

INDIAN GOVERNMENT RAILWAYS

GENERAL RULES

**For all open lines of Railways in the
Republic of India administered by the
Government, together with the**

SUBSIDIARY RULES

of the

CENTRAL RAILWAY

1999

PREFACE

1. Rules : The General Rules apply to all Indian Railways. The subsidiary rules in this book applied to the Central Railway and must be read in conjunction with the General Rules, and are equally binding on the staff.
2. The General Rules are printed in large size letters and these are serially numbered in each chapters. The subsidiary rules are printed in small letters below the General Rules to which they pertain. Subsidiary Rules are prefixed with 'S.R.' bearing reference to the Genrerel rules below whixh they are appended
3. Knowledge of the Rules: Every Railway servant supplied with this Book must make himself thoroughly acquainted with the Rules pertaining to his duties, and he will be held responsible for knowledge of and compliance with all the Rules concerning his functions. Ignorance of Ruels will not be accepted as an excuse for non-compolinace.
4. Correction slips : It is the duty of every Railway servant who is supplied with this Book to maintain his copy up to date. A re cord of all amendments made subsequent to the publication of this book shall be kept in the register of Correction Slips. When a Rules is amended, an endorsement must be made alongside of the Rules giving reference to the Correction Slip or any other notification. All Correction Slips will be issued in the first instrance as Advance Correction slips. It is the duty of every Railway servant to obtain printed copies of Correction Slips. It is the responsibility of every Railway servant to obtain the copy of the Rules Book along with Correction Slip from his superior in case his copy is lost or defaced and ensure that staff working unser him are supplied with the Correction slips.
5. Amendments to Rules: Amendments or additions to the Subsidiary Rules should not be indiscriminately suggested unless there are imperative reasons for doing so. Enquiry Committees who investigate into accident cases must check the tendency to recommend alterations to the Subsidiary Rules as these have been complied after very careful scrutiny.
6. Orders to be kept private: (a) All orders, letters and instructions issued in this connection shall be considered private and shall be communicated only to such of the servants of the Administration as they concern.
(b) Letters or communications pertaining to the business of the Railway shall never be given up or shown tohte public without special instructions.
7. All correction slips, issued for 1981/1998 edition, have been incorporated in this issue.
8. Surrender of Rule Books : This Book is the property of the Central Railway and shall be surrendered before leaving Railway Service.

S.S.Bhandari.
Principal Chief Operations Manager

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)**

No. 69-RR/4

Dated New Delhi, the 11th February, 1976

RESOLUTION

General Rules for Indian Railways (Open Lines) 1976 administered by the Government, and for the time being used for the Public carriage of passengers, animals or goods.

The considerable advancement made in recent years in methods of signalling and interlocking, modes of traction and introduction of new types of equipment necessitated a revision of the General Rules, which had been revised last in 1929, for working Open Lines of Railways in India. The revision of these rules was also advocated by the Railway accidents Committee, 1962 and the Railway Accidents inquiry Committee, 1968, who desired that the revision of the Rules should be consistent not only with the conditions obtaining at present but likely to obtain in the foreseeable future, and emphasised the need for keeping the basic complexion of rules intact while at the same time providing for technological changes in recent years.

2. For this purpose, a committee composed of officers selected for the Traffic and Signal Departments was appointed by the Railway Board in 1968. The committee submitted a set of draft rules for consideration by the Board in February, 1970. The Commission of Railway safety, whose comments were also invited, did not favour the adoption of these draft rules, which had proposed the abolition of certain existing fundamental concepts such as classification of stations, minimum equipment of signals for each class of station, etc. In the Annual Report for 1971-72, the Commission stated that a wholesale revision and re-arrangement of the rules which formed the basis of train working and safety of operations for over 100 years and which were ingrained in the minds of thousands of railway staff, would not be desirable. Accordingly, the Commission conveyed to the Railway Board its inability to agree to the adoption of the new General Rules as drafted.
3. In consideration of the strong views expressed by the Commission of Railway Safety and the positive recommendations of the Railway Accidents Inquiry Committee, 1968, Member Traffic, Railway Board, decided in September, 1972, that the revision of the existing General Rules should be so undertaken as to be in consonance with these views and to cover such aspects only of the existing rules as require modification in the light of the technological changes or where certain existing rules have outlived their use. A fresh revision of the General Rules was accordingly taken up by the Safety Directorate in consultation with the other Directorates of the Railway Board.

4. A provisional issue of the revised General Rules was circulated to the Railway Administrations; the Research, Designs and Standards Organisation; the Commission of Railway Safety; Railway Staff College, Vadodara; Indian Railways Institute of Signal Engineering and Telecommunications, Secunderabad ; Indian Railways Institute of Advanced Track Technology, Pune; Indian Railways Institute of Mechanical and Electrical Engineering, Jamalpur; etc.; for criticism and suggestions under Government of India, Ministry of Railways (Railway Board) Letter No. 68-RR/2/Vol.V, dated 25.07.1974.
5. The exhaustive views and comments received from the Railway Administrations, the Commission of Railway Safety, other Railway Institutions and the Ministry of Law, having been considered by Member Traffic, Railway Board, in consultation with concerned Directorates, a complete revised set of General Rules for Railways administered by the Government have now been framed, sanction and issued by the Central Government with Notification No. 69-RR/4 of this day's date to be brought into use on such date as the Central Government may, by notification in the Official Gazette, appoint.
6. The Central Government desire that the said rules may be brought to the notice of the Administrations of the several railways not administered by the Government and that the Heads of Railway Administrations of such railways may be invited to submit a formal application for the adoption of the rules, with such modifications (if any) as may be considered necessary in each case.

Order:- Ordered that this Resolution, with its enclosures be published under a Notification in the Official Gazette as required by sections 60 & 87 of The Railways Act, 1989(24 of 1989) and that a copy thereof be kept open for inspection at railway stations as directed by sub-section (4) of the same sections, also that a copy of this Resolution and of its enclosures be communicated to the Governments, Administrations and Officers, noted below, for information.

**Member Traffic, Railway Board and
Ex-Officio Secretary to the Government of India.**

Documents accompanying:

General Rules for Indian Railways (Open Lines) 1976 administered by the Government.

Secretaries, Ministries Communications; Defence; Home Affairs, Law Justice and Company Affairs; Petroleum; Shipping and Transport; and Tourism and Civil Aviation.

The Chief Secretaries to the Government of Andhra Pradesh, Assam, Bihar Haryana Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh and West Bengal.

The Chief Secretaries, Administrations of Andaman and Nicobar; Arunachal Pradesh; Chandigarh; Dadra and Nagar Haveli; Delhi; Goa, Daman and Diu; Lakshadweep, Minicoy and Amindivi; Mizoram; and Pondicherry.

Additional Deputy Comptroller and Auditor General of India (Railways) and Ex-Officio Director of Railway Audit.

The Commissioner of Railway Safety.

The Additional Commissioners of Railway Safety, Central, Eastern, Northern, North Eastern, Southern, South Eastern and Western Circles.

The General Managers, Central, Eastern, Northern, North Eastern, Northeast Frontier, Southern, South Central, South Eastern and Western Railways.

The General Managers, Chittaranjan Locomotives Works, Diesel Locomotive Works and Integral Coach Factory.

The General Manager, Metropolitan Transport Project (Railways), Calcutta.

The Chief Administrative Officers, Metropolitan Transport Projects (Railways), Bombay, Delhi and Madras.

The Director General, Research, Design and Standards Organisation, Lucknow.

The Principals, Indian Railways Institute of Advanced Track Technology, Pune; Indian Railways Institute of Mechanical and Electrical Engineering, Jamalpur; Indian Railways Institute of Signal Engineering and Telecommunications, Secunderabad; and Railway Staff College, Vadodara.

The Chairman, Bombay Port Trust Railway, Calcutta Port Trust Railway, Kandla Port trust Railway, Madras Port Trust Railway, and Visakhapatnam Port Trust Railway.

The Managing Agents, Ahmedpur-Katwa Light Railway Company Limited, Bankura-Damodar River Railway Company Limited, Katakhal-lal Bazar Railway Company Limited, and Martin Light Railways.

The General Managers, Bharat Railway and Central Province Railways Company Limited.

The Secretary, Dehri-Rohtas Light Railway Company Limited.

The Chairman, Railway Service Commissions, Allahabad, Bombay, Calcutta and Madras.

The Chairman, Railway Rates Tribunal.

The Secretary, Indian Railways Conference Association.

The Director, National Archives of India.

The Librarians, Central Secretariat Library, National Library, Calcutta, Parliament Library and Railway Board Library.

The Superintendent, Library and Research, Ministry of Law, Justice and Company Affairs.

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GOVERNMENT OF INDIA

MINISTRY OF RAILWAY

(RAILWAY BOARD)

No.69-RR/4

Dated 11th FEBRUARY.1976

NOTIFICATION

IN EXCESERCIS OF THE POWER CONFERED BY SECTIONS 60 & 87 OF THE RAILWAYS ACT, 1989 (24 OF 1989), THE CENTRAL GOVERNMENT HEREBY MAKE THE FOLLOWING GENERAL RULES FOR ALL THE RAILWAYS IN INDIA ADMINISTERED BY THE GOVERNMENT AND FOR THE TIME BEING USED FOR THE PUBLIC CARRIAGE OF PASSENGERS, ANIMALS OR GOODS.,

PRELIMINARY

CHAPTER I

PRELIMINARY

1.01. Short title and commencement -

(1) **These rules may be called the Indian Railways (Open Lines) General Rules, 1976.**

(2) **They shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.**

1.02 Definitions- In these rules, unless the context otherwise requires -

(1) **“Act” means The Railways Act, 1989 (24 of 1989);**

(2) **“adequate distance” means the distance sufficient to ensure safety;**

(3) **“approach lighting” means an arrangement in which the lighting of signals is controlled automatically by the approach of a train;**

S.R. 1.02(3)-1. No approach lighted signals are provided on the Central Railway.

(4) **“approved special instructions” means special instructions approved of or prescribed by the Commissioner of Railway Safety;**

(5) **“authorised officer” means the person who is duly empowered by general or special order of the Railway Administration, either by name or by virtue of his office, to issue instructions or to do any other thing;**

S.R. 1.02(5)-1. Authorised Officer Definition of - (a) The Principal Chief Operations Manager is empowered by a Special Order issued by name by the General Manager and is the Authorised Officer under this Rule for the purpose of Sub-Section (1) of Sections 60 & 87 of The Railways Act , 1989 (24 of 1989).

(b) The Principal Chief Operations Manager alone is authorised to issue or alter Subsidiary Rules.

(c) All Subsidiary Rules must be in conformity with the General Rules.

(6) **“authority to proceed” means the authority given to the Driver of a train, under the system of working, to enter the block section with his train;**

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(7) “axle counter” means an electrical device which, when provided at two given points on the track, proves by counting axles in and counting axles out, whether the section of the track between the said two points is clear or occupied;

(8) “block back” means to despatch a message from a block station intimating to the block station immediately in rear on a double line, or to the next block station on either side on a single line, that the block section is obstructed or is to be obstructed;

(9) “block forward” means to despatch a message from a block station on a double line intimating to the block station immediately in advance the fact that the block section in advance is obstructed or is to be obstructed;

(10) “block section” means that portion of the running line between two block stations on to which no running train may enter until Line Clear has been received from the block station at the other end of the block section;

(11) “Centralised Traffic Control” means a system by which the working of the trains over a route, to which the system applies, is governed by fixed signals remotely controlled from a designated place;

(12) “Centralised Traffic Control Operator” means the person on duty who may for the time being be responsible for the working of trains on the Centralised Traffic Control;

(13) “Chief Commissioner of Railway Safety” means an Inspector appointed to exercise any functions under the Act, and includes a Commissioner of Railway Safety;

(14) “competent railway servant” means a railway servant duly qualified to undertake and perform the duties entrusted to him;

(15) “connections” when used with reference to a running line, means the points and crossings or other appliances used to connect such line with other lines or to cross it;

(16) “Controller” means a railway servant on duty who may for the time being be responsible for regulating the working of traffic on a section of a railway provided with the system of speech communication;

(17) “day” means from sunrise to sunset;

(18) “direction of traffic” means-

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(a) on a double line, the direction for which the line is signalled;

(b) on a single line, the direction for the time being established, under the system of working, to allow trains to move in that direction;

(19) “Driver” means the engine driver or any other competent railway servant for the time being in charge of driving a train;

(20) “electrical communication instrument” means either a telephone or a Morse telegraph instrument;

(21) “facing and trailing points” points are facing or trailing in accordance with the direction a train or vehicle moves over them. Points are said to be facing points when by their operation a train approaching them can be directly diverted from the line upon which it is running;

(22) “fixed signal” means a signal of fixed location indicating a condition affecting the movement of a train and includes a semaphore arm or disc or fixed light for use by day and fixed light for use by night;

S.R.1.02(22)-1-Colour light signals - A colour light signal is also a fixed signal. A colour light signals is a signal which shows a coloured light (or lights) both by day and night.

(23) “fouling mark” means the mark at which the infringement of fixed Standard Dimensions occurs, where two lines cross or join one another;

(24) “Gangman” means a railway servant employed on permanent way or work connected therewith;

(25) “Gangmate” means the person in charge of a gang of workmen employed on permanent way or work connected therewith;

(26) “Gateman” means a competent railway servant posted at a level crossing for working the gates;

(27) “goods train” means a train (other than a material train) intended solely or mainly for the carriage of animals or goods;

(28) “Guard” means the railway servant in charge of a train and includes a Assistant Guard or any other railway servant who may for the time being be performing the duties of a Guard;

(29) “Inspector of Way or Works” means any Inspector or Assistant Inspector responsible for the construction or maintenance of

permanent way, points and signals, bridges or other works connected therewith;

S.R. 1.02(29). Inspector of Way and Works and other technical supervisors have also been designated as Junior Engineer Grade I/II.

(30) “interlocking” means an arrangement of signals, points and other appliances, operated from a panel or lever frame, so interconnected by mechanical locking or electrical locking or both that their operation must take place in proper sequence to ensure safety;

~~(31) “Intermediate Block Post” means a class “C” station on a double line, remotely controlled from the block station in rear;~~

(31) “Intermediate Block Post” means a class “C” station on a single line or double line or multiple line remotely controlled from the block station in rear;

(CS 16-1 vide Gazette of India GSR 1168(E) dated 05.12.2018).

~~(32) “Intermediate Block Signalling” means an arrangement of signalling on double line in which a long block section is split into two portions each constituting a separate block section by providing an Intermediate Block Post;~~

(32) “Intermediate Block Signalling” means an arrangement of signalling on single line or double line or multiple line in which a long block section is split into two portions each constituting a separate block section by providing an Intermediate Block Post;

(CS 16-1 vide Gazette of India GSR 1168(E) dated 05.12.2018).

(33) “isolation” means an arrangement, secured by the setting of points or other approved means, to protect the line so isolated from the danger of obstruction from other connected line or lines;

(34) “last Stop signal” means the fixed Stop signal of a station controlling the entry of trains into the next block section;

(35) “level crossing” means the intersection of road with railway track at the same level;

(36) “level crossing gate” means any form of moveable barrier, including a chain, capable of being closed across the road at the level crossing, but does not include a wicket or a turnstile for the use of pedestrians;

S.R. 1.02-(36)-1. (a) Traffic Gates - Level crossing gates which are located between the outermost stop signals of a station are termed as Traffic Gates. The manning and operation of traffic gates shall be under the control of Operating department.

(b) Engineering Gates - Level crossing gates, other than Traffic gates, are termed as Engineering Gates.

(37) “Line Clear” means the permission given from a block station to a block station in rear for a train to leave the latter and approach the former; or the permission obtained by a block station from a block station in advance for a train to leave the former and proceed towards the latter;

(38) “main line” means the line ordinarily used for running trains through and between stations;

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(39) “material train” means a departmental train intended solely or mainly for carriage of railway material when picked up or put down or for execution of works, either between stations or within station limits;

(40) “mixed train” means a train intended for the carriage of passengers and goods, or of passengers, animals and goods;

(41) “multiple-aspect signalling” means a signalling arrangement in which signals display at any one time any one of the three or more aspects and in which the aspect of every signal is pre-warned by the aspect of the previous signal or signals;

(42) “night” means from sunset to sunrise;

(43) “obstruction” and its cognate expressions includes a train, vehicle or obstacle on or fouling a line, or any condition which is dangerous to trains;

(44) “overhead equipment” means the electrical conductors over the tracks together with their associated fittings, insulators and other attachments, by means of which they are suspended and registered in position for the purpose of electric traction;

(45) “passenger train” means a train intended solely or mainly for the carriage of passengers and other coaching traffic, and includes a troop train;

(46) “point and trap indicators” are not signals, but are appliances fitted to and working with points to indicate by day or by night the position in which the points are set;

S.R. 1.02(46)-1. Point Indicators : All the Point Indicators must show a white target by day or white light by night in both directions when the points are set for the straight and no target by day but a green light by night in both directions when the points are set for the turnout.

S.R.1.02(46)-2. Trap Indicators : Trap Indicators installed to protect and indicate the position of the trap points or derailing switches must show a red target by day and red light by night in both directions when the switch is open or the derail is on the rail and no target by day but a green light by night in both directions when the switch is closed or the derail is off the rail.

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(47) **“running line” means the line governed by one or more signals and includes connections, if any, used by a train when entering or leaving a station or when passing through a station or between stations;**

(48) **“running train” means a train which has started under an authority to proceed and has not completed its journey;**

(49) **“shunting” means the movement of a vehicle or vehicles with or without an engine or of any engine or any other self-propelled vehicle, for the purpose of attaching, detaching or transfer or for any other purpose;**

(50) **“special instructions” means instructions issued from time to time by the authorised officer in respect to particular cases or special circumstances;**

(51) **“station” means any place on a line of railway at which traffic is dealt with, or at which an authority to proceed is given under the system of working;**

S.R. 1.02(51)-1. Stations, Definition of - Whenever the word “Station” is used in the Subsidiary Rules, it must be understood to mean either a Block Station or a Block Cabin.

(52) **“station limits” means the portion of a railway which is under the control of a Station Master and is situated between the outermost signals of the station or as may be specified by special instructions;**

S.R. 1.02(52)-1. On double line, station limits will be separate for each direction.

(53) **“Station Master” means the person on duty who is for the time being responsible for the working of the traffic within station limits, and includes any person who is for the time being in independent charge of the working of any signals and responsible for the working of trains under the system of working in force;**

(54) **“station section” means that section of station limits-**

(1) **at a class 'B' station provided with two-aspect signals, which is included -**

(a) **on a double line, between the Home signal and the Last Stop signal of the station in either direction ; or**

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(b) on a single line-

(i) between the Shunting Limit Boards or Advanced Starters (if any), or

(ii) between the Home signals if there are no Shunting Limit Boards or Advanced Starters, or

(iii) between the outermost facing points, if there are no Homesignals or Shunting Limit Boards or Advanced Starters ;

(2) at a class 'B' station, provided with manually operated multiple aspect or modified lower quadrant signals, which is included-

(a) on a double line -

(i) between the outermost facing points and the Last Stop signal of the station in either direction, or

(ii) between the Block Section Limit Board, where provided, and the last Stop signal of the station in either direction; or

(b) on a single line -

(i) between the Shunting Limit Boards or Advanced Starters (if any), or

(ii) between the outermost facing points, if there are no Shunting Limit Boards or Advanced Starters;

(55) "Subsidiary Rule" means a special instruction which is subservient to the General Rule to which it relates and shall not be at variance with any General Rule;

(56) "system of working" means the system adopted for the time being for the working of trains on any portion of a railway;

(57) "track circuit" means an electrical circuit provided to detect the presence of a vehicle on a portion of track, the rails of the track forming part of the circuit;

(58) "train" means an engine with or without vehicles attached, or any self-propelled vehicle with or without a trailer, which cannot be readily lifted off the track;

(59) "Train Examiner" means a railway servant duly qualified to examine trains and certify their fitness for safe running and includes any other railway servant who may for the time being be performing the duties of a Train Examiner;

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(60) “two-aspect signalling” means a signalling arrangement in which each signal displays at any one time either of the two aspects.

1.03. Classification of Stations -

(1) Stations shall, for the purpose of these rules, be divided into two categories - block stations and non-block stations.

(2) Block stations are those at which the Driver must obtain an authority to proceed under the system of working to enter the block section with his train; and under the Absolute Block System consist of three classes-

Class ‘A’ stations - where Line Clear may not be given for a train unless the line on which it is intended to receive the train is clear for at least 400 metres beyond the Home Signal, or upto the Starter;

Class ‘B’ stations - where Line Clear may be given for a train before the line has been cleared for the reception of the train within the station section; and

Class ‘C’ stations - block huts, where Line Clear may not be given for a train, unless the whole of the last preceding train has passed complete at least 400 metres beyond the Home signal, and is continuing its journey. This will also include an Intermediate Block Post.

(3) Non-block stations or Class ‘D’ stations are stopping places which are situated between two consecutive block stations, and do not form the boundary of any block section.

S.R. 1.03.1- Any station which cannot be worked under ‘A’, ‘B’, ‘C’ or ‘D’ class conditions is termed as ‘Special’ class. The Working Rules for a ‘Special’ class station must have the approval of the Commissioner of Railway Safety.

ΦΦΦ

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

CHAPTER II

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

~~2.01. Supply of copies of rules—The RAILWAY ADMINISTRATION shall supply—~~

- ~~(a) A copy of these Rules—
 - ~~(i) to each station,~~
 - ~~(ii) to each locomotive running shed, and~~
 - ~~(iii) to such other offices as it may prescribe,~~~~
- ~~(b) to each railway servant on whom any definite responsibility is placed by the said rules, a copy of the rules, or of such portions thereof as relate to his duties, and~~
- ~~(c) to any railway servant a translation of the said rules or of such portions thereof as relate to his duties as may be prescribed by special instructions.~~

~~2.02. Upkeep of the copy of rules—Every railway servant who has been supplied with a copy of these rules, shall—~~

- ~~(a) have his copy readily available when on duty,~~
- ~~(b) keep it posted with all corrections,~~
- ~~(c) produce the same on demand by any of his superiors,~~
- ~~(d) obtain a new copy from his superior in case his copy is lost or defaced, and~~
- ~~(e) ensure that the staff working under him are supplied with all corrections and that they also comply with the provisions of this rule.~~

2.01- Supply of copies of rules - The Railway Administration shall supply –

- (a) a copy of these Rules -
 - (i) to each station,
 - (ii) to each locomotive running shed, and
 - (iii) to such other offices as it may prescribe,
- (b) to each railway servant on whom any definite responsibility is placed by the said rules, a copy of the rules, or of such portions thereof as relate to his duties, and
- (c) to any railway servant a copy of these rules or translation of the said rules or of such portions, thereof as relate to his duties, as may be prescribed by Special Instructions.

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

SR 2.01-1 – A copy of rules mentioned in GR 2.01 shall be either hard copy or soft copy.
CS 14/14(a)

2.02 Upkeep of the copy of rules - Each railway servant, who has been supplied with a copy of these rules, as prescribed under rule 2.01 shall –

- (a) keep it posted with all corrections,**
- (b) produce the same on demand by any of his superiors,**
- (c) obtain a new copy from his superior in case his copy is lost or defaced, and**
- (d) ensure that the staff working under him are supplied with all corrections and that they also comply with the provisions of this rule.**

(CS 10 item no.5 i) Rly Bd's letter No. 2008/Safety (A&R)/19/9 dated 31.12.2008
ii) Gazette of India GSR 847(E) No. 644 dated 10.12.08)

SR 2.02-1 Each railway servant, who has been supplied with a copy of these rules, as prescribed under rule 2.01 shall produce the same on demand by any of his superiors, within a week and same may be certified by concerned superiors. Depot. In-charge shall check rule books(hard/soft copy) once in 3 months. **CS 14/14(b)**

2.03. Knowledge of rules - Every railway servant shall -

- (a) be conversant with the rules relating to his duties whether supplied or not with a copy or translation of the rules relating to his duties and the Railway Administration shall ensure that he does so,**
- (b) pass the prescribed examinations, if any,**
- (c) satisfy himself that the staff working under him have complied with clauses (a) and (b), and**
- (d) if necessary, explain to the staff working under him, the rules so far as these apply to them.**

S.R.2.03-1. The train working staff of another Railway who are required to work on this Railway, must be examined for their knowledge of the subsidiary rules and local instructions of this Railway by Transportation Inspector. A written declaration from the staff to the effect that they are acquainted with the rules of this Railway should be obtained.

S.R.2.03-2. Railway employees for whom glasses have been prescribed for the proper performance of their duties must be equipped with a pair of glasses when coming on duty. They must wear them when actually on duty. Running staff must be in possession of two pairs of glasses while they are on duty.

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

S.R. 2.03-3. Training of Guards and Drivers/Motormen working in Automatic Sections - issue of Competency Certificates and one day's intensive course.

CS 10.7

All Guards and Drivers/Motormen who are required to work on Automatic Signalling sections shall be imparted one day's intensive course once in ~~every six months~~, a year about the rules pertaining to this system and Competency Certificates issued/renewed in token of their knowledge and proficiency in these rules. A record of such Competency Certificates issued shall be maintained by ~~Divisional Safety Officer~~ DOM/AOM . Divisional Mechanical Engineer and Divisional Electrical Engineer concerned. No Guard and Driver/Motorman shall be put on duty on such sections unless he posses such certificate.

2.04. Assistance in observance of rules - Every railway servant shall render assistance in carrying out these rules and report promptly any breach thereof, which may come to his notice, to his superior officer and other authority concerned.

2.05. Prevention of trespass, damage or loss -

(1)

Every railway servant is responsible for the security and protection of the property of the Railway Administration under his charge.

(2) Every railway servant shall endeavour to prevent -

- (a) trespass on railway premises,
- (b) theft, damage or loss of railway property,
- (c) injury to himself and others, and
- (d) fire in railway premises.

2.06. Obedience to rules and orders - Every railway servant shall promptly observe and obey -

- (a) all rules and special instructions, and
- (b) all lawful orders given by his superiors.

2.07. Attendance for duty - Every railway servant shall be in attendance for duty at such times and places and for such periods as may be fixed in this behalf by the Railway Administration and shall also attend at any other time and place at which his services may be required.

2.08. Absence from duty -

(1) No railway servant shall, without the permission of his superior, absent himself from duty or alter his appointed hours of attendance or exchange duty with any other railway servant or leave his charge of duty unless properly relieved.

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

(2) If any railway servant while on duty desires to absent himself from duty on the ground of illness, he shall immediately report the matter to his superior and shall not leave his duty until a competent railway servant has been placed in charge thereof.

S.R.2.08-1. Station Masters, Cabin Assistant Station Masters or Switchmen leaving Block Offices or Cabins during the hours of duty -

(a) If a Station Masters, or a Cabin Assistant Station Master or Switchman has to leave his Block Office or Cabin for a few minutes, for any unavoidable reason, he should on uncontrolled section, advise the stations on either side on the block telephone, or the Morse, of the fact. On a Controlled section, the Controller's Permission must first be obtained. At stations where a lock-up lever is provided, he must also lock the levers in whatever position they may be, by means of the lock-up lever and keep the key of that lever in his possession. The Station Master on duty shall also lock the block Instruments, slide Instruments and keep the keys and also the Private Number sheet in his personal custody whenever he has the occasion to leave the Office.

(b) If the Station Master on either side or the Controller knows that line clear will be required for a train, he should advise the Station Master who wishes to leave his office temporarily of the impending approach of a train.

(c) A Pointsman or Leverman should be left in Block Office or Cabin to summon the Station Master when required. This person must not operate the Block or Slide Instruments nor allow unauthorised person to operate them.

2.09. Taking alcoholic drink, sedative, narcotic, stimulant drug or preparation -

(1) While on duty, no railway servant shall, whether he is directly connected with the working of trains or not, be in a state of intoxication or in a state in which, by reason of is having taken or used any alcoholic drink, sedative, narcotic or stimulant drug or preparation, his capacity to perform his duties is impaired.

(2) No railway servant, directly connected with the working of trains, shall take or use any alcoholic drink, sedative, narcotic or stimulant drug or preparation within eight hours before the commencement of his duty or take or use any such drink, drug or preparation when on duty.

S.R.2.09.1. Supervisory staff should ensure that staff appearing on duty and while on duty are not under the influence of any alcoholic drink, sedative, narcotic or stimulant drug or preparation. When any railway servant is found or suspected to be under the influence of any alcoholic drink, sedative, narcotic or stimulant drug or preparation, the official-in-charge will make arrangements for his immediate relief

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

and have him examined by a Doctor as soon as possible. If possible, written evidence of two independent witnesses should also be obtained.

2.10. Conduct of railway servants - A railway servant shall -

- (a) wear the badge and uniform, if prescribed, and be neat and tidy in his appearance while on duty,**
- (b) be prompt, civil and courteous,**
- (c) not solicit or accept illegal gratification,**
- (d) give all reasonable assistance and be careful to give correct information to the public, and**
- (e) when asked, give his name and designation without hesitation.**

2.11. Duty for securing safety - (1) Every railway servant shall -

- (a) see that every exertion is made for ensuring the safety of the public,**
- (b) promptly report to his superior any occurrence affecting the safe or proper working of the railway which may come to his notice, and**
- (c) render on demand all possible assistance in the case of an accident or obstruction.**

(2) Every railway servant who observes -

- (a) that any signal is defective,**
- (b) any obstruction, failure or threatened failure of any part of the way or works,**
- (c) anything wrong with a train, or**
- (d) any unusual circumstances likely to interfere with the safe running of trains, or the safety of the public, shall take immediate steps, such as the circumstances of the case may demand, to prevent accident; and where necessary, advise the nearest Station Master by the quickest possible means :**

Provided that in the case of a train having parted, he shall not show a Stop hand signal but shall endeavour to attract the attention of the Driver or Guard by shouting, gesticulating or other means.

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

~~S.R.2-11-1. Defective Permanent Way (Deleted vide CS-9/19)~~

~~(a) In the event of a Driver experiencing a lurch or any abnormal occurrence in the track, he must, while approaching the first Block station, whistle frequently and bring his train to a stop in such a manner that the engine is in front of the station building or the Block Cabin where the Block Instruments are located, hand over a written memo specifying the location where the defect was noticed, the nature of the defect and the speed at which in his opinion, trains may pass safely over the affected area and obtain acknowledgment. On single line section, the Driver shall not surrender the 'authority to proceed' till such time he has issued the memo to the Station Master. On receipt of such a report from the Driver, the Station Master must immediately issue a message to the Station Master at the other end of the block section (who must acknowledge the same), the P.W.I. and Section Controller. Section Controller will advise all concerned.~~

~~(b) The Station Masters at both ends of the reported section must stop all trains and issue Caution Orders to Driver specifying the kilometrage (distance) and the speed restriction.~~

~~(c) No train must pass over the affected spot at a speed exceeding 15 k.m. per hour or such less speed as the reporting Driver may have specified until the Permanent Way Inspector or the Assistant Engineer has inspected the spot. Caution Orders must then be issued as per SR 4.09-1 for all trains until the Permanent Way Inspector or the Assistant Engineer has certified the track safe for the resumption of normal speed when the Station Master will issue an 'All concerned' message to all those originally advised.~~

~~(d) In case of severe lurch, on double line, Driver should switch "ON" flasher light to attract the attention of the Driver of a train approaching on opposite road. Driver of opposite road, after seeing flasher light "ON" shall at once take action to stop his train short of obstruction. He will continue his journey at normal speed only after ascertaining that the line on which, he is proceeding is free from any obstruction. If however, he finds that the line on which he is to proceed is obstructed the Driver and Guard of the train will protect their train in accordance with G.R.6.03. The Driver of the train proceeding on the adjacent track must stop at the next station and report the occurrence immediately and the assistance required. Caution Order must be issued to the trains running in opposite direction until the SE(P.WAY) or AEN has examined the track and certified both road safe for resumption of normal speed.~~

~~(C/S-3.1 revised 23.01.01)~~

S.R.2-11-1. Running of Defective Locomotives.

If, in the Driver's opinion, the running of a locomotive is, in any way abnormal, the Driver must exercise his discretion to reduce the speed of the train to an extent which he considers safe, and he should immediately report the full

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

circumstances to the Diesel Power Controller/Traction Loco Controller. The Diesel Power Controller/Traction Loco Controller must immediately refer the matter to his Power/Traction Officer. The permission of the latter must be obtained before the engine is put back in service. These instructions refer to all types of locomotives.

~~S.R.2.11-3. Explosion on track or train (Deleted vide CS 9/19)~~

~~(a) On hearing an explosion, the Driver must stop his train as soon as possible, and examine the track along with the Guard at the site of the explosion to ascertain the extent of the damage. If the Driver does not bring the train to a stand within a reasonable time, the Guard shall draw the attention of the Driver by cautiously applying the vacuum / air pressure by means of the Guards Van Valve.~~

~~(b) The Driver shall also examine the train along with the Guard and if little or no damage has been done to the train and if it is safe for the train to proceed to the next block station, the train will be taken ahead to the next block station and the Guard and Driver will jointly report the occurrence to Station Master on duty.~~

~~(c) If the damage to the track is so serious as to render the track unsafe, a competent Railway servant will be left at the site with detonators to protect the spot in accordance with G.R.6.03.~~

~~(d) On receipt of a report from the Driver and the Guard, the Station Master must immediately advise the controller, who will inform the Head Train Examiner and the Loco Foreman for a through examination of the train and the engine at the next terminal station. The Controller will also advise the Permanent Way Inspector, who will proceed to the spot, inspect the track and take such precautions as necessary to put the track right and impose speed restrictions, if necessary. The Station Master immediately issue a message to the Station Master at the other end who must acknowledge the same and the Station Masters at both ends of the reported section must stop all trains and issue caution orders to Drivers, specifying the kilometrage and the speed restriction. The duties prescribed above for the Controller will devolve on the Station Master on uncontrolled sections.~~

~~(e) No train must pass over the affected spot at a speed exceeding 15 kilometres per hour or such less speed as the reporting Driver may have specified, until the Permanent Way Inspector or the Assistant Engineer has certified the track safe for the resumption of normal speed, when the Station Master will issue an "All concerned" message to all those originally advised.~~

S.R.2.11-2. Precautions to be taken for working of trains during storm and strong wind -

(i) When the warning message forecasting cyclone, storm or strong wind has been received from the Meteorological Department and/or there is a reasonable doubt that severe storm is going to break out endangering the safety of passengers, trains, etc., the Station Master shall, in consultation with the Guard and the Driver of the train detain the train and also refuse to grant Line Clear to a train coming to his station until storm abates and he considers movements of trains safe.

(ii) Should a train be caught on the run in cyclone, storm or strong wind of an intensity which, in the opinion of the Driver, is likely to endanger the safety of the

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train he shall immediately control the speed of his train and bring it to a stop at the first convenient place taking care as far as possible to avoid stoppage of the train at places like sharp curves, high embankments and bridges (including approaches thereof). In controlling the speed and bringing the train to halt, the Driver shall stop his train carefully and without a jerk. He shall restart the train in consultation with the Guard only after the cyclone, storm or strong wind abates and it is considered safe to proceed.

(iii) The Guard and the Driver /Assistant Driver of the train in co-operation with the railway staff travelling in the train shall try to see that doors and windows of the coaches are kept open by the passengers to allow free passage of the wind through the coaches.

S.R. 2.11-3. Anemometers.

In case of vulnerable locations and specially selected bridges where Anemometers are installed at one of the stations adjacent to bridges, the Station Master shall take the following action if the anemometer is indicating wind velocity higher than the danger level of more than 72 KMPH on BG and 30 KMPH on NG.

(i) The Station Master shall inform the Section Controller and the Station Master on the other side immediately about the need to control the movement of trains.

(ii) The Station Master shall not start or allow the movement of trains through his station and also not grant Line Clear to the trains waiting at the adjacent station for his station.

(iii) He shall resume normal running of trains in consultation with the Section Controller and the Station Master at the adjacent station after the wind velocity is again below the danger level of more than 72 KMPH on B.G. and 30 KMPH on N.G.

SIGNALS

CHAPTER III

SIGNALS

A. General Provisions

3.01. General use of signals - The signals prescribed in these rules shall be used for controlling the movement of trains in all cases in which exceptions are not allowed by approved special instructions.

3.02. Kinds of signals. - The signals to be used for controlling the movement of trains shall be -

- (a) fixed signals,
- (b) hand signals,
- (c) detonating signals, and
- (d) warning signals.

3.03. Use of night signals by day - The signals prescribed in these rules for use by night shall also be used by day in tunnels and in thick, foggy or tempestuous weather impairing visibility.

3.04. Placing of signals and signal arms; painting of signal arms : -

(1) Fixed signals shall be clearly visible to the Drivers of trains approaching them and shall be placed immediately to the left of or above the line to which they refer unless otherwise authorised by special instructions.

(2) In the case of semaphore signals, signal arms shall be placed on left hand side of the post as seen by the Driver of any approaching train to which they refer.

- (3) (a) Except as provided for in clauses (b) and (c), signal arms shall be painted the same colour as the light exhibited in the 'On' position with a white bar on the side facing trains to which they refer and white with a black bar on the other side. Such bars shall be parallel with the end of the arms.
- (b) In the case of a yellow arm, a black bar shall take the place of the white bar on the side facing trains.
- (c) Calling-on arms shall be painted white with a red bar on the side facing trains to which they refer, and white with a black bar on the other side.

B. Description of Fixed Signals

SIGNALS

3.05. Use of fixed signals -

- (1) Except under approved special instructions, all railways shall be equipped with fixed signals as prescribed in these rules.
- (2) The aspects of a semaphore signal shall be displayed by the position of the arm by day and by a light or lights by night.

NOTE : In the illustrations given in this Chapter, which are not drawn to scale, the day aspects of the semaphore signal is shown by the position of the arm and the night aspects is shown by the light or lights to the right of the signal concerned.

- (3) The aspects of a colour light and position light signal both by day and by night shall be the same and shall be displayed by fixed light or lights.
- (4) The arm of a semaphore signal shall work in -
 - (a) the lower quadrant in two-aspect signalling, and
 - (b) the upper quadrant in manually operated multiple-aspect signalling.
- (5) The 'Off' position of a semaphore signal shall be displayed by day by the inclined position of the arm from 45 degree to 60 degree below the horizontal in case of two-aspect lower quadrant signals, and 45 degrees or 90 degrees above the horizontal in case of multiple-aspect upper quadrant signals.

3.06. Description of Warner signals and their indications.-

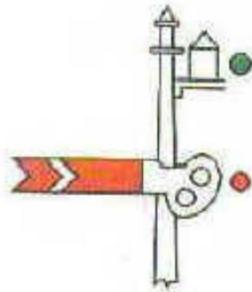
- (1) A semaphore Warner signal has a fish-tailed arm.
- (2) A Warner signal is intended to warn a Driver (a) of the condition of the block section ahead, or (b) that he is approaching a Stop signal.
- (3) A Warner signal may be placed either -
 - (a) on a post by itself with a fixed green light 1.5 to 2 metres above it by night, or
 - (b) on the same post below the first Stop signal or the last stop signal.
- (4) When placed in accordance with clause (b) of sub-rule (3), the variable light of the Stop signal shall take the place of the fixed green light of the Warner signal and the mechanical arrangement shall be such that the Warner signal cannot be taken 'Off' while the Stop signal above it is 'On'
- (5) The aspects and indications of a semaphore Warner signal are shown below :-

SIGNALS

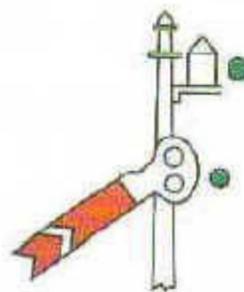
(a) Semaphore Warner signal in Two-Aspect Signalling Territory -

on a post by itself.

'On' Position



'Off' position



Aspect :

Proceed with caution

Proceed

Indication :

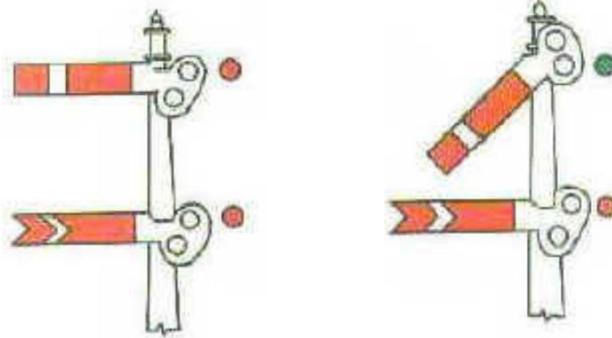
Proceed with caution and be prepared to stop at the next Stop signal.

Proceed.

SIGNALS

- (b) Semaphore Warner signal in Two-Aspect Signalling Territory - below a stop signal.

'On' Position



Aspect :

Stop

Proceed with caution

Indication :

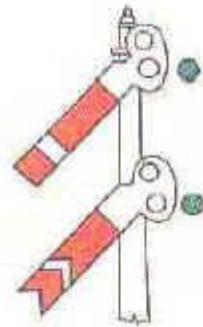
Stop dead

Proceed with caution and be prepared to stop at the next Stop signal.

SIGNALS

Semaphore Warner signal in Two-Aspect Signalling Territory below a stop signal.

'Off' Position



Aspect :

Proceed

Indication :

Proceed

SIGNALS

- (6) The aspects and indications of a Colour light Warner signal are shown below :-
- (a) Colour light Warner signal in Two-Aspect Signalling Territory on a post by itself.

'On' Position



'Off' position



Aspect :

Proceed with caution

Proceed

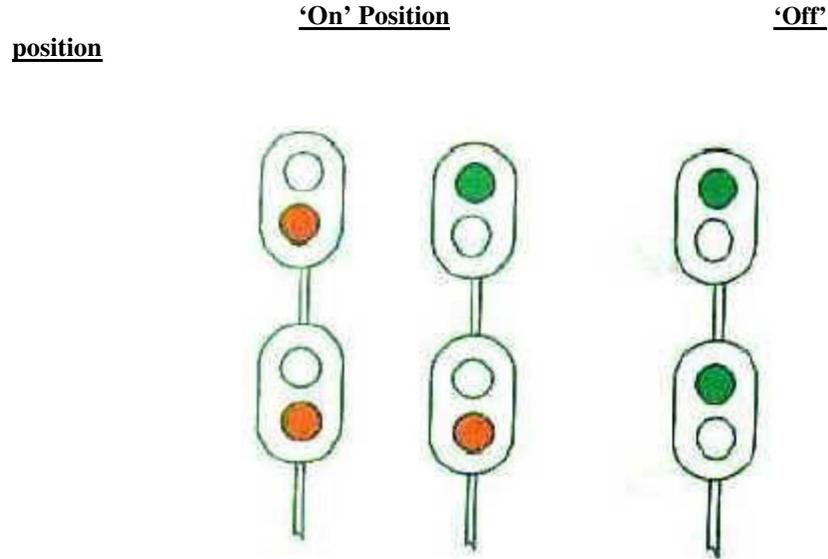
Indication :

Proceed with caution and be prepared to stop at the next Stop signal.

Proceed.

SIGNALS

(b) Colour light Warner signal in Two-Aspect Signalling Territory below a stop signal.



Aspect :

Stop	Proceed with caution	Proceed
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Indication :

Stop dead	Proceed with caution and be prepared to stop at the next Stop signal.	Proceed
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SIGNALS

(7) A Warner signal with a fixed green light above it by night, on a post by itself, shall be located at an adequate distance in rear of the stop signal, the aspect of which it pre-warns :

Provided that when such a Warner signal applies to a gate stop signal, it shall not display the 'Proceed' aspect unless there is adequate distance between the Gate stop signal and the first stop signal of the station ahead. The adequate distance in such a case shall never be less than 1200 metres.

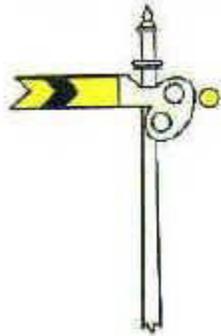
(8) Where special circumstances justify the use of an unworked Warner, it shall be secured in the 'On' position and not be coupled or duplicated for directing purposes.

3.07. Description of Distant signals and their indications :

- (1) A semaphore Distant signal has a fish tailed arm.
- (2) The aspects and indications of a semaphore Distant signal working in the lower quadrant are shown below -

Semaphore Distant signal in Two-Aspect Signalling Territory

'On' position

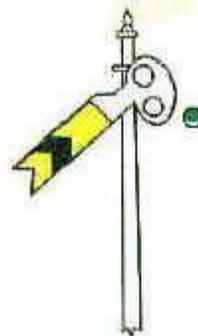


Aspect :

Caution

Indication :

'Off' position



Proceed

SIGNALS

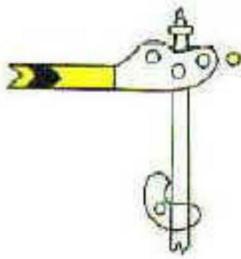
Proceed and be prepared to stop at the next stop signal Proceed

Note : This signal shall be provided only in modified lower quadrant signalling.

(3) **The aspects and indications of a semaphore Distant signal working in the upper quadrant are shown below -**

Semaphore Distant signal in Multiple Aspect Signalling Territory

'On' position



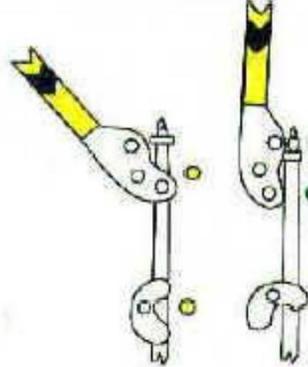
Aspect :

Caution

Indication :

Proceed and be prepared to stop at the next stop signal

'Off' position



Attention

Proceed

~~Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by special instructions.~~ — Proceed

Note : The distance between the two yellow light shall be 1.5 metres when this signal displays 'Attention' aspect at night.

Proceed and be prepared to stop at the next stop signal.	Attention – Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by special instructions. Train is being received either on Main line and is required to stop at the Starter signal; or on a Loop line required to stop at the Starter signal or to pass run through via Loop Line	Proceed – Proceed, Block Section ahead is clear, train is to pass run through the station via Main Line.
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CS11/14(i) (Ref: Rly Board's letter no. 2009/Safety(A&R)/19/24 dated 06.12.2010 & Gazette notification No. 621 dated 10.11.2010.)

SIGNALS

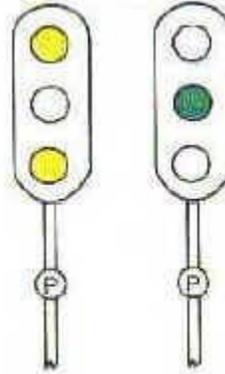
- (4) The aspects and indications of a Colour light Distant signal are shown below -

Colour light Distant signal in Multiple Aspect Signalling Territory

'On' position



'Off' position



Aspect :

Caution

Attention

Proceed

Indication :

<p>Proceed and be prepared to stop at the next stop signal.</p>	<p>Attention – Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by special instructions. Train is being received either on Main line and is required to stop at the Starter signal; or on a Loop line required to stop at the Starter signal or to pass run through via Loop Line</p>	<p>Proceed – Proceed, Block Section ahead is clear, train is to pass run through the station via Main Line.</p>
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CS11/14(ii) (Ref: Rly Board's letter no. 2009/Safety(A&R)/19/24 dated 06.12.2010 & Gazette notification No. 621 dated 10.11.2010.)

- (5) A Distant signal shall be located at an adequate distance in rear of the stop signal the aspect of which it pre-warns.

SIGNALS

(6) Where necessary more than one Distant signal may be provided. In such a case, the outermost signal, to be located at an adequate distance from the first stop signal, shall be called Distant signal and the other called the Inner Distant signal, with the Distant signal capable of displaying 'Attention' or 'Proceed' aspect only.

(7) Under approved special instructions, a colour light Distant signal may be combined with the last stop signal of a station in rear or with a stop signal protecting a level crossing. when a colour light Distant signal is combined with the last stop signal of the station in rear or with a stop signal protecting a level crossing, arrangements shall be such that the signal shall not display less restrictive aspect than the 'Stop' aspect till 'Line Clear' has been obtained from the station ahead in the former case and until the level crossing gates have been closed and locked for the passage of trains in the latter case.

S.R. 3.07-1. Double Distant Signal -

Double Distant signal where provide, the outermost signal should be called Distant signal and the other one shall be called Inner Distant signal. In such a case Distant signal shall display 'Attention' (Double yellow) or 'Proceed' (Green) aspect, whereas Inner Distant shall display 'Caution' (One yellow) or 'Attention' (Double yellow) or 'Proceed' (Green) aspect.

The aspect sequence chart, in case of Double Distant signal is given below :
below :

	Aspect of Distant Signal	Aspect of Inner Distant	Aspect of Home Signal	Means
1.	Green	Green	Green	For Run Through Trains.
2.	Green	Double yellow	Yellow	For trains being received on Main Line.
3.	Double yellow	Double yellow	Yellow with route Indicator	For trains being received on Loop Line
4.	Double yellow	Yellow	Red	For trains being Stopped at Home signal.

The Distant signal (where Double Distant signals are provided) is identified by alternate Yellow and Black bands painted on the post with 'P' marker (Black letters on white disc) fixed on it.

SIGNALS

“The Distant signal (where Double Distant signals are provided) is identified by alternate Luminous Yellow and Black bands painted on the post with ‘P’ marker (Black letters on white disc) fixed on it.”
CS 13/5 (Ref: CSE’s Note No. N.465/S/Visibility/LOC dated 24.08.2012.)

The aspect and indications of a colour light Distant signal in case of Double Distant Signal are shown below -

Colour light Distant signal in case of Double Distant Signal in Multiple-Aspect Territory

‘On’ position



‘Off’ position



Aspect :

Attention

Proceed

Indication :

Proceed and be prepared to pass next signal at

Proceed

SIGNALS

such restricted speed as may be prescribed by special instructions.

~~3.07-2 On Mumbai division, in multiple line section, 5th & 6th line signals shall be identified by alternate luminous orange (50mm) and white (300mm) bands painted on the post with 'Arrow' & 'Legend board'.~~

~~CS 12/1(Ref: CSTE-CSTM note No. N.361/G&SR/CS dt.12.05.11.)~~

3.07-2 On Mumbai division, in multiple line section the signals shall be identified as under -

- a) Slow Local line - Alternate White Luminous (50mm) and Black (300 mm) bands.
- b) Through line - Existing silver colour only.
- c) 5th and 6th lines - Alternate Luminous Orange (50mm) and White (300 mm) bands.

Painted on the post with legend board and arrow pointing towards the line to which signal refer.

CS 13/6 (Ref. : COM's letter No.TR/G&SR/102 dated 27.06.2012.)

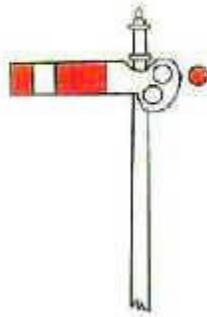
3.08. Description of Stop signals and their indications -

(1) A semaphore stop signal has a square ended arm.

(2) The aspects and the indications of a semaphore stop signal working in the Lower quadrant are shown below :

Semaphore Stop signal in Two-Aspect Signalling territory.

'On' position



'Off' position



SIGNALS

Aspect :

Stop

Proceed

Indication :

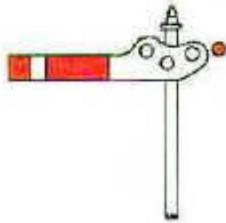
Stop dead

Proceed.

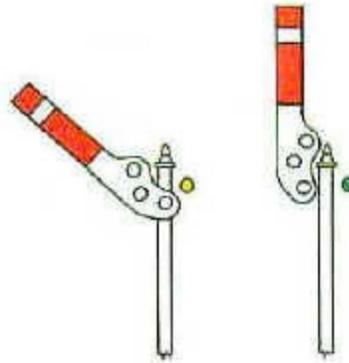
- (3) The aspects and the indications of a semaphore stop signal working in the upper quadrant are shown below :

Semaphore stop signal in Multiple Aspect Signalling territory.

'On' position



'Off' position



SIGNALS

Aspect :

Stop

Caution

Proceed

Indication :

Stop dead

Proceed and be prepared to stop at the next stop signal.

Proceed.

SIGNALS

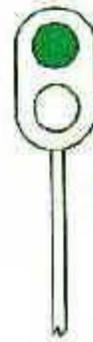
(4) The aspects and the indications of a Colour light stop signal are shown below :

(a) Colour light stop signal in Two aspect signalling territory.

'On' position



'Off' position



Aspect :

Stop

Proceed

Indication :

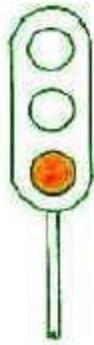
Stop dead

Proceed.

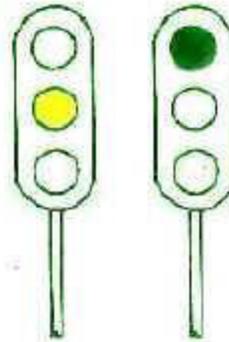
SIGNALS

(b) Colour light stop signal in multiple Three-Aspect Signalling territory -

'On' position



'Off' position



Aspect :

Stop
Proceed

Caution

Indication :

Stop dead
Proceed.

Proceed and be prepared

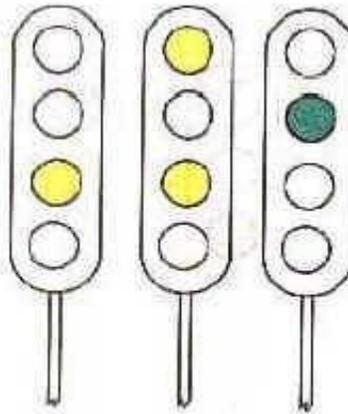
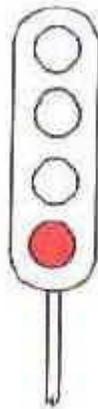
SIGNALS

to stop at the next stop
signal.

(c) Colour light Stop signal in Multiple Four-Aspect Signalling Territory -

'On' position

'Off' position



Aspect :

Stop

Caution

Attention

Proceed

Indication :

Stop dead

Proceed and be prepared to stop at the next stop signal.

Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by

Proceed

SIGNALS

special instructions

S.R. 3.08-1. Junction type route indicators in multiple aspect signalling territory.



Red or yellow or double yellow or green lit as the case may be with junction indicator blank.

Indicates - NO DIVERSION.



3 to 5 white lights lit. Main signal yellow lit with left hand junction indicator lit.

Indicates - LEFT HAND DIVERSION.



3 to 5 white lights lit. Main signal yellow lit with right hand junction indicator lit.

Indicates - RIGHT HAND DIVERSION.

Note : For the purpose of diversion, a signal displaying yellow aspect with a minimum of 3 lights out of the 5 white lights of the junction indicator lit shall be taken as a signal correctly taken 'Off'.

SIGNALS

3.09. Kinds of fixed stop signals for approaching trains -

(1) The Stop signals which control the movement of trains approaching a station are of three kinds, namely - Outer, Home and Routing signals.

(2) The Outer signal, where provided, is the first Stop signal of a station and is located at an adequate distance outside the point upto which the line may be obstructed after Line Clear has been granted to or obtained by the station in rear.

(3) The Home signal is the first Stop signal of a station at which an Outer signal is not provided and the second Stop signal of a station at which an Outer signal is provided. It shall be located outside all connections on the line to which it refers.

(4) The Routing signal is a signal used to indicate to a driver which of two or more diverging routes is set for him, when the Home signal is, in consequence of its position, inconvenient for this purpose.

3.10. Kinds of fixed Stop signals for departing trains -

(1) The Stop signals which control the movement of trains leaving a station are of two kinds, namely - Starter and Advanced Starter.

(2) When a train leaving a station is guided by only one starting signal, it is the last Stop signal of a station and is called the Starter.

(3) When a train leaving a station is guided by more than one Starter signal, the outermost starting signal is the last Stop signal of the station and is called the Advanced Starter.

(4) The Starter, where only one such signal is provided, or the Advanced Starter, shall be fixed at the limit beyond which no train may pass, unless the Driver is given the authority to proceed required under the system of working, and shall be placed outside all connections on the line to which it refers except where otherwise allowed by approved special instructions. Shunting operations beyond this limit shall be carried out only in accordance with special instructions.

(5) where an Advance Starter is provided, the Starter referring to any line shall be placed so as to protect the first facing points or fouling mark of the connections to another running line.

S.R. 3.10-1. At junction station, either intermediate Starters are used or the Starters are provided with route indicators.

3.11. Intermediate Block Stop signal -

Intermediate Block signal is the Home signal provided at an Intermediate Block Post.

SIGNALS

3.12. Kinds of fixed Stop signals in Automatic Block territories -

- (1) Stop signals in Automatic Block territory shall be colour light signals and may be of the following kinds -
- (a) an Automatic stop signal which is not dependent upon manual operation but is controlled automatically by the passage of a train into, through and out of the automatic block signalling section;
 - (b) a Semi-Automatic Stop signal which is capable of being operated either as an Automatic stop signal or as a Manual Stop signal, as required;
 - (i) when a Semi-Automatic stop signal works as an Automatic Stop signal, it assumes 'On' and 'Off' aspects automatically according to the condition of the automatic block signalling sections ahead;
 - (ii) when a semi-Automatic Stop signal works as a Manual Stop signal, it assumes 'On' aspect automatically on the occupation of the automatic block signalling section ahead, but assumes 'Off' aspect when operated manually, provided the relevant automatic block signalling sections ahead are clear;
 - (iii) When a Semi-Automatic stop Signal works as an Automatic Stop signal, the 'A' marker provided under the signal is illuminated. when the 'A' marker is extinguished, the signal shall be deemed to work as a Manual Stop signal; and
 - (ba) a Modified Semi-Automatic Stop signal by converting one of the Automatic stop signal in mid-section under special instructions; when the 'A' marker is illuminated the signal works as Automatic stop signal, and when the 'A' marker is extinguished it works as modified Semi-Automatic stop signal and assumes 'off' aspect automatically or is taken 'off' manually as required; and
- CS/12/5 (Ref : i) Rly Bd's letter No. 2010/Safety(A&R)/19/20 dated 26.09.2011
ii) Gazette of India GSR 705(E) No. 521 dated 21.09.11)**
- (c) a Manual stop signal operated manually and which cannot work as an Automatic or a Semi-Automatic stop signal.
- (2) Colour light signals in Automatic Block territory shall be three-aspect or four-aspect.

S.R. 3.12-1. (a) Semi-Automatic/Manual signal levers provided with normal indication locks, when required to be replaced to normal either in a face of an approaching train in an emergency or after the train has passed the signal, shall be put back to three quarter position and shall be replaced to normal only after getting the "FREE" indication.

SIGNALS

(b) In case of semi-Automatic/Manual signals of the Relay interlocking system, it should not be possible to change the route ahead of the Signal which has not been cleared by the train.

(c) King levers are provided at certain cabins which when reversed, lock the levers of all running Semi-Automatic signals in the reverse position and enable the signals to function as Automatic signals.

(d) In the case of Relay Interlocking no king levers are provided. Certain signals can function as Automatic signals, the switching arrangements for which will be specified in the Station Working Rules.

3.13. Calling-on signals -

(1) A Calling-on signal is a subsidiary signal which has no independent aspect in the 'On' position and shall be -

- (a) a short square ended semaphore arm, or
- (b) a miniature colour light provided with a 'C' marker.

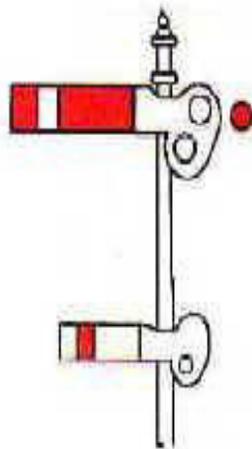
(2) A Calling-on signal, where provided, shall be fixed below a Stop signal governing the approach of a train. Under approved special instructions, a Calling-on signal may be provided below any other Stop signal except the last Stop signal.

(3) A Calling-on signal, when taken 'Off', calls on the Driver of a train to draw ahead with caution, after the train has been brought to a stop even though the Stop signal above is at 'On' and indicates to the Driver that he should be prepared to stop short of any obstruction.

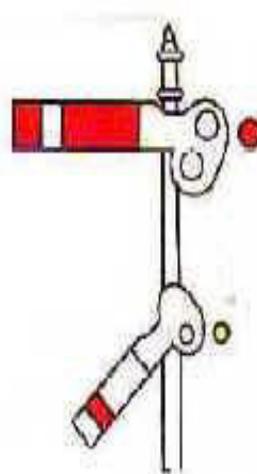
- (4) A Calling-on signal shall show no light in the 'On' position
- (5) The aspects and indications of a semaphore Calling-on signal are shown below :-

(a) Miniature Semaphore arm type Calling-on signal in Two-Aspect Signalling Territory -

'On' position



'Off' position



SIGNALS

Aspect :

Proceed slow

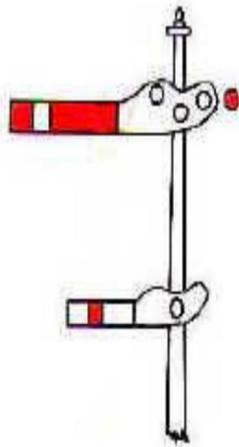
Indication :

Stop and then draw ahead
caution and be prepared to
stop short of any obstruction.

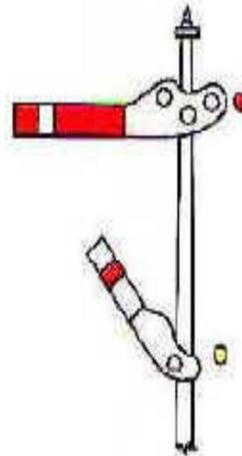
Driver shall obey the aspect of
with the Stop Signal.
stop

(b) Miniature Semaphore arm type Calling-on signal in Multiple-Aspect Signalling Territory -

'On' position



'Off' position



SIGNALS

Aspect :

Proceed slow

Indication :

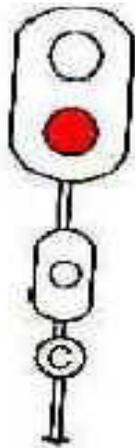
Stop and then draw ahead
caution and be prepared to
stop short of any obstruction.

Driver shall obey the aspect of
with the Stop Signal.

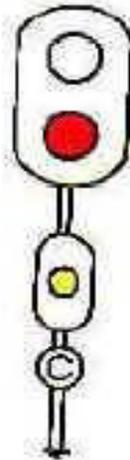
(6) The aspects and indications of colour light type Calling-on signal are shown below -

(a) Colour light type Calling-on signal in Two-Aspect Signalling Territory -

'On' position



'Off' position



Aspect :

Proceed slow

SIGNALS

Driver shall obey the aspect of
with the Stop Signal.

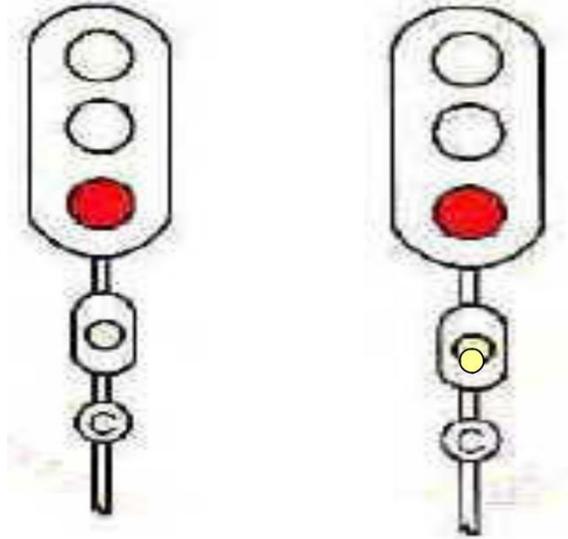
Indication :

Stop and then draw ahead
caution and be prepared to
stop short of any obstruction.

SIGNALS

(b) Colour light type Calling-on signal in Multiple Aspect signalling territory -

'On' position 'Off' position



Driver shall obey the aspect of with the Stop Signal.

Aspect :

Proceed slow

Indication :

Stop and then draw ahead caution and be prepared to stop short of any obstruction.

SIGNALS

3.14. Shunt signals -

- (1) (a) A shunt signal is a subsidiary signal and shall be either -
 - (i) a white disc with a red bar across it, or
 - (ii) a position light signal.
- (b) under special instructions a shunt signal may be miniature semaphore arm
- (2) Shunt signals control shunting movements.
- (3) A Shunt signal may be placed on a post by itself or below a stop signal other than the first stop signal of a station.
- (4) More than one shunt may be placed on the same post and when so placed the topmost shunt signal shall apply to the extreme left hand line and the second shunt signal from the top shall apply to the next line from the left and so on.
- (5) When a Shunt signal is taken 'Off', it authorises the Driver to draw ahead with caution for shunting purposes although stop signal, if any, above it is at 'On'.
- (6) When a shunt signal is placed below a stop signal, it shall show no light in the 'On' position.
- (7) In case shunt signals are not provided, hand signals may be used for shunting.
- (8) The aspects and indications of a disc type shunt signal are shown below -
- (a) Disc type shunt signal in Two-Aspect Signalling Territory -
 - 'On' position
 - 'Off' position



Aspect :

Stop

Indication :

Stop dead



Proceed slow.

Proceed with caution for
Shunting.

SIGNALS

SIGNALS

(b) Disc type Shunt signal in Multiple-Aspect Signalling Territory -

'On' position



'Off' position



Aspect :

Stop

Proceed slow.

Indication :

Stop dead

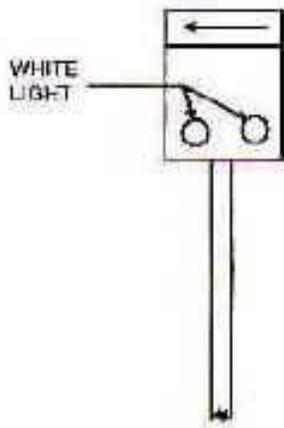
Proceed with caution
for shunting.

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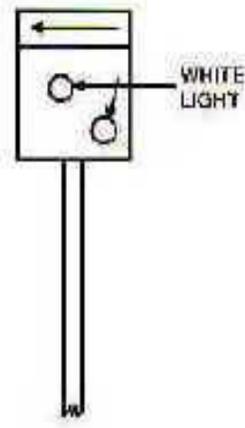
(9) The aspects and indications of a position light type shunt signal are shown below -

Position light type shunt signal in Two-Aspect or Multiple-Aspect Signalling Territory -

'On' position



'Off' position



Aspect :

Stop

Proceed slow.

Indication :

Stop dead

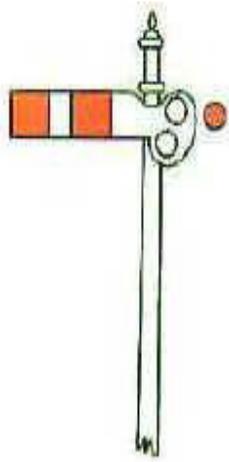
Proceed with caution
for shunting.

SIGNALS

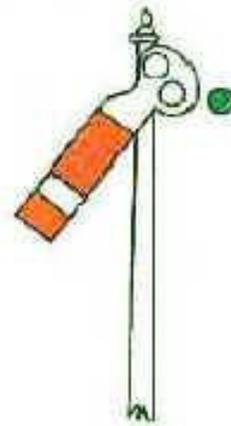
(10) The aspects and indications of a semaphore arm type shunt signal are shown below -

(a) Miniature semaphore arm type shunt signal in Two-Aspect Signalling Territory -

'On' position



'Off' position



Aspect :

Stop

Proceed slow.

Indication :

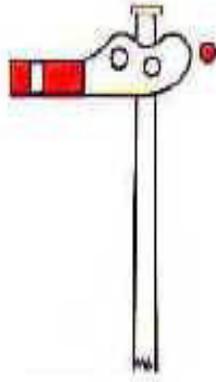
Stop dead

Proceed with caution
for shunting.

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(b) Miniature Semaphore Arm type Shunt signal in Multiple-Aspect Signalling Territory -

'On' position



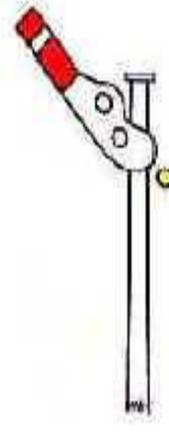
Aspect :

Stop

Indication :

Stop dead

'Off' position



Proceed slow.

Proceed with caution
for shunting.

S.R. 3.14-1. "Shunting permitted" Indicator -

(i) The "Shunting Permitted" Indicator always works in conjunction with a stop signal or a shunt signal and shows in both directions, by day, a black disc with yellow cross painted on it and by night a yellow cross illuminated by light or both by day and by night, a yellow cross illuminated by light, when shunting is permitted in the direction to which it refers. 'Shunting Permitted' indication when given authorises the Driver to shunt past the associated stop/shunt signal in the 'On' position. A proceed hand signal must always be shown at the signal in respect of the movement controlled by the 'Shunting Permitted' Indicator.

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(ii) The Stop/Shunt signal must be taken 'Off' for the movement controlled by the signal and for which the shunting permitted indication will not be shown.

3.15. Co-acting signals -

(1) Co-acting signals are duplicate signals fixed below ordinary signals and are provided where, in consequence of the height of the signal post, or of their being an over-bridge or other obstacle, the main arm or light is not in view of the Driver during the whole time that he is approaching it.

(2) Co-acting signals shall be fitted at such height that either the main arm or light or the Co-acting arm or light is always visible.

3.16. Repeating signals -

(1) A signal placed in rear of a fixed signal for the purpose of repeating to the Driver of an approaching train the aspect of the fixed signal in advance is called a Repeating signal.

(2) A Repeating shall be provided with an 'R' marker and shall be of -

- (a) banner type, or
- (b) a square ended semaphore arm, or
- (c) a Colour light signal.

(3) The aspects and indications of banner type Repeating signal are shown below -

Banner type Repeating signal in Two-Aspect Signalling Territory -

'On' position

'Off' position



Aspect :
Signal 'On'

Signal 'Off'

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Indication :

Signal which it repeats
is at 'On'.

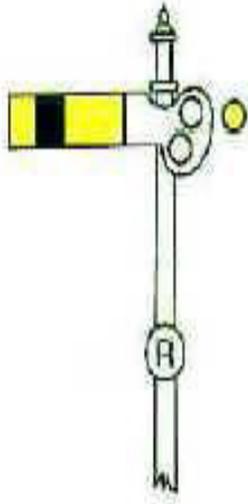
Signal which it repeats
is 'Off'.

SIGNALS

(4) The aspects and indications of a semaphore arm type Repeating signal are shown below -

Semaphore arm type Repeating Signal in Two-Aspect signalling Territory -

'On' position



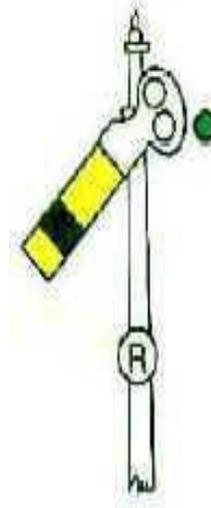
Aspect :

Signal 'On'

Indication :

Signal which it repeats
is at 'On'.

'Off' position



Signal 'Off'

Signal which it
repeats is 'Off'.

SIGNALS

(5) The aspects and indications of a Colour light type Repeating signal are shown below -

Colour light type Repeating signal

'On' position



Aspect :

Signal 'On'

Indication :

Signal which it repeats
is at 'On'.

'Off' position



Signal 'Off'

Signal which it
repeats is 'Off'.

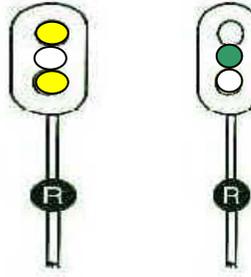
SIGNALS

SR 3.16-1 Repeating Signal – The Aspects and Indications of a colour light type Repeating signal are shown below –

'On' position



'Off' position



Repeating Signal	
Aspect	Indication
Y	Signal which it repeats is at 'On'
YY	Signal which it repeats is One Yellow or One Yellow with Route indicator or Double Yellow
G	Signal which it repeats is Green

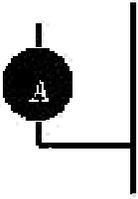
Note :- The provision of SR 3.16-1 will be made applicable as soon as necessary changes in the aspect control circuit of Repeating signals on a particular section is done and will come in force from the date as notified by the Signaling department. On receipt of notification, caution order in this regard will be issued for 10 days.

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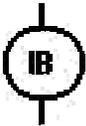
3.17. Distinguishing markers and signs for signals -

(1) Where necessary, signals shall be distinguished by prescribed markers. Such markers shall be fixed on the signal posts below the signals as under :

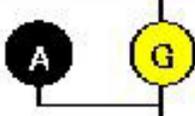
<u>Appearance</u>	<u>Provided on</u>	<u>Description</u>
	Automatic Stop signal	Letter `A' in black on white circular disc
	Semi-Automatic Stop signal	White illuminated letter `A' against black background when working as an Automatic Stop signal, and letter `A' extinguished when working as a Manual Stop Signal
	Colour light Distant or Warner signal on a post by itself.	Letter `P' in black on white circular disc. <small>Automatic Stop Signal</small>

Note : Where a Colour Light Distant signal is combined with a last stop signal as provided for under sub-rule(7) of rule 3.07, the marker shall be dispensed with.

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<u>Appearance</u>	<u>Provided on</u>	<u>Description</u>
	Intermediate Block Stop signal	Letter 'IB' in black on white circular disc.
	Calling-on signal	Letter 'C' in black on white circular disc.
	Repeating signal in Semaphore signalling territory	Letter 'R' in black on white circular disc
	Repeating signal in colour light signalling territory	White illuminated letter 'R' against black background

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<u>Appearance</u>	<u>Provided on</u>	<u>Description</u>
	Gate Stop signal	Letter 'G' in black on yellow circular disc.
	Gate Stop signal in Automatic Block territory	Letter 'G' in black on yellow circular disc and white illuminated letter 'A' against black background.

Note : Letter 'A' shall be 'lit' only when the Gates are closed and locked against road traffic.

- (2) Where necessary, signal arms shall be distinguished by prescribed sign as under :

<u>Appearance</u>	<u>Provided on</u>	<u>Description</u>
	Approach signal for Goods running lines only.	One black ring on Semaphore arm.
	Approach signal for Dock platform	Letter 'D' in black on semaphore arm.

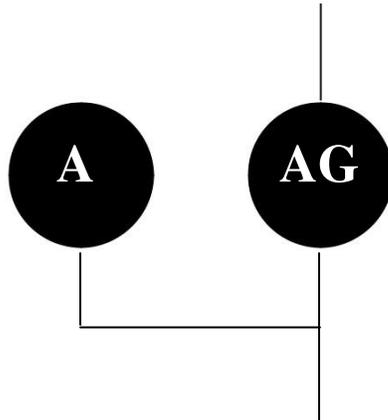
SIGNALS

(3) Other distinguishing markers or signs may be used with the approval of the Railway Board.

S.R.3.17-1. When a gate Stop signal is a Semi-Automatic Stop signal and protects points in addition to the level crossing it shall be provided with white illuminated letter 'A' and white illuminated letters 'AG' against black back ground.

The indication of such signal shall be as under -

- (a) Letter 'A' shall be lit only when the gates are closed and locked against road traffic and points are correctly set and locked for the route.
- (b) Letter 'AG' shall be lit only when the gates are either open to road traffic or have failed but points are correctly set and locked for the route.
- (c) Neither marker shall be lit when the points are not correctly set and locked for the route or have failed.

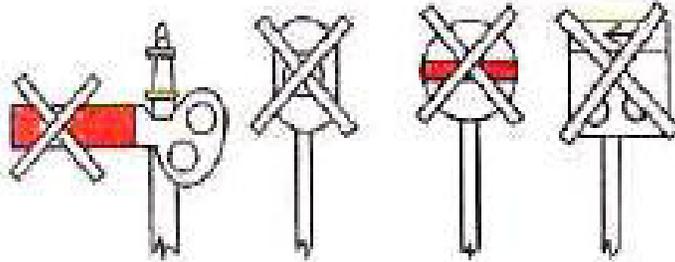


Semi-Automatic Gate Stop Signal.

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3.18. Signals out of use -

(1) When a fixed signal is not in use, it shall be distinguished by two crossed bars, each bar being not less than 1 metre long and 10 cms wide, as illustrated below :



(2) Semaphore or Disc signal when not in use shall be kept fixed in the 'On' position.

(3) Signals not in use shall not be lit.

3.19. Placing of Stop signals at diverging junctions -

Unless otherwise permitted by approved special instructions, where two or more lines diverge, the signals shall be fixed on a bracket post or an approved type of route indicator shall be provided instead of separate signals.

Provided that for speeds upto 75 kilometres per hour with manually operated multiple aspect signals, only a single arm Home signal may be provided instead of separate signals on a bracket post or a route indicator. The facing points must be provided with point indicators.

S.R. 3.19-1. Route indicators Junction or multiple lamp type of approved design may be provided in Multiple Aspect Colour light Signalling territory. When Junction type Route Indicators are provided, each arm of the Junction indicator should indicate a separate diverging line, unless the lines they indicate are track circuited or they are exclusively used for goods traffic in which case there shall be only one arm for each direction i.e. left hand or right hand or both as the case may be.

3.20. Placing of Stop signals at converging junctions - Unless otherwise permitted by approved special instructions, where two or more lines

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converge, signals shall be placed on separate posts. Where the number of signal is considerable, these may be provided on a bracket post or a signal bridge or gantry.

3.21. Signals on bracket post or signal bridge or gantry - Where signals are placed on a bracket post or signal bridge or a gantry, these shall be -

(a) so grouped that the respective signals are easily distinguishable for each running line and are placed as nearly as possible over the running lines to which they refer,

(b) so placed that the signal referring to the main line is higher than the signal or signals referring to the other running line or lines, and

(c) so arranged that the extreme left hand signal refers to the extreme left hand line and the second signal from the left refers to the next line from the left and so on.

3.22. Placing of more than one signal on the same post -

(1) Not more than one signal referring to trains moving in the same direction, whether on the same line or on separate lines, shall be placed on the same post, except -

(a) as prescribed in these rules for Calling-on, Shunt, Co-acting and Warner signals, or

(b) under approved special instructions.

(2) Where under approved special instructions more than one signal is placed on the same post, the topmost signal shall apply to the extreme left hand diverging line and the second signal from the top shall apply to the next line from the left and so on.

Provided that in exceptional cases where two Home signals are placed on the same post, under approved special instructions the top signal shall apply to the main line and the lower signal shall apply to the other lines.

3.23. Electric repeater - The arm and light of any fixed signal which cannot be seen from the place from which the signal is worked shall be repeated to such place by means of an efficient electric repeater.

3.24. Back-lights -

(1) Every semaphore or disc signal, the light of which cannot be seen from the place from which the signal is worked, shall be provided with a back-light to indicate whether the signal light is burning or not.

(2) Back-lights of signals shall show a small white light when 'On' and no light at all in any other position.

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(3) Any fixed light used in conjunction with a semaphore signal shall show a back light.

(4) Back lights may not be provided when alternative arrangements are made at the place from which the signal is worked to indicate whether signal lights are burning or not.

S.R. 3.24-1. Gate signals are provided with back lights which shall be visible to the Gateman when the signals is in 'On' position.

C. Equipment of signals

3.25. Obligation to provide fixed signals at a stations - Fixed signals prescribed in this sub-chapter shall be provided at every station, except -

(a) at a stations between which trains are worked on the One Train Only system, and

(b) at stations which are exempted from the provision of signals under approved special instructions.

3.26. Commissioning of fixed signals - Fixed signals shall not be brought into use until they have been passed by the Commissioner of Railway Safety as being sufficient to secure the safe working of trains.

S.R.3.26-1. Whenever any new signal is brought into use or the existing signal is shifted, it must be inspected by a sighting Committee consisting of Transportation Inspector, Loco Inspector, Signal Inspector or Permanent Way Inspector to ensure that the signal is correctly placed and focused, and submit joint report on Form T.102 B.

S.R. 3.26-2. Whenever a new signal is brought into use or an existing signal is shifted, which would effect the running trains, a caution order should be issued for a period of 10 days, after the signal has been brought into use or shifted, drawing the attention of the Drivers to the change as per S.R.4.09-1.

~~S.R. 3.26-3. The minimum sighting distances of signals are as under:-~~

~~(a) Two Aspect lower quadrant signalling-~~

- ~~(i) Outer signal - 1200 metres in those sections where sectional speed is 100 KMPH and above, 800 metres where sectional speed is less than 100 KMPH.~~
- ~~(ii) Warner signal on a post by itself. - 400 metres.~~
- ~~(iii) Home Signal - Each signal should be visible from its previous~~

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- ~~(iv) Main Starter signal - Stop signal in the direction of train.~~
~~(v) Advanced Starter -~~
~~(vi) Loop Line Starter - 200 metres.~~
~~(b) Multiple Aspect signalling -~~
- ~~(i) Distant signal - 400 metres. An inner Distant signal where provided, shall also be visible from a minimum distance of 400 metres.~~
~~(ii) At a station, aspect - Should be visible from it's previous signal in the direction of train.~~
~~of each signal.~~

~~Note:- Where adequate visibility of Stop signals can not be maintained, Repeater or Co-acting signal shall be provided. In the absence of the above, suitable speed restriction should be imposed.~~

S.R. 3.26-3. The minimum sighting distances of signals are as under:-

(a)	Two-Aspect lower quadrant signalling -		
	(i)	Outer signal	- 1200 metres in those sections where sectional speed is 100 KMPH and above. - 800 metres where sectional speed is less than 100 KMPH. - 400 m where Warner Signal is separated.
	(ii)	Warner signal on a post by itself.	- 400 metres.
	(iii)	Home signal	- 400 metres
	(iv)	Main line starter signal	- 400 metres
	(v)	All other signals	- 200 metres
(b)	Multiple-Aspect signalling -		
	(i)	Distant Signal	- 400 metres.
	(ii)	Inner Distant Signal	- 200 metres.
	(iii)	All Stop Signals	- 200 metres.

Note:- Where adequate visibility of Stop signals cannot be maintained, Repeater or Co-acting signal shall be provided, and if not possible, a suitable speed restriction shall be imposed.

CS 13/9 (Ref: Dy.CSO/T Note No. N.SFT/III/G&SR dated 09.01.2013.)

SR 3.26-4. At 'D' class halt / flag stations Engine stop boards should be provided at a distance of 15 metres from the edge of the platform on either side in case of single line and at a distance of 15 metres from the edge of the platform or where the Engine is required to come to a stand on double line to indicate to the driver the place at which his engine is required to be stop.

The size of the board should be 5 ft. by 1 ft. with the letters "ENGINE STOP" painted in black on a yellow back ground over 7 ft. high pole.

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S.R. 3.26-5. Warning boards of distinctive design are provided at a distance of 1000 meters and 1400 meters in rear of the first Stop signal for passenger and goods trains respectively to warn the Driver that he is approaching the first Stop signal. If no signal indication is available, the Driver should control the speed of the train as if the stop signal ahead is at 'On'. If, however, subsequently after passing the warning board, the Driver gets the indication, either by the Stop signal itself or through the Distant or Warner signal that the Stop signal ahead is not in the 'On' position, he shall suitably increase the speed depending upon the signal indications.

Note : The Warning board located at 1000 meters will have yellow stripes diagonally painted on a black board and the Warning board located at 1400 meters will have a circle between two parallel lines and painted Yellow on a black board.

S.R. 3.26-6. Advance Approach Warning system Boards are provided on sections where trains run at a speed exceeding 120 KMPH except in Automatic signalling territory. A high speed approach warning board shall be provided at a distance of 1800 Metres in rear of the first stop signal/gate signal to warn the Driver of high speed train that he is approaching the first stop signal/gate signal. The circular disc of the board shall have a diameter of 0.6 metres with black diagonal bands on yellow background at a height of 2.1 metres from rail level. A track ground magnet alongside the board and matching equipment on the engine of high speed trains are provided so as to give an audio-visual warning inside the loco to the Driver compelling him to lookout for the signal aspect. If within 5 seconds, the Driver fails to acknowledge the warning, brakes shall be applied to bring down the speed of the train to 100 KMPH.

3.27. Minimum equipment of fixed signals at stations provided with manually operated multiple-aspect signalling - The minimum equipment of fixed signals to be provided for each direction shall be as follows -

- (a) at class 'B' stations -- a Distant, a Home and a Starter, and
- (b) at class 'C' stations -- a Distant and a Home.

3.28. Minimum equipment of fixed signals at stations provided with modified lower quadrant signalling - Modified lower quadrant signalling may be introduced only where it is expressly sanctioned by a special order of the Railway Board. The minimum equipment of fixed signals to be provided for each direction shall be as follows -

- (a) at class 'B' stations -- a Distant, Home, a Warner below the Main Home, and a Starter, and
- (b) at class 'C' stations -- a Distant and a Home.

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3.29. Minimum equipment of fixed signals at other stations provided with two-aspects signalling - The minimum equipment of fixed signals to be provided for each direction shall be as follows -

- (a) at class 'A' stations -- a Warner, a Home and a Starter,
- (b) at class 'B' stations :
 - on a single line -- an Outer and a Home,
 - on a double line -- an Outer, a Home and a Starter, and both on a single and a double line a Warner shall be provided in accordance with Rule 3.06, if trains run through at a speed exceeding 50 kilometres an hour without stopping, and
- (c) at class 'C' stations -- a Warner and a Home.

3.30. Additional fixed signals as stations generally - In addition to the minimum equipment of signals prescribed in Rules 3.27, 3.28, 3.29 and 3.32 such other fixed signals shall be provided at every station as may be necessary for the safe working of trains.

3.31. Signals at class 'D' stations - At a class 'D' station, a train may be stopped in such manner as may be authorised by special instructions.

3.32. Provision of an Advanced Starter, Shunting Limit Board or Block Section Limit Board -

(1) On a single line class 'B' station worked on the Absolute Block System, if the obstructing of the line outside the Home signal or the outermost facing points in the direction of an approaching train is permitted under special instructions under rule 8.09, a Shunting Limit Board or an Advanced Starter shall be placed at such shunting distance from the Home signal or the Outer most facing points as local conditions may require, provided the distance between the Shunting Limit Board (bearing the words 'Shunting Limit' on the side which faces the station, and fitted with a lamp showing a white light in both directions to mark its position by night) or the Advanced Starter and the opposing first Stop signal is never less than 400 meters in the two-aspect signalling territory and 180 meters in the multiple aspect or modified lower quadrant signalling territory. The location of such board or Advanced Starter shall mark the limit upto which shunting may be permitted.

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(2) On a double line class 'B' station worked on absolute Block System equipped with multiple-aspect or modified lower quadrant signalling and where there are no points or the outermost points at the approaching end are trailing, a Block Section Limit Board (bearing the words 'Block Section Limit' on the side which faces the station and fitted with a lamp showing white light in both directions to mark its position by night) shall be provided. It shall be placed at a distance of not less than 180 meters in advance of the Home signal and shall protect the fouling mark of the outermost trailing points, if any. The location of such board shall mark the limit of the block section at such stations.

3.33. Exceptions to Rules 3.27, 3.28, 3.29 and 3.32 - Notwithstanding anything contained in Rules 3.27, 3.28, 3.29 and 3.32 :

(a) If the station has only one connection off the main line, the station shall be worked in accordance with approved special instructions;

(b) On any section where traffic is light and speed slow, one Stop signal only in each direction may be provided at each station; Such signal to be located at an adequate distance outside the outermost facing points of the station and trains worked in accordance with approved special instructions; and

(c) on any railway having very light traffic all signals may be dispensed with and the trains worked under approved special instructions;

Provided that at stations with manually operated multiple aspect signals where the speed of trains through a station does not exceed 50 Kilometres per hour, a Distant signal and a Home signal only may be provided in each direction under approved special instructions.

3.34. Fixed signals at level crossings -

(1) Unless exempted under approved special instructions, every level crossing gate which closes across the line at a level crossing shall, except when interlocked with station signals, be provided with signals fixed at an adequate distance from the level crossing showing Stop aspects in both Up and Down directions when the gates are open for the passage of road traffic.

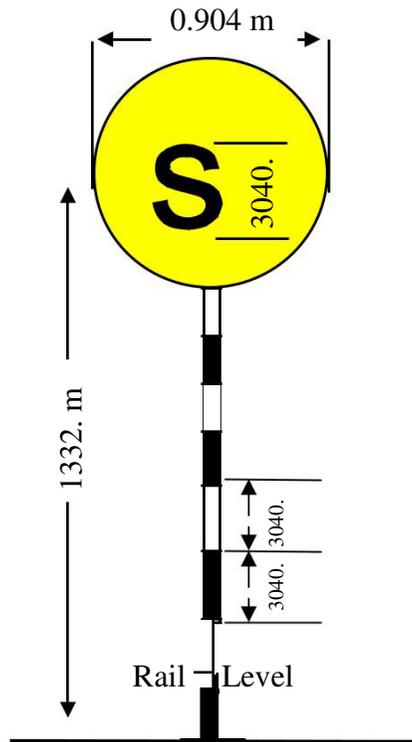
(2) Except where otherwise prohibited under special instructions, a 'G' marker shall be provided on a gate Stop signal.

S.R. 3.34-1. Every gate signal, except those controlling the entry into rail-cum-road bridge or where there is a bridge between the gate signal and the gate, shall be provided with a yellow circular plate on the post with letter 'G' in black inscribed thereon.

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3.35. Protection and working of points of out-lying sidings - Where there are points in the main line at a place which is not a block station, provision for the protection of such points, by signals or otherwise, and for working them, shall be made in order to secure the safe working of trains, as laid down under approved special instructions.

S.R. 3.35-1. 'S' Marker Indicator will be provided for, indicating to Driver the position of the facing points of an outlying siding. The indicator will be of a 0.914 meters diameter disc, painted yellow and bearing 0.304 meters high letter 'S' in black as shown in the diagram below :



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D. Working of Signals and Points.

3.36.Fixed signals generally -

(1) Every fixed signals shall be so constructed that, in case of failure of any part of its connections, it shall remain at, or return to its most restrictive aspect.

(2) A signal which has been taken 'Off' for passage of a train shall not be placed 'On' until the whole of the train which it controls has passed it, except

-

- (a) in case of emergency to avert an accident, or
- (aa) where Starter and Advanced Starter taken 'off' for departing trains that is trains starting from station after coming to stop are required to be put back for the purpose of movement of another train for precedence or crossing shall be put back only after taking following precautions : -
 - (i) relevant Starter and Advanced Starter may be replaced to 'on' position and thereafter the Loco Pilot of the train for which the signals had been taken 'off' shall be advised by on-duty Station Master through a secured means of communication, specified under special instructions or where secured means of communication are not available, through a written memo to the effect that the said signals have been replaced to 'on' and that the Loco Pilot shall not start;
 - (ii) till the Loco Pilot has been advised through secured means of communication referred to in sub-clause(i) or through a written memo and his acknowledgment received, the route set shall not be altered except to avert an accident; or
(CS 14/5 vide Board's letter no. 2012/Safety(A&R)/19/5 dated 06.05.2015)
- (b) where arrangement is provided to restore the signal to 'On' automatically, the control operating the signal shall not be restored to its normal position till the whole of the train has passed it.

(3) No fixed signal within station limits shall be taken 'Off' without the permission of the Station Master, and in the case of signal outside the station limits without the permission of such person as may for the time being be in independent charge of the working of such signal.

S.R. 3.36-1. Signals Taking "Off" -

(a) Signals shall not be taken 'Off' for a train more than ten minutes before the train is due and in the case of short block sections, where the running

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time is less than 10 minutes signals may be taken 'Off' as soon as the 'Line is Clear' signal is given.

(b) For all suburban trains, whether stopping at a station or not, the respective Starting signal should be taken 'Off' as soon as 'Line Clear' has been received from the station in advance, it shall be the responsibility of the Motorman and the Guard to stop their train at the stations at which it is booked to stop in the Working Time Table although the starting signal at that station may have been taken 'Off'.

~~(c) If there is a permanent/temporary speed restriction of less than 50 KMPH within station limits~~

~~i) The Warner signal, in Two Aspect Lower Quadrant signalling, shall be kept disconnected. ii) In Multiple aspect signalling the Clear aspect of Home signal should be kept disconnected.~~

(C) Deleted vide CS 7/9

S.R. 3.36-2. (a) Signals once taken 'Off' for the passage of a train, must not be replaced to 'On', before the complete passage of train in ordinary course.

If, in an emergency, a signal has to be put back to 'On' position before the passage of the train, no points set for its passage, shall be moved until the train has been brought to a stand. However, in extreme emergency, points can be altered to avert an accident.

(b) In the event of any unsafe condition being noticed on a passing train by the CASM/Switchman/Cabinman of the near-end- cabin, he shall immediately contact the ASM/far-end-cabin staff by giving non-stop ring on the inter-cabin/station group telephone. The ASM/Staff of the far-end-cabin, on receipt of the intimation about the unsafe condition, shall immediately putback the departure signals to 'On' position and take all steps to stop the train.

~~(c) In case Starter and Advanced Starter have been taken 'Off' for departing train and required to be put back to 'On' for purpose of precedence or crossing, the following procedure should be followed to replacing the Starter/Advanced Starter signal to 'On'—~~

~~On single line section, the 'Authority to proceed', if any, handed over to the Driver, must be withdrawn and on single line/double line—~~

~~(i) The Driver of the train, for which the signals have been taken 'Off', should be advised by a written memo to the effect that he should not start since his signals are to be replaced to 'On'. His written acknowledgement should be obtained on the office copy of the memo.~~

~~(ii) Thereafter the Driver and staff deputed to handover memo shall immediately exhibit a Stop hand signal to the Station Master/Cabin controlling the signals.~~

~~(iii) On getting such Stop hand signal as stated in para (ii) above, Station Master/Cabin staff shall replace Starter/Advanced Starter to 'On'.~~

(c) : In case Starter and Advanced Starter signals have been taken 'OFF' for departing trains i.e. trains starting from station after coming to stop, are required

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to be put back for the purpose of movement of another train (precedence or crossing), the following precautions must be taken:

- i) Relevant Starter and Advanced Starter signals may be replaced to 'ON' position. Then the Loco Pilot of the train for which the Signal had been taken 'OFF' should be advised by on duty ASM/Dy.SS through a secured means of communication (MTRC etc.) to the effect that his Signal has been replaced to 'ON' and he should not start.
- ii) On single line section, the 'Authority to proceed', if any, handed over to the Loco Pilot, must be withdrawn.
- iii) Whenever secured means of communication in the form of MTRC, etc. is not available, the Loco Pilot shall be advised through a written Memo that his Signal has been replaced to 'ON' and he should not start.
- iv) Till the Loco Pilot has been advised through a secured means of communication or through a written Memo and his acknowledgement received, the route set should not be altered except to avert an accident.

CS 13/7 (Ref. : Board's letter No.2012/Sig/SEM-II/Misc. dated 10.10.2012.)

S.R. 3.36-3. (i) The staff responsible for working signals shall always see that the position of the signal arm corresponds with the position of the lever button/switch operating it.

(ii) After getting control on the Home signal authorising the taking 'Off' of the Home signal, the staff responsible for working signals should personally watch the arm/back light/arm and light repeater to satisfy himself that the correct Home signal has been taken "OFF".

(iii) In case of a train booked to run through a station stops on through signals, and is likely to be detained. The Station Master shall arrange to have the signals put back to the "ON" position informing the cabin accordingly. He shall also restore his control slide of the last Stop signal where provided to normal position.

S.R. 3.36-4. (a) Reception of trains at an interlocked station -

(i) At an interlocked station before admitting a train, the Station Master shall telephone to the near-end and far-end cabins, advising the cabin ASMs/Switchmen/Cabinmen, as the case may be, the number and description of the train and the line nominated for its reception. The cabin staff shall repeat the instructions received in token of having understood them correctly.

(ii) In case of a train to be received on a line, the far end of which terminates in a sand-hump, and if the points at the far-end are to be set to connect to the sand-hump, the Station Master shall so advise the far-end cabin under exchange of Private Numbers.

(iii) The Cabin ASM/Switchman/Cabinman of the far-end cabin shall set and lock the route, as instructed by Station Master, and advise the near-end cabin of having done so and release his slot control on the required reception signal.

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Thereafter, he shall advise the Station Master on the telephone confirming that the requisite route has been set and locked.

(iv) The Cabin ASM/Switchman/Cabinman of the near-end cabin, after setting and locking the route governing the approach of the train for the nominated line shall telephonically confirm to the Station Master that the route has been set and locked correctly.

(v) The Station Master on getting advice from far-end and near end cabins about route having been set and locked correctly for the reception of the train shall advise the near-end cabin of the signal, he is going to slot. This advise shall be under the exchange of private number and thereafter he shall operate the relevant Home Signal slot. The Cabin ASM/ Switchman/Cabinman, as the case may be, responsible for working signals shall also verify that the correct Home signal has been taken "OFF" corresponding to the slot released by the Station Master.

(b) Despatch of Trains -

At an interlocked station, when a train is ready for despatch, the Station Master after obtaining "Line Clear" from the Station in advance shall advise the Cabinman of the far-end cabin of the number and description of the train and the line from which it is to be dispatched. At Station where block instruments are installed in the end cabins, the Station Master shall advise the CASM/Switchman to obtain 'Line Clear' from the station in advance mentioning the number and description of the train and the line from which it is to be dispatched. The CASM/Switchman/Cabinman shall repeat the Station Master's instructions in token of having understood them correctly. There after the CASM/Switchman shall obtain "Line Clear" for the train if the block instruments are installed in the end cabins and the CASM/Switchman/ Cabinman shall then set and lock the requisite route and take 'Off' the Starter Signal, if interlocking does not prevent its being taken off. After verifying that the correct Starter signal has been taken 'Off' the Station Master shall advise the CASM/Switchman/Cabinman under exchange of Private Numbers to take 'Off' the last Stop signal. At stations where the control over the last Stop signal is exercised through the Station Master's slide, the Station Master shall also release his slide control to the Cabinman to take 'Off' last Stop signal.

(c) Procedure for run through trains -

(i) When it is intended to allow a train to run through a station the Station Master, after obtaining "Line Clear" from the Station in advance, shall advise the far-end and near-end cabins of the number and description of the train and the line via which it is to run through instructing them to set and lock the requisite route and to release the slot control of the relevant Home Signal to the Cabin ASM/Switchman/Cabinman of the near end cabin. At a station where block instruments are installed in the end cabins, the Station Master shall also advise

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the Cabin ASM/Switchman of the far-end cabin to obtain “Line Clear” for the train from the Station in advance, before setting and locking the requisite route.

(ii) The Cabin ASM/Switchman/Cabinman of the far-end cabin, after setting and locking the requisite route and releasing the slot control of the relevant Home signal to the near-end cabin, shall advise the Station Master of the route having been set & locked correctly where upon the Station Master shall then release the control of last Stop signal, where provided and shall advise the far end cabin under the exchange of Private Numbers to take ‘Off’ the Advanced Starter and then Starter signal.

(iii) The Station Master after verifying that the correct departure signals have been taken “OFF” shall call the Cabin ASM/Switchman/Cabinman of the near end Cabin and confirm that the correct near end route has been set and locked. He shall then advise the Cabin ASM/Switchman / Cabinman under the exchange of Private Numbers of the Home Signal slide which he is going to release. The Station Master shall release the relevant Home Signal slide. The Cabin ASM/Switchman/Cabinman should verify that the correct Home signal has been taken “OFF” corresponding to the slot received from the Station Master.

Note : The above Instructions pertain to stations provided with 2 or more cabins having inter cabin control, and should be incorporated in the Station Working Rules.

The Station Working Rules of stations with one central cabin should incorporate the procedure for exchange of Private numbers between the Station Master and the cabin staff in conformity with the above instructions.

3.37. Normal aspect of signals -

(1) Unless otherwise authorised under approved special instructions, fixed signals, except automatic signals, shall always show their most restrictive aspect in their normal position.

(2) The normal aspect of an Automatic Stop signal is “Proceed” Where however, the signal ahead is manually operated, the aspect normally displayed may be “Caution” or “Attention”.

S.R. 3.37-1. In Automatic section Drivers and Motormen must bring their train to a halt at Station, where stoppages are scheduled in the Working Time Table even though the signal governing departure from the station is ‘Off’.

S.R. 3.37-2. Stopping run through train at a station on the Automatic Block Section - Two detonators 10 meters apart shall be placed at a distance of 180 meters from the end of station platform towards the approaching train and danger hand signals displayed from the platform.

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3.38 Points affecting movement of train

- (1) **The Station Master shall not give permission to take signals “Off “ for a train until**
 - (a) **all facing points over which the train will pass are correctly set and locked.**
 - (b) **all trailing points over which the train will pass are correctly set, and**
 - (c) **the line over which the train is to pass is clear and free from obstructions.**

- (2) **When a running line is blocked by a stabled load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station etc. the points in rear on double line sections and at either end on single line sections should be immediately set against the blocked line except when shunting or any other movement is required to be done immediately in that direction on that line.**
CS 3/2 dated 14.08.2000

S.R. 3.38-1. Use of lever collars, slide collars/Pins, Button /Switch collars -

The person nominated to operate panel, Lever and Switches are responsible to put Lever Collars, Slide Collars/Pins, Button/Switch Collars under the following situations.

(i) Collars/Pins must be placed on concerned Lever, Slide, Button/Switch of the blocked line to prevent their operation and to serve as a visual indication to the person operating them. The collars must be placed on relevant Lever/Button/Switch/Slide, whenever the line is occupied by a train, or for any other reason like a load vehicle/engine is left standing or when the line is otherwise obstructed.

(ii) Collars must also be used to protect reception line on which a train stops to cross or to give precedence to another train/trains in ordinary course.

(iii) Similarly Collars must also be used to prevent operation of departure signals i.e. Starter of the occupied line by a train and Advanced Starter when a block section ahead is occupied.

(iv) When the running line is obstructed the Collars should be used by Station Master on the relevant Slide of the electric Slide instrument or such other apparatus, if provided to him, to prevent the taking ‘Off’ of the reception signal for occupied / obstructed line.

(v) Lever collar to be placed as under -

- | | |
|----------------------------|--|
| a) Running line is blocked | - On lever/button of Point and Home/ Calling-on/ Routing/slot concerned. |
|----------------------------|--|

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- b) Non running line is blocked - Points concerned.
- c) Block section ahead is obstructed - Advanced Starter.
- d) Power Block/Traffic Block - Concerned signals / points including cross-over if involved.

(vi) Collars will be removed as soon as cause of placing it is over. The collars not in use must be placed on spare Lever/Buttons.

(vii) SM/Inspectors/Officers when inspecting Cabins/Stations shall see that staff are well conversant with the rules regarding use of collars/Pins/ Buttons.

(viii) When a material train is stabled for the night at an interlocked station, a Lever Collar shall be placed on the Leaver operating the points leading to the line on which the material train is stabled. The Guard incharge of the material train must see that this has been done as soon as the train is stabled.

(ix) If there is any possibility of electric locomotive or multiple unit stock being admitted on to a road on which over head line staff are working, or if there is a possibility of the movement of an electric locomotive or multiple unit stock crossing a line under repair and so making it alive by means of the pentograph, the leavers controlling the line under repair shall be protected in signal cabins by means of lever collars. The over head line staff shall be responsible for ensuring through the Station Master that protection in the form of lever collars is provided at all times during maintenance work.

~~S.R. 3.38-2. (i) When a running line is blocked by stable load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station etc., the points in rear on double line sections and at either end on single line sections should be immediately set against the blocked line except when shunting or any other movement is required to be done on that line.~~

SR 3.38-2(i) When a running line is blocked by stable load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station etc., the points should be immediately set against the blocked line as under :

- a) in rear of unidirectional lines on double line sections
 - b) at either end of common loop on double line sections,
 - c) at either end on single line sections,
- except when shunting or any other movement is required to be done on that line.

CS 13/10(Ref: Office Note No. TR/G&SR/Rev/101 dated 21.03.13.)

(ii) If all the lines at a station happened to be blocked, when line clear has been granted to a train the points should be set for the line occupied by a stable load or a goods train in that order so that, in case of mishap, the chances of casualties are minimised. In case all the lines at a station are occupied by passenger trains, points should be set for the loop line, to negotiate which, the speed of the incoming train

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would be reduced which, in turn, would be minimise the consequences, casualties. While doing so, points may be set for a loop occupied by a train, if any, whose engine is facing the direction of approach of the incoming train rather than for a loop occupied by a train where a passenger coach will, in case of collision, receive the impact.

NOTE : These precautions shall be taken in addition to the observance of other precautions like use of lever collars etc.

SR 3.38.3: Setting of points when two trains are to be crossed on single line section:–

- 1) When two trains are to be crossed at non-interlocked stations and standard I interlocked stations where interlocking permits, the facing points must be set and locked for respective lines on which each train is to be received. Reception signals shall be taken off for one train at a time and reception signals in opposite direction for second arriving train shall be kept at “ON” position. The trailing points at the far end although set against the line on which first train is to be received does not constitute an obstruction in the path of the train.
- 2) After arrival of first arriving train, reception signals shall be taken off for second arriving train after setting the complete route including trailing points.

Ref : CSO's letter No. T.361.P.CS/G&SR 1999 edition Date : 13/06/2002 CS 7/2]

3.39. Locking of facing points - Facing points, when neither interlocked nor key locked, shall be locked for the passage of a train either by a clamp, or by a through bolt, with a pad lock. It is not sufficient to lock the lever working the points.

S.R. 3.39-1. Responsibility for setting and locking of points at non-interlocked stations -

(i) The Station Master must set and lock all facing points and set the trailing points or ensure the correct setting and locking of the points, as the case may be, for the reception and despatch of all trains carrying passengers (including material trains) except at the Modified non-interlocked stations and the following non-interlocked stations :

Murtajapur (N.G.) Pachora (N.G.) Latur (N.G.) where this responsibility would devolve on the Point Locker (Pointsman Grade 'A').

(ii) For Goods trains, the Point Locker (Pointsman Grade 'A') or in his absence the Senior Pointsman shall be responsible for the correct setting and locking of points in accordance with the SM's instructions on receipt of line Number Badges.

(iii) When two trains cross or one precedes another and the first train happens to be passenger train, the responsibility for the setting and locking of points will be as in para (i) above, but the Station Master need not proceed to the facing points for the second train, even if it is a Passenger train, and the Guard of the first waiting train will be responsible for verifying that the facing points for all

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subsequent trains (whether carrying passengers or otherwise) are correctly set and locked except at Stations listed under para (i) above.

(iv) The change of duty shall not take place, when 'Line clear' has been obtained or granted for a train. The Station Master, who has so obtained or granted Line Clear, shall be responsible for correct setting and locking of points and taking off the relevant signals

NOTE : 1- Details of the usage of line number, signal and shunting stopped badges, where in force, should be included in the Station working Rules.

2- The details of procedure of receipt and despatch of trains at non-interlocked stations and for crossing of trains on single line should be incorporated in the Station Working Rules of the station concerned.

S.R. 3.39-2. Manning of Non-interlocked facing points -

(a) The Outermost facing points, except the points which are key locked must be manned in addition to their being clamped and pad locked. The responsibility of ensuring the manning of outermost facing points will devolve on the person who is responsible for setting and locking of points as laid down in S.R. 3.39-1.

(b) During shunting operations the Shunting Master or Shunting Jamadar will be responsible for seeing that hand points, which are not fitted with spring levers or otherwise not locked for the movement, are manned.

S.R. 3.39-3. Crossing trains, controller's responsibility in regard to -

(a) Controllers must study the running of trains very carefully before issuing instructions regarding the crossing of trains to give precedence to more important trains. Once definite instructions have been issued, these instructions must not be altered except in an emergency, as it must be realised that a sudden change of orders is apt to upset the working of a station.

(b) On wet dark nights orders once issued must not be changed except under very exceptional circumstances and such cases must be reported specially in the diary with reasons for change of orders.

S.R. 3.39-4. Crossing of trains at a station provided with one Platform line -

(a) When two trains, only one of which is a train carrying passengers, cross at a station where there is only one platform, the train carrying passenger must be received on a platform line, irrespective of whether the platform is on the main line or on the loop line and the goods train on one of the other lines.

When both trains are passenger carrying trains, first train should be admitted on platform line unless otherwise instructed.

(b) No train shall run through on the platform line when a passenger train is standing on the non-platform line.

~~3.40. Conditions for taking 'Off' Home signal~~

~~(1) When a train is approaching a Home signal otherwise than at a terminal station, the signal shall not be taken 'Off' until the train has first been brought to a stand outside it, unless -~~

~~(a) On a double line, the line is clear for an adequate distance beyond the Starter; or~~

~~(b) On a single line, the line is clear for an adequate distance beyond the trailing points, or under approved special instructions for an adequate distance beyond the place at which the train is required to come to a stand.~~

3.40 Conditions for taking 'Off' Home signal -

(1) When a train is approaching a Home signal otherwise than at a terminal station, the signal shall not be taken 'Off' until the train has first been brought to a stand outside it, unless -

(a) On a double line, the line is clear for an adequate distance beyond the Starter; or

(b) On a single line, the line is clear for an adequate distance beyond the trailing points, or for an adequate distance beyond the place at which the train is required to come to a stand.

(CS 16-2 vide Gazette of India GSR 1168(E) dated 05.12.2018).

(2) Where a train has first been brought to a stand outside the Home signal, the signal may be taken 'Off' if -

(a) On a double line, the line is clear up to the Starter; or

(b) On a single line, the line is clear up to the trailing points or under approved special instructions for up to the place at which the train is required to come to a stand.

(3) Except under approved special instructions, the adequate distance referred to in sub-rule (1) shall never be less than -

(a) 180 metres at stations equipped with two-aspect lower quadrant or two-aspect colour light signals, or

(b) 120 meters in the case of stations provided with multiple aspect signals or modified lower quadrant signals.

(4) Where a sand hump of approved design, or under approved special instructions a derailing switch, has been provided for the line on which a train is to be received, they shall be deemed to be efficient substitutes for the adequate distance referred to in sub-rule (3).

S.R. 3.40-1. Reception of trains at 'A' Class stations on the double where Advanced Starters are not provided -

At 'A' Class stations on the double line where Advanced Starters are not provided and except where special instructions are issued to the contrary, if 'Line Clear' has been given to the station in rear and the block section in advance is obstructed., all signals shall be kept at 'On' and the train must be brought to a stand at the Home, Signal. After the train has come to a dead stop at the Home Signal, it shall be taken 'Off' to allow the train to proceed upto the Starter. Should, however, the block section in advance be cleared before the train for which 'Line

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Clear' has been given has arrived at the Home Signal, signals may be taken 'Off' in the usual manner.

3.41. Conditions for taking "Off" Outer signal -

(1) When a train is approaching the Outer signal otherwise than a terminal station, the signal shall not be taken 'Off' until the train has first been brought to a stand outside the signal, unless the line on which the train is to be received in the station is clear -

- (a) in the case of a double line, upto the Starter signal, and
- (b) in the case of a single line, for an adequate distance beyond the first facing points.

(2) Where the train has first been brought to a stand outside the Outer signal, the signal shall not be taken 'off unless the line is clear upto the first facing points, or upto the Home signal at a station where there are no facing points.

S.R. 3.41-1. The Outer signal must not be taken 'Off' until the Home signal has been taken 'Off' and the Outer signal must normally be replaced to 'On' before the Home signal.

~~3.42. Conditions for taking 'Off' last Stop signal or intermediate Block stop signal. The last Stop signal or Intermediate Block Stop signal shall not be taken 'Off' for a train unless Line Clear has been obtained from the block station in advance.~~

GR 3.42 Conditions for taking 'Off' Last Stop Signal or Intermediate Block Stop signal.

(1) On double line, the last stop signal or Intermediate Block Stop signal shall not be taken 'Off' for a train unless Line Clear has been obtained from the block station in advance.

(2) On single line -

(a) the last stop signal shall not be taken 'Off' for a train unless line clear has been obtained from the block station in advance;

(b) for Intermediate Block Signalling -

(i) first, the direction of traffic shall be established and then line clear shall be obtained from the block station in advance as per the established direction of traffic;

(ii) only after establishing the direction of traffic the train movement in the 'Station controlled Intermediate Block section' shall be permitted; and

(iii) the Intermediate Block Stop signal shall not be taken 'Off' unless the line clear has been obtained from block station in advance and direction of traffic is established.

Explanation - On Single Line Intermediate Block Signalling, the line between two adjacent block stations is divided into two subsections, the first section which shall be termed as 'station controlled Intermediate Block section' and the section between Intermediate Block signal to First Stop Signal of block station ahead shall be termed as 'block controlled Intermediate Block section'.

(CS 16-3 vide Gazette of India GSR 1168(E) dated 05.12.2018).

3.43. Conditions for taking 'Off' Warner signal - A Warner signal shall not be taken 'Off' for a train that is booked to stop or for train that has to be stopped out of course.

3.44. Conditions for taking 'Off' gate stop signal - A Gate Stop signal shall not be taken 'Off' until the concerned level crossing or crossings is or are free from obstruction and the gate of such level crossing or crossings are closed or locked against road traffic. Where a gate Stop signal is interlocked with station signals it shall be worked in accordance with Special instructions.

3.45 Conditions for taking 'Off' Calling on signal - A calling on signal shall not be taken 'Off' until the train has been brought to a stand at the stop signal below which the calling-on signal is provided.

3.46. Use of fixed signals for shunting -

(1) The Outer, Home and the last stop signal of a station shall not be taken 'Off' for shunting purpose.

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(2) At Stations where Advanced Starter are provided, Starters may be taken 'Off' for shunting purposes, except where the interlocking interferes with this practice, in which case hand signals shall be used where shunting signals are not provided.

3.47. Taking 'Off' signals for more than one train at a time. When two or more trains are approaching simultaneously from any direction, the signals for one train only shall be taken 'Off' other necessary signals being kept at 'On' until the train for which the signals have been taken 'Off' has come to a stand at the station, or has cleared the station, and the signals so taken 'Off' for the said train have been put back to 'On' except where under special instructions, the interlocking or the layout of the yard renders a contrary procedure safe.

3.48. Stoppage of trains out of course at stations provided with two aspect signalling - When a train which is booked to run through has to be stopped out of course at a station equipped with two-aspect signals, it shall not be received until -

(a) at stations provided with working Warners but not provided with Starters, the working Warner is kept at 'On'.

(b) at stations provided with Starters but not provided with working Warners, the relevant Starter is kept at 'On'.

(c) at stations provided with both working Warners and Starters, both the signals are kept at 'On' and

(d) at stations provided with neither a working Warner nor a Starter, the first Stop signal is kept at 'On' and the train brought to a stand outside it.

S.R. 3.48-1. Stopping a run through train at a non-interlocked Station -

If it is necessary to bring a run through train to a halt at non-interlocked station, the Home, if any and Outer signals must be kept at 'On' When the train has come to a stop, the Home, if any and Outer signals shall be taken 'Off' Danger Hand signals shall also be exhibited from the platform to stop the train. If a starting signal is provided, that signal must be kept at 'On' single line the "authority to proceed" must not be handed over to the Driver until the train comes to a stand.

3.49. Care and lighting of signal lamps -

(1) The Station Master shall see that the lamps of fixed signals, indicators and boards such as shunting Limit Board, Block section Limit Board and Stop Board at his station are lighted at sunset, and are not put out until after sunrise, or at such earlier or later time as may be prescribed by special instructions.

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- (2) Sub-rule (1) shall not apply to -
- (a) approach lighted signals,
 - (b) colour light and position light signals which shall be kept lit throughout the day and night, and
 - (c) the sections where no train is schedule to run at night.

(3) The Station Master shall ensure that the lamps of fixed signals, indicators and boards such as Shunting Limit Board, Block Section Limit Board and Stop Board, when lit, are burning brightly and that the lenses of lamps and spectacle glasses are properly cleaned and backlights clearly visible.

(4) Whenever night signals are used the Station Master shall not grant Line clear unless he has ensured, either personally or in the manner, prescribed under special instructions, that the lamps of fixed signals at his station which are not approach lighted and which apply to the train are burning. If signal lights cannot be kept burning he shall, before giving Line clear initiate action in accordance with the procedure prescribed in Rules 3.68 to 3.72.

(5) Before lighting a semaphore signal or indicator lamp, the Railway servant deputed for lighting it, shall inspect the lenses and spectacle glasses. In case he finds the red roundel broken, cracked or missing, he shall not light the lamp and shall report the fact immediately to the Station Master who shall treat the signal as defective.

(6) Every railway servant in charge of signals shall see that the greatest care is taken in the focusing, cleaning and trimming of signal lamps.

S.R. 3.49-1. (i) Fixed signal lamps must also be lit during thick and foggy weather.

(ii) For lighting of dead end lamps, the following procedure should be followed -

(a) At road side stations, dead end lamps must be lit at dead end sidings where trains are accepted direct or backed on to, such as at Ghat type stations with scissors crossing arrangements or stations with long sidings on which trains are backed.

(b) In goods yards, dead end lamps of shunting necks where loads are drawn must be lit.

(c) In passenger yards, dead end lamps at the end of sidings, where passenger coaching stock is stable as a regular measure or at the end of Dock platforms where trains are received directly or indirectly must be lit.

(d) Dead end lamps must also be lit at other dead end sidings where the Divisional Railway Manager considers necessary taking into account grade or other considerations from safety point of view.

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S.R. 3.49-2. At non-interlocked stations the Station Master shall daily check that all points and Trap indicator glasses are intact by operating all points after the indicator lamps have been lit and by observing the indication of the lights.

~~S.R. 3.49-3. Joint Signal Inspection - Joint signal inspection shall be carried out by the Transportation Inspectors, Loco Inspectors, and Signal Inspectors/ Permanent Way Inspectors and also by Officers of these departments regularly to ensure that the signals are properly maintained by the concerned departments.~~

SR 3.49-3 Joint Signal inspection - Joint *footplate* Inspection shall be carried out by the Transportation Inspectors, Loco Inspectors, and Signal Inspectors/ Permanent Way Inspectors quarterly and also by Officers of these departments regularly *both by day & night* to ensure that the signals are *clearly visible to the running staff*. The report of these inspections *should be signed by all the supervisors* and record maintained by Signal Inspector.

CS 13/11 (Ref: Office Note No. TR/G&SR/Rev/101 dated 08.07.13.)

S.R. 3.49-4. Visibility of signals from Station Master's office -

Whenever night signals are used, the Station Master of station where approach signals are not visible from his place of work and where repeaters are not provided in his office shall not grant Line clear unless he has ensured either personally or through the Cabinman/Leverman supported by a Private Number that the lights of all signals which apply to the train are burning brightly. A specific provision shall be made in the Station working Rules of such stations to that effect.

3.50. Traps, slip sidings and catch sidings - The Station Master shall take steps to ensure that the points of all traps, slip sidings and catch sidings, and other points are set against the line which they are intended to isolate, except when it is not necessary that they should be open for the purpose of Isolation.

S.R. 3.50-1. (a) *Trap Sidings* - Trap siding which is provided with trap in the form of a derailing Switch to check the unauthorised escaping of vehicles/wagons so as not to foul the running line is termed as trap siding.

(b) (i) *Catch siding and Slip siding* - At a station where there is a gradient of 1 in 80 falling towards the station or 1 in 100 falling away from the station within 45 meters beyond the outer most points at either end, a catch siding in a former case and a slip siding in the latter case should be provided.

(ii) At locations where speed sensing devices are not provided for elimination of catch siding halts, all trains must be brought to a stop at the stop

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signal protecting the catch siding. The points which are set for the catch siding should be changed only after the train has come to a stop.

(iii) At locations where speed sensing devices are provided for elimination of catch siding halts, the stop signals can be taken 'Off' for passing the train without stopping provided the line clear from station in advance is already obtained and it is ensured that the train has approached the Stop signal at a restricted speed. The Driver must obey the speed restriction till the whole train clears the catch siding points. Suitable working instructions must be incorporated in the Station Working Rules of stations/cabins where speed sensing devices are provided.

3.51. Points -

(1) All points shall normally be set for the straight except when otherwise authorised by special instructions.

(2) The railway servant concerned with the operation of points and signals shall not, while on duty, leave the place of operation of points or signals which are under his charge except under special instructions.

(3) No railway servant shall interfere with any points, signals, or their fittings, signal wires or any interlocking or block gear for the purpose of effecting repairs, or for any other purpose, except with the previous permission of the Station Master.

S.R. 3.51.1. Points and Signals, disconnection of -

Before taking in hand any disconnection of points, signals or interlocking gear, the person incharge of the work must advise the Station Master or the Cabin Assistant Station Master on duty in writing on Form 'S&T(T/351)' before the work is started and after it is completed. When a disconnection is made at the request of Station Master or Cabin Assistant Station Master on duty to save delays to traffic, the Station Master or Cabin Assistant Station Master must endorse the counter foil of Form S. & T./Dn with the remark "Disconnection made at my request". Where cabins are under the control of Station Master, he must advise the Cabin staff giving the particulars of the point which is disconnected under exchange of Private Numbers.

Whenever the Disconnection memo has been received, it is the personal responsibility of Station Master or Cabin Asstt. Station Master to ensure that such points are set and locked and secured by means of clamps and padlocks before authorising the movement of any train over such points. If the disconnection of points is made at one end of a cross-over, the points at both the ends of the cross-over should be treated as having been disconnected and the train shall be received as under -

(a) In the case of Mechanically/electrically operated points.

(i) the end where work is being done should be treated as having been disconnected and should be clamped and padlocked by the ASM and the trains passed over the same by piloting. It should also be ensured that the other end of the

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cross-over shall be set for isolation and clamped and padlocked if the train passes over the straight road. The other end shall be set and locked for cross movement if the movement is over the cross-over;

(ii) the end where work is not being done shall also be treated as non-interlocked, and also clamped and padlocked and trains passed on signals but with speed restriction of 15 KMPH as in the case of overhauling of lever frames subject to a written authority from S&T. staff that "No work is being done at the end of the cross-over and that trains can be passed over the points at restricted speed of 15 KMPH on signals". It should also be ensured that for a train passing over the straight road at the end where work is not being done that the other end where work is being done should be clamped also for the straight road, i.e. for isolation.

(iii) In case of Electrically operated points for the purpose of obtaining detection at the end where work is not being done, the S & T staff at the end where work is being done may be allowed to adjust the detector [slide](#) to make contacts corresponding to the other end, and this fact should be incorporated in the memo exchanged between S&T Staff and Station Master.

(b) Procedure of working of trains during failure of Electrically operated points of the cross over.

1. On receipt of information from the operating staff about the failure of the point, S&T staff will try to ascertain the nature of fault and put right the failure.

2. If the S&T staff anticipate that the rectification of the failure is likely to take a long time, they will inform the Operating staff in writing on a disconnection memo to initiate action as under -

3. On receipt of such a written information from the S&T staff on a disconnection memo, the ASM/CASM will ensure the correct setting on the affected points to the NORMAL position and will then clamp both the ends of the crossover in NORMAL position and padlock both ends of the crossover in the NORMAL position. ASM/CASM will, under no circumstances remove the clamp in the NORMAL setting, unless and until he receives the memo from the S&T staff that temporary modifications have been removed, and the conditions in para 12 are complied with.

4. After so clamping and padlocking the point, the ASM/CASM will advise the S&T staff in writing, stating that -

"Single ended point/both ends of crossover point No. _____ have been clamped and padlocked in the NORMAL position and the necessary temporary modifications to the installations may please be made". S&T staff will then carry out the temporary modifications as given in para 5 below.

5. S&T staff of not below the rank of a Sectional Engineer, on receipt of such a written advise from ASM/CASM, as per para 4 above, will carry out temporary modifications to the installations so that point steady NORMAL indication is available on the panel, by making NORMAL detection available

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and restricting the clearance of signals reading over the said point (including overlap) to yellow aspect only.

6. After carrying out the temporary modifications, the S&T staff shall advise ASM/CASM in writing that Temporary modifications with respect to Pt.No. _____ have been carried out” and clearance of _____ signal Nos. ____ & ____ have been restricted to yellow aspect only.

7. On receipt of the advise, as per para 6 above, ASM/CASM will arrange for issue of Caution order to the trains for observing 15 Kmph on the route of concerned signals. This may require advising the ASM/CASM of the adjacent stations.

8. ASM/CASM shall arrange for posting suitable operating staff, not below the rank of a Guard near the affected point for the purpose of monitoring the conditions of clamps and the point after every movement. The staff deputed to monitor the point should be equipped with telephone communication with CASM, HS lamps and flags (red and green) fuses, detonators and shall arrange for protection of trains in case the condition of affected point or clamps on it warrants the same. In such a condition, he shall also advise the ASM/CASM on phone to restore the concerned signal to ON position and refrain from taking them to ‘Off’ for any subsequent move till the condition of the points and clamps is set right.

9. After ensuring that the caution orders are being issued ASM/CASM shall allow the first train on the affected lines and over the affected points to pass on ‘A’ marker in the semi automatic territory and on the calling-on-signal or T32 B in non-automatic section.

10. ASM/CASM shall pass the subsequent train by taking ‘Off’ signals after setting routes in the normal manner. However, due to temporary modifications made by the S&T staff the concerned signals will work as free signals and will clear to yellow aspect only.

11.b) After the defect is rectified, the Sectional Engineer in consultation with CASM will remove the temporary modifications done as per Para 5 and will give a memo to CASM stating “work with respect to Point No./Crossover No. _____ has been completed and temporary modifications have been removed and the point is ready for testing”.

b) Before acknowledging a memo, ASM/CASM will ensure none of the route sections over the affected point is set and the signals controlling the movement over it are at “ON” position and the tracks are clear. This is for ensuring that no train passes over the affected point during the testing.

12. After the point is fully tested, the Sectional Engineer will give re-connection memo indicating in a written declaration that “all the temporary modifications to the installations have been deleted and the installation is made fully normal with respect to Point No. _____”.

13. ASM/CASM on receipt of re-connection memo can resume normal working over the affected point under advice to SCOR.

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S.R. 3.51-2. Working of traffic during overhauling -

(a) When a lever frame, S.M's control frame of interlocked key box. or any other interlocking frame is to be overhauled, temporary working instructions for each phase of work shall be prepared jointly by DSO and DSTE for working of traffic during such overhauling. The instructions should *inter-alia* stipulate the clamping and padlocking of points in accordance with G.R. 3.38 and 3.39 and that the Station master shall be responsible for ensuring that all the facing points over which the train will pass, are correctly set, clamped and padlocked and that all trailing points over which the train will pass are correctly set before taking 'Off' signals. The manner in which Station Master will ensure this must be clearly laid down. Detailed temporary working instructions for each station shall be prepared by the **DSO DOM** and DSTE for each phase of the work and supplied to the station before overhauling is commenced.

(b) A notification showing the date and time when the overhauling work would be taken in hand, its probable duration and instruction for the Station Master to issue caution order to Drivers and for Loco Foreman to advise drivers to observe the temporary speed restriction must be issued jointly by the **DSTE and DSO DOM and DSTE.**

(c) For the portion of the Yard, which is controlled by the cabin to be overhauled :

(i) The Driver must receive a caution order at the last stopping Station instructing him of the speed restriction of 15 Kmph at the Station where locking is being overhauled.

(ii) When the work of overhauling cannot be completed by sunset of the day of commencement is likely to extend over a few days temporary caution Indicator and Speed Indicator (15 KMPH) shall be provided, as prescribed in G.R. 15.09 at the station where locking is being overhauled.

(d) Only after the Station Master on duty has assured himself that the line has been correctly set and locked for the required movement, may he permit the signals to be taken 'Off' for the reception or despatch of a train.

(e) Disconnection memo on form No. S&T(T/351). must always be given by the Signal Inspector to the Station Master on duty and his signature obtained before overhauling is started and after the work is completed.

(f) The issue of caution orders and the imposition of speed restriction of 15 KMPH should remain in force until the interlocking frame has been tested by the authorised official and normal working is restored.

S.R.3.51-3. During the interval between disconnection and reconnection, if a train is to be passed or any shunting movement is to be performed, the Station Master must advise in writing the Signal Inspector or the person incharge of the

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work, stating in which position the points are to be set. The Station Master or other authorised person on his behalf shall with the permission of the Signal Inspector or person incharge of the work then arrange to set and clamp the points and secure them with padlocks. The clamp and padlock should be removed by the Station Master after the train/shunting movement has been completed and then Signal Inspector or the person incharge of the work can resume work on the gear.

SR 3.51-4 Use of crank handles –

a) In case of stations provided with interlocked crank handles:-

- (i) If a point is defective and has been set to the required position by the crank handle a normal movement can be made if the crank handle is restored to its normal lock and the signal comes off after being taken off or the points in the route are locked by route setting with steady point indications on the panel but the signal does not come off , no cotter bolting / clamping and padlocking is required in such case.
- (ii) If the signal does not come off after the signal lever/button is operated or the route setting is not achieved for locking of points in the route, cotter bolting / clamping and padlocking is to be done as per S.R. 3.68-1(d) although 'N' or 'R' indication is available and trains are to be signalled past the defective signal in accordance with S.R. 3.69-1 to 3.69-5 & S.R. 3.70-1 to 3.

b) In case of stations provided with non-interlocked crank handles-

If a point is defective and is required to be set by a crank handle , the crank handle should be issued to the Transportation official deputed for setting the point to the required position. The ASM/CASM/Switchman incharge of taking off the signal shall not take off the signal and authorise the movement over the point until:-

- (i) The crank handle is either returned back to him and kept by him in the steel case/glass case provided for the purpose and locked or
- (ii) The crank handle is retained in the possession of the Transportation official not lower in the rank than ASM/CASM/Switchman who shall exchange private numbers with the ASM/CASM/Switchman incharge of taking off the signal in token of the crank handle is being in his personal custody and of the points being correctly set for the intended move;
- (iii) If the signal comes off , after the signal lever/ button is operated or the points in the route are locked by route setting with steady point indications on the panel but the signal does not come off , no cotter bolting / clamping and padlocking is required in such cases. If the signal does not come off after the signal lever / button is operated or the route setting is not achieved for locking of points in the route, cotter bolting / clamping and padlocking is to be done as per S.R. 3.68-1(d), although 'N' or 'R' indication is

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available and trains are to be signalled past the defective signal in accordance with S.R 3.69-1 to S.R 3.69-5 & S.R. 3.70-1 to 3.

CS 1/1 dated 10.03.2000

(c) These instructions should be incorporated in the Station Working Rules.

S.R. 3.51-5. If a Cabinman's/Leverman's (in a non-block cabin), Pointsman's Grade 'A' or Pointsman's Grade 'B' turn of duty expires after he has received orders for the admission of a train, and before the train has arrived, he must not go off duty until the train has arrived. If the expected train is unusually delayed the Station Master will take steps to relieve the man and personally satisfy himself that the reliever understands what he has to do.

S.R. 3.51-6. Signal Cabins, Block Instruments etc., not to leave unattended -

(a) If at any time during his hours of duty, the Station Master/Switchman in charge of a signal cabin where block instruments are placed, finds it necessary in order to comply with safety rules, to vacate the cabin temporarily, he must specially depute a responsible Railway Servant to remain in the cabin or he must close and lock the cabin.

(b) Whenever in an emergency, points, signals or any other safety appliances have to be left unattended, they must be secured in their position by the means provided.

(c) Pointsmen in the cabin or staff incharge of points or signals must not leave their posts. They must not be used for piloting trains, the pointsmen on platform or other duty must be utilised for this purpose.

E. Hand Signals.

3.52. Exhibition of hand signals -

(1) All hand signals shall be exhibited by day by showing a flag or hand and by night showing a light as prescribed in these rules.

(2) During day a flag or flags shall normally be used as hand signals. Hands shall be used in emergencies only when flags are not available.

(3) During night a hand signal shall normally be given by showing a red or green light. A white light waved violently shall be used as a stop signal only when the red light is not available.

(4) Red or green light referred to in sub-rule (3) shall be either a static or flashing type.

[Added vide CS/10 item 1(i) vide i) Rly Bd's letter No. 2001/Safety (A&R)/19/2 dated 14.03.2008 ii) Gazette of India GSR 116(E) No. 93 dated 28.02.08]

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S.R. 3.52-1. Mouth Whistles - Mouth Whistles may be used in conjunction with the hand signals at all Engine changing stations, and at any other stations where special shunting engines are employed or much shunting has to be done. the use of mouth whistles does not dispense with the use of hand signals, but should be used in addition, to draw the attention of the Drivers to the visual signal that is being exhibited and to avoid shouting to attract the Drivers attention.

S.R. 3.52-2. Precautions against derailment during shunting at stations -

~~(a) Hand signals for a shunting move shall be given only after the requisite points have been correctly set.~~

SR 3.52-2 (a) - Hand signals for a shunting move shall be given only after the requisite points have been correctly set and locked.

CS 13/ 12(Ref: Office Note No. TR/G&SR/Rev/101 dated 21.03.13.)

(b) The Leverman/Cabinman/Switchman shall display a danger signal before changing points.

(c) (i) The person in charge of shunting shall wave a hand by day, and a white light by night, across the body as a signal to the Leverman / Cabinman / Switchman to set a point. The signal shall be exhibited from the point concerned.

(ii) The person in charge of shunting shall wave a red flag by day and a red light by night across the body as a signal to the Leverman / Cabinman / Switchman that the shunting move over a point has been completed and that the point can be reset as required. The signal shall be displayed from the point concerned.

(d) No shunting move must take place while the points are being changed; this must be ensured before signalling a shunting move;

(e) While a shunting move is under progress, no points must be changed by the Leverman/Cabinman/Switchman even if signalled to do so, before displaying a danger hand signal and ensuring that the shunting move has come to a stop.

(f) No points must be moved or reversed while the leading wheels of an engine or other vehicles are so near that the points cannot be fully thrown over before the engine or other vehicles come on the points. The point must not be operated until the engine and all the vehicles have passed and cleared them completely.

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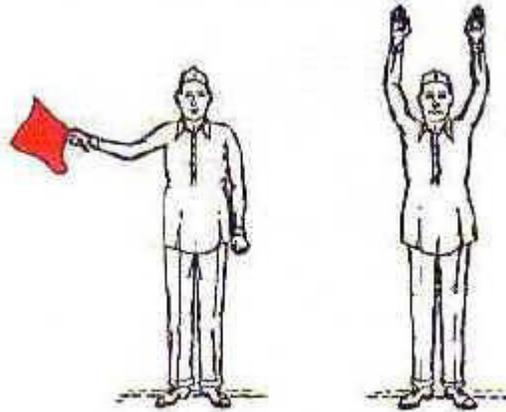
3.53. Stop hand signal -

Indication :

Stop dead

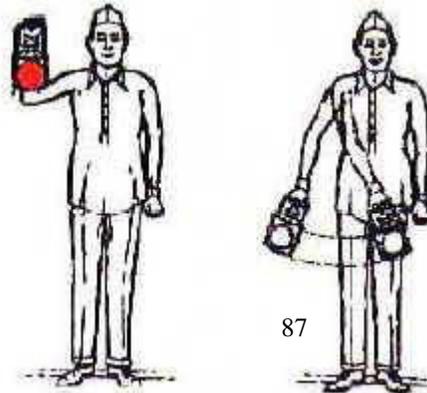
How given by day :

By showing a red flag or by raising both arms with hand above the head as illustrated below -



How given by night :

By showing a red light or by violently waving a white light horizontally across the body of the person showing the signal as illustrated below:



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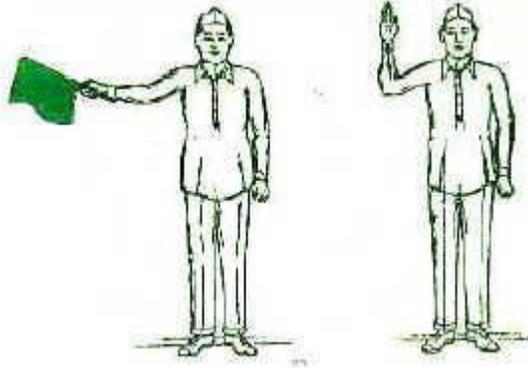
3.54. Proceed hand signal -

Indication :

Proceed

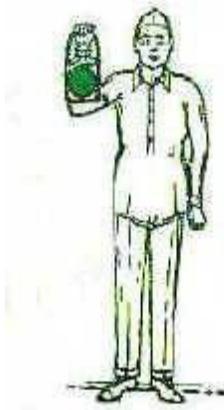
How given by day :

By holding a green flag or by holding one arm steadily as illustrated below :



How given by night :

By holding a green light steadily as illustrated below :



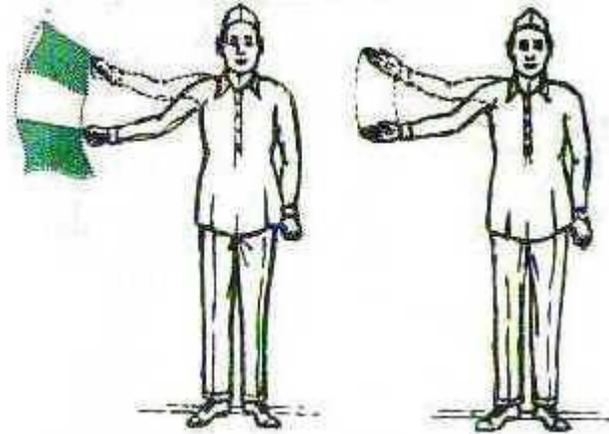
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3.55. Proceed with caution hand signal -

Indication : Proceed slowly reducing speed, further if the signal is given at a progressively slower rate.

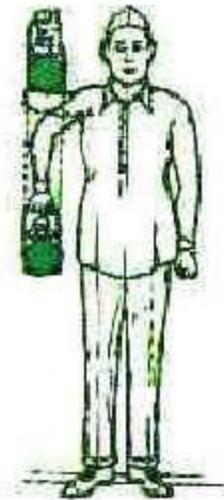
How given by day :

By waving a green flag vertically up and down or by waving one arm in a similar manner as illustrated below :



How given by night -

By waving a green light vertically up and down as illustrated below -



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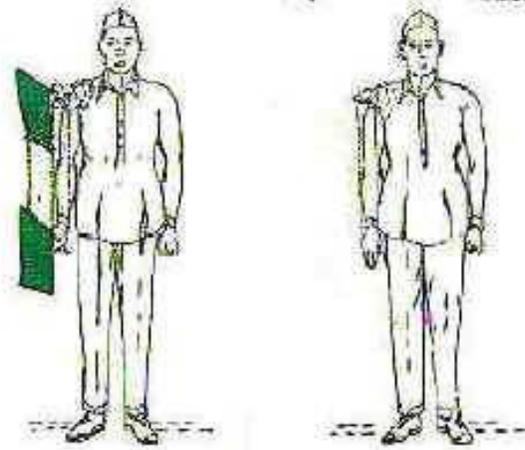
Note : When the speed is to be reduced further, this signal shall be given at a slower and slower rate and when a stop is desired, the stop hand signal shall be shown.

3.56. Hand signals for shunting - The following hand signals shall be used in shunting operations in addition to the Stop hand signal -

(a) Indication : Move away from the person signalling. How given by day :

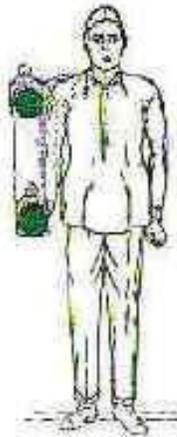
By green flag or one arm moved slowly up and down as illustrated

below :



How given by night :

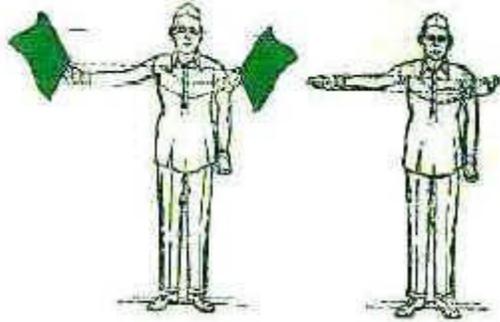
By a green light moved slowly up and down as illustrated below -



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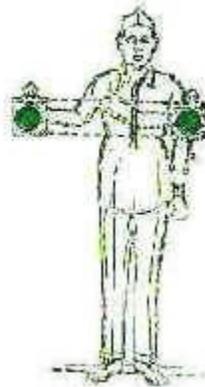
(b) Indication : Move towards the person signalling. How given by day :

By a green flag or one arm moved from side to side across the body as illustrated below -



How given by night :-

By a green light moved from side to side across the body as illustrated below -



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Note : The hand signals for 'Move away from the person signalling', and 'Move towards the person signalling' shall be displayed slower and slower, until the Stop hand signal is given if it is desired to stop.

(c) Indication : Move slowly for coupling

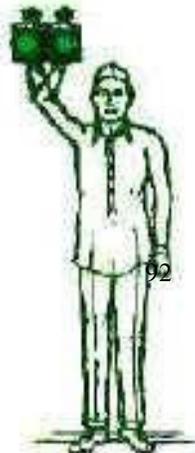
How given by day :

By a green and a red flag held above the head or both hands raised over the head and moved towards and away from each other as illustrated below -



How given by night :

By a green light held above the head and moved by twisting the wrist as illustrated below -



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3.57. Banner flags : A banner flag is a temporary fixed danger signal, consisting of a red cloth supported at each end on a post and stretched across the line to which it refers.

3.58. Knowledge and possession of hand signals -

(1) Every railway servant connected with the movements of trains, shunting operations, maintenance of installations and works of any nature affecting safety of trains shall have -

(a) a correct knowledge of hand signals ; and
(b) the requisite hand signals with him while on duty and keep them in good working order and ready for immediate use.

(2) Every railway servant shall see that the staff under him concerned with use of hand signals are adequately supplied with all necessary equipment for hand signalling and have a correct knowledge of their use.

(3) A red flag and a green flag by day or a lamp, which is capable of showing red, green and white lights by night, shall constitute the requisite equipment for hand signalling.

(4) Every Station Master shall see that his station is adequately supplied with all necessary equipment for hand signalling.

F. Detonating Signals

3.59. Description of detonating signals -

Detonating signals, otherwise known as detonators or fog signals, are appliances which are fixed on the rails and when an engine or a vehicle passes over them, they explode with a loud report so as to attract the attention of the Driver.

3.60. Method of using detonators -

(1) A detonator when required to be used shall be placed on the rail with the label or brand facing upwards and shall be fixed to the rail by bending the clasps around the head of the rail.

(2) In the case of a mixed gauge, detonators shall be placed on the common rail or on one rail of each gauge.

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3.61. Placing of detonators in thick foggy or tempestuous weather impairing visibility -

(1) In thick, foggy or tempestuous weather impairing visibility whenever it is necessary to indicate to the Driver of an approaching train the locality of a signal, two detonators shall be placed on the line, by a railway servant appointed by the Station Master in this behalf, about 10 metres apart, and at least 270 metres outside the signal or signals concerned.

(2) (a) The Station Master may comply with the provisions of sub-rule (I) at his discretion: but shall always do so when visibility conditions from any cause prevent him from seeing a prescribed visibility test object from a distance of not less than 180 meters or a lesser distance if expressly sanctioned by Railway Board.

(b) The visibility test object may be -

- (i) a post erected for the purpose and lighted at night; or
- (ii) the arm by day and the light or the back-light by night of a fixed semaphore signal specified by special instructions ; or
- (iii) the light of a fixed colour light signal both by day and night specified by special instructions.

S.R.3.61-1. (a) The visibility test object must be specified in the Station Working Rules.

(b) Visibility test post shall be provided at all stations except where Station Working Rules earmark a particular signal or the light or back light of a signal to serve as visibility test object. At stations, situated in localities where fog, or dust storm or heavy rains are generally prevalent, such posts must be provided.

(c) Visibility test object will be a post consisting of steel trough sleeper or wooden sleeper (manufactured to RDSO's drawing No. MA 3030 dated 18th September 1959), painted alternately black and yellow and illuminated during night, having been fixed vertically in the ground not less than 180 meters (exact distance may be fixed to suit local conditions) from the centre of the Station Master's Office at each end of the station.

~~(d) In foggy or tempestuous weather or in dust storms when station signals cannot be seen, the Station Master on duty shall personally ensure that the Station Signals are lit, and then send two trained men to act as fog signal men, one in either direction, to the fog signal posts which are erected at all stations 275 meters in rear of (i.e. outside) the outermost signals.~~

~~The fog signal post will consist of steel trough sleepers or wooden sleepers painted alternatively black and white and fixed vertically in the ground.~~

~~(d) In foggy or tempestuous weather or in dust storms when station signals cannot be seen, the Station Master on duty shall personally ensure that the Station Signals are lit, and then send two trained men to act as fog signal men, one in either direction, to the fog signal posts which are erected at all stations 275 meters in rear of (i.e. outside) the outermost signals, except on territories~~

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~~having Double Distant signals (Distant signal and Inner Distant signal) where they are erected at all stations 275 metres in rear (i.e. outside) Inner Distant signal.~~

~~The fog signal posts will consist of steel trough sleepers or wooden sleepers painted alternatively black and white and fixed vertically in the ground. (C/S 8/5 Ref: — This office Note No. TR/G&SR/Rev/101 dated 10.03.05)~~

(d) In foggy or tempestuous weather or in dust storms when station signals cannot be seen, the Station Master on duty shall personally ensure that the Station Signals are lit, and then send two trained men to act as fog signal men, one in either direction, to the fog signal posts which are erected at all stations 270 meters in rear of first stop signal.

No fog signal posts are to be provided at stations with Double Distant Signals.

The fog signal posts will consist of steel trough sleepers or wooden sleepers painted or provided with alternatively black and white luminous strips and fixed vertically in the ground.

CS 11/7 (Ref: Rly Board's letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 & 04.11.2010.)

(e) Each of these men shall be provided with 20 detonating (fog) signals, or such lesser number as may be prescribed under special instructions. The fog signalman shall place two detonators on the centre of the head of the rail, with the label or brand upwards, which shall be securely fastened to the rail by bending the clasp round the upper flanges of the rail, about 10 meters apart from each other, which on explosion under the wheels of an engine, will warn the Driver of his proximity to the Outer. Warner or Distant signal of the station, as the case may be.

(f) After the passage of each train over the detonating (fog) signals, which have been so placed on the rails, the signalman shall immediately replace them by two fresh detonators.

(g) When a railway servant has to place one or more detonators on the line, he must withdraw beyond the safety radius of 45 meters from the detonator or detonators before they are exploded by an approaching engine or train. He shall be responsible for warning as far as circumstances permit, any person in the vicinity to stand beyond the safety radius.

Staff in observing the safety radius of 45 meters shall place themselves as far as possible in rear of the locomotive, train or wagon passing over the detonators.

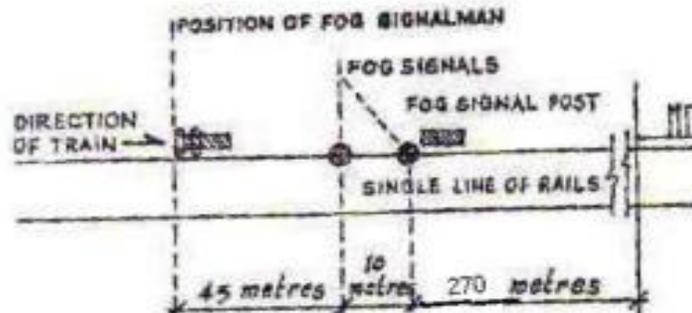
~~(h) The fog signalman must see that the Outer and/or Warner/Distance signals/signal which have /has been taken 'Off' for a train to pass are/is replaced at danger/caution after the passage of the train.~~

~~If after five minutes the signals/signal have/ has not returned to danger/caution the fog signalman must leave two detonators already placed on the rail and shall leave to inform the Cabinman/switchman/Cabin ASM concerned. If there is no cabin, the Assistant Station Master.~~

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CS11/8 (Ref : Rly Board's letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 & 04.11.2010.)

(i) The position of the fog signal post, the fog signals and the fog signalman are shown in the diagram below -



(j) Each of the trained men sent out with detonating (fog) signals, shall carry a lighted hand signal lamp. Should the fog signalman be aware of any obstruction on the line, he shall show a danger hand signal in accordance with General Rule 3.53, in the direction in which a train is expected or approaching. On single line sections for trains leaving a station, the fog signalman deputed to place detonators shall to the Driver a "Proceed" (green) hand signal in accordance with G.R. 3.54.

(k) As soon as it is necessary for the Station Master on duty to take action under S.R. 3.61-1 (d) he will immediately call on duty, two of the Station Class IV Staff who are off duty. The Station Master on duty may either use the two men called from off duty or two of the men already on duty for the purpose of seeing that signals are lit and for sending two men trained in fog signalling duties to either end of the station limits, or he may utilise, if available two trained Gangman detailed for the purpose by the Permanent Way Inspector, but in any event, the trained men sent out to the fog signal posts, must be regular employees of the Railway and not substitute.

~~(l) The procedure in S.R. 3.61-1 (k) refers to action to be taken by the Station Master on duty in an emergency.~~

~~Divisional Railway Managers will notify the names of stations at which fog prevail persistently. At each such station, four of the station class IV Staff (or if this number is not available, it may be made up by one or a maximum of two~~

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~~Gangmen per station being deputed by the Permanent Way Inspector) shall be posted and detailed to act as a fog signalman. All four men must be fully trained in fog signal duties and must be regular employees of the Railway and not substitutes. These four men will be on intermittent duty, one on duty at each end of the station and two resting at the station, each performing three hours 'On' and three hours 'Off' duty. No man is to be on duty as fog signalman continuously for more than three hours at a stretch. The four employees detailed as fog signalman will be replaced by the appointment of two or more Class IV staff at the station and by one or two temporary men in the engineering gang from which the permanent men have been withdrawn.~~

~~(i) At a double line station if the fog appears for about 7 days in the month, it should be treated as persistent fog and separate fog porters should be appointed. If the fog is for less than 7 days in a month the Station Master will act according to S.R. 3.61-1 (k), that is, he will immediately call out two of the station Class IV staff who are "off duty" to work at the station as porters, and the staff who are on duty will be utilised for fog signalling duties. The "Off duty" staff will be paid any overtime that is due and will be replaced by substitutes to work during their normal turn of duty. This arrangement will obviate the necessity of retaining fog porters permanently and substitutes will be required for permanent staff only, when they are actually utilised on fog signalling duty. It should, however, be noted that only permanent employees will be utilised for this purpose.~~

~~(ii) At single line stations where the station porters are required for delivering tokens also, Divisional Railway Managers should examine both the duration of fog and the number of days in a month on which it appears and then taking the overall work into consideration, determine whether special fog porters are required or not. If fog appears only on one or two days in a month and for a short duration it would obviously not be necessary to have separate fog porters and the procedure stated in sub paragraph (i) above should be followed.~~

(l) The procedure in S.R. 3.61-1 (k) refers to action to be taken by the Station Master on duty in an emergency.

Divisional Railway Managers will notify the names of stations at which fog prevail persistently. At each such station, four of the station class IV Staff (or if this number is not available, it may be made up by one or a maximum of two Gang men per station being deputed by the Permanent Way Inspector) shall be posted and detailed to act as a fog signalman. All four men must be fully trained in fog signal duties and must be regular employees of the Railway and not substitutes. The four employees detailed as fog signalman will be replaced by the appointment of two or more Class IV staff at the station and by one or two temporary men in the engineering gang from which the permanent men have been withdrawn.

(i) At a double line station if the fog appears for about 7 days in the month, it should be treated as persistent fog and separate fog porters should be appointed. If the fog is for less than 7 days in a month the Station Master will act according to S.R. 3.61-1 (k), that is, he will immediately call out two of the station Class IV

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staff who are “off duty” to work at the station as porters, and the staff who are on duty will be utilised for fog signaling duties. The “Off duty” staff will be paid any overtime that is due and will be replaced by substitutes to work during their normal turn of duty. This arrangement will obviate the necessity of retaining fog porters permanently and substitutes will be required for permanent staff only, when they are actually utilised on fog signaling duty. It should, however, be noted that only permanent employees will be utilised for this purpose.

(ii) At single line stations where the station porters are required for delivering tokens also, Divisional Railway Managers should examine both the duration of fog and the number of days in a month on which it appears and then taking the overall work into consideration, determine whether special fog porters are required or not. If fog appears only on one or two days in a month and for a short duration it would obviously not be necessary to have separate fog porters and the procedure stated in sub-paragraph (i) above should be followed.

CS 11/9(Ref : Rly Board’s letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 &04.11.2010)

(m) On branch lines or sections on which traffic is light, instead of a fog signalman remaining continuously on duty at each fog signal post, a fog signalman may be sent out to place detonating (fog) signals for each individual train. This procedure may only be adopted under special instructions. In such cases, line clear shall not be given for a train, unless the fog signalman has been sent out at least 30 minutes before the train is due to leave the station in rear.

(n) The Station Master shall ensure that fresh supplies of detonators are sent to the men in replacement of those used.

(o) A ‘Station Detonator Register’ must be maintained at each station, and must show the names of fog signalman, on duty, periods of duty, the stock of detonators, the number of detonators sent out with each fog signalman, the number of each train under which detonators have been exploded, and the number of unused detonators and used cases (including those which have failed to explode) returned each time by fog signalmen to the Station Master on duty.

(p) The Station Master will obtain in the “Station Detonator Register” the signature or thumb impression of all men deputed and/or posted to his station as detonator (fog) signalmen, as an acknowledgment that they understand the rules relating to the fog signalling of trains.

~~(q) In foggy or tempestuous weather or in dust storms Permanent Way Inspectors or Gangmates must promptly arrange for regular gangmen to be deputed to place detonators on the rails 275 meters in rear of (i.e. outside) the first caution signal in each direction when cautious driving is necessary due to repairs of the line or other works being in progress vide G.R. 15.09 and the relevant Subsidiary Rules on the subject.~~

CS11/10(Ref : Rly Board’s letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 &04.11.2010.)

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Note - S.R. 3.61-1 do not apply on the Automatic Block territory.

S.R. 3.61-2. At a 'D' Class station where visibility is poor due to curvature, cuttings etc. a board may be provided 500 meters short of a flag station in order to indicate to the Driver in advance about the approach of a flag station. The Driver after locating the board shall whistle freely. Size of the board would be 2' x 1/2' with a black circle of 9" diameter on a white back ground over 8.1/2' high pole.

S.R. 3.61-3 Necessity of placement of detonators.

(i) Where it is necessary to place detonators:-

The detonators should be placed at 270m short of the first stop signal at stations detailed as under:-

- (a) At 'A' class stations where Warner exists – Detonators to be placed short of Home Signal and not the Warner;
- (b) At 'B' class station equipped with Lower Quadrant signals- Detonators to be placed short of Outer signal;
- (c) In multiple Aspect Signalling , where single Distant Signal is provided- Detonators to be placed short of Home Signal.

Note:- The Fog signal Posts will be provided only at stations where there may be a requirement for placing detonators. Such post may, therefore, be shifted suitably based on the above mentioned position(s).

(II) Where not necessary to place the detonators:-

It is not necessary to place Detonators to indicate 'location of a Stop signal' to the Loco Pilot in following circumstances:-

- (a) In sections where a reliable Fog Safe Device has been provided on Locomotives;
- (b) Where adequate pre-warning is provided; i.e. at stations where double distant signals are provided;
- (c) Where maximum speed allowed in the station section is up to 15 kmph even at stations where pre-warning signal is not available, but a Warning Board exists;
- (d) Where speed of the section is less than 50kmph (but more than 15 kmph) and the first signal of a station is not a stop signal.
- (e) In Automatic Signalling Territory;
- (f) On Gate Signal;
- (g) On Departure signal;
- (h) At the site(s) of temporary Speed Restriction imposed due to maintenance of Track/OHE/Signal.

(CS 11/13 Ref : Rly Board's letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 &04.11.2010.)

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3.62. Placing of detonators in case of obstruction -

(1) Whenever in consequence of an obstruction of a line, it is necessary for a railway servant to stop approaching trains, he shall proceed, plainly showing his Stop hand signal, to a point 400 metres from the obstruction and place on the line one detonator and then proceed to a point 800 metres from the obstruction and place on the line three detonators, about 10 metres apart, at such place :

Provided that on the broad gauge the first detonators shall be placed at 600 metres and three detonators at 1200 metres from the obstruction about 10 metres apart from each other.

(2) If the said railway servant is recalled before the obstruction is removed, he shall leave down three detonators and, on his way back, pick up the intermediate detonator.

3.63. Replacement of detonators on the line -

Every railway servant placing detonators on the line shall see that they are, when necessary, replaced immediately after a train has passed over them.

3.64. Knowledge and possession of detonators -

(1) (a) All Station Masters, Guards, Drivers, Gangmates, Gatemen, and all other railway servants on whom this duty is laid by the Railway Administration, shall keep a stock of detonators.

(b) The Railway Administration shall be responsible for the supply, renewal periodical testing and safe custody of such detonators and for ensuring that their use is properly understood.

(2) Every railway servant concerned with the use of detonators shall have a correct knowledge of their use and keep them ready for immediate use.

(3) Every railway servant shall see that the railway servants in his charge concerned with the use of detonators have a correct knowledge of their use.

S.R. 3.64-1. Stock of Detonators -

(a) A case containing 10 detonators shall form part of the equipment, when on duty, of every Guard, of every Driver on the foot-plate, of every gangmate, of every Gateman, of every Bridge Guard, of every Cutting Guard, of every patrolman, and of every push trolley, motor trolley and

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lorry. Every Keyman shall be supplied with a case containing 10 detonators as a part of this equipment.

(b) The Divisional Railway Manager shall prescribe the number of detonators which must be kept in stock at stations, yards, depots and running shed and the minimum number below which the stock must not be allowed to fall.

The Station Masters, Loco Foremen, Permanent Way Inspectors and Supervisor Incharge of depots are responsible for seeing that the stock of detonators is never allowed to fall below the minimum.

S.R. 3.64-2. Supply of Detonators -

(a) Station Masters will supply detonators to Guards ~~and Asstt. Guards~~, headquartered at their stations and to Gatemen working under their control.

(b) Permanent Way Inspectors shall supply detonators to Gangmates, Keymen, Gatemen (not covered in (a) above). Bridge Guards, Cutting Guards and Patrolmen.

(c) Loco Foremen will supply detonators to drivers.

(d) The users of push trolley, motor trolley, lorries etc., shall arrange for the supply of detonators either direct from the Divisional Railway Managers or through the Station Masters, Permanent Way Inspectors, Loco Foremen, or Supervisors incharge of depots of their Headquarter Station, as may be convenient.

S.R. 3.64-3. Storage of Detonators :-

(a) Detonators must be carefully handled as they are liable to explode if handled roughly.

(b) Detonators shall be kept in the tin cases specially supplied and they shall be stored in dry places and not left in contact with the brick walls, damp wood, chloride or lime or other disinfectants, nor exposed to dampness or steam or other vapours.

(c) The month and year of manufacture is shown on the label outside each case and is also stamped on each detonator. Detonators must be used in the order of the dates stamped on them, those of the oldest date being always used first. To facilitate ready withdrawal in this sequence, they should be stored also accordingly.

S.R. 3.64-4. Use of Detonators -

(a) For use, a detonator shall be placed on the centre of the head of the rail with the label or brand of the detonator upwards, and shall be securely fastened to the rail by bending the clasps attached with the detonators round the upper flange of the rail. If the clasp is damaged, a handful of soft earth will hold the detonator on the rail.

(b) Station Masters, Loco Foremen, Permanent Way Inspectors and Supervisors Incharge of depots are responsible for ensuring that the detonators in

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possession of the Railway servants under them are tested as prescribed under the rules and that the staff know how and when to use them. For Gatemen within station limits, this responsibility will lie with the Station Master (Transportation inspector of the Section) Such staff as are expected to use detonators should be tested once in three months by the Inspecting Officials and Senior subordinates in regard to their knowledge of use of detonators.

(c) Each Station Master, Loco Foreman, Permanent Way Inspector and Supervisor incharge of depots will maintain a register of receipts, use and testing of detonators in respect of Railway staff to whom detonators were issued by him.

S.R. 3.64-5. Testing of Detonators –

(a) Testing of detonators shall be done at the stations/depots where stock of detonators are kept for issue to road side stations/running staff/P.Way & other staff. The depot incharge shall be responsible for testing of detonators one from each batch at least once in 12 months. Proper record of testing done should be maintained **CS6/7**

~~(b) Where the stock are kept by stores clerk of Safety branch, Sr.DSO/DSO may nominate TI/other Sr. Supervisor for testing of detonators.~~

~~(c) The life of detonator is 7 Years from the month of its manufacture. After the expiry of this period, unused detonators shall be returned to the issuing Officer for replacement. Detonators more than seven years old must not be used normally.~~

~~CS 6/7 Ref Office note No. T.361.P G&SR Rev. dated 6/02/2002~~

(b) Where the stocks are kept by divisional stores clerk, Divisional officer of respective branch may nominate Sr. Supervisor for testing of detonators.

CS 12/3 Ref: This office note No.TR/G&SR/Rev./101 dtd 22.11.11)

(c) The normal shelf life of detonators shall be 5 years, reckoned from the year of its manufacture. It can however be extended for maximum of 3 more years, provided that detonators which are more than five year old are effective. For this purpose two detonators of each batch / lot should be tested at the end of 5 years and if the result of these tests are satisfactory, life of detonators of that batch should be extended for one more year, on expiry of which similar tests should be conducted annually to extend the life of detonators of that particular batch / lot upto a maximum of 8 years from the year of manufacture. After the expiry of this period, unused detonators shall be returned to the issuing officer for replacement.

CS 14/7 Ref: Railway Board's letter No.2011/Safety (A&R)/19/3 dtd. 24.01.12)

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(d) Detonators bearing any sign of rust on the surface or appearing unsatisfactory in any way or those failing to explode during tests or in actual working shall be promptly returned to the issuing Officer for replacement.

(e) While testing detonators from a tin case, the one which is the oldest as regards the date of manufacture should be used.

(f) Detonators shall be tested under an empty wagon moving at 8 to 11 Kms. per hour. The empty wagon must be propelled by a electric or diesel locomotive. Test shall not be carried out by any person below the rank of a Transportation Inspectors, Permanent Way Inspectors, Loco Inspectors, Loco Foreman. Station Masters at Guard's headquarter station are, however, authorised to test detonators in their charge or issued by them. Care must be taken to ensure that test is not conducted in a crowded locality or near a level crossing where splinters from detonators may cause injury.

(g) Excepting the crew of the locomotive employed in the test, no person shall be allowed to remain within a radius of 45 meters of the detonator which is being tested. The engine crew shall also keep themselves well within the cab while passing over the detonators. The official-in-charge of the testing operation, shall before commencement of the operation, be responsible for posting sufficient men to ensure that no person encroaches upon the 45 metres safety radius until the test is completed.

(h) The staff shall, while observing the safety radius of 45 metres laid down in sub-rule (g) above, place them as far as possible in rear of the locomotive of train or wagon passing over the detonators as it has been found in practice that splinters from detonators seldom fly in a direction towards the rear of the wheel which explodes them.

(i) A record of the number of detonators tested as also the result of test shall be maintained in a special register kept for the purpose at the place of testing.

(j) After the test is completed, results of the tests shall be communicated to the issuing officer of the detonators, by the Official conducting the test.

(k) The staff in possession of detonators must not make any improper use of them.

SR 3.64-6 Disposal /destruction of expiry dated Detonators (fog signals) – Expiry dated detonators/detonators failed to explode during test or actual working shall be destroyed by one of the following methods:-

- a) by soaking them in light mineral oil for 48 hours and throwing them one by one into fire with due precautions; or
- b) by burning them in incinerator; or
- c) by detonating them under the wagon during shunting operation; or
- d) by throwing them in deep sea.

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The destruction of expired detonators shall be arranged in the presence of a railway servant who shall preferably be a Gazetted officer and in no case below the rank of a Sr. Subordinate. He shall ensure that during destruction, every care is taken to see that the splinters of detonators do not cause any injury to life and property.

It may be noted carefully that in no case the detonators shall be buried or thrown in water at such place where they could be recovered by human beings.”

New SR added CS 11/2 (Ref:Advisor (Safety) D.O. No. 2010/Safety (DM)/7/3 dated 13.05.10)

G. Signals to warn incoming train of danger ahead.

~~3.65. Description of flare signals—A flare signal, which includes a fusee, emits a bright red flame when lighted and is used for warning the Driver of an approaching train of any obstruction.~~

3.65. The signals to be used to warn the incoming train of an obstruction shall be a red flashing hand signal lamp at night or a red flag during day. (Revised vide CS 10 item no.10)

~~S.R. 3.65-1. Description and purpose—~~

~~A flare signal is an illuminating signal which emits a red flame about 10 cms. in diameter and burns for about 7 minutes. A flare signal is to be lit to give timely warning to the Driver of an approaching train of any obstruction, such as a derailed train obstructing the adjacent line or lines, a wash away, floods, land slide etc., when the Driver, Guard, Gateman or Patrolman does not have adequate time to run forward and place detonators to protect the obstruction in the normal manner, as prescribed in General Rule 6.03 and Subsidiary Rules thereunder. (Deleted vide CS 10 item No.11)~~

~~3.66. Use of flare signals - When it becomes necessary to protect an obstruction in a block section, a flare signal may be used, as prescribed by special instructions, while the railway servant proceeds to place detonators.~~

~~3.66. Use of flare signals—~~

~~When it becomes necessary to protect an obstruction in a block section, and a flashing hand signal is not provided, a flare signal may be used, as prescribed by special instructions, while the railway servant proceeds to place detonators.~~

~~[Added vide CS/10 item 1(ii) vide i) Rly Bd's letter No. 2001/Safety (A&R)/19/2 dated 14.03.2008 ii) Gazette of India GSR 116(E) No. 93 dated 28.02.08]~~

3.66. Use of warning signals –

When it becomes necessary to protect an obstruction in a block section, a signal may be used, as prescribed by special instructions under rule 3.65, while a railway servant proceeds to place detonators.

(Revised vide CS 10 item no. 12)

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~~S.R. 3.66-1. The flare signals to be used by Guards, Drivers/Motormen, Gatemen and Patrolmen as when and required.~~

S.R. 3.66-1. The warning signals to be used by Guards, Loco Pilots/Motormen, Gatemen and Patrolmen as and when required.

(Revised vide CS 10 item no. 13)

~~3.67. Knowledge and possession of flare signals -~~

- ~~(1) (a) All concerned railway servants on whom this duty is laid by the Railway Administration shall keep a stock of flare signals.~~
- ~~(b) The Railway Administration shall be responsible for the supply, renewal, periodical testing and safe custody of such flare signals, and for ensuring that their use is properly understood.~~
- ~~(c) The Railway Administration shall supply every Guard, Driver and Patrolman working on the Double or Multiple line, Ghat, Suburban and Automatic Block Territories with one Fusee.~~
- ~~(d) The Railway Administration shall supply:-~~
- ~~(i) every Gatemen working on Double or Multiple line, Ghat, Suburban and Automatic Block Territories with three fusees.~~
 - ~~(ii) every Gatemen working on single line section with one Fusee.~~

Vide CS 2/3 dated 20/7/2000

- ~~(2) Every railway servant concerned with the use of flare signals shall have a correct knowledge of their use and keep them ready for immediate use.~~
- ~~(3) Every railway servant shall see that the railway servants in his charge concerned with the use of flare signals have a correct knowledge of their use.~~

3.67. Knowledge and possession of warning signals -

- (1) (a) All concerned railway servant on whom this duty is laid by the Railway Administration shall keep a stock of such signal as may be prescribed by special instructions under rule 3.65 .
- (b) The Railway Administration shall be responsible for the supply, renewal and safe custody of such signals as may be prescribed by special instructions under rule 3.65 and for ensuring that their use is properly understood.
- (c) The Railway Administration shall supply every Guard, Loco pilot, Patrolman and Gateman working on the Double or Multiple lines,

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Ghat, Suburban and Automatic Block Territories with such signals as may be prescribed by special instructions under rule 3.65.

- (2) Every railway servant concerned with the use of signals as prescribed by special instructions under rule 3.65, shall have a correct knowledge of their use and keep them ready for immediate use.
- (3) Every railway servant shall see that the railway servants in his charge concerned with the use of warning signals as prescribed by special instructions under rule 3.65, have a correct knowledge of their use.

(Revised vide CS 10/14)

~~S.R.3.67 1. (1) (a) Flare signal shall form part of the equipment of Guards, Drivers, Gatemen and of Patrolmen. They shall be equipped with—~~

~~3—Fusees for Gateman and~~

~~1—Fusee for others.~~

~~Each flare signal will have a protective tin plate cap at the ends and will be held in position over the body by a piece of tape adhesive. The flare signal with the protective caps must be kept in the sealed alkathene bag, to avoid ingress of moisture and consequent deterioration when not in use.~~

~~(b) Division Railway Managers shall prescribe the number of flare signals which must be kept in stock at Stations, Running Sheds, Goods Yards and Permanent Way Inspector's Offices and specifying the minimum number below which the stock must not be allowed to fall.~~

~~(c) Station Masters, Yard Masters, Loco Foremen and Permanent Way Inspectors are responsible to ensure that the stock of flare signals is never allowed to fall below the minimum.~~

~~(d) Station Masters, Yard Masters shall supply one flare signal in a tin case to Guards headquartered at their stations/Yards. Loco Foremen shall supply one flare signal in a tin case to Drivers and Permanent Way Inspectors shall supply a flare signal in a tin case to Patrolmen and Gatemen.~~

~~(2) Method of lighting—~~

~~A quick survey must be made to select a site in the vicinity of the obstruction for fixing the stave and after lighting the flare signal, it should be fixed to the stave at an inclination with the head down, so that the signal flame can be clearly seen by the Driver of an approaching train from as great a distance as possible.~~

~~The flare signal can be conveniently lighted in heavy rain, provided Striker does not become damp before it is rubbed against match composition. If possible the flare signal should be lit under a cover i.e. an umbrella, but being lit it can be exposed head down in the rain. Directions for lighting the flare signals are indicated on the printed labels pasted on each flare signal.~~

~~The Driver of an approaching train observing the bright red flame must control the speed of his train and be prepared to stop short of any obstruction.~~

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~~(3) Storage—Flare Signals will be stocked, with their sealed alkathene bags in damp proof boxes of 28 x 14 x 14 cms. size to hold 25 fusees, at all Guards' Driver's and Gatemen/Patrolmen's headquarters.~~

~~(a) The flare Signals must be kept away from fire.~~

~~(b) The flare Signals should not be stored in damp atmosphere after removing them from their wrapping.~~

~~(c) Issuing officials must count and keep a record of the number of flare signals received and issued on each occasion with full particulars.~~

~~(d) The date and year of manufacture of flare signals shall be stencilled on every flare signal as well as on the package.~~

~~(e) When in possession of Guards, Drivers and Patrolmen/Gatemen for use in emergencies, flare signals should be kept in the tin case supplied to hold flare signals in their sealed bags and care should be taken to protect them from moisture, as the lighting and burning composition of the fusee are both hygroscopic and they deteriorate rapidly in moist weather conditions.~~

~~(4) Testing of flare signals—A representative fusee from the batches manufactured during a particular year should be tested annually during the month of May at every storage depot and a certificate issued to Chief Safety Officer through the proper channel. If the flare signal lights without difficulty and burns to its full length with a bright red flame for a duration of 5 to 7 minutes the test should be considered successful.~~

~~When the flare signal fails to give the above results, two more flare signals from the stock manufactured in the same year should be tested to determine their efficiency. In case the test are not successful, the whole stock of the particular year, of which the test was carried out, should be replaced.~~

~~(5) Life of flare signals—The normal life of a fusee is 7 years. Although this period has been given for general guidance, the flare signals may be tried out in the manner prescribed even after the seventh year to see if they are serviceable and if found serviceable, may be used. They should be scrapped if found unserviceable and destroyed in accordance with para (6) below.~~

~~(6) Destruction of flare signal—Unserviceable flare signals should be collected at one place and destroyed by burning them in a coal fire in a pit about 60 cms. deep. It should be ensured that not more than 3 flare signals are put in the fire at one time. The tin caps at either end must be removed before the flare signal is burnt.~~

~~(Deleted vide CS 10 item no. 15)~~

H. Defective fixed Signals and Points

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3.68. Duties of Station Master generally when a signal is defective -

- (1) As soon as a Station Master becomes aware that any signal has become defective or has ceased to work properly, he shall -**
 - (a) immediately arrange to place the signal at 'On' if it is not already in that position.**
 - (b) depute competent railway servants with such hand signals and detonators as may be required to give signals at the foot of the defective signal until he is satisfied that such signal has been put into proper working order -**
 - (c) take action in accordance with Rules 3.69 and 3.70 as may be required for movement of trains past the defective signals ; and**
 - (d) report the occurrence to the railway servant responsible for the upkeep of the signals, and if the section is controlled, the controller also.**
- (2) When the Station Master receives information of any defect in a signals not pertaining to his station from the Driver or the guard or any other railway servant he shall immediately inform the Station Master concerned of the fact and keep the Controller advised, where the section is controlled.**
- (3) In case of signals becoming defective at stations situated on Centralised Traffic Control territories, the Centralised Traffic Control Operator on becoming aware of such defects, shall take action in accordance with special instructions.**

S.R. 3.68-1. Signals, Defective -

- (a) On receipt of information of a stop signal being defective, the Station Master will -**
 - (i) personally verify that the signal is in the 'On' position.**
 - (ii) find out the cause of the defect and remedy it if he can. In the event of an interlocked signal being defective or for any reason refusing to operate, the Station Master or Cabin Assistant Station Master /Switchman /Cabinman on duty must personally inspect the points connected with the signal, if it is safe for trains to pass over the points;**
 - (iii) advise the controller on controlled sections;**
 - (iv) arrange for trains to be signalled past the defective signal in accordance with S.R.s 3.69-1 to 3.69-5 and S.R.s 3.701 to 3.70-3.**
 - (v) Wire to the Signal Inspector and to the Signal and Interlocking Maintainer and submit a special report to the Divisional Railway Manager by letter giving full details of the defective signal and detention to trains. In the case of non-interlocked signal being defective, advice by wire should be sent to the Permanent Way or Signal Inspector concerned whoever is responsible for its maintenance.**
- (b) After the signal and interlocking Maintainer or the Permanent Way Inspector has rectified the defect, the Station Master or the Cabin Assistant Station Master/Switchman/Cabinman on duty will personally verify if the signal is**

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working properly and Station Master will enter particulars of the defect and detention to trains if any, on the back of the Form (S.E.116-F) which will be hand over to him by the Signal and Interlocking Maintainer or the Permanent Way Inspector. The Station Master or the Cabin Assistant Station Master/Switchman on duty must always ask for the Form and fill it up properly before the Maintainer leaves the Station or Cabin.

(c) Drivers and Guards must note on their tickets and journals respectively every case of signals being out of order or working improperly stating the name of the Station or Cabin and the description of the signal.

~~(d) (i) If at an interlocked station, a signal which detects the points is defective, all the points detected by such a signal must be treated as non-interlocked. The Station Master will be responsible for satisfying himself by personal inspection that such points are correctly set and locked before authorising movement of any train over them. He cannot delegate this responsibility to any other member of the staff, except as provided in S.R.3.68-1 (d) (ii).~~

(i) If at an interlocked station, a signal which detects the points is defective, all the points detected by such a signal must be treated as non-interlocked, except where points in the route are locked by route setting with steady point *locked* indications on the panel. The Station Master will be responsible for satisfying himself by personal inspection that such points *where steady lock indication are not available* are correctly set and locked before authorising movement of any train over them. He cannot delegate this responsibility to any other member of the staff, except as provided in S.R.3.68-1 (d) (ii).

CS 13/13 (Ref: Office Note No. TR/G&SR/Rev/101 dated 08.07.13.)

(ii) where points detected by a signal are situated near a cabin under the charge of CASM/Switchman/Cabinman, the CASM/Switchman, Cabinman of the cabin from where the points and signals are worked shall personally verify the correct setting, clamping/cotter bolting and padlocking of the points. If after operation of the points, lockbar and the signal lever can be pulled or when 'N' or 'R' indication is available it is still necessary to clamp/cotter bolt and padlock the points. The CASM/Switchman/ Cabinman after personal verification of the correct setting and locking of the points shall advise the Station Master under exchange of Private Numbers.

Provided further that when the movement of passenger carrying trains is authorised over such points, the Station/Master/CASM/ Switchman shall personally verify the correct setting and locking of points.

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If the points are operated by Crank Handle instructions given under SR 3.51-4 must be followed.

(iii) When the authority to pass a defective signal on form T.32.B is issued by a person other than the one who has ensured the correct setting and locking of points detected by defective signal such authority shall not be issued unless Private Numbers have been exchanged between them to confirm the correct setting of the route. The Station Working Rules shall lay down the specific responsibility of the various staff in this regard.

(e) The taking 'Off' of the signal arm to half a right angle (i.e. 45 degree) is the minimum required and a signal arm at an inclination less than this should be treated as defective and considered as in the 'On' position.

(f) Station staff must not try to take 'Off' defective signal by pulling the wire by hand, as it is a dangerous practice and defeats the object of interlocking the signals.

(g) Inspection of Signal Glass -

The Railway servant, who lights the signal shall inspect the roundels for cracks or breakages and if any defect is noticed, immediately report the matter to Station Master on duty who will enter the report in the station diary. Such signals should be treated as defective during the period they are required to be kept burning and action shall be taken in accordance with the procedure prescribed in General Rules 3.68 to 3.70 and Subsidiary Rules made thereunder provided further that if there is any crack or breakage in the red roundel, the signal must not be allowed to remain lit and a railwayman shall be deputed to show a danger hand signal to the approaching trains from the foot of the signal.

(h) In the event of storms, heavy winds etc. the Station Master on duty should inspect the signals immediately thereafter, note the condition of lenses, and take further steps as necessary.

S.R. 3.68-2. For defective Gate signal see S.R. 16.06-1.

S.R. 3.68-3. Signals Conflicting -

(a) Conflicting signals should be treated as defective and as such equivalent to danger signal, for example, if the reception signals for a particular line are 'off and departure signals for the same line for the opposite direction are also 'Off' then all these should be treated as conflicting and hence defective. Similarly when the signal is 'Off' while the stop signals are 'On' the signal should be treated as conflicting and hence defective.

(b) In case the Outer signal is 'Off' and the Home Signal is in the "ON" position the Driver should bring his train to a stand at the Outer Signal. If, However, due to inadequate sighting distance of the Home Signal, the train cannot be brought to a stop at the Outer Signal, the Driver must bring his train to stop short of Advance Starting Signal or Shunting Limit Board for the opposite

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direction in case of single line stations and short of Home signal in the case of double line stations, and he should not draw up to the Home signal until that signal is taken "off" or unless he is authorised to pass it in the 'On' position, in accordance with G.R. 3.80.

(c) The following signals are inter-related signals -

(1) Reception signals :-

- (i) Outer,
- (ii) Home,
- (iii) Routing Home,

(2) Departure Signals -

- (i) Starter and intermediate Starter (if provided),
- (ii) Advance Starter.

Hence, when one or more signals of a group of interrelated signals are defective, the Driver of a train may be given a single written authority for passing all the interrelated signals. However, in doing this, advantage of detection by taking 'Off' signals which are in order should not be lost.

S.R. 3.68-4. Failure of signal lights, where colour light signals are provided.

~~(a) At stations provided with colour light signals where lights cannot be kept burning due to power failure including failure of standby arrangements, the Station Master must inform the station on either side and the Section Controller immediately, who shall inform the Sr.DEE/DEE and Sr.DSTE/DSTE concerned.~~

(a) At stations provided with colour light signals where signals cannot be kept lit up due to power failure including failure of standby arrangements, the Station Master must inform the station on either side by issuing a message under exchange of pvt. No. and the Section Controller immediately, who shall inform the Sr.DEE/DEE and Sr.DSTE/DSTE concerned.

Station may be treated as 'A' class for the purpose of granting line clear, in the direction of traffic.

CS 13/14 (Ref: Office Note No. TR/G&SR/Rev/101 dated 08.07.13.)

(b) Before despatching a train to such a station, Station Master of the station in rear shall issue T 409 (Caution Order) to the Driver advising him of the absence of any light on the signals and therefore for keeping a good vigil and look out and to stop at the foot of the first stop signal post of the station where signal lights are out.

(c) T.369 (3b) (Authority to pass defective signals) should be issued to the Driver, by the Station Master of the Station where the failure has occurred, at the foot of the first stop signal and the Starter signal.

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(d) Provision of GR 3.69-1 for the issue of authority to pass defective signals (hand written memo) by the Station Master in rear and the last nominated station shall not be applicable in such case.

(e) As and when electric supply is resumed and signal is 'lit' again, the advise as indicated in (a) above shall be cancelled and the Driver of the train shall be guided by the aspect of the signal.

3.69. Duties of Station Master when approach stop signal is defective -

(1) In the event of an Outer or a Home or a Routing signal becoming defective, the Station Master shall advise the station in rear and the nominated station in rear, save in a case where a signal post telephone or a Calling-on signal is provided on the defective signal, in order that the Drivers of approaching trains may be warned of the defective signal and issued a written authority to pass such signal on receipt of Proceed hand signal at the foot of the defective signal.

(2) The Station Master in rear as referred to in sub-rule (1), on receiving the advice of the defective signal, shall immediately acknowledge it and advise the station Master of the station where the signal has become defective, of the number of the first train which will be notified of the defective signal and again on receipt of the advice that the defective signal has been put into proper working order, shall advise the number of the train so notified last.

(3) The Station Master of the station where the signal has become defective shall, before authorising a train to pass the defective signal ensure that the conditions for taking 'Off' that signal have been fulfilled.

He shall then authorise the Driver to pass the defective signal at 'On' in one of the following manners -

(a) When the Driver of an approaching train has been advised of the defective signal at a station in rear - by deputing a competent railway servant in uniform under clause (b) of sub-rule (1) of Rule 3.68, to exhibit Proceed hand signal at the foot of the defective signal to the approaching train. In such cases, the Station Master shall not give Line Clear to the station in rear unless the conditions for taking 'Off' the signal which has become defective, have been complied with; or

(b) When the Driver of an approaching train has not been advised of the defective signal at a station in rear- by having written authority, authorising the Driver to pass the defective signal at 'On' delivered at the foot of the defective signal through a competent railway servant; or

(c) by taking 'Off' the Calling-on signal where provided; or

(d) by authorising the Driver to pass the defective signal at 'On' over the signal post telephone where provided, in accordance with special instructions,

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(4) When the Home signal becomes defective, the Outer shall also be deemed to be out of order and the procedure prescribed in sub-rules (1), (2) and (3) shall be followed.

S.R.3.69-1. Defective - Outer, Home and Routing Signals -

(a) In the event of an Outer or a Home or a Routing Signal/Signals of a station becoming defective, the Station Master on duty shall advise the Station in rear, and also the Station Master of the "Caution Order Station" in rear as given in S.R.4.09-1 supported by a private number, giving the particulars of signal/signals in detail. He will again advise the Station Master in the rear and the "Caution Order" station when the signals are rectified.

(b) The Station Master of the station in rear and the " Caution Order Station" in rear, on receipt of advice of the defective signal/signals supported by a private number, shall immediately acknowledge it supported by a private number, specifying the number of the first train which will be notified regarding the defective signal/signals. Again on receipt of advice that the defective signal/signals has/have been put into proper working order, shall advise the number of the last train so notified.

(c) The Station Master of the station in rear will issue written authority to the Driver of each train to pass such defective signal/signals on receipt of 'proceed' hand signal at the foot of the defective signal/signals, till he receives advice of the defective signal/signals having been rectified and put into proper working order, supported by a private number. In case of trains not scheduled to stop at the station in rear, the Written authority shall be issued by the Station Master of the 'Caution Order Station' in rear till he receives advice of the defective signal/signals having been rectified and put into proper working order, supported by a private number. The form in which the written authority is to be issued is given in S.R.3. 69-5. In this authority the description of the signal/signals and the name of the station must be clearly given in full.

(d) In case, a train has left the station in rear with a written authority to pass the defective signal/signals and in the mean while such signal/signals has/have been put into proper working order, the Station Master concerned must follow the same procedure as if the signal/signals is/are still defective, till the train as notified last has arrived. In case the advice was received at the 'Caution Order station' the Driver can be advised at a convenient station that the signal concerned has been set right. This advice should be in writing.

Note : S.R. 3.69-1 do not apply on the Automatic Block territory.

S.R.3.69-2. Outer Signal, Defective -

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When the Outer Signal is defective, the Home Signal must be kept in the 'On' position and the Station Master on duty will take the following action -

(a) When the Driver of an approaching train has been advised at the previous station- The Station Master will depute a Pointsman in uniform with hand signals to the Outer Signal after ensuring that the conditions for taking 'Off' the Outer signal are satisfied. The Pointsman will hand signal the train past the defective Outer, and the Home signal will be taken 'Off' for the admission of the train.

(b) When the Driver has not been advised at the previous station.- The Station Master, after ensuring that the conditions for taking 'Off' the Outer are satisfied will send an authority on Form T-32B to the Driver to pass the Outer signal at 'On' with the Pointsman in uniform who will hand over this authority to the Driver and pilot the train upto the Home Signal, and on the train coming to a stand, the Home signal will be taken 'Off' for its admission.

NOTE : When there is only an Outer and no Home Signal, the train will be piloted upto the station where the train usually comes to a stand.

S.R.3.69-3. Home Signal, defective -

When either the Home signal or both the Home and Outer Signals are out of order, both must be kept in the 'On' position and the Station Master on duty must take following action -

(a) The Station Master will send the Pointsman in uniform with hand signals at the Outer signal. After ensuring that the condition for taking 'Off' the Home and Outer signals are satisfied the Pointsman deputed at Outer signal must be provided with T.32-B signed by the Station Master on duty for delivering the same to the Driver to pass the Outer and Home signals in the 'On' position. Only when the train comes to a stand at the Outer signal the Pointsman will handover the authority T.32-B and exhibit a green hand signal to the Driver. The Driver having secured the written authority on form T.32-B and finding the green hand signal from the Pointsman at Outer signal shall proceed to the Station past the Outer and Home signals.

(b) At a station where the Home signal is the first stop signal -

(1) When the Driver has been advised at a previous station - The Station Master on duty after ensuring that the, conditions for taking 'Off' the Home signal are satisfied shall depute a Pointsman in uniform at the foot of the Home signal with hand signals. The Pointsman deputed at the foot of the Home signal shall exhibit green signal to the Driver of an approaching train to proceed to the Station.

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(2) When the Driver has not been advised at a previous station - The Station Master on duty after ensuring that the conditions for taking 'Off' the Home signal are satisfied shall depute a Pointsman in uniform at the foot of the Home signal. The Pointsman deputed shall be provided with T.32-B to pass the Home signal in 'On' position only after the train comes to stand at the Home signal the Pointsman will handover the authority T.32-B and exhibit a green hand signal to the Driver. The Driver having secured the written authority on form T.32-B and finding the green hand signal from the Pointsman at Home signal shall proceed to the station past the Home signal.

S.R.3.69-4. Routing Signal, Defective -

Routing signal may or may not be interlocked with Home signal, if interlocked, the Outer and Home signals should also be deemed to be defective.

(i) In case the Routing signal is interlocked with the Home signal - Station Master on duty, after ensuring that conditions for taking 'Off' the Routing signal are satisfied, will, send one Pointsman in uniform with hand signal and prescribed authority (T.32.B) to pass defective Outer, Home and Routing signal at 'On' at the foot of Outer signal. The T.32-B will be handed over to the Driver after stopping his train at Outer signal and the train will be piloted upto the station.

(ii) In case Routing signal is not interlocked with Home signal - Station Master on duty, after ensuring that conditions for taking 'Off' the Routing signal are satisfied, will, send one Pointsman in uniform with hand signal and prescribed authority (T.32.B) to pass defective Routing signal at 'On' at the foot of Routing signal. Outer and Home signal will be taken 'Off' after stopping train at Outer signal. T.32-B will be handed over by Pointsman to pass Routing signal at 'On' at the foot of Routing signal and train will be piloted upto the station.

S.R.3.69-5. Written authority, issuing of, by the Station Master of the station in rear and 'Nominated Station' in rear -

(a) The Written authority referred to in SR.3.69-1 (c) to be handed over to the Driver of a train proceeding to the station where the signal/signals has/have become defective shall be written in the following form -

To,
The Driver of _____ Up/Down train at

Station. You are hereby authorised to pass cautiously defective

Up/Down _____ signal/signals of

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Station, at a speed not exceeding 15 KMPH provided you receive 'Proceed' Hand signal at the foot of the defective signal/signals by a Railway servant in uniform.

Date :

Station Master's Signature

Time :

Station Stamp.

(b) The Station Master on duty shall prepare the authority in duplicate and obtain the signature of the Driver on the carbon copy retaining the same as a station record.

3.70. Duties of Station Master when a departure Stop signal is defective -

(1) In the event of a Starter becoming defective, the Station Master may authorise the Driver to pass such signal by a written authority which shall be handed over to the Driver at the station where the defective signal is located and in addition thereto, a competent railway servant shall show hand signals to the departing train in accordance with the instructions of the Station Master or by taking 'Off' the Calling-on signal, if provided under sub-rule (2) of Rule 3.13, after the train has been brought to a stand at the defective signal.

(2) In the event of an Advanced Starter becoming defective, hand signals may be dispensed with and the Station Master may authorise the Driver to pass such signal by a written authority, which shall be handed over to the Driver at the station, where the defective signal is located :

Provided that in exceptional circumstances where, under approved special instructions, an Advanced Starter protects any points, hand signals shall not be dispensed with.

(3) For the purpose of handing over the written authority mentioned in sub-rules (1) and (2), the train shall be stopped at the station where the defective signal is located. The written authority to pass a defective departure Stop signal shall not be handed over to the Driver unless all the conditions for taking 'Off' such signal have been fulfilled.

(4) Where under approved special instructions a Calling-on signal has been provided below a departure Stop signal, other than the last Stop signal, the Calling-on signal shall not be taken 'Off' unless the conditions for taking 'Off' the departure Stop signal above it have been fulfilled.

S.R.3.70-1. Starter Defective -

The train must be brought to a stand at the station and the Driver will then be given an authority on Form T-32B to pass the signal at 'On'. A Pointsman shall also be deputed at the Starting signal concerned to exhibit a green

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hand signal to the Driver. On receipt of the authority and green hand signal from the Pointsman at the foot of the Starting signal, the Driver will start his train.

When a Starter signal is the last Stop signal, Station Master shall mention clearly in authority on Form T-32.B that 'Line Clear' has been obtained from the station in advance, quoting the Private Number received from the station in advance in the space provided.

The Station Master shall personally verify the correct setting and locking of the route as per S.R.3.68-1 (d)(i) before he parts with the authority on Form T-32.B to be delivered to the Driver. At a station where CASM/Switchman/Cabinman is made responsible for the verification of the correct setting and locking of the route, as per the provision contained in S.R.3.68-2 (d) (ii), the authority on Form T-32.B shall not be issued unless the Station Master has been advised to this effect under the exchange of Private Numbers.

It shall be endorsed on the authority on Form T-32.B that the speed restriction of 15 kilometres an hour must be observed while passing a defective Starter signal which protects the points.

S.R.3.70-2. (a) When the Advanced Starter becomes defective, all trains must be stopped at the station and an authority to pass the signal at 'On' on Form T-32.B shall be handed over to the Driver, clearly mentioning in the authority that 'Line Clear' has been obtained from the station in advance and quoting the Private Number received from the station in advance in the space provided.

The authority to pass the signal in the 'On' position shall not be delivered to Driver unless the points, if any, detected by the signal have been correctly set and locked and personally verified by the Station Master/CASM/Switchman/Cabinman as per S.R.3.68-1(d) (i) and (ii).

The Starting signal, unless interlocking prevents it, shall be taken 'Off'.

In case an Advanced Starter detecting the points is to be passed at 'On', the Station Master shall endorse on the authority on Form T-32.B the speed restriction of 15 Kilometres an hour to be observed by the Driver while passing the Advance Starter.

(b) Advanced Starter signal is defective and IBS is working -

In the event Advanced Starter signal is defective at a station provided with IBS ahead in working condition, all the trains must be stopped at the station and the Station Master/CASM of that station after ensuring that Block Section between Advanced Starter and IBS is clear with the help of clear indication of axle counter/track circuit, shall issue an authority to the Driver to pass the Advanced Starter signal at 'On', on prescribed form T-32.B filling up the number of defective Advanced Starter in the proper column and quoting his private number in the Private No. column and will indicate the word 'You are authorised to proceed up to IBS and further follow its aspect'.

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(c) Both, Advanced Starter and IBS are defective -

In the event both Advanced Starter and IBS are defective then both Block sections to be treated as a single block section. All trains must be stopped at the station (where Advanced Starter is defective) and an authority, to pass Advanced Starter signal and Intermediate Block Signal at 'On' on form T-32.B. will be handed over to the Driver, clearly mentioning in the authority that 'Line Clear' has been obtained from the station in advance and quoting the private no. received from the station in advance, in the space provided.

S.R.3.70-3. In the event of the last Stop signal, which is also the first Stop signal of the block station in advance, becoming defective the Station Master shall not issue the authority to pass the last Stop signal at 'On' unless the Station Master of the block station in advance has complied with the conditions for taking 'Off' this signal. Such an assurance should be supported by a separate Private Number.

3.71. Warner or Distant signals defective in the 'Off' position -

(1) (a) If a Warner signal on a post by itself or a Distant signal is out of order and cannot be kept in the 'On' position, a Stop hand signal shall be shown at the foot of the signal. At night, the light or lights of the signal shall be extinguished and the train, after being first brought to a stand, may then be hand-signalled past the signal. Advice of the defective signal shall be given to the Drivers of trains at the station in rear warning them to stop at such signal.

(b) If a Warner signal placed below a Stop signal becomes defective and cannot be kept in the 'On' position, the Stop signal above it shall be treated as defective and by night the light of the Warner signal shall be extinguished.

(2) If the Warner or Distant signal of an Intermediate Block Post is defective and cannot be kept in the 'On' position, the Intermediate Block Stop signal shall also be kept at 'On' and treated as defective and action taken as per Rule 3.75.

S.R.3.71-1. (a) When a Warner/Distant signal fails in 'Off' position and cannot be kept at 'On' the Station Master shall immediately advise the Station Master of the station immediately in rear exchanging Private Numbers. 'Line Clear' shall not be granted for a train unless a Pointsman has been deputed at the foot of defective Warner/Distant signal to exhibit danger signal to approaching trains. In case a Warner signal is placed below a fixed green light, the fixed green light shall also be extinguished.

(b) The Station Master of the station immediately in rear of the station where defective Warner/Distant is located shall stop all trains and give a written advice to the Driver and obtain his acknowledgment.

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The Driver of the train who has been so advised shall bring his train to stop at the foot of the signal and proceed only after he has been hand signalled past by the Pointsman.

S.R.3.71-2. When a Warner/Distant signal of gate Stop signal has become defective in the 'Off' position and cannot be kept at 'On', signal light shall be extinguished and the Gateman shall intimate this fact to the Station Master of the station having telephonic communication with level crossing gate. The Station Master, on receipt of this information shall advise the Station Master of the station immediately in rear exchanging Private Numbers, to stop trains and issue caution orders to the Drivers of each train to stop short of the defective Warner/Distant signal and further act on the aspect of the gate Stop signal ahead.

When there is no telephone communication between the gate and any of the stations on either side or when the telephone is out of order, the Gateman shall keep the gate Stop signal at 'On' and the level crossing closed and secured against the road traffic. The road traffic may be passed only when he has ensured that no train is approaching the level crossing. For the first approaching train, the Gateman, after closing and securing the level crossing against road traffic, shall proceed to the foot of the defective Warner/Distant signal and display hand danger signal to the Driver of approaching train. After the train has been brought to a halt the Gateman shall advise the Driver of the circumstances and pilot the train pass the level crossing gate.

The Driver of the first train shall stop at the next station and advise the Station Master about the nature of signal defect, who shall take action as given above. The Caution Order shall continue to be issued till the defect is rectified.

3.72. Warner not to be used when Stop signal is defective - Whenever a Stop signal is defective or ceases to work properly at a station provided with Warners, the Warner applying to the line to which the defective Stop signal applies shall be kept at 'On' until the defective Stop signal is rectified.

3.73. Passing of a gate Stop signal at 'On' -

(1) When a Driver finds a gate Stop signal at 'On' he shall sound the prescribed code of whistle and bring his train to a stop in rear of the signal.

- ~~(2) (a) If the gate Stop signal is provided with a 'G' marker, the Driver shall wait at the signal for one minute by day and two minutes by night, and if the signal is not taken 'Off' within this period, he may draw his train ahead cautiously and stop short of the level crossing.~~
- ~~(b) He shall then be hand signalled past the gate by the Gateman, if there is one, or in the absence of a Gateman, by one of the~~

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~~members of the engine crew or by the Guard of the train after ascertaining that the gates are closed against road traffic.~~

- (2) (a) If the gate Stop signal is provided with a 'G' marker, the Loco Pilot shall wait at the signal for one minute by day and two minutes by night, and if the signal is not taken 'Off' within this period, he may draw his train ahead cautiously up to the level crossing, and
- (b) if the Gateman is available and exhibiting hand signals, proceed further past the gate cautiously, or
- (c) if the Gateman is not available, or, is available but not exhibiting hand signals, he shall stop short of the level crossing, where he shall then be hand-signaled past the gate by the Gateman, if there is one or in the absence of a Gateman, by one of the members of the engine crew of the train after ascertaining that gates are closed against road traffic.

[Ref : Rly Bd's letter No. 2004/Safety(A&R)/19/25 dated 11.09.2006.CS 9/1]

(3) If the Driver finds, after stopping at signal, that there is no 'G' marker, he shall proceed further only in accordance with the procedure laid down under special instructions.

S.R.3.73-1. For instructions for passing a gate signal without a 'G' marker refer S.R. 16.06-1 (b).

3.74. Absence of a fixed signal or a signal without a light -

- (1) (a) If there is no fixed signal at a place where a fixed signal is ordinarily shown, or
- (b) if the light of a signal is not burning when it should, or
- (c) if a white light is shown in place of a colour light, or
- (d) if the aspect of a signal is misleading or imperfectly shown, or
- (e) if more than one aspect is displayed, the Driver shall act as if the signal was showing its most restrictive aspect :

Provided that during night, if in the case of a semaphore Stop signal for approaching trains only, the Driver finds the signal light extinguished he shall bring his train to a stop at such signal. If he finds that the day aspect of such signal is clearly visible and is satisfied that the signal is in the 'Off' position, he shall proceed past it upto the station cautiously at a restricted speed obeying all intermediate Stop signals, if any, relating to him, and report the matter to the Station Master for necessary action.

(2) At stations equipped with a colour light signal provided with a 'P' marker, the Driver shall bring his train to a stand if it does not show any light or shows as imperfect aspect and having satisfied himself that the signal

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is provided with 'P' marker, shall proceed preparing to stop at the next stop signal and shall be guided further by its aspect.

S.R.3.74-1. The Repeating signal which is distinguished by letter 'R' can be passed cautiously even when the signal arm or light is imperfectly shown or signal light is extinguished. The Driver shall act further on the aspect of the signal ahead.

3.75. Passing of Intermediate Block stop signal at 'On' -

(1) When a Driver finds an Intermediate Block Stop Signal at 'On', he shall stop his train in rear of the signal and contact the Station Master of the block station in rear on the telephone, if provided on the signal post.

(2) The Station Master shall authorise the driver to pass the Intermediate Block Stop signal, if defective as prescribed by special instructions.

(3) If the telephone is not provided or is out of order, the driver after waiting for 5 minutes at the signal shall pass it at 'On' and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding 15 kilometres an hour if he has a good view of the line ahead, otherwise at a speed not exceeding 8 kilometres an hour and report the failure to the Station Master at the block station ahead.

(4) The Station Master of the block station working the intermediate Block Stop signal on becoming aware that such a signal is defective shall, before dispatching a train, treat the entire section upto the block station immediately ahead of the Intermediate Block Post as one block section and issue a written authority to the Driver to pass the defective intermediate Block stop signal at 'On' without stopping at the signal, in accordance with the procedure prescribed by special instructions.

S.R.3.75-1. Passing Intermediate Block Stop signal at 'On' -

When a Driver finds an Intermediate Block Stop signal at 'On', he shall bring his train to a stop in rear of the signal, advise the Guard of the fact by sounding one long continuous Whistle at distinct intervals and contact the Station Master of the block station in rear, on the telephone provided for the purpose on the signal post.

S.R. 3.75-2. If the Station Master, on being contacted on telephone by the Driver, finds that the signal is defective, he shall, after obtaining 'Line clear' for the train from the station in advance, authorise the Driver on the telephone to pass the Intermediate Block Stop signal at 'On' and enter the block section ahead. He shall also advise the Driver of the Private Number under which he had received Line Clear' from the station in advance. The Driver will note this Private Number in his Memo Book.

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S.R. 3.75-3. If, however, the telephone provided at the Intermediate Block Stop signal post, is out of order and the Driver is unable to contact the station in rear, he shall wait for 5 minutes at the signal and if within this period the signal is not taken 'Off' he may, after advising the Guard of this fact by sounding one long whistle which may be repeated as necessary and after exchanging all-right signals with him, pass the Intermediate Block Stop signal at 'On' and proceed cautiously into the block section ahead. When such a signal is passed in this manner, the speed of the train shall not exceed 15 KMPH if the visibility is good. Where, owing to any reason, the line ahead cannot be seen clearly, the Driver shall proceed at a very slow speed, which shall under no circumstances exceed 8 KMPH. Driver shall be extremely vigilant and continue to proceed cautiously till he reaches the foot of next Stop signal. Even if that signal is 'Off' the Driver shall continue to look out for any possible obstruction short of the same and will act upon it's indication only after he has reached it. After being received at the block station ahead, the driver shall report the failure of the signal/the telephone, as the case may be, to the station Master.

S.R. 3.75-4. However, if the Station Master of the block station immediately in rear of an Intermediate Block Stop Signal is aware that such a signal is defective, he shall, before dispatching a train, obtain 'Line Clear' for the block section between the intermediate Block Stop signal and the block station in advance and then issue a written authority to the Driver to pass the Intermediate Block Stop signal ahead at 'On' without stopping at the signal. An endorsement shall be made on such an authority that 'Line Clear' for the block section upto next station has been obtained under Private Number quoting the Private Number so obtained from the Station Master of the block station in advance.

S.R. 3.75-4. 5 Intermediate Block stop signal protecting a level crossing gate -

A legend board will be provided with legend "*IBS signal protecting LC Gate. Ensure its closure before passing IBS signal at 'ON'.*"

- a) Passing Intermediate Block Stop signal protecting a level crossing gate, at 'On' -
- i) When LP finds such IBS signal at 'On', he shall bring his train to a stop in rear of the signal, advise the Guard of the fact by sounding one long continuous Whistle at distinct intervals and contact the Station Master of the block station in rear, on the telephone provided for the purpose on the signal post.
 - ii) If the SM, on being contacted on telephone by the Loco Pilot, finds that the signal is defective, SM shall treat the LC gate as non interlocked and will obtain private number from the Gateman personally, if under his control or through the SM of station at other end, as an assurance of closure of LC gate. SM shall authorise the Loco Pilot on the telephone to pass the Intermediate Block Stop signal at 'On' and enter the block section ahead by issuing Private Number under which he had received line clear from the station in advance and private number of Gateman. Loco Pilot will note both the Private Numbers in

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his Memo Book, sound whistle in prescribed code (short- long - short), obtain all right signal from Guard and proceed with normal speed.

- iii) If, however, the telephone provided at such IBS signal is out of order and the Loco Pilot is unable to contact the station in rear, he shall wait for 5 minutes at the signal and if within this period the signal is not taken 'Off' the Loco pilot shall take cognizance of the legend board provided at the IBS signal as mentioned above. He may, after advising the Guard of this fact by sounding one long whistle which may be repeated as necessary and after exchanging all right signals with him, pass the Intermediate Block Stop signal at 'On' and proceed cautiously upto the level crossing, and if the gateman is available and exhibiting hand signal, proceed further and pass the gate cautiously or if the gateman is not available or is available but not exhibiting hand signal, he shall stop short of the level crossing and after ascertaining that the Gates are closed against the road traffic and on getting the hand signal from Gateman, and in his absence from Assistant Loco Pilot, the Loco Pilot shall sound prescribed code of whistle and cautiously proceed into the block section ahead and be prepared to stop short of any obstruction including at any Level crossing gates available in the section. When such a signal is passed in this manner, the speed of the train shall not exceed 15 KMPH if the visibility is good. Where, owing to any reason, the line ahead cannot be seen clearly, the Loco Pilot shall proceed at a very slow speed, which shall under no circumstances exceed 8 KMPH. Loco Pilot shall be extremely vigilant and continue to proceed cautiously till he reaches the foot of next Stop signal. Even if that signal is in 'Off' position the Loco Pilot shall continue to look out for any possible obstruction short of the same and will act upon it's indication only after he has reached it. After being received at the block station ahead, the driver shall report the failure of the signal/the telephone, as the case may be, to the Station Master.
- iv) However, if the Station Master of the block station immediately in rear of such an Intermediate Block Stop Signal is aware that the said IBS signal is defective, gate protected by IBS signal shall be treated as non-interlocked and before dispatching a train he shall obtain 'Line Clear' from station in advance and also obtain private number from gateman personally, if under his control or from the SM of station at other end, as an assurance of closure of LC gate. Then he shall issue a written authority T/369-3(b) to the Loco Pilot to pass the Intermediate Block Stop signal ahead at 'On' without stopping at the signal by endorsing both private numbers.

Note: On those sections, where due to gradients and other local conditions, the Loco pilot cannot leave the engine, he will sound two long and two short whistles distinctly for the Guard to assist and come to engine. In such cases the duties of the Loco pilot will devolve upon the Guard.

(CS 14/11 Ref : This office note no. TR/G&SR/Rev./101 dated 18.04.2018)

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~~Note: (1) On those sections, where due to gradients and other local conditions, the Driver cannot leave the engine, he will sound two long and two short whistles distinctly for the Guard to assist and come to engine. In such cases the duties of the Driver will devolve upon the Guard.~~

~~(2) During thick, foggy or tempestuous weather impairing visibility, the working of Intermediate Block stop signals may be suspended.~~

(CS 11/11 Ref : Rly Board's letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 & 04.11.2010.)

3.76. Intimation to officials when defects remedied - As soon as a defective signal has been put into good working order, the Station Master shall intimate the fact to the officials who were advised of its being defective.

3.77. Defective or damaged points etc. -

(1) Whenever points, crossings or guard rails are defective or damaged, the railway servant in charge of operation of points shall protect them and immediately arrange to report the circumstances to the Station Master.

(2) The Station Master, on becoming aware of such defective or damaged points etc. shall -

(a) immediately arrange to have the defect rectified by the railway servant responsible for their maintenance,
(b) arrange to ensure the safe passage of trains, and
(c) keep the signal or signals concerned at 'On' until the defect is rectified.

S.R.3.77-1. Defective Points -

On receipt of information that points are defective or cannot for any reason be fully operated, the SM, or the CASM/Switchman must normalise the signals and points concerned and attempt to re-operate them. If the defect still persists, and S&T staff responsible for the maintenance of S&T gears are available, they must be promptly advised. Where, however, such S&T staff are not available, he must personally inspect the points to find out the cause and remedy the defect, if he can. If he cannot, he must promptly advise "All Concerned".

S.R.3.77-2. Points Damaged -

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The Station Master must examine the damaged points immediately and take steps to prevent any movement over the damaged track until the defect has been rectified.

S.R. 3.77-3. Points - Drivers trailing through -

If on any account a point is trailed through, the Driver must not under any circumstances back his train over the point trailed through before the defect to the point has either been rectified, or the point been properly set and clamped for any further movement, provided that after clamping, the point does not gape.

3.78. Duties of engine crew in respect of signals:-

~~(1)(a) The Driver shall pay immediate attention to and obey every signal whether the cause of the signal being shown is known to him or not.~~

~~(b) He shall not, however, trust entirely to signals, but always be vigilant and cautious.~~

~~(2) (i) When his engine explodes a single detonator or when he notices a flare signal burning, he shall immediately bring his train to a stop and be guided by the signals that he may receive or if no hand signal or other signals are at once visible to him he will follow the procedure as given in para (v), (vi) and (vii).~~

~~(ii) In thick, foggy or tempestuous weather impairing visibility when his engine explodes 2 detonators within a distance of 10 meters apart, the Driver will control his train immediately and will follow the aspect of the fixed signal ahead within a distance of 270 meters.~~

~~(iii) When driver explodes 3 detonators with in a distance of 40 meters distance he should control his train and move cautiously to stop short of any obstruction and be guided by the signal that he may receive and or if no hand signal or other hand signals are at once visible to him he will follow the procedure as given in para (v), (vi) and (vii) below.~~

~~(iv) If it is day and he has a clear view of the line ahead, proceed very cautiously at such speed as will enable him to stop short of any obstruction.~~

~~(v) If it is day and the view of the line is not clear or if it is night, or if the visibility is impaired on any account, proceed very cautiously on hand signals given by a member of the engine crew or the Guard who shall walk ahead of the train for this purpose.~~

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- ~~(vi) after proceeding 1.5 kilometers from the place where the explosion occurred or where flare signal was burning. If he does not explode any more detonators or sees no other signals, he may then resume authorised speed, and report the incident to the next station or cabin.~~
- ~~(3) If in consequence of fog or storm or for any other reason, the view of the signals is obstructed, the Driver shall take every possible precaution, so as to have the train well under control.~~
- ~~(4) A Driver shall acquaint himself with the system of working, location of signals and other local conditions affecting the running of trains on a section or sections of the railway over which he is to work and if he is not so acquainted with any portion of the railway over which he is to work, obtain the services of a qualified railway servant who is conversant with it to assist him.~~
- CS 2/2 dated 8.06.2000**

3.78. Duties of engine crew in respect of signals:-

- (1) (a) The Loco Pilot shall pay immediate attention to and obey every signal whether the cause of the signal being shown is known to him or not.
- (b) The Loco Pilot shall not, however, trust entirely to signal, but always be vigilant and cautious.
- (2)(a) The Loco Pilot shall whistle intermittently when his engine explodes detonator(s) and take every possible caution including reduction of speed as necessary, so as to have the train well under his control and be able to stop short of any obstruction on the line;
- (b) after proceeding 1.5 kilometers from the place where his engine exploded detonator(s), if his engine does not explode any more detonator(s), he may then resume authorized speed; and
- (c) report the incident to the next station or cabin.
- (3) If in consequence of fog or storm or any other reason, the view of the signal is obstructed, the Loco Pilot shall take every possible precaution, so as to have the train well under control.

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- (4) When the loco pilot notices a signal warning of an obstruction, except detonator(s), he shall stop his train immediately and act on advice of the person exhibiting warning signal or on the basis of obstructions noticed by him.
- (5) In case no further details of exhibition of warning signal are noticed, after stopping for one minute by day and two minutes by night to ascertain the location and/or cause of the warning, he shall proceed cautiously up to the next block station, keeping a sharp lookout.
- (6) The loco pilot shall acquaint himself with the system of working, location of signals and other local conditions affecting the running of trains on a section or sections of the Railway over which he is to work and if he is not so acquainted with any portion of the Railway over which he is to work, obtain the services of a qualified Railway servant who is conversant with it to assist him.”

(Revised vide CS 10 item No. 16)

S.R.3.78-1. Non-Interlocked facing points - Driver's duty -

If the Driver finds that the outermost facing points at a non-Interlocked station are not manned by a railway servant in uniform as required in S.R.3.39-2, he shall reduce speed to 10 Kms in case of goods trains and shall stop dead and proceed cautiously in case of passenger trains.

On arrival of his train at the station he shall advise the Station Master and the Guard of the train and the latter shall record this in the journal.

S.R.3.78-2. Need for careful attention to -

While approaching or leaving a station, the Driver shall pay careful attention to the various signals displayed in order -

- (a) to distinguish between the signals applicable to train and those not applicable.
- (b) to observe the aspect of such signals as are applicable to his train until he passes them.

Note : The Driver of a train shall be responsible for observing the position of all facing points fitted with point indicators, while arriving at or leaving a station.

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S.R. 3.78-3. Whenever due to fog, heavy dust, storm or for any exceptional circumstances the visibility of the line ahead is impaired, the Driver shall exercise caution and keep his train under control ensuring the safety of the train and of any obstruction ahead particularly at level crossing gates, if any.

~~SR 3.78.4 Need for re-acquainting himself with the working in a section by a Driver :- Driver shall acquaint himself by undertaking following number of trips as road learning in case he has not worked in the section for periods shown against each -~~

No. of trips of Road learning		Period of absence
During Day	During Night	
2	1	over 1 year
1	1	over 3 months

~~In case of Ghat sections and sections with automatic signalling, driver may request for a maximum of 3 trips more than stipulated.~~

[CS 7/1 Ref: CSO's Letter no. T 361.P. CS/G&SR 1999 edition dated 07/05/02]

SR 3.78(4). Need for re-acquainting himself with the working in a section by a Driver :-

Driver shall acquaint himself by undertaking following number of trips as road learning in case he has not worked in the section for periods shown against each -

No. of trips of Road learning		Period of absence
During Day	During Night	
2	2	over 1 year
<u>2</u>	1	over <u>6</u> months

In case of Ghat sections and sections with automatic signalling, driver may request for a maximum of 3 trips more than stipulated.

(CS 10 item no. 8 Ref : Sr.DEE(TRS.O) CSTM letter No. BB.TRSO.SAFE.3 dated 16/07/09)

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3.79. Duties of Driver in respect of a Calling-on signal - The Driver of a train shall be guided always by the indication of the Stop signal below which the Calling-on signal is fixed. If this Stop signal is at 'On', he shall bring his train to a Stop. If he finds that the Calling-on signal is taken 'Off', he shall, after bringing his train to a Stop, draw ahead with caution and be prepared to Stop short of any obstruction.

3.80. Duties of Driver when an approach Stop signal is 'On' or defective -

(1) The Driver of a train shall not pass an Outer, a Home or a routing signal that refers to him, when it is 'On' or defective, unless -

(a) he has, at a previous station, received notice in writing specifying that the signal is out of order and unless he also receives a Proceed hand signal from a railway servant in uniform at the foot of such signal; or

(b) after coming to a stand, he is either given a written authority by the Station Master to proceed past such signal or is authorised by a Calling signal in the 'Off' position or is authorised by the Station Master over the signal post telephone in accordance with special instructions.

(2) The Driver of a train while passing an Outer, a Home or a Routing signal, when it is 'On' or defective, shall ensure that the speed of his train does not exceed 15 Kilometres an hour.

S.R.3.80-1. Driver's duty when an approach Stop signal is 'On' or defective -

The Driver of a train must not pass a fixed approach Stop signal which refers to him when it is 'On' or defective unless -

(a) he has received a written authority as stipulated in S.R.3.69-5 from the Station Master of the Station in rear or the nominated station in rear authorising him to pass such defective signal/signals and also he has received a Proceed hand signal at the foot of the defective signal/signals, or

(b) after coming to a stop at the defective signal he is given a written permission on Form T-32B by the Station Master on duty and is also signalled past by the Pointsman in uniform.

3.81. Duties of Driver when a departure Stop signal is 'On' or defective

(1) The Driver of a train shall not pass a departure Stop signal that refers to him, when it is 'On' or defective, unless his train has been brought to a stop at the station where the defective signal is situated and he is authorised to do so -

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(a) By a written permission from the Station Master, in addition, in the case of a starter. Or advanced Starter protecting points, he shall not pass such signals, when “on” or defective, unless he also receives a “Proceed” hand signal from a duly authorised member of the station staff posted at the signal, or

(b) by taking ‘Off’ the calling-on-signal, if provided under approved special instructions, vide sub-rule (2) of Rule 3.13.

~~(2) In the case of a Starter, or Advanced Starter protecting points, he shall not pass such signal, when ‘On’ or defective, unless he also receives a Proceed hand signal from a duly authorised member of the station staff posted at the signal.~~

(2) In the case of a last Stop signal, he shall not pass such signal, when ‘On’ or defective, unless he is also in possession of a proper authority to proceed under the system of working.

[CS 3/3 dated 14/8/2000]

S.R.3.81-1. Departure signals defective or ‘On’ - Drivers duties -

When departure Stop signal protecting the points is to be passed at ‘On’ the Driver shall ensure that while passing over such points, the speed of his train does not exceed 15 kilometres an hour.

3.82. Permission before entering on or crossing a running line - No Driver shall take his engine on or across any running line until he has obtained the permission of the Station Master and has satisfied himself that all the correct signals have been shown.

3.83. Assistance of the engine crew regarding signals -

(1) The Driver and the first Fireman or the Assistant Driver, as the case may be, shall identify each signal affecting the movement of the train as soon as it becomes visible. They shall call out the aspects of the signals to each other.

(2) The Assistant Driver or the Fireman shall, when not otherwise engaged, assist the Driver in exchanging signals as required.

(3) The provisions of sub-rules (1) and (2) shall, in no way, absolve the Driver of his responsibility in respect of observance of and compliance with the signals.

3.84. Duties of Drivers as to signals when two or more engines are attached to train - When two or more engines are attached to a train, the Driver of the leading engine shall be responsible for the observance of and compliance with the signals and the Driver or Drivers of other engine or engines shall watch for and take signals from the Driver of the leading engine, except in cases where special instructions are issued to the contrary.

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S.R. 3.84-1. Coupled engines, duties of Drivers of -

When two engines are attached to a train, the Driver of the leading engine will be in charge of the train, and will receive the Line Clear Token or Starting Permit and Caution Orders when issued. The second Driver should, however, satisfy himself that everything is in order, correct signals given, etc. The leading Driver will satisfy himself that the other Drivers have noted the Caution Orders.

[CS 6/8 (i) & (ii) dated 3/4/2002]

3.85. Reporting of defects in signals -

(1) Should a Driver or a Guard observe that a signal is rendered imperfectly visible by branches of trees or by any other cause, or that a signal light is partially obscured or not burning brightly enough to give a clear aspect, he shall report the matter to the Station Master at the next station at which the train stops.

(2) When such a report is made by a Driver or a Guard, the Station Master shall take immediate steps to advise the Station Master concerned who shall get it rectified.

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WORKING OF TRAINS GENERALLY

CHAPTER IV

WORKING OF TRAINS GENERALLY

A. Timing and Running of Trains

4.01. Standard time - The working of trains between stations shall be regulated by the standard time prescribed by the Government of India, which shall be transmitted daily to all the principal stations of the Railway at 16.00 hours in the manner prescribed.

S.R.4.01-1. (a) Control offices shall transmit the correct time at 16.00 hours daily to all the stations on controlled sections to enable the stations to adjust the station clocks.

The clocks provided in the control offices must be synchronised with the time signal given by All India Radio at 8.00 hrs., 13.30 hours and 21.00 hours.

(b) On the non-controlled sections all stations will cease to work on circuits at 15.57 hours and the 16.00 hours time signal shall be transmitted by the controlling stations to all the stations in the section.

(c) Station Masters shall record any variation in time in the Train Signal Register. If the office clock shows right time this should also be recorded.

At a station where no Train Signal Register is maintained, a separate Time Register must be maintained.

(d) On non-controlled sections the Railway Servant, on resuming duty in an office or cabin with block instruments must check his time with the stations on either side and enter the discrepancies in the Train Signal Register.

On Controlled areas, time must be checked with the Section Controller when coming on duty.

4.02. Adherence to advertised time - No passenger train or mixed train shall be despatched from a station before the advertised time.

S.R.4.02-1. Punctuality of trains -

(a) Every endeavour must be made to make up time at stations when a train is running late. No delay must take place in taking 'Off' the departure signals or ringing the station bell.

(b) Drivers must be on the alert and start their trains immediately they have received the Guard's signal and have satisfied themselves that the departure signals have been taken 'Off' and, on the single line, the correct 'Authority to proceed' has been received.

(c) Trains, if running late, may be allowed to start if the full halt allowed for the train has not elapsed; but no train carrying passengers must start before the departure time shown in the Public Time Table.

4.03. Setting watch - Before a train starts from a terminal or crew-changing station, the Guard shall set his watch by the station clock or the clock

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at the authorised place of reporting for duty and communicate the time to the Driver who shall set his watch accordingly.

4.04. Time of attendance for train crew - Every Guard, Driver, Assistant Driver or Fireman shall be in attendance for duty at such place and at such time as may be prescribed by special instructions.

S.R.4.04-1. Guards ~~and Assistant Guard~~ - when to attend - Passenger Guards ~~and Assistant Guard~~ must report for duty at least 30 minutes before the scheduled departure of the train. Guards of Suburban trains shall report for duty at least 15 minutes before the scheduled departure of the train. In the case of goods trains originating from a terminal yard, the Guards shall appear on duty at least 45 minutes before the train is scheduled to leave. At intermediate points where only the change of train crew takes place, the time of attendance will be prescribed by the Divisional Railway Manager.

S.R.4.04-2. Drivers and Assistant Drivers - Attendance of - Drivers and Assistant Drivers must 'Sign on at such time in advance of the starting time of their trains, as the Divisional Railway Manager will fix. In the calculation of the time required, the following will be allowed for -

- (a) 30 minutes for examining and taking over engine in shed after 'Signing on' duty.
- (b) Such time as is required for the journey between the shed and the train. This time should be calculated for each separate station, on an average of the actual time required.
- (c) 15 minutes for free shunting time before the departure time of the trains.

They must also remain with their engines on arrival at the shed after finishing a journey for such time as may be prescribed for the purpose of examining their engines, booking repairs, or such other work as may be necessary.

4.05. Proper running line - The Driver shall take his train along the proper running line.

4.06. Direction of running -

(1) On a double line, every train shall run on the left hand line unless otherwise prescribed by special instructions.

(2) If there are two or more parallel lines, the direction in which trains are to run on each line shall be prescribed by special instructions.

4.07. Supply of Working Time Table and Schedule of Standard Dimensions

(1) A copy of the working Time Table for the time being in force shall be supplied to each Station, Guard, Driver, Inspector of Way or Works and any

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other railway servant requiring the use of the Working Time Table during the course of his duties.

(2) A copy of the Working Time Table shall, on issue, be supplied to the Commissioner of Railway Safety.

(3) A copy of the Schedule of Standard Dimensions for the time being in force shall be supplied to each Inspector of Way or Works and Train Examiner.

B. Speed of Trains

4.08.Limits of speed generally -

(1) (a) Every train shall be run on each section of the railway within the limits of speed sanctioned for that section by approved special instructions.

(b) The sectional speed sanctioned and permanent speed restrictions shall be shown in the Working Time Table.

(2) The Driver shall -

(a) regulate and control the running of the train according to the Working Time Table, so as to avoid either excessive speed or loss of time, and

(b) not make up between any two stations more time than is allowed in this behalf in the Working Time Table, and shall also observe all speed restrictions.

(3) When it is necessary to indicate to the Driver where trains are to run at a restricted speed or where trains have to come to a stop due to the line being under repairs or due to any other obstructions action shall be taken as specified in Rule 15.09.

S.R.4.08-1. Engineering Fixed Indicators where special precaution is necessary -

(a) The engineers will provide engineering speed restriction indicators, both by day and night, to indicate the place where a stop or a reduction of speed is required, permanently or temporarily, in terms of G.R.15.09.

(b) (i) Caution Indicator - This shall consist of a horizontal board 1.371 metres wide and 0.381 metres deep fish tailed at one end and pointed at the other end. This is shown in diagram 'A'. By night the indicator for temporary restrictions shall display two yellow lights in the horizontal line, the indicator for permanent restrictions will, however, not display any lights.

(ii) Continuous Falling Gradient Indicator - This shall consist of a disc 0.91 metre diameter painted yellow and bearing 0.3 metre high letter 'C' with an arrow pointing downwards alongside in black as shown in diagram 'B'. This indicator will be provided at the beginning of a long continuous falling gradient in

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order to warn the Driver to keep his train under proper control and within permissible speed limit.

(iii) *Speed Indicator* - As shown in diagram 'C' this shall consist of a yellow equilateral triangular board, with 0.914 metre sides painted yellow and it shall indicate in kilometres the speed at which a train is to proceed past the indicator. The Speed Indicator shall be provided for both permanent and temporary restrictions.

The Indicator for temporary restrictions shall be illuminated by night fixing a hand signal lamp in front of it; the Indicator for permanent speed restrictions will not be illuminated.

(iv) *Stop Indicator* - This shall consist of a horizontal board 1.371 metres long and 0.381 metre wide and painted with red and white vertical stripes as shown in diagram 'D'

The Indicator will display two red lights by night in horizontal line. This indicator will be used when trains are required to stop.

(v) *Termination Indicator* - This shall consist of a 0.914 metre diameter disc painted yellow and bearing 0.304 metre high letters 'T/P' for passenger trains, and 'T/G' for goods trains, in black as shown in Diagrams 'E' & 'E-1'. On the sections where trains run at night the lamps of the termination Indicators should be kept lit from sunset to sunrise, in case of temporary speed restriction.

Two termination indicators are provided one for passenger trains (T/P) at a distance equal to the length of the longest passenger train, and the other for goods trains (T/G) at a distance equal to the length of the longest goods train, from where the Drivers of passenger trains and goods trains shall resume the normal speed respectively.

In case the light engine or single unit rail car, the Driver shall resume the normal speed after clearing the restricted length.

In case of Suburban EMU trains, the Guard shall give 0 pause 0 code bell signal to the Motorman as an indication that the restricted length is over and resume the normal speed which shall be acknowledged by the Motorman.

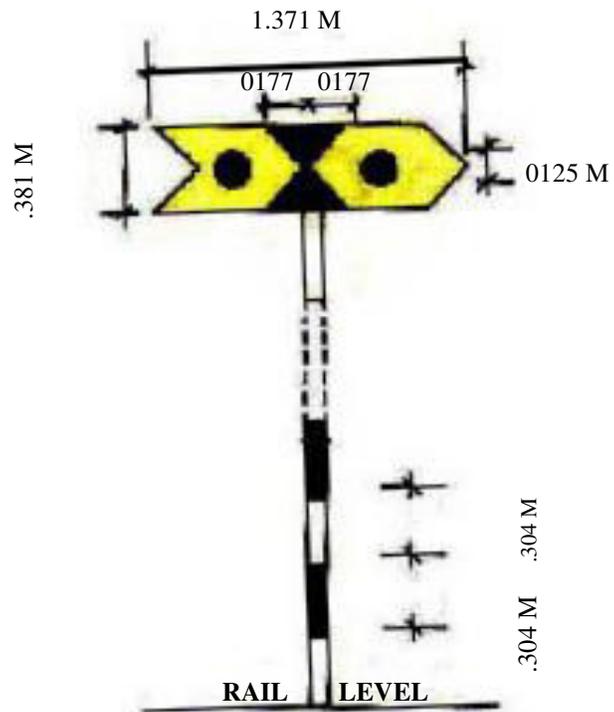
The Guard of the shorter loads shall also show an 'All Right' signal to indicate to the Driver to pick up the normal speed after the last vehicle has cleared the restricted length.

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Diagrams 'A', 'B', 'C', 'D', 'E', and 'E-1' printed on following pages show the prescribed standard types of indicators :

Diagram 'A'

CAUTION INDICATOR

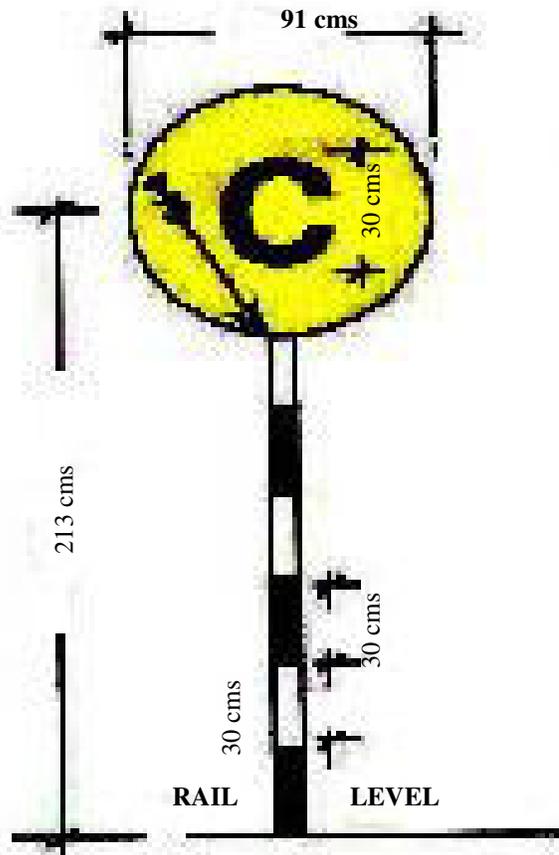


Measures are in metres.

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Diagram 'B'

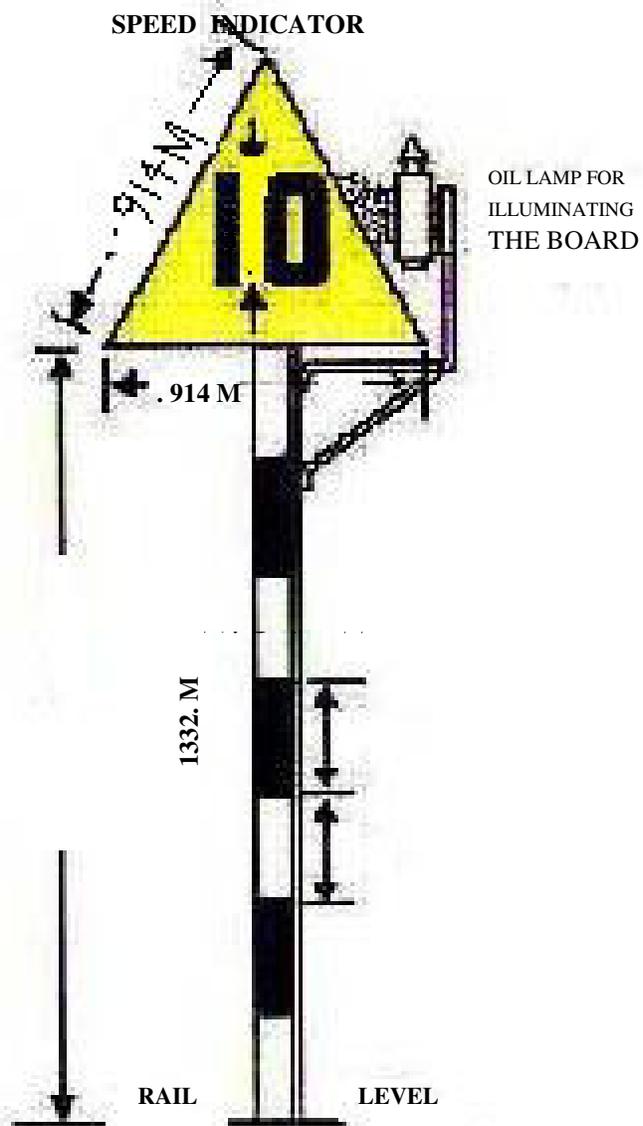
CONTINUOUS DOWN GRADIENT INDICATOR



Measures are in metres.

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Diagram 'C'

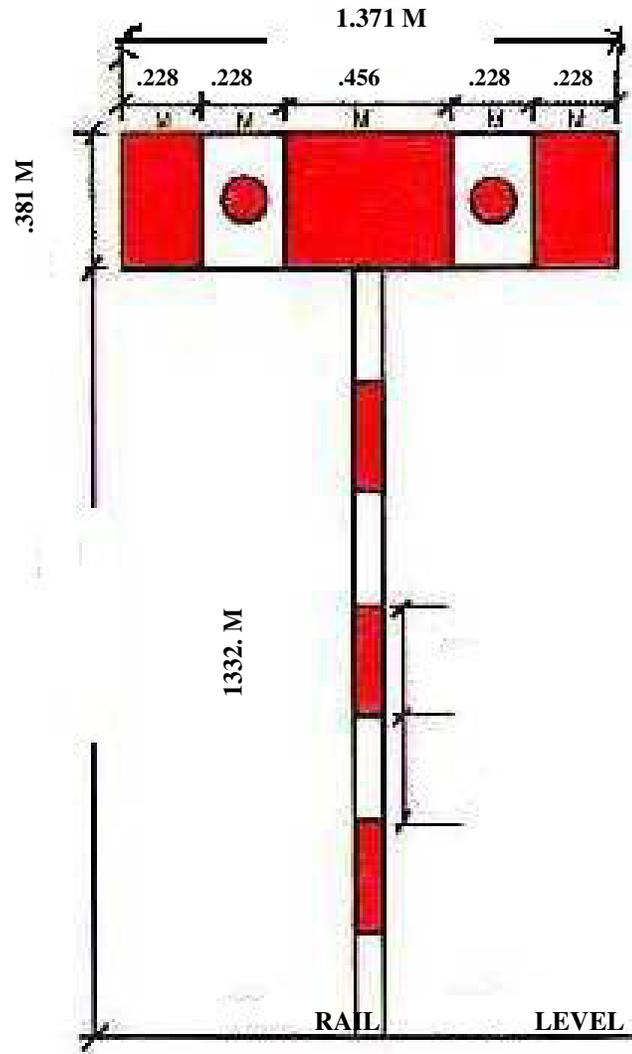


Measures are in metres.

Diagram 'D'

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STOP INDICATOR

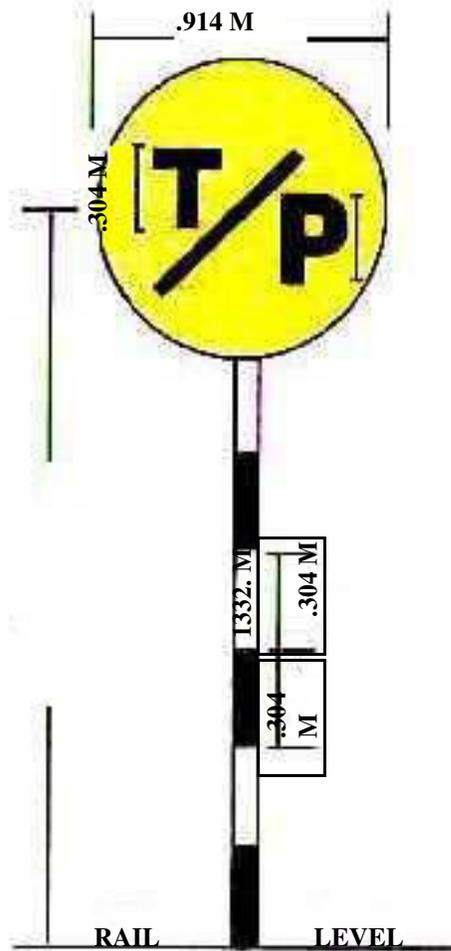


Measures are in metres.

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Diagram 'E'

TERMINATION INDICATOR PASSENGER TRAINS

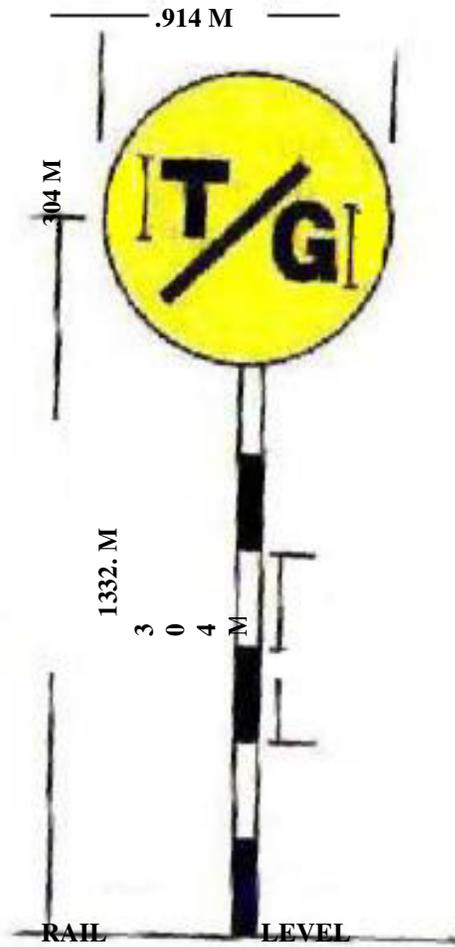


Measures are in metres.

Diagram 'E-1'

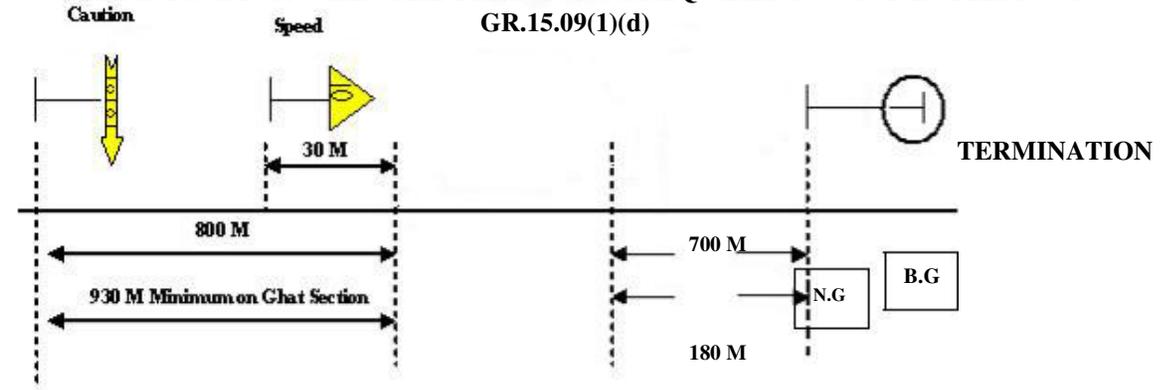
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TERMINATION INDICATOR GOODS TRAINS

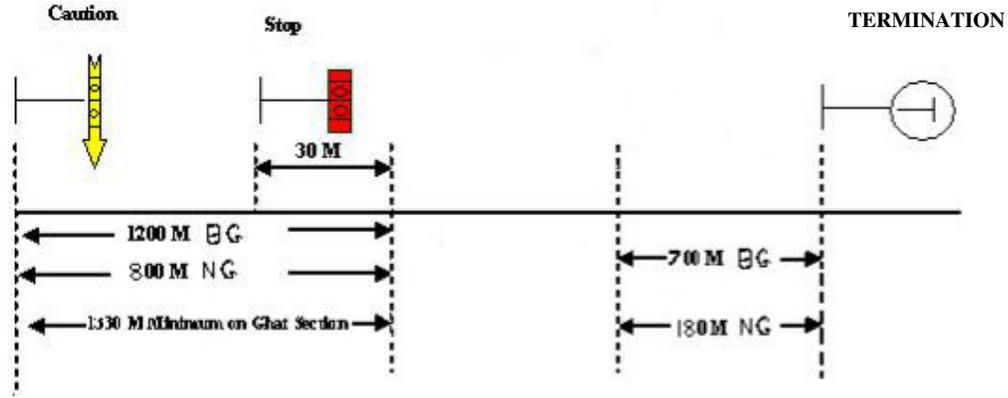


Measures are in metres.

Sketch I.
SPEED INDICATOR WHEN THE TRAIN IS NOT REQUIRED TO STOP IN TERMS OF GR.15.09(1)(d)



Sketch .II
SPEED INDICATOR WHEN THE TRAIN IS NOT REQUIRED TO STOP IN TERMS OF GR.15.09(1)(b)



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Note : The distance of 700 metres from the end of obstruction to the Termination Indicator shown in the diagrams (sketch I and II) above applies to B.G. lines and for N.G. lines, 180 metres.

(c) The representative of the engineering department shall obtain the signature of the Driver in the book kept for the purpose, after the train has been brought to a halt at a Stop Indicator. The Driver shall not start his train until the engineering official exhibits an 'all right' hand signal (green flag by day or a green light by night) authorising the Driver to pass the Stop Indicator.

(d) In areas controlled by automatic or semi-automatic signalling, previous notice must be given to the Chief Signals & Telecommunication Engineer, to enable him to arrange to alter the control of the signals governing the section where Engineering Speed Indicators have to be provided.

(e) The advice regarding imposition of cautions/speed restrictions should be given by Permanent Way Inspector/Official-in-charge of the work to all authorities as prescribed in S.R.4.09-1(ii) and the Station Master concerned will issue Caution Orders regarding these cautions/speed restrictions as per S.R.4.09-1.

S.R. 4.08-2. Working of Speedometer - No Locomotive shall be turned out from the shed with deficient or defective Speedometer. In case, the Speedometer becomes defective enroute, Driver shall work the train at speed 10% less than the maximum permissible speed by estimating the speed with the help of his watch, kilometre posts and inter-section running time given in the Working Time Table,

S.R. 4.08-3 –

The speed of the train may be controlled during thick and foggy weather as under:-

- i) The loco pilot shall run the train at a speed at which he can control the train depending on brake power, load and visibility etc.
- ii) In Absolute Block system, the loco pilot shall run the train at a speed at which he controls the train so as to be prepared to stop short of any obstruction, which shall not exceed 60 kmph.
- iii) In Automatic territory, the loco pilot shall not exceed the speed of the train prescribed as under :-

Green Aspect - 60 kmph; Double Yellow - 30 kmph,

Yellow - Restricted speed so as to be prepared to stop at the next stop signal.

iv) Loco pilot to whistle frequently to warn the gateman ahead to keep gate closed and the road user of an approaching train at level crossing.

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(CS 11/5 Ref : Rly Board's letter no. 98/Safety(A&R)/19/16 dated 07.12.2009 and 23.08.10.)

4.09. Caution Order -

(1) Whenever, in consequence of the line being under repair or for any other reason, special precautions are necessary, a Caution Order detailing the kilometres between which such precautions are necessary, the reasons for taking such precautions, and the speed at which a train shall travel, shall be handed to the Driver at the stopping station immediately short of the place where such precautions are necessary, or at such other stations and in such manner, as prescribed under special instructions.

(2) Sub-rule (1) does not apply in the case of long continued repairs when fixed signals are provided at an adequate distance short of such place and have been notified to the running staff concerned.

~~(3) The Caution Order referred to in Sub-rule(1) shall be on green paper, both faces being green, and be made out and signed in full:~~

~~Provided that as a temporary measure the Caution Order may be on white paper with a green band running diagonally across the form.~~

~~(3) The Caution Order referred to in Sub-rule (1) shall be on white paper with green fonts and be made out and signed in full.~~

~~As a temporary measure the Caution Order may be issued on the white paper with a green band running diagonally across the form.~~

~~[CS 4/2 dated 23/10/2001 Ref: Rly Bd ltr No.97/Safety(A&R)/29/15 dated 10.08.2000]~~

(3) The Caution Order referred to in sub-rule(1) shall be on white paper in blue or black font or typed or made out on computers with the words "CAUTION ORDER" written on top of the form in bold letters of appropriate font size to draw attention distinctly and signed in full.

CS 9/15 (Ref: i) Rly Bd's letter No. 2007/Safety(A&R)/19/3 dated 19.11.2007

ii) Gazette of India GSR 694(E) dated 7.11.07.)

~~S.R. 4.09-1. I. When it is necessary to give a Driver special instructions in regard to restriction of speed, need for observing caution due to damage, repairs to track, overhead equipment, signalling and interlocking equipment or for any other reason endangering safety, a Caution Order on form T-409 B printed on white paper shall be issued to the Driver and the Guard by the Station Master on duty. The circumstances are listed below :-~~

SR 4.09-1. I - When it is necessary to give a Driver special instructions in regard to restriction of speed, need for observing caution due to damage, repairs to track, overhead equipment, signaling and interlocking equipment or for any other reason endangering safety, a Caution Order on form T-409 B on white paper in blue or black font or typed or made out on computers with the words "CAUTION ORDER"

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written on top of the form in bold letters of appropriate font size to draw attention distinctly and signed in full shall be issued to the Driver and the Guard by the Station Master on duty. The circumstances are listed below:

Revised vide CS9/16(Ref: i) Rly Bd's letter No. 2007/Safety(A&R)/19/3 dated 19.11.2007

- (1) When engineering works or repairs are undertaken inside or outside station limits.

Note : Notwithstanding anything contained in G.R. 4.09-(2), provisions of G.R. 4.09 (1) shall apply and caution order for all temporary speed restrictions must be issued.

- (2) When rough running or heavy lurch is reported by the Driver.
- (3) When any Patrolman does not report within 15 minutes of his scheduled arrival at the station.
- (4) Unsafe condition of bunds of tanks or rivers.
- (5) When water level rises over the danger level marked at bridges.
- (6) When gate signals outside station limits are reported to be defective.
- (7) When there is doubt or suspicion that a block section may have been affected or obstructed during the passage of an earlier train.
- (8) Trolley or lorry working in section, as required under the rules.
- (9) When a signal is newly erected or resited on the section.
- (10) On a double line section if a passenger train does not arrive within 10 minutes or a goods train within 20 minutes of its normal running time, for train proceeding in opposite direction.
- (11) When overhead equipment is damaged or under taken for repairs.
- (12) When signalling and interlocking equipment is damaged or undertaken for repairs.
- (13) When sending an engine to assist a disabled train in section.
- (14) In connection with temporary single line working on double line section, working on double line when all communications fail, and working under abnormal conditions as required under the rules or considered necessary.
- (15) Any other conditions or circumstance necessitating issue of Caution Orders.

Note : The above is the usual list of contingencies under which a Caution Order is required to be issued but it is not exhaustive.

II. Sending of information -

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(1) Whenever in circumstances detailed above special precautions are necessary, or when any danger to safety of trains is apprehended, the Station Master receiving such information shall immediately inform the Station Master at the other end of the affected block section, the Controller, the Centralised Traffic Control Operator, the Power Controller, the Traction Power Controller, The Loco Foreman, other Railway servants concerned and the notice station or stations (to be specified in the Working Time Table) of such conditions under exchange of Private Numbers.

(2) The Controller, Traction Power Controller, Power Controller shall in return ensure that all the Station Masters and the Loco Foremen concerned have been advised of such conditions.

III. Procedure for issue of Caution Order -

(1) *By the Station Master at either end of the affected Block section -*

(i) The Station Master receiving advice about the line being under repairs, or any other eventuality endangering safety of trains, necessitating exercise of caution shall not permit any train or any vehicle running under block protection to enter the affected block section either from his station or from the other end unless -

- (a) the Station Master at the other end has acknowledged receipt of such information,
- (b) he has warned the Driver and the Guard of the danger ahead and its location by the issue of a Caution Order except in case of permanent speed restrictions which are notified in the Working Time Table,
- (c) he has ensured that Caution Order has been issued by the Notice Station concerned, and
- (d) he has received advice about restoration of normal working.

(ii) The Station Master at the other end of the affected block section shall also take action in accordance with sub-clauses (b) to (d) of the clause (i) above.

(iii) Run through trains shall be stopped out of course for issue of Caution Order till such time it has been ensured that a Caution Order has been issued by the Notice Station concerned.

(2) *By the Station Master of Notice Station -*

(a) On receipt of advice of the line being under repairs or any other eventuality endangering the safety of trains, necessitating exercise of caution, the Station Master of the Notice Station shall acknowledge the same and shall not allow any train, which has to pass through the affected block section, to leave his station unless he has warned the Driver and the Guard of the danger and its location through the issue of a Caution Order. He shall also advise the Station Master of the station in

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rear of site of restriction of the particulars of the first train to which the Caution Order has been issued.

(b) The Station Master of a Notice station shall issue 'NIL' Caution Order to the Drivers and the Guards of all trains leaving his station if he has received no intimation of any special precautions to be observed between his station and the next Notice Station of the train, in the direction of movement.

Note : The Driver shall not start the train and the Guard shall not give signal to start the train from a Notice Station until they have received the Caution Order.

(3) *In case of trains originating from stations other than Notice Stations -*

In case of a train originating from a station which is not a Notice Station, the Station Master shall consult the Controller or Traction Power Controller or the Notice Station in rear or the Notice Station in advance (on single line section only) and issue Caution Orders upto the Notice Station in advance. However, when such information cannot be collected by the station due to failure of communications with the Control or the Notice Station in rear or the Notice Station in advance (on single line section only) the train should be started after issuing a Caution Order for restrictions, if any, or a 'NIL' Caution Order upto the block station in advance giving a written advice to the Driver to stop at the block station in advance and act upon the instructions given there. This procedure will be followed till a station is reached which can obtain particulars of all restrictions upto the Notice Station in advance.

(4) *Change of train crew enroute -*

In case of change of train crew enroute, the Driver/Guard taking over charge must take over all Caution Orders relating to his train giving acknowledgment to the Driver/Guard who is being relieved.

(5) *Attaching of assisting/banking engine enroute -*

In case of an assisting or a banking engine being attached at a station enroute, the responsibility for acquainting himself with restrictions shall lie on the Driver of such an engine who shall contact the train engine Driver or the Guard, as the case may be, and get the necessary information.

(6) *During failure of communications -*

During failure of communications, the Station Master of the station immediately in rear of the affected block section shall issue Caution Order to trains of all descriptions irrespective of whether it is a single line section or a double line section and irrespective of the system of working in force on the section.

(7) *In case of power blocks on electrified sections-*

In case it becomes necessary to permit movement of vehicles hauled by diesel locomotives on a section under power block for a running line, a Caution

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Order must be issued as per rules. While asking for the power block, the Traction Power Controller concerned shall invariably mention the duration of the power block, the block stations and the exact kilometreage between which the work is to be done, the nature of work, the speed at which the train shall travel, and other special precautions required to be observed by the Driver.

Note : In case of other engineering works - In case of works like relaying, deep screening of ballast, string-lining of curves etc., where the work progresses and the location of the speed restrictions consequently change from time to time, the engineering official-in-charge of the work will issue a daily message, when the block is lifted, to the Station Master of the nearest block station (preferably the block station controlling entry into the block section concerned) indicating the kilometreages and speed restrictions to be observed and obtain his acknowledgment. The copy of this restriction message should also be endorsed to the Section Controller, the Loco Foreman, the Power Controller and the Traction Power Controller.

The Station Master immediately on receipt of this advice shall inform the Station Master of the block station immediately in rear of the affected section on double line and the Station Masters on either side on single line and the Station Master of the Notice Station in rear on the double line and the Station Masters of Notice Stations on either side on single line, under exchange of Private Numbers.

(8) *In case of Local/Suburban trains -*

In the case of trains running on suburban sections, Caution Order shall be issued to the Driver/Motorman and Guard by the Station Master of such stations as are indicated and specified in the Working Time Table except in case of emergency necessitating sudden imposition of speed restrictions. In respect of these trains the Caution Orders may be either typed, cyclostyled or printed on a green paper, as considered necessary, covering the entire section on which the train is to run and shall be issued only once unless some speed restriction/restrictions is/are required to be cancelled or some further speed restriction/restrictions is/are required to be imposed.

Note : (a) On the suburban section of Mumbai Division, i.e. CSTM - Kalyan - Karjat - Kasara and CSTM - Bandra - Kurla - Mankhurd sections, engineering or other officials desiring to impose a caution/speed restriction on any portion of the local or the through lines, shall send a written notice to the Station Master (Suburban), CSTM and obtain his acknowledgment for incorporation in the cyclostyled list of Caution Orders/speed restrictions to be issued daily to Guards, Drivers and Motormen of suburban/through trains in accordance with special instructions issued by Divisional Railway Manager Mumbai. It will be the responsibility of engineering and other officials to ensure that the cautions/speed restrictions imposed by them have been included in the cyclostyled list of

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Caution Orders/speed restrictions before they commence the work requiring enforcement of cautions/speed restrictions.

The person in-charge of the train originating station/depot/yard will be responsible for ensuring that these cyclostyled Caution Orders are issued to Guards/Drivers/Motormen of all originating trains, pilots and light engines from the stations/depots/yards and their acknowledgment obtained for this purpose. In the case of all Up trains which run through Kasara, Karjat and Kalyan it will be the responsibility of the Station Master, Igatpuri and Lonavla, as the case may be, to issue the cyclostyled Caution Orders to Drivers and Guards of such trains.

- (b) In case the caution/speed restriction is required to be imposed at short notice for which advance notice has not been given in accordance with the rules prescribed above, the official imposing such caution/speed restriction shall immediately advise the Section Controller and Station Masters(Main Line) & (Suburban), CSTM and obtain their acknowledgments. The Section Controller will immediately arrange to advise Station Masters, CSTM, Kurla, Ghatkopar, Thana, Kalyan, Bandra, Chembur and Mankhurd, and obtain their acknowledgments. The Station Masters of these stations will arrange to stop all trains proceeding in the direction of the affected section and issue Caution Orders to Drivers/Motormen, in accordance with special instructions issued by the Divisional Railway Manager, Mumbai.

The emergent Caution Orders applying to locations beyond Kalyan will be issued by Station Masters in rear of the affected sections who will be intimated by the Section Controller.

It, must, however, be ensured by the engineering or other officials that emergent cautions/speed restrictions are not imposed unless they are inescapable, and the affected line must be adequately protected in accordance with the rules.

(9) *In case of stations where no train is booked to stop -*

- (a) A Caution Order shall normally not be issued except in an emergency necessitating imposition of sudden speed restrictions.
- (b) If any information warranting issue of Caution Order is received by the Station Master of such a station, he shall immediately advise the adjoining block stations for the issue of Caution Order and only after obtaining their acknowledgments in this regard under exchange of Private Numbers, shall acknowledge the message requiring imposition of speed restrictions.
- (c) On receipt of such information, the Station Master of the adjoining station who receives the information first, shall act as if he had himself received the message for imposition of the restriction.

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IV. Description and Preparation of Caution Order -

(a) Caution Order shall be prepared in the prescribed form **on white paper** both faces being white except as specified in paras (e) and (h). All forms should be serially numbered and the name of the station issuing it shall be stamped on each foil. It shall be in three foils- one each for the Driver, the Guard and the Station record.

In case of trains worked by engine manned by Drivers and Co-Drivers, the Caution Order shall be got noted by the Co-Driver also. Caution Order should be prepared neatly and legibly in triplicate by carbon process.

“Printing of Caution Order forms should be bilingual i.e. in English and Hindi/Regional language.”

(b) No entries should be made on the back of the Caution Order. If more than one Caution Order form is used pages should be serially numbered as Page-1, Page-2, Page-3 etc.

(c) The Caution Order shall specify the kilometreage and the station at which or the Stations between which caution is required to be observed, the reasons therefore, and the speed at which the train will travel on the restricted zone. Station codes should not be used. Names of the Stations concerned should be written in full.

(d) Caution order shall be specifically made out for each train separately except at specified stations and for specified trains for which case it may be typed, cyclostyled or printed, provided that it shall be checked up again at the time of service to ensure that all locations where caution is required to be observed have been incorporated therein. Necessary provisions in this regard shall be made in the Station Working Rules of stations concerned and such station/trains shall be specified in the Working Time Table. Wherever speed restrictions are required to be observed at two or more locations, the kilometreage of all such locations shall be indicated in geographical order in relation to the direction of movement.

(e) Caution Order shall always be dated and signed in full.

(f) In case of any error or overwriting, it shall be cancelled and a fresh Caution Order prepared.

~~—(g) As a temporary measure, the Caution Orders may be permitted to be prepared on white paper with a green band running diagonally across the form. —deleted vide CS – 9/17.~~

~~(h) deleted vide CS – 5 Item 2(i) & (ii).~~

V. Serving of Caution Order -

~~(1) The Caution Order shall be delivered to the Driver and the Guard of a train by the Station Master either personally or through a competent railway servant~~

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~~deputed by him and the signatures of Driver and Guard obtained on the record foil in token of their having received and understood it. When more than one foil is served, each counter foil will be signed by the Driver/Guard.~~

~~————— (2) Where there is more than one engine, the Caution Order shall be given to Driver of the leading engine and his signature obtained in accordance with sub-rule (1). However, before delivering the Caution Order to the Driver of the leading engine, it shall be shown to the Driver or Drivers of other engine or engines on the train and his or their signature or signatures obtained, in token of his or their having gone through it and understood its contents.~~

~~————— In case, there is a banking engine/assisting engine or engines in rear/front, a fresh Caution Order should be issued by Station Master where such engines are attached.~~

~~(3) A reminder Caution Order shall be given to the Driver and Guard of the train at the block station immediately in rear of the affected block section if the train is being worked by an engine pushing it~~

[CS 5/2 (i) & (ii) dated 31/7/2001]

(1) The Caution Order shall be delivered to the Loco Pilot, ALP and the Guard of a train by the Station Master either personally or through a competent railway servant deputed by him or through the lobby supervisors where the train crew are booked and signing 'On' for duty and acknowledgement of the train crew obtained on the record foil in token of their having received it. When more than one page of caution order is served, each page will be signed by the train crew.

(2) Where there is more than one engine, the Caution Order shall be given to Loco Pilot of the leading engine and his signature obtained in accordance with sub-rule

(1). However, before delivering the Caution Order to the Loco Pilot of the leading engine, it shall be shown to the Loco Pilot or Loco Pilots of other engine or engines on the train and his or their signature or signatures obtained, in token of his or their having gone through it and understood its contents.

In case, there is banking engine/assisting engine or engines in rear/front, a fresh Caution Order should be issued by Station Master where such engines are attached.

(3) It is the responsibility of the train crew to obtain the caution order for his train from the SM/ lobby supervisor concerned while signing 'ON' duty.

(4) Where the lobbies of LP and guards are at different locations, the SM shall prepare extra copies of the caution order and hand over to the concerned lobby supervisor for delivering the same to the train crew.

(5) In case of emergency imposition of caution order, it is the responsibility of SM to ensure delivery of additional caution order to the concerned train crew and obtain the acknowledgement.

(6) On Mumbai division where divisional caution order is being prepared daily and issued to train crew, the lobby supervisor should ensure the acknowledgement of train crew in signing 'ON' register in respective column as per the special instructions of DRM issued vide JPO.

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(7) A reminder Caution Order shall be given to the Loco Pilot and Guard of the train at the block station immediately in rear of the affected block section if the train is being worked by an engine pushing it.

CS 11/1 (Ref: Office note no. TR/G&SR/Genl./102 dated 17.05.2010)

VI. Method of notifying/cancellation of special precautions-

(1) When a competent railway servant finds it necessary to impose any speed restriction or any special precaution on a portion of a line, including OHE, due to repairs or work or for any other reason, he shall-

- (i) (a) advise in writing the Station Master of the nearest block station (preferably the block station controlling entry into the block section concerned) the exact kilometreage and the station at which or the stations between which the restriction or special precaution is to be observed, its nature and likely duration, the method of protection of the place of restriction together with the location where engineering indicators are to be exhibited etc., and also advise other railway servants concerned as per clause (1) of paragraph II who are required to be notified in this regard, and
- (b) not commence such operations until written acknowledgment is received from the Station Master.
- (ii) The Station Master receiving the advice shall not acknowledge it until he has advised the Station Master of the block station at the other end of the block section, if any, to be affected and obtained his acknowledgment.

(2) When the cause of such restriction or special precaution has been removed, the competent railway servant shall advise this fact to the Station Master of the nearest block station under exchange of Private Numbers and other officials concerned who were notified earlier of the imposition of restriction.

VII. Action by the Station Master after cancellation of the speed restriction -

(1) The Station Master receiving advice regarding the removal of the restriction, shall advise the Station Masters at the other end of the block section concerned, Station Masters of Notice Stations and other railway servants, who were advised about it earlier. After issue of the advice regarding cancellation of the Caution Order, the Station Master may discontinue the issuing of the Caution Order.

(2) If no train is booked to stop at the station, the advice regarding the removal of restriction shall be sent to one of the adjoining block stations who should take action in accordance with para (1) above.

VIII. Record of Caution Orders -

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(a) At all stations where Caution Orders are issued, the Station Master shall keep an up to date record of all the speed restrictions imposed with the dates of their enforcement and cancellation, authority, nature, etc. in the Caution Order Register and bring forward every Monday at 9.00 hrs. in geographical order in relation to the direction of movement, the Caution Orders due to be issued. No code names of stations shall be used in these registers.

(b) Similar record should also be kept in Control Offices, Loco Sheds etc., where information in this regard is received.

Note :

(1) When a Station Master is relieved, either for change of duty or otherwise, he will ensure that his reliever is acquainted with all the cautions/speed restrictions that are in force at the time of relief. When a Station Master comes on duty he must record in the station diary the serial numbers of all the Caution Orders in force at that time.

(2) A similar Caution Order Register should be maintained by the Loco Foreman separately, for each section. A separate register should be maintained for obtaining the acknowledgments of Drivers before they are booked out for each trip in token of their having acquainted themselves with the cautions/speed restrictions in force over the section of their run. It will be the responsibility of Drivers to peruse the register and acquaint themselves with all cautions/speed restrictions that are to be observed over the section over which they are booked to run.

(c) The Drivers and the Guards should hand over the Caution Orders to the Loco Foreman and Station Master respectively at the end of their journey along with other train papers.

IX. Preservation of Caution Orders -

Record foils of the Caution Orders shall be preserved for a period of twelve months after issue.

X. List of Notice Stations -

Caution Orders will be issued to the Drivers and Guards of all trains at Notice Stations that are nominated by the DRMs for each section under his jurisdiction and notified in the Working Time Table.

4.10. Limits of speed over facing points -

(1) The speed of trains over non-interlocked facing points shall not exceed 15 kilometres an hour in any circumstances, and the speed over turnouts

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and crossovers shall not exceed 15 kilometres an hour unless otherwise prescribed by approved special instructions, which may permit a higher speed.

(2) Subject to the provisions of sub-rule (1), a train may run over interlocked facing points at such speed as may be permitted by the standard of interlocking.

4.11. Limits of speed while running through stations -

(1) No train shall run through an interlocked station at a speed exceeding 50 kilometres an hour, or such less speed as may be prescribed by approved special instructions unless the line on which the train is to run has been isolated from all other lines by the setting of points or other approved means, and interlocking is such as to maintain this condition during the passage of the train.

(2) In every case in which trains are permitted to run through on a non-isolated line, all shunting shall be stopped and no vehicle unattached to an engine or not properly secured in accordance with Rule 5.23 may be kept standing on a connected line which is not isolated from the through line.

S.R.4.11-1. (a) On the Broad Gauge sections the speed over points must not exceed -

- | | |
|---|-----------|
| (i) Non-interlocked points. | - 15KMPH |
| (ii) Interlocked when the train takes a turnout from one line to another with 1 in 12 or 1 in 8 1/2 turn out with curve/symmetrical split switches. | - 15 KMPH |
| (iii) Motor trolley (Heavy or light) while passing through points and crossings (Irrespective of whether the trolley is running through the straight or a turnout.) | - 15 KMPH |
| (iv) When a train takes a turn out from one line to another over 1 in 8 1/2 turnout with straight switches or over an emergency crossover having 1 in 8 1/2 turnout with straight switches. | - 10 KMPH |

(b) The prescribed limits of speeds over the facing points on the Narrow Gauge sections are given in the Working Time Table.

(c) Trains running through on the loop with 1 in 12 turn out or 1 in 8 1/2 turn out equipped with curved/symmetrical split switches -

The Driver shall not exceed a speed limit of 15 KMPH when running through a loop line at interlocked as well as non-interlocked stations. When a run

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through train passes over a loop line, the 'Authority to Proceed' shall be handed over to Driver opposite the station building and not at the facing points.

(d) Trains running through on goods loop lines with 1 in 8 1/2 turn outs with straight switches -

- (i) In no circumstances is a train allowed to run through an interlocked or non-interlocked station over a goods loop or a loop with 1 in 8 1/2 turn out with straight switches. The train must first be brought to a stand on that line and then signals, if provided, may be taken 'Off' and the 'Authority to proceed' handed over to the Driver.
- (ii) The Drive shall not exceed the speed limit of 10 KMPH while entering or leaving such lines at interlocked as well as non interlocked stations.

Note : Warning Boards of speed limit have been provided at all 1 in 8 1/2 turn outs with straight switches for warning the Driver to restrict the speed to 10 KMPH. A list of such turnouts will be notified in the Working Time Table.

4.12. Engine pushing -

(1) No engine or self-propelled vehicle shall push any train outside station limits except in accordance with special instructions and at a speed not exceeding 25 kilometres an hour :

Provided that this sub-rule shall not apply to a train the leading vehicle of which is equipped with driving apparatus and which may be operated under approved special instructions :

Provided further that this sub-rule shall not apply to an engine assisting in rear of a train, which may be permitted under approved special instructions to run without being coupled to the train;

Provided also that no train which is not equipped with continuous vacuum/air brake shall be pushed outside station limits except in case of emergency;

Provided further that a "Patrol" or "Search-light" special with one or more vehicles in front of the engine may be permitted to run at a maximum speed of 40 kilometres an hour.

(2) For movement of trains outside station limits with engine pushing during night or in thick, foggy or tempestuous weather impairing visibility or where otherwise prescribed by special instructions, the leading vehicle of such trains shall be equipped with the prescribed head light and marker lights except in case of emergency.

(3) When trains are worked as described in sub-rules (1) and (2), the engine pushing the load when it is the rearmost, or the rearmost vehicle if any, shall carry a tail board or a tail lamp.

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S.R.4.12-1. Position of engine when moving a train -

With the following exceptions no engine must push a train upon any running line, but must draw it.

- (a) When within station limits, or where specially authorised.
- (b) Under special instructions when used as an assisting engine.
- (c) When it is necessary for a train to push back to the station from which it entered the section under the instructions laid down in S.R.4.12-2.
- (d) In the case of a disabled train or accident, a following engine may push the train or vehicles slowly to the next siding or to the first station or cabin at which the engine can be transferred to the front of the train.
- (e) When it is necessary for a train to push back to the site of accident in case of a passenger being thrown out or a person being knocked down by a train, outside the station limits, except that such pushing back should not be done on ghat sections, in automatic block signalling sections and at other places where prohibited by special instructions.
- (f) When the line is obstructed and trains are being worked to the point of obstruction on both sides.
- (g) When required to assist a train in starting.
- (h) When required to do so in connection with Engineering works or material trains, provided the brakevan occupied by the Guard of the train is the leading vehicle.
- (i) When required by the General Manager, Principal Chief Operations Manager, or Chief Engineer travelling on an Inspection Special train.

S.R.4.12-2. Train pushing back from block section -

(a) No train must be allowed to push back from the block section without a written authority from the Station Master of the station from which it has entered the section. Where Line Clear Tickets are in use, the Station Master shall endorse the Line Clear Ticket as follows -

“To push back to (*name to be added*) station”

After an authority to push back has been given, no obstruction of the line beyond the Starting signal in the same direction must be allowed, except at a class “B” station, on the single line, where obstruction may be permitted within the station section in accordance with instructions laid down in Block Working Manual.

(b) The Guard of a pushing train will travel in the leading vehicle which is fitted with an air brake valve or hand brake. If the leading vehicle is not so fitted, the Guard will travel in the nearest vehicle thereto which is so fitted. The speed of a pushing train with the Guard travelling in the leading vehicle must not exceed 25 kms. per hour. If the Guard is not travelling in the leading vehicle, the speed must not exceed 8 kms. per hour.

(c) The Station Master at a station where the train starts from and pushes back to, must advise the station in advance on the telephone or telegraph instrument and also the Controller on controlled section that the train will push back to the

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station. He will then obtain Line Clear from the station in advance on the block instruments, or on the Morse instrument if the block instruments are not provided, and then give the "Train Entering Section" signal in the usual way.

(d) On return of the train, the Guard will intimate that the whole train has returned complete from the sections, and he must sign in the Train Signal Register to that effect, and return the "Authority to push back" to the Station Master who will cancel it. The Station Master will then give 'Cancel Last signal' on the block or on the Morse instrument, and endorse the following remarks in the Train Signal Register or the Line Clear Enquiry Book 'Train pushed back' against the entry of the train. In the case of single line, the token must be returned to the block instrument, where token instruments are provided or the Line Clear Ticket cancelled.

(e) When it has been arranged for a train to push back from the section it must always do so, and not go to the station in advance.

(f) While a train is being pushed back from the section, the Driver and the Guard shall be vigilant and be prepared to stop short of any obstruction including obstruction at a level crossing. The Driver shall make frequent use of engine whistle as a warning to the road traffic passing across the level crossing. The Guard shall keep a sharp look-out in front and take measures to stop the train, if circumstances so warrant.

(g) On the double line, when a train is required to be pushed into a station the train must come to a stand opposite the outermost signal pertaining to the other track and the Driver shall whistle when, if a line is clear for its reception, it must be piloted into the station.

(h) On the single line, when a train is required to be pushed back, it must first come to a stand outside the outer most signal and whistle when, if a line is clear, reception signals may be taken 'Off' for its reception. At a Non-interlocked station, the train must, in addition, be piloted from the outermost signal.

(i) Except in an emergency, material trains may push back during daylight only. If it is necessary to push back at night the speed should be restricted to 8 kms. per hour.

S.R.4.12-3. Pushing back of trains on single line section where tokenless instruments have been provided -

If a train is required to push back to the station from where it started Line Clear shall be obtained according to the procedure detailed in the Block Working Manual. The train will be despatched as usual when the 'TOL' indication will appear.

When the train returns, the reception signals shall be taken 'Off' using cancellation switch S-2 and the procedure for closing the line will be as for

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normalising block instrument when train returns to the despatching block station as given in Block Working Manual.

4.13. Limits of speed with engine tender foremost-

(1) (a) A passenger train or a mixed train shall not be drawn outside station limits by a steam engine running tender foremost, except -

- (i) under a written order issued by the authorised officer; or
- (ii) in a case of unavoidable necessity, to be established by the

Driver.

(b) When any such trains is so drawn, the speed shall not exceed 25 kilometers an hour, or such higher speed, not exceeding 40 kilometers an hour, as may be authorised by approved special instructions.

(2) In cases of unavoidable necessity, goods trains may run with steam engines tender foremost at a speed not exceeding 25 kilometers an hour or such higher speed, which shall, in no circumstances, exceed 40 kilometers an hour, as may be laid down by special instructions.

(3) When trains have to be worked with steam engines tender foremost as a regular measure under sub-clause(i) of clause (a) of sub-rule (1) and sub-rule (2), the head light and marker light as prescribed in Rule 4.14 shall be provided on the tender.

S.R.4.13-1. Speed of Light Engine -

The maximum permissible speed of light engines shall be as follows -

<i>section</i>	<i>Other than</i>	<i>Ghat</i>
<u>1/80</u>	<u>Ghat Section</u>	<u>steeper than</u>
(a) <u>Electric Engines.</u>		
(i) WCM/1, WCM/2, WCM/3, WCM4, WCM/5, WCAM-1 & 2, WAM/1, WAM/4, WAP/1, WAP/2, WAP/3.	105 KMPH	50 KMPH
(ii) WAG/5, WAG/7, WAG/9	90 KMPH	50 KMPH
(iii) WCG/2	90 KMPH	50 KMPH
<i>section</i>	<i>Other than</i>	<i>Ghat</i>

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<u>1/80</u>	<u>Ghat Section</u>	<u>steeper than</u>
(b) <u>Diesel Engines.</u>		
(i) WDM/2	105 KMPH	50 KMPH
(ii) WDG/2	90 KMPH	50 KMPH
(iii) WDS/6	55 KMPH	40 KMPH
(iv) WDS/4	40 KMPH	40 KMPH

(2) In addition to the above, all permanent speed restrictions and temporary speed restrictions shown in the caution notices or shown by speed indicators on the line from time to time must be strictly adhered to.

C. Equipment of Trains and Train Crew

4.14. Head light and marker lights -

(1) A train shall not be worked at night or in thick, foggy or tempestuous weather impairing visibility or in long tunnels, unless the engine carries an electric head light of an approved design and, in addition, two oil or electric white marker lights.

(2) An engine employed exclusively on shunting at stations and yards shall, at night or during thick, foggy or tempestuous weather impairing visibility, display such head lights as are prescribed by the Railway Administration, and exhibit two red marker lights in front and in rear.

(3) The electric head light on the engine shall be fitted with a switch to dim the light and shall be dimmed -

- (a) when the train remains stationary at a station ;
- (b) when the train is approaching another train which is running in opposite direction on double or multiple track of same or different gauges; and
- (c) on such other occasions as may be prescribed by special instructions.

(4) In case the electric head light fails or a train has to be worked with the engine running tender foremost in an emergency, the engine shall display the two oil or electric white marker lights referred to in sub-rule (1) pointing in the direction of movement and the train shall run at a speed prescribed by special instructions.

S.R.4.14-1. Electric Headlight on Engines -

- (a) Light engines should display the same lights as train engines.

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(b) Suburban electric multiple unit stock must be equipped with an electric head light and two white marker lights or head code lights of approved design in front.

S.R.4.14-2

(a) Before leaving the Loco Shed , the Driver of a train engine/light engine must ensure that he has effective head light and marker lights on his engine as prescribed in GR 4.14 and also flasher lights on both side in proper working condition.

[CS 1/3 dated 10/03/2000]

(b) The electric headlight Fitter is responsible for certifying that the electric headlight equipment is in proper working order and the electric headlight is provided with a bulb of not less than 250 watts power.

(c) The Driver must test the electric headlight and satisfy himself that it produces sufficient illumination to enable him to see ahead clearly for a distance of 240 metres or more.

(d) If the electric head light becomes defective on the run during the hours of darkness and/or thick and foggy weather, the driver shall light marker lights as per para 4 of Rules No.4.14 and work the train cautiously at a speed not exceeding 40 kmph on BG, 15 KMPH on NG subject to the maximum permissible speed of the section and other speed restriction in force and sound engine's whistle frequently. The driver shall also inform the Station Master of the next block station in advance of the incidence so that the later may inform the controller, if any.

[CS 1/4 dated 10/03/2000]

S.R.4.14-3. When a train is approaching a station, the Station Master on duty will see that the engine has a headlight and marker lights as prescribed in S.R.4.14-1 (a) above. If the engine has neither a headlight nor the marker lights, and the train is running through, the Station Master must send the 'Stop and examine train, signal to the station in advance advising the Station Master of the reason on the block or control telephone. The Station Master of the other station, on receipt of this information, will stop the train and find out the reason why the prescribed headlight and marker lights are not burning, and instruct the Driver to switch on the electric headlight and marker lights.

S.R.4.14-4. Before entering a long tunnel during day, the Driver should switch on the electric headlight and electric marker lights.

4.15. Tail and side lights -

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- (1) At night or in thick, foggy or tempestuous weather impairing visibility, no train shall be worked outside station limits unless it has -**
- (a) in the case of an engine with vehicles attached, save in a case to which sub-rule (2) applies, at least one red tail light, and two side lights showing red towards the rear and white towards the engine : provided that, provision of side lights on goods trains and electric multiple unit trains may be dispensed with under special instructions.**
 - (b) in the case of a single engine without vehicles attached at least one red tail light; and**
 - (c) in the case of two or more engines coupled together without vehicles attached, at least one red tail light affixed to the rear engine.**

(2) A colliery pilot, i.e., a train used for collecting or distributing vehicles in colliery sidings, when working in a block section or in the colliery sidings taking off from a block section, need carry a red tail light only as it enters or leaves the block station, at either end of such block section, provided that special instructions are issued to ensure that no other train is permitted to proceed into the block section until the Guard of the colliery pilot has certified that he has left no vehicle obstructing the block section in which he has been working.

(3) When trains may run in the same direction on parallel lines, the side lights mentioned in clause (a) of sub-rule (1) may be arranged in accordance with special instructions.

(4) When a train has been shunted for a following train to pass, the tail and side lights mentioned in clause (a) of sub-rule (1) shall be dealt with in accordance with special instructions.

(5) Within station limits or in a siding, an engine employed in shunting shall have tail lights in accordance with special instructions.

S.R.4.15-1. Tail and Side lights -

(a) At night and in thick, foggy and tempestuous weather impairing visibility, one side lamp showing white light to the front and red light to the rear must be placed, unless otherwise exempted under special instructions on each side of the rear brakevan.

(b) At night when a train is shunted for another train to precede it, the side lamp on the side on which the other train will pass it should be reversed so that the white instead of a red light is exhibited to the approaching train. If the side lamp is fixed and provided with a red slide, the slide should be withdrawn until the approaching train has passed. The Driver of an approaching train, when he observes that the nearest side lamp has not been changed from red to white, must whistle until it is changed, and if this is not done, must stop his train and wait till it is changed.

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(c) provision of side lights on goods trains and electric multiple unit trains may be dispensed with.

4.16. Tail board or tail lamp -

(1) In order to indicate to the staff that a train is complete, the last vehicle shall, except as provided for in sub-rule (2), be distinguished by affixing to the rear of it -

- (a) by day, a tail board of approved design or a red painted tail lamp of approved design which may be unlit, or
- (b) by night, as well as in thick, foggy or tempestuous weather impairing visibility during day, a red tail lamp of approved design displaying a flashing red light to indicate last vehicle check device, or
(Revised vide CS 10 item No.17)
- (c) such other device as may be authorised by special instructions.

(2) A colliery pilot, i.e. a train used for collecting or distributing vehicles in colliery sidings, when working in a block section or in the colliery sidings taking off from a block section, need carry a tail board or tail lamp, or such other device as may be authorised by special instructions, only as it enters or leaves the block station at either end of such block section, provided that special instructions are issued to ensure that no other train is permitted to proceed into the block section until the Guard of the colliery pilot certifies that he has left no vehicle obstructing the block section in which he has been working.

(3) In emergencies only, and under special instructions in each case, a red flag may be used in lieu of a tail board or an unlit tail lamp.

S.R.4.16-1. Tail lamps and tail boards -

(a) (i) In an emergency, when a tail board or a red painted tail lamp is not available or when it is desired to make a short trip with a shunting engine, a red flag is permitted during daylight and in clear weather only to indicate that the train is complete.

(ii) On Mumbai division, during daylight, the rearmost vehicle on electric multiple unit trains shall show a red disc in the Train Indicator (or an oval red sign painted on the destination board). A similar indication is not given in any other part of the train. At night at least one red light will be shown in addition to the red disc in the Train Indicator which will be illuminated.

(ii) During day and night, one inbuilt Red light provided on EMU, MEMU, DEMU, as a Tail Lamp shall be illuminated, on the rearmost vehicle and similar indication shall not be given in any other part of the EMU, MEMU & DEMU. Destination indicator shall be provided at either end of EMU, MEMU & DEMU.

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(iii) When electric locomotives are running light or at the rear of a train at night or on the Thull or Bhore ghats by day or night, one of the rear panel lights

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must be lit and should have a red slide over it. This should be regarded as a tail lamp.

(b) When an assisting engine is attached in rear of a train, the last vehicle indication must be affixed behind the assisting engine, and replaced behind the last vehicle when the assisting engine is detached. The Guard is responsible for carrying out this rule.

(c) Guards, when working trains on the double line, shall watch the tail boards or lamps or red flag of passing trains and report at the next station if they are not available on the last vehicle or if during the night the tail lamp is not burning properly.

(d) Tail lamps must be lit on all UP and Down trains during the day between Karjat and Lonavla and between Kasara and Igatpuri.

(e) Running of light engine/engines in block section:-

During Night – One of the rear panel (marker) light must be lit and covered with red slide over it.

During Day – A red flag should be affixed at the rear of the locomotive. In case of two locomotives running coupled together, the panel (marker) light covered with red slide/red flag will be on the rear of the rearmost locomotive.

[CS 6/9 dated 3/04/2002]

(f) The Guard must carry an oil tail lamp complete with dubbars/dryfit or lead acid or 24V electric (for passenger trains) tail lamp which must be attached behind the rearmost vehicle. The Guard must ensure that the tail lamp is lit only on the last vehicle and electric tail lamps of intermediate coaches, if any, are switched off.

(g) Brake vans and certain other vehicles are fitted with fixed electric tail lamps. These fixed tail lamps must not be used, but a portable tail lamp should be used. Particular care should be exercised that the fixed tail lamp is not lit when vehicles are attached behind such brakevans or other vehicles.

(h) If for any reason a train comes to a stop in a tunnel the Guard of the train should immediately light the tail lamp. This responsibility will devolve upon the Driver in the case of a light engine.

4.17. Responsibility of Station Master regarding tail board or tail lamp of passing trains -

(1) The Station Master shall see that the last vehicle of every train passing through his station is provided with a tail board or tail lamp or such other device in accordance with the provisions of Rule 4.16.

(2) If a train passes the station without such indication to show that it is complete, the Station Master shall -

(a) immediately advice the station in advance to stop the train to see that the defect is remedied and to advise whether or not the train is complete,

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- ~~(b) meanwhile withhold the closing of the block section to ensure that no train is allowed to enter the block section from the station in rear.~~

~~Provided that where in a section, a block proving axle counter or track circuit and complete track circuiting of station yard, excluding non-running lines on either end is provided and where block section clear indication provided with such equipment shall ensure clearance of block section automatically, the withholding may not be necessary, and~~

~~[CS 7/3 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 2.9.2002.]~~

- (b) meanwhile withhold the closing of the block section to ensure that no train is allowed to enter the block section from the station in rear and

[CS 9/4 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 11.09.2006.]

- (c) unless the station in advance has advised that the train is complete, neither consider the block section in rear as clear nor close it.

- (3) Where in a section, a block proving axle counter or continuous track circuiting between Block Stations and complete track circuiting of station section excluding non-running lines of the receiving station is installed and is functioning and there is a clear indication of clearance of Block Section as well as complete arrival of the train as per indication given, if a train passes a station without confirming to the provision of Sub clause (1) above, the Station Master shall still advise the station in advance to stop the train to see that the defect is remedied and he need not withhold closing of block section in rear as prescribed in clause (b) & (c) of sub rule (2) in such cases.

[CS 9/5 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 11.09.2006.]

S.R.4.17-1. Tail lamp or tail board, Train passed without -

- (a) If a train passes a station without a tail lamp or tail board being visible to the Station Master, he must at once send the 'Train passed without tail lamp or tail board' signal on the block instrument to the station in advance, and also inform the Controller. On sections where 'Line Clear' is obtained on telegraph instruments, he must add the words 'Train passed without tail lamp or tail board' in the 'out' report.

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(b) The Station Master must not give the 'Train out of section' signal to the station in rear, but must give the 'Train passed without tail lamp or tail board' signal in the bell code. On sections where 'Line Clear' is obtained on the telegraph instruments, the Station Master must not give the 'in' report but must send a telegraphic report to the station in rear stating that the train has passed without tail lamp or tail board.

(c) On the double line, the Station Master sending the 'Train passed without tail lamp/board' signal must put fixed signals at 'On' to stop any train from the opposite direction, advise the Guard and the Driver of the circumstances and issue a Caution Order to proceed cautiously and stop short of any obstruction.

(d) The Station Master of the station in advance on receiving the 'Train passed without tail lamp/board' signal must -

- (i) acknowledge it;
- (ii) place fixed signals at 'On' to stop train for which the 'Train passed without tail lamp/board' signal is received;
- (iii) stop the train proceeding towards the station from which the signal was received, advise the Guard and the Driver of the Circumstances and issue a Caution Order instructing them to proceed cautiously and be prepared to stop short of any obstruction;
- (iv) ascertain from the Guard of the train for which the 'Train passed without tail lamp/board' signal was received if the train is complete;
- (v) if the train is complete, send the 'Train out of section' signal or the 'in' report to the station in rear;
- (vi) if the train is incomplete, advise the Controller and the Station Master in rear and take action in accordance with Rule No.6.09;
- (vii) instruct the Guard to light the tail lamp if it is out; or fix a tail lamp/board or if no tail lamp/board is available, a hand signal lamp displaying red light during the night and in thick or foggy weather' or a red flag by day and in clear weather should be fixed.

(e) If the Station Master receiving 'Train passed without tail lamp/board' signal finds that he cannot stop the train without bringing it to a sudden stand, he should not place the fixed signals at 'On' against the approaching train, but must be given the 'Train entering section' signal and also the 'Train passed without tail lamp/board' signal to the station in advance and an advice to that effect on the telegraph instruments.

(f) Should a train pass with a tail lamp not lit, but the lamp is clearly visible to the Station Master, the Station Master will give the "Train out of section" signal to the Station in rear, and the 'Train passed without tail lamp' signal to the Station in advance, and advice the Station Master in advance on the telephone or the

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telegraph instrument that the tail lamp is extinguished, when the latter will stop the train, and inform the Guard. In such a case it is not necessary for the Station Master sending or receiving this signal to stop any train going in the opposite direction.

4.18. Means of communication -

(1) No passenger train or mixed train shall be despatched from any station, unless every passenger carriage is provided with means by which communication can be made with the Guard or the Driver.

(2) Sub-rule (1) shall not apply to -

- (a) passenger or mixed trains in case of complete or partial failure of vacuum ; and**
- (b) such particular trains as may be exempted under approved special instructions.**

(3) If a Railway Administration is satisfied that mischievous use of the means of communication referred to in sub-rule (1) is prevalent, it may, notwithstanding anything contained in that sub-rule, direct the disconnection, for the time being, of the means of communication provided in all or any of the passenger carriages in any such train.

(4) A goods vehicle in which passengers are carried is not a 'passenger carriage' within the meaning of this rule.

S.R.4.18-1. Control of Air Brake on running trains -

(a) When two engines are employed to draw a train, the Driver of the leading engine, unless there are local rules to the contrary, is responsible for the working of the air brake. The Driver of the second engine must however, in case of emergency, assist in stopping or reducing the speed of the train by applying the air brake or hand-brake, as may be required, but he must not maintain or re-create air pressure.

(b) When an additional engine/engines are employed to push a train from the rear, the Drivers thereof must not interfere with the working of air brake, which shall be under the control of the leading engine Driver as laid down in (a), except in cases of a run-back, when the rear most assisting engine Driver automatically becomes the leading Driver.

(c) Drivers of all additional engines will, at all times, keep the handle of the air brake, in the running position and should not create air brake pressure.

(d) In the event of the Driver of the engine in rear requiring in an emergency to attract the attention of the leading engine Driver, he shall give a whistle signal as laid down in General Rule 4.46 and S.R.4.46-1.

Note : In case two engines are pushing a load in an emergency, the leading Driver in the direction of the motion will be the controlling Driver.

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S.R.4.18-2. Alarm signal -

(a) On observing a drop in the Brake Pipe Pressure Indicator, the Driver must at once bring his train to a stand as quickly as possible and he must, at the same time give two short, one long whistle. This whistle code must be repeated while the train is being brought to a stand and until the Guard shows a red flag by day and a red light by night indicating that he understands the situation. ~~The Assistant Guard also shall show a red flag by day and a red light by night towards the Driver to indicate that he understands the situation.~~

(b) If it is noticed that the alarm chain has been applied at a place which will necessitate the train being stopped on a bridge, viaduct, tunnel, cutting, catch points, spring points or another spot considered unsuitable for stopping the train, the Driver may recreate air pressure and work the train on to a safe place to stop, giving one short whistle to advise the Guard ~~and Assistant Guard~~ that he is doing so.

(c) When the train comes to a stand, the Guard must immediately show a red hand signal and leave his brake van on the left side of the train, unless the train is standing on a right hand curve, in which case, he will detrain on the right side, and proceed to the carriage from which the communication chain has been pulled. ~~The Assistant Guard shall show a red hand signal and leave his brake van on the right side of the train, unless the train is standing on a left hand curve, in which case, he will detrain on the left side and proceed to the carriage from which the communication chain was pulled.~~

The Driver shall also depute his Assistant Driver to assist the Guard ~~and Assistant Guard~~ in finding out the bogie from which the communication chain was pulled.

(d) When the chain is pulled, a red disc projects outside on some carriages or revolves from horizontal to vertical position in others on either side at the end of the carriage where the clappet valve is fitted. The carriage from which the alarm signal is pulled can be ascertained by the position of the red disc, and the compartment by the slackness of the chain inside the compartment.

(e) When the train comes to a stop the Guard/~~Assistant Guard~~ must immediately ascertain by whom the chain has been applied and its cause and, if necessary, attend to the requirements of the passenger who used it. If it is found that the reason for the stoppage of the train will necessitate a halt of more than ten minutes, the train must be protected in accordance with S.R.6.03-1.

(f) Should it be found that the alarm chain has been mischievously pulled or for an unjustifiable cause, the Guard in-charge must ascertain the name of the person who pulled the chain. His name and address with those of other occupants must be obtained and the matter reported at the next station of importance where the passenger can be dealt with in accordance with standing instructions issued by the Divisional Railway Manager.

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(g) Before restarting the train, the Guard should also satisfy himself that the correct amount of air pressure is available in the train.

(h) The Guard must record the fact in his journal and, in addition, send a special report to the Divisional Railway Manager with full details of the use of the communications, the name of the passenger and tickets held by him.

S.R.4.18-3. Air Brake Rules for working -

(a) The competency examination of Drivers and Guards ~~and Assistant Guards~~ must include questions on the operation of the automatic air brake.

(b) When an assisting engine is attached in rear of the train, the hose pipes/air pressure pipes between the assisting engine and the train must be coupled up and the Driver of the assisting engine will be jointly responsible with the Guard to see that this is done.

(c) The air brake may be applied from the brakevan in an emergency. The application of the air brake must, in such cases, be gradual as there is the risk of the train parting owing to sudden application of the air brake from the rear.

~~(d) When an automatic vacuum cylinder or air brake cylinder or gear on a vehicle is out of order, the cylinder must be put out of action. This must be done in case of vacuum cylinder by disconnecting the syphon pipes from the release valve and dummied the loose end of the syphon pipes with a wooden plug in case of air brake vehicle by by-passing the particular vehicle.~~

(d) When an air brake cylinder or gear on a vehicle is out of order, the cylinder must be put out of action. This must be done by by-passing the particular vehicle.

(CS 14/10 Ref: This office note no.TR/G&SR/Rev./101 dated 03.01.18.)

~~(e) If on any goods train, less than three fourth (75%) of the total number of vehicles are equipped with effective automatic vacuum cylinders and in case of air braked train less than 75% of the total number of vehicles are equipped with effective brake cylinders, the train is to be treated as non-automatic or non-air braked and worked in accordance with paragraphs (f) & (g) below.~~

(e) If on any air braked goods train, less than 75% of the total number of vehicles are equipped with effective brake cylinders, the train is to be treated as non-air braked and worked in accordance with paragraphs (f) & (g) below.

(CS 14/10 Ref: This office note no.TR/G&SR/Rev./101 dated 03.01.18.)

(f) In the event of failure of air brake, during the journey, the Driver must take his train cautiously upto the next station, where the defective vehicle or vehicles can be detached or where the defect can be rectified. The Guard must be prepared to assist the Driver in controlling the load by applying the hand brake in the brakevan.

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(g) The Driver must exercise great care and maintain effective control of the load. The Guard ~~and the Assistant Guard~~ must always be vigilant and prepared to assist the Driver by applying hand brakes, if called upon to do so by the Driver. If the Driver requires additional brake power, the Guard shall pin down hand brakes or put on hand brakes of as many vehicles as the Driver may consider necessary.

S.R.4.18-4. Whenever shunting is done on a train at an intermediate station where train examining staff are not available, the Driver and Guard of the train shall jointly examine the vehicles which are attached or detached to see their cylinders are effective to the extent that the percentage of effective cylinders on the entire train does not go below 75% **in case of vacuum braked train and air braked train** in any case. The Driver and Guard shall ensure that the prescribed amount of air pressure is available in the engine and the brakevan before starting the train.

S.R.4.18-5. The Driver, after starting the train from the originating station or an intermediate station where shunting has been performed on his train, shall apply the air brake to test its efficiency without actually stopping the train.

~~S.R.4.18-6. Minimum air pressure / vacuum in engine and rear brake van :-
(A) minimum air pressure in engine and in rear Brakevan of passenger and goods trains at the time of starting a train:~~

Particulars	On engine		On rear Brakevan	
	FP Pressure	BP Pressure	FP Pressure	BP Pressure
On Mail, Express and Passenger trains.	6 Kg/Cm ²	5 Kg/Cm ²	5.8 Kg/Cm ²	4.8 Kg/Cm ²
On Goods trains with load up to 40 air braked & wheeler wagons.	-	5 Kg/Cm ²	-	4.8 Kg/Cm ²
On goods trains with more than 40 air braked & wheeler wagons.	-	5 Kg/Cm ²	-	4.7 Kg/Cm ²

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S.R.4.18-6. Minimum air pressure in engine and rear brake van :-

a) Brake pipe & Feed pipe pressure required in the train

Particulars	On engine		On rear Brakevan	
	FP Pressure	BP Pressure	FP Pressure	BP Pressure
On Mail, Express and Passenger trains .	6 Kg/cm ²	5 Kg/cm ²	5.8 Kg/cm ²	4.8 Kg/cm ²
On Goods trains with load up to 56 wagons	6 Kg/cm ²	5 Kg/cm ²	5.8 Kg/cm ²	4.8 Kg/cm ²
On goods trains with more than 56 wagons .	6 Kg/cm ²	5 Kg/cm ²	5.7 Kg/cm ²	4.7 Kg/cm ²

(CS 14/10 Ref: This office note no.TR/G&SR/Rev./101 dated 03.01.18.)

~~(Deleted) (b) Standardization of vacuum level in engine and brakevan of passenger and goods trains:-~~

~~(i) Minimum level of vacuum in engine and brakevan :-~~

Type of Service	Engine	Brake Van	Average
M/E	53	47	50
Passenger	50	44	47
Goods	46	38	42

~~Whenever a coaching train runs initially on passenger and subsequently on express services, vacuum levels on such rakes will be maintained as those prescribed on M/E trains.~~

~~(ii) Creation of Initial Vacuum on Electric Locomotives.~~

~~In case of Electric locomotives, at the time of initial creation of vacuum as well as after full application of brakes the vacuum should be created by running both the exhausters till 45 Cms of vacuum is obtained. Thereafter only one exhauster will run.~~

~~(iii) Vacuum trouble on trains:~~

~~In case of vacuum trouble in a train, the locomotive should be tested first, followed by the rake, if loco is found normal. The respective guidelines for testing are given below.~~

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(iv) Testing of locomotive in case of Vacuum trouble.

In case the desired vacuum level is not created the identification of problem on diesel and electric locomotives, is to be carried out with the help of following tests :-

- * Blockage Test : With one exhauster on electric loco/diesel loco running at idle, remove vacuum hose pipe on one side of the loco from dummy and raise it upward (to avoid suction of dirt etc.). Normally with hose pipe open, the vacuum should drop to zero but if it is more than 8 cm, it indicates blockage in the system. Repeat the procedure from the other end of the loco.
- * Efficiency Test : Electric/Diesel locomotives be tested to ascertain that on 5/16" dia (8mm) leak hole in 3 mm plate, with single exhauster working at slow speed on electric locomotive and with engine working at idle speed on diesel locomotive, the vacuum level of 53 cm is achieved.

Loco	<i>Vacuum Loco</i>		<i>Dual Brake Loco</i>	
	Dummy	Dise : 3 mm (8mm hole)	Dummy	Dise: 3 mm (8mm hole)
Diesel	56	53	58	53
Electric	56	53	58	53

On newly manufactured, rebuilt and POHed locomotives, the difference between the dummy and 8 mm hole disc should not be more than 3 cms.

- * Leakage Test : If the above conditions are achieved, then tests may be carried out to ensure that Maximum leakage rate on diesel/electric locomotives is not more than 7 Cm/min

The blockage and efficiency tests on diesel and electric locomotives should be carried out not only before turning it out from the shed but also in the yard to rule out loco defects whenever the train is held up for creation of vacuum.

The leakage test on both the locomotives should be carried out in the shed only.

(v) Testing of Train in case of Vacuum Trouble :

(a) Coaching Train : On passenger carrying train maximum leakage rate should not be more than 5 Cm / min. on one vehicle and 13 Cm/min. for the full rake as per IRCA Pt. IV Appendix D Para 2.2 (d).

(b) Freight Train : On goods trains maximum leakage rate should not be more than 5 Cm/min. on one vehicle, as per IRCA PT. iii, Appendix E, Clause E-54

WORKING OF TRAINS GENERALLY

(b) Percentage Brake Power in Coaching & Freight Trains :

The percentage effective brake power for different services at originating station as well as en-route are given below :

Service		Originating (%)	En-route (%)
Coaching	M/E	100	90
	Passenger	100	90
Freight	CC rake	100	90
	Others	85	75

However for loaded Air braked Goods trains, while descending NE / SE Ghats of Mumbai Division the 90% brake power shall be ensured.

[CS 5/4 dated 31/7/2001]

~~(Deleted) Minimum level of vacuum/air pressure in engine and brakevan of the trains Worked by DC/AC DC/Steam locomotives :-~~

Particulars	Vacuum		Air pressure	
	Engine	Rear brakevan	Engine	Rear brakevan
On Mail, Express and Passenger trains:	45 Cms	38 Cms	5 Kg/Cm²	4.8 Kg/Cm²
On Goods trains with load up to 70 FW wagons / 35 vacuum braked 8 wheeler wagons / 40 air braked 8 wheeler wagons :-	45 Cms	36 Cms	5 Kg/Cm²	4.8 Kg/Cm²
On goods trains with more than 70 FW wagons / more than 35 vacuum braked 8 wheeler wagons / more than 40 air braked 8 wheeler wagons :-	40 Cms	30 Cms	5 Kg/Cm²	4.7 Kg/Cm²

~~Added vide addenda dated 12/06/2002~~

~~Deleted vide (CS 14/10 Ref:This office note no.TR/G&SR/Rev./101 dated 03.01.18.)~~

WORKING OF TRAINS GENERALLY

4.19. Guard's and Driver's equipment-

(1) Each Guard and Driver shall have with him, while on duty with his train, the following equipment -

- (a) a copy of these rules or such portions there of as have been supplied to him under Rule 2.01,
- (b) a copy of the Working Time Table, and all correction slips and appendices, if any, in force on that section of the railway over which the train is to run,
- (c) a hand signal lamp or tri-colour dry-cell or dry-fit or lead acid type battery operated hand signal lamp and/or torch,
- (d) a whistle (for Guards only)
- (e) a red flag and a green flag,
- (f) a stock of detonators sufficient to comply with the relevant rules as may be prescribed by special instructions,
- (g) a first aid box (for Guards of passenger carrying train only), and
- (h) such other articles as may be prescribed by the Railway Administration in this behalf.

(2) If any Guard or Driver is not in possession of any article mentioned or referred to in sub rule (1), he shall report the fact to his superior who shall make good the deficiency.

(3) Each Guard and Driver shall have with him while on duty with his train, two pairs of such spectacles as he is required to wear under medical advice.

Note : Each Guard and Driver should also be in possession of a watch in addition to the equipment prescribed in sub-rule (1).

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S.R.4.19-1. Guard's and Assistant Guard's Personal Stores -

(a) A Guard must be also be in possession of the following Personal Stores

~~(1) Accident Manual complete and upto date or such portion thereof as relevant to his duties.~~

~~(1) Rule books complete and up to date or such portion thereof as relevant to his duties and should produce the same on demand by any of his superiors (as per GR 2.01 & 2.02).~~

~~(Revised vide CS 10 item No. 18)~~

(1) Rule books (either hard copy or soft copy) complete and up-to-date or such portion thereof as relevant to his duties.

CS 14/14(c)

(2) Guard's memo book.

(3) 10 detonators in a case.

(4) 2 red and 1 green flags mounted of sticks.

(5) Padlock and keys as prescribed.

(6) Rubber washers - 3.

(7) Parcel Loading Pamphlet.

(8) LED based flasher tail lamp/tail lamp and a tail board of approved designs

(9) Detachable air pressure gauges with adapters (for goods train guards only). [CS 6/10 dated 3/04/2002]

~~(10) One Flare signal (fusee) where prescribed.~~

(10) LED based flashing tri-colour hand signal lamp. Revised vide CS 10 item No. 18)

Passenger train Guards shall also have with them the following additional articles -

(11) Carriage Key.

(12) Complaint book.

(13) A torch with cells.

(14) A light weight first Aid Box.

(15) Key for resetting ACP valve for air brake coaches.

~~(b) A Assistant Guard must be in possession of the following personal stores—~~

~~(1) General and Subsidiary Rules complete and up to date (in regional language when required)~~

~~(2) Hand signal lamp of approved pattern complete with slides or tri-coloured dry cell or dryfit or lead acid type battery operated and/or touch.~~

~~(3) 1 red and 1 green flags mounted on sticks.~~

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~~———— (4) Carriage Key~~

~~———— (Deleted vide CS 10 item no.18(b))~~

~~———— (c) When a Guard or Assistant is transferred, he will take with him to the new division his personal stores, and the Divisional Railway Manager of the division from which the man is transferred will pass on a statement of stores in the Guard's or Assistant Guard's possession to the Divisional Railway Manager under whom he will work. The Station Master of the Guard's or Assistant Guard's new head-quarters will check the stores and report any deficiencies at once to the Divisional Railway Manager. The Station Master of a station where Guards and Assistant Guards are stationed must check their personal stores once in three months.~~

(b) When a Guard is transferred, he will take with him to the new division his personal stores, and the Divisional Railway Manager of the division from which the man is transferred will pass on a statement of stores in the Guard's possession to the Divisional Railway Manager under whom he will work. The Station Master of the Guard's new head-quarters will check the stores and report any deficiencies at once to the Divisional Railway Manager. The Station Master of a station where Guards are stationed must check their personal stores once in three months.

Revised vide CS 10 item no.18(c)

S.R.4.19-2. Brakevan stores -

Guard of passenger trains must see that their brakevans are provided with the following -

- (1) 2 brakevan side lamps complete,
- (2) 2 Wedges in each brakevan,
- (3) 2 chemical fire extinguishers in good order,
- (4) One portable field telephone with instructions for use,
- (5) Emergency lighting equipment,

S.R.4.19-3 Driver's personal stores -

(a)(i) In addition to items given in G.R. 4.19, a Driver, while incharge of a train engine or a light engine, must also have the following personal stores -

~~(1) Accident Manual complete and up-to-date or such portion thereof as relevant to his duties,~~

(1) Rule books complete and up-to-date or such portion thereof as relevant to his duties and should produce the same on demand by any of his superiors (as per GR 2.01 & 2.02).

(CS 10 item no. 19)

(1) Rule books (either hard copy or soft copy) complete and up-to-date or such portion thereof as relevant to his duties.

CS 14/14(d)

- (2) Safety Pamphlet,
- (3) 10 Detonators in a case,
- (4) ~~2 hand signal lamps with red and green slides,~~

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- (4) LED based flashing tri-colour hand signal lamp. (CS 10 item no. 19)
- (5) 2 red and 1 green flags mounted on sticks,
- (6) Drivers memo book (T.245-B/Rev.1955).
- (7) Key for resetting ACP valve for air braked coaches.
- (8) Head light and cab light bulbs(spare),
- (9) ~~Flare signals (fusces) for Drivers working on ghat/suburban section, CS10.19.~~
- (10) Trouble shooting guide (for Diesel drivers only) and Trouble shooting directory/operating manual for AC Drivers. [CS 4/3 23/10/2001]
- (11) Speed calculator (if provided under special instructions).
- (12) A light weight, compact portable control telephone to all drivers working in electrified section.

[CS 7/8 Ref: Office note T.361.P. G&SR revision dated 29.04.03]

~~(a)(ii) Each Assistant Loco Pilot shall have with him, while on duty with his train, the following equipment along with handy bag :-~~

- ~~1) LED based flashing tri colour hand signal lamp.~~
- ~~2) 2 red and 1 green flags mounted on sticks.~~
- ~~3) Hammer cum Screw Driver.~~
- ~~4) Working Time table.~~

(CS 14/8 Ref: Railway Board's letter No.2010/Safety (A&R)/19/18 dtd. 21.07.2017.)

(a)(ii) Each Assistant Loco Pilot shall have with him, while on duty with his train, the following equipment along with handy bag :

- 1) LED based flashing tri-colour hand signal lamp.
- 2) 2 red and 1 green flags mounted on sticks.
- 3) Working Time table.

[CS 14/16 Ref: Railway Board's letter No.2010/Safety (A&R)/19/18 dtd. 05.07.2018.]

(b) On Diesel Locos, two fire extinguishers and in DC/AC locos two fire extinguishers in each of the two driving cabs must be provided. The type of the fire extinguishers so provided shall be decided by C.M.E. for Diesel Locos and by C.E.E. for electric locos.

In addition to above one emergency field telephone/portable field telephone, Mobile Radio set, 4 wooden wedges, one spare feed pipe/brake pipe for air braked trains should also be provided. The Driver must satisfy himself that necessary tools are provided in the driving cab or engine.

~~(c) Loco Foreman/Supervisor in charge of loco shed will check each Driver's stores once in three months.~~

(c) Lobby in-charge will check each Loco Pilot's and Assistant Loco Pilot's stores once in three months.
(CS 14/8)

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Note : Vernacular translations of the General and Subsidiary Rules may be supplied to Drivers who do not understand English.

S.R.4.19-4. Rubber washers for hose pipe coupling -

Spare sets of 20 washers each will be kept with the Assistant Station Master or Assistant Yard Master on duty responsible for booking Guards and these will be handed over to station staff booked to work as Guards.

S.R.4.19-5. "First Aid" equipment on trains -

(1) A register will be maintained by the Station Master of the Guard's home station in which the Guard must sign when taking over the first aid box. This box will be handed over to the Guard complete with equipment as per list of contents pasted inside the lid of the box unsealed, and must be jointly checked at the time of issue to ensure that there are no deficiencies.

(2) If the Guard uses the first aid box during the journey, he will note this in his journal, and must also submit a report to the Divisional Railway Manager giving the following information -

- (i) Train number and date,
- (ii) Name, designation and address of the person to whom first aid was rendered. In the case of passengers, details of tickets held will also be recorded.
- (iii) Serial number of the first aid box used,
- (iv) Nature of injury, and
- (v) Name, designation and address of the person who rendered the first aid.

The Guard must also enter the relevant particulars on the case card within the box under the appropriate columns.

(3) When the First Aid box has been used as mentioned in para (2) above, the Guard shall have the same replenished at the sectional hospital or the dispensary where he resides before his next trip. The Guard will satisfy the medical official concerned that the material used was required for an injury case.

(4) Goods Guards, utilised temporarily for trains carrying passengers, military specials and material trains, must obtain a first aid box from the Station Master on duty. A certain number of spare sealed first aid boxes will be kept at Guards' home and out stations and these should be issued to goods Guards utilised temporarily to work trains carrying passengers, military specials and material trains. At the time of issue, the seal must be broken and the box checked jointly by the Station Master and the Guard must sign for the box in the register maintained by the Station Master.

(5) On completion of duty, the Guard must return the box to the Station Master at the home station who will check the contents and reseal the box. The Station Master will recoup any equipment before its reissue to a Guard.

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(6) When relief to a passenger train Guard has to be arranged at the last minute and the contents cannot be checked without delaying the train, the box may be issued without being checked and the reason for not checking the contents should be entered in a register. When the first aid box is returned to the Station Master, a joint check of the contents must be made.

(7) All first aid boxes will have the code initials of the Division and the Station to which they are allotted prominently painted, together with serial number for each station. The Station Masters are responsible to see that the boxes belonging to their station are not miscarried.

(8) The Medical Superintendents, Divisional Medical Officers and the Divisional Asstt. Medical Officers will inspect first aid boxes and initial the inspection card in the first aid box. They will also note down any deficiencies found. Checks should be carried out by Transportation Inspectors and other Officers and recorded in the inspection card.

4.20. Manning of engine in motion -

(1) Except when otherwise provided by special instructions, no engine shall be allowed to be in motion on any running line unless the Driver as also the Assistant Driver or the Fireman are upon it.

(2) Subject to the provision of sub-rule (3), in no circumstances shall a person other than the Driver or a Railway servant duly qualified in all respects, drive an engine on any running line.

(3) If a Driver becomes incapacitated while the engine is in motion , the Assistant Driver or the Fireman, if duly qualified, may work the train to the next station cautiously and where the Assistant Driver or the Fireman is not duly qualified, he shall bring the train to a stop and send a message to the Station Master of the nearest station to make arrangements for a Driver to take over the train, and for so doing he may take the assistance of the Guard.

SR 4.20-1 - Driving a Diesel hauled train :

- (1) Only Drivers who are in possession of Diesel Driver's competency certificate issued by Sr. DME/DME of the divisions will be permitted to work the train.
- (2) If a Driver has not worked on Diesel traction for more than 6 months, he should be accompanied by certified Loco Inspector for Diesel Traction by Sr. DME/DME on foot plate in first trip and after examination certificate will be renewed by Sr.DME/DME.

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- (3) Staff under training for driving Diesel engines, when specially authorised by the Sr. DME/DME, may drive such engines under the supervision of certified Inspector/Regular Driver. While a trainee is driving under these conditions, the Supervising Instructor / Regular Driver shall keep a continuous watch over the trainee and keep himself in readiness to take any action that may be required to control the train in an emergency.
- (4) Within Loco shed premises authority to work a loco should be given by AME.
- (5) In case of emergency, in the event of Driver becoming incapacitated while the engine is in motion, the Asstt. Driver who is duly qualified (Passed Driver's promotion Course at ZRTI) may work the train to the next station cautiously. If, however, he is not qualified, he must bring the train to stop and send the message to the nearest Station Master to make arrangement for a Driver to take over the train.

[CS 6/3 3/04/2002]

SR 4.20-2 Shunting engines working at stations/yards/loco sheds/ workshops will have only shunters without assistants.

[CS 8/2 dated 4/02/2004]

4.21. Driving an electric train -

- (1) In the case of electric trains, the Driver shall be in the leading driving compartment when the train is in motion or when the train is standing on any running line except as otherwise prescribed in these rules.
- (2)(a) In the case of a single or multiple unit train, if the driving apparatus in the leading driving compartment becomes defective, the train shall be driven cautiously from the nearest driving compartment which is serviceable; in this event, the Guard shall travel in the leading driving compartment and shall convey the necessary signals to the Driver; the Guard shall also sound the horn or whistle as necessary and apply the brake in case of emergency and shall be responsible for stopping the train correctly at signals, stations and obstructions.
- (b) In the case of an electric engine, if the leading driving compartment becomes defective, the train shall be driven from the trailing driving compartment by the Assistant Driver if he is duly qualified to drive; and the Driver shall remain in the leading driving compartment, and shall be responsible for the correct operation of the train.

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S.R. 4.21-1. Single and multiple unit trains-shunting of.- When shunting is to be performed the rules contained in S.R. 5.14-1 must be complied with.

S.R.4.21-2. (a) When an engine cannot be driven from its leading cab, the Loco Pilot shall follow the special instructions issued by the Sr.Divisional Electrical Engineer/ Divisional Electrical Engineer (Rolling stock) or Sr.Divisional Mechanical Engineer/Divisional Mechanical Engineer.

(b) If the driving apparatus in the leading compartment of an Electric Engine or Diesel Engine(Twin Cab) becomes defective, the Loco Pilot shall send the Assistant Loco Pilot to drive the engine from the trailing cab. The Loco Pilot shall be responsible for the correct operation of the train. All operation will be done by exchange of signals between Loco Pilot and Assistant Loco Pilot. The speed of the train shall not exceed 40 kilometers per hour.

(c) At the first opportunity the Loco Pilot shall inform the Traction Loco Controller or Power Controller (Diesel) to arrange for a relief engine.
(CS 14/4 Vide Board's letter No. 2014/Safety(A&R)/19/20dt. 15.01.15)

(d) In the event of the driving apparatus in the leading driving compartment of an EMU train becoming defective, or in the event of it being necessary for the Motorman to drive from another driving compartment for any reason whatsoever the Guard will station himself in the leading driving compartment of the train, sound the horn as necessary and operate the Driver's brake valve handle for operation of the air brake or the Guard's emergency brake handle for operation of the air brake as required.

It is the duty of the Guard under such circumstances to apply the brake as required and stop at the next station. In the event of the possibility of over running or in the case of emergency, the Motorman must also apply the air brake from the driving compartment he is occupying. The speed shall not exceed 15 kilometres per hour, except while climbing the Reay Road ramp in the up direction, and Sandhurst Road ramp in the Down direction. The maximum speed for climbing the ramps may reach 30 kms. P.H. However, the speed shall be reduced to 15 kms. P.H. immediately after clearing the ramps.

S.R.4.21-3. (1) (a) Only certified Drivers and Assistant Drivers for electric rolling stock shall be allowed to drive electric rolling stock on any part of the running lines. They shall not allow any one to enter the driving compartment other than those who are authorised to do so under these rules or who hold a permit signed by the Divisional Electrical Engineer (Rolling stock.) No person shall be allowed to handle any apparatus in the engine or in the driving compartment unless he is in possession of a Driver's certificate of competency.

~~(b) If a Driver has not driven an electric engine or multiple unit for six months, he shall be re-examined after a refresher course and his certificate of competency endorsed before he is allowed to drive again.~~

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(b) If a Driver has not driven an electric engine or multiple unit for six months, he should be accompanied by certified Loco Inspector (Elect.) on footplate in first trip and after examination his certificate will be renewed by Sr. DEE/DEE.

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(CS 8.3 dt.4.02.05 vide office note of Dy CEE (Operation))

(c) When a driver has not worked on any section for six months and over, he must not be booked on that section unless he has learnt the road and a competency certificate has been issued in his favour. A record of all competency certificate issued to Driver shall be maintained in the office of the Divisional Electrical Engineer (Rolling Stock).

(d) However, staff under training for driving electric engines, when specially authorised by the Divisional Electrical Engineer (Rolling Stock), may drive such engines under the supervision of a certified Instructor/regular Driver. While a trainee is driving under these conditions, the supervising Instructor/regular Driver shall keep a continuous watch over the trainee and keep himself in readiness to take any action that may be required to control the train in an emergency.

(2) No person shall be allowed to move any electric rolling stock within the limits of the loco shed and stabling sidings unless he has been certified competent to do so by the Assistant Electrical Engineer (Rolling Stock).

(3) In the case of an emergency or in the event of a Driver becoming incapacitated while the engine is in motion, the Assistant Driver, if duly qualified, may work the train to the next station cautiously. If, however, the Assistant Driver is not duly qualified, he must bring the train to a stop and send a message to the nearest Station Master to make arrangements for a Driver to take over the engine.

4.22. Riding on engine or tender -

(1) No person other than the engine crew shall be authorised to ride on the engine or tender of a steam locomotive, except in accordance with special instructions.

(2) Except as may be permitted by special instructions, no person other than the engine crew shall be authorised to enter any driving compartment of a single or multiple unit train or a train propelled by electric, diesel or petrol engine.

(3) No unauthorised person shall manipulate any apparatus contained therein.

S.R.4.22-1. Engine, Riding on -

No person other than a Driver, Assistant Driver, is permitted to ride on an engine, unless he is in possession of an engine pass, except Guards, ~~Asstt. Guard~~ and shunting staff when performing shunting operations or staff proceeding to the site of an accident, or in an emergency in the discharge of their duties. In the case of a Driver learning the road, an Engine Pass on the prescribed form should be supplied to him through his Foreman. Officers and Inspectors whose passes are endorsed "Available on Engines" are allowed to ride on the foot plate provided not more than three such Official may ride on the engine at a time, except when permitted by Operating /Power Officer.

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4.23. Brakevans -

(1) No train shall be allowed to enter a block section, unless one or more brake vans or hand braked vehicles are attached to it, except in emergency or as provided for under special instructions.

(2) This rule does not apply to rail cars, light engine or light engines coupled together.

S.R.4.23-1. The following goods trains may run without goods brake-vans but not without a tail board or tail lamp affixed on the last vehicle -

- (i) Colliery Pilots.
- (ii) Goods pilots which operate between a yard and a siding which do not have to run over the main line.
- (iii) Goods shuttles on short specified routes which will be worked by a leading engine for which the prior approval of the Principal [Chief Operations Manager](#) will be obtained.

(iv) Working of goods trains without brakevan -

(a) The Sr.DOM/DOM may authorise working of trains without brakevan as the last vehicle only in emergent circumstances to cater for operational exigencies.

(b) Trains may run without brakevan only in controlled sections.

(c) Running of trains without brakevan is prohibited during total failure of communications.

(d) No damaged wagon or vehicle should be attached to a train running without brakevan.

(e) Procedure to be observed for running goods train without brakevan -

- (i) The Guard shall travel on the engine. While running through a station the green hand signal shall be exchanged on station side by the Guard and on the other side by the Assistant Driver. They shall look back and ensure that the train is following in a safe manner.
- (ii) The train shall be provided with continuous Air pressure from the engine to the rearmost vehicle and with adequate brake power. The train examiner must mention in the brake power certificate the number and description of the last vehicle.
- (iii) The LV board/Tail lamp shall be fixed by the Guard and he should travel on the engine. For CBC stock the last vehicle Board/Tail Lamp should be clamped to the coupler with the clamp of approved design. In absence of the clamp and tail board/tail lamp on the rearmost vehicle no train is permitted to run without brakevan.
- (iv) The Guard of the train travelling on the engine should look back frequently while on run.

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- (v) Before starting a train without brakevan the Station Master of the originating station must intimate to the SCOR on duty the last vehicle number under exchange of private number.
In automatic signalling territory SCOR on duty will inform the Station Master of the stations which are nominated to exchange signals.
- (vi) While asking 'Line Clear', the SM/Switchman shall specifically mention that the train for which line clear is being asked is running without brakevan.
However, in automatic signalling territory the Station Master/Pointsman of stations nominated for exchange of signals will be responsible for ensuring that train running without brakevan is intact by checking the LV board /Tail lamp on the last vehicle.
- (vii) The Station Master/Cabin In-charge before clearing back the section must verify that the train has passed safely with tail lamp/tail board. In case, the train is stopped at station for precedence, crossing or due to any other reason, SM/Cabin In-charge shall send the 'Train Intact Register' in advance to the Guard who will certify the complete arrival of the train inside the fouling mark with Tail Lamp/Tail Board on the last vehicle after physically verifying the last vehicle. Procedure laid down in S.R. 4.56-1 (c) should be followed.
- (viii) A register should be maintain in control office showing the trains run without brakevan and Sr.DOM/DOM should sign in the register in token of his permission to run the train without brakevan.
- (ix) The duties of the Guard which can be performed on by his presence in Brakevan like applying hand brakes during parting, exchanging hand signals with the Driver etc. will not be applicable in this condition.
- (x) Trains may be permitted to run without goods brakevan only in emergent circumstances and a Goods brakevan must be attached at the first possible opportunity.

Note:- Goods trains, in NE (Kasara – IGP) & SE (KJT – LNL) Ghat sections of Mumbai division in down direction only, are permitted without brakevan when eight wheeler brakevan is not available.

[CS 6/6a dated 3/04/2002]

~~(f) Procedure to be observed in case of vacuum trouble enroute–~~

~~When a train running without brakevan encounters trouble enroute the following steps which are normal for train operation are required to be taken by the Guard of a train :-~~

- ~~(i) Guard along with Assistant Driver should check complete train for any hose pipe disconnection or leakage etc. The help of C&W staff or Pointsman should be taken when the vacuum trouble occurs within the station limits.~~
- ~~(ii) The Guard should arrange to connect the hose pipe, plug the leakage etc. with the help of Assistant Driver and start his train after ensuring~~

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~~that the vacuum trouble has been fully attended to and the requisite amount of vacuum is maintain on the locomotives.~~

~~(iii) The Driver should regulate the speed of the train depending on the 'Field Test' conducted by him in the first block section.~~

- (f) Procedure to be observed in case of pressure trouble enroute –
- (i) Guard along with Assistant Loco Pilot should check complete train for any air hose disconnection or leakage etc. The help of C&W staff or Pointsman should be taken when the pressure trouble occurs within the station limits.
 - ii) The Guard should arrange to connect the air hose, arrest the leakage with the help of Assistant Loco Pilot and start his train after ensuring that the pressure trouble has been fully attended to and the requisite amount of pressure is maintained on the locomotives.
 - (iii) The Loco Pilot should regulate the speed of the train depending on the 'Brake Feel Test' conducted by him in the first block section.
- (CS 14/10 Ref: This office note no.TR/G&SR/Rev./101 dated 03.01.18.)

S.R.4.23-2 Coaching Stock, Definition of -

The following vehicles are to be considered as Coaching Stock -

Passenger carriages, Postal vans, horse boxes, carriage trucks, motor vans, store vans, restaurant cars, luggage and fruit vans, passenger brakevans, goods vehicles marked 'Coaching vehicles' and any other vehicles that may from time to time to be included in the list of Coaching stock.

S.R.4.23-3. Goods Stock- Definition of Goods stock includes all goods wagons, i.e. all rolling stock other than coaching stock, irrespective of contents whether attached to passenger or goods trains.

S.R.4.23-4. Marshalling of passenger and mixed trains -

(a) The composition and marshalling of Mail, Express, Passenger and Mixed trains is prescribed by special instructions, issued by PCOM from time to time.

(b) On passenger trains, there must be at least one SLR or LR in the rear of the fixed composition of the train. On passenger and mixed trains on short branch lines, one bogie SLR may be attached in the middle of the train to avoid reversing provided not more than 2 bogies are on either side.

(c) The marshalling arrangements on mixed trains shall ordinarily be -

Train engine, goods vehicles, passenger vehicles, SLR/LR, vehicles fitted with air brake in good working order and must be connected with air brake system of train. However, vehicles loaded with the live stock, explosive, dangerous and inflammable goods should be attached in rear.

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(d) Vehicles fitted with and connected with air brake system of train throughout can be attached behind rear SLR.

In Passenger trains - not more than two bogies/four 4-wheelers may be attached behind rear SLR. In addition, one inspection carriage fitted with hand brake may be attached as rear most vehicle.

In mixed train - One Inspection carriage or Power (Generator) car may be attached as rear most vehicle in addition to two bogies/four 4 wheeler behind rear SLR.

(e) A single 4 wheeler vehicle must not be marshalled between two bogies or between engine and bogie.

(f) When four wheelers are attached to a passenger train, speed of train should not exceed 75 KMPH subject to local restrictions.

(g) No goods stock will be attached to a passenger train unless certified by the Train Examiner that it is safe to run on passenger train.

(h) Train piped vehicles are not to be attached by Passenger train. However, in case of mixed train they may be attached inside rear brakevan of fully air brake train and not behind rear brakevan, provided they do not cause any interference to train lighting connections.

(i) Train Examiners at all coaching and goods 'Maintenance' and 'Fit to Run' stations shall examine all goods stock attached to Passenger trains, even though the train to which they are attached is not ordinarily examined at that station. At these stations, the examination will be limited to the goods stock only and will be confined to a safe to run examination.

(j) On such stations where no C&W staff is provided on the terminal stations, the C&W staff at originating station of mixed train will give the certificate for both outward and inward journey of the wagons whether loaded or empty indicating the terminal stations.

S.R.4.23-5. Marshalling of goods train -

(a) There should be at least one goods brakevan in the rear of the train, except in case of trains mentioned in S.R.4.23-1.

(b) No load which infringes the standard moving dimensions shall be attached to a train without the sanction of the Principal Chief Operations Manager.

(c) A single four-wheeler must not be marshalled between 2 bogies but a single four-wheeler may be attached between the engine and a bogie vehicle to avoid delays in shunting en-route.

(d) A single empty four wheeler wagon must not be marshalled between two loaded wagons on the Ghat section.

(e) One damaged (or sick) vehicle/wagon, or engine certified fit to run, may under special instructions, be attached in the rear of the rear brakevan of a goods train during daylight hours only. Provisions of S.R.4.29-1 should also be complied with.

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- (f) Dead or defective engine –
- (i) If a dead locomotive is worked without any one of locomotive couplings or connecting rods, it is termed as an unbalance locomotive.
 - (ii) Whenever a locomotive working a train fails in the block section, the dead train locomotive may be coupled to the relief engine and the train worked to the next block station, where the dead locomotive should normally be detached. Otherwise the train may be worked double headed with the dead locomotive up to destination.
 - (iii) Attachment of Dead locomotives: The following condition shall be satisfied before attachment of dead locomotive to any train/light engine :-
 - (a) Certificate for 'Fit to run' is issued by Section Engineer / Loco Inspector / Power Controller for Passenger / Goods train.
 - (b) The dead locomotive is escorted by a competent person not lower than Asst. Driver.
 - (c) Maximum permissible speed of the dead locomotive shall not be less than maximum permissible speed of. Train.
 - (d) Arrangements have been made to ensure that brakes can be applied on dead locomotives in synchronization with working locomotives.
 - (e) Running of double / triple headed is permissible on the section over which the dead locomotive is to be hauled.
 - (f) When a dead electric locomotive has to be moved on a non-electrified section, special check shall be made regarding its infringement to be schedule of the maximum moving dimensions. In the case of any infringement, the dead locomotive shall be treated as an ODC.
 - (g) As a final check, the coupled locos should be run for about 500 meters and the driver shall check for any abnormal rise in the temperature of the wheels of the dead locomotive and shall also check it at subsequent stops during the journey.

In addition to the above , the following precautions should be taken for hauling the dead locomotives :

- (iv) Attaching / hauling of dead locomotives by Passenger Trains :
- (a) Only one dead locomotive (diesel / electric) can be attached.
 - (b) Brake power of the train should be 100% excluding dead locomotive.
 - (c) The dead locomotive can be attached next to train engine only.
 - (d) As far as possible, brake should work on dead locomotive. However, if it is not possible, then in the case of air-braked train, brake pipe and feed pipe of working locomotive shall be connected to brake pipe and feed pipe of trailing stock and dead locomotive will work as piped vehicle.
 - ~~(e) In the case of vacuum braked train, vacuum pipe of locomotive shall be connected with vacuum train pipe of trailing stock and the dead locomotive shall be treated as a piped vehicle. However, pure~~

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~~air/vacuum brake locomotive shall be attached only by air/vacuum brake stock respectively.~~

(Deleted CS 14/10)

(v) Attaching /Hauling of dead locomotive by goods trains :

- (a) Movement of maximum three locomotives (2 working + 1 dead) with load is permissible subject to observations of all restrictions on operation of double / triple headed working locomotives in the section provided that brakes in dead locomotives are operational.
- (b) If a dead locomotive is not coupled with the train engine, the minimum distance between the dead locomotive and the train engine/banking engine (if any) should not be less than the largest span of the bridge on the section where dead locomotive is hauled. However when a dead diesel/electric locomotive is coupled next to the train engine, dead engine should be treated as a piped vehicle and at least ten fully air braked wagons should be attached in rear of it.

(vi) A locomotive when it is sent to shops for POH/repairs should normally be sent on its own power. If a locomotive has to be sent dead to shop for repairs by a train, it should be attached to a goods train. An unbalanced engine being sent to shops for repairs, should be hauled by a light engine at a speed not exceeding 15 KM/H.

(CS 6/8 (iii) Ref : Rly.Bd's letter No. 99/Safety(A&R)/19/10 dated 10/12/01 and 8/1/02)

MARSHALLING CHART

The position of wagons should be as shown in chart below. However such wagons may be attached at a later position.

		In Goods trains worked by DSL/AC/DC Locomotive.	In Passenger/ mixed trains worked by DSL/AC/DC Locomotive
1.	Live stock/loaded Horse box	2 nd from engine	2 nd from engine
2.	Motor vehicles in open and ventilated covered wagon	3 rd from engine	3 rd from engine
3.	Motor vehicles of military specials.	3 rd from engine	Not applicable
4.	Cotton in covered wagon	2 nd from engine	Not applicable
5.	Open wagon loaded with	2 nd from engine	Not applicable

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	Bhoosa, Hay		
6.	Damaged (or sick) vehicles/ engine certified fit to run.	Behind rear brakevan during day light hours only	Not applicable
7.	Dead engine	Next to Engine or 7 th	Next to engine
8.	Crane	Next to Engine or 7 th	With guard wagons & with permission of COM.

* Where double heading is not permitted

** Where double heading is permitted.

4.24. Position of brakevan on train -

Unless it be otherwise directed by special instructions, one brakevan shall be attached to the rear of the train, provided that reserved carriages or other vehicles may, under special instructions, be placed in rear of such brakevan.

4.25. Guards -

- (1) Except under special instructions or in an emergency, every running train shall be provided with one or more Guards.
- (2) The Guard of a running train shall travel in his brake-van, except-
 - (a) in an emergency, or
 - (b) under special instructions.
- (3) When a train is worked without a Guard, such of his duties as can be performed by the Driver shall devolve on him as may be specified by special instruction.

~~S.R.4.25 1 (1) No train shall run without Guard when brakevan is not provided, Guard should travel in the engine. However in NE (Kasara—IGP) & SE (KJT—LNL) Ghat sections of Mumbai division in such circumstances, in down direction, guard will travel in rear cab of rearmost loco of the banker/bankers. [CS 6/6b dated 3/4/2002]~~

~~S.R.4.25 1 a) No train shall run without a Guard. However, in case of emergency a goods train can be run without a Guard with prior approval of Sr.DOM. In all such cases a qualified Group 'C' staff should be deputed to perform the duties of Guard who shall carry with him minimum Guard's equipments including Detonators, Red & Green flags/ LED-based flashing HS Lamps etc. required for the protection of the train and its safe running. Record of such goods train run shall be maintained in a separate register in the control office.~~

~~b) When brake van is not provided, Guard should travel in the engine. However in NE (Kasara—IGP) & SE (KJT—LNL) Ghat sections of Mumbai division in such~~

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~~circumstances, in down direction, guard will travel in rear cab of rearmost loco of the banker/bankers.~~

CS 11/4 (Ref: Office note no. TR/G&SR/Genl./102 dated 07.07.2010)

SR 4.25-1 Working of train without Guard –

- a) The following trains may run without Guard to cater for operational exigencies -
- (i) Goods train
 - (ii) Departmental trains (ballast train, material train, Track Maintenance Machines, Tower Wagon)
 - (iii) Empty Coaching rakes,
 - (iv) Parcel Special.

However, running of train without Guard in Ghat section and during thick, foggy or tempestuous weather, total interruption of communications and single line working on double line section, is strictly prohibited.

- b) Procedure to be observed for running of train without Guard –
- i) The Sr.DOM/DOM may authorise working of trains without Guard and a record of such orders shall be maintained in respective control office in a separate register.
 - ii) Trains without Guard can be permitted in Absolute Block System(including IBS signaling) and Automatic Signaling Section with normal speed.
 - iii) The train shall be provided with continuous air pressure from Engine to rear-most vehicle.
 - iv) When train is worked without Guard, such of his duties as can be performed by the Loco Pilot shall devolve on the Loco Pilot and Assistant Loco Pilot. In case of departmental trains, concerned supervisors will perform the duties of Guard.
 - v) If a Guard is not provided at the originating station or intermediate station, the Loco Pilot on being informed by the Station Master of same, shall conduct continuity test with the help of train examiner if available or the staff nominated by Station Master.
 - vi) Last vehicle indicator (Tail Lamp/Tail Board/Red Flag) must be made available to the Loco Pilot and it shall invariably be fixed to the tail end of the rear-most vehicle by the Assistant Loco Pilot with the help of station staff nominated by SM.
The tail lamp is essential in running such a train in the night time.
 - vii) Before starting a train without Guard the Station Master of the originating station must intimate to the SCOR on duty the last vehicle number under exchange of private number.
 - viii) While asking 'Line Clear', the SM/Switchman shall specifically mention that the train for which line clear is being asked is running without Guard. Station Master/Pointsman will be responsible to ensure that the train without Guard is intact and complete by looking at last vehicle indicator or matching last vehicle number.
 - ix) In automatic signalling territory SCOR on duty will inform the Station Master of the stations which are nominated to exchange signals and Station Master/Pointsman of such nominated stations will be responsible to ensure that the train without Guard is intact and complete.

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- x) Vehicle Guidance and Guard's copy of BPC shall be handed over to Loco Pilot which shall be collected by Guard when booked for train en-route or by Station staff at destination.
 - xi) When such a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the Loco Pilot finds that this train cannot proceed further, he shall immediately protect the train as per G.R. 6.03. While going for protection, care shall be taken that loco is not deserted if it is on rails.
 - xii) When such a train stops at a station the SM shall ensure that the train has arrived complete and is standing clear of the fouling marks.
 - xiii) While on run Assistant Loco Pilot shall look back frequently and ensure that the train is running in safe manner and shall acknowledge any danger signal shown by the Gateman / Cabin staff/Station staff.
- (CS 14/12 (Ref: Office note no. TR/G&SR/Genl./101 dated 25.04.2018)

(2) Guard's Journals -

(a) The Guard's journal on the prescribed form (Form T.20-B Revised) must be filled by the Guard. This form shall be used for train (except suburban and material trains for which separate forms are provided). The cause of each detention to trains must be clearly explained. All irregularities in connection with the working of trains such as absence of signals or improper exhibition of signals, slack working of staff, complaints made by Drivers or the travelling public or accidents must be reported in the journal. Remarks on the following heads must also be passed at the foot of the journal - Time checked with the Controller, amount of air pressure maintained in the brakevan, weather conditions, whether cautious driving observed, condition of the rolling stock and fitting defects in lighting on the train, correctness of the brakevan side lamps and tail lamp and other brakevan equipment. In the case of passenger and special trains, the number of the first aid box, wooden wedges, portable field telephone, emergency train lighting equipment, fire extinguishers, stretcher and such other equipment's (provided as brakevan equipment) must be recorded.

(b) The Guard of a train must, at the end of each trip, before he leaves the station, make over his journal to the Station Master for submission to the Divisional Railway Manager. Before doing so, he must see that Caution Orders, Line Clear Tickets etc., if any, are obtained from the Driver and attached to the Guard's journal.

(c) Station Masters must maintain a register on the prescribed form (to be kept in carbon process) in which should be recorded particulars of trains run and journals received. One foil will be retained by the Station Master and the other sent daily to the divisional office with the Guard's journals. In the case of passenger and mixed trains a copy of the Guard's journal should also be forwarded to the Principal Chief Operations Manager.

(d) Dating of Guard's journals and Way bills -

WORKING OF TRAINS GENERALLY

The advertised departure according to the time table or train ordering message is to be taken as being the date on which a train ran that is, if a train is timed to leave a terminal at say, 23/20 hours on the 1st, but does not start till, say, 0/10 hrs. on the 2nd it should be shown as a train running on the 1st.

(3) Wagon Way bills (Vehicle guidances) -

(a) Wagon Way bills (vehicle guidances) for all goods, passenger, mail and other trains must be entered up by the staff at the starting station, and handed to the Guard in charge of the train. The wagon way bill at each terminal starting station must be prepared direct from the Train Clerk's hand book in which the Train Clerk must record the numbers of each individual vehicle composing the train from the vehicles themselves. The numbers are not to be copied out from one wagon way bill into another. Entries of vehicles attached to a train at intermediate stations must be made by the station staff there. The Guard must obtain the signature of the station staff in the wagon way bill for any vehicle detached from his train.

(b) The wagon way bill must be carefully and legibly prepared at the starting station.

(c) Wagon way bills (vehicle guidances) for passenger trains must be sent through to the destination station on this Railway. It is not necessary to prepare sectional way bills for passenger trains.

(d) Wagons way bills for through goods trains must be prepared in duplicate, one copy must be made over to the Station Master of the last terminal station of the division for submission to the Divisional Railway Manager, the original copy to go through as far as the destination station. These through wagon way bills are to be transferred from Guard to Guard. Guards handing over through wagon way bills will obtain acknowledgment in their memo book of having done so; otherwise they will be held responsible if the wagon way bills go astray.

(e) Before starting, the Guard will be responsible for checking the load on the train with the entries on the wagon way bill of wagon numbers, booking and destination stations, type of vehicle open or covered, four wheeler, bogies or special types, tare weights, weights of contents and gross weights etc.

(f) On arrival at destination, the Guard of an incoming train will make over the wagon way bill to the Station Master or the Yard Master or other yard staff specially deputed for the purpose, who will sign for the same in the Guard's memo book.

(g) The Station Master or the Yard Master will despatch daily wagon way bills for mail, express, passenger, troop and other special trains to the Principal Chief Operations Manager and for mixed and goods trains to the Divisional Railway Manager, along with a summary on a prescribed form, in separate covers marked 'Wagon Way Bills; in order they may be readily sorted out from the rest of the dak.

(h) The Station Master or the Yard Master will be responsible that wagon way bills are duly received from Guards and sent to the Principal Chief Operations Manager, or Divisional Railway Managers, as prescribed in the foregoing para.

(i) In calculating the load of goods and mixed trains, Weights less than 5 quintals should be omitted and 5 quintals or more should be counted as one tonne.

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(j) When a bogie carriage (i.e. Coaching stock) is attached to a goods train, it should be counted as equivalent to two and half four-wheeler units for the purpose of calculating the vehicle load of the train.

4.26. Couplings - No vehicle that is not fitted with a coupling or couplings of approved pattern shall be attached to any train.

S.R. 4.26-1. Coupling of vestibuled stock -

(a) The vestibule connections of coaches and other stock so equipped are to be carefully coupled together so that there is no gap between the fall plates.

(b) When a vestibuled coach is the last vehicle on a train or is isolated and the vestibule is not in use, the doors of the unused vestibules must be closed and properly secured.

(c) The Guard must not allow a train to proceed without satisfying himself if some defect is reported to him or comes to his notice.

[CS 4/4 dated 23/10/2001]

D. Vehicles and Cranes.

4.27 Cranes -

(1) No travelling crane shall be attached to a train until it has been certified by a duly authorised person that it is in proper running order, and with a dummy truck for the jib, if necessary.

(2) When a crane is to work on any line provided with electric traction or any line adjacent to it, the procedure and precautions as laid down under special instructions shall also be followed.

S.R.4.27-1. Cranes, Use of on the Electrified area -

(a) Steam or hand cranes shall not be worked adjacent to overhead lines, unless such overhead lines are dead. If the use of steam or hand crane which may foul the overhead equipment, or track lifting is necessary on the electrified area, the Power Controller, Traction Foreman (Overhead Equipment), and Assistant Traction Engineer(Distribution) must be advised and their sanction obtained.

(b) All movements of the crane jib shall be exercised with great care so as not to foul overhead lines. Wherever possible, the direct blast from the crane chimney to the overhead lines or insulators should be avoided.

S.R.4.27-2. Working and care of cranes -

(1) Cranemen - All Cranemen must be in possession of a competency certificate issued by the Divisional Railway Manager. The Craneman is responsible for the efficiency of the crew working under him, who must be trained men.

(2) Attachment of Cranes-

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- (a) No travelling steam cranes are to be worked on the main line, except under the supervision of a certified Craneman.
- (b) Before a travelling crane is allowed to run outside station limits, the jib must be lowered on to its dummy truck, with the jib resting freely on the bolster. The cams beneath the balance weight box or such other contrivance with which the crane is fitted must be brought into use. On steam cranes the outrigger girders must be pushed in and secured and on hand cranes the balance weight box must be fixed close to the crane-pillar. The grippers and all other fittings must be securely stowed away and fastened to prevent their moving. The weight of the crane must be taken on the springs. The Craneman shall ensure this.
- (c) The craneman is responsible to see that no one other than the crane staff are allowed to travel on the crane and travelling in the crane platform is completely prohibited.
- (d) Where possible all cranes should travel with the jib to the rear, but where this is found impracticable, care must be taken to see that the instructions regarding the securing of the jib have been fully observed. When the jib faces the engine, a speed restriction of 40 kilometres an hour must be observed.
- (e) The Train Examiner will certify in the Guard's Memo Book if the crane is fit to run. Before certifying that the crane is fit to run, he must ascertain from the Craneman that the above rules have been complied with.
- (f) A travelling crane shall ordinarily be hauled by goods train. Not more than two cranes are to be attached to a train. If there is no goods train on the section, it may be attached to mixed train. When attached to a mixed train, the crane must be placed amongst the goods wagons. ~~A crane may only~~ be attached to a passenger train with the Principal [Chief Operations Manager's permission](#).
- (g) When the jib of a travelling crane projects beyond the truck, an additional truck shall be attached to act as a dummy.
- (h) 20.3 tonnes, 35.6 tonnes, 50.8 tonnes, 66 tonnes, and 76 tonnes steam cranes, when running on ordinary trains or on breakdown trains are allowed to run on the following sections subject to the conditions shown against each section -

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Conditions

(i)	20.3 tonnes steam crane may run over any section of the Railways	On sections, where coupled engines are allowed, 6 wagons must intervene between the crane and any other crane or any engine on a double headed train: but the crane may be attached next to the engine of a single headed train.
(ii)	35.6 tonnes steam crane. May run over the following sections -	
(a)	Mumbai - Delhi	On sections, where coupled engines are allowed, 6 wagons must intervene between the crane and any other crane or any engine on a double headed train : but the crane may be attached next to the engine of a single headed train. On sections where coupled engines are not allowed, 6 wagons must intervene between the crane and any other crane or any engine on the train.
	Kalyan - Wadi	
	Bhusawal - Nagpur	
	Itarsi - Nagpur	
	Amla - Parasia	
	Dhond - Manmad	
	Wardha - Balharshah	
	Karjat - Khopoli	
	Kurla - Mankhurd	
	Bhusawal - Nagpur	
	Itarsi - Nagpur	
	Amla - Parasia	
	Dhond - Manmad	
	Wardha - Balharshah	
	Karjat - Khopoli	
	Kurla - Mankhurd	
	Jalamb - Khamgaon	
	Badnera - Amraoti	
	Majri - Rajur	
	Tadali - Ghugus	
	Chalisingaon - Dhule	
	Katni - Singrauli	

(b)	Jhansi - Kanpur	6 wagons must intervene between the crane and any other crane or any engine on the train, which must pass over the Betwa Canal and Jamna Bridges at dead slow speed.

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- | | |
|-----------------------|--|
| (c) Ait - Kunch | Must not run over this section at a speed exceeding 25 KMPH. 6 wagons must intervene between the crane and any other crane or engine on the train. |
| (d) Bina - Katni | Must not run over this section at a speed exceeding 65 KMPH subject to a speed restriction of 25 KMPH over the portion of track laid with 36.29 Kg. F.F. rails and all loops and sidings laid with 34 Kg or lighter rail section. 6 wagons must be between the crane and any other crane or engine on the train. |
| (e) Jhansi - Manikpur | Must not run over this section at a speed exceeding 25 KMPH and must pass over the Ken Bridge at dead slow speed. Six wagons must be between the crane and any other crane or engine on the train. |

On sections where coupled engines are allowed, there must be 6 wagons between the crane and any other crane or any engine on a double headed train; but the crane may be attached next to the engine of a single headed train.

On sections where coupled engines are not allowed there should be 6 wagons between the crane and any other crane or any engine on the train.

(iii) 50.8 tonnes steam crane.

May run over the following sections :

- | | |
|--------------------------|-----------------------------------|
| (a) Mumbai - Delhi | Must not run |
| over these sections at a | |
| Kalyan - Wadi | speed exceeding 65 KMPH . |
| Bhusawal - Nagpur | |
| Itarsi - Nagpur | |
| Amla - Parasia | On sections where coupled engines |
| are | |
| Itarsi - Allahabad | allowed there should be 6 wagons |
| Dhond - Manmad | between the crane and any other |
| crane | |
| Wardha - Balharshah | or any engine on a double headed |
| train; | |

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to	Karjat - Khopoli	but the crane may be attached next
	Kurla - Mankhurd	the engine of a single headed train.
	Jalamb - Khamgaon	
six	Badnera - Amraoti	On other sections there should be
	Majri - Rajur	wagons between the crane and any
train.	Tadali - Ghugus	other crane or any engine on the
	Chalisgaon - Dhule	
	Bina - Katni	
	Katni - Singrauli	
	(b) Ait - Kunch	Must not run over this section at a speed exceeding 25 KMPH. There should be 6 wagons between the crane and any other crane or any engine on the train.
	(c) Jhansi - Manikpur	These cranes are not permitted on this section.
	(d) Jhansi - Kanpur	Speed should not exceed 65 KMPH. There should be 6 wagons between the crane and any other crane or any engine on the train. The cranes permitted to run over this section must pass over the Betwa Canal and Jumna Bridges at dead slow speed.
	(iv) 66 tonnes steam crane. May run over the following sections -	
	(a) Mumbai - Delhi	On sections, where coupled engines are
wagons should be between	Kalyan - Wadi	allowed, 6
engine	Bhusawal - Nagpur	the crane and any other crane or
crane	Itarsi - Nagpur	on a double headed train, but the
of a	Amla - Parasia	may be attached next to the engine
	Itarsi - Chheoki	single headed train.
	Dhond - Manmad	

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<p>Wardha - Balharshah</p> <p>Karjat - Khopoli Kurla - Mankhurd Jalamb - Khamgaon</p> <p>be</p> <p>Badnera - Amraoti</p> <p>crane</p> <p>Majri - Rajur Tadali - Ghugus Chalisingaon - Dhule Katni - Singrauli</p>	<p>On other sections 6 wagons should be between the crane and any other or any engine on the train.</p>
<p>(b) Ait - Kunch</p>	<p>Speed should not exceed 25 KMPH and 6 wagons should be between the crane and any other crane or any engine on the train.</p>
<p>(c) Bina - Katni</p>	<p>Maximum speed not to exceed 65 KMPH subject to a speed restriction of 25 KMPH over the portion of track laid with 36.9 Kg F.F. rails and all loops and sidings laid with 34 Kg or lighter rail sections and 6 wagons between the crane and any other crane or any engine on the train.</p>
<p>(d) Jhansi - Manikpur</p>	<p>Maximum speed not to exceed 65 KMPH. 6 wagons must intervene between the crane and any other crane or any engine on the train.</p>

A speed restriction of 10 KMPH will be observed over the following bridges -

From Jhansi	From Mumbai
Kms	Kms
<p>(i) Betwa Bridge</p> <p>13/3</p>	<p>1141/013</p>

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(ii) Dhasan Bridge 78/2	1206/04
(iii) Ken Bridge 188/12	1316/7 to 1317/2
(e) Jhansi - Kanpur	Of the 66 tonnes crane only No. 43930 and No. 43931 are permitted to run over this section. Six wagons must intervene between the crane and any other crane or any engine on the train. The two cranes permitted to run over this section must pass over the Betwa Canal and the Jumna Bridges at dead slow speed.

Six wagons must be between the crane and any other crane or any engine on a double headed train or single headed train, but the crane may be attached next to the engine of a single headed train.

- Note :
- (a) Cranes must not be allowed to lift or swing loads on steel or arched bridges without the special permission of the Chief Engineer.
 - (b) On the Thull & Bhore Ghats, on the Mumbai Division, must be adopted in marshalling these cranes on trains -
 - (i) Down Direction - The crane should be marshalled in the leading half of the train.
 - (ii) UP Direction - 20.3 tonnes & 35.6 tonnes cranes should be marshalled in rear of the train and a 66 tonnes crane not nearer to the engine than the 20th vehicle.

The use of a crane which is likely to foul the overhead equipment on an electrified area is subject to the conditions laid down in S.R. 4.27-1 (a) and (b).

- (iv) (a) 76 tonnes steam crane.
May run over the following sections -
 - (i) Mumbai - Delhi
 - (ii) Bhusawal - Nagpur
 - (iii) Itrasi - Nagpur
 - (iv) Itrasi - Allahabad
 - (v) Kalyan - Wadi
 - (vi) Dhond - Manmad
- 65 KMPH

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On all sections, 6 wagons must be between a crane and any other crane or any engine but the crane may be attached next to the engine on a single headed train.

(7) Operation -

- (a) Detailed instructions in connection with the operation of hand and steam cranes are embodied in a booklet issued by the Chief Operating Manager and the Chief Mechanical Engineer.
- (b) Under no circumstances must a crane be loose shunted or a loose shunt made against a crane.
- (c) The bearing spring must be relieved of the weight of the crane by the means provided, the outrigger girders must be fully extended to project equally on both sides of the crane and securely packed up and the claws or grippers must clip the rails firmly. On hand cranes the cams beneath the balance weight box may next be thrown out of gear and the balance weight box must be traversed outwards to its full extend and clamped. The rising pulley block on the chain must always be used when lifting loads above half lifting capacity of a hand crane.
- (d) Two cranes of unequal lifting capacity must not be operated together to lift any one heavy article, unless the lifting capacity of the smaller crane is at least equal to half the weight to be lifted. In such cases the sanction of the Divisional Railway Manager must be obtained.
- (e) When a crane is liable to foul another line during working, it must be in-charge of responsible official, such as an Inspector. The Station Master at either end of the section must be advised to issue Caution Orders to the Drivers of trains proceeding into the section. The Inspector in-charge of the crane must, when the crane is likely to foul another line, protect that line with banner flags and hand signals in accordance with S.R. 15.09-1. Such banner flags and hand signals may only be removed on his authority when the crane has stopped working and the jib has been placed parallel to the track, clear of the adjacent road.
- (f) It is desired to work a crane or cranes on a bridge, the permission of the Divisional Engineer must be obtained, who will, if necessary obtain the sanction of the Chief Engineer. The maximum weight to be lifted and the maximum radius and angle at which the jib will work should be given for guidance.

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- (g) Posting of rules-Mounted copies of rules of working cranes are to be displayed on the back of the water tank in the case of steam travelling cranes, and on the back of the balance-weight box in the case of hand travelling cranes.

- (8) Cranes belonging to the engineering or mechanical departments must be worked solely by Certified Cranemen appointed by those departments and the Cranemen are responsible for the proper working of the cranes.

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4.28. Loading of vehicles -

(1) No wagon or truck shall be so loaded as to exceed the maximum gross load on the axle fixed under sub-section (3) of section 53 of the Act, or such less load, if any, as may have been prescribed by the Railway Administration.

(2) Except under approved special instructions, no vehicle shall be so loaded as to exceed the maximum moving dimensions prescribed from time to time by the Railway Board.

(3) When a load in a truck projects to an unsafe extent beyond the end of truck, an additional truck shall be attached to act as a dummy.

(4) The Guard shall, unless this duty is by special instructions imposed on some other railway servant, carefully examine the load of any open truck which may be attached to the train, and if any such load has shifted or requires adjustment, shall have the load made secure or the truck removed from the train.

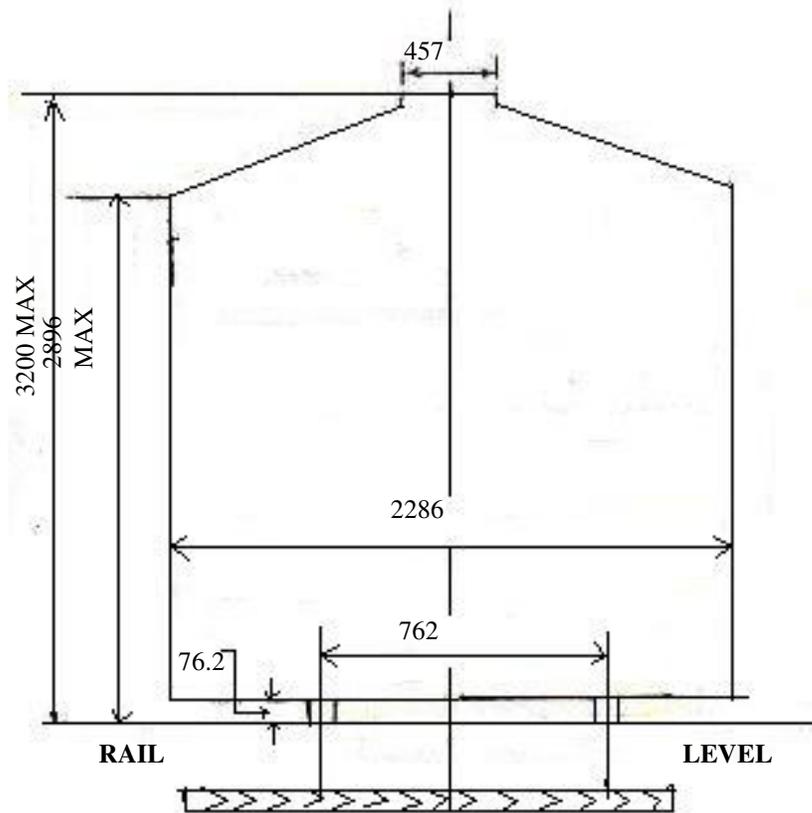
S.R.4.28-1. Moving dimensions -

(a) Except under approved special instructions, every vehicle and its load must be within the dimensions shown in the diagrams below -

Maximum & Minimum Dimensions Coaching

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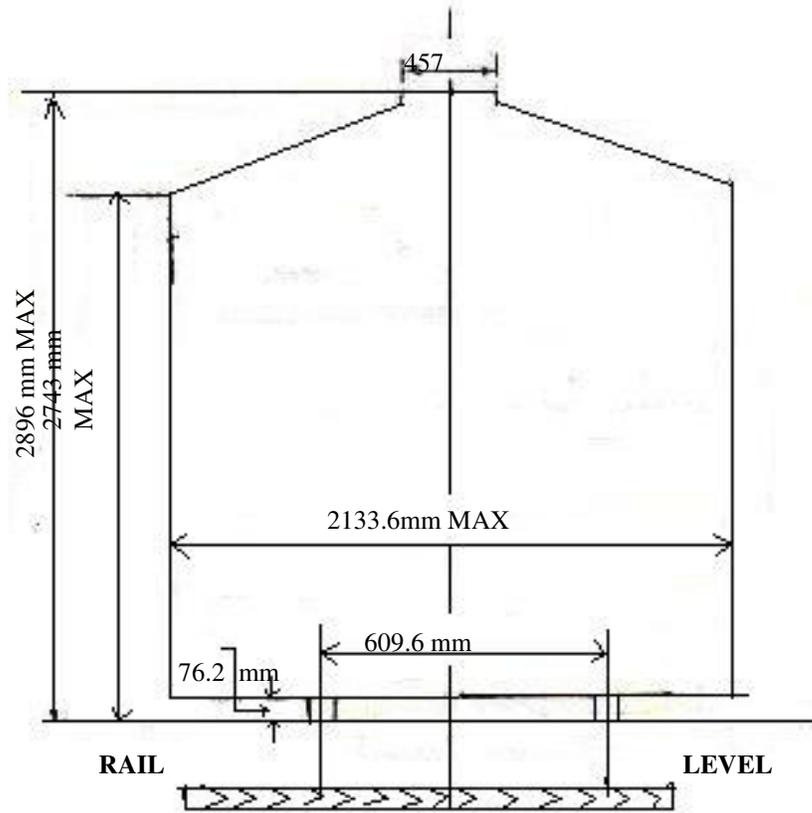
MAXIMUM MOVING DIMENSIONS 762 mm GAUGE (NARROW)



All dimensions are in mm.

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MAXIMUM MOVING DIMENSIONS 609.6 mm GAUGE (NARROW)



S.R.4.28-2. Projecting load -

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When it is found necessary, in consequence of the contents projecting beyond the end or ends of a wagon, to attach one or more guard wagons thereto, Guards must be careful to see that they are not separated from the wagon or wagons in which the overhanging load is placed.

S.R.4.28-3. Loads infringing Standard Moving Dimensions -

(a) Loads which infringe standard moving dimensions will not be despatched without the sanction of the Principal Chief Operations Manager, who will, if necessary, obtain the sanction of the Commissioner of Railway Safety through Chief Engineer.

(b) Running of 132 Tonnes Broad Gauge Well Wagon-

(i) This well wagon is to run only on the following sections of this Railway with prior approval of PCOM.

- (a) Wadala Road-Mahim chord.
- (b) Wadala Road - Kurla - Kalyan - Manmad - Bhusawal - Itarsi - Bhopal - Bina -Jhansi - Tughlakabad.
- (c) Kurla-Mankhurd.
- (d) Kurla-Trombay.
- (e) Naini-Itarsi.
- (f) Kalyan-Wadi.
- (g) Bhusawal-Nagpur.
- (h) Itarsi-Nagpur.
- (i) Wardha-Ballarshah.
- (j) Bina-Katni.
- (k) Karjat-Khopoli.
- (l) Dhond-Manmad.
- (m) Jalamb-Khamgaon
- (n) Badnera-Amraoti
- (o) Amla-Parasia
- (p) Majri-Rajur
- (q) Kurla - Dadar

(ii) The well wagon either loaded or empty, must always be run as a special train and must be accompanied by a Transportation Inspector/Special duty Guard, a Train Examiner, a C&W fitter and two C&W khalasies.

(iii) There must be at least 6 wagons between the engine and this well wagon. When it is necessary to attach a banking engine in the rear, there must be at least 6 wagons (including the goods brakevan) between this well wagon and the banking engine. No wagons other than guard wagons should be attached to the train.

(iv) The maximum speed of the special train carrying this well wagon will be 30 kms.P.H.

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(v) The speed must be restricted to 15 kms. P.H. over the following 6 bridges over Wadala Road-Tughlakabad section.

(a) Kali Machk bridge Harsud and Khirkiya at Kilometres 625/10-12.

(b) The following 5 bridges between Agra Cantt. and Tughlakabad -

(i) 1/40' Girder at kms. 1372/12 T.P. 2/40'

(ii) 2/40' Girder at kms.1283/5 T.P.

(iii) 1/20' Girder at kms.1436/7 T.P.

(iv) 1/40' Girder at kms.1447/14 T.P.

(v) 1/40' Girder at kms.1475/15 T.P.

Note : All other restrictions given in the sanction for the movement of the well wagon must be strictly observed.

(vi) This well wagon must not be loose or fly shunted.

(vii) This well wagon must not be booked to destinations beyond the Indian territory.

Note : Guard Wagon - Definition of - Empty wagon/Coaching vehicle or loaded wagon/coaching vehicle but not containing explosives, dangerous or goods of inflammable nature or duly locked empty passenger coach can be used as Guard wagon. These wagons are required to be attached in front and in rear of the wagons containing explosives, ammunitions and inflammable liquids/gases etc. Instead of two Guard wagons one 8 wheeler Guard wagon may be attached.

S.R.4.28-4. Explosives and Ammunitions, Wagons containing -

(a) The maximum number of wagons or powder vans containing military explosives and ammunitions that can be carried by each class of trains is as follows -

(i) By goods trains - 5

(ii) By passenger trains - 2. As far as possible, powder vans will be used for transport of explosives.

(iii) By mixed trains - 4 powder vans or 3 covered wagons.

(b) All wagons containing ammunition and explosives must be marshalled together and close coupled to one another and also to the adjoining vehicles on either side.

(c) The total quantity of explosives permitted to be carried in any one wagon shall not exceed the marked capacity of the wagon subject to rules given in Red Tariff.

(d) Wagons containing ammunition and explosives must be preceded and followed by two guard wagons exclusive of brakevan. One guard wagon should be provided between the locomotive and such wagons if marshalled next to engine. As

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far as possible, wagons containing explosives or explosive vans on passenger trains will be attached in the rear.

- (e) The above rules regarding guard wagons will also apply to military specials.

(f) The number of explosive and ammunition wagons to be carried by military special train and their marshalling arrangements will be regulated by rules in the Military Tariff. The maximum load of such a train should be the load that a scheduled locomotive can haul on the various sections.

S.R.4.28-5. Carriage of Petroleum and other inflammable liquids by trains -

Petroleum and other inflammable liquids are divided into Class 'A', which are highly inflammable, and Class 'B' which are inflammable. The common types of class 'A' liquids carried on the railway are aviation spirit, benzene, crude oil, petrol (motor spirit), solvent oil, methanol and naphtha. The common types of Class 'B' liquids are diesel oil, furnace oil, jet turbine fuel kerosene and turpentine. Details are given in the Red Tariff.

S.R.4.28-6. Carriage of Petroleum and other inflammable liquids by Passenger or Mixed trains -

(a) The maximum number of tank wagons or vans containing packed petroleum and other inflammable liquids that can be carried by passenger or mixed trains is four.

(b) Such wagons must be grouped together and close-coupled to one another and also to the adjoining vehicles on either side and must be marshalled as far away as possible from the locomotive.

(c) Wagons containing Class 'A' liquids must be preceded and followed by two guard wagons exclusive of brakevan. If wagons containing Class 'A' liquids are marshalled next to locomotive, one guard wagon should be provided between locomotive and such wagons. Wagons containing Class 'B' liquids need be separated by one guard wagon in front and one in rear. However, the number of guard wagons in front and in rear will not be less than two when wagons contain gases (Compressed, liquified or dissolved)

(d) All empty wagons which had contained either Class 'A' or Class 'B' inflammable liquids should be treated in the same way as wagons actually containing the inflammable liquids and should be separated in front and rear as per item (c) above.

S.R.4.28-7. Carriage of petroleum and other inflammable liquids by goods trains -

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(a) Tank wagons or other wagons loaded with petroleum or other inflammable liquids Class 'A' or Class 'B' may be carried by goods train or specials as load permits.

(b) Such wagons must be grouped together and close-coupled to one another and also to the adjoining vehicles on either side and must be marshalled as far away as possible from the locomotive.

(c) In the case of wagons containing Class 'A' liquids, they must be preceded by one and followed by two guard wagons exclusive of brakevan. Wagons containing Class 'B' liquids need be separated by one guard wagon in front and one in rear. However, the number of guard wagons in front and in rear will not be less than two when the wagons contain gases (compressed, liquified or dissolved.)

(d) All empty tank wagons which had contained Class 'A' or Class 'B' inflammable liquids should be treated on par with wagons actually carrying the inflammable liquid.

4.29. Damaged or Defective vehicles -

(1) No vehicle which has been derailed shall run between stations, until it has been examined and passed by a competent Train Examiner:

Provided that in case of a derailment between stations, the Driver may, if the vehicle has been rerailed and if he considers it safe to do so, take such vehicle to the next station at a slow speed.

(2) If a Guard or Station Master has reason to apprehend danger from the condition of any vehicle on a train before it can be inspected by a Train Examiner, the Driver shall be consulted, and if he so requires the vehicle shall be detached from the train.

S.R.4.29-1. Disabled vehicle, wagon or damaged engine -working of -

Whenever a Loco Foreman or Train Examiner considers it safe to attach a disabled vehicle, wagon or damaged engine behind the rear brakevan, a Station Master on receiving a written advice to this effect, may attach such a vehicle, wagon or engine behind the rear brakevan of goods train or a mixed train on sections where no goods trains generally run, during day light and in clear weather. After sunset or if the weather is thick, foggy or tempestuous, the vehicle, wagon or engine, must be detached and sent on again in day light or when the weather is clear. The original advice must be given to the Guard of the train for submission with the journal. If the vehicle, wagon, or damaged engine is detached before reaching its destination, the original advice must be made over to the Station Master, who will give it to the Guard of the train by which the vehicle, wagon or engine is subsequently despatched. Only one such vehicle, wagon or engine can be attached in the rear of a goods or mixed train. The Loco Foreman or Head Train Examiner should depute a competent railway servant to accompany the train when such a vehicle, wagon, tender or engine is attached.

S.R.4.29-2. Hot Axles -

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- (a) Any railway servant observing a hot axle on a running train must do everything in his power to stop the train and warn the train staff.
- (b) If an axle box of a vehicle or wagon is found running hot at a station, other than a train examining station, the vehicle or wagon must be detached from the train. The vehicle or wagon must not be worked onward except as provided for in sub-para (c).
- (c) If an axle box is observed to be running hot between stations, the train must be brought to a stand immediately and the axle box examined by the Driver after opening the axle box face plate. The Driver should exercise his discretion with regard to the restricted speed at which it is safe for the vehicle or wagon to travel. On arrival at the first block station with detaching facilities, the vehicle or wagon must be detached from the train.
- (d) Immediately a vehicle is detached from a train at other than a train examining station, the Station Master must advise the Head Train Examiner under whose jurisdiction his station is situated by wire, quoting the number, type and owning railway of the vehicle.
- (e) Water must not be poured on a hot box to cool it.
- (f) Before a wagon is attached to a train at a way-side station other than a train examining station, the Driver must examine the axle boxes to ensure that the wagon is safe to run.

S.R.4.29-3. Vehicle, Repairs to -

- (a) When a vehicle has to be taken out of traffic for repairs, it must be stencilled 'Not to run' on both sides as near the label holder as possible, in the case of goods stock, and on the sole-bars in the case of coaching vehicles. In addition, the prescribed 'Damaged not to Go' labels must be pasted on both sides of a goods vehicle near the label holders, or tacked on to foot boards in the case of a coaching vehicle. If a vehicle is not to be transhipped, the inscription on the same label 'Tranship load' should be deleted.
- (b) When a vehicle or wagon has been marked sick for placement in a sick siding, the Train Examiner will send a written memo (on form T.262 B. Revised 1940) giving the number of vehicle, owning railway, time and date marked sick and reasons, and send it to the Station Master, Yard Master or Trains Clerk concerned. A register will be maintained in the Station Master's or Yard Master's office in which particulars of sick vehicles will be maintained and also the date and time at which a vehicle was marked fit for traffic. The Trains Clerk, Shunting Master and Yard Master as they come on duty will examine this register and initial it.
- (c) All wagons marked sick shall be detached in a siding set apart for sick wagons and placed into the sick siding or tranship shed as required, without delay.
- (d) The Train Examiner, the Guard, the Station Master, the Shunting Master and the Trains clerk are jointly responsible to see that no sick vehicle is worked away until certified fit to run. After the repairs are carried out, the stencil marks and labels must be removed.

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S.R.4.29-4. (i) Whenever any unsafe condition on a train while passing through the station is noticed, such as hot axle, loose wagon/vehicle undergear hanging etc., the Station Master/Cabin Staff should take immediate steps to stop the train by exhibiting hand danger signal putting the fixed signals to 'On' etc.

If the measures taken by station staff to stop the train fail to attract the attention of the train crew, the Station Master/CASM/Switchman should immediately transmit 'Stop and Examine Train' signal to the station in advance on block instrument, telephone attached to the block instrument or on electric communication instrument. The Section Controller should also be simultaneously advised, who shall take measures to stop the train at the station immediately in advance and ascertain the cause.

(ii) The Station Master, on receipt of 'Stop Examine Train' signal, shall not admit the train directly unless it is ensured that the train has been brought to stop outside the first stop signal. The approach signals may thereafter be taken 'Off' for admission of the train, if the train can be received on the main line.

In the event of the main line being not available and the train is to be received on a loop line, the Station Master, after ensuring that the train has come to a stop outside the first stop signal, shall arrange to advise the Driver of the train of the reason of the train being so stopped through a member of station staff. The Driver on being so advised shall examine the train to ascertain if it would be safe to work the train up to the station negotiating crossover for entry into the loop line. The train, thereafter, may be piloted up to the station after fixed signals have been taken 'Off' and it has been ascertained by the Driver that it is safe to do so. The Driver while negotiating the facing points shall observe the speed restriction which, under no circumstances, shall exceed 10 KMPH.

(For other instructions refer para 4.10 of Block Working Manual)

E. Precautions before Starting Train.

4.30. Driver and Guard to examine notices before starting-Every Driver and Guard before starting with a train shall examine the notices issued for their guidance, and ascertain there from whether there is anything requiring their special attention on that section of the railway over which they have to work.

S.R. 4.30-1. Notices, Drivers and Guards to acquaint themselves with -

Copies of Monthly Gazette are kept in the Station Master's/Yard Master's and the Engine Turner's offices and when 'signing on duty' Drivers and Guards must read all instructions pertaining to them in the Monthly Gazette and sign in acknowledgment of having read and understood them. A register is also maintained

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in each shed in which all current speed restrictions are entered and before going out on each trip each Driver must scrutinize this register and sign it. The Drivers must also acquaint themselves with the instructions contained in the Order Book, maintained in the Engine Turner's office and append their signatures in token of having read and understood them.

(For Guards Order Book refer S.R. 4.34-1 (a).)

4.31. Examination of trains before starting-

- (1) **When a train is examined by a Train Examiner at a station, the Station Master shall not give permission to start the train until he has received a report from such examiner to the effect that the train is fit to proceed and has the prescribed brake power.**
- (2) **At station where no Train Examiner is posted or at way side station while clearing the stabled load, the Guard and the Driver -**
 - (i) **shall ensure vacuum or air pressure continuity and adequate brake power by counting operative or non-operative pistons before starting.**
 - (ii) **shall ensure by visual examination that there are no loose fittings in the under gear including brake blocks, safety brackets, track area pins, brake gear pins which may endanger the safe running of the train;**
 - (i) **shall check up the validity of the Brake Power Certificate. In case validity period is over, shall work the train up to the next Train Examiner point in the direction of movement and control shall be informed through the SM by making endorsement on joint memo which shall be prepared as specified in clause (iv); and**
 - (ii) **shall prepare the memo jointly on plain sheet in triplicate indicating the brake power and deficiency, if any, and shall append their signatures on the same and both of them shall retain a copy of the same. Third copy thereof shall be handed over to the Station Master.**
- (3) **The Station Master shall not permit the Guard and the Driver to start the train until he has received a joint memo from both of them to the effect that the train is fit to proceed.**

[CS No.6 Item No.2] [Rly. Bd's letter No. 2000/Safety(A&R)/19/35 dt. 31/7/01]

S.R.4.31-1. Carriage and Wagon staff, protection of -

Whenever it is necessary for the carriage and wagon or electrical staff to work underneath or between rolling stock or in any other dangerous position on the train, they must take the following precautions -

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(a) Passenger trains - Before commencing work the Train Examiner must place a red disc by day and a red light by night at each end of the train. Before the Station Master on duty authorises the ringing the starting bell or the Guard gives the hand signal for starting, each must satisfy himself that the red disc or the red light is removed by the Train Examiner. The red disc or red light must only be removed by or under the personal direction of the Train Examiner.

(b) Goods trains-

(i) The Train Examiner must first protect the train by placing a red banner flag or a red lamp at each end of the train and before commencing work, he must obtain the signature of the Station Master, Yard Master or Shunting Master on the prescribed form (T.325 B).

(ii) The banner flags or the lamps should be placed so as to be clearly visible on both sides and in both directions and may only be removed by the person who put them in position, or under his directions. When the flags or lamps are removed, the time must be noted in the aforesaid form and the signature of the official concerned must again be obtained.

(c) The instructions in sub-para(b) above also apply in respect of all stock standing alone or forming part of a rake on any road or siding other than recognized carriage and wagon sick siding under the control of the Train Examiner.

(d) In case of air braked trains (coaching/goods) Driver and Guard, before signing the record copy of brake power certificate, shall carry out pressure continuity test for ensuring continuity of air pressure from locomotive to the last vehicle of train. Air pressure continuity test should be carried out as per procedure laid down in working Time Table. Driver and Guard should personally check the correct quantity of air pressure in feed pipe/brake pipe gauge to avoid cross connection between feed pipe and brake pipe.

4.32. Examination of train by Driver - The Driver shall, before the commencement of the journey and after performing any shunting enroute, ensure-

- (a) that his engine is in proper working order,**
 - (b) that the coupling between the engine and the train is properly secured,**
- and**
- (c) that the head light and marker lights as prescribed in sub-rule(1) of Rule 4.14 are in good order, and these are kept burning brightly, when required.**

S.R. 4.32-1. (a) The Assistant Driver will uncouple the engine when it has to be detached for Loco purposes.

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(b) Precaution before moving an engine- Drivers and Shunters must personally satisfy themselves before moving an engine that nobody is working under it or is in a position to be injured by moving the engine.

(c) A Driver shall not take his train on to a running line until he has tested all his control, power and brake apparatus and found them in proper prescribed working order and is in possession of the required brake power certificate. He shall, in addition carry out inspections and tests in accordance with special instructions. The brake power of the train shall be tested by the Driver in the first block section after taking over charge of the engine and after performing shunting enroute.

In case of air braked train also ensure continuity of air pressure in whole train.

4.33. Examination of single and multiple units by Driver - When coupling single or multiple units or coaches of any such units together, the Driver shall be responsible for observing that all electrical couplings are properly made. After all couplings have been made, the Driver while taking over the complete train shall satisfy himself that all control and power apparatus and brakes of the complete train are in proper and prescribed working order.

4.34. Duties of Guard when taking over charge of a trains- The Guard when taking over charge of a train shall satisfy himself, before the train is despatched-

- (a) that the train is properly coupled,
- (b) that the train is provided with the prescribed brake power,
- (c) that the train carries tail board or tail lamp and side lamps and that such lamps are lighted and kept burning brightly , when required,
- (d) that the appliance, if any, for communication between the Guard and the Driver, is in proper working order, and
- (e) generally that, as far as he can ascertain, the train is in a state of efficiency for travelling.

S.R.4.34-1. Guards, Duties of -

The Guards must, before starting, comply with the following additional instructions :

(a) Guard's Order Book - Guards' Order Books are maintained at all headquarter stations and Guards, on reporting for duty, are responsible for scrutinizing this book for any fresh orders which may have been received and issued through this medium and append their signatures in token of having understood them.

(b) Coupling of Trains -

(i) In case of goods train originating from a station/yard the Guard must see that all the screw couplings of his train are tightly screwed and the air pressure pipes are connected before the train leaves station/yard.

(ii) In case of coaching trains this responsibility lies with Train Examiner.

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(c) The Guard must test the hand brake of his brake-van and inspect tail lamp/tail board.

(d) The Guard shall see that his train is properly marshalled in accordance with instructions in force.

(e) Before entering the Thull and Bhore ghats, Guards of all trains (including material trains) must examine at Kasara, Igatpuri, Karjat or Lonavla, the side and end doors of all stock that open outwards and ensure that all such doors are properly secured or locked so that they cannot swing out. The ~~Assistant Guard and the~~ station staff will assist them in this duty. The Guard of a material train must also ensure that all outward opening doors are secured and locked before the commencement of work in a section between stations and after completion of work before the train resumes running.

(f) When taking over charge of a train and before signing the train examiner's Brake Power certificate, the guard of a train shall ensure that the train examiner has signed in the Brake Power certificate form that

- i) the doors of all carriages and wagons are in proper working order and can be closed and fastened.
- ii) Vestibules connection are properly secured, that doors, when necessary are locked and bolted.

(g) If it is noticed enroute that the air pressure on the rear brakevan has fallen below the minimum prescribed and the defect cannot be traced, the Driver will work the train forward to the next train examining station by utilising the available brake power of the train. In such a case the train shall be treated as partially air braked and the Driver and the Guard must exercise great care. If the Driver is unable to control the load effectively by means of the available brake power, he shall work forward cautiously at a reduced speed with the assistance of hand brakes. In addition, the hand brakes of sufficient number of wagons may be pinned down/screwed to have effective brake power for controlling the train.

(h) The Guard in-charge of a goods train must see that open wagons are properly sheeted to protect inflammable or perishable goods from sparks or from rain and that heavy loads are securely fastened; that the doors of all wagons are properly secured and every fastening fixed and that all seals are intact.

(i) The Guard of the train should also examine the setting of the empty/load box when taking over the train and ensure correct setting. When a box wagon is attached or detached at road side stations, the Guard should see to the correct setting of the empty/load box. (Also see instructions contained in S.R.5.23-2).

(j) The prescribed load is given in the Working Time-Table. Guards are jointly responsible with Station Masters for seeing that shunting operations on their trains are properly carried out.

~~(k) Guard of a passenger carrying train must ensure that the doors of the rear and front luggage van (loaded or empty) are properly closed and locked. If Assistant Guard is available on the train he will be responsible for front SLR.~~

4.35. Starting of trains -

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(1) A Driver shall not start his train from a station without the authority to proceed. Before starting the train, he shall satisfy himself that all correct fixed signals and, where necessary, hand signals are given and the line before him is clear of visible obstructions and the Guard has given the signal to start.

(2) The Guard shall not give the signal for starting the train unless he has received the permission of the Station Master to start, in the manner prescribed by special instructions.

(3) The Guard shall not give the signal for starting unless he has satisfied himself that, except in accordance with special instructions, no person is travelling in any compartment or vehicle or roof of the vehicle not intended for the use of passengers. Guard, Loco Pilot or Assistant Loco Pilot shall take help, if necessary from Government Railway Police, Railway Protection Force and Station Staff to remove the unauthorized persons from the compartment or vehicle or roof of the vehicle.

(CS 14/3 vide Rly Board's letter No. 2013/Safety(A&R)/19/12 dated 20.11.2014)

(4) The Station Master shall see, before he gives the Guard permission to start a train, that all is right for the train to proceed.

(5) The permission of the Station Master referred to in sub-rule (2) may be dispensed with in case of suburban trains on such section of a Railway as may be specified by special instructions.

(6) When permission of the Station Master to start has been dispensed with under sub rule (5) or at a station where no Station Master is posted, the Guard shall see, before giving the starting signal, that all is right for the train to proceed.

~~S.R.4.35 1 Starting of trains~~

~~(a)(i) No train shall be started from a station by the Guard of the train unless the Station Master has permitted the train to leave.~~

~~(ii) The Station Master will give permission to start a train only when the following conditions are fulfilled~~

~~(1) Line Clear from the Station ahead has been obtained.~~

~~(2) Correct starting signal has been taken 'Off' or starting permit has been sent to the Driver.~~

~~(3) The last stop signal has been correctly taken off on double line or on single line where tokenless block instruments are in use. In addition, on single line, the tangible authority to proceed, where in use, has been sent to the Driver.~~

~~(4) In case of starter or Advanced Starter Signal being defective, the provisions of Rule 3.70 and S.R.3.70 1, 3.70 2, 3.70 3 thereunder have been complied with.~~

~~(5) For defective Intermediate Block Home, the Station Master shall in addition, comply with the provision of S.R.3.75 1. (d).~~

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~~(b)(i) For passenger trains, the Station Master will give permission to the Guard to start the train either personally or by having the station bell rung according to the prescribed code or giving a green hand signal to the Guard.~~

~~(ii) The Guard of the EMU, DMU or MEMU should authorise the train to start, provided he has satisfied himself that conditions for the train to start are complied with except that the responsibility to see that the correct signal has been taken 'Off' for the train will be that of the Motorman/Driver.~~

~~(c)(i) For Goods trains taking 'Off' of the starter and the Advanced Starter signals on double line or on single line where tokenless block instruments are in use will be considered as the Station Masters permission to start the train. On single line where tangible authority to proceed is in use, the Driver should be in possession of the same in addition to the taking 'Off' of the Starter and Advanced Starter signals.~~

~~Where Starting signals are not provided, the Driver must also be in possession of a Starting permit.~~

~~(ii) When the conditions laid down in (c)(i) are fulfilled, the Driver of a Goods trains will sound the engine whistle in token of having observed that the correct signal have been taken 'Off' for his train or in the event of defective starter and of Advanced Starter signals that he has in his possession the authority on form T.32.B to pass the same at danger, on which the Guard will give his permission to start.~~

SR 4.35-1 Starting of trains –

- a) (i) No train shall be started from a station by the Guard of the train unless the Station Master has permitted the train to leave.
- (ii) The Station Master will give permission to start a train only when the following conditions are fulfilled -
 - (1) Line Clear from the Station ahead has been obtained.
 - (2) Correct starting signal has been taken 'Off' or starting permit has been sent to the Loco Pilot.
 - (3) The last stop signal has been correctly taken off on double line or on single line where tokenless block instruments are in use. In addition, on single line, the tangible authority to proceed, where in use, has been sent to the Loco Pilot.
 - (4) In case of starter or Advanced Starter Signal being defective, the provisions of Rule 3.70 and S.R.3.70-1, 3.70-2, 3.70-3 there under have been complied with.
 - (5) For defective Intermediate Block Home, the Station Master shall in addition, comply with the provision of S.R.3.75-1, 2 & 4.
- (b) (i) Taking 'Off' of Starter and the Advanced Starter signals on double line or on single line where tokenless block instruments are in use will be considered as the Station Masters permission to start the train referred to in clause (2) of GR 4.35. On single line where tangible authority to proceed is in use, the Loco Pilot should be in possession of the same in addition to the taking 'Off' of Starter and Advanced Starter signals.

WORKING OF TRAINS GENERALLY

Where Starting signals are not provided, the Loco Pilot must also be in possession of a Starting permit.

- (ii) When the conditions laid down in (b)(i) above are fulfilled, the Loco Pilot of trains will sound the engine whistle in token of having observed that the correct signal have been taken 'Off' for his train or in the event of defective Starter and Advanced Starter signals that he has in his possession the authority on form T.369(3b) to pass the same at danger, on which the Guard will give his permission to start.

CS 13 item no.2 Ref : Office note No. TR/G&SR/Gen./102 dated 13.08.2012

~~S.R.4.35-2 Starting of trains, Guard's duties before.~~

~~(i) On receipt of Station Master's permission to start the train and when all work in connection with the train is completed, the Guard will sound his whistle and display a green flag by day or a green light by night to the Driver to start his train.~~

~~Note : On the electrified suburban section, the code of bell signal to be given by the Guard to the Motormen will be 2 rings for starting and 1 ring for stopping. In the event of the bell circuit becoming defective the train should be started by the Guard by means of hand signals as for other trains.~~

~~(ii) The Guard in charge of a passenger carrying train must satisfy himself by visual check that passengers have detrained and entrained.~~

~~(iii) On sections of the line where banking engines are employed, the Guard, after giving the starting signal to the Driver in front, shall immediately repeat the signal to the Driver in rear.~~

~~(iv) In the case of the Driver having to pass an automatic signal in the 'On' position, the Guard will observe the provisions of G.R.9.07.~~

SR 4.35-2 Starting of Trains; Guard's duties before –

- i) After Station Master's permission to start the train as per SR 4.35-1(b)(i) and when all work in connection with the train is completed, the Guard will sound his whistle and display a green flag by day or a green light by night to the Loco Pilot to start his train.
- ii) In case of passenger carrying train, Guard must satisfy himself by visual check that passengers have detrained and entrained, ensure that departure signals are taken 'Off' for his train either by personal verification and if not visible, by confirming through Loco Pilot of his train and will sound his whistle before giving the signal to start.
- iii) The Guard's signal to the Loco Pilot to start the train shall be display of green flag by day or green light by night.
- iv) In case of EMU, DMU or MEMU trains the Guard should authorise the train to start by giving prescribed code i.e. 2 rings, provided he has satisfied

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himself that conditions for the train to start are complied with except that the responsibility to see that the correct signal has been taken 'Off' for the train will be that of the Motorman/Loco Pilot.

- v) On sections of the line where banking engines are employed, the Guard, after giving the starting signal to the Loco Pilot in front, shall immediately repeat the signal to the Loco Pilot in rear.
- vi) In the case, Loco Pilot has to pass an automatic signal in the 'On' position, the Guard will observe the provisions of G.R.9.07.

Note: At stations where it is not possible to exchange the signal physically between Guard and Loco pilot due to longer composition of train/curvature the Guard shall ask the Loco Pilot to start the train on walkie-talkie after confirming the departure signals are taken 'Off' for his train and continue to exhibit the signal till it is acknowledged by the Loco Pilot/Asst. Loco Pilot.

CS 13/3 (Ref. :- Office note No. TR/G&SR/Genl./102 dated 13.08.2012)

S.R.4-35-3. Brakevans, travelling in -

No Railway Servant shall, otherwise than in the execution of his duty, ride in a brakevan or in any vehicle in which luggage or parcels are being carried. Railway servants and others whose passes are endorsed as 'Available by Goods train brakevans' may be allowed to travel in goods brakevans.

Train crew/guard, maintenance staff & security staff can travel in B/van of passenger train in case of emergency only. Not more than three persons excluding guard should be permitted to travel in B/van of passenger train.

The number of persons permitted to travel in the brake van of goods trains in addition to the guard should not exceed five. However in emergent cases exception may be made for security staff, police, repair gangs of S&T/medical staff etc. with the prior approval of Sr.DOM of the concerned division.

S.R.4.35-4.

(a) When a train carrying passengers is due to leave and all work in connection with it is finished, the Station Master shall authorise the station bell to be run except between the hours of 22 and 6 as follows-

One beat for starting a down train, two beats for an up train and four beats for a branch line train.

(b) At all stations, except on the Bombay suburban section sharp continuous beats shall be given on the Station bell to announce the approach of a stopping train.

S.R. 4.35-5. Precautions - drawing a train ahead - If a train after it has stopped at a station/Yards to be drawn ahead for any reason beyond the starter signal, the Station Master shall advise Guard and Driver of the train in writing the reason for doing so. A pilotman would invariably be deputed by Station Master for this

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purpose. The Driver may then draw his train ahead on receipt of “all right” hand signal from the pilotman only upto the fouling mark. The Starter signal, must not be taken ‘Off’ for drawing the train ahead.

When a train, part of which has gone beyond the Starter signal after drawing it ahead has to restart, the Station Master after ensuring that Line Clear has been obtained from the Station in advance shall authorise the taking ‘Off’ of the last stop signal and issue starting permit on prescribed form T.189-B to the Driver. The Driver will not start his train unless he has received such an authority from the Station Master.

4.36. Guard to be in charge of train - After the engine has been attached to a train, and during the journey, the Guard or (if there be more than one Guard) the Head Guard shall be in charge of the train in all matters affecting stopping or movement of the train for traffic purposes. In the case of any self-propelled vehicle, such as a motor coach without a trailer and unaccompanied by a Guard, the duties of the Guard shall devolve on the Driver.

4.37. Subordination of Guards in station limits - When a train is within station limits, the Guard shall be under the orders of the Station Master.

4.38. Firemen and Assistant Drivers to obey Drivers - The Firemen or Assistant Driver shall obey the lawful orders of their Drivers in all particulars.

4.39. Driver to obey certain orders - After an engine has been attached to a train and during the journey, the Driver shall obey -

(a) the orders of the Guard, in all matters affecting the starting, stopping or movement of the train for traffic purposes, and

(b) all orders given to him by the Station Master or any railway servant acting under special instructions, so far as safe and proper working of his engine will admit.

F. Duties of Staff Working Trains during Journey

4.40. Driver and Fireman or Assistant Driver to keep a good look out -

Every Driver shall keep a good look-out while the train is in motion, and every Fireman or Assistant Driver shall also do so when he is not necessarily otherwise engaged.

S.R. 4.40-1. Calling out of signal aspects by engine crew -

The Assistant Driver/Diesel Assistant shall assist the Driver in sighting the signal aspects. He shall call out the aspects displayed by the signals from the place from where the signals can be sighted. The Driver, after personally verifying the correct aspect of the signal shall repeat the same. This however does not absolve the Driver of his responsibility contained in G.R. 3.78 and S.Rs there under.

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The aspects of the signals shall be called out in various signalling territories as under -

(a) In two aspect lower quadrant signalling territory -

Outer	-	
right/against.		
Warner	-	
right/against.		
Main Home/Loop Home	-	right/against.
Starter	-	
right/against.		
Advanced Starter	-	
right/against.		

(b) In colour light signalling territories the names of signals should be called out with the colour displayed by the signal -

Distant	-	
Green/Double Yellow/Yellow		
Home	-	
Yellow/Double Yellow/Green/Red		

(c) In MAUQ Signalling Territory.-

Distant	-	
right/against/45°		
Home	-	
right/against/45°		
Starter	-	
right/against		
Advanced Starter	-	right/against

Night indication same as for colour light signalling territory.

4.41. Driver and Fireman or Assistant Driver to look back - The Driver and the Fireman or the Assistant Driver shall look back frequently during the journey to see whether the train is following in a safe and proper manner.

S.R. 4.41-1. When a train passes a gang working on the line or a manned level crossing gate, the Driver, Assistant Driver or Diesel Assistant should look back to ascertain if every thing is all right with the train and if any signal is being exhibited warning them of a danger of an accident.

~~S.R.4.41 2. In case of animal run over, Driver will abide by the instructions issued in Item No. 7 on "Animal run over" in Appendix 1 on "Classification of Accidents" in chapter 7 of Accident Manual. Whenever animals are run over and the carcass does not foul the track, driver and Assistant Driver should look back to see~~

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~~whether the train is following in safe and proper manner. In case of slightest doubt, The train should be stopped and examined for safe running before starting.~~

S.R.4.41-2 Whenever animals/cattle (the term 'cattle' does not include sheep, goats, pigs, dogs, donkeys) are run over and the carcass does not foul the track, train crew shall look back to see whether the train is following in safe and proper manner. In case of any doubt, the train should be stopped. Carcass must be removed clear of the track and if required, necessary assistance of Guard may be obtained. Train shall be examined for safe running before starting. If carcass fouls adjacent track and in the opinion of the train crew it is detrimental to safe train running, then provisions of SR 6.07-3 to be observed.

In the event of damage to P/Way, Locomotive or rolling stock, LP will advise SM of nearest station and Power Control by available means of communication. He will also record the details of incident in Loco log book and LP memo book. (CS 14/9 Ref: This office note no.TR/G&SR/Rev./101 dated 03.01.18.)

4.42. Exchange of signals between Driver, Guard and Station staff -

(1) The Driver and the Guard of a train shall exchange signals with each other, at such time and in such manner as may be prescribed by special instructions.

(2) The Driver and the Guard of a train shall, while running through a station, look out and, except under special instructions, acknowledge the 'all right' signals which the Station Master and such other staff at the station as may be specified by special instructions shall give if the train is proceeding in a safe and proper manner. If the train is not proceeding in a safe and proper manner, the Station Master or the other staff shall exhibit a Stop hand signal, on receipt of which the Guard and the Driver shall take immediate steps to stop the train.

S.R. 4.42-1 Signals between the Guard and the Driver -

(a) Hand Signals must be exchanged between the Guard and the Driver as detailed below :

- (i) When a train starts after stopping at a station.
- (ii) When a train starts after stopping between stations.
- (iii) When a train runs through a station.

In (i) and (iii) signals must be exchanged until the engine has passed the Advanced Starting signal or the outermost points where an Advanced Starting signal is not provided. If the Driver does not get the signal from the Guard, he shall whistle and if there is no response, he shall stop the train and ascertain the cause.

(b) Signals, how exchanged -

- (i) When there is a Assistant Guard on the train, he shall, as soon as his work is completed, show a green hand signal to the Guard by waving it up and down. The Guard will then show the green hand signal to the Loco Pilot to start. In no circumstances, the Loco Pilot shall start his train on the Assistant Guard's signal and must only do so on receiving a green hand signal from the Guard. The only signal that the Loco Pilot will obey from the Assistant Guard is a danger signal, except in cases mentioned in S.R. 4.42-2 (b).
- (ii) While exchanging signals with the Loco Pilot, the Guard will wave the hand signal horizontally at a level above his head before the train starts and will just hold it out when the train is in motion. The Assistant Guard when signalling to the Guard will move the hand signal up and down.
- (iii) The Loco Pilot may depute the Assistant Loco Pilot to exchange signals on his behalf. When a train starts from a station after stopping or runs through a station, hand signal shall normally be exchanged on the platform side unless the track is on a curve and signals cannot be seen from that side. When a train starts after stopping outside station limits, signals must be exchanged on the left

hand side, unless the track is on right hand curve, in which case signals shall be exchanged from the right side.

- (iv) In case of a train starting from a station when the Guard's signal cannot be seen by the Loco Pilot for any reason, the Station Master shall arrange for the Guard's signal to be repeated to the Loco Pilot.

(v) When a train, either stopping or non stopping at a station, has passed a station inclusive of a train halt, the Guard shall look back and satisfy himself that no danger signal or other indication is given by any of the station staff, as warning that there is anything wrong with the train.

(b) Signals, how exchanged –

- i) While exchanging signals with the Loco Pilot, the Guard will wave the hand signal horizontally at a level above his head before the train starts and will just hold it out when the train is in motion.
- ii) The Loco Pilot may depute the Assistant Loco Pilot to exchange signals on his behalf. When a train starts from a station after stopping or runs through a station, hand signal shall normally be exchanged on the platform side unless the track is on a curve and signals cannot be seen from that side. When a train starts after stopping outside station limits, signals must be exchanged on the left hand side, unless the track is on right hand curve, in which case signals shall be exchanged from the right side.
- iii) In case of a train starting from a station when the Guard's signal cannot be seen by the Loco Pilot or cannot be communicated through means provided between Guard and Loco Pilot for any reason, the Station Master shall arrange for the Guard's signal to be repeated/ communicated to the Loco Pilot.
- iv) When a train, either stopping or non stopping at a station, has passed a station inclusive of a train halt, the Guard shall look back and satisfy himself that no danger signal or other indication is given by any of the station staff, as warning that there is anything wrong with the train.

CS13/4 (Ref. :- Office Note No. TR/G&SR/Genl./102 dated 22.08.12.)

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S.R. 4.42-2 (a) When a train has come to a stand in the block section, the Driver must not start his train until the Guard has signalled from the brakevan to proceed.

(b) Whenever a train stops out of course in a section due to alarm chain pulling or for any other reason, where the signals between the Guard and the Driver cannot be seen by each other due to curvature or any other reason, ~~the Assistant Guard, if there is any, shall walk back to the spot from where he can see the signal of the Guard and on receipt of 'all-right' signal from Guard, shall come back to his brake and show 'all-right' signal to the Driver who shall start on Assistant Guard's signal. If there is no Assistant Guard,~~ the Driver shall depute his Assistant Driver to walk back to the spot from where he can see the signal of the Guard. On receipt of 'all-right' signal from the Guard, the Assistant Driver shall proceed to the engine and assure the Driver that every thing is all right. The Driver will then start the train .But the Driver and the Guard shall continue to exhibit all right signals till they are visible to each other.

S.R.4.42-3. Exchange of signals between Guard, Driver and Station staff -

(a) When a train is booked to run through a station, a green hand signal shall be exhibited by the SS/Dy.SS/SM/ASM on duty from the platform or from where it can be best seen by the Driver and the Guard. After exchanging signals, he will physically verify that the complete train has passed the Advanced Starter and both the signals Starter and Advanced Starter have been put back to 'On'. Where view ahead is not clear, he shall obtain confirmation from the concerned cabin staff about the same under exchange of private number.

Green hand signal shall also be exchanged between the cabin staff of block and non block cabins with the Driver and the Guard of a train.

The SS/Dy.SS/SM/ASM and the cabin staff shall take measures to stop the train when any unusual condition endangering safety of the train is noticed.

~~(b) In case of a train running through a station the Assistant Guard shall exchange a green hand signal with the Pointsman deputed by the Station Master and the cabin staff on the offside. He shall be vigilant to observe any danger signal displayed by the pointsman or by Cabin staff and take measures to stop the train.~~

In case of a train having a scheduled halt or when a train is stopped out of course at a station for any reason, the cabin staff of near end cabins when a train is approaching and the cabin staff of far end cabins for trains departing after halt, will watch the train. They will also exchange the hand signals with the train crew except for those cabins which have been specifically exempted.

The Cabin staff of these cabins shall display danger hand signal to attract the attention of Guard/Engine Crew/~~Assistant Guard~~ when any dangerous or unsafe condition is noticed on the train and immediately advise the Station Master. In case of far-end Cabins provided with block instrument, the Cabin ASM/Switchman will transmit 'Stops and Examine Train' signal to the station in advance, in case the train

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does not stop either by display of hand danger signal exhibited by Cabin staff or on signals which should be put back to 'On' in such cases.

During night time, while exchanging all right hand signals, the cabin staff must not display the green hand signal light towards the approaching train, which is likely to be mistaken for a stop signal by the train crew. The green light should be at right angle to the track, so that the hand signal is visible only when the train passes the cabin.

~~The Assistant Guard of the train which starts after stopping at a station shall also exchange hand signal when a train has started after stopping at a station with the Cabin staff situated on the opposite side of the platform.~~

(c) Drivers/Assistant Drivers and Guards of running trains will be responsible to watch any train passing on the adjacent line in the same direction and attract the attention of the Driver/Assistant Driver or Guard of the other train, by exhibiting danger hand signal, should any condition be noticed on that train which may endanger its safety.

In case of trains running in opposite direction, as on double line, the Drivers/Assistant Drivers and Guards of the two trains will exchange green hand signals and will examine each others trains. In case anything unusual is noticed, a danger hand signal shall be exhibited to attract the attention of the Guard and Driver of the other train.

(d) The Station Master/Cabin staff/Pointsman while exchanging green hand signal during day should also have red flag furled which, should be exhibited immediately to attract the attention of the train crew should any unsafe condition on the train be noticed.

(e) With a view to ensuring safety of train, the Guard of a train running through a station shall exchange green hand signal with the Driver and the Station Master waving Green hand signal. The Station Master shall remain vigilant to observe the condition of the vehicles on the train and shall promptly display a danger hand signal to attract the attention of the Guard, in the event of anything wrong being noticed, to enable the Guard to Stop the train.

(f) The cabin staff, in block as well as non-block cabins, shall remain vigilant and exchange hand signals with the Driver and the Guard of a train, when it either runs through or starts after stopping at a station. They shall take measures to stop the train whenever any unusual condition endangering the safety of the train is noticed.

At stations, where frequent shunting movements take place or circumstances warrant otherwise, exceptions should be incorporated in the Working Rules of those stations. However the cabin staff who are exempted from exchanging hand signals with train crew should be watchful and show danger signal and take steps to stop the train, if anything dangerous is noticed.

Note : This rule does not apply to electric multiple unit trains.

S.R. 4.42-4. (a) When a train hauled by a diesel or electric locomotive or when a diesel/electric light locomotive passes through a station and signals are not

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exchanged from the locomotive as prescribed, the Station Master should immediately advise the Station Master at the next station to stop the train and ascertain the cause. He should also inform the Controller.

(b) The Controller on receipt of such a report should make an entry on the chart and ascertain particulars of action taken by the Station Master at the station ahead.

S.R. 4.42-5. If the Guard of a train running through a station fails to exchange hand signals with the station staff, the Station Master should immediately advise the Station Master of the station in advance to stop the train and ascertain the cause. He should also inform the Controller. The Controller on receipt of such a report should make an entry on the chart and ascertain particulars of action taken by the Station Master at the station ahead.

S.R.4.42-6. Failure on the part of station staff to exchange hand signals with the Guard and Driver of a train running through a station shall be reported by the Guard in his journal.

4.43. Guard to keep a good lookout.- During the journey including halts at stations, every Guard shall keep a good look-out and satisfy himself from time to time that the tail board and brake-van lamps are in position and that all brake-van lamps, where required, are burning brightly, that the train is complete in every respect and is proceeding in a safe and proper manner.

Note - The term “brakevan lamp” includes “tail lamp”.

S.R.4.43-1. When a vehicle is attached to a train behind the rear brakevan, the Guard must keep a good look-out and if it becomes detached, must take steps to stop the train carefully.

S.R.4.43-2. When passing a manned level crossing gate the Guard must look back to see if the Gateman is exhibiting any danger hand signal.

S.R.4.43-3. Whenever a train has been stopped out of course by Station staff by exhibiting a hand danger signal or by any other means, Guard of the train shall not authorise the train to re-start unless he has personally ascertained from the Station Master on duty of the cause of the train being so stopped. The train shall be started only after it has been ascertained that everything is safe for the train to proceed.

4.44. Train held up at first stop signal -

(1) When a train has, without an apparent cause, been kept standing at the first Stop signal for five minutes, the Driver shall sound the prescribed code of whistle to warn the Guard, and the Brakesman shall proceed to the cabin or station to warn the Station Master. If there is no Brakesman, the Driver shall depute a Fireman or Assistant Driver to proceed to the cabin or station to warn the Station Master. The Brakesman or Fireman or Assistant Driver proceeding

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to the cabin or station shall show a Stop hand signal towards the station. The Guard shall, as soon as the train is stopped at the first Stop signal, check up that the tail board or tail lamp is correctly exhibited and shall maintain a vigilant attitude in rear of the train. After fifteen minutes or such less time as may be prescribed by special instructions, the Guard shall, irrespective of whether the cause is apparent or not, proceed to protect the rear of the train in accordance with instructions laid down in Rule 6.03. If in the meantime the signal is taken 'Off', or the Driver receives the necessary authority to pass the signal in the 'On' position, he shall sound the prescribed code of whistle to recall the Guard and exchange hand signal with him before starting the train.

(2) In the case of a train not accompanied by a Guard, these duties shall devolve on the Driver.

S.R. 4.44-1. Whenever the detention to a train at the first stop signal exceeds 15 minutes necessary action to protect the train shall be taken in accordance with G.R. 6.03. Provided further when a train is detained at the first Stop signal of a station having an Intermediate Block Stop signal in rear, the train shall be protected if the detention is likely to exceed 5 minutes.

4.45. Attracting attention of Driver -

(1) If any Guard sees reason to apprehend danger or considers it necessary for any reason to stop the train, he shall use his best endeavours to attract the attention of the Driver.

(2) In the absence of other means of communications with the engine, a Guard desiring to attract the Drivers attention shall apply his hand brake sharply and as suddenly release it, and wherever possible, he shall reverse the side lamps to show red towards the engine.

(3) When the attention of the Driver has been attracted, the necessary hand signals shall be shown.

(4) If the train is fitted with continuous brake, the Guard may, in case of emergency, apply such brake gradually to stop the train.

4.46. Assistance from Guard's hand brake.- When the Driver requires the assistance of Guard's hand brake, he shall sound the prescribed code of whistle, if necessary repeatedly, or, if a brake whistle is provided, sound such whistle, and shall also use other means of communication, if provided, between the Driver and the Guard.

S.R. 4.46-1. (a) - The Guard ~~and Assistant Guard~~ must promptly apply the hand brakes whenever a non-automatic brake train comes to a stand at a station or between stations on a steep gradient. Before the Guard applies the hand brake, he must assure himself that the train has cleared the fouling marks in rear.

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(b) Should the Driver of a train require the assistance of the hand brakes of the brakevans, he will give three short whistles (to be continuously repeated) and the Guard ~~or Assistant Guard~~ must apply the brakes promptly. Drivers, however, must not rely on assistance from Guard's in controlling their trains when approaching a stopping place, but must call for such assistance as an emergency measure only.

4.47. Application of Guard's hand brake -

(1) When the Driver sounds the prescribed code of whistle or the brake whistle, the Guards shall immediately apply their hand brakes.

(2) When a train is travelling down a steep incline, the Guards shall, if necessary to steady the train, assist the Driver with their hand brakes.

S.R. 4.47-1. Brakes, Application of, by Guards.-

Hand-brakes, when necessary, must be carefully applied so as to prevent the wheels skidding.

4.48. Permission of Guard to detach engine from train.- When a train has been brought to a stand outside station limits or any where on a grade, the Driver shall not detach his engine from the train without the permission of the Guard, who before giving such permission, shall satisfy himself that the van-brakes have been put on securely and take such other measures as may be necessary or prescribed by special instructions:

Provided that detaching of engines from trains in such cases may be prohibited altogether under special instructions wherever considered necessary in the interest of safety.

S.R. 4.48-1. The engine of a train carrying passengers must not be detached or the train divided in section except in an emergency, for testing a bridge or for isolating a burning coach or coaches on a train carrying passengers. The following precautions must be taken before the engine is detached or the train divided -

(a) Hand brakes in the Guard's brakevan at the rear and in the front brakevan, where provided, must be securely screwed on.

(b) Hand brakes of any goods vehicles on the train must be securely pinned down.

(c) Hand brakes, if provided, on coaching vehicles must be securely applied.

(d) The wedges provided in the Guard's brakevan must be securely applied under the furthest wheels of the rake in the direction of falling gradient. Air pressure must be created to **prescribed amount**, and an attempt made to lightly pull or push the load with the engine in the direction of the falling gradient. Only after it had been ensured that the load is securely restrained against movement, will the air pressure, be dropped and concerned angle cock is closed and the engine detached. The interval from the time, the engine is detached to the time it is again attached to the train must not exceed 45 minutes.

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(e) On the ghat sections, locomotives must not be detached from trains between stations.

(f) When it is necessary to isolate a burning coach and where the precautions as in item (d) above cannot be undertaken in detail, the Guard and the Driver, of the train will be responsible for using the wedges supplied in the Guard's brakevan to the best advantage in order to prevent parts of the train colliding against each other by running away.

4.49. Starting and stopping of train.- The Driver shall start and stop his train carefully and a without jerk.

S.R. 4.49-1. Drivers shall not depend on Guards ~~and Assistant Guard's~~ to assist in pulling up trains. They should have their trains fully under control, so as to bring them to a dead stop at Stop Signals in 'On' position, or engineering Stop indicators as necessary. Drivers shall be careful not to overshoot the Stop boards or Starting signals or the spot where a train is required to come to a stand. When working passenger trains they must ensure that the passenger bogies do not overshoot the platform.

4.50. Sounding of engine whistle -

(1) Except under special instructions, the Driver shall always sound the whistle of the engine according to the prescribed code of whistle -

- (a) before putting an engine in motion;**
- (b) when entering a tunnel; and**
- (c) at such other times and places as may be prescribed by special instructions.**

(2) Engine whistle code shall be prescribed under special instructions.

S.R. 4.50-1. Engine Whistle Signals -

(a) The following are the authroised engine whistle signals which must be sounded by engine Drivers :

Whistle Code

S.No. Code of Engine whistle
Indication

- | | | |
|----|---|---|
| 1. | 0 | (a) Before starting -
(i) Indication to Driver of assisting / banking engine that the Driver of leading engine is ready to start.
(ii) Acknowledgement by the Driver of assisting/banking engine to leading engine. |
|----|---|---|

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		(iii) Engine ready to leave loco yard or after completing locowork.
		(iv) Engine ready to go to loco yard.
		(b) On run -
		(i) Assistance of other engine not required.
		(ii) Acknowledgment of Driver of assisting/banking engine that assistance stopped.
2.	0 0	(a) Call for Guard's signal.
		(b) Signals not exchanged by Guard.
		(c) Signals not exchanged by station staff.
3.	— 0	(a) Guard to release brakes.
		(b) Before starting engine or a train from station/mid-section.
		(c) Main line clear after backing into siding.
4.	0 0 0	(a) Guard to apply brakes.
		(b) Train is out of control, Guard to assist.
5.	0 0 0 0	(a) Train cannot proceed on account of accident/failures, obstruction or other exceptional cause.
		(b) Protect train in rear.
6.	— — 0 0	Call for Guard to come to engine.
7.	0 — 0	(a) Token not received.
		(b) Token missed
		(c) With wrong 'authority to proceed'
		(d) Passing Stop signal at 'On' on proper authority.
8.	—	(a) Passing an automatic Stop signal.

S.No. Code of Engine whistle Indication

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- (b) Passing an intermediate block stop signal at 'On' when telephone provided on the signal posts is out of order and the Driver is thus unable to contact the station in rear.
- (c) On run- Acknowledgment of Guard's signal.

9. 
~~(continuous)~~
~~or~~

- ~~(a) Approaching level crossing or tunnel or area of restricted visibility curves or cutting or site of accident.~~
- ~~(b) Recall railway servant protecting train in rear.~~
- ~~(c) Material train ready to leave.~~
- ~~(d) Running through a station.~~
- ~~(e) Approaching a Stop signal at 'On'.~~
- ~~(f) Detained at a Stop signal.~~
- ~~(g) when in consequence of fog, storm or any other reason the view of signals is obstructed.~~

9(i) 
 Intermitent

- (a) Approaching level crossing

9(ii) 
 (continuous)

- (a) Approaching tunnel or area of restricted visibility or curves or cutting or site of accident.
- (b) Recall railway servant protecting train in rear.
- (c) Material train ready to leave.
- (d) Running through a station.
- (e) Approaching a Stop signal at 'On' position.
- (f) Detained at a Stop signal.
- (g) when in consequence of fog, storm or any other reason the view of signals is obstructed.

CS 11 item 3 (Ref: Office note no. TR/G&SR/Genl./102 dated 23.06.2010 & Rly Bd's letter No. 2001/Safety (A&R)/19/8 dated 14.05.2010)

- (h) When noticed train stopped in mid section/staff working on adjacent track.

CS 12/4 (Ref : This office note No.TR/G&SR/Rev./101 dated 03.01.12)

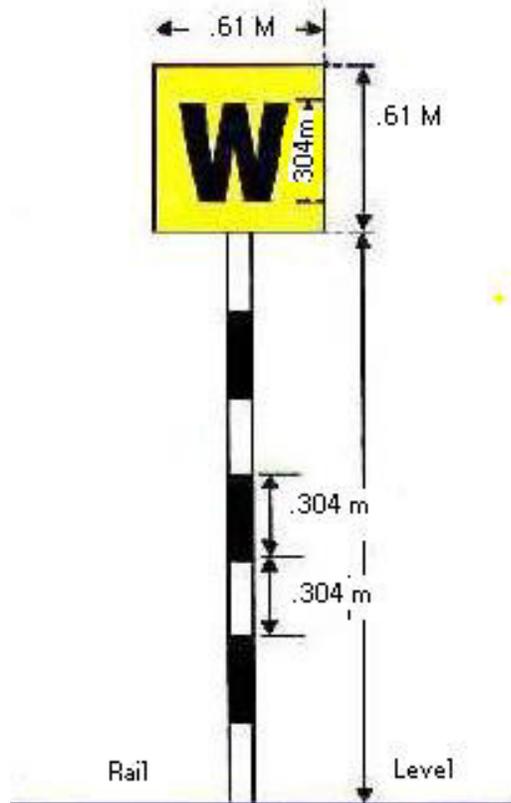
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- | | | |
|-----|--------------------------------------|--|
| 10. | — 0 — 0 | <ul style="list-style-type: none"> (a) Train parting. (b) Train arriving incomplete. |
| 11. | 0 0 — | <ul style="list-style-type: none"> (a) Alarm Chain pulled. (b) Insufficient air pressure in engine (c) Guard applies air brake (d) Intercommunication apparatus used. |
| 12. | — — | Raise pantograph. To be acknowledged by the other engine. |
| 13. | — 0 — | Lower pantograph. To be acknowledge by the other engine. |
| 14. | — 0 0 | <ul style="list-style-type: none"> (a) Signal arm lowered but light extinguished. (b) Signal arm improperly/insufficiently taken 'Off'. (c) Defective signal. |
| 15. | — — — | Fouling mark not cleared. |
| 16. | 0 0 0 0 0 0 0 0 0 0
(Frequently) | <ul style="list-style-type: none"> (a) Apprehension of danger. (b) Danger signal to the Driver of an approaching train whose path is fouled or obstructed for any reason. (c) While working on a single line section during total failure of communication or when single line working is introduced on a double line section. (d) Moving in wrong direction on a double line or against the signalled direction in the automatic block signalling territory or against the establisheddirection in the automatic block signalling territory on single line. |

Note - The signals above are illustrated by '0' for a short whistle and '—' for a long whistle.

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(b) Whistle Indicator is a 0.61 metre square board painted Yellow and bearing 0.304 metre high letter 'W' in black as given in diagram.



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S.R. 4.50-2. In case of failure of horn/whistle of the driving cab of engine at originating station, the engine should be treated as failed and another engine should be provided. If the defect develops enroute, the Driver should Stop at first approaching station and should inform the Station Master about the defect. The Station Master, on getting memo from the Driver, will advise controller who will arrange relief loco. If the same loco is allowed to work by Traction Loco Controller/Power Controller due to non availability of relief loco, the Driver will observe a speed restriction of 25 KMPH if view ahead is clear and a speed restriction of 8 KMPH when view ahead is not clear due to any reason. In such cases defective locomotive should be changed at first available opportunity.

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4.51. Bell signals between Driver and Guard -

When bell communication is provided between the Driver and the Guard of the train, bell signal code, as may be prescribed by special instructions, shall be used.

S.R. 4.51-1. Code signals between Drivers & Guards of E.M.U. Trains –

S.No	Code of Bell signals	Indication	Acknowledgment
1.	O	Stop train	O
2.	OO	Start train	O O
3.	OO pause OO	Passing automatic signal 'On'	at OO — OO
4.	OOO	Guard required by the Driver	OOO
5.	OOOO	Protect train in rear	OOOO
6.	O pause O	Zone of speed restriction over resume prescribed speed	O — O
7.	OOO pause OOO	Guard's warning when the Motorman exceeds the speed prescribed.	OOO — OOO

Note - The signals above are illustrated by 'O' for a ring and '—' for a pause.

S.R. 4.51-2. In the event of failure of bell code communication between Motorman and Guard of an E.M.U. train, the former must make use of horn (OOOO) as a code signal, for protection of the train by the Guard, when a train stops in the section and can not proceed due to an accident, failure or obstruction.

4.52. Throwing out water, fire or cinders.- A Driver or Fireman shall not throw out water, fire or cinders when passing through a station yard or tunnel, or when on a bridge.

4.53. Hose or water crane - After taking water from a tank or water column, the Driver shall see that the hose or arm is left clear of the line and, when it is provided with fastenings, properly secured.

4.54. Passengers - Every Guard shall give his best assistance to passengers entraining and detraining.

G. Duties of staff on Arrival

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4.55. Shutting off power - In stopping a train, the Driver shall determine where to shut off power by paying particular attention to the gradient, the state of the weather, the condition of the rails, the brake power and the length and weight of the train.

4.56. Guard to see that train is stopped clear of fouling marks - When a train comes to a stand at a station, the Guard shall see that, wherever possible, the last vehicle of his train has cleared the fouling marks of all points and crossings. If not, he shall inform the Station Master at once and exhibit Stop hand signal to prevent any movement on the fouled line.

S.R. 4.56-1. Guard to see train clear of fouling marks -

(a) The Guard of the train shall verify that the train is complete and is standing clear of the fouling marks -

At a station where two or more cabins are provided, when a train comes to a stand, where the Station Master cannot easily see whether the train has arrived complete, the Guard of the train shall exchange 'all-right' signals with the Cabin Asstt. Station Master/Switchman/Cabinman of the cabin nearest to which the last vehicle stands.

At a station with one cabin, the Guard shall exchange 'all-right' signals with Station Master/ASM/Switchman/Cabinman of the Central cabin by waving an arm by day and a white light by night.

(b) In all cases where train has not arrived complete, or has not cleared the fouling marks, Guard shall display a hand danger signal to the Station Master or the Cabin staff of the cabin nearer to him. He shall proceed exhibiting a danger signal towards the station or the cabin, to prevent movement on the fouled line.

(c) When the complete arrival of a train inside the fouling marks with tail lamp/tail board on the last vehicle cannot be ascertained by the Station Master/Cabin ASM/Switchman/Cabinman either by personal observation or on receipt of 'all-right' hand signal from the Guard, the Train Intact Register shall be sent by the Station Master/Cabin ASM/Switchman to the Guard through a competent railway servant to certify the complete arrival of the train inside the fouling marks with tail lamp/tail board on the last vehicle. In case of poor visibility of obstructed view, Train Intact Register should be sent in advance. The Guard of the train after verifying that the last vehicle stands inside the fouling marks shall append his signature in appropriate column against the entry of his train in the Train Intact Register, which shall have the following columns -

Date	Train No.	Line	Time of arrival	Guard's signature in token of the complete arrival of the train inside the fouling marks.
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The Pointsman shall then exchange 'all-right' signal with the Station Master/Cabin ASM/Switchman/Cabinman. The 'Train out of section' signal may be given by the Station Master/Cabin ASM/Switchman after he receives the 'all-right' signal from the Pointsman.

In case the Pointsman exchanges 'all-right' signal with the Cabinman, the latter shall inform the Station Master about the complete arrival of the train supported by a Private Number on receipt of which the Station Master may give the 'Train out of section' signal.

(d) The Guard of a stopping train shall also see that all visible signals in rear protecting his train have been placed to the 'On' position. At night this can be verified by looking at the back light of the signal. In the event of a signal bearing in the 'Off' position, the Guard must immediately inform the Station Master or the Cabin Assistant Station Master/Switchman/Cabinman and, if necessary, protect his train.

(e) If the fouling marks in the rear are not clear, the Station Master will take immediate steps to draw the train forward and get the fouling marks cleared. The Station Master shall not allow any movement on the adjacent lines which are infringed until the fouling marks are cleared.

S.R.4.56-2. Guard's duty when two or more trains cross or precede at a station on a single line section or precede at a station on a double line section-

(a) (i) At a non-interlocked station when two trains cross, on one precedes another, the Guard of the train arriving first, having personally verified that the complete train has arrived within the fouling marks, must proceed to the facing points leading to the line on which the other train is to be received and personally see that the points are correctly set and locked for that line. The Station Master must not take "Off" any signal for reception of the second train until he has received an all-right signal from the Guard by waving his arm by day or white light by night, from the facing points for the other train, as well as from the Pointsman sent out to man the outermost facing points.

(ii) At an interlocked station, where the Station Master cannot easily verify whether a train has arrived complete inside the fouling marks, the Guard of a stopping train shall verify that the last vehicle is standing clear of fouling marks and exhibit an "All-Right" signal to the Cabinman or ASM or Switchman by waving an arm by day and a white light by night.

(iii) At stations, where the complete arrival of a train inside the fouling marks cannot be ascertained either by personal observation or receipt of 'All Right' hand signal from Guard by the Station Master/Cabin ASM/Switchman/Cabinman "Train Intact Register" shall be sent by the Station Master/Cabin ASM/Switchman to the Guard to certify complete arrival of the train and its standing clear of the fouling marks.

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If train is incomplete or has not arrived within the fouling marks, it is the personal responsibility of the Guard to inform Station Master immediately and exhibit danger hand signal to the Station Master/Cabin ASM/Switchman.

(b) Should the Guard observe any irregularity in the setting and locking of points, he must exhibit a hand danger signal in the direction of the approaching train and take steps that may be possible to stop the train.

(c) When more than one train is waiting at a station, the Guard of the train which has arrived first, should take the above mentioned precautions not only for the protection of his own train but also for the other waiting train or trains, if any.

(d) At modified non-interlocked stations, and at Murtazapur (NG), Pachora (NG) and Latur stations, the Guard is exempted from proceeding to the points to satisfy himself as to their setting, prior to the reception of another train which is to cross or precede his train.

4.57. Detaching engine - Whenever a train has been brought to a stand, and it is necessary for the engine, with or without vehicles, to be detached from the rest of the train, the Guard shall, before the train is uncoupled, satisfy himself that the van-brakes have been put on securely and take such other measures as may be prescribed by special instructions.

S.R.4.57-1 When a train which is not worked on air pressure comes to a halt at a station, the Guard shall put his brakevan hand brake on and he shall release the brakes before starting.

S.R.4.57-2. Should shunting operations cause any part of a train to be left unattached to either engine or brake vans, the hand brakes must be applied.

4.58. Driver to see that train is stopped clear of fouling marks -

When a train comes to a stand at a station, the Driver shall see that, wherever possible, his engine is clear of the fouling marks of all points and crossings. If not, he shall take steps to inform the Station Master at once and exhibit Stop hand signal to prevent any movement on the fouled line.

S.R.4.58-1. When the train comes to a stand, if the Driver finds that his engine is not clear of fouling marks, he must at once sound his whistle and attract the attention of the Station/Cabin staff and take steps to inform the Station Master that the fouling marks are not clear. The Station Master shall get the fouling marks cleared. Till then the Station Master shall not allow any movement on the adjacent lines which are infringed. The Driver shall also remain alert to protect the infringement against any movement.

4.59. Moving of train carrying passengers after it has been stopped at a station-When a train carrying passengers has been brought to a stand at a

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station, whether along side, beyond, or short of the platform, the Driver shall not move it, except under orders of the Guard or to avert an accident.

S.R.4.59-1. After a train carrying passengers has been brought to a stand, the Driver may move it only on receiving hand signals from the Guard, who shall not give the signal until he has warned the passengers by whistle and seen that no passengers are getting into or detraining from the train.

4.60. Guard not to leave train till handed over-No Guard shall leave his train until it has been properly handed over in accordance with special instructions.

S.R.4.60-1. On arrival of a train at the end of the journey or at a changing station, the Guard ~~and the Assistant Guard~~ must not leave the station until they have handed over parcels and luggage. The Guard ~~and the Assistant Guard~~ must enter their arrival in the book kept for the purpose and obtain signature for the stock on their train.

4.61. Driver not to leave engine when on duty-No Driver shall leave his working locomotive or his self-propelled vehicle when on duty, whether at a station or on a running line, except in case of absolute necessity and after a competent railway servant has been placed in-charge of the locomotive or self-propelled vehicle. In the case of a self-propelled vehicle manned by a Driver only, a Driver may leave it when necessary, provided he has locked the cabs and has put the vehicle in low gear with the ignition switch in the off position and has screwed down and locked the hand brake.

S.R.4.61-1. The competent man referred to above in the case of running trains/shunting engine is the Assistant Driver.

SR 4.61-2 - In case locomotive has to be stabled, the Loco Pilot and Asst. Loco Pilot before leaving locomotive should ensure the following :-

- i) Loco should be stabled clear of fouling mark.
- ii) Required entries in repair book and trip card should be made.
- iii) Hand brake should be applied.
- iv) Loco brakes should be applied.
- v) The diesel engine should be shut down and all circuit breakers and switches should be switched off.
- vi) A9, SA9 and reverser handles should be removed
- vii) Wooden wedges should be applied on wheels
- viii) The reverser handle, A9, SA9, repair book and trip card should be handed over to the authorised person i.e. Lobby

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Supervisor/ Supervisor in-charge of Station or Yard / On-duty Supervisor in Shed, as the case may be.

CS 11/15 (Ref: This office note No. TR/G&SR/Rev./101 dated 03.03.2011.)

H. Working of Material Trains.

4.62. Working of a material train in a block section-A material train shall be worked only with the permission of the Station Masters on each side and in accordance with special instructions.

S.R.4.62-1. Ordering and Working -

(a) On receipt of advice from the engineering department, the Divisional Operating Manager will order the train by letter to all concerned detailing the sections over which the material train will work, the date on which it will commence working, the stations at which it will stable and the official who will be in-charge of the train.

(b) The engineering department must give adequate notice but not less than three days regarding the working of material trains.

(c) If the working of a material train is suspended for more than a fortnight or the section over which it is to work is altered, a fresh 'all-concerned' letter or telegram must be issued.

(d) Each material train must have at least one 10 tonnes brakevan in rear, and where available, two brake vans, one in front and the other in rear. Vehicles with active Air brake should be attached next to the engine and the air pressure connected up with the engine.

(e) The Engineering Supervisor in-charge of the material train must ensure that the rake is examined at least once in 15 days in case of air brake stock by Carriage and Wagon staff. The brake power certificate issued by C&W staff should be in possession of the Engineering Supervisor in-charge before the material train is allowed to proceed. The responsibility that train is so examined shall devolve on the Engineering Supervisor in-charge of the material train.

(Revised vide CS 5/5)

(f) A material train shall usually work between sunrise and sunset. On Bombay-Kalyan section and in urgent cases on other sections, the Divisional Railway Manager may authorise the working of material train after sunset.

(g) The unloading and loading of material trains will be done under orders of the engineering official in-charge, who will be responsible for leaving the tracks, signal wire transmission, rodding and any other S & T apparatus close to the track clear of obstruction. No unloading will be done while the train is in motion except from specially constructed trucks and under orders of the engineering official in-charge and at a speed not exceeding 8 kilometres per hour.

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(h) When a material train is working between stations, the Guard will in consultation with the engineering official in-charge of the material train, depute adequate number of permanent competent engineering staff to protect the train by means of banner flags as follows :

The person or persons deputed for protecting the train will proceed to the rear of the train on the double line, and both in rear and in front on the single line, 600 metres on broad gauge and 400 metres on metre and narrow gauges and will place a banner flag across the track or in the case of cutting or other obstruction, at such other places not less than 600 metres on broad gauge and 400 metres on metre gauges and narrow gauge so that the banner flag is plainly visible to Drivers of approaching trains. The person deputed to protect the train must place two detonators, 10 metres apart near the banner flag. He must shift the banner flag and the detonators when necessary, as the train moves. In station yards banner flags must be placed at either end of the train standing on a line unprotected by signals. If banner flags are not available, men with hand signals should be posted for the protection of a train in emergency.

(i) A material train must not be divided outside station limits.

(j) A material train should work on the proper road. If, a material train has to push back to the station, from where it has started, the rules for pushing back as given in S.R.4.12-2 must be followed. In case a material train has to work in the block section in the rear, the line must be blocked back and the Driver must be given an authority on prescribed form for entering the section. At a station where Daido's lock and block instruments are installed, the Driver shall be given the occupation key for entering the rear block section.

(k) When running between block stations with the engine leading, the speed of a material train must not exceed the prescribed speed for goods trains.

(l) When the engine is pushing the train or is placed in an emergency somewhere in the middle of the train, and the brakevan is leading-

- (i) the speed must not exceed 25 kilometres per hour on the straight line, and 8 Kilometres per hour over a turn-out;
- (ii) the Guard must travel in the leading brake-van and must exhibit hand signals to the Driver;
- (iii) the train crew must keep a good look-out especially in the direction in which the train is moving and must be prepared to stop short of any obstruction or level crossing.
- (iv) when approaching turn-outs, the Guard must stop the train and satisfy himself that the points are correctly set and that all non-interlocked points are locked and manned.

(m) When the engine is pushing the train and brake-van is not leading-

- (i) the speed must not exceed 8 kilometres per hour.
- (ii) the Guard must travel in the leading vehicle which is fitted with a air brake valve or hand brake. If the leading vehicle is not so fitted, he will travel in the nearest vehicle thereto, so fitted. He must exhibit hand signals to the Driver.

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(iii) Sub clauses(i) (iii) and (iv) of item(1) must be strictly complied with.

4.63. Workers on material train-The Guard of a material train shall, before giving the signal to start, see that all the workers are on the train, and warn them to sit down.

S.R.4.63-1. Precautions before Guard starts a material train -

Before giving the signal to start, the Guard shall satisfy himself that the engineering official in-charge has been advised that the train is ready to start and to ensure that no men are under the vehicles.

4.64. Protection of material train when stabled -

(1) A material train shall not be stabled on a running line at a station, except in unavoidable circumstances.

(2) When a material train is stabled at a station, it shall be protected in the following manner and the Station Master shall ensure that-

(a) the vehicles of the material train have been properly secured and are not fouling any points or crossings,

(b) all necessary points have been set against the line on which the material train is stabled and such points have been secured with clamps or bolts and cotters and padlocks, and

(c) the keys of such padlocks are kept in his personal custody until the material train is ready to leave the siding or line.

(3) The Guard shall not relinquish charge until he has satisfied himself that the material train has been protected as prescribed in this rule.

S.R.4.64-1. Material train, Stabling of -

(a) At an interlocked station, lever collars must be used in accordance with the rules for use of lever collars. Switch/button collars must be placed on the switches/buttons pertaining to the blocked line at a station provided with route relay/panel interlocking.

(b) In loco sheds, the Loco Foreman on duty will carryout the duties assigned to the Station Master in this regard.

(c) Clamps are kept at each Guard's headquarter station and will be supplied to Guards detailed to work material train. Additional supplies may be obtained from the engineering department.

4.65. Working of track maintenance machines-

Track laying or on track tamping or maintenance machines shall be worked only with the permission of the Station Master and in accordance with special instructions.

~~S.R.4.65 1 'On Track' Track Maintenance Machines are self propelled Track Maintenance Machines. These machines shall be worked as a train under the system of working applicable and shall be treated as a train as defined in GR 1.02(58) for the~~

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~~purpose of working on open line. However, there need not be any Guard or Brake Van attached to the Machine.~~

~~— During Day or Night hours when the vision is clear and adequate lighting arrangements have been made, upto 5 'ON TRACK' Track Maintenance Machines may be allowed under one authority to proceed for working within the Block Section and proceed to the next station or come back. All 'ON TRACK' Track Maintenance Machines must leave and enter the station at a time one after another.~~

~~— In case of movement from one station to another station only one /coupled 'ON TRACK' Track Maintenance Machines may be allowed under one authority to proceed.~~

~~— In case of thick, foggy and tempestuous weather as well as during total failure of communication, these machines are not permitted to work on line.~~

S.R. 4.65 2

~~a) Each machine shall be in direct charge of Jr. Enggineer (TM) here in after called the Operator. The complement of staff with its machine will normally be one Operator, one Machanic and one Khalasi. However, number of Railway Staff on each Track Machine should not exceed 5. The Operator shall be a qualified person, competent to hold the charge of the machine on the Main Line and also certified to be qualified in the rules and actual driving and working of the unit efficiently.~~

~~b) The 'ON TRACK' Track Maintenance Machines shall work under the direct supervision of an Enginnering official, not below the rank of Sectional Engineering/P.Way, who will be responsible for taking the traffic block and for protection of the line while the work is in progress. Here in after, he will be called Sectional Engineer (P.Way) incharge.~~

S.R. 4.65 3: COMPETENCY CERTIFICATE

~~i) Operator of the machine shall not use/ operate the Track Machine unless;~~

~~a) He is in possession of a valid Track Maintenance Machine working Competency Certificate which will be issued in token of his being competent to operate the machine. This Certificate will be issued by Dy.CE(T/M) — JHS/XEN(T/M) and will be valid for 3 years.~~

~~b) He is fully conversant with the system of working, signaling of the section and has undergone road learning as prescribed for Drivers and has recorded this fact in a competency book kept on the machine. This will be countersigned by Sr.Section Engineer(TM) Incharge. The competency Certificate regarding learning road, protection rules etc. will be issued by Sr.DSO/DSO Sr.DOM/DOM/AOM of the concerned division and will be valid for one year.~~

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- ~~ii) The Operators (JE I/JE II TM) of the machines responsible for operating /running of the machines shall follow the schedule of initial training in train working rules as prescribed for train drivers in ZRTI/BSL. However, refresher courses shall be once in three years.~~
- ~~iii) He must possess a certificate of Medical fitness in A3 category issued by a Railway Medical Doctor, as prescribed for train driver.~~

S.R. 4.65 4: EQUIPMENTS:

~~— The Operator of the machine will be responsible to ensure that the following equipments complete in all respects and in working condition, are available on each Track Maintenance Machine before the machine is put on a running line:—~~

- ~~a) Two red and one Green Hand Signal flag.~~
- ~~b) Two tri-colour Hand signal lamps. Two LED based flashing tri-colour hand signal lamp. CS10 item 20.~~
- ~~c) Two chains with padlocks~~
- ~~d) Two clamps with padlocks.~~
- ~~e) 10 Detonators~~
- ~~f) One fusee signal CS10 item 20.~~
- ~~g) A copy of the Working Time Table of the section where the machine is working.~~
- ~~h) G&SR Book with upto date amendment slips.~~
- ~~i) One 4 cell flasher light~~
- ~~j) One petromax lamp..~~
- ~~k) One portable field telephone~~
- ~~l) Two banner flags~~
- ~~m) One first aid box~~
- ~~n) Two skids~~

S.R.4.65 4(i)

~~— Each Track Maintenance Machine must be equipped with prescribed head and tail light, marker light and flasher lights as per GR4.14 to 4.16 and SR's thereto.~~

~~— While moving the convoy the LV Board/Tail lamp, should be fixed only on the last machine in the direction of movement.~~

S.R.4.65 5: RULES FOR OPERATION:

- ~~i) No Track Maintenance Machine shall be brought on a running line from the siding / stabling line without the written permission of the Station Master on duty in the form of a shunting order on T.806.~~

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~~ii) When the Track Maintenance Machine is required to move from one Block Station to another Block Station, the Operator should run the machine only with proper authority to proceed as defined in GR—1.02(6).~~

~~iii) The following procedure shall be observed for working of Track Maintenance Machine between two block stations:~~

~~a) The Track Maintenance Machines shall work under the line block. The Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge of all the Track Maintenance Machines shall give the requisition for block in duplicate to SM, indicating the number of Track Maintenance Machines which will work, the specific location where the machines will work, the duration of block required and whether the machines will proceed to the next station or return back to the starting station or clear in the wrong direction after completion of the work. The SM shall then contact the control and ascertain the movement of trains before granting line block.~~

~~b) After ascertaining from control, the duration of block that may be granted, SM shall return the original of the requisition to the Jr.Engineer /Sr.Sectional Engineer(P.Way) incharge endorsing the duration of the block permitted and other special instructions, if any.~~

~~c) Single line section : Work and proceed:~~

~~— SM will obtain line clear form Station in advance, take off Last Stop signal, issue Track Maintenance Machine permit indicating the number of Maintenance Machines permitted to work within the block section which will be signed by all the Operators of Track Maintenance Machines and will be handed over to the Jr.Engineer /Sr.Sectional Engineer(P.Way) incharge along with token if any. Jr.Engineer/Sr.Sectional Engineer(P.Way) incharge shall travel on the last Track Maintenance Machine.~~

~~— On completion of the work, machines will be received by taking off reception signals, Station's Pointsman should display green hand signal at the foot of first stop signal till the last machine enters the station.~~

~~— On reaching the Station in advance, Jr.Engineer/Sr. Sectional Engineer(P.Way) incharge will hand over the token, if any as well as Track Maintenance Machine permit, only when the last machine clears the block section. He will also certify that the track is fit for train movement. Then only SM will clear back the section.~~

~~d) Single Line Section : WORK AND RETURN~~

~~i) With Token/Tablet Instruments :~~

~~SM will obtain line clear from station in advance, take off last stop signal, issue Track Maintenance Machine permit indicating the number of Track~~

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~~Maintenance Machines permitted to work within the block section, the station where they will return etc. which will be signed by all the Operators of Track Maintenance Machines and will be handed over to the Jr. Engineer/ Sr. Sectional Engineer (P.Way) incharge along with Token/ Tablet. Jr. Engineer/ Sr. Sectional Engineer (P.Way) incharge shall travel on the first Track Maintenance Machine.~~

~~— On completion of the work, the machines will be received by taking off reception signals. Station's Pointsman should display green hand signal at the foot of first stop signal till the last machine enters the Station. Jr. Engineer /Sr. Sectional Engineer(P.Way) incharge shall hand over the Token/Tablet as well as Track Maintenance Machine permit to the SM on duty, only when all Track Maintenance Machines have cleared the block section. He will also issue a certificate to the SM that track is fit for train movement. Then only SM will clear back the section and normalise the Block Instrument.~~

~~ii) Tokenless Block Instrument:~~

~~SM will Block back the section take off the shunting key, issue a Track Maintenance Machine indicating the number of Track Maintenance Machines permitted to work within the Block Section, the Station where they will return etc. which will be signed by all the Operators of Track Maintenance Machines and will be handed over to the Jr. Engineer/ Sr. Sectional Engineer (P.Way) incharge along with the shunting key. In addition to it T369(3b) will also be issued for passing the last stop signal at danger. Jr. Engineer/ Sr. Sectional Engineer (P.Way) incharge shall travel on the first Track Maintenance Machine.~~

~~— On completion of the work, the machines will be received by taking off reception signals. Station's Pointsman should display green hand signal at the foot of first stop signal till the last machine enters the Station.~~

~~Jr. Engineer /Sr. Sectional Engineer(P.Way) incharge shall hand over the Shunting Key as well as Track Maintenance Machine permit to the SM on duty, only when all Track Maintenance Machines have cleared the block section. He will also issue a certificate to the SM that track is fit for train movement. Then only SM will remove the 'Block Back'.~~

~~e) DOUBLE LINE SECTION — WORK AND PROCEED:~~

~~i) Via Right Direction:~~

~~— SM will obtain line clear form station in advance, issue a track maintenance machine permit indicating the number of Track Maintenance Machines permitted to work within the Block section which will be signed by all the Operators of Track Maintenance Machines and will be handed over to the Jr. Engineer/ Sr. Sectional Engineer (P.Way) incharge. Jr. Engineer/ Sr. Sectional Engineer (P.Way) incharge shall travel on the last Track Maintenance Machine. Machines will be dispatched by taking off last stop signal.~~

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~~— On completion of the work, the machines will be received by taking off reception signals. Station's Pointsman should display green hand signal at the foot of first stop signal till the last machine enters the station.~~

~~— On reaching at the station in advance, Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge will hand over Track Maintenance Machine permit to SM only when the last machine clears back the section. He will also certify that the track is fit for train movement. Then only the SM will clear back the section.~~

~~ii) Via Wrong Direction:~~

~~— Station Master will take the line clear from the station in rear on Block telephone indicating the number of Track Maintenance Machines which will work from that station upto the next station, prepare Paper Line Clear Ticket, issue Track Maintenance Machine permit clearly indicating the number of Track Machines to work, the station to which the machines will clear on completion of work and the line on which the machines will work. The Paper Line Clear Ticket and Track Maintenance Machine permit should be signed by all the Operators and then should be handed over to the Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge who shall travel on the last machine.~~

~~— The machines shall be piloted out of the station on a written authority issued by the SM after all the facing points have been set and locked and trailing points correctly set over which the machine will pass.~~

~~— After completion of the work on approaching the next station, the Operators shall bring their machines to stop opposite the first stop signal pertaining to the right line or at the last stop signal pertaining to the wrong line (on which they are running) whichever they come across first.~~

~~— The SM at the other end of the Block Section shall depute a Railway servant in uniform at the foot of the signal (whichever the machines would encounter first) who shall stop the machines on danger hand signal and thereafter pilot them into the station on a written authority issued by the SM.~~

~~— If the Operator finds that no railway servant, in uniform has been deputed at the foot of the signal to pilot the machine into the station, provision of GR 4.44 shall be observed.~~

~~— All the cross-over points in the facing direction over which the machines shall proceed shall be clamped and padlocked.~~

~~— On reaching the station at the other end of the block section, Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge will hand over the Paper Line Clear Ticket, Track Maintenance Machine permit to SM on duty when the last machine clears the block section. He will also certify that the track is fit for train~~

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~~movement. Then only the SM will close line and normal train running may be resumed.~~

~~f) DOUBLE LINE SECTION WORK AND RETURN:~~

~~i) Via right direction:~~

~~SM will block forward the section arrange to put the needle of the block instrument directly to "Train on Line", take out the shunting key in case of "Daido" Double line Block Instrument, issue Track Maintenance Machine permit indicating the number of track maintenance machines permitted to work within the block section, station where they will return etc. which will be signed by all the Operators and will be handed over to the Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge along with the shunting key, if any. Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge shall travel on the first Track Maintenance Machine. In addition, T369(3b) will also be issued for passing the last stop signal.~~

~~On completion of the work, the operator shall bring their machine to stop opposite First Stop signal pertaining to the right line or at the Last Stop signal pertaining to the line on which they are running whichever comes across first.~~

~~SM shall depute a Railway servant in uniform at the foot of the signal (whichever the machine would encounter first) who shall stop the machine on danger signal and thereafter pilot them into the station on written authority issued by the SM.~~

~~If the Operators find that no railway servant in uniform has been deputed to pilot the train, provision of GR 4.44 shall be observed.~~

~~All the cross-over points in the facing direction over which the machine shall proceed shall be clamped and padlocked.~~

~~On reaching the station, Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge will hand over Track Maintenance Machine permit to the SM on duty when last machine clears the block section. He will also certify that the track is fit for train movement. Then only the SM will close the line and normal working may resume.~~

~~ii) Via the wrong direction:~~

~~SM will block back section, put the needle of the block instrument directly to "Train on Line" take out the shunting key in case of "DAIDO" double line block instrument, issue Track Maintenance Machine permit indicating the number of track maintenance machines, Station where they will return etc. which will be signed by the Operators and then will be handed over to the Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge along with the shunting key, if any. Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge will travel on the first track maintenance machine.~~

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~~—The machines shall be piloted out of the station on a written authority issued by the SM after all the facing points have been correctly set and locked and trailing points correctly set over which the machines will pass.~~

~~—On completion of the work, the Machines will be received by taking off the reception signals. Station's Pointsman should display green hand signal at the foot of the first stop signal till the last machine enters at the station.~~

~~—Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge shall handover the shunting key, if any, as well as the Track Maintenance Machine Permit to the SM on duty, only when all the Track Maintenance Machines have cleared the block section. He will also issue a certificate that the track is fit for train movement, then only the SM will remove block back.~~

~~g) Track Maintenance Machine following a train/track maintenance machine.~~

~~i) Track Maintenance Machine may follow a fully vacuum/air braked train in the same block section for working. When Track Maintenance Machine follows a train, a minimum distance of 200 meters shall be kept between the train and track maintenance machine to be followed.~~

~~Vide C/S 9 item no.18 dated 14.03.08 (Ref: Rly Board's XRX/Fax No. 2007/Safety(A&R)/19/10 dated 04.12.07)~~

~~i) On single line sections worked with token block instruments, the official incharge of the Track Maintenance Machine will obtain the token of the block section from the Driver of the preceding train, lock the token in the pouch and hand over the same to the Driver of the preceding train/ Track Maintenance Machine, retaining the key of the lock in his personal custody. The token duly locked will be dropped by the Driver of the preceding train/ Track Maintenance Machine on arrival at the station in advance.~~

~~ii) The last Stop signal shall not be taken off for the Track Maintenance Machine when following a train /track maintenance machine. An authority on form T369(3b) to pass the same in the 'ON' position shall be issued to the official incharge of the following track maintenance machine.~~

~~iii) After complete arrival of the train/track maintenance machine at the station in advance, the Station Master shall arrange for the reception signal to be taken 'OFF' for the following Track Maintenance Machine in the usual manner.~~

~~iv) The 'IN' and 'OUT' reports of the preceding train shall be sent separately and recorded in the Train Signal Register. Where block instrument are in use, the block section shall not be cleared on the block instrument after the arrival of preceding train / Track Maintenance Machine, but the 'IN' report shall be sent to the station in rear on the telephone attached to the block instrument. On single line sections, where token working is in force, the token, duly clamped and~~

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~~locked, received from the preceding train/ Track Maintenance Machine, shall be kept in the safe custody by the Station Master on duty and shall not be inserted in the block instrument for clearing the section unless unlocked by the incharge of track maintenance machine.~~

- ~~v) — On arrival of the following track maintenance machine at the station in advance, the official in charge of the Track Maintenance Machine shall hand over the Track Maintenance Machine permit to the Station Master and sign the Train Signal Register in token of his machines having arrived intact indicating the time of arrival. On single line section where token working is in force, the official incharge of the Track Maintenance Machine shall unlock the token from the clamp and hand over it to the Station Master on duty. The Station Master on duty at the station in advance shall then advise the Station Master on duty at the station in rear and arrange to clear the block section.~~

S.R. 4.65-6: PRECAUTIONS

- ~~i) — The Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge of the machine is responsible for the protection of the site of the work and also for protection of adjoining track in case of infringement, if any. He shall also be responsible for safety of track after the working of the machine.~~
- ~~ii) — The Station Master on either side shall inform all the level crossing gates equipped with telephones falling in this block section about the total number of track machines permitted to work in the block section under exchange of Private numbers.~~
- ~~iii) — While the Track Machines are moving in the block section, in convoy, it will be the responsibility of the Operator of their machines to remain at a minimum distance of 200 meters from each other.~~
- ~~iv) — In course of working, when required to pass a manned or unmanned gate, each track machine shall stop short of the level crossing gate and pass only after ensuring the safety of the track machine and the road traffic.~~
- ~~v) — The Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge shall always take four efficient flagmen equipped with banner flags, 10 detonators, one fusee signal and red hand signal each to protect the machines. One flagman shall exhibit banner flag at a distance of 600 meters on either side of the site of the work and one flag man showing a stop hand signal a distance of 1200 meters on either side of the work.~~
- ~~vi) — Some machines tend to foul the adjacent lines while working on double line section or in the yard. BRM may foul the adjacent when stretching out its blades. If any part of a machine is likely to foul the adjacent line while working, the Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge shall request SM in writing to block both the line and such work should only be undertaken, if~~

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~~blocking of both the lines has been permitted by the control and the SM and both the lines have been protected as per para 4.65-6(v) above.~~

- ~~vii) — In case of CSM/DUO or any other such machine where the operator is not in a position to get a view of front directly, he shall ensure by deployment of his assistants in the front/rear cab that any obstruction/infringement i.e. machine moving ahead of banner flag etc. is communicated to him verbally or by display of hand signal /flag etc. so that movement of the machine may be controlled accordingly.~~

S.R. 4.65-7: PROTECTION OF TRACK MACHINES WHEN STABLED AT STATION:

- ~~i) — The running and stabling of the track machine shall be arranged by the Station Master in consultation with the section controller. In case, the control is not working, the Station Master shall consult the Station Master of the adjoining stations.~~
- ~~ii) — The Track machine shall normally be stabled on a non-running line.~~
- ~~iii) — When the track machine is stabled on a running line due to unavoidable circumstances, the mechanical hand brakes shall be applied and machine shall be securely chained to the rails in accordance with GR 5.23 and SRs thereunder. Lever collars shall be used on the concerned signal levers and slide collar pins on the relevant slides in the office of the Station Master.~~
- ~~iv) — When the machine is stabled, the Operator shall ensure that it is berthed clear of fouling marks and traps and without obstructing the adjacent lines. He shall apply the hand brakes and skids to prevent movement.~~
- ~~— The concerned points shall be set against the line on which the track machine is stabled and such points shall be secured with clamps or bolts and cotters and padlocks. The keys of such padlocks shall be kept in the personal custody of SM until the machine is ready to leave from siding or running line. The machine operator shall not relinquish charge unless he has satisfied himself that the machine has been properly secured and protected as prescribed.~~

S.R.4.65-8:

~~— The track machines shall not move into or inside the traffic yard without the permission of the Station Master on shunting order (T806). No shunting of goods/passenger stock shall be permitted on the line where track maintenance machines are stabled nor shunting should be performed with the machines attached.~~

S.R. 4.65-9: FAILURES & ACCIDENTS:

- ~~i) — Failures in Block sections of the track machines will be treated as accident under class H. Accidents involving track machines shall be treated as train~~

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~~accident under the appropriate class and action to be taken as per the rules in force.~~

- ~~ii) — In the case of failure of track machine in block section, the Jr.Engineer/ Sr. Sectional Engineer (P.Way) incharge may decide to push the disabled unit to the nearest station provided the brake power is in good condition.
— Otherwise, intimation shall be sent to the nearest Station Master through a messenger and to control through portable telephone asking for a light engine to tow the unit.~~
- ~~iii) — In the event of breakdown, themachines shall be protected as per GR 6.03 and SR thereunder. In case, official incharge of machine feels that clearance of sections going to take long time, assistance of accident relief train shall be asked immediately.~~

~~S.R.4.65-10 SPEED:~~

~~— Maximum permissible speed should be as approved by CRS. On points and crossings, the speed shall however, be restricted to 15 kmph.~~

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~~TRACK MAINTENANCE MACHINE PERMIT~~

Type Of Machine _____ Division _____ Station Stamp _____

No. of Machines _____ Time _____ Date _____

Shri _____
_____ (Name and designation of the Official-in-charge of machines)

— You are hereby permitted to take your Track Maintenance Machine/machines cautiously into the block section between stations _____ and _____ to work at kms _____ to _____. The block section shall remain blocked upto _____ hours for your work. On completion of work after reaching at station _____ with all machines, hand over this permit to the Station Master.

Option*

- a) Following _____ train which left his station at _____ hours on Up Line/Dn line/Single line section.
- a) Single line section(work and proceed).
- b) Single line section work and return (with token instrument).
- e) Single line section work and return (with tokenless instrument).
- d) Double line (Up/Dn) work and proceed (via right direction).
- e) Double line (Up/Dn) work and proceed (via wrong direction).
- f) Double line (Up/Dn) work and return (via right direction).
- g) Double line (Up/Dn) work and return (via wrong direction).

*whichever is applicable.

Signature of Operators Signature of Station Master Private
Number _____

1. —
2. —
3. —
4. —
5. —

Received
Signature of Incharge
Designation
Date and time.

Vide C/S 9 item no.18 dated 14.03.08 (Ref: Rly Board's XXR/Fax No. 2007/Safety(A&R)/19/10 dated 04.12.07)

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- i) ~~Track Maintenance Machines (TMMs) are self propelled. There need not be any Guard or Brake Van attached to the Machine.~~
- ii) ~~In case of movement from one station to another station only one /coupled TMM(s) may be allowed under one authority to proceed.~~
- iii) ~~Upto 5 TMMs may be allowed for working within the Block Section. All TMMs must leave/arrive station in convoy.~~
- iv) ~~During integrated block, Material Train/TRT/PQRS, TMMs, Tower wagon(s) will be allowed to work in the same block section, however the composition of group should not be more than 5.~~
- v) ~~TMMs will not be permitted following a train, however during integrated block TMMs, Tower wagon(s) shall be allowed to work following Material train/TRT/PQRS. While working in integrated block distance to be maintained as –~~

Between		Distance to be maintained
Material train/TRT/PQRS	TMM	500m
TMM	TMM	200m
TMM	Tower wagon	200m

~~During integrated block sequence to be maintained as Material train/TRT/PQRS, TMMs and Tower wagon(s).~~

- vi) ~~During TMM block or integrated block, 'Work and Proceed' movement will only be permitted.~~
- vii) ~~In case of thick, foggy and tempestuous weather as well as during total failure of communication, these machines are not permitted to work on line.~~

viii) Incharge during block –

During Block working	Incharge
Material Train	JE/SSE(P/Way)
Tower Wagon	JE/SSE(TRD)
Single/Group of Track Maintenance machines	JE/SSE(P/Way) herein after called as Official Incharge(TMMs).
Integrated block	JE/SSE(P/Way) herein after called as Overall Incharge(Integrated Block).

~~Note: Each Track Maintenance Machine shall be in direct charge of JE/SSE(TMM) herein after called the Operator.~~

- ix) ~~Competency certificate/Medical/Road learning/Refresher Course for operator –~~

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S N	Competency Certificate for	Issued by	Validity	Medical	Road learning	Refresher course
1	Operation of machine	Dy.CE(T/M)/XEN(T/M)	3 years	A3	As prescribed for Loco Pilot	Once in 3 years
2	Train working rules	Sr.DOM/DOM/AOM	one year			

SR 4.65 2 EQUIPMENT:

The Operator of the machine will be responsible to ensure that the following equipment complete in all respects and in working condition, are available on each Track Maintenance Machine before the machine is put on a running line:-

- a) Two red and one Green Hand Signal flag.
- b) Two LED-based flashing tri-colour hand-signal lamp.
- c) Two chains with padlocks
- d) Two clamps with padlocks.
- e) 10 Detonators
- f) A copy of the Working Time Table of the section where the machine is working.
- g) G&SR Book with upto date amendment slips..
- h) One 4 cell flasher light
- i) One petromax lamp..
- j) One portable field telephone
- k) Two banner flags
- l) One first aid box
- m) Four wooden wedges
- n) Tail Lamp and Tail Board

Each Track Maintenance Machine must be equipped with prescribed head and tail light, marker light and flasher lights as per GR4.14 to 4.16 and SR's thereto.

SR 4.65 3 Working of Track Maintenance Machine(s) (TMMs):

Only work and proceed in Single line and Double/Multiple line (via right line) is permitted for working of TMMs. Procedure to be adopted as under —

SN	Description	Action to be taken
1	Block requisition	Official Incharge(TMMs) will submit block requisition (Annexure I) to SM in duplicate. SM will advise Section Controller.
2	Block permission	Permission shall be granted by SCOR under exchange of Pvt. No. with SM of either end stations. SM will endorse on Annexure I and hand over it to

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		Official incharge(TMMs)-
3.	Despatch of TMM(s)	All TMMs will be dispatched in convoy by taking 'Off' last stop signal (issuing token if any) i.e. first TMM will get Last Stop Signal in 'Off' position and subsequent machines will be authorized to pass Last stop signal at 'On' position by endorsing the same on Annexure I.
4.	Mid section — while passing— a) IBS signal (if any) b) Home signal of 'C' class station (if any)	First TMM will get IBS signal in 'Off' position and subsequent TMMs will be authorized to pass IBS signal at 'On' position by endorsing the same in Annexure I by SM of block permitting station. First TMM will get Home signal of 'C' class station in 'Off' position and subsequent TMMs will be authorized to pass this signal at 'On' position by endorsing the same in Annexure I by SM of block permitting station.
5.	Reception of TMM(s) at station in Advance	All TMMs will be admitted by taking off reception signal(s). Official incharge(TMMs) shall ensure that all TMMs enter in convoy. First Machine will get reception signal(s) in 'Off' position and subsequent machine shall pass reception signal in 'On' position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). During reception of TMMs, SM will not alter any point in the route till complete arrival of all TMMs. He shall use button collar/lever collar.
6.	Safety Certificate	On reaching the Station in advance, Official Incharge(TMMs) will hand over Track Maintenance Machine permit (Annexure I), as well as token(if any on Single line) to SM only when the last TMM clears the block section. He will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
7.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Track Maintenance Machine permit (Annexure I), SM of station in Advance will clear back the section and cancel block under exchange of private number with Section Controller and SM of adjacent station(s)[Block permitting station and 'C' class station(if any)].

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Note – i) ~~When block is permitted in station section, the movements of machines shall be carried out by issuing T/806 to every individual machine under the supervision of Official Incharge (TMMs).~~

~~ii) In IBS signaling – During the block no train will be allowed to proceed upto IBS Signal (even though section upto IBS is cleared by TMMs) till complete arrival of all the TMMs at station in advance.~~

~~iii) In case of ‘C’ class station between two ‘B’ /Spl Class stations between which block is permitted, SM of ‘C’ class station will obtain line clear from station in advance and take ‘Off’ the Home signal. SM of ‘C’ class station will not grant line clear to SM in rear till complete arrival of all the TMMs at station in Advance. SM of ‘C’ class station will remain vigilant and ensure safe movement of TMMs.~~

~~iv) Automatic Block territory will be treated as Absolute block territory and TMMs will be allowed to enter in block section only via right line and proceed to station in advance to clear the block as per procedure above.~~

~~v) All Automatic signals between block area will be treated as suspended, however, aspect of Gate stop signal(s)(if any) should be observed.~~

SR 4.65 4 Working during Integrated block – Material train/TRT/PQRS, TMMs, Tower wagon(s):-

- ~~i) Sequence during integrated block will be - Material train/TRT/PQRS, TMMs, Tower wagon(s) and the composition of group should not be more than five. Only work and proceed in Single line and Double/Multiple line (via right line) is permitted.~~

~~ii) Procedure to be adopted as under –~~

~~Material Trains/TRT/PQRS, TMMs, Tower Wagons are allowed to leave the station in convoy under one authority to proceed (i.e. leading Material train/TMM will get Last Stop signal in ‘Off’ position, however, above mentioned subsequent TMMs, Tower Wagons are allowed to pass Last Stop signal at ‘On’ position);~~

SN	Description	Action to be taken
1	Block requisition	Overall Incharge(Integrated Block) will submit block requisition (Annexure II) to SM in duplicate. SM will advise Section Controller.
2	Block permission	Permission shall be granted by SCOR under exchange of Pvt. No. with SM of either end stations. SM will endorse on Annexure II and hand over it to Overall Incharge(Integrated Block).
3.	Despatch	Material train/TRT/PQRS, TMMs, Tower Wagons will be dispatched in convoy by taking ‘Off’ last stop signal (issuing token if any) i.e. leading Material train/TMM will get Last Stop signal in ‘Off’ position,however,abovementioned subsequent TMMs, Tower Wagons are allowed to

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		pass Last Stop signal at 'On' position, by endorsing the same on Annexure II.
4.	Mid section while passing— a) IBS signal (if any) b) Home signal of 'C' class station (if any)	First Material Train/TRT/PQRS will get IBS signal in 'Off' position and subsequent TMMs, Tower wagons will be authorized to pass IBS signal at 'On' position by endorsing the same in Annexure II by SM of block permitting station. First Material Train/TRT/PQRS will get Home signal of 'C' class station in 'Off' position and subsequent TMMs, Tower Wagons will be authorized to pass this signal at 'On' position by endorsing the same in Annexure II by SM of block permitting station.
5.	Reception at station in Advance	Material train/TRT/PQRS, TMMs, Tower Wagons will be admitted by taking off reception signal(s). Overall Incharge (Integrated Block) shall ensure that Material train/TRT/PQRS, TMMs, Tower Wagons enter in convoy. Leading Material train/TMM will get reception signal(s) in 'Off' position and subsequent TMMs/Tower Wagons(s) shall pass reception signal in 'On' position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). During reception SM will not alter any point in the route till complete arrival of all Material train/TRT/PQRS, TMMs, Tower Wagons. He shall use button collar/lever collar.
6.	Safety Certificate	On reaching the Station in advance, Overall Incharge(IntegratedBlock)willhandover Integrated Block permit (Annexure II), as well as token(if any on Single line) to SM only when the last TMM/ Tower Wagon clears the block section. He will also certify that the track is fit for trainmovementandissueTrackSafe Certificate(Annexure III).
7.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure III) andTrackMaintenanceMachinepermit (Annexure II), SM of station in Advance will clear

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		back the section and cancel block under exchange of private number with Section Controller and SM of adjacent station(s)[Block permitting station and 'C' class station(if any)].
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Note—

- ~~i) — In IBS signaling – During the block no train will be allowed to proceed upto IBS Signal (even though section upto IBS is cleared by Material train/TRT/PQRS, TMMs, Tower Wagons) till complete arrival of all the Material train/TRT/PQRS, TMMs, Tower Wagons at station in advance under the supervision of Overall Incharge (Integrated Block).~~
- ~~ii) — In case of 'C' class station between two 'B' /Spl Class stations between which block is permitted, SM of 'C' class station will obtain line clear from station in advance and take 'Off' the Home signal. SM 'C' class station will not grant line clear to SM in rear till complete arrival of all the Material train/TRT/PQRS, TMMs, Tower Wagons at station in Advance. SM of 'C' class station will remain vigilant and ensure safe movement of Material train/TRT/PQRS, TMMs, Tower Wagons.~~
- ~~iii) — Automatic Block territory will be treated as Absolute block territory and Material train/TRT/PQRS, TMMs, Tower Wagons will be allowed to enter in block section only via right line and proceed to station in advance to clear the block as per procedure above.~~
- ~~iv) — All Automatic signals between block area will be treated as suspended, — however, aspect of Gate stop signal(s)(if any) should be observed.~~

SR 4.65 5 PRECAUTIONS

- ~~i) — The Official Incharge(TMMs) /Overall Incharge (Integrated Block) is responsible for the protection of the site of the work and also for protection of adjoining track in case of infringement, if any. He shall also be responsible for safety of track after the working.~~
- ~~ii) — The Station Master on either side shall inform all the level crossing gates equipped with telephones falling in this block section about the total number of Material train/TRT/PQRS, TMMs, Tower Wagons permitted to work in the block section under exchange of Private numbers.~~
- ~~iii) — In course of working, when required to pass a manned or unmanned gate, — each Material train/TRT/PQRS, TMMs, Tower Wagons shall stop short of the level crossing gate and pass only after ensuring the safety at the Level Crossing gate.~~
- ~~iv) — The Official Incharge(TMMs) /Overall Incharge(Integrated Block) shall always take four efficient flagmen equipped with banner flags, 10 detonators and red hand signal each to protect the machines. One flagman shall exhibit banner flag at a distance of 600 meters on either side of the site of the work and one flag man showing a stop hand signal at a distance of 1200 meters on either side of the work.~~

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v) ~~Some machines tend to foul the adjacent lines while working on double line section or in the yard. BRM may foul the adjacent line when stretching out its blades. If any part of a machine is likely to foul the adjacent line while working, the The Official Incharge(TMMs) /Overall Incharge (Integrated Block) shall request SM in writing to block both the lines and such work should only be undertaken, if blocking of both the lines has been permitted and both the lines have been protected.~~

vi) ~~The The Official Incharge(TMMs) /Overall Incharge (Integrated Block)is responsible for the protection of the work site and also for protection of adjoining track in case of infringement, if any. He will also ensure the following during dusty atmosphere, heavy noise pollution and mass labour working—~~

~~1) Safety of track after the working of the machine.~~

~~2) Temporary whistle board should be fixed on the adjoining track, which can be moved along with Track Machine at work site.~~

~~3) Imposition of Speed restriction for adjacent line(s) during block of BCM/TRT/PQRS is technically not required for machine working. However, depending upon local site condition P/Way officials may impose suitable speed restriction on adjacent line(s). Such Speed restrictions should be within overall Engineering allowance of the concerned section.~~

vii) ~~During Integrated Block, Overall Incharge (Integrated Block) will co-ordinate with Incharge (Material Trains and Tower wagon), Machine Operators and ensure safety.~~

viii) ~~SCOR will advise Engineering Control and TPC regarding permission granted for Integrated block. Engineering Control and TPC will monitor the block in Control Office. —~~

~~ix) SM will make necessary entries in the Engineering Block Register, Power Block register and Train Signal Register(with Red ink).~~

SR 4.65 6 PROTECTION OF TRACK MAINTENANCE MACHINES (TMMs) WHEN STABLED AT STATION:

~~i) The Track machine shall normally be stabled on a non-running line.~~

~~ii) While stabling the TMMs, GR 5.23 and SRs thereunder shall be followed. The Operator shall be responsible for ensuring that machine is stabled by clearing the fouling marks and traps and without obstructing the adjacent lines. He shall apply the hand brakes and wooden wedges to prevent movement.~~

SR 4.65 7 FAILURES & ACCIDENTS:

~~i) Failures in Block sections of the track machines will be treated as accident under class R 5. Accidents involving track machines shall be treated as train accident under the appropriate class and action to be taken as per the rules in force.~~

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~~ii) In the case of failure of track machine in block section, the Official Incharge(TMMs)/Overall Incharge(Integrated Block) may decide to clear the disabled unit to next station either by pushing or pulling with the help of other machine provided the brake power is in good condition.~~

~~— Otherwise, intimation shall be sent to the nearest Station Master through a messenger and to control, through portable telephone asking for a light engine to tow the unit.~~

~~iii) In the event of breakdown, the machines shall be protected as per GR 6.03 and SR there under. In case, Official incharge (TMMs)/Overall Incharge(Integrated Block) of machine feels that clearance of sections going to take long time, assistance of accident relief train shall be asked immediately.~~

~~SR 4.65 8 SPEED: Maximum permissible speed should be as approved by CRS. On points and crossings, the speed shall however, be restricted to 15 kmph.~~

~~SR 4.65 9~~

Annexure I	Block Requisition Notice & Permit
Annexure II	Integrated Block Requisition Notice & Permit
Annexure III	Track Safe Certificate

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Annexure-I	(Official Incharge(TMM), SM/Record)
BLOCK REQUISITION NOTICE & PERMIT	
From: _____ Official Incharge(TMMs) at _____ station TO _____ SM _____ station Notice No. _____ Date _____ Time _____ The line _____ (Up/Dn) between _____ station and _____ station at _____ kms _____ to _____ is required to be blocked for the duration of _____ hours for working the _____ Nos. of TMMs. The sequence in which machines will work is as under:- (i) _____ (ii) _____ (iii) _____ (iv) _____ (v) _____ All the Machines will enter in Block section in convoy from _____ station on Up/Dn line _____ and clear at _____ station (Work and Proceed on Right line). _____ Signature of Official Incharge(TMMs)	
To _____ Official Incharge(TMMs) You are hereby permitted to work as per above and for _____ hrs from _____ to _____ hrs. Private Number _____ (In token of obtaining Line Clear) Caution Order if any	
_____ _____ Signature of Station Master	
Received _____ _____ Signature of Official Incharge(TMM)	
Date _____ Time _____ Note :- i) TMMs are allowed to leave the station in convoy under one authority to proceed [i.e. first machine will get Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) in 'Off' position, however, above mentioned subsequent machines are allowed to pass Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) at 'On' position]; ii) Automatic territory— TMMs are allowed to leave the station in convoy under one authority to proceed. All Automatic signals in the block area will be treated as suspended during block working. [i.e. first machine will get Automatic Stop signals in 'Off' position, however, above mentioned subsequent machines are allowed to pass Automatic Stop signals at 'On' position], however, observe aspect of Gate stop signal in the block area.	
Signature of Operators i) _____, ii) _____, iii) _____, iv) _____, v) _____ Signature of Official Incharge(TMMs) _____ It is the responsibility of Official Incharge(TMMs) to apprise all the Operators regarding working of TMMs during the block and obtain the signature on his record copy	

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Annexure-II		(Overall Incharge/Integrated Block, SM/Record)		
<u>INTEGRATED BLOCK REQUISITION NOTICE & PERMIT</u>				
From: _____ Overall Incharge(Integrated Block) at _____ station TO _____ SM _____ station. Notice No. _____ Date _____ Time _____ The line _____(Up/Dn) between _____ station and _____ station at kms _____ to _____ is required to be blocked for the duration of _____ hours for working the _____ Nos. of Material Train, _____ Nos. of TMMs, _____ Nos. of Tower Wagons(Total not exceeding Five). The sequence will be as under:- (i) _____ (ii) _____ (iii) _____ (iv) _____ (v) _____ Material train/TRT/PQRS, TMMs, Tower Wagons will enter in Block section in convoy from _____ station on Up/Dn line _____ and clear at _____ station (Work and Proceed on Right line). _____ Signature of Overall Incharge (Integrated Block).				
To _____ Overall Incharge (Integrated Block) You are hereby permitted to work as per above and for _____ hrs from _____ to _____ hrs. Private Number _____ (In token of obtaining Line Clear) Caution Order if any				
SN	STATION BETWEEN	KILOMETERAGE	Speed kmph	Cause/ Remark
	From To	From To		
_____ _____ Signature of Station Master				
Received _____ _____ Signature of Overall Incharge (Integrated Block) Date _____ Time _____				
Note:- i) Material Trains/TRT/PQRS, TMMs, Tower Wagons are allowed to leave the station in convoy under one authority to proceed [i.e. leading Material train/TMM will get Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) in 'Off' position, however, above mentioned subsequent TMMs, Tower Wagons are allowed to pass Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) at 'On' position], ii) Automatic territory— Material train/TRT/PQRS, TMMs, Tower Wagons are allowed to leave the station in convoy under one authority to proceed. All Automatic signals in the block area will be treated as suspended during block working. (i.e. leading Material train/TMM will get Automatic Stop signals in 'Off' position, however, above mentioned subsequent TMMs, Tower Wagon(s) are allowed to pass Automatic Stop signals at 'On' position), however, observe aspect of Gate stop signal in the block area.				
Signature of Operators/Loco Pilots i) _____, ii) _____, iii) _____, iv) _____, v) _____. Signature of _____ _____ Overall Incharge (Integrated Block) _____ Tower Wagon Incharge _____ Material Train Incharge It is the responsibility of _____ Overall Incharge(Integrated Block) to apprise all the Operators, Tower Wagon Incharge, Material Train _____ Incharge regarding working of Material train/TRT/PQRS, TMMs, Tower Wagons during the Integrated block and obtain the signature on his record copy				

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Annexure III	(SM/Record)
Track Safe Certificate	

No.....	Date:.....Time.....
From: Overall Incharge(in case of Integrated Block)/ _____ Official Incharge(TMMs)	
_____ H.Q. at.....Station.	
To: SM.....	
Refer my notice No.....dated.....and your No..... date..... : The block imposed between.....station andstation at Kms.....to from.....hrs. to.....hrs. is cancelled, and all the TMMs (Material Train/TRT/PQRS, TMMs, Tower Wagons in case of integrated block) have arrived completely within fouling mark and the line is certified safe for normal working.	
..... Signature of Official In-charge(TMMs)	
..... or	
..... Signature of Overall Incharge (In case of Integrated Block)	
Received.....	
..... Signature of SM	
_____ Date:.....Time.....	

CS 14/13 item(1) (Ref: Office note no. TR/G&SR/Genl./101 dated 17.05.2018
Revised vide CS/14/15(Ref. Note no. TR/G&SR/Genl./101 dated 13.07.2018)

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- i) Track Machines are self propelled. There need not be any Guard or Brake Van attached to the Track Machine(s) and can be worked in day and night hours.
- ii) Movement of Track Machines –
 - a) One or coupled Track Machine shall be permitted to move from one station to another station under one authority to proceed.
 - b) For movement of group of Track Machines in convoy, from one station to another station, procedure mentioned in SR 4.65-3(i), (ii), (iii)(a) shall be followed.
- iii) Up to 7 Track Machines shall be allowed for working within the Block Section. All Track Machines must leave/arrive station in convoy.
- iv) Track Machines will not be permitted following a train, however during integrated block, Material Train, Track Machine(s), Tower wagon(s) shall be allowed to work following each other. While working in block minimum 200m distance to be maintained and it may be reduced depending on site working condition by taking necessary precautions.
- v) During Track Machine(s) Block and Integrated Block, following movements will be Permitted/Not-Permitted –

Absolute Block System		
	Work and Proceed	Work and Return
Double line (Right line)	Permitted	Permitted
Double line (wrong line)	Not- Permitted	Permitted
Single line	Permitted	Permitted

In Automatic Block System, Automatic Block Territory will be treated as Absolute Block Territory. Track Machine(s) Block and Integrated Block will be permitted as mentioned above.

- vi) In case of thick, foggy and tempestuous weather as well as during Total Failure of Communication, Track machine(s) Block and Integrated Block are not permitted.
- vii) In-charge during block –

During Block working	In-charge
Material Train	JE/SSE(P/Way)
Tower Wagon	JE/SSE(TRD)
Single/Group of Track Machines	JE/SSE(P/Way) herein after called as Official In-charge (P/Way).
Integrated block	JE/SSE(P/Way) herein after called as Overall In-charge(Integrated Block).

Note: Each Track Machine shall be in direct charge of JE/SSE(Track Machine) herein after called the Track Machine In-charge.

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viii) Competency certificate/Medical/Road learning/Refresher Course for Track Machine In-charge -

SN	Competency Certificate for	Issued by	Validity	Medical	Road learning	Refresher course
1.	Operation of Track Machine	Dy.CE(T/M)/XEN(T/M)	3 years	A3	As prescribed for Loco Pilot	Once in 3 years
2.	Train working rules	Sr.DOM/DOM/AOM	3 years			

SR 4.65-2 EQUIPMENT:

The Track Machine In-charge will be responsible to ensure that the following equipment complete in all respects and in working condition, are available on Track Machine before the machine is put on a running line:-

- a) Two red and one Green Hand Signal flag
- b) Two LED based flashing tri-colour hand signal lamp
- c) Two chains with padlocks
- d) Two clamps with padlocks
- e) 10 Detonators
- f) A copy of the Working Time Table of the section where the Track Machine is working
- g) G&SR Book (hard/soft copy) with up to date amendment slips
- h) One 4 cell flasher light
- i) One petromax lamp
- j) One portable field telephone
- k) Two banner flags
- l) One first aid box
- m) Four wooden wedges
- n) Tail Lamp and Tail Board

Each Track Machine must be equipped with prescribed head and tail light, marker light and flasher lights as per GR4.14 to 4.16 and SR's thereto.

SR 4.65-3 Working of Track Machine(s) :

- i) Official In-charge (P/Way) will submit block requisition (Annexure-I) to SM in duplicate. SM will advise Section Controller.
- ii) Permission shall be granted by SCOR under exchange of Pvt. No. with SM of either end stations. SM will endorse on Annexure-I and hand over it to Official In-charge(P/Way).
- iii) Procedure to be adopted during –

(a) Work and Proceed in Single line and Double/Multiple line (via right line) as under –

SN	Description	Action to be taken
1.	Despatch	SM will obtain line clear from station in advance. All Track Machines will be despatched in convoy by taking 'Off' last stop signal (issuing token if any) i.e. first Track Machine will get Last Stop Signal in 'Off' position and subsequent Track Machines will be

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		authorized to pass Last stop signal at 'On' position by endorsing the same on Annexure-I. Note:- While starting from the station, SM will authorize subsequent Track Machines to pass concerned Starter signal(s) at 'On' position after ensuring correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Track Machines and same will be mentioned in Annexure – I.
2.	Mid-section – while passing IBS signal (if any)/Home signal of 'C' class station (if any)	First Track Machine will get IBS signal/Home Signal of 'C' class station in 'Off' position and subsequent Track Machines will be authorized to pass IBS signal/Home signal of 'C' class station at 'On' position by endorsing the same in Annexure –I by SM of block permitting station.
3.	Reception at station in advance	All Track Machines will be admitted by taking off Reception signal(s). Official in-charge (P/Way) shall ensure that all Track Machines enter in convoy. First Track Machine will get Reception signal(s) in 'Off' position and subsequent Track Machine(s) shall pass Reception signal(s) in 'On' position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). Calling On signal(s), if available, and possible may be taken 'Off' for subsequent Track Machines. During reception of Track Machine(s) , SM will ensure correct setting and locking of concerned points in the route and shall not alter any point in the route till complete arrival of all Track Machines . SM shall use button collar/lever collar.
4.	Safety Certificate	On reaching the Station in advance, Official In-charge (P/Way) will hand over Track Machine permit (Annexure-I), as well as token (if any on Single line) to SM only when the last Track Machine clears the block section. Official In-charge (P/Way) will also certify that the track is fit for train movement and issue Track Safe Certificate (Annexure-III).
5.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Track Machine permit (Annexure-I), SM of station in advance will clear back the section and cancel block under exchange of private number with Section Controller and SM of adjacent station(s)[Block permitting station and 'C' class station(if any)] .

(b) Work and Return (via right line) on Double/Multiple line as under –

SN	Description	Action to be taken
1.	Despatch	SM will take block forward and all Track Machines will be despatched in convoy by authorizing them to pass last stop signal at 'On' by endorsing the same on Annexure-I.

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		Note:- While starting from the station, SM will authorize subsequent Track Machine(s) to pass concerned starter signal(s) at 'On' positions. SM will ensure correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Track Machines and same will be mentioned in Annexure – I.
2.	Mid-section - while passing IBS signal (if any) or Home signal of 'C' class station (if any)	If there is IBS signaling or 'C' class station, both block sections shall be treated as one block section. SM /SMs (If 'C' Class station is there), will take block forward. SM of block permitting station will permit to pass IBS signal /Home signal of 'C' class station at 'On' by endorsing the same on Annexure –I.
3.	Reception	<p>On completion of the work, the Track Machine In-charge(s) shall bring their Track Machine to stop opposite First Stop signal pertaining to the right line or at the Last Stop signal pertaining to the line on which they are running whichever comes across first.</p> <p>SM shall depute a Railway servant in uniform at the foot of the signal (whichever the Track Machine would encounter first) who shall stop the Track Machine on danger signal. All Track Machines will be received in convoy by issuing single pilot- in memo to Official In-charge (P/Way) after ensuring correct setting and locking of concerned points. SM will not alter the point(s) in the route till complete arrival of all the Track Machines. Official In-charge (P/Way) will be responsible for ensuring safe movements of all the Track Machines.</p> <p>If the Track Machine In-charge(s) find that no railway servant in uniform has been deputed to pilot the Track Machine(s), provision of GR 4.44 shall be observed.</p>
4.	Safety Certificate	On reaching the Station, Official In-charge(P/Way) will hand over Track Machine permit (Annexure-I), to SM only when the last Track Machine clears the block section. Official In-charge(P/Way) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
5.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Track Machine permit (Annexure-I), SM will cancel block forward and cancel the block under exchange of private number with Section Controller and SM(s) of concerned station(s).

(c) Work and Return (via wrong line) in Double/Multiple line as under –

SN	Description	Action to be taken
1.	Despatch	SM will take block back, then issue Track Machine permit(Annexure-I) and Single Pilot-out memo to the Official In-charge (P/Way).

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		<p>The Track Machine(s) shall be piloted out from the station in convoy after ensuring correct setting and locking of points. Official In-charge (P/Way) shall supervise this movement and ensure that all the Track Machines enter into the block section safely.</p> <p>Note:- While starting from the station, SM will authorize Track Machines to pass concerned Starter signal(s), if any, at 'On' position after ensuring correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Track Machines and same will be mentioned in Annexure – I.</p>
2.	Mid-section- while passing IBS signal (if any) or Home signal of 'C' class station (if any)	If there is IBS signaling or 'C' class station, both block sections shall be treated as one block section. SM /SMs (If 'C' Class station is there) will take block back. If block is beyond the IBS signal/ Home signal of 'C' class station, while returning this signal will be passed at 'On' on the basis of endorsement made by the SM of block permitting station on Annexure –I.
3.	Reception	All Track Machines will be admitted by taking off Reception signal(s). Official In-charge (P/Way) shall ensure that all Track Machines enter in convoy. First Track Machine will get Reception signal(s) in 'Off' position and subsequent Track Machine(s) shall pass Reception signal(s) in 'On' position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). Calling On signal(s), if available, and possible may be taken 'Off' for subsequent Track Machine(s). During reception of Track Machine(s), SM will ensure correct setting and locking of concerned points in the route and shall not alter any point in the route till complete arrival of all Track Machines. SM shall use button collar/lever collar.
4.	Safety Certificate	On reaching the Station, Official In-charge (P/Way) will hand over Track Machine permit (Annexure-I), to SM only when the last Track Machine clears the block section. Official In-charge (P/Way) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
5.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Track Machine permit (Annexure-I), SM will clear block back and cancel the block under exchange of private number with Section Controller and SM(s) of concerned station(s).

(d) Work and Return in Single line as under –

SN	Description	Action to be taken
1.	Despatch	i) SM will obtain line clear from station in advance and take off last stop signal. First Track Machine will get Last Stop signal in 'Off' position, however, subsequent Track Machine(s) will be allowed to pass Last Stop signal at 'On' position by endorsing the same

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		<p>on Annexure –I.</p> <p>ii) Token(if any) will be handed over to Official In-charge(P/Way).</p> <p>Note:- While starting from the station, SM will authorize subsequent Track Machine(s) to pass concerned Starter signal(s) at ‘On’ position after ensuring correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Track Machines and same will be mentioned in Annexure – I.</p>
2.	Reception	All Track Machines will be admitted by taking off Reception signal(s). Official In-charge(P/Way) shall ensure that all Track Machine(s) enter in convoy. First Track Machine will get Reception signal(s) in ‘Off’ position and subsequent Track Machine(s) shall pass Reception signal(s) in ‘On’ position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). Calling On signal(s), if available and possible may be taken off for subsequent Track Machine(s). During reception of Track Machines, SM will ensure correct setting and locking of concerned points in the route and shall not alter any point in the route till complete arrival of all Track Machines. SM shall use button collar/lever collar.
3.	Safety Certificate	On reaching the Station, Official In-charge(P/Way) will hand over Track Machine permit (Annexure-I) and token (if any), to SM only when the last Track Machine clears the block section. Official In-charge(P/Way) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
4.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Track Machine permit (Annexure-I) and token (if any), SM will clear the block section and cancel the block under exchange of private number with Section Controller and SM of adjacent station.

Note – When block is permitted in station section, the movements of Track Machines shall be carried out by issuing T/806 to every individual Track Machine under the supervision of Official In-charge(P/Way).

SR 4.65-4 Working during Integrated block - Material train, Track Machine(s), Tower wagon(s):-

- i) During Integrated block, Material Train, Track Machine(s), Tower wagon(s) will be allowed to work in the same block section, however the composition of group should not exceed 7.
- ii) During Integrated block, sequence of Material train, Track Machine(s) and Tower wagon(s) will be decided by Overall In-charge (Integrated Block) based on the working direction of Track Machines and location of works and the same shall be mentioned in the ‘ Integrated Block Requisition Notice and Permit’ (Annexure-II).

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- iii) Overall In-charge (Integrated Block) will submit block requisition (Annexure-II) to SM in duplicate. SM will advise Section Controller.
- iv) Permission shall be granted by SCOR under exchange of Pvt. No. with SM of either end stations. SM will endorse on Annexure-II and hand over it to Overall In-charge (Integrated Block).
- v) Procedure to be adopted during -
 - (a) Work and Proceed on Single line and Double/Multiple line (via right line) as under

SN	Description	Action to be taken
1.	Despatch	SM will obtain line clear from station in advance. All Material Train, Track Machine(s), Tower Wagon(s) will be despatched in convoy by taking off last stop signal (issuing token if any) i.e. first Material Train/ Track Machine/ Tower Wagon will get all the concerned en route signal(s) including Last Stop Signal in 'Off' position and subsequent Material Train, Track Machine(s), Tower Wagon(s) will be authorized to pass concerned en route signals including Last stop signal at 'On' position by endorsing the same on Annexure-II after ensuring correct setting and locking of concerned points in the route. SM shall not alter the points in the route till passage of all the Material train, Track machine(s), Tower Wagon(s) and same will be mentioned in Annexure – II.
2.	Mid-section - while passing IBS signal (if any) or Home signal of 'C' class station (if any)	First Material Train/ Track Machine/ Tower Wagon will get IBS signal or Home signal of 'C' class station in 'Off' position and subsequent Material Train, Track Machine(s), Tower Wagon(s) will be authorized to pass IBS signal or Home signal of 'C' class station at 'On' position by endorsing the same in Annexure –II by SM of block permitting station.
3.	Reception at station in advance	All Material Train, Track Machine(s), Tower Wagon(s) will be admitted by taking off Reception signal(s). Overall In-charge (Integrated Block) shall ensure that all Material Train, Track Machine(s), Tower Wagon(s) enter in convoy. First Material Train/ Track Machine/ Tower Wagon will get Reception signal(s) in 'Off' position and subsequent Material Train, Track Machine(s), Tower Wagon(s) shall pass Reception signal(s) in 'On' position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). Calling On signal(s), if available and possible may be taken off for subsequent Material Train, Track Machine(s), Tower Wagon(s). During above reception, SM will ensure correct setting and locking of concerned points in the route and shall not alter any point in the route till complete arrival of all Material Train, Track Machine(s), Tower Wagon(s). SM shall use button collar/lever collar.

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4.	Safety Certificate	On reaching the Station in advance, Overall In-charge (Integrated Block) will hand over Integrated Block permit (Annexure-II), as well as token (if any on Single line) to SM only when the last Material Train/ Track Machine/ Tower Wagon clears the block section. Overall In-charge (Integrated Block) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
5.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Track Maintenance Machine permit (Annexure-II), SM of station in advance will clear back the section and cancel block under exchange of private number with Section Controller and SM of adjacent station(s)[block permitting station and 'C' class station(if any)] .

(b) Work and Return (via right line) on Double/Multiple line as under –

SN	Description	Action to be taken
1.	Despatch	SM will take block forward and all Material Train, Track Machine(s), Tower Wagon(s) will be despatched in convoy by authorizing them to pass all the concerned en route signal(s) including Last Stop Signal at 'On', after ensuring correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Material train, Track Machine(s), Tower Wagon(s) and same will be mentioned in Annexure – II.
2.	Mid-section- while passing IBS signal (if any) or Home signal of 'C' class station (if any)	If there is IBS signaling or 'C' class station, both block section shall be treated as one block section. SM /SMs (If 'C' Class station is there), will take block forward. SM of block permitting station will permit to pass IBS signal /Home signal of 'C' class station at 'On' by endorsing the same on Annexure –II.
3.	Reception at station.	On completion of the work, the LP of Material train, Track Machine(s) In-charge, LP of Tower Wagon(s) shall bring their Material Train, Track Machine(s), Tower Wagon(s) to stop opposite First Stop signal pertaining to the right line or at the Last Stop signal pertaining to the line on which they are running whichever comes across first. SM shall depute a Railway servant in uniform at the foot of the signal (whichever the Material Train/ Track Machine/ Tower Wagon would encounter first) who shall stop them on danger signal. All Material Train, Track Machine(s), Tower Wagon(s) will be received in convoy by issuing single pilot- in memo after ensuring correct setting and locking of concerned points. SM will

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		<p>not alter the point(s) in the route till complete arrival of all the Material Train, Track Machine(s), Tower Wagon(s). Overall In-charge (Integrated Block) will be responsible for ensuring safe movements of all Material Train, Track Machine(s), Tower Wagon(s).</p> <p>If the Track Machine In-charge(s)/LP(s) find that no railway servant, in uniform, has been deputed to pilot the Material train, Track Machine(s), Tower Wagon(s), provision of GR 4.44 shall be observed.</p>
4.	Safety Certificate	On reaching the Station, Overall In-charge (Integrated Block) will hand over Integrated Block permit (Annexure-II) to SM only when the last Material Train/ Track Machine/ Tower Wagon clears the block section. Overall In-charge (Integrated Block) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
5.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Integrated Block permit (Annexure-II), SM will cancel block forward and cancel the block under exchange of private number with Section Controller and SM(s) of concerned station(s).

(c) Work and Return (via wrong line) in Double/Multiple line as under –

SN	Description	Action to be taken
1.	Despatch	<p>SM will take block back, then issue Integrated Block permit(Annexure-II) and Single Pilot-out memo to the Overall In-charge (Integrated Block).</p> <p>The Material Train, Track Machine(s), Tower Wagon(s) shall be piloted out from the station in convoy after ensuring correct setting and locking of points. Overall In-charge (Integrated Block) shall supervise this movement and ensure that all the Material Train, Track Machine(s), Tower Wagon(s) enter into the block section safely.</p> <p>Note:- While starting from the station, SM will authorize all Material Train, Track Machine(s), Tower Wagon(s) to pass concerned Starter signal(s) in the route, if any, at 'On' positions after ensuring correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Material train, Track Machine(s) Tower Wagon(s) and same will be mentioned in Annexure – II.</p>
2.	Mid-section-while passing IBS signal (if any) or Home signal of 'C'	If there is IBS signaling or 'C' class station, both block section shall be treated as one block section. SM /SMs (If 'C' Class station is there) will take block back. If block is beyond the IBS signal/ Home signal of 'C' class station, while returning this signal will be passed at 'On' on the basis of endorsement made by the SM of block

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	class station (if any)	permitting station on Annexure –II.
3.	Reception at station.	All Material Train, Track Machine(s), Tower Wagon(s) will be admitted by taking off Reception signal(s). Overall In-charge (Integrated Block) shall ensure that all Material Train, Track Machine(s), Tower Wagon(s) enter in convoy. First Material Train/ Track Machine/ Tower Wagon will get Reception signal(s) in ‘Off’ position and subsequent Material Train, Track Machine(s), Tower Wagon(s) shall pass Reception signal(s) in ‘On’ position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). Calling On signal(s), if available and possible, may be taken off for subsequent Material Train, Track Machine(s), Tower Wagon(s). During above reception, SM will ensure correct setting and locking of concerned points in the route and shall not alter any point in the route till complete arrival of all Material Train, Track Machine(s), Tower Wagon(s). SM shall use button collar/lever collar.
4.	Safety Certificate	On reaching the Station, Overall In-charge (Integrated Block) will hand over Integrated Block permit (Annexure-II), to SM only when the last Material Train/ Track Machine/ Tower Wagon clears the block section. Overall In-charge (Integrated Block) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
5.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Integrated Block permit (Annexure-II), SM will clear block back and cancel the block under exchange of private number with Section Controller and SM(s) of concerned station(s).

(d) Work and Return in Single line as under –

SN	Description	Action to be taken
1.	Despatch	SM will obtain line clear. Material Train, Track Machine(s), Tower Wagon(s) will be despatched in convoy by taking off last stop signal (issuing token if any) i.e. first Material Train/ Track Machine/ Tower Wagon will get all the concerned en route signal(s) including Last Stop Signal in ‘Off’ position and subsequent Material Train, Track Machine(s), Tower Wagon(s) will be authorized to pass concerned en route signal(s) including Last stop signal at ‘On’ position after ensuring correct setting and locking of concerned points in the route and shall not alter the points in the route till passage of all the Material train, Track Machine(s), Tower Wagon(s) and same will be mentioned in Annexure – II.
2.	Reception at	All Material Train, Track Machine(s), Tower Wagon(s) will be

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	station.	admitted by taking off Reception signal(s). Overall In-Charge (Integrated Block) shall ensure that all Material Train, Track Machine(s), Tower Wagon(s) enter in convoy. First Material Train/ Track Machine/ Tower Wagon will get Reception signal(s) in 'Off' position and subsequent Material Train, Track Machine(s), Tower Wagon(s) shall pass Reception signal(s) in 'On' position by observing green hand signal displayed by Pointsman in uniform at the foot of Reception signal(s). Calling On signal(s), if available and possible, may be taken off for subsequent Material Train, Track Machine(s), Tower Wagon(s). During above reception, SM will ensure correct setting and locking of concerned points in the route and shall not alter any point in the route till complete arrival of all Material Train, Track Machine(s), Tower Wagon(s). SM shall use button collar/lever collar.
3.	Safety Certificate	On reaching the Station, Overall In-charge (Integrated Block) will hand over Integrated Block permit (Annexure-II) and token (if any), to SM only when the last Material Train/ Track Machine/ Tower Wagon clears the block section. Overall In-charge (Integrated Block) will also certify that the track is fit for train movement and issue Track Safe Certificate(Annexure-III).
4.	Clearance of Section and Block cancellation.	On receipt of Track Safe Certificate (Annexure-III) and Integrated Block permit (Annexure-II) and token (if any), SM will clear the block section and cancel the block under exchange of private number with Section Controller and SM of adjacent station.

Note – (For Track Machine block and Integrated block)

- i) In IBS signaling – During the block no train will be allowed to proceed upto IBS Signal (even though section upto IBS is cleared) till complete arrival of all Track Machines(in case of Track Machine block) and Material train, Track Machine(s) , Tower Wagon(s) (in case of Integrated block) at the concerned station.
- ii) In case of 'C' class station between two 'B' /Spl Class stations between which block is permitted, during work and proceed, SM of 'C' class station will obtain line clear from station in advance and take off the Home signal. SM 'C' class station will not grant line clear to SM in rear till complete arrival of all Track Machines(in case of Track Machine block) and Material train, Track Machine(s) , Tower Wagon(s) (in case of Integrated block) at station in advance. SM of 'C' class station will remain vigilant and ensure safe movement of all Track Machines(in case of Track Machine block) and Material train, Track Machine(s) , Tower Wagon(s) (in case of Integrated block). During work and return block on wrong line, SM of 'C' class station will not grant line clear to station in rear till cancellation of block.

WORKING OF TRAINS GENERALLY

- iii) Automatic Block territory will be treated as Absolute block territory, all Automatic signals between block area will be treated as suspended, however, aspect of Gate stop signal(s)(if any) should be observed.

SR 4.65-5 PRECAUTIONS

- i) The Official In-charge(P/Way) /Overall In-charge (Integrated Block) is responsible for the protection of the site of the work and also for protection of adjoining track in case of infringement, if any. He shall also be responsible for safety of track after the working.
- ii) The Station Master on either side shall inform all the level crossing gates equipped with telephones falling in this block section about the total number of Material train, Track Machine(s), Tower Wagon(s) permitted to work in the block section under exchange of Private numbers.
- iii) In course of working, when required to pass a manned or unmanned level crossing, each Material train, Track Machine(s), Tower Wagon(s) shall stop short of the level crossing and pass only after ensuring the safety at the Level Crossing.
- iv) The Official In-charge(P/Way) /Overall In-charge(Integrated Block) shall always take four efficient flagmen equipped with banner flags, 10 detonators and red hand signal each to protect the Material train/Track Machine/Tower wagon. One flagman shall exhibit banner flag at a distance of 600 meters on either side of the site of the work and one flag man showing a stop hand signal at a distance of 1200 meters on either side of the work.
- v) Some Track Machines tend to foul the adjacent lines while working on double line section or in the yard. BRM may foul the adjacent line when stretching out its blades. If any part of a Track Machine is likely to foul the adjacent line while working, the Official In-charge(P/Way) /Overall In-charge (Integrated Block) shall request SM in writing to block both the lines and such work should only be undertaken, if blocking of both the lines has been permitted and both the lines have been protected.
- vi) The Official In-charge(P/Way) /Overall In-charge (Integrated Block) is responsible for the protection of the work site and also for protection of adjoining track in case of infringement, if any. He will also ensure the following during dusty atmosphere, heavy noise pollution and mass labour working –
 - 1) Safety of track after the working of the Track Machine(s).
 - 2) Temporary whistle board should be fixed on the adjoining track, which can be moved along with Track Machine at work site.
 - 3) Imposition of Speed restriction for adjacent line(s) during block of BCM/TRT/PQRS is technically not required for Track Machine working. However, depending upon local site condition P/Way officials may impose suitable speed restriction on adjacent line(s). Such Speed restrictions should be within overall Engineering allowance (EA) of the concerned section.
- vii) During Integrated Block, Overall In-charge (Integrated Block) will co-ordinate with In-charge (Material Train, Tower wagon and Track Machine(s)) and ensure safety.

WORKING OF TRAINS GENERALLY

- viii) Official In-charge(P/Way) / Overall In-charge (Integrated Block) / Tower Wagon In-charge will be responsible for obtaining power block, if required.
- ix) SCOR will advise Engineering Control and TPC regarding permission granted for Integrated block. Engineering Control and TPC will monitor the block in Control Office.
- x) SM will make necessary entries in the Engineering Block Register, Power Block register and Train Signal Register(with Red ink).

SR 4.65-6 PROTECTION OF TRACK MACHINE(S) WHEN STABLED AT STATION:

- i) The Track Machine(s) shall normally be stabled on a non running line.
- ii) While stabling the Track Machine(s) , GR 5.23 and SRs there under shall be followed. The Track Machine(s) In-charge shall be responsible for ensuring that Track Machine is stabled by clearing the fouling marks and traps and without obstructing the adjacent lines. He shall apply the hand brakes and wooden wedges to prevent movement.
- iii) The Track Machine(s) shall not move into or inside the traffic yard without written permission(T/806) of SM. Except in emergency, no shunting of Goods /Passenger stock shall be permitted on the line where Track Machines are stabled.

SR 4.65-7 FAILURES & ACCIDENTS:

- i) Failures in Block sections of the Track Machine(s) will be treated as accident under class –R-5. Accidents involving Track Machines shall be treated as train accident under the appropriate class and action to be taken as per the rules in force.
- ii) In the case of failure of Track Machine(s) in block section, the Official In-charge(P/Way) /Overall In-charge(Integrated Block) may decide to clear the disabled unit to next station either by pushing or pulling with the help of other Track Machine provided the brake power is in good condition.
Otherwise, intimation shall be sent to the nearest Station Master through a messenger and to control, through portable telephone asking for a light engine to tow the unit.
- iii) In the event of breakdown, the Track Machine(s) shall be protected as per GR 6.03 and SR there under. In case, the Official In-charge(P/Way) Overall In-charge(Integrated Block) feels that clearance of sections going to take long time, assistance of Accident Relief Train shall be asked immediately.

SR 4.65-8 SPEED: Maximum permissible speed should be as approved by CRS. The speed while negotiating turnout will be as per prescribed speed laid down for turnouts, which shall not exceed 15 kmph under any circumstances(While entering/exiting loop lines /sidings/crossovers).

WORKING OF TRAINS GENERALLY

SR 4.65-9

Annexure –I	Block Requisition Notice & Permit
Annexure –II	Integrated Block Requisition Notice & Permit
Annexure –III	Track Safe Certificate

WORKING OF TRAINS GENERALLY

Annexure-I	Official In-charge(P/Way), SM/RecordE/465/A <u>BLOCK REQUISITION NOTICE & PERMIT</u>																																
<p>From: Official In-charge(P/Way) at station TO SM..... station Notice No..... Date.....Time..... The line(Up/Dn) between station andstation at kmsto..... is required to be blocked for the duration of hours for working the Nos. of Track Machines. The sequence in which Track Machines will work is as under:- (i)..... (ii)..... (iii)..... (iv)..... (v)..... (vi)..... (vii).....</p> <p>All the Track Machines will enter in Block section in convoy from _____ station on Up/Dn line___ and clear at _____ station (i)Work and Proceed on Right line, (ii) Work and Return on Right/Wrong line.(Strike out whichever is not applicable).</p> <p style="text-align: center;">Signature of Official In-charge(P/Way)</p>																																	
<p>To Official In-charge(P/Way)</p> <p>You are hereby permitted to work as per above and for _____ hrs from _____ to _____ hrs. Private Number _____(In token of obtaining Line Clear/Block Back/Block forward) All the points in the concerned route are correctly set and locked and piloted out by _____. Following Departure Signal(s) is/are authorized to pass at 'On' i)_____ ii) _____ iii)_____ iv)_____ v) Last Stop Signal No._____, Mid section signals: vi)IBS signal No. _____/vii) Home Signal of 'C' class _____ Caution Order if any</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">SN</th> <th colspan="2">STATION BETWEEN</th> <th colspan="2">KILOMETERAGE</th> <th rowspan="2">Speed kmph</th> <th rowspan="2">Cause/ Remark</th> </tr> <tr> <th>From</th> <th>To</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> </tbody> </table> <p style="text-align: right;">_____ Signature of Station Master</p> <p>Received _____ Signature of Official In-charge(P/Way) Date.....Time.....</p> <p>Note : a) Work and proceed on Right line on Single /Double/Multiple i) Track Machines are allowed to leave the station in convoy under one authority to proceed [i.e. first Track Machine will get Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) in 'Off' position, however, above mentioned subsequent Track Machine(s) are allowed to pass Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) at 'On' position], ii)Automatic territory - Track Machine(s) are allowed to leave the station in convoy under one authority to proceed. All Automatic signals in the block area will be treated as suspended during block working. [i.e. first Track Machine will get Automatic Stop signals in 'Off' position, however, above mentioned subsequent Track Machines are allowed to pass Automatic Stop signals at 'On' position], however, observe aspect of Gate stop signal in the block area.</p> <p>b) Work and return, Double line- 1) On right line) i) Track Machine(s) is/are allowed to pass last stop signal at 'ON' while proceeding into block. ii) If block is beyond the IBS signal/ Home signal of 'C' class station, this signal is permitted to pass at 'On'. 2) On wrong line - If block is beyond the IBS signal/ Home signal of 'C' class station, while returning this signal is permitted to pass at 'On'.</p> <p>c) Work and return, Single line - first Track Machine will get Last Stop signal in 'Off' position, however, above mentioned subsequent Track Machines are allowed to pass Last Stop signal at 'On' position.</p>		SN	STATION BETWEEN		KILOMETERAGE		Speed kmph	Cause/ Remark	From	To	From	To																					
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	From	To	From	To																													
<p>Signature of Track Machine(s) In-charge i)_____, ii) _____, iii) _____, iv) _____, v)_____ vi)_____ vii)_____ . Signature of Official In-charge (P/Way) _____</p> <p>It is the responsibility of Official In-charge (P/Way) to apprise all the Track Machine(s) In-charge regarding working of Track Machines during the block and obtain the signature on his record copy</p>																																	

WORKING OF TRAINS GENERALLY

Annexure-II	(Overall In-charge/Integrated Block, SM/Record)	E/465/B																																
<u>INTEGRATED BLOCK REQUISITION NOTICE & PERMIT</u>																																		
<p>From: Overall In-charge(Integrated Block) at station</p> <p>TO SM..... station.</p> <p>Notice No..... Date.....Time.....</p> <p>The line(Up/Dn) between station and station at kmsto..... is required to be blocked for the duration of hours for working the Nos. of Material Train, Nos. of Track Machines,Nos of Tower Wagons. The sequence will be as under:-</p> <p>(i)..... (ii).....(iii).....iv).....(v)..... (vi)..... (vii)</p> <p>Above mentioned Material train, Track Machine(s) , Tower Wagon(s) will enter in Block section in convoy from _____ station on Up/Dn line_____ and clear at _____station</p> <p>(i)Work and Proceed on Right line, (ii) Work and Return on Right/Wrong line.(Strike out whichever is not applicable).</p> <p style="text-align: center;">Signature of Overall In-charge (Integrated Block).</p>																																		
<p>To</p> <p style="text-align: center;">Overall In-charge (Integrated Block)</p> <p>You are hereby permitted to work as per above and for _____hrs from _____ to _____ hrs.</p> <p>Private Number _____(In token of obtaining Line Clear/Block Back/Block forward) All the points in the concerned route are correctly set and locked and piloted out by _____. Following Departure Signal(s) is/are authorized to pass at 'On' i)_____ii) _____ iii)_____ iv)_____ v) Last Stop Signal No.____, Mid section signals: vi)IBS signal No. ____/vii) Home Signal of 'C' class _____ Caution Order if any</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">SN</th> <th colspan="2">STATION BETWEEN</th> <th colspan="2">KILOMETERAGE</th> <th rowspan="2">Speed kmph</th> <th rowspan="2">Cause/ Remark</th> </tr> <tr> <th>From</th> <th>To</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> </tbody> </table> <p style="text-align: right;">Signature of Station Master</p> <p>Received _____</p> <p style="text-align: center;">Signature of Overall In-charge (Integrated Block)</p> <p>Date.....Time.....</p> <p>Note : a) Work and proceed on Right line on Single /Double/Multiple</p> <p>i)Material Train, Track Machine(s) , Tower Wagon(s) is/are allowed to leave the station in convoy under one authority to proceed [i.e. first Material Train/Track Machine/Tower Wagon will get Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) in 'Off' position, however, above mentioned subsequent Material Train, Track Machines , Tower Wagons are allowed to pass Last Stop signal and/or IBS signal (if any) or Home Signal of 'C' class station (if any) at 'On' position],</p> <p>ii) Automatic territory - Material Train, Track Machine(s), Tower Wagon(s) are allowed to leave the station in convoy under one authority to proceed. All Automatic signals in the block area will be treated as suspended during block working. [i.e. first Material Train/Track Machine/Tower Wagon will get Automatic Stop signals in 'Off' position, however, above mentioned subsequent Material Train, Track Machine(s) , Tower Wagon(s) are allowed to pass Automatic Stop signals at 'On' position, however, observe aspect of Gate stop signal in the block area.</p> <p>b) Work and return, Double line-</p> <p>1) On right line) i) Material Train, Track Machine(s) , Tower Wagon(s) are allowed to pass Last Stop signal at 'ON' while proceeding into block. ii) If block is beyond the IBS signal/ Home signal of 'C' class station, this signal is permitted to pass at 'On'.</p> <p>2) On wrong line - If block is beyond the IBS signal/ Home signal of 'C' class station, while returning this signal is permitted to pass at 'On'.</p> <p>c) Work and return, Single line - first Material Train/Track Machine/Tower Wagon will get Last Stop signal in 'Off' position, however, above mentioned subsequent Material Train, Track Machine(s) , Tower Wagon(s) are allowed to pass Last Stop signal at 'On' position.</p> <p>Signature of Track Machine(s) In-charge/Loco Pilot(s) i)____, ii) _____, iii) _____, iv) _____, v)____vi)_____vii)_____.</p> <p>Signature of _____</p> <p style="text-align: center;">Overall In-charge (Integrated Block) Tower Wagon In-charge Material Train In-charge</p> <p>It is the responsibility of Overall In-charge(Integrated Block) to apprise all the Track Machine(s) In-charge, Tower Wagon(s) In-charge, Material Train In-charge regarding working of Material train, Track Machine(s) , Tower Wagon(s) during the Integrated block and obtain the signature on his record copy</p>			SN	STATION BETWEEN		KILOMETERAGE		Speed kmph	Cause/ Remark	From	To	From	To																					
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	From	To	From	To																														

WORKING OF TRAINS GENERALLY

Annexure III

**E/465/C
(SM /Record)**

Track Safe Certificate

No.....

Date:.....Time.....

From: Overall In-charge(in case of Integrated Block)/
Official In-charge(P/Way) in case of Track Machine block
H.Q. at.....Station.

To: SM.....

Refer my notice No.....dated.....and your No..... date..... . The block imposed between.....station andstation at Kms.....to from.....hrs. to.....hrs. is cancelled, and all the Track Machines(In case of Track Machine Block). All the Material Train, Track Machine(s) , Tower Wagon(s) (In case of integrated block) have arrived completely within fouling mark and the line is certified safe for normal working.

.....
Signature of Official In-charge(P/Way)
(In case of Track Machine Block)

or

.....
Signature of Overall In-charge
(In case of Integrated Block)

Received

Signature of SM

Date:.....Time.....

Revised vide CS/14/22(Ref. Note no. TR/G&SR/Genl./101 dated 13.07.2018)

WORKING OF TRAINS GENERALLY

I. Private Engines and Vehicles

4.66. Private engines and vehicles - No engine or other vehicle which are the property of a private owner, shall be allowed to enter upon the railway, except in accordance with special instructions.

S.R. 4.66-1. Engines of private firms -

(a) Engines belonging to private firms shall not be run either in steam or dead on their own wheels over this Railway, unless specially authorised by the Principal Chief Operations Manager. When run dead on their own wheels, motion parts must, before despatch, be uncoupled by, and at the expense of the owner, and all brass work and loose fittings must be packed in boxes.

(b) An engine belonging to a private firm, before being attached to a train, must be examined by the nearest Loco Foreman. If fit to run, he must issue a certificate which will be attached to the Wagon Way Bill and a Assistant Driver must be on the foot-plate for oiling the engine.

ΦΦΦ

CONTROL AND WORKING OF STATIONS

CHAPTER V

CONTROL AND WORKING OF STATIONS

5.01 . Responsibility of the Station Master for working :-

- (1) The Station Master shall be responsible for the efficient discharge of the duties devolving upon the staff employed, either permanently or temporarily, under his orders at the station or within the station limits and such staff shall be subject to his authority and direction in the working of the station.
- (2) The Station Master shall see that all signals, points gates of level crossings and the whole machinery of his station are in proper working order and shall immediately report all defects therein to the proper authority.
- (3) The Station Master shall also be responsible to see that the working of the station is carried out in strict accordance with the rules and regulations for the time being in force.
- (4) No person other than the Station Master shall ask for or give Line Clear, or give authority to proceed.

~~S.R.5.01-1. The Station Master must daily inspect the station which must include the inspection of cabins, signals, level crossing gates, lamps, weighing machines, goods and station yard and vehicles standing therein, at least once a day. The Yard Master will perform similar duties in the area under his charge. At large stations where daily inspection is not practicable, the Station Master must do this inspection frequently, at least once a week. The Assistant Station Master or the Assistant Yard Master on duty must inspect signal cabins once in his duty hours and sign the Train Signal Registers.~~

S.R.5.01-1 The Supervisory Station Master must daily inspect the station which must include the inspection of cabins, signals, level crossing gates, lamps, weighing machines, goods and station yard and vehicles standing therein, at least once a day. The Yard Master will perform similar duties in the area under his charge. At large stations, where daily inspection is not practicable and at Road side station not having supervisory SM, the Station Master in-charge must do this inspection frequently, at least once a week. The Assistant Station Master or the Assistant Yard Master on duty must inspect signal cabins once in his duty hours if there are no ASMs in the Cabin and sign the Train Signal Registers.

CS 13/15(Ref: Office Note No. TR/G&SR/Rev/101 dated 08.07.13.)

~~S.R.5.01-2. The Station Master must also see that goods, parcels and other material must not be left scattered about on the platform. Packages to be loaded should be neatly stacked at a safe distance from the edge of the platform.~~

SR 5.01-2. The Station Master must also see that goods, parcels and other material must not be left scattered about on the platform. Packages to be loaded should be neatly stacked at a safe distance from the edge of the platform. At stations having

CONTROL AND WORKING OF STATIONS

commercial supervisor like CBS/CPS/CGS these aspects should be monitored by them, under the supervision of Station Master.

CS 13/16 (Ref: Office Note No. TR/G&SR/Rev/101 dated 21.03.13.)

~~S.R.5.01 3. Block Instruments, Operation of –~~

~~(a) No person is permitted to operate block instruments unless he is in possession of the prescribed certificate of competency on Form T.115 B and has been detained for the work. Station Masters and Assistant Station Masters on duty, Cabin Assistant Station Masters and Switchmen in independent charge of block cabins and stations and who are in possession of certificates of competency on Form T.115 B are authorized to operate block instruments independently, it will be prescribed in the Station Working Rules.~~

~~(b) If staff have been working for a year or more at stations where they are not required to operate block instruments, are posted to stations where they are required to operate block instruments, or when they are required to operate new type of block instruments, they shall be tested locally by the Divisional Safety Officer/Divisional Operations Manager/ Assistant Operations Manager in the manipulation of block instruments and a fresh certificate of competency on Form No. T.115 B shall be issued before such staff are allowed to take over charge of their duties on transfer.~~

~~In case of single line tokenless block instruments the Certificate of competency shall be issued by the Divisional Safety Officer/Divisional Operations Manager.~~

~~(c) No person shall be allowed to operate panels or work on route relay installations unless he is in possession of a valid certificate of competency jointly issued by the DSO and DSTE.~~

S.R.5.01-3. Block Instruments, Operation of –

(a) No person is permitted to operate block instruments/Panel/RRI unless he is in possession of the prescribed certificate of competency. Station Masters and Assistant Station Masters on duty, Cabin Assistant Station Masters and Switchmen in independent charge of block/panel/RRI cabins and stations and who are in possession of certificates of competency are authorized to operate block instruments/panel/RRI independently, it will be prescribed in the Station Working Rules.

CS 12/8(Ref : This office note No.TR/G&SR/Rev./101 dated 25.01.12.)

(a) No person is permitted to operate block instruments/Panel/RRI unless he is in possession of the prescribed certificate of competency. Station Masters and Assistant Station Masters on duty, Cabin Assistant Station Masters and Switchmen in independent charge of block/panel/RRI cabins and stations and who are in possession of certificates of competency are authorized to operate block instruments/panel/RRI independently; it will be prescribed in the Station Working Rules.

However, at non-block Cabins having Panel interlocking, Cabinman/Leverman/ Pointsman 'A' who are in possession of certificate of

CONTROL AND WORKING OF STATIONS

competency jointly issued by DOM/AOM and DSTE/ASTE are authorized to operate panel independently.

CS 13/1 (Ref : Office note No. TR/G&SR/Genl./102 dated 19.07.2012)

- (b) In case of staff who have been working for a year or more at station where Block Instrument and/or Panel/RRI are not provided and who are subsequently posted to a station where Block Instrument and/or Panel/RRI are provided, or when they are required to operate new type of block instruments/Panel/RRI, the staff shall be tested by DOM/AOM and DSTE/ASTE and a certificate of competency shall be issued before such staff is allowed to take over charge of their duties on transfer.

CS 12/8(Ref : This office note No.TR/G&SR/Rev./101 dated 25.01.12.)

5.02. Supply of copies of rules and distribution or exhibition of other documents – The Station Master shall see –

- (a) that every railway servant subordinate to him who should be supplied with a copy of authorised translation of these rules under Rule 2.01 duly receives the same;
- (b) that the Working Time Table in force together with all correction slips an appendices, if any, working rules and instructions, and other notices having reference to the working of the line, are properly distributed or exhibited in such manner as may be prescribed under special instructions;
- (c) that both the sheet time tables and fare lists are correctly exhibited at the station if it is open for the booking of traffic; and
- (d) that copies of the Act, and the Goods and Coaching Tariffs are available for inspection by the public.

5.03. Obedience to orders and keeping of books and returns – The Station Master shall see that all orders and instructions are duly conveyed to the staff concerned and are properly carried out, and that all books and returns are regularly written up and neatly kept.

5.04 . Signal Cabins –

- (1) The Station Master shall make himself thoroughly acquainted with the duties of the staff employed in the signal cabins, if any, at his station and shall satisfy himself that they perform their duties correctly, and in order to maintain an effective supervision over the said staff, frequently visit the signal cabins.
- (2) The Station Master shall ensure that the prescribed equipment is readily available in signal cabins and maintained in good working order.

CONTROL AND WORKING OF STATIONS

(3) Signal Cabins shall be kept neat and clean and no unauthorized persons shall be permitted to enter such cabins.

5.05. Report of neglect of duty- The Station Master shall report without delay to his superiors, all neglect of duty on the part of any railway servant who is under his orders.

5.06. Station Working Rules –

(1) In addition to the General Rules for Indian Railways and Subsidiary Rules of a Railway, each station shall be provided with Station Working Rule applicable to the station, issued under special instructions.

(2) A copy of the Station Working Rules or relevant extract thereof shall be kept at cabins and level crossings concerned.

~~S.R.5.06-1. The Divisional Railway Managers are the Authorised Officers for the purpose of this Rule.~~

~~Power to issue working instructions are delegated to the Divisional Railway Managers within their own divisions and to their Divisional safety Officers/Divisional Operations Manager. Station Working Rules shall be framed jointly by the Divisional Safety Officers and Divisional Signal and Tele-Communication Engineers for interlocked stations and by the Divisional Safety Officers for non-interlocked stations.~~

S.R.5.06-1. The Divisional Railway Managers are the Authorised Officers for the purpose of this Rule.

Powers to issue working instructions are delegated to the Divisional Railway Managers within their own divisions and to their Sr. Divisional Operations Manager. The Station Working Rules should be framed jointly and signed by the Sr. Divisional Operation Manager and Sr. Divisional Signal & Telecommunication Engineers for interlocked stations and by the Sr. Divisional Operations Manager and Sr. Divisional Engineers for non-interlocked stations and the appendices signed by the concerned officers only.

CS 11/17(Ref: Rly Board's letter No.2005/Safety(A&R)/19/36 dated 27.10.2005.)

~~S.R.5.06-2. Preparation, Revision and Issue of Station Working Rules –~~

~~(a) The Divisional Safety Officers and Divisional Signal and Tele-Communication Engineers will have the station working rules and correction slip there to of all the stations carefully checked on the spot to see that they are correct and complete in all respect before they are finally issued and brought into force. The Chief Safety Officer and Chief Signal and Telecommunication Engineer may be approached for any advice, if necessary.~~

CONTROL AND WORKING OF STATIONS

~~(b) If the Working Rules and instructions to be issued for regulating safe working of traffic, in and between stations and in yards, involve matters, in which general rules, require their issue of 'Approved Special Instructions', or exemption from a rule, Divisional Railway Manager, shall refer the matter to the Chief Safety Officer, who will obtain the necessary sanction from the Commissioner of Railway Safety.~~

~~(c) On the expiry of 3 years if upto three correction slips have been issued and no further change is contemplated, the Station Working rules should be treated as not requiring any change and should be re-validated.~~

~~(d) When a fourth correction is contemplated, the Station Working Rules should be revised and re-issued.~~

~~(e) The method of re-validation at the end of every three years can be by way of issuing re-validation order jointly signed by the safety and S&T officers which should be placed on the Station Working Rules. Re-calling of Station Working Rules for this purpose should not be necessary.~~

S.R.5.06-2. Preparation, Revision and Issue of Station Working Rules –

- (a) The Sr. Divisional Operations Manager and Sr.Divisional Signal & Tele. Engineers will have the station working rules and correction slip thereto of all the stations carefully checked on the spot to see that they are correct and complete in all respect before they are finally issued and brought into force. The Chief Transportation Planning Manager and Chief Signal and Telecommunication Engineer may be approached for any advice, if necessary.
- (b) If the Working Rules and instructions to be issued for regulating safe working of traffic, in and between stations and in yards, involve matters, in which general rules, require either issue of 'Approved Special Instructions', or exemption from a rule, Divisional Railway Manager, shall refer the matter to the Principal Chief Operations Manager, through PCSTE who will obtain the necessary sanction from the Commissioner of Railway Safety.
- ~~(c) On the expiry of five years if up to three correction slips have been issued and no further change is contemplated, the Station Working rules should be treated as not requiring any change and should be re-validated.~~
- ~~(d) When a fourth correction is contemplated, the Station Working Rules should be revised and re-issued.~~
- c) On the expiry of five years if up to five correction slips have been issued and no further change is contemplated, the Station

CONTROL AND WORKING OF STATIONS

Working rules should be treated as not requiring any change and should be re-validated.

- d) When a sixth correction is contemplated, the Station Working Rules should be revised and re-issued.

(c) & (d) revised vide Correction Slip No. 11 Item No. 18, is further revised vide CS

13/8 (Ref:Railway Board's Letter No. 2000/Safety (A&R)/19/36 dated 02.11.2012.)

- (e) The method of re-validation at the end of every five years can be by way of issuing re-validation order jointly signed by the Operating and S&T officers which should be placed on the Station Working Rules. Re-calling of Station Working Rules for this purpose should not be necessary.

CS 11/18 (Ref: Rly Board's letter No.2005/Safety(A&R)/19/36 dated 27.10.2005.)

5.07. Forms –

(1) All messages and written authorities mentioned in these rules shall be prepared on prescribed forms laid down in these rules or prescribed under special instructions and shall be stamped with the station stamp.

(2) If the authorized printed forms is not available for any reason or in exceptional circumstances a manuscript form containing all the particulars as contained in the prescribed form is issued as an emergency measure, reasons therefore shall be recorded in the station diary.

5.08. Access to and operation of equipment – No unauthorized person shall be permitted to have access to or operate signals, points electrical block instruments and electrical communication instruments or any other appliances connected with working of the Railway.

S.R.5.08-1. (1) For the operation of Section or Isolator Switches in emergencies, every Station Master, Cabin Assistant Station Master and Switchman shall be trained in the operation of these switches. They shall open or close such switches when called upon to do so by the Traction Power Controller.

(2) No switch affecting the feed to main running line or loop line(s) shall be closed or opened without the previous consent of the Traction Power Controller. An exception to this rule is that these switches may be opened in times of emergency by trained Station Masters/Cabin Assistant Station Masters, and Switchmen. All operation of section or isolating switches shall be reported to the Traction Power Controller in every case.

5.09. Reception of a train on an obstructed line -

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- (1) In case of reception of a train on an obstructed line, the Station Master shall -
- (a) whenever possible, intimate the Driver through the Station Master of the station in rear that the train is to be received on an obstructed line;
 - (b) ensure that the signal or signals controlling the reception of the train are not taken 'Off'; and
 - (c) ensure that all the points over which the train has to pass are correctly set and the facing points locked.
- (2) After the train has been brought to a stand at the relevant Stop signal, it may be received on the obstructed line by -
- (a) authorising the Driver to pass the Stop signal at 'on' by taking 'off' the Calling-on signal, where provided; or
 - (b) authorising the Driver on the signal post telephone, where provided, to pass the Stop signal at 'on', in accordance with special instructions; or
 - (c) authorising the Driver to pass the relevant signal or signals at 'on' through a written authority to be delivered by competent railway servant who shall pilot the train past such signal or signals.
- (3) The train shall be brought to a stand at the facing points leading to the reception line until hand-signalled forward by a competent railway servant.
- (4) A Stop hand signal shall be exhibited at a distance of not less than 45 metres from the point of obstruction to indicate to the Driver as to where the train shall be brought to a stand.
- (5) The Driver shall keep his train well under his control and be prepared to stop short of any obstruction.

5.10. Reception of a train on a non-signalled line -

- (1) Should it be necessary, in an emergency, to receive a train on a line which is not signalled for reception, the Station Master shall ensure that -
- (a) the train is brought to a stand at the first Stop signal;
 - (b) the line on which it is intended to receive the train is clear upto the trailing points or upto the place at which the train is required to come to a stand;
 - (c) all the points over which the train has to pass are correctly set and facing points locked; and
 - (d) the Driver is authorised to pass the approach Stop signal at 'on' through a written authority to be delivered by a competent railway servant who shall pilot the train on to the non-signalled line.

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(2) The Driver, while entering a non-signalled line, shall proceed cautiously and be prepared to stop short of any obstruction.

5.11. Departure of a train from a non-signalled line -

(1) In the event of a train having to be started from a line not provided with a Starter signal, the Driver shall be given a written permission to start :

Provided that such permission may be dispensed with where a tangible authority to proceed is given to the Driver.

(2) The written permission or the tangible authority to proceed referred to in sub-rule (1) shall not be given unless all the points for the departure of the train have been set and the facing points locked.

S.R. 5.11-1. In case of a train having to be started from a line not provided with a Starter signal, an authority on the prescribed form T.511 shall be given in addition to the 'Authority to proceed'.

5.12. Departure of a train from a line provided with a common departure signal -

(1) In the event of a train having to be started from a line out of a group of lines provided with a common departure signal, the Driver shall be given a written permission to start in addition to the authority to proceed under the system of working.

(2) The written permission and the authority to proceed referred to in sub-rule (1) shall not be given unless all the points for the departure of the train have been set and facing points locked.

5.13. Control of shunting -

(1) Shunting operations shall be controlled by fixed signals or hand signals or by verbal directions.

(2) The Driver shall not, however, depend entirely on signals and shall always be vigilant and cautious.

(3) The speed during shunting operations shall not exceed 15 kilometres an hour unless otherwise authorised by special instructions.

S.R.5.13-1. Shunting Operations -

~~(a) Shunting must be performed under the supervision of properly authorised operating staff only. At stations, other than road side stations, where separate shunting staff is provided the Stations Working Rules will clearly lay down on whom this duty devolves.~~

~~(b) (i) At road side stations, the Guard in charge of a train must personally supervise all shunting connected with his train, under instructions from~~

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~~the Station Master. On tranship trains, when the Guard is engaged in handing over and receiving packages, the Assistant Guard may be deputed to conduct shunting.~~

~~(ii) The Guard or the Assistant Guard, as the case may be, who is in charge of the shunting, shall ensure that the points are correctly set and locked, where necessary, for the shunting and he himself shall exhibit hand signals to the Driver.~~

~~(e) The shunting of a train from one line to another across the main line, when necessary, shall be conducted by the Guard under the Station Master's instructions and the Guard must travel in his brakevan while a train is being shunted. During the period Guard is travelling in the brakevan the shunting shall be conducted by the Assistant Guard, or if there is no Assistant Guard, by a Pointsman. At 'A' and 'C' class stations when such shunting is performed the line must be 'blocked back'.~~

(a) Shunting must be performed under the supervision of properly authorised operating staff only. At stations, other than roadside stations, where separate shunting staff is provided the Stations Working Rules will clearly lay down on whom this duty devolves. The lowest level of staff to supervise the shunting of passenger and mixed trains should be Shunting Jamadar.

(b) (i) At roadside stations, the Guard in charge of a train must personally supervise all shunting connected with his train, under instructions from the Station Master.

(ii) The Guard, who is in-charge of the shunting, shall ensure that the points are correctly set and locked, where necessary, for the shunting and he himself shall exhibit hand signals to the Driver.

(c) The shunting of a train from one line to another across the main line, when necessary, shall be conducted by Guard under the Station Master's instructions and Guard must travel in his Brakevan while a train is being shunted. During the period Guard is traveling in the Brakevan the shunting shall be conducted by a Points man. At "A" and "C" class stations when such shunting is performed the line must be "blocked back".

CS 8/6(Ref: Railway Board's letter No.2005/Safety (A&R)/19/25 dated 16.11.05)

(d) At a class 'B' station shunting may be performed within the station section, provided the respective Outer, if any, and Home signals are maintained in the 'On' position. At a class 'B' station on the single line, shunting may be carried on between the first Stop signals without 'blocking back' the line, provided 'Line Clear' has not been given for a train to approach.

(e) For other rules on shunting, see G.R.8.05, 8.06, 8.08, 8.09, 8.10, 8.11, 8.12 and 8.13.

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5.14. Responsibility for shunting- The Station Master shall see that the shunting of trains or vehicles is carried on only at such times and in such manner as will not involve danger.

S.R.5.14-1. (a) Shunting will be performed only by the Engine Driver on the instructions of the Station Master, Yard Master, Guard, Shunting Master or whoever may be in-charge of shunting operations. Clear instructions should be given to the staff conducting shunting including the train crew.

(b) ~~(i) The Station Master or the person authorised to give instructions for shunting operations shall issue an authority on Form T.451 F for shunting of all trains, from a running line to a siding, from siding to a running line, from one line to another or on the same line if such shunting fouls the facing and trailing points at either end. This form shall be signed by the Guard and the Driver, if the Driver is illiterate, the Guard shall personally hand over and explain the contents to him.~~

(i) The Station Master or the person authorized to give instructions for shunting operations shall issue an authority on Form T-806 for shunting of all trains, from a running line to a siding, from siding to a running line, from one line to another or on the same line if such shunting fouls the facing and trailing points at either end. This form shall be signed by the Guard and the Loco Pilot. However, in major yards other than road side station where separate shunting staff is provided and regular shunting movement takes place within the defined area, issue of shunting authority T-806 be dispensed with.

CS 12/2 (Ref : This office note No.TR/G&SR/Rev./101 dated 21.09.11.)

(ii) It is the responsibility of the Guard to acquaint himself with shunting restrictions before the commencement of shunting.

(c) The person, who initially gives instructions for shunting operations, shall not change instructions and authorise the changing of points etc., unless he has satisfied himself that shunting operations have been stopped completely and the staff conducting shunting have been advised of the changes contemplated.

(d) (i) The maximum permissible shunting speed is 15 kilometres per hour. When shunting or marshalling of wagons loaded with Petrol, Kerosene Oil, Liquid Fuel, Spirit and other highly inflammable liquids in bulk or packed in tins or drums, or wagon loaded with acids, gases, poisonous (toxic) substances, explosives and oxidising substances the speed is restricted to 8 kilometres per hour.

(ii) Maximum impact speed when shunting a single BOX wagon must not exceed 5 KMPH, while maximum impact speed when shunting a group of five box wagons coupled together with transition couplers at either end should not exceed 2 KMPH.

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(iii) The securing of vehicles after shunting should be done by station staff, such as, Pointsmen, Porters, or any other staff deputed for shunting, under personal supervision of the train Guard or SM/ASM on duty or the person in-charge of shunting.

~~(e) At interlocked stations those facing Points which are equipped with track locks/lock bars shall be invariably locked by pulling the track lock/lock bar lever during shunting operations, if interlocking permits of this being done; otherwise the points may be locked either by a clamp, or by a through bolt, with a padlock.~~

~~Facing points at interlocked stations which are neither equipped with track locks/lock bars nor are key locked and all points at non-interlocked stations shall be locked either by a clamp, or by a through bolt, with a padlock. However in cases of points over which shunting moves are governed by shunt signals, which detect the locking of the points by clamps or through bolt need not be done.~~

~~The above instructions apply to shunting of a passenger or goods train or part thereof or slip coaches and not to yard shunting.~~

e) At interlocked stations those facing Points which are equipped with track locks/lock bars shall be invariably locked by pulling the track lock/lock bar lever during shunting operations, if interlocking permits of this being done; otherwise the points may be locked either by a clamp, or by a through bolt, with a padlock.

Facing points at interlocked stations which are neither equipped with track locks/lock bars nor are key-locked and all points at non-interlocked stations shall be locked either by a clamp, or by a through bolt, with a padlock. However in cases of points over which shunting moves are governed by shunt signals detecting locking of all the points, locking by clamps or through bolts is not required

The above instructions apply to shunting of a passenger or goods train or part thereof or slip coaches and not to yard shunting.

Cs 13/17(Ref: Office Note No. TR/G&SR/Rev/101 dated 08.07.13.)

(f) Fixed signals except Outer, Home and last Stop signal may be taken 'off' for shunting purposes.

~~(g) Hand signals should be shown in such a manner as to be clearly visible to the Driver. If hand signals are shown from a Cabin, such signals must be repeated by the person in charge of shunting operations from the ground. The Driver shall act only on the latter's signals.~~

(g) Hand signals should be shown in such a manner as to be clearly visible to the Loco Pilot. If hand signals are shown from a Cabin, such signals must be repeated by the person in charge of shunting operations from the ground. The Loco Pilot shall act only on the latter's signals. However, in case movement is done by taking off fixed signal/shunt signal the display of hand signals is not necessary.

CS 12/2(Ref : This office note No.TR/G&SR/Rev./101 dated 21.09.11.)

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(h) The person in charge of shunting operations must see that conflicting signals, are not shown to the Driver, and whenever possible, instead of exhibiting a sudden Stop signal, a warning signal should be shown to enable the Driver to slacken speed.

(i) When shunting has to be performed on a train with two engines, one engine only must be used to do the work except in case of two diesel or electric engines coupled together to form one multiple unit and when operated by one Driver only, subject to local restrictions, if any, imposed in sidings and elsewhere.

~~(j) Screw couplings must not be allowed to hang down and drag during shunting operations. Vacuum/air hose pipes must be placed on dummy plugs before the screw coupling is unhooked.~~

(j) Screw couplings must not be allowed to hang down and drag during shunting operations. Air hose pipes must be placed on Air Brake hose coupling support before the screw coupling is unhooked.

(CS14/10)

(k) When vehicles are being moved by an engine for attaching to a passenger train, the air brake should be connected up so that brake power will be available. In the case of shunting on goods trains at intermediate stations, the air brake should, as far as possible, be connected with the engine.

(l) Carriages occupied by passengers must not be moved for shunting purposes without the personal instructions of the Station Master and also the Guard of the train concerned, who will jointly be responsible for taking all precautions, to warn passengers and to prevent accidents either to the passengers in the carriages or to those attempting to get into or out of them under the impression that the train is starting. The Guard shall have the air brake connected up and see to the correct setting of points over which shunting is performed.

Whenever shunting is to be performed for attaching or detaching coaches or when an engine is to be coupled to a passenger carrying train, the coaches/ engine must first be brought to stop 20 metres away from train and thereafter shunting be performed carefully.

If any Engine, other than that involving shunting with passenger carrying train, is required to be brought in rear of the passenger carrying train, it should be accompanied and hand signalled by shunting staff and stopped in rear of passenger carrying train at a minimum separation distance of 50 metres between the train and the Engine.

CS 14/1 vide office note dated 24.01.14 and CRS letter dtd 16.12.13

(m) When shunting is performed simultaneously from both ends in a yard, the person in charge of shunting operations, prior to shunting or backing a train or load which may foul a line or siding on which vehicles may be shunted from the other end, will instruct the Cabin Assistant Station Master/Switchman/Cabinman at

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his end to inform the Cabin Assistant Station Master/Switchman/Cabinman at the other end to advise the person in charge of shunting operation at that end that he is about to do so, mentioning the line on which the shunt is to be performed. He will at the same time depute a man to proceed to the rear of the load to pin down wagon brakes or to apply the hand brakes of brake vans, if any, to prevent the points in rear being fouled. The man sent to the rear to pin down brakes must also be instructed to exhibit a danger signal when the fouling mark in rear is being reached. If the line is on a curve, staff should be posted at intervals to repeat this signal to the Driver to enable the train to be stopped and thus avoid a side collision. All Yard Masters, Yard Supervisors and Shunting Masters must make themselves acquainted with the capacity of each line in the yard.

(n) No hand shunting by hamals employed by Contractors, traders or Station Master should be permitted except under the supervision of an operating official.

(o) The following practices are prohibited. Station Masters must personally explain this order to the illiterate staff working under them -

- (i) Uncoupling vehicles in motion.
- (ii) Riding on buffers or screw couplings of vehicles in motion.
- (iii) Getting between a vehicle and the front of an engine fitted with a cow catcher for purpose of coupling up, before the engine has come to a stop.
- (iv) Passing under vehicles during shunting operations.
- (v) Sheltering under wagons.
- (vi) Sleeping in the Yard.
- (vii) Working on vehicles under repairs without the protection of special signals i.e. red flags or lights, banner flags, detonators, etc.
- (viii) Keeping slip coaches on a blocked line in rear of a passenger carrying train.

S.R. 5.14-2. Shunting in face of an approaching train at a class 'B' single line station.

(a) Shunting may be performed within the station section unless prohibited by the Station Working Rules.

(b) No hand or loose shunting is permitted outside the Home signal in case of two-aspect signals and outside the outermost facing points in case of multiple

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aspect signals unless the approaching train has come to a stop at the first Stop signal and the Station Master has personally satisfied himself in this regard.

(c) At stations where there is a gradient steeper than 1 in 400 falling away from the station within the station section towards the approaching train, shunting should be performed with the engine leading towards the falling gradient.

(d) On the Narrow Gauge section shunting must not be performed at the station after Line Clear is given for a train to approach and until the train has arrived and come to a stop at the outer signal and the Station Master has personally satisfied himself in this regard.

At stations where shunting limit boards have been provided and the distance between the shunting limit board and the outer signal for the opposite direction is 400 metres or more, when Line Clear has been given to a train, shunting may be performed within the station section upto shunting limit board except where the Station Working Rules expressly prohibit shunting in the face of an approaching train.

S.R.5.14-3 Shunting Orders -

Driver of Train engine shall perform shunting as and when asked to do so for which he will be given Shunting Memo and if period of shunting exceeds by 15 minutes, Driver will be issued a Shunting Order by concerned Station Master.

5.15. Shunting at stations under Centralised Traffic Control-

1. No shunting shall be performed at a station under Centralised Traffic Control without the permission of the Centralised Traffic control Operator or when Centralised Traffic control is not in operation, without the permission of the Station Master.

2. For the purpose of shunting, the Centralised Traffic Control Operator may, when required, hand over the local control of working of traffic at a station or part of a station to the Station Master who shall thereafter be responsible for the shunting at the station or that part of the station for which the local control has been made over to him in the manner prescribed under special instructions.

5.16. Shunting during reception of trains- When signals have been taken 'off' for an incoming train on to a line which is not isolated, no shunting movement shall be carried out towards points over which the incoming train is to pass.

S.R. 5.16-1 Shunting during reception/dispatch of trains –When signals have been taken “Off” for an incoming /outgoing train on/from a line which is not isolated, no shunting movement shall be carried out towards the points over which the incoming /outgoing train is to pass except on stations where frequent shunting movements take place and where such points are protected by Stop signal or by a Shunt signal or by a Stop Board with the precautions to be observed while performing such shunting that:-

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- (a) Shunting shall be carried out under the supervision of authorized competent railway servant.
- (b) Rake/Load should be fully on air brake.
- (c) The maximum speed during such shunting operation shall not exceed 15 kmph.
(Added vide CS 10 item 3 office note No. TR/G&SR/Rev/101 dated 08.10.08)

5.17. Shunting near level crossing- The railway servant in charge of shunting near or across a level crossing, before giving permission to the Driver to move his train across it, shall ensure that the level crossing gates have been closed and locked against road traffic.

5.18 Drawing of a train to an advanced position –

(1) A train waiting for an authority to proceed shall not be allowed to draw out up to an Advance Starter for despatch, except where track circuit or Axle Counter has been provided between the Starter and Advance Starter to indicate the presence of a train in advanced position.

(2) The provision of sub-rule (1) shall not apply in case of shunting of a train within a station section itself.

CS 4 Item No.7

5.19.Obstruction of running line -

(1) No railway servant shall commence any loading, shunting or any other operation by which a running line may be fouled or obstructed without obtaining the previous sanction of the Station Master or of other railway servant nominated in this behalf under special instructions, who shall see that all necessary steps are taken for the protection of traffic while such operation is being carried on and the necessary signals are kept at ‘on’ until the obstruction is removed.

(2) A sand hump or snag dead end shall not be obstructed for any purpose and when it has become obstructed, it shall cease to be a substitute for the adequate distance for the purpose of taking ‘off’ signals.

S.R.5.19-1. Obstruction of line -

(a) When a train or any vehicle or vehicles have to be shunted so as to foul any running line, and should it be necessary to detach or leave a vehicle or vehicles on or fouling the running line, the Station Master’s permission must first be obtained. The person in charge of shunting operations must immediately advise the Station Master that a vehicle or vehicles are remaining on or fouling the running line. The Station Master must at once take steps to see that all the necessary points are set and locked to prevent any train going to the obstructed line and that lever and slide collars are used.

In the ordinary course of events, vehicles should not be allowed to stand on running lines. Should it be necessary to detach a vehicle from a train and leave it standing on the running line, the Station Master on duty must advise the Cabins concerned of the block, confirming this advice by exchange of Private Numbers. The line should be cleared as early as possible and when the block is removed, the

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cabins concerned must again be immediately advised, supporting this advice by exchange of Private Numbers. Suitable remarks should be made in the diary and in the Train Signal Register on both the occasions i.e. when a line is blocked and when it is cleared.

(b) The loading or unloading of any loose vehicle on a running line is normally prohibited. In exceptional circumstances, wagons may be loaded or unloaded on a running line between sunrise and sunset only, subject to the following conditions-

- (i) On controlled sections permission of the Controller must be obtained.
 - (ii) When wagons are placed on a running line for loading or unloading, they must be placed as near the station office as possible so as to be under the direct supervision of the Station Master on duty whose permission must first be obtained; wagons so placed must be spragged/wedged, and the hand brakes firmly pinned down so as to secure them against escape or unauthorised movement.
 - (iii) The Station Master will be held personally responsible for seeing that before signals are taken 'Off' for a train, no packages unloaded from or to be loaded into a vehicle are left fouling any running line and that all wagon doors are closed. Goods or parcels should be placed at a safe distance from the edge of the platform.
 - (iv) Wagons placed on a running line for loading or unloading must be removed and placed in a siding before darkness sets in except where specially authorised.
- (c) Whenever vehicles or trains have to be stabled on a running line, the following additional precautions must be taken -
- (i) At a non-interlocked station, all points leading to the line on which the vehicles are stabled must be set and locked against that line and keys of the points kept in the personal custody of the Station Master on duty.
 - (ii) At an interlocked station the Station Master must make use of the slide collars and the lever collars as directed in S.R. 3.38-1 (iii) and (iv) and personally satisfy himself that the signals for the admission of trains on the obstructed line are maintained in the 'on' position.

(d) The Station Master on duty must record in his diary the position of running lines, both passenger and goods at the time of handing over charge the incoming Station Master must sign the entry in the diary as a token of being aware of the condition of the running lines, both passenger and goods, within his jurisdiction at the time of taking over charge. This will, however, not absolve the Station Master on duty of his responsibility to ensure that the line on which a train is to be received is actually clear before authorising the taking 'off' of signals for the reception of the train.

S.R. 5.19-2. Closing of doors of Carriages and Wagons -

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(a) Doors of all carriages standing on siding adjacent to running lines must be securely closed and the doors of wagons securely closed and fastened. All Station Masters, Yard Masters, Goods Clerks, Inspectors (including Permanent Way Inspectors) and Guards must give this matter their personal attention and explain the dangers which arise through not carrying out these orders to the staff working under them.

(b) Before entering the Thull and Bhore Ghats, the Guard must examine at Kasara, Igatpuri, Karjat or Lonavala the side and end doors of all stock that open outwards and ensure that all such doors are properly secured or locked so that they can not swing out. The ~~Assistant Guard and the~~ Station staff will assist him in this duty.

5.20. Shunting on Gradients - When shunting is being performed on a gradient, the railway servant in-charge of the shunting shall ensure that -

(a) sufficient number of brakes are put on, sprage are used, where necessary, slip siding points or traps, where provided, are set to ensure safety and that all precautions are taken to prevent vehicles getting out of control, and

(b) in case of shunting over a portion of line on steep gradient, neither isolated nor protected by slip sidings, an engine is also attached towards the falling side of the gradient.

Note : For purposes of this rule a steep gradient shall be 1 in 260 or steeper except in case of vehicles fitted with roller bearings, when it shall be 1 in 400 or steeper.

S.R. 5.20-1. Hand and Loose shunting on gradients -

(a) At stations where the gradient in the station or within 400 metres beyond the outermost facing points is steeper than 1 in 400 either at one end or at both ends of the station, no loose shunting of any vehicle is permitted on the main line or on a non-isolated loop. Hand shunting is, however, permitted at that end of the station, where the gradient is not steeper than 1 in 400 in the station yard or within 400 metres beyond the outermost points subject to the conditions laid down in (b), (c) and (d) below.

(b) Where the gradient in the station yard or within 400 metres beyond the outermost facing points is not steeper than 1 in 400, hand and loose shunting may be carried on, subject to the limits laid down below, and provisions of (d) below :

- (i) Single line - 45 metres beyond the outermost facing points.
- (ii) Double line - From the Home signal to the last Stop signal in each direction.

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(c) When line clear has been granted for a train to approach in either direction, no hand or loose shunting shall be performed on the main line or on a non-isolated loop.

(d) Hand shunting of any vehicle fitted with roller bearing such as BOX's, BOB's, BCX's, BRH's etc. shall not be permitted except on sidings isolated from the running lines. Loose shunting of such wagons fitted with roller bearing shall be permitted only during hump shunting when adequate precautions must be taken.

S.R. 5.20-2. Shunting on Lines at stations with falling gradients and not isolated from main lines-

(a) At a stations having falling gradients away from the station, while performing shunting, the shunting engine should be leading towards the falling gradient.

(b) At stations where it is not feasible to have shunting engine leading towards the falling gradient, shunting may be performed from the other end provided no Line Clear has been granted to a train coming from opposite direction such shunting shall be permitted up to the station building/45 metres short of the point, from where the falling gradient commence.

(c) Additional following precautions shall be observed while performing shunting –

- (i) No Loose shunting shall be permitted.
- (ii) Load should be fully on air brake.
- (iii) Detached wagons are secured by applying hand brakes and use of wedges.
- (iv) While taking engine on load it should be stopped 20 metres short of the load and then be taken cautiously on load to avoid bumps.
- (v) The point beyond which shunting shall not be permitted should be clearly demarcated.

(d) These rules should be incorporated in the SWR of the concerned stations.

5.21. Loose shunting - Cranes, vehicles containing passengers, workers, explosives, dangerous goods or live stock or any other vehicle that may be specified under special instructions, shall not be loose shunted and no loose shunting shall be made against them.

S.R. 5.21-1. Loose shunting -

(a) Loose shunting means vehicles being pushed by an engine and being allowed to run forward unattached. It includes hump shunting. No vehicle shall be loose shunted unless provided with an efficient hand brake or unless the vehicle is attached to at least one other vehicle fitted with an efficient hand brake. A loose shunted vehicle must be attended by a man to pin down the hand brake when necessary.

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(b) Loose shunting of or against loaded or empty oil tank wagons, vehicles containing petrol or kerosene oil in tins, loaded or empty explosive vans, wagons loaded with live-stock or military and other consignments of explosive or dangerous goods whether labelled 'Not to be loose shunted' or not, an occupied or empty coaching vehicle, is forbidden.

(c) Loose shunting of or against wagons loaded with heavy machinery, rails or timber, cranes, military consignments of other than explosive or dangerous goods, is also forbidden.

(d) Fly shunting - Fly shunting applies to two or more vehicles, not attached to each other, which, after receiving an impetus from an engine, have to be separated at the points while on the move by the points being sharply reversed between the vehicles in order to send them on the different lines. Fly shunting is prohibited on the Central Railway, except for hump shunting in hump yards.

S.R. 5.21-2. Shunting restrictions - Shunting restrictions at each station are embodied in the Station Working Rules and they must be rigidly adhered to. Staff must acquaint themselves with the orders in this respect before performing shunting operations at a station.

5.22. Leaving vehicles in sidings outside station limits - No railway servant shall leave any vehicle in a siding outside station limits, unless the vehicle is clear of all running lines and, except under special instructions, unless the wheels there of are properly secured.

5.23. Securing of vehicles at station - The Station Master shall see that vehicles standing at the station are properly secured in accordance with special instructions.

S.R. 5.23-1. Precautions for securing of vehicles -

(a) all vehicles standing at a station must be so placed and secured that they do not and cannot foul any running line. Each vehicle must have its brake on and must -

- (i) be within facing points so locked that it cannot escape, or
- (ii) be inside a locked Scotch Block or Derail, or
- (iii) be wedged, or
- (iv) be chained and padlocked, or
- (v) be coupled with other vehicles secured in the manner indicated above, as circumstances may require.

(b) When it is necessary to stable a vehicle on a running line, the brakes shall be put on and it shall be secured by the method given in (iv) above. Besides, the points must be set, clamped and locked against the line and the key kept with the Station Master.

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Note : The safety chain must be passed twice round the wheel and rail and then tied and locked, so that no strain falls on the padlocks.

S.R. 5.23-2. Securing of BOX Wagons -

(i) Whenever one or more BOX wagons or any other wagons fitted with roller bearings such as BOBs, BCXs, BRHs etc. are detached from a train and stabled on a running line or a siding irrespective of the gradient at the station, the hand brakes must be fully tightened before such wagons are uncoupled. Wooden wedges should also be used. The wagons must be chained by passing a chain through the space between the head stock of the trolley frame and the wagon body to prevent the wagons rolling down. Whenever possible, such wagons should be stabled on lines which are isolated from running lines. When these wagons are kept on running line, the Station Master on duty should ensure that all points are set against these lines and the points clamped and padlocked, keeping the key in his personal custody. If a rake of BOX wagons is stabled at least six wagons from each end must have their brakes put on tightly.

(ii) The securing of vehicles should be done by station staff such as Pointsmen, Porters or any other staff deputed for shunting under the personal supervision of the train Guard or SM/ASM on duty or the person in-charge of shunting.

SR 5.23-3 - In case locomotive has to be stabled, with or without load, provision of SR 4.61-2 to be observed.

CS 11/16 (Ref: This office note No.TR/G&SR/Rev./101 dated 03.03.2011.)

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ACCIDENTS AND UNUSUAL OCCURRENCES

CHAPTER VI

ACCIDENTS AND UNUSUAL OCCURRENCES

6.01 Accident or obstruction -

(1) When a report of any accident or obstruction is received by the Station Master, he shall see that all necessary precautions are taken by the most expeditious means possible, for the protection of traffic.

(2) If an accident happens to a train, the Station Master shall arrange for all necessary assistance to be sent to the train.

(3) The Station Master shall, as soon as practicable, report each accident in accordance with special instructions.

6.02. Working in case of accident or failure of communications -

In case of accidents to the line or to any train, or of failure or interruption of communications, or in an emergency, trains shall be worked between stations in accordance with special instructions.

S.R. 6.02-1. RULES AND REGULATIONS FOR SINGLE LINE WORKING ON A DOUBLE LINE SECTION WHEN ONE LINE IS OBSTRUCTED.

1. Whenever an accident to a train or track or other obstruction precludes the use of one of the lines on a double line section the traffic may temporarily be worked over single line under one of the following systems :-

(a) By obtaining "Line Clear" on electric speaking instruments.

(b) By the installation of single line block instruments and "Shunting Limit Boards" demarcating the block section in the wrong direction, if the affected line is likely to remain out of use for a substantial period.

2. When it is desired to introduce temporary single line working on double line, on electric speaking instruments, the Station Master at one end of the affected section shall on receipt of reliable information in writing that one line is clear, take steps to introduce temporary single line working, on that line in consultation with the Section Controller and the Station Master of the station at the other end of the section.

3. If there is reason to suspect that the line over which temporary single line working is to be introduced, is also fouled or damaged, temporary single line working must not be introduced until a responsible engineering official of the rank not less than that of an Inspector has inspected that section and certified that the road is safe for passage of trains.

ACCIDENTS AND UNUSUAL OCCURRENCES

4. Single line working shall be introduced between the nearest stations provided with cross-over between Up and Down line on either side of the obstruction. If there is an intermediate Block Hut between the above two stations, the same shall be treated as closed and the commutator of the Block instrument at such Block Huts shall be kept locked in "Train on Line Position" throughout the period single line working is in force. The commutators shall be locked also in that position, with SM's key, wherever possible. In cases where it is not possible to keep the commutators in "Train On Line" position as in Daido instruments, the Block instruments shall be put out of use and Caution Indicator hung on the handle of the Block instruments. The signals at such Block Huts shall be kept in the "On" position throughout and these shall be passed by the Drivers on the written authority in the prescribed form issued by the Station Master of the adjoining Block station in operation.

5. All trains will be worked in accordance with the rules for the use of electric speaking instruments on single line and 'Line Clear' shall be obtained on the telephone attached to Block Instrument or control telephone or VHF set.

6. At all stations on the portion of the section on which single line working has been introduced, the commutators of the Block Instruments pertaining to both obstructed and unobstructed lines shall be kept in 'Train on Line ' position through out the period single line working is in force. The commutators shall be locked also in that position with SM's key, wherever possible. In cases where it is not possible to keep the commutators in 'Train on line' position, as in Daido instruments, the Block instruments shall be put out of the use and Caution Indicators hung on the handle of the Block Instruments. At the stations, if the train is running on the wrong line all fixed signals shall be kept in the 'On' position.

7. After ascertaining that one of the lines is clear for the passage of traffic, the Station Master proposing single line working shall issue a message containing the following information under exchange of private numbers, to the Station Master at the other end of the affected section.

- (a) cause of introduction of single line working;
- (b) the line in which the single line working is proposed,
- (c) source of information that the said line is clear,
- (d) place of obstructions,
- (e) restriction of speed, if any, on the line,
- (f) names of intermediate stations if any, which would be out of use,
- (g) assurance that the trap points, if any, have been spiked or clamped and padlocked.
- (h) assurance that if the train is running on the right line, the last stop signal shall be kept in the 'On' position. In case the train is running on the wrong line, all fixed signals shall be kept in the 'On' position and
- (i) the number and the timings of the last train which arrived or left the block station issuing the message.

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8. On receipt of acknowledgement from the Station Master, confirmed by a Private Number single line working may be introduced, 'Line Clear' will be obtained on telephone attached to Block Instruments or Control Telephone or VHF or any two way communication system set, and trains run on paper line clear ticket in accordance with the instructions contained in this book and Block Working Manual.

9. Driver of each train shall be handed over an Authority for Temporary Single Line Working on Double Line Section indicating:—

- (i) the line on which the train or light engine is to run;
 - (ii) the kilometrages between which the obstruction exists;
 - (iii) any restriction of speed which may have been imposed by way and works staff; and
 - (iv) an assurance to the effect that any trap points on the line in question have been spiked or clamped.
- (v) authority to pass the last Stop signal in the 'On' position. In case the last Stop signal is the Starter, in addition to the written authority, he shall also be shown hand signals at the foot of this signal.

10. An endorsement will also be made in the Caution Order given to the Driver of the first train to inform all Gatemen and Gangmen on the way about the introduction of temporary single line working and specifying the road on which the train will run. This information shall be conveyed through the Driver of a subsequent train also, if necessary.

11. The speed of the first train passing over the temporary single line, will be restricted to 25 kilometres per hour. Subsequent trains may run at their booked speed, subject to observance of other speed restrictions imposed by Way and Work Staff.

12. When a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the Driver finds that it cannot proceed, it shall be protected as per Rule 6.03.

13. In the case of a train proceeding on the right line:—

- (a) The last Stop signal of the station in rear of the affected section may be passed in the 'On' position on a written authority issued by the Station Master in the prescribed form referred to in para 9(v). In case the last Stop signal is the Starter, in addition to the written authority, hand signals shall also be shown at the foot of this signal.
- (b) The approach Stop signals, if any of the station in advance of the affected section, may be taken off.

14. In the case of a train proceeding on the wrong line:

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a) (i) The train shall be piloted out of the station on a written authority issued by the Station Master after all the facing points have been correctly set and locked and trailing points correctly set, over which the trains will pass.

(ii) The driver should switch "ON" the flasher light of the train engine while running on the wrong line on proper authority to proceed. In case the train engine running on the wrong line without switching "ON" the flasher light is noticed by the station staff, Gatemen and Gangmen, they shall stop the train immediately.

[CS 5/1 (i) & (ii) dated 31/7/2001] [CS 6/4 (ii) dated 3/4/2002]

b) On approaching the next station the Driver shall bring his train to a stop opposite the first Stop Signal pertaining to the right line or at the last Stop signal pertaining to the wrong line (on which he is running), whichever, he comes across first.

c) The Station Master of the station in advance shall depute railway servant in uniform at the foot of the signal (whichever the train would encounter first) who shall stop the train on hand danger signal and thereafter pilot it into the station on a written authority issued by the Station Master.

d) If the Driver finds that no railway servant in uniform has been deputed at the foot of the signal to pilot the train into the station, Rule 4.44 shall be observed.

15. All the cross over points in the facing direction over which the train shall proceed, while temporary single line working is in force, shall be clamped and padlocked.

16. Resumption of normal working-

a) On receipt of a written certificate from a responsible Engineering Official that the obstructed track is free and safe for passage of trains, the Station Master will issue a message to the other station or stations, as the case may be, under exchange of private numbers and decide, in consultation with Section Controller, the train after passage of which, normal working has to be introduced.

b) When double line working is introduced the Block Instruments and all fixed signals, including those of intermediate Block Huts which were treated as closed, shall be brought into use immediate. An entry shall also be made in the Train Signal Register of all stations concerned showing the time double line working was suspended, time single line was introduced and the time normal working was resumed. The Driver of the first train entering the section after normal working is resumed shall inform all Gatemen and Gangmen on the way about the resumption of normal working.

17. All the records in connection with the temporary single line working shall be retained at the station and the Transportation Inspector of the section must scrutinise them and submit his report to the Divisional Railway Manager within 7 days of the resumption of normal working

S.R. 6.02-2. RULES AND REGULATION FOR SINGLE LINE WORKING ON DOUBLE LINE DURING TOTAL INTERRUPTION OF COMMUNICATIONS.

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The following rules must, in addition to rules prescribed in 'Rules and Regulations for working of trains during total interruption of communication on single line', be observed by the staff.

1) Whenever an accident to a train or track or other obstruction, precludes the use of one line on double line section during total interruption of communications, single line working shall be introduced only after a responsible official of the Engineering Department, not less than an Inspector in rank, has certified that the other line on which single line working is to be introduced is free and safe for passage of trains. Such an engineering official shall give the certificate only to the Station Master of the station at that end of the affected section for which the unobstructed line shall be the right line for dispatching trains. On receipt of this certificate the Station Master will follow the rules prescribed for opening of communications.

2) Drivers of trains, including light engine, shall be given a Caution Order on which, shall be stated clearly.

- a) The line on which the train is to run;
- b) Kilometrage where the obstruction exists;
- c) Any restriction of speed which may be imposed by Way & Works Staff;
- d) An assurance to the effect that any trap points on the line in question have been spiked and clamped.

3) All the cross over points in the facing direction over which the train shall proceed, while temporary single line working is in force, shall be clamped and padlocked.

4) In the case of a train proceeding on the right line:

- (a) The last Stop signal of the station in rear of the affected section may be passed in the 'On' position on a written authority issued by the Station Master in the prescribed form. In case the last Stop signal is the Starter, in addition to the written authority, hand signals shall also be shown at the foot of this signal.
- (b) The approach Stop signals, if any, of the station in advance of the affected section, may be taken 'Off'.

5) In the case of a train proceeding on the wrong line:

- a) The train shall be piloted out of the station on a written authority issued by the Station Master after all the facing points have been correctly set and locked and trailing points correctly set over which the train will pass.
- b) On reaching the next station, the Driver shall bring his train to a stop opposite the first Stop signal pertaining to the right line or at the last Stop signal pertaining to the wrong line (on which his train is running), whichever he comes across first.
- c) The Station Master of the station in advance shall depute a railway servant in uniform at the foot of the signal (whichever the train would encounter first) who

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shall stop the train on hand danger signal and thereafter pilot it into the station on a written authority issued by the Station Master.

6) It will be the responsibility of the person Incharge of the first engine or self-propelled vehicle or other vehicle, sent under 'Authority to Proceed Without Line Clear' to inform all the Gatemen and Gangmen enroute about the introduction of temporary single line working as also the line on which it is proposed to run the train.

This information shall be conveyed through the Driver of a subsequent train also, if necessary.

7) Resumption of normal working:

a) if after the introduction of single line working, communications are restored between two affected stations, the trains will continue to run under special rules until action is taken in accordance with the instructions contained in these rules for the cancellation of the procedure. Thereafter, trains will be run in accordance with the instructions for the movement of traffic during temporary single line working on double line.

b) if, however, before communications are restored, the other line is released for the passage of traffic, trains shall be worked, in accordance with the instructions for running of trains on double line section during total interruption of communications.

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S.R. 6.02-3. RULES AND REGULATIONS FOR WORKING OF TRAINS DURING TOTAL INTERRUPTION OF COMMUNICATIONS ON DOUBLE LINE SECTION.

~~1. In the event of total interruption of communications occurring between two stations on a double line section, i.e. when 'Line Clear' cannot be obtained by anyone of the following means stated in order of preference viz.:~~

- ~~(a) Block Instruments; Track circuits or Axle Counters;~~
- ~~(b) Telephones attached to the Block Instruments;~~
- ~~(c) Morse Telegraph Instruments;~~
- ~~(d) Control Telephone;~~
- ~~(e) VHF sets;~~

~~The following procedure shall be adopted for train passing.~~

1. In the event of total interruption of communications occurring between two stations on a double line section, i.e. when 'Line Clear' cannot be obtained by anyone of the following means stated in order of preference viz.:

- (a) Block Instruments; Track circuits or Axle Counters;
- (b) Telephones attached to the Block Instruments;
- (c) Station to station fixed telephones wherever available;
- (d) Fixed telephone such as Railway auto phones & BSNL/MTNL phones;
- (e) Control Telephone;
- (f) VHF sets under special instructions, but not as the sole means of communication on sections where passenger trains run.

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The following procedure shall be adopted for train passing.

(Revised vide CS 9/9) Ref: Rly Bd's letter No. 2005/Safety (A&R)/19/7 dated 01.07.2005 & 21.07.2006).

2. Before any train is allowed to enter a block section in advance, it shall be brought to a stop and the Driver and the Guard of the train shall be advised of the circumstances by the Station Master on duty.
3. The Station Master shall give an authority for working of trains during total interruption of communication on double line section to the Driver of each train which shall include:-
 - (a) An Authority to Proceed without Line Clear.
 - (b) A caution order restricting the speed to 25 kilometres per hour over the straight and to 10 kilometres per hour when approaching or passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog, or any other cause;
 - (c) An authority to pass the last Stop signal in the 'On' position.
4. In the event of a Driver approaching or passing any portion of the line where the view ahead is not clear, a railway employee with hand signals must be sent in advance to guide the further movement of the train. A sharp look out ahead should be kept and the engine whistle freely used.
5. No train shall be allowed to enter the block section until there is a clear interval of 30 minutes between the train about to leave and the train which has immediately preceded
6. Fixed Signals with the exception of the last Stop signal may be taken 'Off' for the reception and departure of trains. The first Stop signal shall, however, be taken 'Off' only after the train has been brought to a stand outside it
7. A tunnel should be entered only after it has been ascertained that it is clear. If there is any doubt on this point, the train should be piloted by a railway employee equipped with hand signals and detonators
8. The Guard shall keep a sharp look out in the rear and be prepared to exhibit a hand danger signal to prevent the approach of a train from the rear and to protect it if necessary
9. When a train is stopped in the block section the Guard shall immediately exhibit a hand danger signal towards the rear and check up that the tail board or the tail light is correctly exhibited. If the stoppage is on account of accident, failure, obstruction or other exceptional cause and the train cannot proceed the Driver shall sound the prescribed code of whistle to apprise the Guard of the fact whereupon the Guard shall protect the train by placing one detonator at 250 metres from the train on the way out and two detonators, 10 metres apart, at 500 metres from the train, irrespective of the gauge. When train is detained outside signals and if the detention exceeds or is likely to exceed 10 minutes it

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shall also be protected accordingly. In the absence of the Guard the duty of protecting the train shall devolve on the Driver.

10. No train shall be backed. In exceptional circumstances when it may be unavoidable to back a train, the train shall be backed only after providing protection by placing one detonator at 250 metres and two detonators, 10 metres apart, at 500 metres in rear of the point up to which the train is to be backed.
11. Before entering a tunnel, the head lights, side and tail lights and other lights (where provided) shall also be lit.
12. When approaching the station ahead, the Driver must bring his train to stop outside first Stop signal and sound continuous whistle (or any other code prescribed by special instructions), if no one from the station turns up within 10 minutes, the train shall be protected as per para 9 above and the Driver may send his Assistant Driver immediately thereafter, to the station or the cabin to inform the Station Master or Cabinman of the fact that the train is waiting at the signal for its admission into the station. In the absence of the Assistant Driver, the Guard after protecting the train, shall give this information.
13. The Drivers of all trains shall make over the 'Authority to Proceed Without Line Clear' to the Station Master of the station at the other end of the affected section. These shall be kept by the Station Master in his safe custody for inspection by the Transportation Inspector of the section, who shall prepare a report on the working of trains and shall forward the same alongwith his report to the Divisional Railway Manager within 7 days of communication.
14. A record of all trains passed over the blocked section on 'Authority to Proceed Without Line Clear' during the course of total interruption of communications, shall be maintained on the Train Signal Registers at both the stations concerned.
15. Trains must continue to work on this system until anyone of the means of communications, mentioned in Rule(1), is restored by the competent authority.
16. As soon as anyone of the means of communications has been restored the Station Master must send a message to the Station Master at the other end of the section on the following Form:

From Station Master _____ .

To Station Master _____ .

Message No. _____ Train (Number and description) _____ arrived complete at ___ hours _____ minutes
Last train _____ (Number and description) despatched to your station _____ at _____ hours _____ Minutes. Cancel the present method of working the trains. Line Clear must be obtained by means of _____. Acknowledge.
Private No. (in words) _____ (in figures) _____

On receipt of the above message the Station Master at the other end of the section must acknowledge in the following form:

From Station Master _____

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To Station Master _____
Message No. _____ . Your Message No. _____. Understand that train (Number and description) _____ which was the last train to leave my station has arrived complete at your station. Train No. _____ which left your station has arrived complete at my station at _____ hours _____ minutes/not arrived. Present system of train working is being/will be cancelled immediately after the complete arrival of train no. _____.
Line Clear for the next train will be obtained by means of _____ .
Private No. (in words) _____ (in figures) _____ .

Line Clear shall not be obtained or given by means of communications restored until both the Stations are satisfied that all trains and engines etc. despatched from their stations have arrived complete at the other stations. When the trains referred to in para (16) above arrive complete at the stations, after restoration of 'communication' their No. and their arrival time will be communicated to the other Station Master concerned under exchange of Private Numbers. Thereafter .an intimation about this shall be given to Section Controller also, on controlled sections, if communication with the Section Controller has also got restored, and normal working resume. If however, communication with Section Controller has not got restored along with restoration of communications between two stations, the Section Controller shall be advised of the position immediately on restoration of communication with him.

S.R.6.02-4. RULES AND REGULATIONS FOR WORKING OF TRAINS DURING TOTAL INTERRUPTION OF COMMUNICATIONS ON SINGLE LINE.

~~1. In the event of total interruption of communications occurring between two block stations i.e. when Line Clear cannot be obtained by one of the following means stated in order of performance viz.~~

- ~~(a) — Block Instruments; Track circuits or Axle Counters;~~
- ~~(b) — Telephones attached to the Block Instruments;~~
- ~~(c) — Morse Telegraph Instruments;~~
- ~~(d) — Control Telephone;~~
- ~~(e) — VHF sets;~~

~~The instructions laid down in the succeeding paragraph, shall be followed for working trains between block stations.~~

~~Note :These instructions shall also be followed whenever during total interruptions of communications, an accident to a train or track or other obstructions precludes the use of the lines on a double line section, or whenever total interruption of communications occurs during single line working on a double line section.~~

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1. In the event of total interruption of communications occurring between two block stations on a single line section i.e. when Line Clear cannot be obtained by the following means stated in order of preference viz.
 - (a) Block Instruments; Track circuits or Axle Counters;
 - (b) Telephones attached to the Block Instruments;
 - (c) Station to station fixed telephones wherever available;
 - (d) Fixed telephone such as Railway auto phones & BSNL/MTNL phones;
 - (e) Control Telephone;
 - (f) VHF sets under special instructions, but not as the sole means of communication on sections where passenger trains run.

The instructions laid down in the succeeding paragraph, shall be followed for working trains between block stations.

Note: These instructions shall also be followed whenever during total interruptions of communications, an accident to a train or track or other obstructions precludes the use of the lines on a double line section, or whenever total interruption of communications occurs during single line working on a double line section.

(Revised vide CS 9/10) Ref: Rly Bd's letter No. 2005/Safety (A&R)/19/7 dated 01.07.2005 & 21.07.2006).

2. The Station Master who has a train to dispatch through the affected block section shall open communications by establishing contact with the Station Master of the block station at the other end of the affected block section by sending an engine or self propelled vehicle or any other vehicle, enumerated below, in the order of preference laid down -

- (i) Light engine
- (ii) Train engine, after it is detached from the train by the Driver on instructions from the Station Master on duty;
- (iii) Motor Trolley/Tower Wagon duly accompanied by a Guard or by a Station Master other than the Station Master on duty;
- (iv) Trolley/Cycle Trolley/Moped Trolley duly accompanied by a Guard or by a Station Master other than the Station Master on duty;
- (v) Diesel car/Rail Motor Car/EMU Rake after ensuring that all passengers have detrained;

3. Before the Light Engine/Train Engine/Motor Trolley/Tower Wagon/Trolley/Cycle Trolley/Moped Trolley/Diesel Car/Rail Motor Car/EMU Rake is sent into the affected block section to open communications, the Driver/Motorman/ Guard/Station Master being sent to do so shall be advised by the Station Master on duty of the circumstances in which and the purpose for which he is being sent. The Station

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Master on duty shall also satisfy himself that the Driver/Motorman/Guard/Station Master being sent to open communications, thoroughly understand the rules of working of trains during total failure of communications on the single line. If the Driver/Motorman/ Guard/ Station Master who is being sent to open communications, is not conversant with the Rules for working of trains during total failure of communications on single line, the Station Master on duty shall explain these rules to such staff. The Station Master on duty shall also obtain the signature of the Driver/Motorman/ Guard/Station Master on 'Authority for opening communication during total interruption of communication on single line section', in token of such staff having fully understood the circumstances in which and the purposes for which he is being sent and the Rules for Working of Trains during total failure of communications on single line.

4.1 Before dispatching the Light Engine/Train Engine/Motor Trolley/Tower Wagon/Trolley/Cycle Trolley/Moped Trolley/Diesel Car/Rail Motor Car/EMU Rake, the station master on duty shall hand over 'Authority for opening of communication during total interruption of communication on single line section' to the Driver/Motorman/Guard/Station Master who is being sent to open communications, which includes:-

- (i) An "Authority to Proceed Without Line Clear".
- (ii) A Caution Order, specifying the speed up to which the engine or self propelled vehicle or other vehicle referred to in para 2 may run to the affected block section.
- (iii) An Authority to pass the last stop signal in the "On" position in case there is a last Stop Signal at the station.
- (iv) A Line Clear Enquiry message addressed to the Station Master of the block station at the other end of the affected block section asking for Line Clear for the train waiting to be despatched to his station.
- (v) A conditional Line Clear message to the Station Master of the block station at the other end of the affected block section permitting him –
 - (a) **To return the Light Engine/Train Engine, either light or attached to a train waiting to be despatched from his station, or attached with another engine ; or**
 - (b) To return Tower Wagon/Diesel Car/Rail Motor Car/EMU Rake running by itself ; or
 - (c) To return Motor Trolley/Cycle Trolley/Moped Trolley either running by itself or loaded in a train waiting to be despatched from his station.

4.2 The Line Clear Enquiry message asking Line Clear for the trains to be despatched through the affected block section, and the Conditional Line Clear Message for the return journey or the engine or self propelled vehicle or other vehicle referred to in para 2, as the case may be, shall be written out, on telegraph forms for being sent through the Driver/Motorman/Guard/Station Master going to

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open communications, and these messages shall also be entered in the Line Clear Books.

(I) The Line Clear Enquiry Message shall be worded as follows :-

Message No._____. On return of _____ * will line be clear and kept clear for Train No._____ waiting to proceed?

** The particulars of the engine either returning in light or attached to a train or attached to another engine/Tower Wagon/Diesel Car/Rail Motor Car/E MU Rake/Motor Trolley or trolley or Cycle Trolley or Moped Trolley running by itself or loaded in a train,as may be applicable, shall be correctly filled in while preparing the message.*

(ii) The Conditional Line Clear Message for return journey of the engine or self propelled vehicle or other vehicle referred to in para 2, as the case may be, shall be worded as follows :-

Message No._____ .

On arrival of_____,* at yours, line will be clear and kept clear for _____ \$ Engine to return with/without attached to a train or another engine or self propelled vehicle/trolley etc.(complete particulars) _____ Private Number (in words)_____ (in figures) _____

**The particulars of engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU Rake/Motor Trolley/Trolley/Cycle Trolley/Moped Trolley, as may be applicable, shall be correctly filled in.*

\$ The particulars of engine either running light or attached to a train or attached to another engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU Rake/Motor Trolley or Trolley or Cycle Trolley or Moped Trolley running by itself or loaded in a train, as may be applicable, shall be correctly filled in while preparing the message.

4.3 The Driver/Motorman/Guard/Station Master going to open communications shall, on receipt of 'Authority for opening communication during total interruption of communication on single line section', sign on its original and carbon copy in token of his having understood its contents. In case the Driver is illiterate, the contents shall be explained to him by the Station Master on Duty, in the presence of the Guard concerned, if any.

4.4 In case a light engine or an engine and brake van is to be despatched to proceed to the next block station and then continue its journey onward after arrival at the next station and is not meant for opening communications, the driver of engine or the engine and brake van, shall be given with the 'Authority for opening communication during total interruption of communication' and the items 'Line Clear Enquiry Message and Conditional Line Clear Message' shall be struck out in form. Such

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engines or engine and brake van shall be issued only the 'Authority to Proceed Without Line Clear', the Caution Order and the Authority to Pass the Last Stop Signal in the 'On' position, referred to in para 4.1 (i), (ii) and (iii) where necessary. Should it be necessary to dispatch another light engine or another engine and brake van in the same direction, an interval of at least 30 minutes shall be allowed to elapse before it is despatched.

4.5 The Last Stop Signal shall not be taken 'OFF', while permitting an engine or self propelled vehicle or other vehicle to proceed to the next station on 'Authority for opening communication during total interruption of communication on single line section'.

5. After an engine or self propelled vehicle or other vehicle is despatched to the next station to open communications with Line Clear Enquiry Message, and a Conditional Line Clear Message to the next station for the return journey of the engine or self propelled vehicle or other vehicle, no other train or engine or self propelled vehicle or vehicle shall be allowed to leave the station and proceed in the same direction until the engine or self propelled vehicle or other vehicle sent to open communications returns. This does not, however, prevent an engineering officials going into the section on push trolley for his work on a section on which push trolleys do not run on Line Clear.

6.(a) The engine or self propelled vehicle or other vehicle proceeding on 'Authority for opening communication during total interruption of communication on single line section' shall switch on the Flasher light wherever provided and shall proceed at a speed not exceeding 15 kilometres per hour by day and when the view is clear and 10 kilometres per hour during night or when the view is obstructed, making free use of engine whistle or horn of the self propelled vehicle, where provided. In thick, foggy or tempestuous weather or in dust storm etc. when visibility is impaired, the engine or self propelled vehicle, or other vehicle proceeding on 'Authority to Proceed Without Line Clear' shall proceed at walking pace only making repeated use of the engine whistle or horn of self propelled vehicle, where provided, preceded at an adequate distance by two men on foot, one displaying a red light and the other carrying fog signals ready for immediate use. Normally one of these men will be provided by the Station Master from his Class IV Staff and the other from the crew of the engine or the person whose Motor Trolley/Trolley/Cycle Trolley/Moped Trolley is being used. In case of single manned self propelled vehicle, both these men shall be provided by the Station Master. The Station Master on Duty shall explain to both of them their duties, in the presence of the Driver/Motorman/Guard/Station Master Incharge of the self propelled vehicle or other vehicle being sent to the next station and satisfy himself that they understand the same.

(b) Both by day and night, a tunnel must not be entered until the Driver/Motorman/Guard/ Station Master has ascertained that it is clear. Should there be any doubt on this point, the engine or other vehicle etc. should be piloted by a railway servant equipped with hand signal and detonators. Before entering the

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tunnel the head lights, side and tail lights and other lights (where provided) shall also be lit.

(c) No obstruction of the line beyond the outermost facing points shall be allowed until the return of the engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU Rake/Motor Trolley/Cycle Trolley/Moped Trolley.

7. In the event of an engine/self propelled vehicle/other vehicle, proceeding on 'Authority for opening communication during total interruption of communication on single line section' meeting in the mid section, an engine/self propelled vehicle/other vehicle sent from the other end, the Drivers/Motormen/Guards/Station Masters, as the case may be, shall taking into consideration the importance of the train for which they are proceeding to get Line Clear, the distance from the nearest station, gradients to be encountered, the presence of catch sidings etc. decide to which of the two stations, the engines/self propelled vehicle/vehicles should proceed. Before proceeding, the engines or self propelled vehicles shall, if possible, be coupled up. If the engines/self propelled vehicles cannot be coupled up they should run at a safe speed and adequate distance apart. In the case of Motor Trolley/Push Trolley/Cycle Trolley/Moped Trolley, meeting an engine and brake van/Diesel Car/Rail Motor Car/EMU Rake, the Motor Trolley/Push Trolley/Cycle Trolley/Moped Trolley shall, if possible, be loaded with the Brake Van/Diesel Car/Rail Motor Car/EMU Rake.

8. On sighting the station to which the engine/self propelled vehicle/other vehicle running by itself or with another similar unit coupled together or separately, to which it is/they are proceeding, the leading engine/self propelled vehicle/other vehicle shall stop outside (i.e. In rear of) the first Stop signal of the station. The engine or self propelled vehicle or other vehicle following the leading engine/self propelled vehicle/other vehicle, shall stop at a safe distance behind the leading engine/self propelled vehicle/other vehicle. The Station Master shall be advised of the stoppage outside the first Stop signal either by using the engine whistle/horn of the self propelled vehicle, if provided, or by sending a man if necessary. They shall not enter the station till permitted by the Station Master to do so either by taking 'Off' the relevant signals or otherwise.

9. When the engine or engines/self propelled vehicle or self propelled vehicles/other vehicle or vehicles have been admitted into the Station, the 'Authority for opening communication during total interruption of communication on single line section' with the Line Clear Enquiry Message and the Conditional Line Clear Message giving the Line Clear for the return journey shall be delivered to the Station Master on Duty who shall keep this document in his safe custody and also post the Line Clear Enquiry Message and Conditional Line Clear Message in his Line Clear Books. On the Authority of the Conditional Line Clear Message for the return journey the Station Master on Duty shall make out a Conditional Line Clear Ticket and hand over it to the Driver/Motorman/Guard/ Station Master to return to the Block station from where he came with his engine (either light or attached to a train

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or another engine or a self propelled vehicle if one is waiting to proceed in that direction)/self propelled vehicle/other vehicles.

10. In case of the engine or self propelled vehicle or other vehicle returning to the station from which he was sent without reaching the next station, the 'Authority for opening communication during total interruption of communication on single line section' shall be taken back by the Station Master on Duty of the station from which this was issued and cancelled. The original entries shall also be cancelled.

11. Station Master on duty before dispatching the engine either light or attached to a train/self propelled vehicle/other vehicle, on the return journey shall hand over to the Driver/Motorman/ Guard/Station Master, 'Conditional Line Clear Reply Message' for the 'Line Clear Enquiry Message', giving Line Clear for the train waiting at the other station, thereby authorizing the Station Master at that station to start the train waiting there on complete arrival of the engine, either light or attached to a train/self propelled vehicle/other vehicles at his end.

12. The Conditional Line Clear Reply Message shall be worded as follows :-

Message No.-----
Your Message No. ----- on arrival of * Engine with/without train/self
propelled vehicle/other vehicle No.----- at yours line will be clear
and kept clear for following trains :----- *

(i) Train No.----- Private No.(in words)-----	(in figures) -----
(ii) Train No.----- Private No.(in words)-----	(in figures) -----
(iii) Train No.----- Private No.(in words)-----	(in figures) -----
(iv) Train No.----- Private No.(in words)-----	(in figures) -----

* *Strike out which ever is not applicable.*

* *The particulars of the engine either returning light or attached to a*

train or attached to another Engine/Tower Wagon/Diesel Car/Rail Motor

Car/EMU Rake/Motor Trolley or Trolley/ Cycle Trolley or Moped Trolley running

by itself or loaded in a train as may be applicable shall be correctly filled in

while preparing the message.

13. On the return journey, engine either light or attached to a Train/Diesel Car/Rail Motor Car/EMU Rake/Train loaded with Motor Trolley/Push Trolley/Cycle Trolley/Moped Trolley may run at booked speed observing speed limits in the Working Time Table and other relevant rules. The Motor Trolley /Push Trolley/Cycle Trolley/Moped Trolley returning by itself may run at their normal speed observing the rules governing their running on Line Clear.

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14. On reaching the station, the engine either light or attached to a train/self propelled vehicle/other vehicles shall again stop outside (i.e. In rear of) the first stop signal of the station and thereafter be guided by the instructions from the Station Master, who may arrange to receive it by taking 'Off' the relevant signals or otherwise.

15. On arrival at the station the 'Conditional Line Clear Reply Message' shall be handed over to the Station Master who shall record in the Line Clear Message Book and on its authority issue a Conditional Line Clear Ticket for the waiting train.

16. If there be an even flow of trains in both directions, Enquiry and Conditional Line Clear Messages for each succeeding trains may be sent through the Guard of the preceding train.

17. The arrival and departure time of all trains, engines, trolleys etc. which are passed under the above rules must be carefully recorded in the Line Clear Enquiry and Reply Books, and also in the counterfoil of the 'Authority to Proceed Without Line Clear' and in the train signal register.

18. If the Station Master at one end of the interrupted section has more than one train to dispatch in the same direction before another train is normally expected from the opposite direction, he shall, in such cases, send the available engine of a train to obtain 'Line Clear' not only for that train but also for the following trains which may be waiting or expected at his station. In the Line Clear Enquiry Message, it shall be stated that these latter trains will be despatched after the first train at intervals of 30 minutes. After the Driver returns with the Line Clear for the required number of trains to the station at which he had left the train, the Station Master shall dispatch the first train on the authority of the Line Clear for the trains and shall also endorse on that Line Clear that a particular train (giving its number and description in full) shall follow at a specified interval. The Station Master shall give similar information to the Guard also in writing. The Drivers of the second and subsequent following trains shall be given a Caution Order restricting the speed to 25 kilometers per hour over the straight when the view ahead is clear and to 10 kilometers per hour when approaching or passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog, or any other cause .

When dispatching a second and subsequent trains, the particulars of the last preceding train along with its time of departure will be endorsed on the Line Clear as also the particulars of the train which would follow. The Line Clear for the last train of the series should be endorsed with the particulars of the proceeding train together with its time of departure.

While adopting this procedure, the Guard and the Driver should be instructed to keep a sharp look out and be prepared to stop short of any obstruction.

19. When a train is stopped in the block section the Guard shall immediately exhibit a hand danger signal towards the rear and check up that the tail board or the tail light is correctly exhibited. If the stoppage is on account of accident, failure, obstructions

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or other exceptional cause and the train cannot proceed, the Driver shall sound the prescribed code of whistle to apprise the Guard of the fact, where upon the Guard shall protect the train by placing one detonator at 250 metres from the train on the way out and 2 detonators, 10 metres apart, at 500 metres from the train, irrespective of the gauge, when a train is detained outside signals and if the detention exceeds or is likely to exceed 10 minutes it shall also be protected accordingly. In the absence of the Guard the duty of protecting the train shall devolve on the Driver.

20. When trains follow one another no train shall be backed. In exceptional circumstances when it may be unavoidable to back a train, the train shall be backed only after providing protection by placing one detonator at 250 metres and 2 detonators, 10 metres apart, at 500 metres from the point upto which the train is to be backed.

21. Trains must continue to work on this system until anyone of the means of communications, mentioned in Rule 1 is restored by the competent authority.

22. As soon as anyone of the means of communications has been restored, the Station Master must send a message to the Station Master at the other end of the section on the following form :-

From Station Master _____ To Station Master _____

TIME _____ HOURS _____ MINUTES

Message No. _____ . Train (No. and description) _____ arrived complete at _____ hours _____ minutes.. Last train _____ (No. and description) dispatched to your station at _____ hours _____ minutes. Cancel the Conditional Line Clear Working of trains. Line Clear must be obtained by means of _____ . Acknowledge. Private No. (in words) _____ (in figures) _____.

On receipt of the above message, the Station Master at the other end of the section must acknowledge in the following form:

From Station Master _____
To Station Master _____ .

Message No. _____ . Your Message No. _____ . Understand that train (number and description) _____ which was the last train to leave my station has arrived complete at your station. Train No.

_____ which left your station has arrived complete at my station at _____ hours _____ minutes/not arrived. Conditional Line Clear Working of trains is being/will be cancelled immediately after the complete arrival of train number _____ . Line Clear for the next train will be obtained by means of _____ .

Private No.(in words) _____ (in figures) _____ .

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23. Line Clear shall not be obtained or given by means of communication restored, until both the Station Masters are satisfied that all trains and engines etc. despatched from their stations have arrived complete at the other station. Even if the communication is restored immediately after the departure of the light engine/self propelled vehicle/any other vehicle referred to in Rule 2, sent under 'Authority for opening communication during total interruption of communication on single line section,' normal working should not be resumed until the light engine/self propelled vehicle/any other vehicle reaches the next station and both the Station Masters are satisfied under exchange of Private Numbers that no light engine/self propelled vehicle/any other vehicle is on the section. Thereafter an intimation about this shall be given to Section Controller also on control sections, if communication with Section Controller has also got restored and normal working resumed. If, however, communication with Section Controller has not got restored along with restoration of communications between two stations, the Section Controller shall be advised of the position immediately on restoration of communication with him.

24. On the section where total interruption of communication occurs, the Transportation Inspector of the section, must scrutinize the train passing records of the station and submit his report to the Divisional Railway Manager within 7 days of the resumption of communication.

SR 6.02-5 Rules and Regulation for working of trains during partial interruption/failure of electrical communication instrument.

The procedure laid down in Para 4.20 and 10.12 of Block Working Manual shall be followed for obtaining/granting line clear during partial interruption/failure of electrical communication instrument.

(Added vide CS 9/11 Ref: Rly Bd's letter No. 2005/Safety (A&R)/19/7 dated 01.07.2005 & 21.07.2006).

6.03 Protection of trains stopped between stations :

- 1) **When a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the Driver finds that his train can not proceed, he shall apprise the Guard of the fact by sounding the prescribed code of whistle, or through walkie talkie or other means and exchange hand danger signals with him. Then the Guard shall immediately exhibit a hand danger signal towards the rear and check up that the tailboard or tail light is correctly exhibited and switch 'on' flasher light if provided in the rear of his brakevan. The Guard and Driver shall then immediately take the following action in the rear and the front :-**
 - (i) **On a single line section or a section of double or multiple lines when temporarily worked as a single line section:-**
 - a) **The Guard shall either himself go back or send a competent person to protect the train. If the Guard has deputed a competent person to protect the train, he shall go to the Driver for consultation.**

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- b) The person going back to protect the train shall continuously show his hand danger signal to stop any approaching train, and in addition to his hand signal, shall take detonators and place them upon the line on which the stoppage has occurred, as follows:-
One detonator at 600 meters from his train , to be placed on the way out and three detonators, 10 metres apart, not less than 1200 meters from his train or at such distance as has been fixed by special instructions.
Provided that on the meter and narrow gauge the first detonator shall be placed at 400 meters and the three detonators 10 meters apart, not less than 800 meters or at such distance as has been fixed by special instructions, from the place where the train has stopped.
- c) If a person other than the Guard has gone back to protect the train, he shall after taking action as per sub-clause (b), continue to show his hand signal to stop any approaching train, until he is recalled.
- d) When the Guard has himself gone back to protect the train, he shall, after taking action as in sub-clause (b), depute a competent person, if available to show a hand danger signal to stop any approaching train until he is recalled, and shall himself return to his train to ascertain the cause.
- e) Unless the Guard has succeeded in getting another competent person to show a hand danger signal, as in sub-clause (d) he shall after consultation with the driver once again return to the place at which he placed three detonators, showing his hand danger signal to any approaching train and continue to do so until he is recalled.
- f) When the Guard or the person deputed by him is recalled, he shall leave down the three detonators and on his way back pick up the intermediate detonator.
- g) On a section of double or multiple lines, if assistance has been asked for, or on a single line section or during temporary single line working on a section of Double line or multiple lines, the driver shall at once show a danger signal to the front, and proceed to protect the train in front in the manner prescribed in clauses (b) and (f) either by going himself or by sending his Assistant Driver or some other competent person; and
- h) Should any train be seen approaching, the person going to protect the train shall immediately place one detonator on the line, as far away from the disabled train as possible and will continue to show his hand danger signal to stop any approaching train. If the person has already placed one detonator on 600 or 400 metres in BG or MG/NG respectively and he is not in a position to reach at a distance of 1200 metres or 800 metres in BG or MG/NG respectively he will again place one detonator as far away from the train which has met the accident.

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- (ii) **On a double line section where trains on the two lines run in the opposite direction:-**
- a) **As soon as the Driver comes to know that his train has met with an accident he shall at once switch On the flasher light and switch "off" the headlight and thereafter either go himself or send his Assistant Driver or some other competent person to protect the adjacent line in front in the manner prescribed in clause (i) above.**
- The Guard shall himself first immediately proceed ahead to assist and ensure protection of the adjacent line in front in the manner prescribed in clause (i) above and if a competent person is available send him to protect the train in the rear in the manner prescribed in clause (i) above.**
- b) **In case it is not known whether the adjacent line is obstructed or not :--**
- The Driver shall take action to protect the adjacent line as mentioned above.**
- The Guard shall proceed towards the engine watching the train carefully. If the Guard finds that the adjacent line is obstructed he shall proceed ahead to assist and ensure protection of the adjacent line as mentioned above. In case he finds that the adjacent line is not obstructed, he shall, after consultation with Driver, go back to protect the train in the rear in the manner prescribed in clause (i) above, if he has not already sent another competent person for the purpose.**
- (iii) **On a multiple line section with uni-directional traffic on the nominated lines:**
- a) **As soon as the Driver comes to know that his train has met with an accident, he shall at once take action to protect the adjacent line/lines in the manner prescribed in clause (ii) above.**
- b) **As soon as the Guard comes to know that his train has met with an accident, he shall at once protect such adjacent line/lines in the manner prescribed in clause (i) above**

CS 2/1 dated 8.06.2000

S.R. 6.03-1. Protection of trains -

- (a) When a train comes to a stop in a block section on account of an accident or any other cause, which is not immediately obvious, and the Loco pilot finds that his train cannot proceed, he shall immediately switch 'On' the flasher light, if provided, on his engine keeping the head light 'Off' to attract the attention of a train approaching from the opposite direction and sound four short

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sharp whistles (0000) repeatedly to apprise the Guard of his inability to proceed and display a red flag by day and a red light by night. The Guard on hearing the Loco pilot's whistle shall acknowledge it by waving a red hand signal up and down. The Loco pilot will acknowledge the Guard's signal by a long whistle. The Guard shall then fix a red flag by day to the side lamp bracket or on the handle of the door or at such a place on the brakevan which can easily be seen by the Loco pilot and at night reverse the side lamps of his brakevan, where provided, to show red towards the Loco pilot. The Guard shall also ensure that during day the tail board is in position and at night the tail lamp and the side lamps where provided, are burning brightly.

The Loco pilot shall also whistle repeatedly as in S.R.4.50-1 (a)-16 so as to attract the attention of the Loco pilot of a train approaching from the opposite direction. If the stoppage has occurred on a section of double or multiple lines, during night or in thick and foggy weather when visibility is impaired, the Loco pilot and the Guard shall exhibit the danger hand signal on which trains normally run so as to be clearly visible to the Loco pilot of an approaching train. The Loco pilot and the Guard shall then take action regarding protection of adjacent line and of the train in accordance with G.R. 6.03.

- (a) When the Loco pilot of an approaching train sees the light of the flasher or danger hand signal, he shall at once take action to stop his train short of obstruction just as he would act when he sees a danger hand signal or hears the distressed whistle code of another engine or explodes a detonator and render all possible assistance to the affected train. He will continue his journey at normal speed only after ascertaining that the line on which, he is proceeding is free from any obstruction. If however, he finds that the line on which he is to proceed is obstructed the Loco pilot and Guard of the train will protect their train in accordance with G.R. 6.03. The Loco pilot of the train proceeding on the adjacent track must stop at the next station and report the occurrence immediately and the assistance required.

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- (c) The flasher light shall be switched 'Off' only when the Driver finds that his train is in a position to proceed or after he has ascertained that the adjacent line is free from obstruction and it is not necessary to stop any

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approaching train to obtain assistance. In case the flasher light is not provided or it fails the head light may be switched 'On' and 'Off' repeatedly to attract the attention of the approaching train.

(d) Flasher, light units have been provided on diesel and electric locomotives. The unit, when switched 'On' flashes amber coloured lights. When taking over charge of the diesel/electric locomotives from the shed/yard the Driver shall test the working of the unit and make appropriate entry in the shed engine book.

(e) EMU trains - The EMU trains have been provided with electric bell signals between Motorman and Guard and also blinker lights. In case EMU trains come to a stop on account of an accident or any other cause which is not immediately obvious and the train can not proceed, the Motorman shall immediately switch 'On' the blinker light and also apprise the Guard of his inability to proceed by sounding 4 rings in the bell signals which shall be acknowledged by the Guard by 4 rings then the Guard shall switch 'On' the blinker light and protect the train as prescribed in G.R. 6.03 or G.R. 9.10-1 as the case may be. In case of failure of the bell code the horn and also the hand signals should be used.

When the Loco pilot/Motorman of an approaching train sees the blinking light of the Motorman he will take action as in S.R. 6.03-1

(b). When the Loco pilot/Motorman of an approaching train sees the blinking light of the Guard he shall act as under -

If the blinker is set on the same line on which he is traveling he will stop short of the train and arrange to protect his train according to G.R. 6.03 or G.R. 9.10-1 as the case may be. If the blinker is not on the line in which he travels, he shall exercise greater vigilance and be guided by the hand signals ahead, if any.

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(f) When the train is able to go forward the Driver will sound one continuous long whistle to recall the Guard or the person, deputed to protect the train in rear, who will immediately return leaving the 3 detonators on the line and picking up the intermediate detonator. The Driver must not start his train after it has been brought to a stand until the Guard has signalled to him from the brakevan to proceed. The Guard shall remove the red flag/reverse the side light, where provided

to show white light towards the Driver when the train is ready to start. The Guard will show hand danger signal and keep a good look out, towards the rear until his train arrives at the station in advance.

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(g) If the train has also been protected in front, the Driver will, when the train goes forward, endeavour to stop short of detonators and pick up the three detonators.

(h) In the case of light engine or coupled engines the Driver or both the Drivers are responsible for the protection of the engine or engines in accordance with G.R. 6.03.

S.R. 6.03-2. For procedure for the protection of a train when it is stopped at the first stop signal of a station, see S.R. 4.44-1.

6.04. Trains unusually delayed -

(1) If a train carrying passengers does not arrive within 10 minutes or if goods train does not arrive within 20 minutes after allowing for its normal running time from the station in rear, the Station Master at the station in advance shall immediately advise the station in rear and the Control of this fact. Thereafter on double or multiple lines, the Station Masters at either end of the block section shall immediately stop all trains proceeding into the block section on adjacent line or lines in either direction and warn the Drivers and Guards of such trains by issue of suitable caution orders and shall also ascertain the whereabouts and the condition of the delayed train.

(2) The action mentioned above shall be taken earlier, should the circumstances so require.

S.R. 6.04-1. The Station Master shall intimate action in the following manner when a train is delayed in the block section

(a) (i) Arrange to send a railway employee into the block section to fetch information regarding the whereabouts of the train; and in case of mishap, the nature of assistance required.

(ii) On a double line section if there is a tunnel and the train is delayed, the Station Master shall prevent any train from proceeding on its journey in the opposite direction until he has first ascertained that the line is clear. If there is no tunnel in the block section, the Station Master must stop the first train proceeding in the opposite direction and inform the Driver of the circumstances and instruct him to proceed cautiously.

(iii) The Guards of trains carrying passengers which are provided with a set of portable field telephone, when delayed in the block section over 10 minutes will also inform the Controller on controlled section the cause and probable duration of the delay.

(b) The Controller on receipt of such advice shall immediately warn the station where a Medical Van or first aid chests are located so that they would be kept in readiness for despatch to the site of the accident on receipt of further

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information. He shall also issue preliminary warning to the Loco Foreman and Station Master to get the Break Down Train ready, and will also arrange for an engine to be made available immediately for taking the Medical Van to the site of the accident, if necessary

S.R. 6.04-2. If, for any reason, a train is brought to a stand on a gradient the following precautions should be taken by the train crew :

1. Driver should immediately put on the flasher light.
2. Driver should apply loco brakes in addition to the application of train brake i.e. air brake. Train brake must not be released.
3. Driver should not normally leave locomotive. If required to leave in an emergency, he will ensure that assistant Driver is present on the locomotive.
4. When the train is not likely to start within 15 minutes,

Driver should -

- (a) Apply locomotive hand brakes.
 - (b) Direct Assistant Driver to pin down the hand brakes of 10 wagons in case of 4 wheeler or 5 wagons in case of 8 wheeler load behind the loco and put wedges under the loco wheels.
 - (c) Draw the attention of Guard by sounding 3 short whistle (o o o) for applying brake followed by 4 short (o o o o) whistles for protection in rear.
 - (d) Direct Assistant Driver in single line section for protection of train in front.
5. The Guard of the train will apply hand brake of brakevan and pin down hand brakes of 10 wagons in case of 4 wheelers load or 5 wagons in case of 8 wheelers load. In case of passenger carrying trains he will put wedges to the wheels of two vehicles nearer to the brakevan. After it he will protect train in rear.
6. Guard, after protecting train in rear, should meet Driver/Assistant Driver and will take action for advising Control to arrange assisting engine or other sort of assistance.

7. The following procedure should be adopted to restart the train -

- (a) Driver to recreate adequate air pressure gradually.
- (b) Release train brakes fully with loco brake 'On'.
- (c) Notch up the loco by a few notches in forward direction in case of up gradient or reverse direction in case of down gradient.
- (d) Release the wagons hand brakes and remove wooden wedges both in front and in rear.
- (e) Guard to release hand brake of his brakevan.

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- (f) Exchange 'All Right' signal with Guard.
- (g) Release hand brake of locomotive.
- (h) Gradually release loco brake and start.
- (i) Re-check brake power at the first opportunity.

8. The Driver himself or, on his direction, the Assistant Driver shall be responsible for application and release of the hand brakes of wagons behind the engine. The Guard shall be responsible for the similar action in regard to the wagons inside the brakevan.

9. Considering the condition of brake power on train, the Driver may take additional precautions during the stoppage of his train on section steeper than 1 in 400 to avoid run away.

6.05. Sending advice of accident or breakdown - If the engine is for any reason unable to proceed, the Guard or in his absence the Driver, shall convey, by the most expeditious means, advice to the nearest station, stating the location, nature and cause of the accident, and if assistance has been asked for, the train shall not be moved until such assistance arrives, provided that if the train is subsequently able to move, it may do so at walking pace, but not unless a competent railway servant has been sent with hand signals and detonators to protect the train, such railway servant keeping at least 400 metres in advance of the train, the other end of the train being protected in a similar manner.

S.R.6.05-1.. Sending advice of accident or breakdown -

(a) (i) When owing to an accident or breakdown, a train is stopped outside station limits, the Guard must first protect the train in accordance with S.R.6.03-1. The Guard must then consult the Driver and in the case of a train equipped with a portable field telephone he must report the accident or break down on the field telephone to the Section Controller. This report must detail the nature of the accident or breakdown, the site and the relief required. On the double line sections, in case the field telephone is inoperative and a train is passing on the other line, it should be stopped and the Guard of the affected train should hand over a written report to the Driver or Guard of the opposite direction train indicating the details of the accident or breakdown as stated above for communication to the next station in the direction in which the train is proceeding. In all other cases, on the single and double line sections a written report of the accident or breakdown as stated above must immediately be sent with the Assistant Driver ~~or Assistant Guard~~ to the Station Master of the nearest station.

(ii) In the event of a serious accident, when prompt assistance is required and information cannot be conveyed promptly in the manner prescribed in clause (i) above, the Guard will arrange for the train engine of the disabled train, if it is able to proceed, to be detached and sent light to the next station with the report of the accident or breakdown through the Driver to be handed over to the Station Master of

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that station. Before detaching the engine, the provisions laid down in S.R. 6.09-1 must be complied with.

(b) The Station Master receiving the information that the train is disabled, must at once inform the Controller and other Officers concerned. On uncontrolled areas, the Station Master will arrange for the requisite assistance and if the engine is disabled, utilise the engine of a less important train to work the disabled train forward and advise the terminal Station Master of having done so.

Note : In the absence of the Guard or if the Guard is incapacitated, the duties of the Guard will devolve upon the Driver.

S.R. 6.05-2. Disabled engine, assistance to -

(a) When an engine is disabled, the Guard shall ascertain from the Driver if it is necessary to requisition a relief engine. Should the Driver expect to be able to put the engine in working order within 30 minutes, he shall inform the Guard. If the time is likely to be exceeded, the Guard must send advice to the nearest station in accordance with S.R. 6.05-1 and call for relief engine.

(b) After having asked for assisting engine, if subsequently the Driver is able to repair the damage and is in a position to restart the train, Driver will ask permission of the Section Controller / Station Master. The Section Controller/ Station Master, in case assisting engine has not entered in the block section, will regulate the assisting engine and will advise the Driver to start his train supported by Train notice/Private number. Driver will work his train cautiously upto next block station. Driver shall not restart his train unless he receives Train notice/Private number from Section Controller/Station Master. In such case he will wait till arrival of assisting engine.

(c) When there is likelihood of an engine failing to reach its destination, the Driver must at once ask for a relief engine.

(d) If the engine of a passenger train fails in a section, the train must not be divided. After protecting the train in accordance with S.R. 6.03-1 a relief engine must be requisitioned. The train must be detained with the engine coupled to the train till the assistance arrives. The train must then be worked forward with the assisting engine coupled up, to the next block station ahead, where the Driver will decide whether he is in a position to haul the load forward alone with his engine or double headed with an assisting engine.

6.06. Train in a block section without authority to proceed -

(1) When the Driver becomes aware in a block section that he does not have an authority to proceed or a proper authority to proceed, he shall immediately stop the train.

(2) The train shall be treated as an obstruction in the block section and protected as such, in accordance with Rule 6.03.

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(3) The Guard ,or in his absence the Driver,shall convey the report of the occurrence to the nearest block station by the most expeditious means and the train shall thereafter move only in accordance with the instructions which may be issued by the Station Master to whom the occurrence has been reported:

Provided that when a proper tangible authority to proceed is lost on the run, the Driver may proceed to the next station and report the occurrence to the Station Master.

S.R.6.06-1. Token, not applicable to the section or over carried.- For instructions refer S.R. 14.11-1.

6.07 Report of conditions likely to affect running of trains to Controller or Centralised Traffic Control Operator -

(1) Drivers, Guards and Station Masters shall advise the Controller or the Centralised Traffic Control Operator of any known conditions or unusual circumstances likely to affect the safe and proper working of trains.

(2) The Controller or the Centralised Traffic Control Operator,on becoming aware of such defect or failure,shall inform the same to the railway servant responsible for the maintenance of the equipment and other railway servants concerned.

SR 6.07-1 - Defective Permanent Way –

In the event of the Loco pilot and/or Guard experiencing any abnormal condition in the track over which his train has passed and he considers that the portion of the track over which his train has passed is detrimental for safe running of subsequent trains will take action as under-

- a) Stop his train at next block station without clearing the block section, whistle frequently and inform the Station Master through available means of communication not to permit any train from either end of the affected block section in case of single line and from the rear in case of double line. In case of IBS and automatic block territories, the Loco pilot must inform the station master and Loco pilot of trains already left station in rear through available means of communications to stop movement of trains;
- b) proceed further, only after satisfying himself that Station Master has clearly understood so as not to permit further movement over the line until a written memo indicating the details of the occurrence is received by Station Master from the Loco pilot. Loco Pilot will then again stop in such a manner that the Engine is in front of the Station Building or the Block Cabin where the Block instruments are located so as to deliver the written memo in detail to the Station Master.

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- c) The station master on receipt of such a memo must issue a message addressed to the Station Master of the block station at the other end of the block section, and Junior Engineer/ Section Engineer(P.Way), Assistant Engineer, Divisional Engineer, Chief Controller and Divisional Operations Manager.
- d) Arrange to dispatch a rail maintenance machine/tower wagon/ light engine or in their absence a train accompanied by an engineering official with a caution order to the effect to 'Stop Dead' sufficiently short of the expected portion of the track. The engineering official accompanying will inspect the track and shall allow the train to pass only after satisfying that the track is safe for the passage of train. Advise the condition of the track and any restriction of speed to be imposed to the Station Master personally or through written memo which may be sent through the Loco pilot.
- e) In the absence of engineering officials the train with a caution order instructing the Loco pilot to 'Stop Dead' before the affected kilometers and after satisfying himself about the condition of track, pass over the track in question at 10 kilometers per hour or if he finds the line unsafe to pass, return to station in rear. If the Loco pilot is not able to detect any thing doubtful, subsequent trains shall be dispatched with a speed restriction of 10 kmph over the affected track till the track is certified to be safe by engineering officials.
- f) If the condition as reported earlier is confirmed by the Loco pilot, no train movement shall be allowed till certified to be safe by engineering officials.

Note: In case the Guard of the train experiences any abnormal occurrence in the track while working his train, he must inform the Loco pilot of his train through walkie-talkie or other available means of communication between the Loco pilot and the Guard about the occurrence, after which the Loco pilot shall take action as mentioned in SR 6.07-1(a) above. In the event of Guard unable to contact the Loco pilot, he should take action to stop the train and inform the Loco pilot.

SR 6.07-2 - Sabotage or likely sabotage, Explosion on track or train –

- a) As soon as information of sabotage or likely sabotage, bomb blast explosion etc. to the track, bridges or other fixed installation is received, the Station Master who becomes aware of it, will stop movement of trains in the affected block section as well as on adjacent lines on double /multiple line sections and will take action as per SR 6.07-1(d) in consultation with the Section Controller except that only Rail maintenance machine/tower wagon/ light engine shall be sent to ascertain for the line to be safe for the movement of the train.
- ~~b) On hearing an explosion, the Loco Pilot must stop his train as soon as possible, and examine the track along with the Guard at the site of the explosion to ascertain the extent of the damage. If the Loco Pilot does not bring the train to a stand within a reasonable time, the Guard shall draw the attention of the Loco Pilot by cautiously applying the vacuum / air pressure by means of the Guards Van Valve.~~

ACCIDENTS AND UNUSUAL OCCURRENCES

- b) On hearing an explosion, the Loco Pilot must stop his train as soon as possible, and examine the track along with the Guard at the site of the explosion to ascertain the extent of the damage. If the Loco Pilot does not bring the train to a stand within a reasonable time, the Guard shall draw the attention of the Loco Pilot by cautiously applying brakes by dropping air pressure by means of the Guards Van Valve.
(CS 14/10)
- c) The Loco Pilot shall also examine the train along with the Guard and if little or no damage has been done to the train and if it is safe for the train to proceed to the next block station, the train will be taken ahead to the next block station and the Guard and Loco Pilot will jointly report the occurrence to Station Master on duty.
- d) If the damage to the track is so serious as to render the track unsafe, a competent Railway servant will be left at the site with detonators to protect the spot in accordance with G.R.6.03.

SR 6.07-3 In the event of the Loco pilot and/or Guard experiencing any obstruction or any other unsafe condition, on or near the track adjacent to the line over which his train has passed and which in his opinion is detrimental to safe train running, will take the following remedial action :-

- a) immediately switch "ON" the flasher light of his loco;
- b) inform the Station Master(s) concerned /control through the available means of communication, and concurrently;
- c) stop his train and proceed with danger hand signals to protect the line in question in terms of GR 3.62;
- d) thereafter, he will continue journey to the next station cautiously keeping flasher light 'ON'; and
- e) be prepared to stop any incoming train approaching on the affected Track by communicating on walkie talkie or other available means of communication and exhibiting danger hand signal;
- f) Loco Pilot of opposite road, after seeing flasher light 'ON' shall at once take action to stop his train short of obstruction and proceed only after ascertaining that the line on which, he is proceeding is free from any obstruction. If, however, he finds that the line on which he is to proceed is obstructed, the train will be protected in accordance with GR 6.03.
- g) on arrival at the next station he shall inform the Station Master through a written memo about the occurrence;
- h) on receipt of such information the Station Master must take action as per SR 6.07-1(c) to (f).

CS-9/20 (Rly Bd's letter No. 2007/Safety(A&R)/19/13 dated 17.12.2007)

6.08. Train parting -

ACCIDENTS AND UNUSUAL OCCURRENCES

(1) If any portion of a train should, while in motion, become detached.

(a) the Driver shall use his judgement to keep the front portion in motion, if possible, until the rear portion has been brought to a stand so as to avoid the chance of a collision between the two portions, and sound the prescribed code of whistle to inform the Guard of the parting.

(b) the Guard or Guard in the rear portion shall -

(i) do all they can to prevent a collision with the front portion, and

(ii) promptly apply their hand-brakes, where provided, and

(c) the Driver of a banking engine, if any, shall bring the rear portion to a stand and sound the prescribed code of whistle to attract the attention of the Driver in the front portion.

(2) As soon as the rear portion of a train has been brought to a stand, the Guard of the train shall protect that portion in accordance with Rule 6.03 both in the front and the rear, and take steps to secure the vehicles in stationary position by pinning down hand brakes and wherever necessary and prescribed by special instructions by use of sprags and chains also.

(3) The Guard shall indicate the parting of the train, by waving in repeated motions a green flag by day, or a white light by night, up and down vertically as high and as low as possible.

(4) When both portions of a parted train are brought to a stand within sight of each other and it is possible and safe to couple them, the train shall be coupled with due caution under hand signals from the Guard provided necessary precautions have been taken to secure the rear portion in the manner described in subrule (2).

(5) If the Driver of the parted train has already reached the block station in advance before he could bring the front portion to a stop, he shall instantly warn the Station Master of the parting as also the railway servant in charge of a cabin, if passed on the way, and shall not give up the tangible authority to proceed, if any, till the block section is cleared of all the vehicles of his train.

(6) The duties of the Guard specified in this rule shall devolve on the Driver in the absence of the Guard.

ACCIDENTS AND UNUSUAL OCCURRENCES

S.R. 6.08-1. Parting of trains -

(a) When any portion of a train in motion becomes detached, the Guard ~~(and the Assistant Guard, if any)~~ on realising the situation shall promptly apply his hand brake and then signal to the Driver by waving up and down a green signal by day and white light by night. The Driver must acknowledge this signal with —0—0 whistles and use his judgement to keep the front portion in motion until the rear portion has come to a stand.

(b) If the Driver comes to know that the train has parted, he should put on flasher light and give —0—0, whistle repeatedly to attract attention of the Guard till acknowledged by Guard (by waving green signal up and down by day and white light by night). Driver should keep the front portion of the train moving until the rear portion has come to a stand.

(c) If the Driver finds it necessary to proceed to the station ahead, he must, on approaching the station, give —0—0 whistle repeatedly to warn the station staff. The station Master must promptly admit the train into the station on a vacant line, and immediately inform the station in rear that the train has parted and that the rear portion may roll back towards the latter. If however, the rear portion is following the front portion, the Station Master must place three detonators on the line to attract the Guard's attention and endeavour to bring it to a stand by the application of wagon brakes or by heaping up earth on the rails or other suitable means or divert it, if possible, to a vacant loop or siding line.

(d) If there is a banking engine in the rear, the Driver of which discovers the parting, he must bring the rear portion to a stand and at the same time repeatedly give —0—0 whistle to attract the attention of the leading engine Driver.

(e) If the Station staff notice a train running in two or more portions, they will endeavour to attract the attention of the Driver and the Guard by waving up and down a green signal by day and white light by night, provided the line ahead is clear and take action in accordance with instructions contained in Block Working Manual.

(f) As soon as the rear portion has come to a stand in the section, the Guard must protect it, both in rear and in front, or if the front portion is out of sight, in accordance with G.R. 6.03. If there is a banking engine, the Driver of the banking engine will protect the rear and the Guard will protect in front of the train. If both the portions have come to a stand on a single line section, the train Driver will depute Assistant Driver to protect in front and the Guard will protect the rear. On a double line, if the adjacent line is fouled, that line must also be protected in accordance with the rules.

(g) If portion of the parted loads stops on a gradient then Driver and Guard will also take action according to S.R. 6.04-2.

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(h) When both the portions of the parted train are brought to a stand and it is possible to couple them up, the Guard will be responsible for bringing the two portions together in a safe and proper manner.

(i) Do not attempt to recouple the parted load if the number of wagons in rear portion is 10 or less in four wheeler stock and 5 or less in eight wheeler bogie stock. In such case, clear the load in two portions. In case where there is banking loco in rear, the load can be recoupled.

(j) When a train parts on its journey, the tonnage and number of vehicles/wagons of the train must be jointly checked by the Guard and the Driver and also by the Station Master where the train is taken in two portions. This information must be embodied in the joint report.

6.09. Portion of train left in a block section -

(1) When a train stopped in a block section has to be divided in consequence of an accident or the inability of the engine to take the whole train forward, the Guard of the Train shall immediately take steps to protect the rear portion of his train in accordance with Rule 6.03.

(2) If the engine is capable of proceeding either with or without vehicles, the Guard shall, after taking action as provided for in sub-rule (1) and before uncoupling, put down the brakes and shall, if necessary, otherwise carefully secure the rear portion of the train to ensure its remaining stationary.

(3) When the Guard has taken action as provided for in sub-rule (2), he shall give a written permission to the Driver to uncouple and proceed to the next station and may, if he thinks fit, give him written instructions to return on the same line.

(4) On sections of the single line where token working is in force, the Driver shall, before leaving any portion of his train in a block section, hand over the token to the Guard from whom he shall obtain a written receipt. The Guard shall retain the token until the block section has been cleared of all vehicles of his train.

(5) At night or in thick, foggy or tempestuous weather impairing visibility, as soon as the engine, whether with or without vehicles is drawn forward, the Guard shall -

(a) protect his train in the front also in accordance with Rule 6.03, and

(b) also see that a red light is shown on the front vehicle of the rear portion of the train.

(6) When the front portion of the train is taken forward, no tail lamp or tail board shall be placed on the rear vehicle of that portion of the train but the Guard shall give its number in full in the written permission referred to in sub-rule (3).

(7) On entering a station with the knowledge that the block section in rear is obstructed, the first duty of the Driver is instantly to warn the station Master of this fact. If a cabin is passed on the way to the station, the railway servant in charge of the cabin shall also be informed of the fact.

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(8) When ,under written instructions referred to in sub-rule(3), the engine is to be brought back, Guard shall, until the arrival of the engine,continue to remain in rear of the portion of the train left in the block section and shall not permit a following train,if any, to move any of the vehicles under his charge.

(9) (a) The Driver shall not bring his engine, with or without vehicles back on the same line unless he has received written instructions under sub-rule (3) from the Guard to do so.

(b) In addition,on a multiple line section, the Driver shall also have a written authority from the Station Master, who shall ensure that no train is diverted on to or crossing the same line on that portion of the track over which the said Driver would be returning.

(c) The Station Master, before giving such written authority, shall obtain necessary assurances as prescribed by special instructions from the Station Masters having diversion facilities and also inform the Controller of the circumstances.

(10) On double or multiple line sections,the Driver may,under instructions from the Station Master, take the train back on the proper line,according to the system of working,until he can cross on to the line on which he has left the rest of his train and may then proceed by that line and after attaching the engine shall work the train to the station to which he is directed.

(11) When moving under written instructions against the direction of traffic on a double line, or against the established direction of traffic on a single line, the Driver shall proceed cautiously and make frequent use of the prescribed code of whistle.

S.R. 6.09-1. Working of trains in two or more parts -

(a) When a train stops in a block section in consequence of an accident or the inability of the engine to take the whole train forward, the Driver of the train will give four short (0000) whistles repeatedly and the Guard will take immediate steps to protect the train in rear in accordance with G.R. 6.03.

(b) (i) After the train has been protected, the Guard will consult the Driver and if the engine, is capable of proceeding either light or with part of the load, the Guard will take immediate steps to pin down firmly hand brakes of at least 50% wagons of remaining load or 10 wagons (whichever is more) and also apply the hand brake in the brakevan. This must be done before the train is divided or the engine is uncoupled from the train. The Driver must ensure that hand brakes on an adequate number of wagons have been pinned down.

(ii) In air braked load close the angle cock of both the wagons/coaches from where the load is to be divided.

(c) (i) The Guard will give a written authority on the prescribed form (T/609B) to the Driver to proceed to the next station, clearly stating the number of

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vehicles and also the painted number and the owning railway of the last vehicle of the load attached to the engine. On a single line section the Driver shall hand over the 'token' or the Line Clear Ticket, whichever in use, to the Guard and obtain a receipt from him. The Guard shall retain the token or the line Clear Ticket until the block section has been cleared of all the vehicles of his train.

(ii) As soon as the engine with/without vehicles is drawn forward, the Guard will place his red hand signal in front of the remaining load and then Guard will protect load in front in accordance with G.R. 6.03.

(d) (i) The Driver will send his Assistant Driver to the Guard who will depute the Assistant Driver with hand signals to protect the remaining load in rear.

(ii) The Driver while working part load, without Assistant Driver on engine, should proceed cautiously upto the next block station.

(e) (i) On approaching the station ahead with the knowledge that the block section behind is obstructed, the Driver must stop at the outermost facing points and give (—0—0) whistles repeatedly to warn the station staff that only a part of load has arrived and that the section behind is obstructed.

At stations where there are no facing points, the Driver shall stop opposite station/Cabin without clearing the block section in rear and give the prescribed whistle code.

(ii) The Station Master after understanding the situation will take immediate steps to ensure that the block section in rear is not cleared and advise the Station Master at the other end of the obstructed block section and the Section Controller on controlled section. He should then exhibit 'All-Right' hand signal from the platform/Cabin for the train to be admitted into the station.

(f) On arrival at the station, the Driver and the Station Master must jointly check the front portion of his load to see that it has arrived complete.

(g) When returning to pick up the load left in section under instructions, the Driver must keep a sharp look-out and proceed cautiously at a speed not exceeding 25 kilometres per hour making frequent use of the engine whistle.

(h) Station Master will depute one Pointsman with the Driver of the train engine, while returning to pick up remaining portion of the load. Driver will immediately stop his engine at the site where the Guard is displaying the red signal. After stopping of engine, Guard will pick up 3 detonators and pilot the engine by riding on it towards the load bursting the intermediate detonator.

(i) As soon as the portion of the load left in the section is either sighted by the Guard or Driver, the engine will be brought to a halt. The Guard will get down from the engine and pilot the engine onto the load walking at a safe distance ahead of the engine. The Assistant Driver deputed to protect the train in rear will be recalled. He will return leaving 3 detonators on the line and picking up the intermediate detonator. In air braked load, while attaching locomotive, connect the

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air pressure hoses of loco and wagon/coach and then open the angle cock of loco and wagon/coach.

(j) If the same Driver could not be returned due to failure or otherwise, another engine will be sent by Station Master under authority to proceed without line clear.

(k) On multiple line section, the Station Master, before giving written permission to the Driver authorising him to proceed in the obstructed section, shall advise the Station Master of the stations having diversion facilities, not to permit any train or engine on the obstructed line. This assurance shall be under the exchange of messages with such Station Masters having diversion facilities. This message/messages will be supported by private number.

(l) If the engine of a passenger train is unable to haul the full load, it will not be detached but will remain coupled up to the train until an assisting engine arrives. After the train has been protected in rear in accordance with G.R.6.03, and if information cannot be conveyed to the Controller on the Field Telephone, the ~~Assistant Guard or~~ Assistant Driver will be sent to the nearest block station with a written message for assistance.

(m) Before clearing back section the Station Master and Guard should jointly check that complete load has arrived.

6.10. Fire -

(1) A railway servant noticing a fire,likely to result in loss of life or cause damage to property,shall take all possible steps to save life and property,to prevent it from spreading and to extinguish it.

(2) In case the fire is on or adjacent to any electrical equipment, the railway servant shall ,if he is competent in handling electrical equipment and specially trained for the purpose,have the affected part immediately isolated from its source of supply of electrical energy.

(3) The occurrence of a fire shall,in every case,be reported to the nearest Station Master by the most expeditious means and Station Master shall take such action as may be prescribed by special instructions.

S.R. 6.10-1. Fire on trains -

(a) Should any portion of a train be discovered to be on fire,it should be brought to a stand and burning vehicle or vehicles separated from the rest of the train,and every exertion made to put out the fire with the least possible delay. For isolating a burning coach on fire see S.R. 4.48-1.

(b) Should it be known that water is procurable within a short distance from the place where the fire is discovered and it is considered safe to run the burning vehicle on to that spot, this may be done. A burning vehicle as far as possible should not be moved unless the rear portion is detached. Much, however,

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would depend upon the nature of the contents of the vehicle, the extent of the fire, and the liability of other vehicles being also set on fire; the Guard and Driver of the train must exercise their discretion in such cases.

(c) When a fire is discovered in a Passenger train, the safety of passengers must first be attended to; and when a postal van or carriage is on fire every effort must be made to save the mails.

(d) Drivers must not keep the back damper of the engine open when the train is running.

S.R. 6.10-2. Fire on electrical multiple unit trains and Electric engines -

(a) When fire or continued fusing in any equipment occurs, the Driver shall at the earliest possible moment move the master controller handle to the "Off" position and "trip" all circuit breakers. If fire still continues, he shall take immediate steps to cut off the power supply to the overhead equipment of the track on which the disabled train is standing. After power has been cut off and the pantograph lowered, the special fire extinguishers provided, or sand shall only be used in extinguishing the fire. The Driver shall arrange for the power supply to be restored as soon as it is safe to do so.

(b) The Guard shall give the Driver every assistance in dealing with the fire and see to the safety of passengers as instructed in S.R. 6.10-1 (c). When the fire is finally put out, defective coach shall, if necessary be electrically isolated from the rest of the train. Should the coach affected be the leading driving compartment, the Driver will operate the train as instructed in General Rule 4.21.

(c) Special type fire extinguishers shall be fitted in each multiple unit motor coach and also in each driving cab of all electric engines. Sand shall be provided in the luggage compartment of each motor coach, and at stations and other appointed places. The special type of fire extinguisher supplied on the electric rolling stock shall only be used in connection with fires in, or adjacent to, any electrical equipment under live conditions.

S.R. 6.10-3. (1) (a) In the event of a fire on any part of any traction electrical equipment, the affected part shall first be completely isolated from the distribution system, if this has not been done automatically. If arising continues due to a feed from adjacent supply control posts, it shall be got interrupted either by remote or local operation of switches. The fire shall be extinguished by means of extinguishers provided. The Traction Power Controller shall be informed immediately of the nature of the fire and the extent to which it has affected supply.

(b) If an unauthorised person notices a fire on or adjacent to traction electrical equipment, he shall make an attempt to extinguish the fire but shall report the occurrence to the Traction Power Controller by means of emergency telephone or the nearest Station Master, Cabin Assistant Station Master or Switchman immediately. In the event of a Gangmate/Gangman noticing fire on or

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adjacent to traction electrical equipment he shall, in addition, inform any passing train or trolley. The Guard and /or Driver of the train or the occupant of the trolley shall then take action in accordance with General Rule 6.10 as the case may be. If there be more than one Gangman, the occurrence shall be reported to the Station Master or Cabin Assistant Station Master or Switchman on either side. A Station Master, Cabin Assistant Station Master or Switchman, on receipt of such information, shall immediately inform the Traction Power Controller. The Traction Power Controller shall arrange for isolation of the affected portion of the equipment and for extinguishing the fire in accordance with these rules. If necessary, the Station Master should prevent the movement of trains towards the affected Section.

(2) (a) In the event of fire on an electric engine, the Driver shall immediately switch 'Off' the circuit breaker and lower the pantograph. The train shall then be brought to a stop at once.

(b) After cutting off electric supply to the affected circuits the Driver shall take necessary action to put out the fire.

(c) If fire cannot be extinguished by the above means, the Driver shall advise the Traction Power Controller through the emergency telephone to arrange for the affected section of the overhead equipment to be made dead.

(d) The Guard shall give all possible assistance to the Driver in putting out the fire.

(e) Fire extinguisher of an approved type for use on electrical fires shall be provided on each electric engine and the Driver shall make himself familiar with the location and use of these extinguishers. During the periodical inspection of locomotive the extinguishers shall be examined by the locomotive inspection staff.

(3) Ordinary fire extinguishers or water from a hose pipe or bucket shall on no account be used to extinguish fires on live electrical equipment. If the services of the fire brigade are required, the brigade shall not be allowed to commence operations until all electrical equipment in the vicinity of the fire has been made dead.

(4) Fire extinguisher which have been used shall be replaced or recharged with the least delay.

(5) Sand-bins are provided at switching stations, stations and signal cabins. The supervisory official in charge must see that the sand is kept dry and clear of rubbish, and is not used for any other purpose.

6.11 Vehicles escaping from station - If any vehicle escapes from a station, the Station Master shall take immediate steps to warn the other stations or persons concerned, as far as practicable, to prevent an accident.

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S.R. 6.11-1 Vehicles escaping -

(a) In the event of a vehicle escaping from a station, the Station Master must -

(i) Immediately advise the station in the direction in which the vehicle has escaped by sending the prescribed signals on the block instruments, where provided, and also advise him on the telephone, or send an immediate message on the telegraph instrument. If the escaping vehicle contains passengers, this information must also be given. On controlled sections, the Controller must also be advised immediately.

(ii) put back all signals to 'On' stop any train proceeding in that direction until it has been ascertained that the road is clear.

(iii) on a double line section, if the vehicle has escaped on the wrong road stop trains proceeding in that direction on the right road, until it has been ascertained that the escaped vehicle is not fouling the adjacent road.

(b) The Station Master who has received the signal must act promptly as follows -

(i) He must immediately place all signals at 'On' to stop any train proceeding in the direction from which the vehicle has escaped, until it has been ascertained that the road is clear.

(ii) If there is an approaching train in the section in front of the runaway vehicle, he should admit the train in front immediately, if a line is clear, and then take steps to stop or divert the runaway vehicle.

(iii) On a double line section, if the escaped vehicle is approaching on the wrong road, he must detain trains proceeding in that direction until it has been ascertained that the runaway vehicle is not fouling the adjacent road.

(iv) He must also take such measures as may be most expedient under the circumstances for stopping the escaping vehicle by covering the rails heavily with earth or small stones for as great a distance as possible or turning the runaway vehicle into a clear loop or siding or derailling it by placing a sleeper in its path.

(v) As far as possible, the vehicle containing passengers should not be derailed or turned into a derailling siding. If the block section ahead is clear and the line is not on a falling gradient, the vehicle may be allowed to run through the station and the 'Vehicle running away' signal must be given to the station ahead.

(vi) If the Station Master is unable to stop the runaway vehicle, he must repeat the 'Vehicle running away' signal to the next station in the direction in which the vehicle is escaping.

(vii) If a portion of a train or a brakevan has run away, the Station Master must place three detonators on the track to attract the attention of the Guard.

(c) The Station Master at both ends of the section will depute competent railway servants to make a search for the vehicle and after it is ascertained that the vehicle has come to a stand and has been secured, send assistance into the section to bring the vehicle in accordance with para 4.12 of Block Working Manual, in consultation with each other.

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SYSTEMS OF WORKING

CHAPTER VII

SYSTEMS OF WORKING

7.01. Systems of Working -

(1) All trains working between stations shall be worked on one of the following systems, namely -

- (a) the Absolute Block System,
- (b) the Automatic Block System,
- (c) the Following Trains System,
- (d) the Pilot Guard System,
- (e) the Train-Staff and Ticket System, or
- (f) the One Train Only System.

(2) The Absolute Block and the Automatic Block Systems alone shall be used on every railway, except any railway or portion of a railway on which the use of any other system of working mentioned in sub rule (i) may be sanctioned under special instructions subject to the conditions applicable to each system as described in these rules.

S.R. 7.01-1. System (c) to (e) are not in force on the Central Railway.

7.02. Applicability of General Rules referring to the working of signals and trains - All rules referring to the working of signals and trains also apply to the system of working detailed in these rules, except where otherwise provided.

S.R.7.02-1. All Subsidiary Rules referring to the working of signals and trains also apply to the system of working detailed in these rules except where otherwise provided.

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THE ABSOLUTE BLOCK SYSTEM

CHAPTER VIII

THE ABSOLUTE BLOCK SYSTEM

A. Essentials

8.01. Essentials of the Absolute Block System -

- (1) **Where trains are worked on the Absolute Block System -**
 - (a) **no train shall be allowed to leave a block station unless Line Clear has been received from the block station in advance, and**
 - (b) **on double lines such Line Clear shall not be given unless the line is clear, not only upto the first Stop signal at the block station at which such Line Clear is given, but also for an adequate distance beyond it;**
 - (c) **on single lines such Line Clear shall not be given unless the line is clear of trains running in the same direction, not only upto the first Stop signal at the block station at which such Line Clear is given, but also for an adequate distance beyond it, and is clear of trains running in the direction towards the block station to which such Line Clear is given.**

- (2) **Unless otherwise directed by approved special instructions, the adequate distance referred to in clauses (b) & (c) of sub-rule (1) shall not be less than -**
 - (a) **400 metres in case of two-aspect lower quadrant signalling or two-aspect colour light signalling, and**
 - (b) **180 metres in case of multiple-aspect signalling or modified lower quadrant signalling.**

S.R.8.01-1. Essentials of the Lock & Block system -

The following are the essentials of the Lock & Block System -

- (a) It shall not be possible to take 'Off' last Stop signal to permit a train to leave a block station until 'Line Clear' has been received from the block station in advance.
- (b) The entry of a train into the block section shall cause the last Stop signal to be automatically replaced at 'On'.
- (c) Line Clear shall not be given by the block station in advance until the preceding train has passed over the section clearing track circuit or it's

THE ABSOLUTE BLOCK SYSTEM

equivalent and until Stop signal/signals in rear of the train has/have been replaced to 'On' position.

B. Conditions for Granting Line Clear.

8.02. Conditions for granting Line clear at a class 'A' station -

At a class 'A' station on single line or double line, the line shall not be considered cleared and Line Clear shall not be given, unless -

- (a) the whole of the last preceding train has arrived complete;
- (b) all signals have been put back to 'On' behind the said train;
- (c) the line on which it is intended to receive the incoming train is clear upto the Starter; and
- (d) all points have been correctly set and all facing points have been locked for the admission of the train on the said line.

S.R.8.02-1. There are no class 'A' stations on the single line on Central Railway.

8.03. Conditions for granting Line clear at a class 'B' station -

(1) At a class 'B' station on double line, the line shall not be considered clear and Line Clear shall not be given, unless -

- (a) the whole of the last preceding train has arrived complete;
- (b) all necessary signals have been put back to 'On' behind the said train; and
- (c) the line is clear -
 - (i) at stations equipped with two-aspect signalling - upto the Home signal, or
 - (ii) at stations equipped with multiple-aspect signalling or modified lower quadrant signalling - upto the outermost facing points or the Block Section Limit Board (if any).

(2) At a class 'B' station on single line, the line shall not be considered cleared and Line Clear shall not be given, unless -

- (a) the whole of the last preceding train has arrived complete;
- (b) all necessary signals have been put back to 'On' behind the said train; and

THE ABSOLUTE BLOCK SYSTEM

(c) the line is clear -

(i) at stations equipped with two-aspect signalling -
upto the Shunting Limit Board or Advanced Starter (if any) at
that end of the station nearest to the expected train.

or

upto the Home signal if there is not Shunting Limit Board or
Advanced Starter,

or

upto the outermost facing points if there is no Shunting Limit
Board or Advanced Starter or Home signal;

(ii) at stations equipped with multiple-aspect signalling or
modified lower quadrant signalling -
upto the Shunting Limit Board or Advanced Starter (if any) at
the end of the station nearest to the expected train,

or

upto the outermost facing points if there is no Shunting Limit
Board or Advanced Starter.

Note : At a class 'B' single line station, this rule does not forbid direct reception of a train from one side, when Line Clear has been given to the block station on the other side provided the distance between the Outer signal and outermost facing points in two-aspect signalling, and between the Home signal and outermost facing point in multiple-aspect signalling, or modified lower quadrant signalling is not less than the sum total of the adequate distances prescribed in Rule 8.01 in regard to conditions for granting Line Clear and Rule 3.40 in regard to conditions for taking 'Off' Home signal for the admission of a train even where Shunting Limit Boards or Advanced Starter have not been provided as prescribed in sub-rule (1) of Rule 3.32.
See illustrative diagrams at the end of this chapter.

~~S.R. 8.03 1. Working of trains at class 'B' stations during thick, foggy or tempestuous weather.~~

~~In case of thick, foggy or tempestuous weather when station signals can not be seen at a class 'B' station, the Line Clear shall not be given unless—~~

~~(a) (i) All the signals are lit and fog signalman with detonators deputed in accordance with S.R. 3.61 1(d), and the Control and SM's on either side advised about this.~~

~~(ii) The Line on which it is intended to receive the train is clear upto its trailing points or upto the Starter, where provided, and~~

THE ABSOLUTE BLOCK SYSTEM

~~(iii) All points have been correctly set and all facing points have been locked for the admission of the train on the said line.~~

~~(b) Should the line be not cleared as desired in clause (ii) of sub para (a) above, the SM shall, before granting Line Clear, advise the SM in rear to caution the Driver that he is likely to be detained at the first stop signal.~~

~~(c) However, 'Train out of Section' signal may be given in usual manner under the conditions prescribed for class 'B' station.~~

CS11/12 (Ref : Rly Board's letter no. 98/Safety(A&R)/19/16 dated 23.08.2010 &04.11.2010.)

8.04. Conditions for granting Line clear at a class 'C' station -

At a class 'C' station on single line or double line in two aspect, multiple aspect or modified lower quadrant signalling the line shall not be considered clear and Line Clear shall not be given, unless -

- (a) the whole of the last preceding train has passed complete at least 400 meters beyond the Home signal and is continuing its journey; and
- (b) all signals taken 'Off' for the preceding train have been put back to 'On' behind the said train;

provided that on a single line, the line is also clear of trains running in the opposite direction towards the block hut from the block stations at the other end.

C. Obstruction - Double Line

8.05. Obstruction on double line at a block station when a train is approaching -

(1) Class 'A' station - When Line Clear has been given, no obstruction shall be permitted outside the Home signal, or, on the line on which it is intended to admit the train, upto the starter pertaining to the said line.

(2) Class 'B' station - When Line Clear has been given, no obstruction shall be permitted outside the station section but shunting within the station section may go on continuously, provided the necessary signals are kept at 'On'.

(3) When signals have been taken 'Off' for an approaching train on a line which is not isolated, no shunting movement shall be carried on towards the points over which the incoming train will pass.

S.R. 8.05-1 Shunting during reception/dispatch of trains –When signals have been taken "Off" for an incoming /outgoing train on/from a line which is not isolated, no shunting movement shall be carried out towards the points over which the incoming /outgoing train is to pass except on stations where frequent shunting movements take

THE ABSOLUTE BLOCK SYSTEM

place and where such points are protected by Stop signal or by a Shunt signal or by a Stop Board with the precautions to be observed while performing such shunting that:-

- a) Shunting shall be carried out under the supervision of authorized competent railway servant.
- b) Rake/Load should be fully on air brake.
- c) The maximum speed during such shunting operation shall not exceed 15 kmph. (Added vide Ad C/Slip 10/4 office note No. TR/G&SR/Rev/101 dated 08.10.08)

8.06. Obstruction on double line in the block section -

(1) When Line Clear has been given, no obstruction shall be permitted in the block section in rear,

(2) Shunting or obstruction for any other purpose shall not be permitted in the block section in rear unless it is clear and is blocked back.

(3) Shunting or obstruction for any other purpose shall not be permitted in the block section in advance unless it is clear and is blocked forward :

Provided that the when block section in advance is occupied by a train travelling away from the station, shunting or obstruction may be permitted behind the train under special instructions taking into consideration the speed, weight and brake power of trains and the gradients on the section, and as soon as intimation has been received that the train has arrived at the block station in advance, the line shall be blocked forward if it is still obstructed.

Note : See Rule 8.14 also.

S.R. 8.06-1. (a) Whenever shunting is permitted in block section, either in rear or front, the Station Master, after blocking back/forward the line, as the case may be, shall issue an authority on prescribed form (T 209B) authorising the Driver to enter the section for shunting purposes. After the shunting has been completed in the block section the Driver shall return this authority to the Station Master, who shall paste it alongwith the original foil.

(b) The authority for performing shunting (T.209.B) shall also be given, when such shunting is permitted in the block section occupied by a train travelling away from the station. This authority need not be issued, when a shunt signal provided below the last Stop signal, has been taken 'Off' for shunting purposes.

SR 8.06-2 : At stations where Daido's Lock and Block Instruments are installed, the Loco Pilot shall be given the 'Occupation Key', extracted from the Block Instrument, by the Station Master. This Key will serve as authority for performing shunting in the block section. In the event of shunting being performed in the block section in rear of travelling away train, the authority on form T 806 will be issued to

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the Loco Pilot. Should the section be cleared before the shunting movements in block section are completed, the Station Master shall extract the 'Occupation Key' after blocking forward the line and keep the same in his personal custody till the shunting operation have been completed in block section.

(Added vide Ad C/S 14/6 office note No. TR/G&SR/Rev/101 dated 22.08.2016)

D. Obstruction - Single Line

D. I Class 'A' stations

8.07. Obstruction on single line at a class 'A' station when a train is approaching - When Line Clear has been given, no obstruction shall be permitted outside the Home signal, or, on the line on which it is intended to admit the train, upto the Starter which controls the train.

8.08. Obstructing the block section at a Class 'A' station on single line - The block section shall not be obstructed for shunting purposes, unless -

- (a) The Station Master has received Line Clear from the Station Master at the other end of the block section, or**
- (b) The block section is blocked back, or**
- (c) is occupied by a train travelling away from the block station at which the shunting is to be performed which shunting may be permitted under special instructions taking into consideration the speed, weight and brake power of trains and the gradients on the section. As soon as intimation has been received that the train has arrived, the block section shall be blocked back, and**
- (d) The Driver or other person in charge of the shunting operations has received distinct orders from the Station Master to shunt in a manner directed by special instructions.**

D. 2. Class 'B' Stations

8.09. Obstruction in the face of an approaching train at a class 'B' station on single line - The line outside the Home signal in two-aspect signalling territory or outermost facing points in multipleaspect or modified lower quadrant signalling territory in the direction of a train for which line Clear has been given, shall only be obstructed when a Shunting Limit Board or an Advanced Starter is provided and under special instructions which take into consideration the speed, weight and brake power of trains, the gradients, the position of the first Stop Signal and the distance from which that signal can be seen by the Driver of an approaching train.

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8.10. Obstructions within station section at a class B station on single line -

(1) If the necessary signals are kept at on shunting may be carried on within the station section, provided the provisions of Rule 8.09 are complied with for shunting upto Shunting Limit Board or Advanced Starter, where provided.

(2) When signals have been taken off for an incoming train on to a line which is not isolated, no shunting movement shall be carried on towards the points over which the incoming train will pass.

S.R. 8.10-1 Shunting during reception/dispatch of trains –When signals have been taken “Off” for an incoming /outgoing train on/from a line which is not isolated, no shunting movement shall be carried out towards the points over which the incoming /outgoing train is to pass except on stations where frequent shunting movements take place and where such points are protected by Stop signal or by a Shunt signal or by a Stop Board with the precautions to be observed while performing such shunting that:-

- a) Shunting shall be carried out under the supervision of authorized competent railway servant.
- b) Rake/Load should be fully on air brake.
- c) The maximum speed during such shunting operation shall not exceed 15 kmph.
(Added vide Ad C/Slip 10/4 office note No. TR/G&SR/Rev/101 dated 08.10.08)

8.11. Obstructions outside station section at a class B single line station equipped with two-aspect signals - The line outside the station section and upto the Outer signal shall not be obstructed unless a railway servant specially appointed in this behalf by the Station Master is in charge of the operations, and unless -

(a) The block section into which the shunting is to take place is clear of an approaching train and all relevant and necessary signals are at on position, or

(b) If an approaching train has arrived at the Outer signal, the Station Master has personally satisfied himself that the train has been brought to a dead stand at the signal :

Provided that the line shall not be obstructed under clause (b) in thick, foggy or tempestuous weather impairing visibility, or, in any case unless authorised by special instructions.

S.R. 8.11-1. At a class B station on single line equipped with two-aspect signals, shunting may be performed between the Outer signals without blocking back the section, provided ‘Line Clear’ has not been granted for a train to approach. In the event of receipt of ‘Is line clear’ signals from the other end of the section, and if the section is still occupied, the line should be immediately ‘blocked back’.

At stations where tokenless block instruments are installed, such shunting out side the station section upto the outer signal shall be performed only after

THE ABSOLUTE BLOCK SYSTEM

section has been 'blocked back' and the shunt/occupation key handed over to the Driver.

8.12. Obstruction outside station section at a class 'B' single line station equipped with manually operated multiple-aspect signals - The line outside the station section and upto the first Stop signal shall not be obstructed unless a railway servant specially appointed in this behalf by the Station Master is in charge of the operations, and unless the block section into which the shunting is to take place is clear of an approaching train.

S.R.8.12-1. At a class B station on single line equipped with manually operated multiple-aspect signals, shunting may be performed between the Home signals without 'blocking back' the section, provided 'Line Clear' has not been granted for a train to approach. In the event of receipt of 'Is Line Clear' signal from the other end of the section and if the section is still occupied, line should be immediately 'blocked back'.

At stations where tokenless block instruments are installed, such shunting outside the station section upto the Home signal shall be performed only after the section has been 'blocked back' and the shunt/occupation key handed over to the Driver.

8.13. Obstruction outside the first Stop signal at a class 'B' station on single line - The line outside the first Stop signal shall not be obstructed unless the line has been blocked back.

E. General provisions.

8.14. Block back or Block forward -

Block back or block forward shall be done only in accordance with the procedure prescribed by special instructions.

S.R.8.14-1. The detailed procedure for block back and block forward is given in Block Working Manual.

8.15. Authority for shunting or obstruction in block section - While permitting shunting or obstruction in the block section, the Driver shall be given authority for shunting in the block section as prescribed under special instructions which authority may be -

- (a) either a shunting arm of prescribed size and design on the same post as and under the Last Stop signal, or
- (b) a token of prescribed design, or
- (c) a written permission to shunt.

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S.R.8.15-1. Whenever shunting is permitted in the block section, shunt arm, if any, below the Last Stop signal shall be taken 'Off' or a written authority on form T.806 shall be issued to the Driver and his acknowledgment obtained.

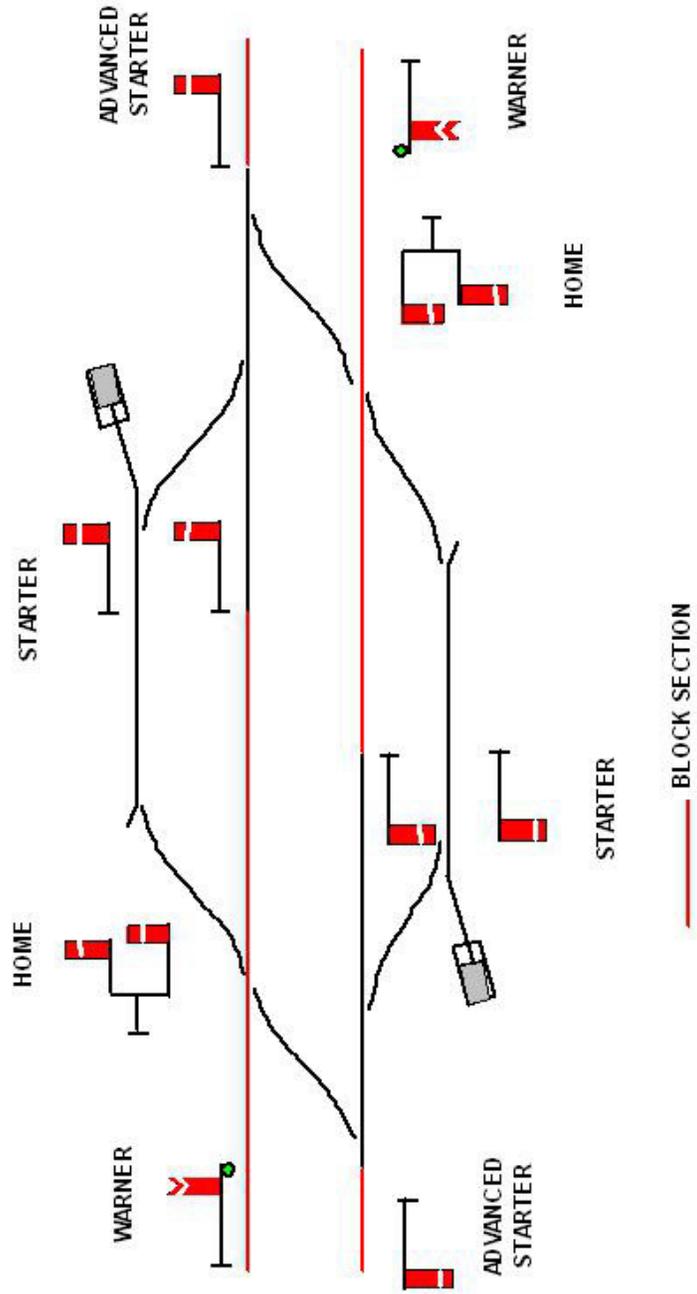
At a station on double line where Daido's block instruments are in use, the 'Occupation-key' shall be handed over to the Driver as an authority for permitting shunting in the block section.

At a station on single line where tokenless block instruments or push button type block instruments are in use, the 'Occupation/Shunting-key' shall be handed over to the Driver as an authority for permitting shunting in the block section.

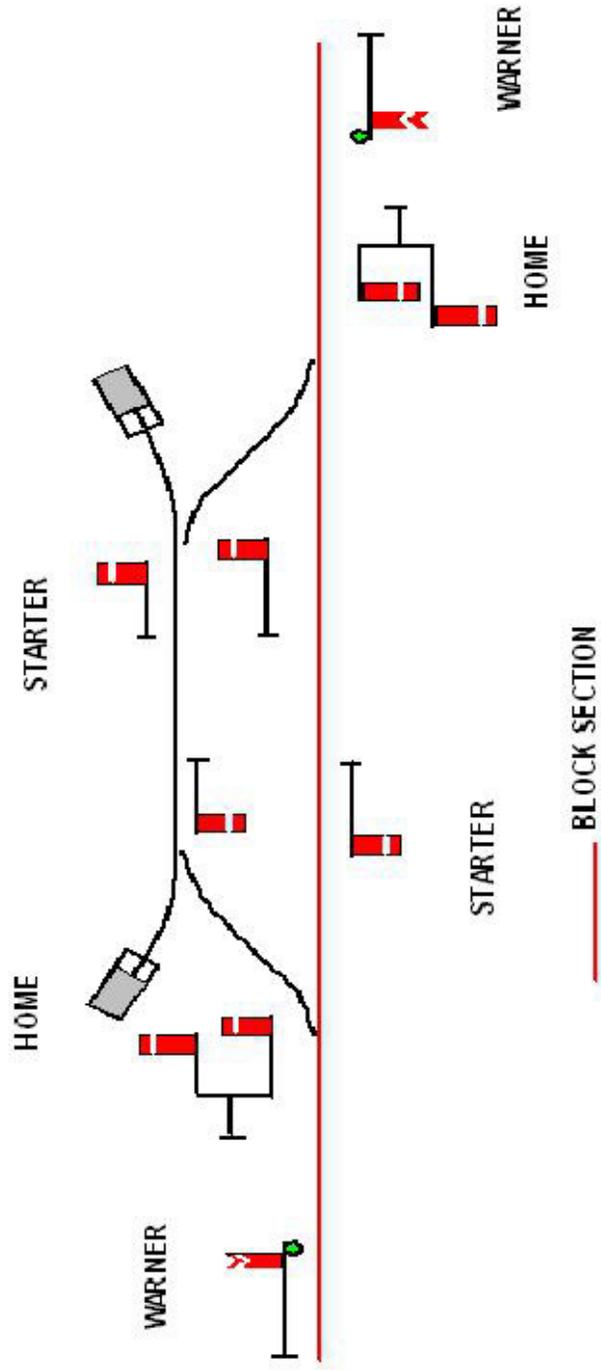
8.16. Illustrative diagrams.- Class 'A', 'B' and 'C' stations on single line and double line are illustrated in the following diagrams, which are not drawn to scale.

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CLASS 'A' DOUBLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, HOME, STARTER AND ADVANCED STARTER SIGNALS

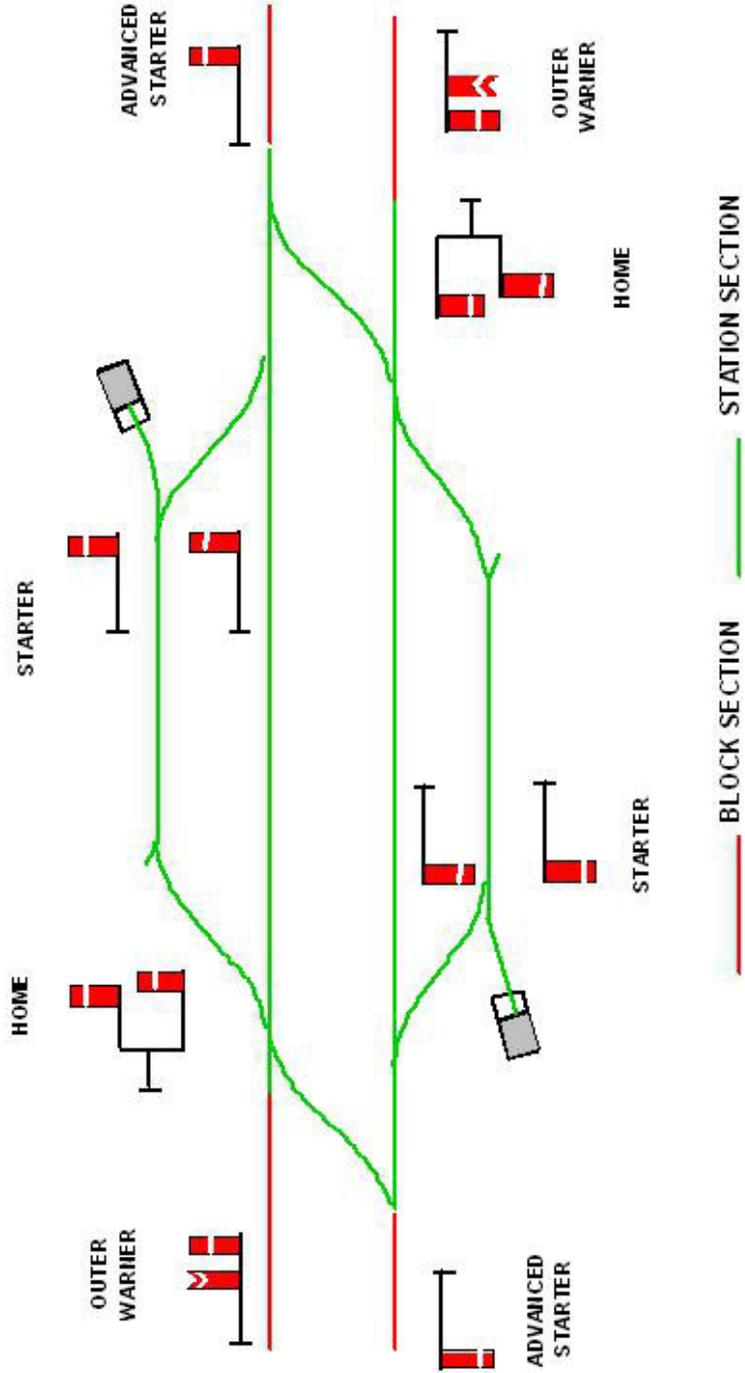


CLASS 'A' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, HOME, AND STARTER SIGNALS



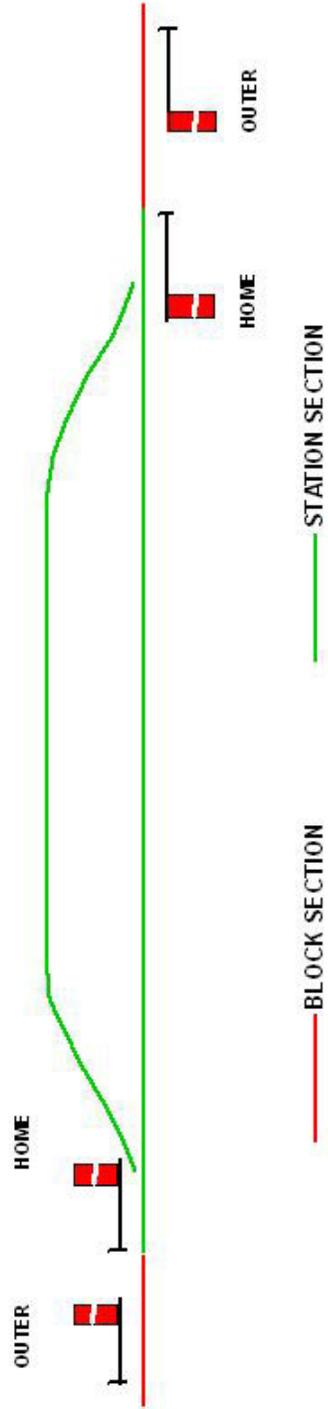
THE ABSOLUTE BLOCK SYSTEM

CLASS 'B' DOUBLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, OUTER, HOME, STARTER AND ADVANCED STARTER SIGNALS

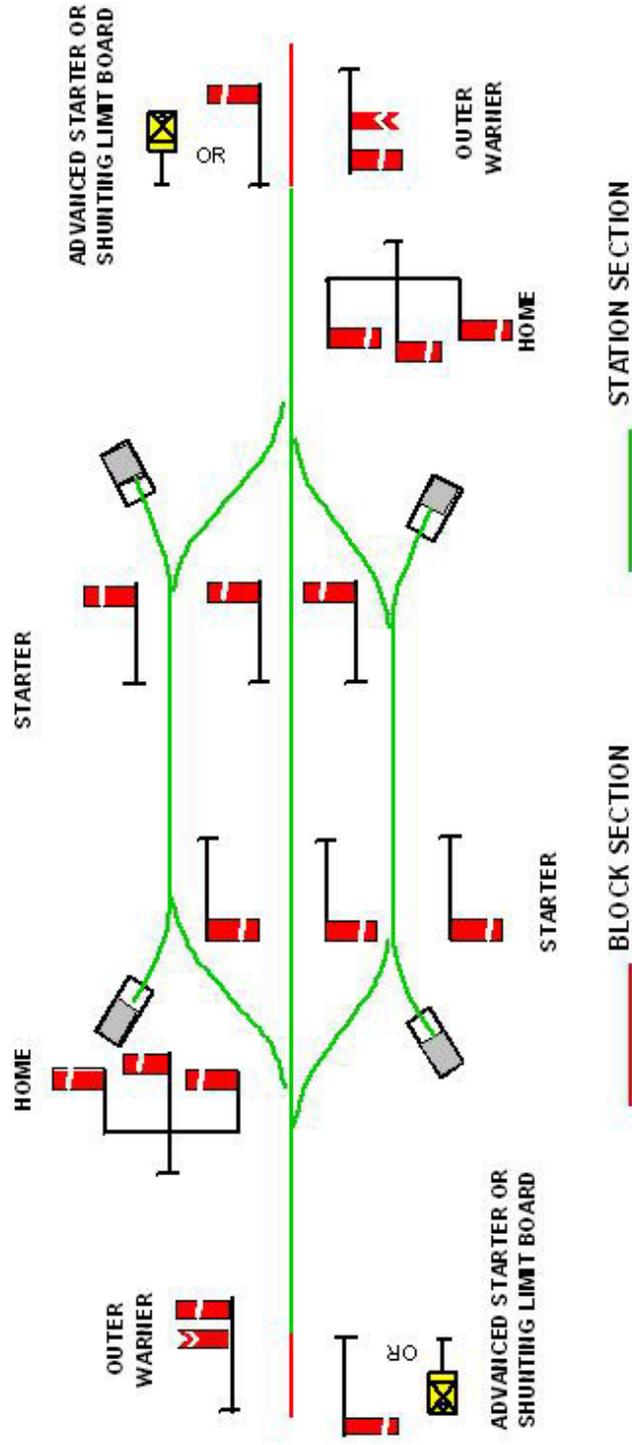


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CLASS 'B' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH OUTER AND HOME SIGNALS

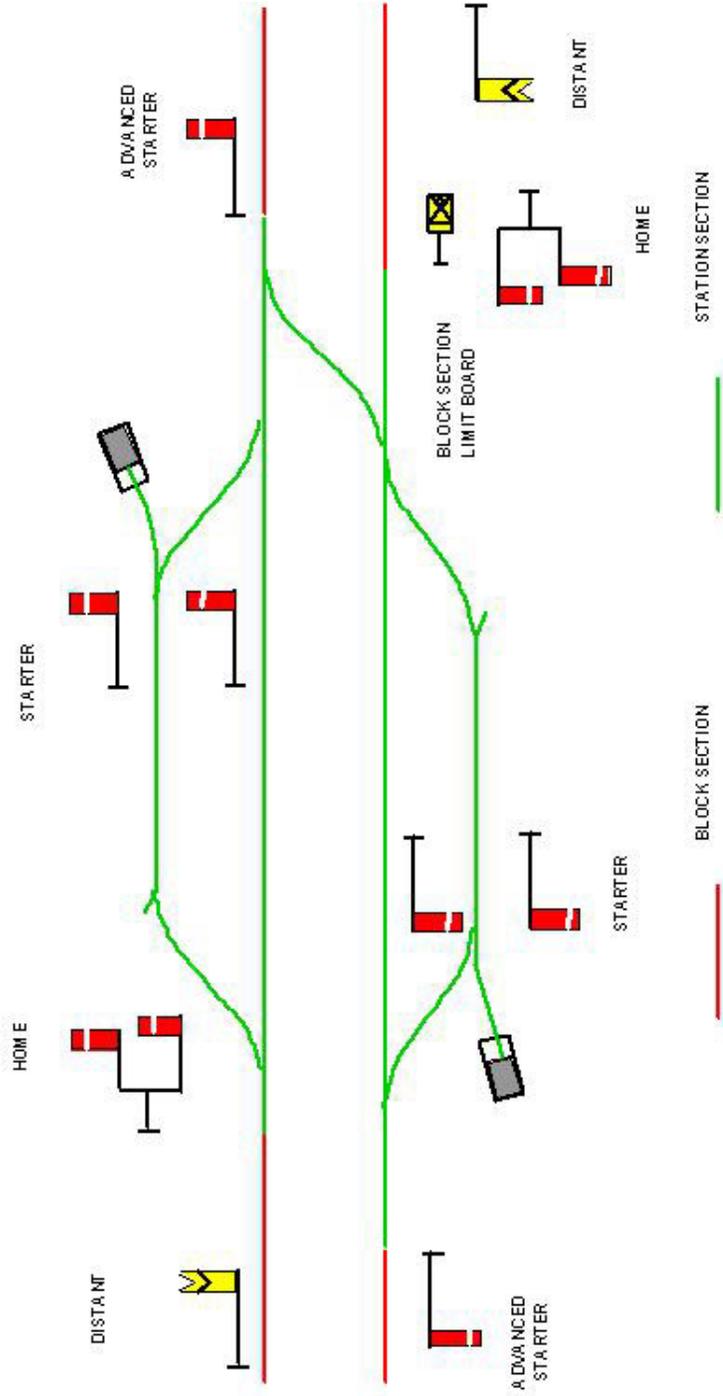


CLASS 'B' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, OUTER, HOME, STARTER AND ADVANCED STARTER SIGNALS/SHUNTING LIMIT BOARDS



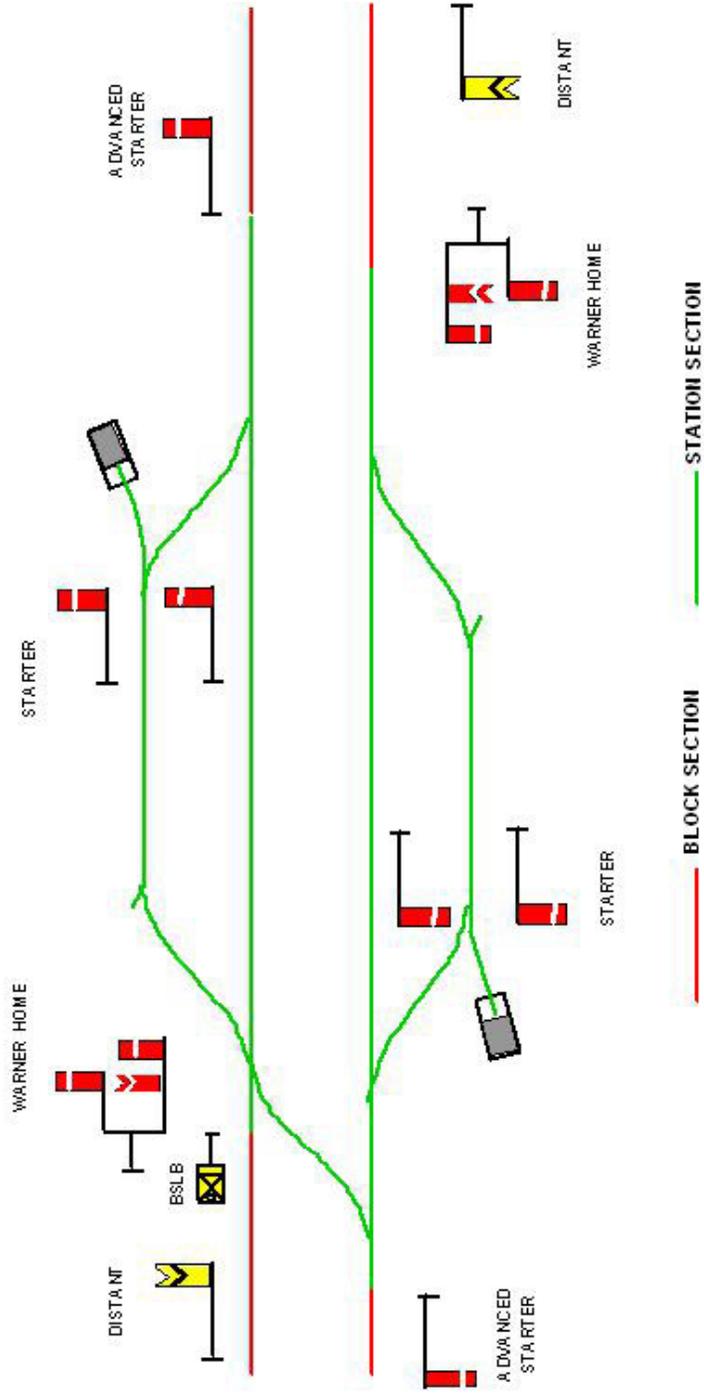
THE ABSOLUTE BLOCK SYSTEM

CLASS 'B' DOUBLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT, HOME, STARTER, ADVANCED STARTER SIGNALS AND BLOCK SECTION LIMIT BOARD

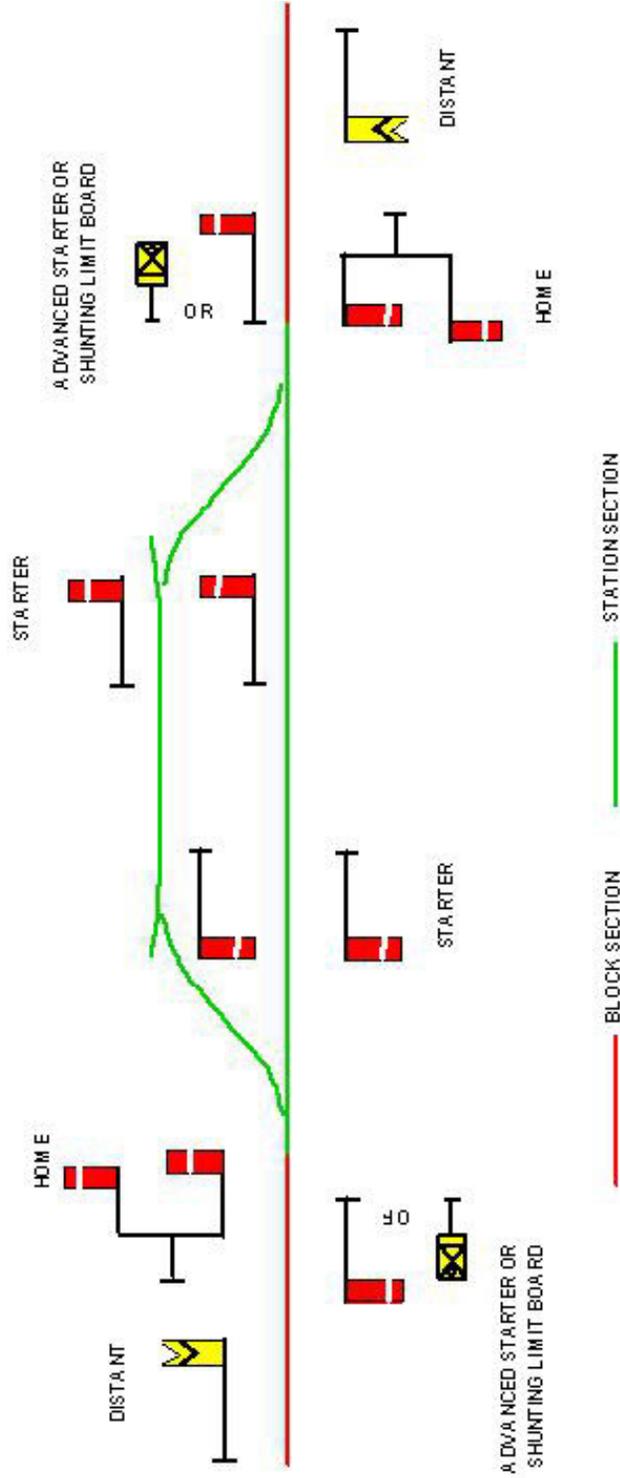


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CLASS 'B' DOUBLE LINE STATION IN MODIFIED LOWER QUADRANT SIGNALLING TERRITORY WITH DISTANT, WARNER, HOME, STARTER, ADVANCED STARTER SIGNALS AND BLOCK SECTION LIMIT BOARD

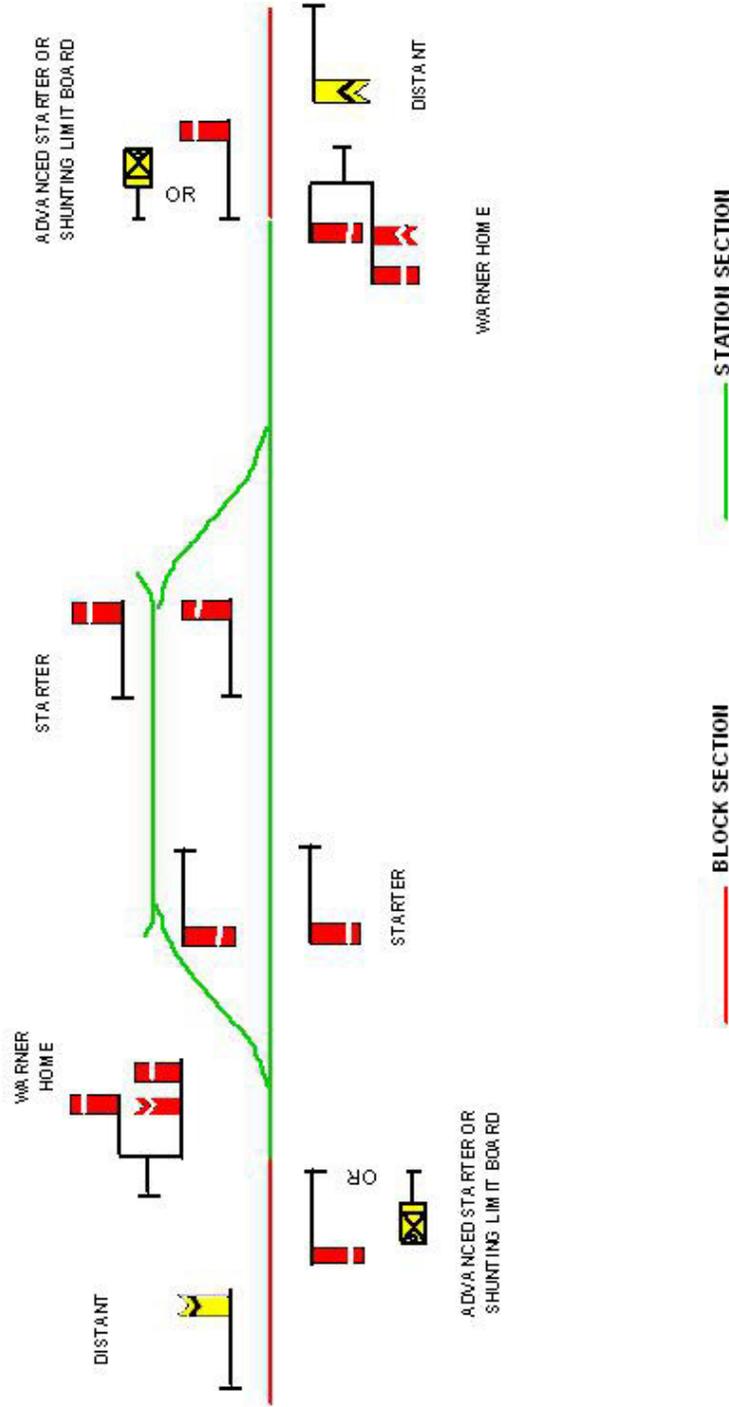


CLASS 'B' SINGLE LINE STATION IN MULTIPLE ASPECT SIGNALING TERRITORY WITH DISTANT, HOME, STARTER AND ADVANCED STARTER SIGNALS/SHUNTING LIMIT BOARDS

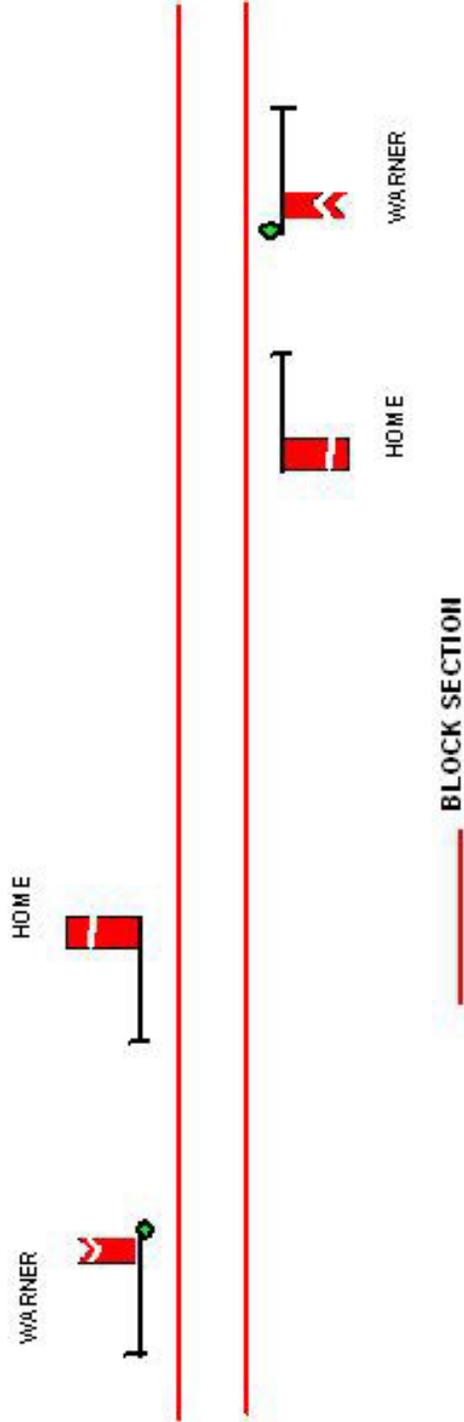


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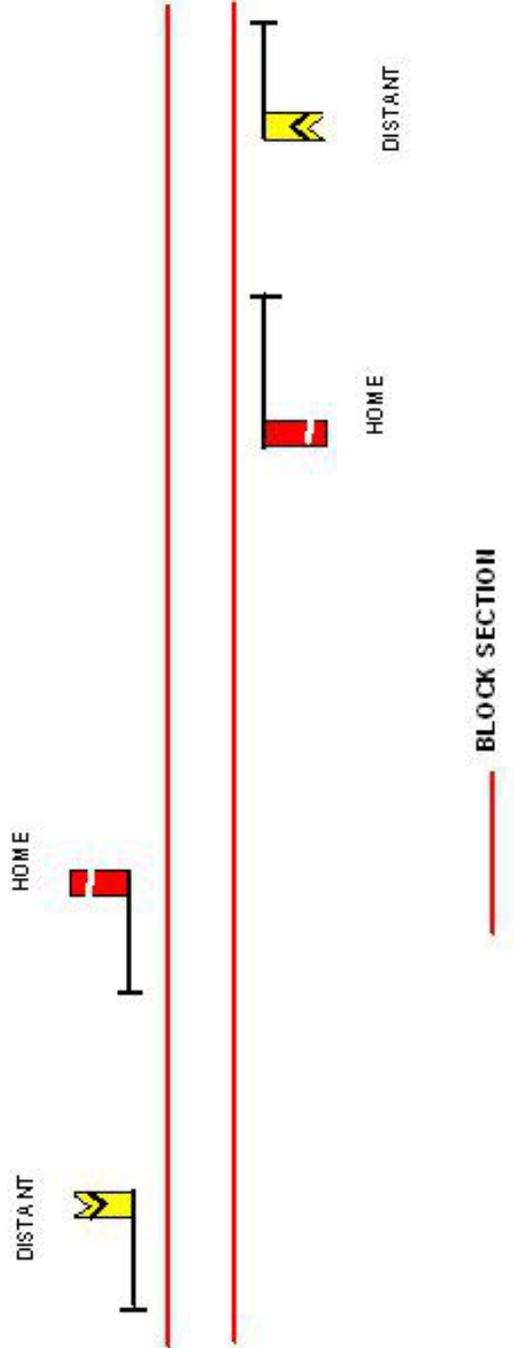
CLASS 'B' SINGLE LINE STATION IN MODIFIED LOWER QUADRANT SIGNALLING TERRITORY WITH DISTANT, WARNER, HOME, WARNER, STARTER AND ADVANCED STARTER SIGNALS/ SHUNTING LIMIT BOARD



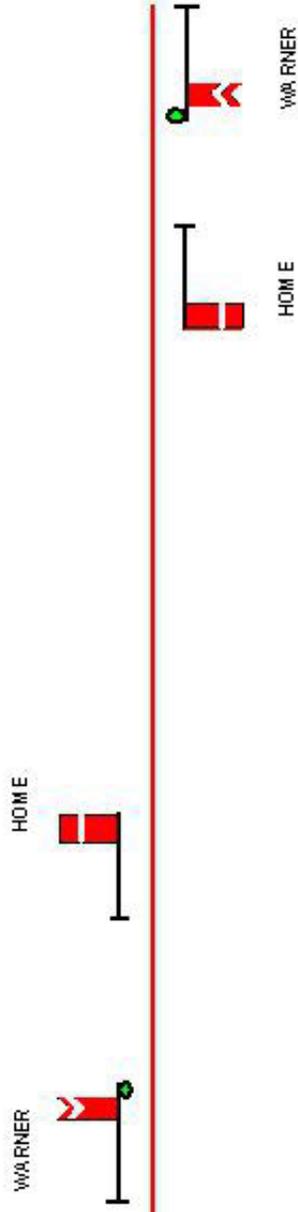
CLASS 'C' DOUBLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER AND HOME SIGNALS



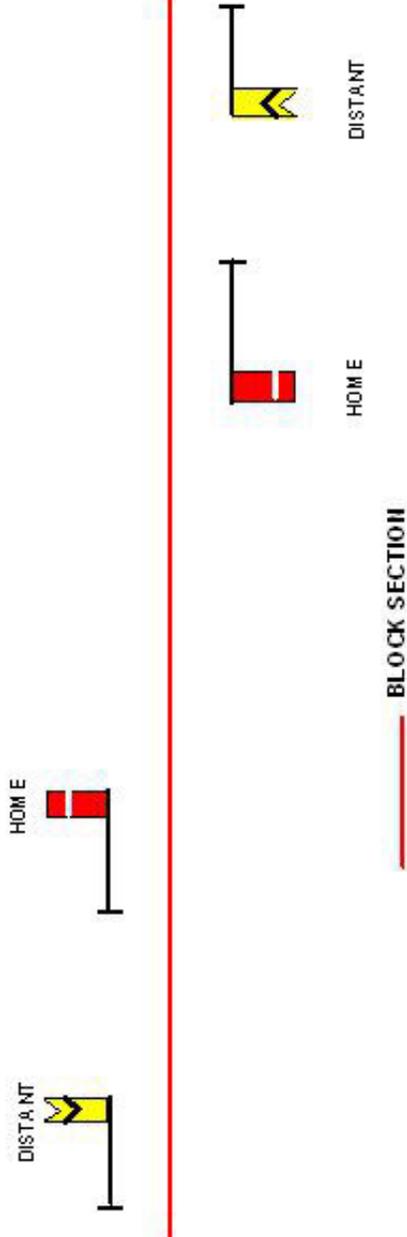
CLASS 'C' DOUBLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH
DISTANT AND HOME SIGNALS



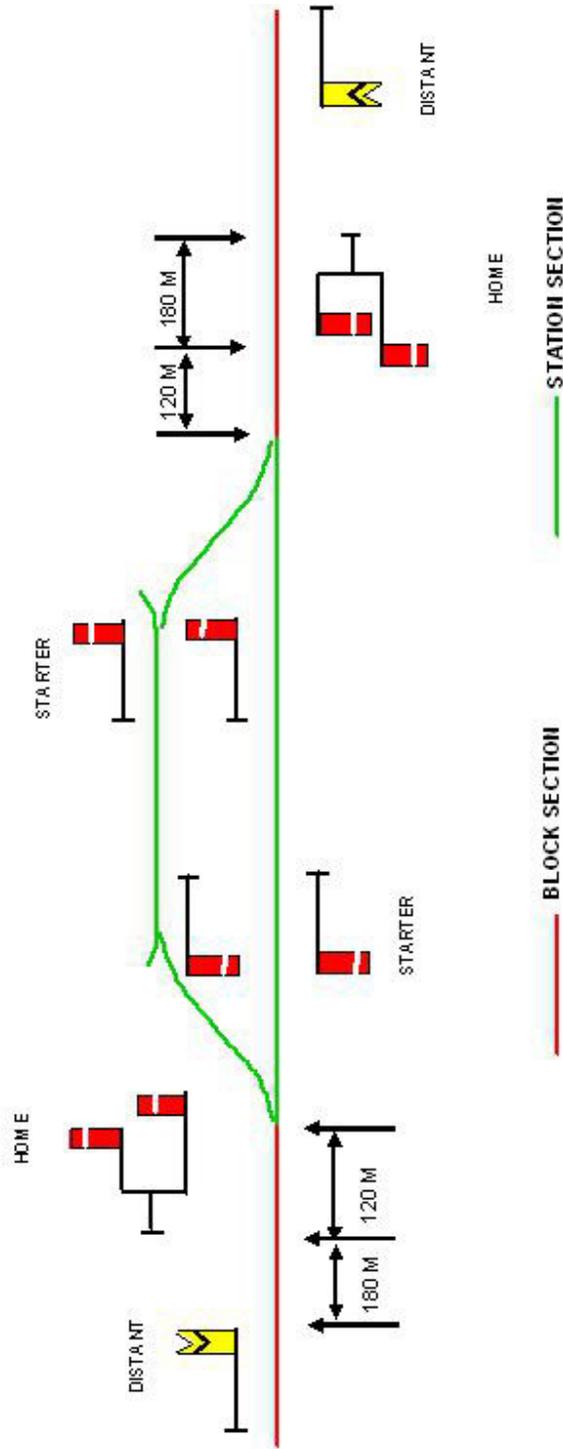
CLASS 'C' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER AND HOME SIGNALS



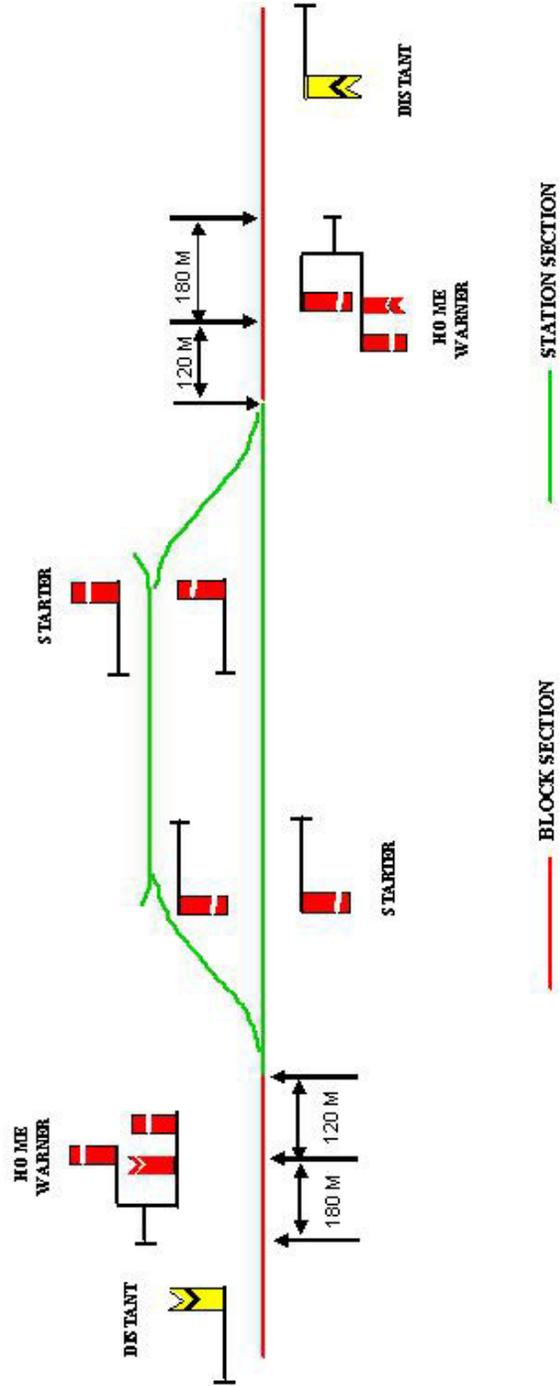
CLASS 'C' SINGLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT AND HOME SIGNALS



CLASS 'B' SINGLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT, HOME AND STARTER SIGNALS



CLASS 'B' SINGLE LINE STATION IN MODIFIED LOWER QUADRANT SIGNALING TERRITORY WITH DISTANT, WARNER, HOME AND STARTER SIGNALS



THE AUTOMATIC BLOCK SYSTEM

CHAPTER IX

THE AUTOMATIC BLOCK SYSTEM

A. Rules applicable to double line.

9.01. Essentials of the automatic block system on double line -

- (1) where trains on a double line are worked on the Automatic block system -
- (a) the line shall be provided with continuous track Circuiting or axle counters,
 - (b) the line between two adjacent block stations may, when required, be divided into a series of automatic block signalling sections each of which is the portion of the running line between two consecutive stop signals, and the entry into each of which is governed by a stop signal, and
 - (c) the track circuits or axle counters shall so control the Stop signal governing the entry into an automatic block Signalling section that -
 - (i) the signal shall not assume an 'Off' aspect unless the line is clear not only upto the next stop signal in advance but also for an adequate distance beyond it, and
 - (ii) the signal is automatically placed to 'On' as soon as it is passed by the train.

(2) unless otherwise directed by approved special instructions, the adequate distance referred to in sub-clause (i) of clause (c) of sub-rule (1) shall not be less than 120 metres.

- (3)(a) under special instructions, one of the automatic stop signal between two stations in the automatic block signaling territory in each direction may be made as modified semi-automatic stop signal;
- (b) the mid-section modified semi-automatic stop signal so provided shall be interlocked with the signals of the station ahead through track circuits or axle counters or both and shall be controlled by the Station Master of the station ahead, the relevant indications whether the signal is in normal automatic mode or modified semi-automatic mode shall be available to the Station Masters at both the ends;
- (c) Advanced starter signal of the station in rear shall be interlocked with the mid-section modified semi-automatic stop signal in such a way that when working with 'A' sign extinguished, the Advanced starter shall assume 'off' aspect or be taken 'off' only when the line is clear upto an adequate distance beyond the mid-section modified semi-automatic

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stop signal; similarly the mid-section modified semi-automatic stop signal shall assume 'off' aspect automatically or be taken 'off' only when the line is clear upto an adequate distance beyond the Home signal of the station ahead;

- (d) during abnormal conditions like fog, bad weather impairing visibility, the mid-section modified semi-automatic stop signal may be worked by extinguishing 'A' marker in the manner prescribed under special instructions and this action shall also ensure that the 'A' marker of the Advanced starter signal of the station in rear and Home signal of the station in advance shall also be extinguished;
 - (e) the adequate distance mentioned under clause (c) shall not be less than as prescribed under sub-rule (2);
 - (f) during normal conditions, mid-section modified semi-automatic stop signal shall work as normal automatic stop signal.
- (4)(a) when the Loco Pilot finds mid-section modified semi-automatic stop signal with 'A' marker extinguished in 'ON' position, he shall stop his train in the rear of the signal and inform this fact to the Station Master of the station ahead on approved means of communication as prescribed under special instructions;
- (b) the Station Master of the station ahead may authorise the Loco Pilot to pass the mid-section modified semi-automatic stop signal working with 'A' marker extinguished in 'ON' position through approved means of communication after ensuring conditions and procedure prescribed under special instructions;
 - (c) in case the Loco Pilot is unable to contact the Station Master of station ahead, he shall pass the signal at 'ON' after waiting for five minutes at the signal and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding ten kilometres an hour upto the next Signal and act as per aspect of this signal; and
 - (d) the Loco Pilot shall report the failure of mid-section modified semiautomatic stop signal to the Station Master of the station ahead. **CS 12/6 (Ref : i) Rly Bd's letter No. 2010/Safety(A&R)/19/20 dated 26.09.2011**
ii) Gazette of India GSR 705(E) No. 521 dated 21.09.11)

9.02. Duties of driver and guard when an automatic stop signal on double line is to be passed at 'On'

(1) When a Driver finds an Automatic Stop signal with an 'A' marker at 'On', he shall bring his train to a stop in the rear of the signal. After bringing his train to a stop in the rear of the signal, the Driver shall wait there for one minute by day and two minutes by night. If after waiting for this period, the signal continues to remain at 'On', he shall give the prescribed code of whistle and exchange signals with the Guard and then proceed ahead,

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as far as the line is clear, towards the next Stop signal in advance exercising great caution so as to stop short of any obstruction.

(2) The Guard shall show a Stop hand signal towards the rear when the train has been so stopped at an Automatic Stop signal, except as provided for in sub-rule (4).

~~(3) Where owing to the curvature of the line, fog, rain or dust storm, engine working the train pushing it, or other causes, the line ahead cannot be seen clearly, the Driver shall proceed at a very slow speed, which shall under no circumstances exceed 8 kilometres an hour. Under these circumstances, the Driver, when not accompanied by a Fireman or an Assistant Driver, and if he considers necessary, may seek the assistance of the Guard by giving the prescribed code of whistle.~~

(3) Where owing to the curvature of the line, fog, rain or dust storm, engine working the train pushing it, or other causes, the line ahead cannot be seen clearly, the Loco Pilot shall proceed at a very slow speed, which shall under no circumstances exceed 10 kilometres an hour. Under these circumstances, the Loco Pilot, when not accompanied by an Assistant Loco Pilot, and if he considers necessary, may seek the assistance of the Guard by giving the prescribed code of whistle.

CS 11/14(iii) (Ref: Rly Board's letter no. 2009/Safety(A&R)/19/24 dated 06.12.2010 & Gazette notification No. 621 dated 10.11.2010.)

(4) When so sent by the Driver, the Guard shall accompany him on the engine cab, before he moves forward, to assist the Driver in keeping a sharp look-out.

(5) When an automatic Stop signal has been passed at 'On' the Driver shall proceed with great caution until the next Stop signal is reached. Even if this signal is 'Off' the Driver shall continue to look out for any possible obstruction short of the same. He shall proceed cautiously upto that signal and shall act upon its indication only after he has reached it.

S.R.9.02-1. (a) The 'ON' position of an Automatic Signal may be due to a train in the Automatic Signalling section ahead including the overlap or due to an obstruction on the track or broken or displaced rail or any other cause.

When a Driver/Motorman passes an Automatic Signal with an 'A' marker at 'ON' he shall proceed exercising great caution to be able to stop short of any obstruction and at a speed, which shall not exceed 15 KMPH on a straight road when visibility is good. Where due to curvature of the line, fog, dust storm, or other causes line ahead can not be seen clearly, the Driver/Motorman shall observe, the speed which shall not exceed 8 KMPH as prescribed in Rule No. 9.02. In case of electric Multiple units, the Motorman shall give 2 pause 2 rings and the same will be acknowledged by the Guard by the same code of beats.

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(b) (i) The Guard of a train shall watch that the Driver does not exceed the speed prescribed in item (a) above.

(ii) In case of EMU trains if the Motorman exceeds the speed prescribed the Guard (when not travelling with the Motorman) shall give 3 pause 3 rings on the bell code to warn the Motorman and take action as prescribed in Rule 4.45.

(iii) In case of other trains also if the Driver exceeds speed prescribed the Guard shall take action as per rule 4.45.

(c) The Guard of an EMU train shall watch that the Motorman does not exceed the speed prescribed in item (a) above. He shall give 000 — 000 rings on the bell code to warn the Motorman, if the prescribed speed limit is exceeded and if the Motorman continues to run in excess of the prescribed speed the Guard shall arrange to stop the train.

In case of trains hauled by electric locomotive, if the Driver exceeds the speed prescribed in item (a) above Guard shall attract the attention of the Driver by the application of air brake and releasing it intermittently till such time the Driver observes the prescribed speed.

(d) Driver/Motorman to stop close to signals at 'On' - When a Driver/Motorman has to stop his train at the automatic, Semiautomatic or a Gate Signal which is in the 'On' position, he should bring the train to a halt as close to the signal as possible in the rear of the signal.

S.R.9.02-2. The Driver shall give two long and two short whistles (— — 00) when the Guard is required to be called to the engine. In case of electric multiple unit trains, the Motorman shall give three rings (000) to call the Guard which shall be acknowledged by the Guard.

S.R.9.02-3. The indication of an Automatic signal applies to the track beyond the signal and there is possibility of a train or obstruction on being inside the signal when it is showing 'Off'. A Driver having passed an Automatic signal at 'On' must not act on the indication of the Signal ahead until he has actually reached it.

S.R. 9.02-4. (a) Whenever an Automatic or a Semi-Automatic signal changes its aspect from green/yellow to red and again to green/yellow or from red to red in succession, it shall be treated as a bobbing/flickering signal and shall be considered as showing the most restrictive aspect.

On seeing a bobbing/flickering signal, the Driver/Motorman shall bring his train to stop in rear of the signal and pass the same only when it assumes a steady aspect and remains so for one minute.

(b) If the signal continues to bob/flicker and does not assumes a steady aspect it should be considered displaying the 'On' position and pass only after observing the stipulations contained in S.R. 9.02-1. The Driver/Motorman shall report the defect to Station Master at the first reporting station.

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(c) Whenever a manual stop signal shows more than one aspect or a misleading aspect, it should be treated as showing the most restrictive aspect and should be passed by observing instructions contained in Rule 3.74 and subsidiary rules appended thereunder.

(d) The Station Master, on receipt of information of flickering/bobbing signal, shall record the defect in the Signal Failure Register and advise Signal Inspector or Electric Signal Maintainer immediately to rectify the defect. All cases of failures bobbing, or flickering signal should also be reported to Section Controller who shall record the defect in the Signal Failure Register kept for the purpose.

S.R. 9.02-5. Distance between two trains in Automatic Signalling territories after passing an Automatic Signal at 'ON' -

~~(a) After passing an Automatic Stop signal at 'ON' the Driver of the train hauled by any locomotive shall ensure that minimum distance of 150 metres or two clear OHE spans is maintained between his train and the preceding train if any or any obstruction on the line ahead. However, in the case of EMU train the minimum distance of 75 metres or one clear OHE span shall be maintained between EMU train and a preceding train if any or any obstruction on line ahead.~~

(a) After passing an Automatic Stop signal at 'ON' the Driver of the train hauled by any locomotive shall ensure that minimum distance of 150 metres or two clear OHE spans is maintained between his train and the preceding train if any or any obstruction on the line ahead. However, in the case of EMU train the minimum distance of 75 metres or one clear OHE span shall be maintained between EMU train and a preceding train if any or any obstruction on line ahead. However, during dense fog, after passing an Automatic Stop Signal at 'On' (Red), the Loco pilot/Motorman of the train hauled by any locomotive including EMU train shall, while moving at a speed not exceeding 10 kmph, should ensure that he maintains a reasonable distance at which he is able to observe the flashing tail lamp of the train ahead or the obstruction, as the case may be.

CS 11/ 5 (Ref: Rly Board's letter no. 98/Safety(A&R)/19/16 dated 07.12.2009 and 23.08.10.)

(b) In special circumstances like flood etc., or if necessary to assist a disabled EMU train the following EMU train may be drawn closer to the preceding EMU train, exercising great caution.

B. Rules applicable to Single Line

9.03. Essentials of the Automatic Block System on single line -

(1) Where trains on a single line are worked on the Automatic Block System -

(a) the line shall be provided with continuous track circuiting or axle counters.

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- (b) the direction of traffic shall be established only after Line Clear has been obtained from the block station in advance.
- (c) a train shall be started from one block station to another only after the direction of traffic has been established.
- (d) it shall not be possible to obtain Line clear unless the line is clear, at the block station from which Line clear is obtained, not only upto the first Stop Signal but also for an adequate distance beyond it,
- (e) the line between two adjacent block stations may, where required, be divided into two or more automatic block signalling sections by provision of Stop signals,
- (f) after the direction of traffic has been established movement of trains into, through and out of each automatic block signalling section shall be controlled by the concerned Automatic Stop signal and the said Automatic Stop signal shall not assume 'Off' position unless the line is clear upto the next Automatic Stop signal :

provided further that where the next stop signal is a Manual Stop signal, the line is clear for an adequate distance beyond it, and

- (g) all stop signals against the direction of traffic shall be at 'On'.

(2) Unless otherwise directed by approved special instructions, the adequate distance referred to in clauses (d) and (f) of sub-rule (1) shall not be less than 180 metres.

- (3)(a) under special instructions, one of the automatic stop signal between two stations in the automatic block signaling territory in each direction may be made as modified semi-automatic stop signal;
- (b) the mid-section modified semi-automatic stop signal so provided shall be interlocked with the signals of the station ahead through track circuits or axle counters or both and shall be controlled by the Station Master of the station ahead, the relevant indications whether the signal is in normal automatic mode or modified semi-automatic mode shall be available to the Station Masters at both the ends;
- (c) Advanced starter signal of the station in rear shall be interlocked with the mid-section modified semi-automatic stop signal in such a way that when working with 'A' sign extinguished, the Advanced starter shall assume 'off' aspect or be taken 'off' only when the line is clear up to an adequate distance beyond the mid-section modified semi-automatic stop signal; similarly the mid-section modified semi-automatic stop signal shall assume 'off' aspect automatically or be taken 'off' only when the line is clear up to an adequate distance beyond the Home signal of the station ahead;

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- (d) during abnormal conditions like fog, bad weather impairing visibility, the mid-section modified semi-automatic stop signal may be worked by extinguishing 'A' marker in the manner prescribed under special instructions and this action shall also ensure that the 'A' marker of the Advanced starter signal of the station in rear and Home signal of the station in advance shall also be extinguished;
 - e) the adequate distance mentioned under clause (c) shall not be less than as prescribed under sub-rule (2);
 - f) during normal conditions, mid-section modified semi-automatic stop signal shall work as normal automatic stop signal.
- (4)(a) when the Loco Pilot finds mid-section modified semi-automatic stop signal with 'A' marker extinguished in 'ON' position, he shall stop his train in the rear of the signal and inform this fact to the Station Master of the station ahead on approved means of communication as prescribed under special instructions;
- (b) the Station Master of the station ahead may authorize the Loco Pilot to pass the mid-section modified semi-automatic stop signal working with 'A' marker extinguished in 'ON' position through approved means of communication after ensuring conditions and procedure prescribed under special instructions;
 - (c) in case the Loco Pilot is unable to contact the Station Master of station ahead, he shall pass the signal at 'ON' after waiting for five minutes at the signal and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding ten kilometers an hour up to the next Signal and act as per aspect of this signal; and
 - (d) the Loco Pilot shall report the failure of mid-section modified semiautomatic stop signal to the Station Master of the station ahead.

CS 12/ 7 (Ref : i) Rly Bd's letter No. 2010/Safety(A&R)/19/20 dated 26.09.2011
ii) Gazette of India GSR 705(E) No. 521 dated 21.09.11)

9.04. Minimum equipment of fixed signals in Automatic Block territory on single line - The minimum equipment of fixed signals to be provided for each direction shall be as follows -

- (a) **Manual Stop signals at a station -**
 - (i) a Home,
 - (ii) a Starter.
- (b) **An Automatic Stop signal in rear of the Home signal of the station.**

Note : Under approved special instructions, the Automatic Stop signal may be dispensed with.

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9.05. Additional fixed signals in Automatic Block territory on single line -

(1) Besides the minimum equipment prescribed in Rule 9.04, one or more additional Automatic Stop signals, as are considered necessary, in between block stations, may be provided.

(2) In addition, such other fixed signals as may be necessary for the safe working of trains may be provided.

9.06. Conditions for taking 'Off' Manual Stop signals in Automatic Block territory on single line -

(1) Home signal - When a train is approaching a Home signal, otherwise than at a terminal station, the signal shall not be taken 'Off' unless the line is clear not only upto the Starter but also for an Adequate distance beyond it.

(2) Last Stop signal - The last Stop signal shall not be taken 'Off' for a train unless the direction of traffic has been established and the line is clear upto the next Automatic Stop signal, or when the next Stop signal is a Manual Stop signal for an adequate distance beyond it.

(3) The adequate distance referred to in sub rules (1) and (2) shall never be less than 120 metres and 180 metres respectively unless otherwise directed by approved special instructions. A sand hump of approved design, or subject to the sanction of the Commissioner of Railway Safety, a derailing switch shall be deemed to be an efficient substitute for the adequate distance referred to sub-rule(1).

9.07. Duties of Driver and Guard when an Automatic Stop signal on single line is to be passed at 'On' -

(1) When a Driver finds an Automatic Stop signal with an 'A' Marker at 'On' he shall bring his train to a stop in rear of that signal and wait there for one minute by day and two minutes by night.

(2) If after waiting for this period the signal continues to remain at 'On' and if telephone communication is provided near the signal, the Driver shall contact the Station Master of the next block station or the Centralised Traffic Control Operator of the section where Centralised Traffic Control is provided, and obtain his instructions. The Station Master or the Centralised Traffic Control Operator, as the case may be, shall, after ascertaining that there is no train ahead upto the next signal and that it is otherwise safe for the Driver to proceed so far as is known, give permission to the Driver to pass the signal in the 'On' position and proceed upto the next signal, as may be provided under special instructions.

(3) If no telephone communication is provided near the signal or if the telephone communication provided near the signal is out of order and can

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not be made use of, the Driver shall give the prescribed code of whistle and exchange signals with the Guard and then proceed past the signal as far as the line is clear, upto the next Stop signal in advance, exercising great caution so as to stop short of any obstruction.

(4) The Guard shall show a stop hand signal towards the rear when the train has been so stopped at an Automatic Stop signal, except as provided for under sub-rule (6).

~~(5) Where owing to the curvature of the line, fog, rain or dust storm, engine working the train pushing it, or other causes, the line ahead cannot be seen clearly, the Driver shall proceed at a very slow speed, which shall under no circumstances exceed 8 kilometres an hour. Under these circumstances, the Driver when not accompanied by a Fireman or Assistant Driver, and if he considers it necessary, may seek the assistance of the Guard by giving the prescribed code of whistle.~~

(5) Where owing to the curvature of the line, fog, rain or dust storm, engine working the train pushing it, or other causes, the line ahead cannot be seen clearly, the Loco Pilot shall proceed at a very slow speed, which shall under no circumstances exceed 10 kilometres an hour. Under these circumstances, the Loco Pilot, when not accompanied by an Assistant Loco Pilot, and if he considers necessary, may seek the assistance of the Guard by giving the prescribed code of whistle.

CS 11/14(iv)(Ref: Rly Board's letter no. 2009/Safety(A&R)/19/24 dated 06.12.2010 & Gazette notification No. 621 dated 10.11.2010.)

(6) When so sent for by the Driver, the Guard shall accompany him on the engine cab, before he moves forward, to assist the Driver in keeping a sharp look out.

(7) When an Automatic Stop signal has been passed at 'On', the Driver shall proceed with great caution until the next Stop signal is reached. Even if this signal is 'Off', the Driver shall continue to look out for any possible obstruction short of the same. He shall proceed cautiously upto that signal and shall act upon its indication only after he has reached it.

S.R.9.07-1. Duties of Driver and Guard when an Automatic signal on single line is to be passed at 'On' -

When an Automatic signal is to be passed at 'On' on single line, the instructions contained in G.R. 9.02 and S.Rs. there under should be complied with.

9.08. Person in charge of working trains in Automatic Block System on single line -

(1) Except where Centralised Traffic Control is in operation, the Station Master shall be responsible for the working of trains at and between stations.

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(2) On a section where Centralised Traffic Control is in operation, the Centralised Traffic Control Operator shall be responsible for the working of trains on the entire section except as provided for in sub rule (3).

(3) On a sections where Centralised Traffic Control is in operation, the working of trains at a station or part of a station may be taken over by or handed over to the Station Master during emergency or as prescribed by special instructions. When such emergency control is transferred, the Station Master shall be the person in charge of working trains at the station or part of the station and the station shall be worked in accordance with sub-rule (1).

C. Rules applicable to both Double and Single lines

9.09. Working of trains on Centralised Traffic Control territory - On a section where Centralised Traffic Control is in operation, the working of trains shall be governed by special instructions.

9.10. Protection of a train stopped in an Automatic block signalling section -

(1) When a train is stopped in an Automatic block signalling section, the Guard shall immediately exhibit a stop hand signal towards the rear and check up that the tail board or tail light is correctly exhibited.

(2) If the stoppage is on account of accident, failure, or obstruction and the train cannot proceed, the Driver shall sound the prescribed code of whistle and the train shall be protected immediately as per Rule 6.03 except that for the protection of the occupied line one detonator shall be placed at 90 metres from the train on the way out and similarly two detonators, 10 metres part, not less than 180 metres from the train or at such distance as has been fixed by special instructions.

S.R.9.10-1. When a train comes to a stand in an Automatic signalling section and cannot proceed further due to an accident, failure or obstruction, the Driver/Motorman and Guard shall follow all the rules under S.R. 6.03-1 (a) to

(h) and the occupied line shall be protected with detonators in rear as specified in General Rule 9.10.

9.11 Driver to report failures -

(1) When a Driver has to pass an Automatic stop signal at 'On', he shall stop his train at the next reporting station or cabin as prescribed by special instructions and report particulars of Automatic Stop signals passed at 'On' by him.

(2) The Station Master or person in charge of the reporting station or cabin shall promptly report the fact to the signal and operating officials concerned.

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S.R.9.11-1. The following are the reporting stations for the purpose of this rule.

- (i) Trains running on DN Suburban Line - CLA, TNA, KYN, ABH, TLA.
- (ii) Trains running on UP Suburban Line - KYN, TNA, PR, CST.
- (iii) Trains running on DN Through Line - DR, KYN, ABH, TLA.
- (iv) Trains running on UP Through Line - KYN, TNA, DR, CST.
- (v) Trains running on DN Harbour Line - BA, CLA, CMBR, MNKD.
- (vi) Trains running on UP Harbour Line - CLA, CST.

S.R.9.11-2. Failure of signals in the Automatic section -

When the Signal Maintainer finds that the failure of a signal/signals in the automatic section is likely to last for sometime and cause serious delay to trains, he must advise by telephone the Signal Inspector concerned and the Section Controller.

S.R.9.11.3. Action to be taken during failure of signals in the Automatic section -

(a) Whenever a failure of Automatic Signal has taken place, the Driver or the Motorman must, on approaching the next reporting station, sound his whistle and inform the Station Master on duty of failure, giving the correct number of signal that has failed.

(b) An automatic signal should be considered to have failed when :

- (i) The signal exhibits no aspect at all, or
- (ii) The signal displays more than one aspect, or
- (iii) The signal displays 'On' aspect with the block section, protected by it being clear.

Note : If an Automatic signal exhibits a dim light with only auxiliary filament burning, the Driver/Motorman should report this at the next reporting, station.

(c) The Station Master of the reporting Station must at once advise by telephone the Signal Maintainer concerned, the Section Controller and the Station Master on duty at the reporting Station immediately in rear, giving the correct number of the signal that has failed.

(d) The Station Master on duty at the reporting station in rear, must arrange for the issue of Caution Orders to the Drivers or Motormen of all following trains in respect of the signal that has failed, giving its position and number, and instruct them to proceed with caution in accordance with G.R.9.02.

(e) The Station Master of the reporting Station in rear must also maintain a register of signal failures that have been reported to him for the issue of Caution Orders.

(f) After the failure has been rectified, the Signal Maintainer must immediately advise the Station Master on duty at the reporting station in rear who will inform the Section Controller, giving the time at which the failure was rectified. The Station Master at such reporting station must also arrange to stop issue of Caution Order for subsequent trains.

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(g) A register of signal failures shall be maintained in the Control Office and daily return of the signal failures will be submitted to the Divisional Railway Manager.

9.12. Procedure during failure of Automatic signalling -

When a failure of Automatic signalling is likely to last for some time or cause serious delay, trains shall be worked from station-to-station over the section or sections concerned under special instructions.

S.R. 9.12-1. Failures of all signals on double or single line likely to last for some time and cause serious delay when means of communications are available -

In the event of failure of all signals occurring in an area consisting of two or more stations worked under Automatic Block System, the officials concerned of the Signalling Department shall take immediate steps to inform all concerned, and the following procedure shall be adopted for train passing -

(1) Before any train is allowed to enter the affected section, it shall be brought to a stand and the Driver of the train advised of the circumstances by the Station Master and the Guard of the train advised through a copy of the 'Authority to Proceed' as prescribed in Rule 5(a) below. The Controller and the Station Master concerned ahead of the affected section shall also be informed.

~~(2) The Station Master on duty at the station in rear of the affected section shall obtain 'Line Clear' for the train by one of the following means of communications, viz-~~

- ~~(a) Morse Telegraph instruments.~~
- ~~(b) Inter Cabin/Station Group telephone.~~
- ~~(c) Control telephone.~~

(2) The Station Master on duty at the station in rear of the affected section shall obtain 'Line Clear' for the train by the following means of communications, in the order of preference viz.

- a) Station to station fixed telephones wherever available;
- b) Fixed telephone such as Railway auto phones & BSNL/MTNL phones.
- c) Control Telephone.
- d) VHF sets under special instructions, but not as the sole means of communication on sections where passenger trains run.

(CS 9/12 Ref: Rly Bd's letter No. 2005/Safety (A&R)/19/7 dated 01.07.2005 & 21.07.2006).

(3) The Station Master on duty at the station in advance shall not give such 'Line Clear' (as per clause 2 above) unless -

- (i) the whole of the last preceding train has arrived,

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- (ii) the line on which it is intended to receive the incoming train is clear at least 180 metres beyond the Platform Starter or the place at which the trains usually come to a stand, and
- (iii) all points have been correctly set and all facing points locked for the admission of the train on the said line.

(4)(a) The Driver of the first train entering the affected section on 'Authority to Proceed', as prescribed in rule (5)(a) below shall proceed with utmost caution and must not run at a speed exceeding 25 Kilometres per hour under any circumstances, subject to other speed restrictions in force. The Driver shall continue to look out for any obstruction until he reaches the station ahead.

(b) After ensuring that the first train has arrived safely at the station ahead of the affected section, the Drivers of all subsequent trains shall also proceed with great caution, subject to other speed restrictions in force and must continue to look out for any possible obstruction.

(5) The S.M. shall give the Driver/Motorman of each train -

(a) An 'Authority to proceed on Automatic Block System during prolonged failure of signals' on prescribed form T.AUT-1B.

Note - To distinguish this authority from 'Authority to Proceed without Line Clear', it shall be crossed diagonally by 2 green lines.

(b) A Caution Order restricting the speed of all trains as per clause 4(a) above.

(6) Before handing over the 'Authority to Proceed' all the points over which the train will pass, shall be correctly set and facing points locked. Whenever any power operated points have to be operated for diverting trains, these may be released and operated locally under the written instructions of the Station Master on duty by the Signal Maintainer at stations where Signal Maintainers are Provided.

(7) When approaching the next station, the Driver shall bring his train to a stand outside the first Stop signal and sound one long whistle. The Station Master after satisfying himself that all is safe shall arrange for a man in uniform to pilot the train from this signal, who shall obey hand signals, if any, relayed from the station platform.

(8) Clearance of the section by each train shall be intimated to the station, in rear under exchange of Private Numbers.

(9) Train Signal Register shall be brought into use and all entries regarding train working recorded there in. The Controller shall be kept advised of all train movements taking place in the affected section, if possible.

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(10) As soon as signals are put right by competent authority, normal working of trains on Automatic Block System may be resumed, after exchanging messages with Private Numbers by the Station Masters concerned, assuring that the section is clear. Controller's permission, if possible, should be obtained before resumption of normal working.

(11) All the records in connection with train working on this system shall be retained at the station and the Transportation Inspector of the section must scrutinise them and submit his report to the Divisional Railway Manager within seven days of the resumption of normal working.

~~S.R.9.12-2. Failure of all signals on double line likely to last for sometime and cause serious delay when no means of communication are available - In the event of failure of all signals occurring in an area consisting of two or more stations worked under Automatic Block System and when trains cannot be worked by any of the following means, viz.,~~

- ~~(a) Morse Telegraph Instruments, or~~
- ~~(b) Inter-Cabin/Station Group telephone, or~~
- ~~(c) Control telephone.~~

~~the following procedure shall be adopted for train passing -~~

S.R.9.12-2. Failure of all signals on double line likely to last for sometime and cause serious delay when no means of communication are available - In the event of failure of all signals occurring in an area consisting of two or more stations worked under Automatic Block System and when trains cannot be worked by any of the following means, viz.,

- (a) Station to station fixed telephones wherever available;
- (b) Fixed telephone such as Railway auto phones & BSNL/MTNL phones;
- (c) Control Telephone;
- (d) VHF sets under special instructions, but not as the sole means of communication on sections where passenger trains run.

the following procedure shall be adopted for train passing -

(CS 9/13 Ref: Rly Bd's letter No. 2005/Safety (A&R)/19/7 dated 01.07.2005 & 21.07.2006).

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(1) The movement of trains on the affected section shall be controlled by such stations and on such lines as are prescribed by special instructions.

(2) All points over which the trains will run within the affected area shall be correctly set and facing points locked before the movement of any train is authorised over them.

Whenever any power operated points have to be operated for diverting trains, these may be released and operated locally under the written instructions of the Station Master on duty by the Signal Maintainer at stations where Signal Maintainers are available.

(3) Before any train is allowed to leave the station as prescribed in clause (1) above, it shall be brought to a stand and the Driver/Motorman and the Guard of the train shall be advised of the circumstances by the Station Master.

(4) The Station Master shall give the Driver/Motorman of each train -

(a) An "Authority to Proceed without Line Clear" on the prescribed form. The counterfoil shall be retained by the Station Master and the foil given to the Driver.

(b) A Caution Order restricting the speed to 25 Kilometres per hour over the straight with clear view and to 8 kilometres per hour when approaching or passing any portion of line where the view ahead is not clear due to curve, obstruction, rain, fog or any other cause. Subject to the observance of other speed restriction imposed and speed over facing points being restricted to 15 kilometres per hour, the Driver shall ensure that the speed is kept at the limit prescribed above and is not exceeded or, without any reason reduced.

(c) An authority on the prescribed form authorising the Driver/Motorman to pass the Automatic signals intervening the two nominated stations at 'On', the Semi-Automatic signals and manually operated signals on being signalled past by a Pointsman or any other railway servant in uniform deputed for the purpose and the Gate signals cautiously upto the level crossing where he must ascertain that the gates are locked and the hand signals are displayed by the Gateman before he proceeds further. The individual distinguishing number / numbers of each Automatic, Semi-Automatic, Manually operated, and Gate Signal/signals shall be indicated on this authority.

(5) No train shall be allowed to enter an affected section until there is a clear interval of 15 minutes between the train about to leave and the train which has immediately preceded, unless a shorter interval has been prescribed under special instructions.

(6) (a) In the event of a Driver approaching or passing any portion of a line where view ahead is not clear, Assistant Driver or Guard with hand signals must be sent in advance to guide the further movement of the train. A sharp lookout ahead should be kept and the engine whistle freely used.

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Further, before entering a section where there are tunnels, the Driver shall light the buffer lamps and the electric head lights.

(b) A tunnel shall be entered only after it has been ascertained that it is clear. If there is any doubt on this point, the train shall be piloted by a Assistant Driver or Guard equipped with hand signal and detonators.

(7) The Guard shall keep a sharp lookout in the rear and be prepared to exhibit a danger signal to prevent the approach of a train from the rear and to protect it, if the detention is likely to exceed 5 minutes. Before entering a section where there are tunnels, he shall also light the side and tail lamps.

(8) When approaching the next station nominated under special instructions under clause (1) above, the Driver shall bring his train to a stand outside the first Stop signal and sound one long whistle. The Station Master after satisfying himself that all points have been correctly set and facing points locked, shall arrange for a man in uniform, before the train arrives at the signal, to pilot the train from the signal without any delay.

(9) The Drivers of all trains shall make over the 'Authority to proceed without Line Clear' to the Station Master of the nominated station at the end of the section. These shall be kept by the Station Master in his personal custody for inspection by the Transportation Inspector of the section, who shall prepare a report on the working of trains and shall forward the same alongwith his report to the Divisional Railway Manager within 7 days of resumption of communication.

(10) A record of all trains passed over the affected section on 'Authority to proceed without Line clear' during the course of total interruption of communications, shall be maintained in the Train Signal Registers to be opened at all the specially nominated stations under clause 1 above.

(11) Trains must continue to work on this system until either the signals are put right or any one of the means of communications is restored by the competent authority.

(12) As soon as the signals are put right, normal working of trains shall be resumed, but where signals continue to remain inoperative and any of the means of communications is restored, the Station Master shall immediately send a message to the Station Master at the other end of the affected section on the following form -

From Station Master _____ to Station Master

_____ Train (Number and Description) _____ arrived complete at
_____ hours. Last train _____ (Number and Description) despatched to
your station _____ at _____ hours. Cancel the present method of working of
trains. Line Clear shall be obtained by means of _____ Acknowledge.

Private Number _____

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On receipt of the above message, the Station Master at the other end of the affected section shall acknowledge in the following form -

From Station Master _____ to Station Master _____ No _____
Your No. _____ Understand that train (Number and Description) _____
which was the last train to leave my station has arrived complete at your station.
Train No. _____ which left your station has arrived complete at my station at
_____ hours/not arrived. Present system of train working is being/will be
cancelled immediately after the complete arrival of train No. _____ Line Clear
for the next train will be obtained by means of _____

Private Number _____

(13) Line Clear shall not be obtained or given by any means of communication which has been restored until both the Station Master are satisfied that all trains and engines etc. despatched from their stations have arrived complete at the other station. When the trains referred to in clause 1 above arrive complete at the stations, their number and their arrival time will be communicated to the other Station Master concerned under exchange of Private Numbers. Thereafter an intimation about this shall be given to the Section Controller, if possible.

S.R. 9.12-3. Rules and Regulations for working of trains under the Automatic Block System during obstruction of one or more lines, when signals are operative and communications are available.

In the event of obstruction of one or more lines in an area consisting of two or more stations worked under the Automatic Block System when signals are operative and communications are available, the following procedure shall be adopted -

1. On the Double line section when one line is obstructed -

(1) When it is desired to introduce temporary single line working on double line on electric communication instruments, the Station Master at one end of the affected section shall, on receipt of reliable information in writing that one line is clear, take steps to introduce temporary single line working on that line in consultation with the Section Controller and the Station Master of the station at the other end of the section.

(2) If there is reason to suspect that the line over which temporary single line working is to be introduced is also fouled or damaged, temporary single line working shall not be introduced until a responsible engineering official not below the rank of an Inspector has inspected that section and certified that the road is safe for the passage of trains.

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(3) The movement of trains on the affected section shall be controlled by such stations and on such lines as are prescribed by special instructions.

(4) All trains running in the wrong direction shall be worked in accordance with the rules for the use of electric communication instruments on single line and Line Clear shall be obtained on the Morse telegraph instrument, Inter-cabin /Station Group telephone or Control telephone, as the case may be. Line Clear shall not be given unless the line on which the train is to be received is clear at least 180 metres beyond the first Stop signal pertaining to the correct line or the last Stop signal pertaining to the wrong line whichever is earlier. For each first train running in the wrong direction, Line clear shall neither be asked for nor given unless the two Station Masters have assured under exchange of Private Numbers that all the trains running in the right direction have already arrived complete at the station in advance.

Except for each first train running in the right direction for which the procedure laid down for the trains running in the wrong direction shall be followed, subsequent trains running in the right direction may be allowed to follow each other on Automatic Signal indications, provided the station in rear has intimated the station in advance of the fact that he is permitting particular train/ trains to follow and has ascertained the latter's readiness to receive it/them. Private Numbers shall be exchanged for this transaction.

(5) Train Signal Register shall be introduced at the stations on affected section.

(6) Drivers of all trains on the affected area must be so advised in writing by the station immediately in rear of the affected section on which temporary single line working has been introduced. A written authority in the proforma should also be given to the Drivers of trains running in the right direction to pass the last Stop signal which shall be kept at 'red'. The Drivers of trains running in the wrong direction shall be given the prescribed Line Clear Tickets before entering the affected section.

(7) All the points over which the train will run within the affected area shall be correctly set and facing points locked before the movement of any train is authorised over them.

Whenever any power operated points have to be operated for diverting trains these may be released and operated locally under the written instructions of the Station Master on duty by the Signal Maintainer at stations where Signal Maintainers are available.

(8) After ascertaining that one of the lines is clear for the passage of traffic, the Station Master proposing single line working shall issue a message under exchange of Private Numbers, containing the following information, to the Station Master at the other end of the affected section -

(a) cause of introduction of single line working,

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- (b) the line on which single line working is proposed,
- (c) the source of information that the said line is clear,
- (d) place of obstruction,
- (e) restriction of speed, if any, on the line,
- (f) the number and timings of the last train which arrived/left the station nominated by the Divisional Railway Manager under clause 3 above, and
- (g) an enquiry about speed restriction in the opposite direction.

(9) On receipt of acknowledgment and reply to the enquiry regarding speed restriction in the opposite direction, from the Station Master at the other end confirmed by a Private Number, single line working may be introduced. Line clear shall be obtained on Morse telegraph instrument, Inter-cabin/Station Group telephone, or Control telephone, as the case may be, and trains run on the procedure set out above.

(10) (a) A Caution Order shall also be handed over to the Driver of each train on which shall be clearly stated -

- (i) the line on which the train or light engine is to run,
- (ii) the kilometres between which the obstruction exists,
- (iii) any restriction of speed, and
- (iv) the instructions that Automatic signals in the wrong direction should be considered as out of use even though they may be showing 'Proceed' or 'Caution' aspect.

(b) For trains running in the wrong direction, an authority on the prescribed form authorising the Driver/Motorman to pass the intervening non-governing (i.e. relating to the opposite direction) Semi-Automatic and Manually operated signals on being hand signalled past by a Pointsman or any other railway servant in uniform deputed for the purpose and the gate signals cautiously upto the level crossings where he must ascertain that the gates are locked and hand signals are displayed by the Gateman before he proceeds further. He must also ascertain that the points of the outlying sidings are correctly set and locked before passing over them. In such cases, the hand signals shall be displayed at such points/gates instead of at the signals. The individual distinguishing number including number of each Automatic, Semi-Automatic, Manually operated and gate signals shall be indicated on this authority.

(11) An endorsement shall also be made on the Caution Order given to the Driver of the first train introducing temporary single line working in the wrong direction to stop and inform all Gatemen and Gangmen on the way about the introduction of temporary single line working. The road on which the trains shall run is also to be specified.

(12) The speed of all trains running in the wrong direction shall not exceed 25 Kms.per hour.

(13) When approaching the next station nominated under special instructions under clause 3, the Driver of the train running in the wrong direction

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shall bring his train to a stand opposite the first Stop signal pertaining to the correct line or the last Stop signal, pertaining to the wrong line on which he is running, whichever he comes across first, and sound one long whistle. The Station Master, after satisfying himself that all points have been correctly set and facing points locked, shall arrange for a man in uniform to pilot the train from this signal, who shall obey hand signals, if any, relayed from the station platform. Manual/Semi-Automatic signals, if any, shall, however, be passed on a written authority on the prescribed form to be issued by the Station Master.

(14) Resumption of normal working -

(a) On receipt of written certificate from a responsible engineering official that the obstructed track is free for passage of trains, the Station Master shall issue a message to other station or stations, as the case may be, under exchange of Private Numbers and decide, in consultation with Section Controller, the train after the passage of which the normal working has to be introduced.

(b) An entry shall also be made in the Train Signal Registers of all stations concerned showing the time double line working was suspended, time single line working was introduced and the time normal working was resumed.

(15) All the records in connection with the temporary single line working shall be retained at the station and the Transportation Inspector of the section must scrutinise them and submit his report to the Divisional Railway Manager within seven days of the resumption of normal working.

II. On a Quadruple Line Section -

(A) If one line or two lines (one Up and one Down) are obstructed -

(i) Trains will continue to run on the unobstructed lines under normal system of working and will be diverted on to their proper lines where possible.

(ii) Suburban trains running on through lines shall stop only at those stations having platform on that line. Where stoppage of a train at stations where it is scheduled to stop is eliminated on this account, passengers shall be suitably notified through loud speakers or other means at convenient stations.

(B) If both the UP lines or both the Down lines are obstructed -

(i) On the local line - On the local line trains will continue to run in the right direction under the normal system of working.

(ii) On the through line -

(1) The movement of trains on the affected section shall be controlled by the nearest stations provided with crossovers between unobstructed lines.

(2) All facing points on the line on which the trains will run shall be clamped and locked for the movement of the trains on the line and an assurance to this effect shall be obtained on the telephone from the Station Masters of the affected section, under exchange of Private Numbers.

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(3) Trains shall be allowed to follow one another at intervals of 15 minutes or at such intervals as may be prescribed by special instructions.

(4) Trains shall run on 'Authority to proceed without Line Clear' applicable upto terminal station at the other end of the affected section (to avoid stoppage of trains running on through lines at the stations not provided with platforms on through lines). In order to ensure that a minimum time interval of 15 minutes is kept between two consecutive following trains, the Divisional Railway Manager shall prescribe the stations in between the affected section from where a written authority shall be given to the Driver of the train authorising him to leave the station. This authority shall be in addition to the 'Authority to proceed without Line Clear' already issued and shall not be given to the Driver by the Station Master concerned on duty unless he has satisfied himself that atleast 15 minutes have elapsed since the departure of the last preceding train.

(5) Suburban trains shall stop only at those stations having platforms on the through line. Where stoppage of a train at stations where it is scheduled to stop is eliminated on this account, passengers shall be suitably notified through loudspeakers or other means at convenient stations.

(6) Trains shall run at a speed not exceeding 25 kilometres per hour when the view is clear and 8 kilometres when the view is not clear subject to other speed restrictions in force. Speed over facing points will be restricted to 15 kilometres per hour.

(7) All movements on the through line, other than the normal complement of Passenger and Scheduled Through Goods trains, such as running of light engines from and to shed, shunting Goods trains etc., shall be suspended. The running of normal trains on the through line shall be controlled by hand signals.

(C) If three lines are obstructed - Trains will be worked on the unobstructed line in accordance with rules prescribed in S.R. 9.12-3(1).

(D) Resumption of normal working -

(i) On receipt of a written certificate from a responsible engineering official that the obstructed track/tracks is /are free for passage of trains, the Station Master will issue a message to either station or stations as the case may be, under exchange of Private Numbers and decide, in consultation with the Section Controller, the train after the passage of which the normal working has to be introduced.

(ii) An entry shall also be made in the Train Signal Registers of all stations concerned showing the time when normal working was suspended and the time when normal working was resumed.

(iii) All the records in connection with the train working under this system shall be retained at the station and the Transportation Inspector of the section

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must scrutinise them and submit his report to the Divisional Railway Manager within 7 days of the resumption of normal working.

~~S.R.9.12 4. Rules and Regulations for working of trains under the Automatic Block System during obstruction of one or more lines when no communications are available and signals have also failed—~~

~~The following procedure shall be adopted for train passing—~~

~~1. On a double line section when one line is obstructed—~~

~~In the event of total interruption of communications occurring on a section worked under Automatic Block System and when trains cannot be worked by any one of the following means :~~

- ~~(a) Automatic Block,~~
- ~~(b) Morse Telegraph Instrument,~~
- ~~(c) Inter Cabin/Station Group telephone, or~~
- ~~(d) Control telephone.~~

S.R.9.12-4. Rules and Regulations for working of trains under the Automatic Block System during obstruction of one or more lines when no communications are available and signals have also failed - The following procedure shall be adopted for train passing -

I. On a double line section when one line is obstructed -

In the event of total interruption of communications occurring on a section worked under Automatic Block System and when trains cannot be worked by any of the following means :

- (a) Automatic Block,
- (b) Station to station fixed telephones wherever available;
- (c) Fixed telephone such as Railway auto phones & BSNL/MTNL phones;
- (d) Control Telephone;
- (e) VHF sets under special instructions, but not as the sole means of communication on sections where passenger trains run.

(CS 9/14 Ref: Rly Bd's letter No. 2005/Safety (A&R)/19/7 dated 01.07.2005 & 21.07.2006).

(1) The movement of trains on the affected section shall be controlled by such stations and on such lines as are prescribed by special instructions.

(2) Before any train is allowed to leave the first controlling station prescribed under clause I above to enter the affected area, it shall be brought to a stand and the Driver and the Guard of the train shall be advised of the circumstances by the Station Master.

(3) The Station Master shall satisfy himself that the Guard and the Driver thoroughly understand the rules under which the trains are to be run during total

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failure of communications on single line. He will also obtain the signatures of the Driver and the Guard in ink on the counterfoil of the form 'Authority to proceed without Line Clear' referred to in clause 6-(i). In case the Driver is illiterate, the procedure of working trains in such conditions shall be explained to him by the Station Master in the presence of the Guard and a record of this kept on the foil and counter foil of the 'Authority to proceed without Line Clear'.

(4) Communications shall be opened by an empty train, train engine, light engine, Motor trolley or Tower wagon to be sent on the unobstructed line. In case a train consisting of EMU stock/Diesel car has to be sent to open communications all passengers must be detrained before the train is despatched. The relevant provisions of the rules for single line working on double line during total failure of communication shall be adhered to.

(5) Drivers of all trains approaching the affected area must be advised in writing by the first controlling station prescribed under clause 1 above about the stations between which and the line on which temporary single line working has been introduced. In addition, the Drivers of trains which will run on the right road on temporary single line shall stop at the station immediately in rear of the affected section and proceed further only on receipt of the prescribed authority to proceed.

(6) The Station Master will handover to the Driver opening the communication the following documents -

(i) "An Authority to proceed without Line Clear" on prescribed form.

(ii) A Caution Order restricting the speed to 25 kilometres per hour over the straight with clear view and to 8 Kilometres per hour when approaching or passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog or any other cause, subject to the observance of other speed restrictions imposed and speed over facing points being restricted to 15 Kilometres per hour.

The Caution Order shall contain :

(a) The line on which the train or light engine is to run.

(b) The kilometres between which the obstruction exists.

(iii) An authority on the prescribed form authorising the Driver/ Motorman to pass the Automatic signals intervening the two nominated stations at 'On' the Semi-Automatic signals and Manually operated signals on being signalled past by a Pointsman or any other railway servant in uniform deputed for the purpose and Gate signals cautiously upto the level crossing where he must ascertain that the gates are locked and the hand signals are displayed by the Gateman before he proceeds further. The individual distinguishing number/numbers of each Automatic, Semi-Automatic, Manually operated, and Gate signal/ signals shall be indicated on this authority.

(iv) A conditional line clear message for a train to enter the affected section from the other end.

(v) An enquiry message addressed to the Station Master of the nominated station in advance seeking line Clear for the next train to proceed to his station.

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(7) An endorsement shall also be made on the Caution Order given to the Driver of the first train to stop and inform all Gatemen and Gangmen on the way about the introduction of temporary single line working. The road on which the trains will run shall also be specified.

(8) All the points over which the trains will run within the affected area shall be correctly set and the facing points locked before the movement of any train is authorised over them.

Whenever any power operated points have to be operated for diverting trains, these may be released and operated locally under the written instructions of the Station Master on duty by the Signal Maintainer at stations where signals Maintainers are available.

(9) (a) After sending forward a train engine / empty EMU train / light engine /Motor trolley/Tower wagon with enquiry and line clear messages, no other train or engine shall on any account be allowed to leave in the same direction until the return of that engine/empty EMU train/Motor trolley/Tower wagon.

(b) No obstruction of the line at the station shall be allowed until the return of that engine/motor trolley or Tower wagon or empty EMU train.

(10) The Driver of such an engine/empty EMU train/motor trolley /Tower wagon proceeding to open communications shall proceed at a speed not exceeding 25 kilometres per hour over the straight with a clear view and 8 kilometres per hour when approaching or passing any portion of the line by night or when the view ahead is not clear making free use of the engine whistle. In thick or foggy weather, the Driver must proceed at walking pace, whistling repeatedly, preceded by two men on foot at an adequate distance, one displaying a red light and the other carrying fog signals ready for immediate use. One of these men will be provided by the Station Master from his class IV staff and the other by the Driver from a member of his crew. Both these men will have their duties clearly explained to them by the Station Master who would satisfy himself that they thoroughly understand the same in the presence of the Driver.

(11) In the event of an engine or Tower Wagon or Motor trolley or empty EMU train meeting any other engine, Tower wagon etc. sent from the other end in the mid section, the two Drivers shall, taking into consideration the importance of the trains waiting, the distance from the nearest station, gradients to be encountered, the presence of catch siding etc., decide which engine/unit etc. should push back so as to allow the other to go through.

(12) On arrival of the train etc. at the next station nominated under special instructions, under clause 1 above, the Driver shall hand over the Conditional Line Clear and Line Enquiry Message to the Station Master who shall record it in the Line Clear Message book.

(13) The Station Master on the authority of the Conditional Line Clear shall despatch the waiting train from his station.

The Driver shall be given the following documents.-

- (i) Conditional Line Clear ticket as per G.R. 14.25(1)
- (ii) Conditional Line Clear Message for a train to leave from the station waiting at the other end of the affected section.
- (iii) A Caution Order on which shall be clearly stated -

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- (a) The line on which train is to run.
- (b) The kilometres between which the obstruction exists.
- (c) Any temporary restriction of speed which may have been imposed.
- (d) An enquiry message addressed to the Station Master of the nominated station in advance seeking Line Clear for the next train to proceed to his station.

(14) When approaching the next station nominated under special instructions, under clause 1 above, the Driver shall bring his train to a stand outside the first Stop signal pertaining to the correct line or opposite the last Stop signal pertaining to the wrong line on which he is running, whichever he comes across first, and sound one long whistle. The Station Master, after satisfying, himself that all points have been correctly set and facing points locked shall arrange for a man in uniform, to pilot the train from this signal who shall obey hand signals, if any, relayed from the Station Platform. Manual signals (including Semi-Automatic, signals working as Manual signals) if any, shall be, however, passed on a written authority on the prescribed form to be issued by the Station Master.

(15) On arrival at the station, the Driver shall hand over the Line Clear Reply Message to the Station Master who shall record it in the Line Clear Message Book on its authority issue a conditional Line Clear Ticket for the waiting train.

(16) The speed of all trains passing over the temporary single line shall be restricted to 25 kilometres per hour subject to observance of other speed restrictions imposed and speed over facing points being restricted to 15 Kilometres per hour.

(17) If there be an even flow of trains in both directions, Enquiry and Line Clear Messages for each succeeding train may be sent with the Driver of the preceding train.

(18) The arrival and departure time of all trains must be carefully recorded in -

- (a) Line Clearly Enquiry and Reply Books,
- (b) Counterfoil of the "Authority to proceed without Line Clear" (this applies to the first train only), and
- (c) The Train Signal Register.

(19) If the Station Master, at one end has more than one train to despatch in the same direction before another train is normally expected from the opposite direction, shall mention in the Line Enquiry Message the numbers of trains he wants to send and also state therein that the latter trains will be despatched after the first train at interval of 15 minutes or full running time whichever is more.

After the receipt of Line Clear for the required number of trains the Station Master while despatching the first train shall endorse on the Line Clear ticket that a particular train (giving its number and description in full) shall follow at a specified interval.

While adopting this procedure the Guard and the Driver shall be instructed to keep a sharp look out and be prepared to stop short of any obstruction and if the

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view is restricted because of fog, curve or any other reason, speed shall not exceed 8 kilometres per hour.

Note : If Line Clear is granted for a train or trains, no other train should be despatched from the opposite end until the arrival of the train or trains or the cancellation of the Line clear.

(20) Resumption of normal working.- The normal working shall not be resumed unless :

(a) The Station Master has received a written certificate from a responsible engineering official that the obstructed track is free for passage of trains, and

(b) Either the signals are put right or any one of the means of communications as listed above in Rule-1 is restored by the competent authority.

Note : (i) In case when obstruction is removed but signals continue to remain inoperative and none of the means of communications is available, the train shall be worked in accordance with the instructions prescribed in S.R. 9.12.-2.

(ii) In case where either signals are put right or any one of the means of communications is available, but the obstruction continues, the instructions as prescribed in S.R. 9.12-3(1) shall be observed.

(c) An entry shall also be made in the Train Signal Registers of all stations concerned showing the time when normal working was suspended and the time when normal working was resumed.

(21) All the records in connection with the train working under this system shall be retained at the station and the Transportation Inspector of the section must scrutinise them and submit his report to the Divisional Railway Manager within 7 days of the resumption of the normal working.

II. On a Quadruple line section -

(i) When one or two lines (one Up and one Down) are obstructed - The Trains shall continue to work on proper unobstructed line/lines as in the case of "Total interruption" under rules prescribed in S.R. 9.12-2.

(ii) When both the Up or both the Down lines are obstructed -

(1) On local line, trains shall continue to run on their proper line as in the case of "Total Interruptions" vide rules prescribed in S.R. 9.12-2.

(2) On the wrong line(Through line) -

(a) The movement of trains on the affected section shall be controlled by the nearest stations provided with cross-overs between unobstructed lines.

(b) A train shall not be started in the wrong direction until the affected section is clear of all trains running in the right direction on that line.

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(c) All facing points on the line on which the trains will run shall be clamped and locked for the movement of the trains on that line.

Whenever any power operated points have to be operated for diverting trains, these may be released and operated locally under the written instructions of the Station Master on duty by the Signal Maintainer at stations where Signal Maintainers are provided.

(d) To ensure that all trains running on the through line in the right direction have arrived and that all facing points on the line on which the trains will run have been clamped and locked for the movement of trains on that line, the following procedure should be observed -

(i) The Station Master of the station at which the trains are running in the proper direction shall, on receipt of the information that the tracks are obstructed, prepare a memo by carbon process for the Station Master at the other end of the affected section (say station 'A') and also for the Station Masters of all Intermediate stations. This memo shall be to the effect that the train is the last one running on the proper line and that after its complete arrival at station 'A', the Station Master of that station shall be authorised to despatch trains in the wrong direction on the through line. Requisite number of copies shall be handed over to the Guard of the train and his acknowledgment obtained. The Guard shall deliver a copy each of the memo to the Station Master of intermediate stations and station 'A' and obtain their acknowledgement. On receipt of the memo the Station Masters of the intermediate stations shall clamp and padlock all facing points for movement of trains on that line. The contents of the memo shall be advised to the Driver also.

(ii) The Station Master shall hand over to the Driver the following documents -

(1) An 'Authority to Proceed without Line Clear' on the prescribed form.

(2) A Caution Order restricting the speed to 25 kilometres per hour over the straight with clear view and to 8 kilometres per hour when approaching or passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog or any other cause, subject to the observance of other speed restriction imposed and speed over facing points being restricted to 15 kilometres per hour. The Caution Order shall indicate the kilometres between which the obstruction exist, if known.

(3) An authority on the prescribed form authorising the Driver/ Motor-man to pass the Automatic signal intervening the two nominated stations at 'On', the Semi-Automatic signals and manually operated signals on being signalled past by a Pointsman or any other railway servant in uniform deputed for the purpose and the Gate signals cautiously upto the level crossing where he must ascertain that the gates are locked and the hand signals are displayed by the Gateman before he proceeds further. The individual distinguishing number/ numbers of each Automatic, Semi-Automatic, Manually Operated, and Gate signal/ signals shall be indicated on this authority

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(4) On arrival of the complete train at Station 'A' the Driver shall hand over the 'Authority to proceed without Line Clear' and other documents to the Station Master. The Guard shall also hand over the memo to the Station Master who shall record it in the Train Signal Register. On receipt of the memo, the Station Master 'A' shall despatch the waiting train from his station and the flow in the wrong direction on through line will thus be established. The first train travelling on the wrong line will carry an operating official who shall ensure that the facing points on which the trains will run are properly clamped and locked for the movement of trains on that line. For this purpose, the first train shall stop short of all the facing points concerned and shall also stop at all the intermediate stations.

(e) Trains will be allowed to follow one another at interval of fifteen minutes or at such intervals as may be prescribed by special instructions.

(f) Trains shall run on 'Authority to proceed without Line Clear' applicable upto the terminal station at the other end of the affected section (to avoid stoppage of trains running on through lines at the stations not provided with platforms on the through lines) and suburban trains shall stop only at those stations having platforms on the through line. Where stoppage of a train at stations where it is scheduled to stop is eliminated on this account, passengers shall be suitably notified through loudspeakers or other means at convenient stations.

(g) Trains shall run at a speed not exceeding 25 kilometres per hour when the view is clear and 8 kilometres per hour when the view is not clear subject to other speed restriction in force. Speed over facing points will be restricted to 15 kilometres per hour.

(h) All movements on the through line, other than the normal complements of Passengers and scheduled Through Goods trains such as running of light engines from and to shed, shunting Goods trains etc., shall be suspended.

(iii) When three lines are obstructed - The procedure laid down in S.R. 9.12-4 shall be followed.

(iv) Resumption of normal working - The normal working shall not be resumed unless -

(a) The Station Master has received a written certificate from a responsible engineering official that the obstructed track/tracks is/are free for passage of trains, and

(b) the signals are put right.

Note : (i) In case when obstruction is removed but signals continue to remain inoperative and none of the means of communications is available the trains shall be worked in accordance with the instructions prescribed under S.R. 9.12-2.

(ii) In case when obstruction is removed but signals continue to be inoperative and one of the means of communications (as listed in S.R.

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9.12-4(I) above) is available the trains shall be worked as per rules prescribed under S.R. 9.12-1.

- (iii) In case where either signals are put right or any one of the means of communications is available but the obstruction continues, the instructions as prescribed in S.R. 9.12-3 will be observed.
- (iv) An entry shall also be made in the Train Signal Register of all stations concerned showing the time when normal working was suspended and the time when normal working was resumed.
- (v) All the records in connection with train working under his system shall be retained at the station and the Transportation Inspector of the section must scrutinise them and submit his report to the Divisional Railway Manager within seven days of the resumption of the normal working.

9.13. Movement of trains against the direction of traffic on the Automatic Block System - In Automatic signalling territory, trains shall run in the established direction of traffic only. Movement of trains against the established direction of traffic is not permitted. When in an emergency it becomes unavoidably necessary to move a train against the established direction of traffic, this shall be done only under special instructions which shall ensure that the line behind the said train upto the station in rear is clear and free from obstruction.

S.R.9.13-1. (a) The Guard of the train in consultation with the Driver/Motorman shall send written advice to the Station Master of the rear station explaining the circumstances necessitating the train to push back.

(b) The Station Master, after ensuring that the line in rear of the said train is clear upto his station shall send a written message authorising the Driver/Motorman to push back to his station. He shall also advise the Station Master of the station in advance and the Section Controller about the pushing back of the train. The Station Master shall ensure that there is no train on the same line between his station and the train to be pushed back.

(c) The Driver/Motorman and Guard shall observe provisions contained in S.R.4.12-2 (b) (g) and (h) while the train is pushing back.

(d) In case of an EMU train, the Motorman shall drive the train from the leading motor coach/driving cab.

(e) The Driver/Motorman shall whistle frequently by giving prescribed code of whistle (eleven short whistles).

SR 9.13-2 Overshooting of PF short of Starter signal while working EMU trains
-Whenever a suburban EMU train overshoots a PF, but short of the Starter Signal and it becomes unavoidably necessary to move the train against the established direction of traffic for the convenience and safety of passengers this shall be done as per the procedure given below :-

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1. At stations where Station Master is available, Motorman/Guard shall call Station Master by sounding frequent short whistle. The procedure for backing train as prescribed shall be carried out under the supervision of Station Master. In case, at Stations where Station Master is not available (Stations where Clerk In-charge is posted), this responsibility lies with the Guard and Motorman.
2. The Guard shall ensure that the line behind the said train in the rear is clear and free from any obstruction and switch 'ON' the flasher light.
3. The public at the affected station/platform wherever possible should be advised on Public Address system about backing of the train.
4. Guard of the train shall consult with the Motorman on PA system/Talk Back and after ensuring that everything is safe for Motorman to push back the train shall authorize Motorman to push back the train on the Platform by exchanging 3 : 3 beats. Motorman after exchanging the beats will push back the train cautiously up to Platform at a speed not exceeding 5 kmph.
5. In case communication either through PA system/Talk Back or Bell Code cannot be established between Motorman and Guard then in such cases, Motorman should change his cab and drive from the leading Driving Cab in the direction of travel and the Guard will station himself at the other end till the train is brought safely to the platform.
6. On arrival of train on Platform, guard shall give one beat for stopping the train and Motorman should stop the train and acknowledge the beat.
7. The Guard must satisfy himself by visually checking that passengers have detrained and entrained and give two beats to start the train.
8. The motorman must be alert and start the train immediately after having received the Guard's signal and satisfying himself that the Starter signal pertaining to his train has been taken 'Off'.
9. In case such incident happens at Stations where there is no Station Master, Guard shall inform preferably at the next station where there is a Station Master in writing about the incident. The Station Master should then inform the controller. Similarly, Guard and Motorman should also report such incident in writing at terminal/crew changing stations.

Note :

All Loco Pilots and Motormen should exercise great caution after passing an automatic signal at ON and follow Rule 9.02 especially when a train is noticed on the Platform of station ahead.

(Added vide Adv.C/Slip no.10.3 vide office note No. TR/G&SR/Rev/101 dated 08.09.08)

9.14 Procedure when Semi-Automatic Stop signal is 'On' -

THE AUTOMATIC BLOCK SYSTEM

- (1) When a Semi-Automatic Stop signal is worked as an Automatic Stop signal, Rule 9.02 or 9.07 shall apply as the case may be.
- (2) When a Semi-Automatic Stop signal is working as a Manual Stop signal and becomes defective, it may only be passed under relevant rules detailed in Chapter III, Section 'H'.
- (3) When a Driver is authorised to pass a Semi-Automatic Stop signal at 'On' by taking 'Off' the Calling-on signal fixed below it, he shall follow the precautions stipulated in Rule 9.02 or 9.07 as the case may be.

9.15. Passing a gate stop signal at 'On' in Automatic signalling territory - if the Driver finds a gate Stop signal at 'On' in an Automatic signalling territory-

(a) he shall comply with the provisions of Rule 9.02 or 9.07 as the case may be, if the 'A' marker is illuminated, or

~~(b) if the 'A' marker light is extinguished, he shall sound the prescribed code of whistle to warn the Gateman and bring his train to a stop in rear of the signal. If after waiting for one minute by day and two minutes by night, the signal is not taken 'Off', he shall draw his train ahead cautiously and stop in rear of the level crossing. After ascertaining that the gates are closed against the road traffic and on getting hand signals from the Gateman, and in his absence from the Fireman or Assistant Driver, the Driver shall sound the prescribed code of whistle and cautiously proceed upto the next Stop signal complying with the provisions of rules 9.02 or 9.07 as the case may be; in the absence of fireman or Assistant Driver, this duty shall devolve upon the Guard.~~

(b) (i) if the 'A' marker light is extinguished, he shall sound the prescribed code of the whistle to warn the Gateman and bring his train to stop in rear of the signal, and

(ii) if after waiting for one minute by day and two minutes by night, the signal is not taken 'Off', he shall draw his train ahead cautiously up to the level crossing, and

(iii) if the Gateman is available and exhibiting hand signals, proceed further past the level crossing gate cautiously or

(iv) if the Gateman is not available, or, is available but not exhibiting hand signals, stop in rear of the level crossing and after ascertaining that the gates are closed against road traffic and on getting hand signals from the Gateman, and in his absence from Assistant Loco Pilot, the Loco Pilot shall sound the prescribed code of whistle and cautiously proceed up to the next stop signal complying with the rule 9.02 or 9.07 as the case may be.

THE AUTOMATIC BLOCK SYSTEM

[Ref : Rly Bd's letter No. 2004/Safety(A&R)/19/25 dated 11.09.2006.CS

9/2] S.R.9.15-1.(a) The Driver shall sound one continuous long whistle when the train comes to a stop at a gate signal and one long and one short whistle before passing the gate signal and also the level crossing gate.

(b) In case of EMU trains the Motormen shall give 2 pause 2 rings before passing the Gate signal in the 'On' position, and 2 rings before passing the level crossing gate, which shall be acknowledged by the Guard.

S.R.9.15-1. (a) The Driver shall sound one continuous long whistle when the train comes to a stop at a gate signal and one long and one short whistle before passing the gate signal and also the level crossing gate.

(b) In case of EMU trains the Motormen shall give 2 pause 2 rings,(i) if after waiting for one minute by day and two minutes by night, the signal is not taken 'Off', he shall draw his train ahead cautiously up to the level crossing, and

(ii) if the Gateman is available and exhibiting hand signals, proceed further past the level crossing gate cautiously, or

(iii) if the Gateman is not available, or, is available but not exhibiting hand signals, stop in rear of the level crossing and after ascertaining that the gates are closed against road traffic and on getting hand signals from the Gateman, and in his (Gateman) absence motorman shall give 3 rings to call for the Guard for ascertaining closure of the gate and on getting hand signals from the guard, he shall sound the prescribed code of whistle and cautiously proceed up to the next stop signal complying with the rule 9.02 or 9.07 as the case may be.

[Ref : Rly Bd's letter No. 2004/Safety(A&R)/19/25 dated 11.09.2006.CS 9/2]

S.R. 9.15-2. Passing a Semi-Automatic Gate Stop Signal, provided with illuminated 'A' and illuminated 'AG' markers, at 'On' in Automatic signalling territory - If the Driver finds a gate signal provided with illuminated 'AG' marker at 'On' in an Automatic signalling territory -

(a) he shall comply with the provisions of General Rules 9.02 or 9.07 as the case may be, if the 'A' marker is illuminated but the 'AG' marker light is extinguished, or

(b) If the 'A' marker light is extinguished but the 'AG' marker light is lit he shall comply with the provisions of clause (b) of General Rule 9.15 or

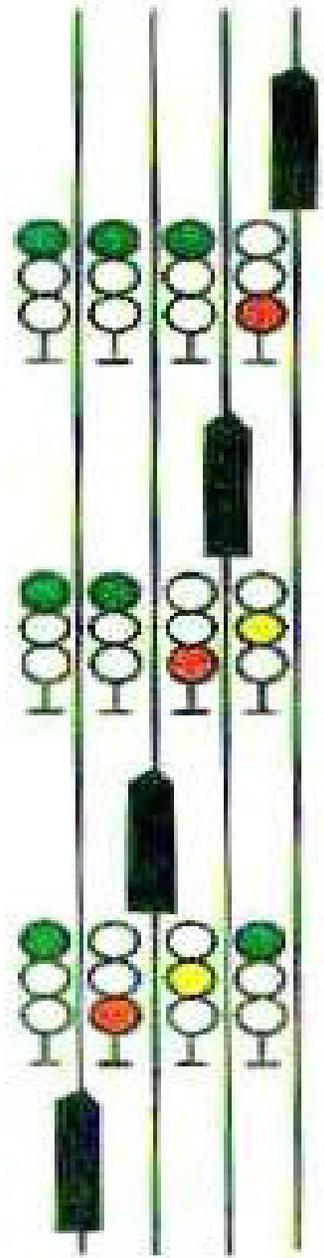
(c) If both the 'A' marker and 'AG' marker light are extinguished, he shall sound the prescribed code of whistle to warn the Gateman and bring his train to a stop in the rear of the signal. Thereafter, he shall proceed further only in accordance with the procedure laid down under special instructions.

THE AUTOMATIC BLOCK SYSTEM

9.16. Illustrative diagrams - Automatic change of sequence of aspects being behind the train in three aspects and found aspects signalling is illustrated in the following diagrams which are not drawn to scale.

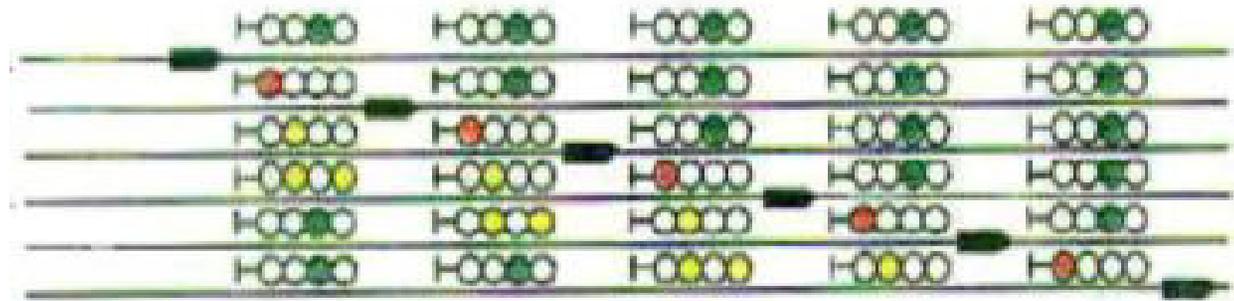
THE AUTOMATIC BLOCK SYSTEM

Automatic change of sequence of aspects behind the train in three aspect signalling territory



Automatic change of sequence of aspects behind the train in four- aspect signalling territory

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THE FOLLOWING TRAINS SYSTEM

CHAPTER X

THE FOLLOWING TRAINS SYSTEM

(This system is not in force on Central Railway)

10.01. Essentials of the following Trains System -

(1) Where trains are worked on the following Trains system, they may be despatched from one station to the next, following each other in succession in the same direction on the same line in such manner and at such intervals of time as may be prescribed by special instructions.

(2) Trains shall not be worked on the Following Trains system unless the Station Master of the block station in advance has exchanged messages regarding his readiness to receive the trains and has, in addition, given his assurance that no train will be allowed to leave his station for the station from which the following trains are to be despatched, until the latter have all arrived at his station and until he has received permission to despatch trains in the opposite direction.

10.02. Report to the Commissioner of Railway Safety - When the Following Train System is introduced on any portion of a railway under Rule 7.01, a report shall be sent by telegram to the Commissioner of Railway Safety.

10.03. Conditions to be observed in Working Trains on the following Trains System - When the Following Trains System is adopted, the following conditions shall be observed, namely -

- (a) no train shall start until the Driver has been given written authority to proceed in the form prescribed for the purpose and a written acknowledgment there of has been obtained from him, the train being stopped for the purpose, if not booked to stop,
- (b) the authority to proceed shall state the station at which the train is next to stop, the speed at which it is to run and the actual time of departure of the preceding train,
- (c) the Driver and Guard of each preceding train shall have been informed of the fact that a train will follow, and of the probable period which will elapse before the following train shall start,
- (d) a train shall not follow another from a station unless there has elapsed since the departure of the previous train, an interval of not less than 15 minutes, or such shorter interval as may be fixed by special instructions.

THE FOLLOWING TRAINS SYSTEM

- (e) all the trains following the first train shall be timed to run at the same speed and such speed shall not exceed 25 kilometres an hour except under special instructions,
- (f) the actual time of the departure of each train shall at once be intimated to the block station in advance and the actual time of arrival of each train shall at once be intimated to the block station in rear, and
- (g) the number of following trains running at the same time between any two Block stations shall not be more than one for each 5 kilometres of station interval; and unless permitted by special instructions, shall never exceed four, whatever may be length of the station interval.

10.04. Delivery of authority to proceed to Driver or Guard on the Following Trains System -

(1) Every authority to proceed shall be delivered to the Guard or Driver by the Station Master, or by some railway servant appointed in this behalf under special instructions.

(2) When such authority to proceed is delivered to the Driver under sub-rule (1), a duplicate shall be given to the Guard.

(3) When an authority to proceed is delivered to the Guard under sub-rule (1), it shall be either -

- (a) handed personally by the Guard to the Driver ,or
- (b) countersigned by the Guard and then handed to the Driver either by the Station Master or by some railway servant appointed in this behalf by special instructions.

(4) An authority to proceed shall not be handed to the Driver under sub-rule (2) or (3) -

- (a) until the train is ready to start, and
- (b) if the train is waiting to pass another train until the whole of the later train has come in and is clear of the running line for the former train.

THE FOLLOWING TRAINS SYSTEM

10.05. Authority to proceed on the following Trains System.- The written authority to proceed for use on the following Trains System shall be in the following form -

S.NO. _____ RAILWAY _____

THE FOLLOWING TRAINS SYSTEM

AUTHORITY TO PROCEED
UP (OR DOWN)

Train No. _____ Up (or Down) Date _____

Time _____ Hours _____ Minutes.

From _____ Station,
to _____ Station.

To Driver and Guard

(1) You are hereby authorised to proceed with your train from _____ station to _____ station

* (2) Train no _____ ahead of your train left this station at _____ hours _____ minutes.

* (3) Train No. _____ shall follow your train from this station at _____ hours _____ minutes.

(4) You are required to observe a speed restriction of _____ kilometres and hour.

Signed _____
Station Master at _____
(Station stamp)

Signature of
Guard at _____ station.

*Strike out whichever is inapplicable.
This ticket shall be given up by the Driver immediately on arrival to the Station Master or other person authorised to receive it and such person shall immediately cancel it and place it on record.

THE FOLLOWING TRAINS SYSTEM

10.06. Responsibility as to proper preparation of authority to proceed on the following Trains System -

(1) When an authority to proceed is delivered to the Driver under sub-rule (1) of Rule 10.04, the Station Master shall see -

- (a) that it is properly filled up in the form prescribed for the purpose ,
and
- (b) that it is signed in full and in ink.

(2) When the authority to proceed is delivered to the Driver under sub-rule (I) of Rule 10.04, he shall satisfy himself that the authority to proceed delivered to him has been correctly and completely prepared in the form prescribed for the purpose and he shall not proceed with his train until he has done so and the mistake, or omission, if any, has been rectified.

(3) When an authority to proceed is delivered to the Guard of the train under sub-rule (3) of Rule 10.04, he shall, before it is handed to the Driver, satisfy himself similarly.

10.07. Obstruction in face of approaching train or trains on the line Following Trains System - The shall not be obstructed outside the an outermost facing points in face of approaching train as long as this system of working is in force.

10.08. Cessation of working on the Following Trains System - When it is intended that no more following trains shall be despatched in the same direction, the Station Master shall intimate such intention by a message to the block station in advance, after which no more trains in either direction shall be despatched between the two stations until the last train has arrived at the block station in advance and the line has been cleared between the two stations.

10.09 Protection of trains on the following Trains System -

(1) When a train is stopped between stations and if the detention exceeds or is likely to exceed five minutes, it shall be protected in accordance with the provisions of Rule 6.03, except that the Guard going back to protect the train shall place one detonator, at 250 metres from the train on the way out, and two detonators, 10 metres apart, at 500 metres from the train, irrespective of gauge.

(2) In case the train stopped between stations, is unable to proceed on account of accident, failure, obstruction or any other exceptional cause, Driver shall also arrange to protect the train in the front in the manner laid down for the Guard.

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THE PILOT GUARD SYSTEM

CHAPTER XI

THE PILOT GUARD SYSTEM

(This system is not in force on Central Railway)

11.01. Essential of the Pilot Guard System - Where trains are worked on the Pilot Guard System -

- (a) a railway servant (hereinafter called a pilot Guard) shall be specially deputed to pilot trains; and
- (b) no train shall leave a station except under the personal authority of the Pilot Guard.

11.02 Conditions to be observed for following trains on the pilot Guard system- Trains shall not follow one another in the same direction between stations, unless -

- (a) the Driver has been properly warned of the time of departure of the preceding train and of the place at which it will next stop;
- (b) all the trains are timed to run at the same speed, and such speed shall not exceed 25 kilometres an hour except under special instructions; and
- (c) an interval of fifteen minutes has elapsed since the departure of the preceding train.

11.03 Pilot Guard's dress or badge - The pilot Guard shall be distinguished by red dress or badge.

11.04. Pilot Guard to accompany train or give authority to proceed -

(1) No train shall be started from a station unless the Driver sees that it is accompanied by, or that the authority to proceed is given personally by the Pilot Guard wearing the dress or badge prescribed in Rule 11.03.

(2) The Pilot Guard shall accompany every train :

“Provided that when it is necessary to start two or more trains from one end of the section before a train has to be started from the other end, the Pilot Guard shall accompany only the last of such trains, and shall personally give the authority to proceed for the preceding trains.”

(3) When accompanying a train, the Pilot Guard shall ride on the foot-plate of the engine.

THE PILOT GUARD SYSTEM

11.05. PILOT GUARD'S TICKETS -

(1) when the Pilot Guard does not accompany a train, he shall deliver to the Guard (or, if there be no Guard, to the Driver) a Pilot Guard's ticket on a printed form properly filled up and signed in ink, as the authority to proceed.

(2) Every such ticket shall apply only to the single journey to the station named on it.

(3) If the train is in charge of a Guard, he shall, before the train is started, deliver the ticket to the Driver.

(4) Immediately on the arrival of the train, the Driver shall deliver the ticket to the Station Master who shall at once cancel it.

11.06 Protection of trains on the Pilot Guard System - In the event of a train, which is followed by another train, stopping on the line between station, the Guard and the Driver shall take action to protect the train in accordance with the provisions of Rule 10.09.

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THE TRAIN STAFF AND TICKET SYSTEM

CHAPTER XII

THE TRAIN STAFF AND TICKET SYSTEM

(Not in force on the Central Railway)

12.01. Essentials of the Train-staff and Ticket System - Where trains are worked between two stations on the Train staff and Ticket System -

- (a) a single Train-staff shall be kept at one of such stations, and
- (b) no train shall start from either of such stations to the other unless the said Train staff is at the station from which the train starts and has either been handed to or shown to the Driver by the Station Master when giving such permission.

12.02 System where applicable - Trains may be worked on the Train staff and Ticket system only when the line is single and only between such stations as have been declared by special instructions to be Train staff stations.

12.03. Conditions to be observed for following trains on the Train staff and Ticket System.- Trains shall not follow one another in the same direction between Train staff stations, unless -

- (a) the Driver has been properly warned of the time of departure of the preceding train and of the place at which it will next stop;
- (b) all the trains are timed to run at the same speed, and such speed shall not exceed 25 kilometres an hour except under special instructions; and
- (c) an interval of fifteen minutes has elapsed since the departure of the preceding train.

12.04. Driver to have Train staff or Train-staff Ticket - No train shall be started from a station unless the Driver has in his possession to be carried with him on the journey, either the Train staff or a Train staff Ticket, for the section of the line over which the train is about to travel.

12.05. Train-staff or Train-staff Ticket : by whom to be delivered to Driver - The Train staff or Train Staff Ticket shall be delivered to the Driver by the Station Master or by some railway servant appointed in this behalf by special instructions.

12.06. Train-staff or Train-staff Ticket : when to be delivered to Driver -

(1) When no other train is intended to follow before the Train staff will be required for a train running in the opposite direction, then subject to the provisions of sub-rule (3), the Train staff shall be delivered to the Driver.

THE TRAIN STAFF AND TICKET SYSTEM

(2) When other trains are intended to follow before the Train staff can be returned, then, subject to the provisions of subrule (3), a Train staff Ticket indicating that the Train staff is following, shall be delivered to the Driver of each train except the last; and the Train staff shall be delivered to the Driver of the last train.

(3) When a train is assisted by a second engine in the rear, a Train staff Ticket shall be delivered to the Driver of the front engine and the Train staff shall be delivered to the Driver of the rear engine :

Provided that if both the engines attached to the train travel over the entire length of line to which the Train staff applies, and the train is to be followed by other trains, a Train staff Ticket shall be delivered to the Driver of each of the engines attached to the first mentioned train.

(4) When a train is assisted by a second engine in the front ,the Train staff or a Train staff Ticket, as the case may be, shall be delivered to the Driver of the leading engine.

(5) When a material train has to stop between stations, the Train staff shall be delivered to the Driver.

(6) The Train staff or a Train-staff Ticket shall not be delivered to the Driver of any train until the train is ready to start.

(7) The Driver shall not accept a Train staff Ticket unless he sees the Train staff at the same time in the possession of the person who delivers the Train staff Ticket to him.

12.07. Train-staff to be kept on engine - When the Train-staff is delivered to the Driver of a train, he shall place it in a conspicuous place provided for the purpose on the engine.

12.08. Trains not to be started until Train staff returned - When the Train staff has been taken away from a station by the Driver of a train, no other train shall be started from that station to follow the first mentioned train until the Train staff has been returned to the station.

12.09. Train staff or Train staff Ticket to be given up and Ticket to be cancelled on arrival of train -

(1) Upon the arrival of a train at the station to which the Train staff or a Train staff Ticket extends, the Driver shall immediately give the Train staff or Train staff Ticket to the Station Master, or to some railway servant appointed by special instructions to receive it.

THE TRAIN STAFF AND TICKET SYSTEM

(2) The person to whom any such Train staff Ticket is so delivered shall immediately cancel the same.

12.10. Procedure when engine is disabled on the Train staff and Ticket System-

(1) If an engine which carried the Train staff breaks down between two stations, the Firemen shall take the Train staff to the staff -station in the direction when assistance can best be obtained, in order that the Train staff may be available at that station for delivery to the Driver of the assisting engine.

(2) If an engine which carries a Train staff ticket breaks down between two stations, assistance shall ordinarily be obtained only from the station at which the Train-staff has been left; but if assistance can more readily be obtained from another station in the opposite direction, immediate steps shall be taken to have the Train staff transferred to the other end of the section.

(3) Whenever an engine has broken down between two stations the Fireman shall accompany the assisting engine to the spot.

12.11. Train staff Tickets : how kept - Train staff Tickets shall be kept in a ticket box provided for the purpose and fastened by an inside spring, the key to open the box being the Train staff to which the tickets apply.

12.12 Train staff : how kept - The Train staff when at a station, shall not be left in the box but shall be kept by the Station Master in safe custody.

12.13. Distinguishing marks on Train staff Tickets and boxes -

(1) Each Train staff shall have shown upon it the name of the Train staff station at each end of the portion of line to which it applies.

(2) The Train staff and Train staff Tickets and boxes for the different portions of the line shall be distinguished by different colours.

(3) 'UP' and 'DOWN' Train staff Ticket shall also have distinguishing marks.

THE TRAIN STAFF AND TICKET SYSTEM

12.14. Form of Train staff Ticket - Every Train staff Ticket shall be in the following form -

Ticket No _____ Railway _____
TRAIN - STAFF TICKET UP(or Down)
Train No. _____
Time _____ Hours _____ Minutes _____
From _____ To _____
To Driver and Guard.
You are authorised to proceed from to _____ station to _____ station and the Train staff will follow.
Train No. _____ in front left _____ hours _____ minutes
Signed _____ Station Master at _____ (Station stamp) Date : _____

(Back of Ticket)

The Driver shall not accept this ticket unless he sees the Train staff for the portion of line which he is about to enter. This ticket shall be given up by the Driver, immediately on arrival, to the Station Master or other person authorised to receive it, and such person shall immediately cancel it.

12.15. Record of Train staff Tickets issued - The Station Master shall keep a record in a book of each Train staff Ticket issued, showing the number of each ticket and the particular train for which it was issued.

12.16. Obstruction outside the Home signal - The line outside the Home signal shall not be obstructed unless the Train staff of the portion of the line to be obstructed is at the station.

12.17. Protection of trains on the Train staff and Ticket System - In the event of a train, which is followed by another train, stopping on the line between stations, the Guard and the Driver shall take action to protect the train in accordance with the provisions of Rule 10.09.

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THE ONE TRAIN ONLY SYSTEM

CHAPTER XIII

THE ONE TRAIN ONLY SYSTEM

13.01. Use of the One Train Only System - Trains may be worked on the One Train only System only on short terminal branches on the single line.

S.R.13.01-1. Information regarding the branches of the Central Railway worked on the One Train Only System is given in the Working Time Table of the division.

S.R.13.01-2. Authority to proceed.

(a) A single metal token bearing the inscription 'Authority to proceed on _____ section' and 'One Train only' system on the reverse shall be supplied to each junction station with the Main Line.

(b) Except as provided in G.R. 13.04 (2).

(i) The token prescribed in para (a) above shall be the sole authority for a train to enter the section and the Driver of a train shall not enter the section until he has this token in his possession.

(ii) The Station Master shall, before allowing a train to enter the section, personally handover the token to the Driver of the train.

(c) The token shall be kept locked in a case especially provided for the purpose and the key of the case shall be kept by the Station Master in his personal custody.

(d) On arrival of the train the Driver shall personally handover the token to the Station Master and the Station Master will immediately secure it in the case.

(e) When the token is lost, the Station Master will at once report the matter to the Divisional Railway Manager for replacement and until the token is replaced, he shall issue an authority on a manuscript form to the Driver.

13.02 Essentials of the One Train Only System - Where trains are worked on the One Train Only System, only one train shall be on the section on which this system is in force, at one and the same time.

13.03. Authority to enter the section - A Driver shall not take his train into the section unless he is in possession of the authority to proceed as prescribed by special instructions.

13.04. Procedure in case of accident or disablement on the One Train Only System -

(1) (a) If the train becomes disabled and requires assistance or if an accident occurs which renders it impossible for the train to proceed, the train

THE ONE TRAIN ONLY SYSTEM

shall be protected in accordance with the provisions of Rule 6.03 in the direction from which assistance, if necessary, is being obtained.

(b) The Guard of the train shall convey advice of the circumstances under which the train has become disabled and is not able to proceed, to the Station Master of the station from which assistance can best be obtained, and if it is necessary for such Guard to proceed to such station, he shall instruct the Driver in writing to keep the train stationary until his return, and obtain his written acknowledgment.

(2) (a) Such Station Master, if he is not the Station Master of the base station, shall communicate this information to the Station Master of the base station. On receipt of such information, the Station Master of the base station may allow another engine to enter the line.

(b) The engine so sent shall either be accompanied by the Guard of the disabled train, who shall explain to the Driver where and under what circumstances the disabled train is situated, or the Driver of the engine so sent shall be given a written authority, containing such instructions as to where and under what circumstances the disabled train is situated and such other particulars as may be necessary to enter the line unaccompanied by the Guard of the disabled train.

(3) The Guard of the disabled train shall be responsible for the safe and proper working of the line until the disabled train has been moved and any other engine sent to the assistance of the disabled train has been returned to the base station.

(4) If there is no Guard of a disabled train, the Fireman or the Assistant Driver or, if necessary the Driver shall perform the duties imposed by this rule on the Guard, provided that the engine is not left unmanned in terms of Rule 4.20.

S.R.13.04-1. If it is necessary for the Guard to remain with his train he will send the advice to the nearest station through the Assistant Driver stating the nature and cause of the breakdown and at once protect the train in accordance with G.R.6.03 in the direction from which relief is expected. If assistance has been asked for, he shall not allow the engine or any portion of his train to be moved until such time assistance arrives.

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BLOCK WORKING

CHAPTER XIV

BLOCK WORKING

A. General provisions.

14.01. Means of granting or obtaining Line Clear - The running of every train shall, in its progress from one block station to another, be regulated by means of any one of or a combination of the following -

- (a) electrical block instruments of token or tokenless type,
- (b) track circuits,
- (c) axle counters, or
- (d) electrical communication instruments.

14.02. Provision of instruments -

(1) Electrical communication instruments shall be provided at every station, except at class 'D' stations where they may be provided under special instructions.

(2) (a) The electrical block instruments, where provided, and electrical communication instruments at any station shall be of a type approved by the Commissioner of Railway Safety and shall not be brought into use in the first instance unless they have been passed by him.

(b) The person in charge of the maintenance of electrical block instruments or electrical communication instruments shall not without the approval of the Commissioner of Railway Safety, permit the substitution, for the instruments and installation brought into use in the first instance, of any instruments or installation which do or does not satisfy the conditions prescribed in clause (a).

14.03. Consent required before interfering with block working equipment - No railway servant shall interfere with the block working equipment, or their fittings for the purpose of effecting repairs, or for any other purpose, except with the previous consent of the Station Master.

S.R.14.03-1. Whenever block instruments or their fittings are to be interfered with for testing, repairs or replacement, the competent S&T staff shall issue a Disconnection Memo on the prescribed form (S&T(T/351)) to Station Master clearly specifying the various signals which shall be affected during such repairs or replacement of block instruments. The Station Master shall not give his consent for this purpose unless the block section is clear of trains and the block instruments, where provided, have been brought to Line Closed position.

If a train is waiting at station to proceed, the block instruments or signals shall not be tested by S&T staff, unless it has been so authorised in writing by the Station Master, who, before giving such permission, shall inform the Driver of the waiting train in writing to treat signal/signals as defective. After the testing of the block instruments and signals has been completed and the Reconnection Memo received from S&T staff, the block instruments and signals shall be brought in use and normal working resumed. The Driver of the waiting train shall also then be advised to this effect.

B. Block Stations at which Electrical Block Instruments,

BLOCK WORKING

Track Circuits or Axle Counters are provided.

14.04. Certificate of competency -

(1) No person shall operate the electrical block instruments until he has passed a test in the operation of block instruments and unless he holds a certificate of competency granted by a railway servant appointed in this behalf by the Railway Administration.

(2) The certificate of competency referred to in sub-rule (1) shall only be valid for a period of three years or such longer period as may be laid down by special instruments.

SR 14.04-1 Certificate of Competency:

- a) The competency certificate referred to sub rule (1) of GR 14.04, shall be issued by the Principal, Zonal Railway Training Institute to SM/ASM/Switchman/Cabin Master undergoing training in initial, promotional and refresher courses, after conducting the necessary examination by an officer nominated by the Principal and will include block, panel & RRI competency.
- The validity of competency certificate will be 3 years, however, in exceptional circumstances, if there is no refresher course scheduled, the validity of competency certificate may be extended by the DOM/AOM upto the date of commencement of next refresher course.
- b) In case of staff who have been working for a year or more at station where Block Instrument and/or Panel/RRI are not provided and who are subsequently posted to a station where Block Instrument and/or Panel/RRI are provided, or when they are required to operate new type of block instruments/Panel/RRI, the staff shall be tested by DOM/AOM and DSTE/ASTE and a certificate of competency shall be issued before such staff are allowed to take over charge of their duties on transfer.

CS 12/9 (Ref : This office note No.TR/G&SR/Rev./101 dated 25.01.12.)

14.05 Bell code - For the signalling of trains, the prescribed code of bell signals as detailed below, shall be used, and a copy thereof shall be exhibited in each block station near the place of operation of the block working equipment –

Ref. No.	Indication	Code	How signalled	How acknowledged
1.	CALL ATTENTION, OR ATTEND TELEPHONE	O	One stroke or beat.	One stroke or beat.
2.	IS LINE CLEAR, OR LINE CLEAR ENQUIRY	OO	Two	Two
3.	TRAIN ENTERING BLOCK SECTION	OOO	Three	Three
4.	(A) TRAIN OUT OF BLOCK SECTION (B) OBSTRUCTION REMOVED	OOOO	Four	Four

BLOCK WORKING

5.	(A) CANCEL LAST SIGNAL (B) SIGNAL GIVEN IN ERROR	OOOO O	Five	Five
6.	(A) OBSTRUCTION DANGERSIGNAL (GENERAL)	OOOO OO	Six	Six
	(B) STOP AND EXAMINE TRAIN	OOOO OO — O	Six pause One	Six pause One
	(C) TRAIN PASSED WITHOUT TAIL LAMP OR TAIL BOARD	OOOO OO — OO	Six pause Two	Six pause Two
	(D) TRAIN DIVIDED	OOOO OO — OOO	Six pause Three	Six pause Three
	(E) VEHICLES RUNNING AWAY IN WRONG DIRECTION ON DOUBLE LINE OR INTO THE BLOCK SECTION ON SINGLE LINE	OOOO OO- OOOO	Six pause Four	Six pause Four
	(F) VEHICLES RUNNING AWAY IN RIGHT DIRECTION ON DOUBLE LINE	OOOOO O- OOOOO	Six pause Five	Six pause Five
7.	TESTING.	OOOOO OOO OOOOO OOO	Sixteen	Sixteen

Note : (1) 'O' INDICATES A STROKE OR A BEAT AND '—' INDICATES A PAUSE.

(2) EACH SIGNAL SHALL BE GIVEN SLOWLY AND DISTINCTLY.

(3) Exchange of bell codes under reference numbers 3 and 4 are not required in a section provided with block proving axle counter or track circuit having complete track circuiting of station yard excluding non-running lines on either end."

[CS 7/4 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 2.9.2002]

14.06. Acknowledgement of signals -

- (1) Each signal received shall be acknowledged by sending its authorised acknowledgement.
- (2) Nosignal shall be acknowledged until itisclearly understood.
- (3) A signal shall not be deemed to be complete until it is acknowledged,

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- (4) If the station to which a signal is sent does not reply, the signal shall be repeated at intervals of not less than 20 seconds until reply is received.

14.07. Train Signal Register -

- (1) A Train Signal Register shall be kept by the Station Master or under his orders.
- (2) All signals received or sent on the electrical block instrument and the timings of receipt and despatch shall be entered therein, immediately after acknowledgment, by the person operating the block instrument.
- (3) The timings entered in the register shall be the actual timings, except that any fraction of a minute shall be counted as one.
- (4) All entries in the register shall be made in ink.
- (5) No erasure shall be made in the register, but if any entry is found to be incorrect, a line shall be drawn through it, so that it may be read at any time and the correct entry shall be made above it.
- (6) The person who keeps the register for the time being shall be responsible for all entries made therein and for correctly filling in each column thereof.

S.R.14.07-1. Detailed instructions regarding Train Signal Register are contained in para 12.03 of Block Working Manual.

14.08. Authority to proceed - The Driver shall not take his train from a block station unless he has been given an authority to proceed -

- (a) on double line, by the taking 'Off' of the last Stop signal, and
- (b) on the single line, either -
- (i) by a token for the block section, taken from an electrical block instrument, or
 - (ii) by a Line Clear Ticket duly signed by the Station Master, or
 - (iii) by any document prescribed in this behalf by special instructions, or
 - (iv) by the taking 'Off' of the last Stop signal in lieu of tangible authority as mentioned in sub-clauses (i) to (iii) on sections provided with electrical block instruments of tokenless type or track circuits or axle counters.

S.R.14.08-1. Should the last Stop signal fail to function, the Station Master after obtaining 'Line Clear' from the station ahead shall give the Driver an authority to pass the last Stop signal at 'On' on form T.32-B, on which an endorsement should be made that 'Line Clear' has been received from the station in advance, quoting the Private number received in the space provided for the purpose.

14.09. Driver to examine authority to proceed -

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(1) The Driver shall ensure that the authority to proceed given to him is the proper authority under the system of working and refers to the block section he is about to enter, and if the said authority is in writing that it is complete and duly signed in full and in ink.

(2) If the conditions mentioned in sub - rule (1) are not complied with, the Driver shall not take his train past or start from the station until the mistake or the omission is rectified.

14.10 Conditions for closing the block section -

(1) When the block section has been cleared by the arrival of the train or by the removal of the cause of blocking, the block section shall be closed by the block station in advance by giving the prescribed bell code signal.

~~(2) Before such signal is given, the Station Master shall satisfy himself~~

~~(a) that the train has arrived complete, or the cause of blocking the section has been removed, and~~

~~(b) that the conditions under which Line Clear can be given, are complied with.~~

(2) Before such signal is given, the Station Master shall satisfy himself as per the prescribed special instructions-

(a) that the train has arrived complete, or the cause of blocking the section has been removed, and

(b) that the conditions under which Line Clear can be given, are complied with.

[CS 9/6 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 11.09.2006.]

(3) The provision of clause (b) of sub-rule (2) may be relaxed at class 'A' single line crossing stations. In such cases, the Station Master shall satisfy himself that the train is standing at its Starter clear of the line on which the second train is to run.

~~(4) In a section with block proving axle counter or track circuit and complete track circuiting of station yard, excluding non-running lines on either end, block section clear indication provided with such equipment shall also ensure compliance of the provisions of sub-rules (1), (2) and (3) above.~~

[CS 7/5 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7 dated 2.9.2002]

(4) Where in a section, a block proving axle counter or continuous track circuiting between block stations and complete track circuiting of station section, excluding non-running lines of the receiving stations is installed and is functioning and there is a clear indication of clearance of block section as well as complete arrival of the train as per indication given, it would be taken as assurance for complete arrival of the train to the Station Master.

**[CS 9/7) Ref: Railway Board's letter No. 99/Safety (A&R)/19/7
dated 11.09.2006.]**

S.R.14.10-1. Detailed instructions regarding Conditions for closing the block section are contained in Para 4.16 & 4.17 of Block Working Manual.

**[CS 9/8 Ref: Railway Board's letter No. 99/Safety (A&R)/19/7
dated 11.09.2006.]**

14.11. Responsibility of Station Master as to authority to proceed -

(1) An authority to proceed shall not be given to the Driver until the procedure prescribed for the purpose, so far as it is applicable in the particular case, has been followed.

(2) An authority to proceed shall not be given to the Driver except by the Station Master or by some railway servant appointed in this behalf by special instruments.

(3) The Station Master shall see that the authority to proceed given to a Driver is accurate and that, when it is in writing, it is complete and is signed in full and in ink.

(4) If the train stops at the station and is waiting to cross another train, the authority to proceed shall not be given to the Driver until the whole of the latter train has arrived and is clear of the running line for the former train.

(5) If two engines are coupled together or if one engine is in front and another in rear of the train, the authority to proceed shall be given to the Driver of the leading engine.

S.R. 14.11-1. Token, not applicable to the Section or over carried -

(a) If a Driver who has entered the block section with correct token or Line Clear Ticket or authority to proceed without Line Clear loses the same on the run, he shall proceed to the next station and report the matter to the Station Master.

(b) Should a Driver enter a block section without a token not applicable for that section, he shall at once bring the train to a stop and advise the Guard and take immediate steps to protect the train in front and advise the Guard to protect it in rear. The ~~Assistant Guard (or the~~ Assistant Driver ~~if there is no Assistant Guard~~) shall be deputed to take the token with a note explaining the circumstances to the nearest station. If the token is sent to the station immediately in the rear, the Station Master shall deliver to the ~~Assistant Guard~~/Assistant Driver a correct token for the train to proceed to the next station. Should the token be sent to the station ahead, the Station Master shall immediately inform the station at the other end of the block section of the circumstance and hand over to the ~~Assistant Guard~~/Assistant Driver an 'Authority to proceed without Line Clear' to enable the train to come to his station. On arrival of the train, the Station Master shall inform the station at the other end of the block section by a message, supported by a private number, of the complete arrival of the train at his station.

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Before starting forward with the correct token or 'Authority to proceed, without Line Clear, the Driver and the Guard should remove the detonators placed on the line for protecting the train.

(c) If the Driver over carries a token beyond the section to which it applies and is in possession of the correct token for the section, he should proceed with his train to the station ahead and hand over the wrong token to the Station Master and obtain a receipt for it. The Station Master shall return the token to the station concerned with the Guard of the first train in that direction and obtain a receipt from him.

S.R. 14.11-2. Token, Surrender of, by Driver - On arrival of the train at the block station in advance, the Driver of a stopping Mail, Express, Passenger or Parcel train shall throw out the token with the pouch on the platform cautiously near the station office. For all other stopping trains, the Driver must make over the token to a member of the station staff in uniform, on coming to a halt. If the train runs through the station without stopping, the token with the pouch must be dropped by the Driver into the net provided for the purpose.

14.12. Special responsibility as to electrical token instruments and to the token -

- (1) The Station Master shall be responsible to ensure that -**
 - (a) no one but himself operates the electrical block instruments,**
 - (b) the procedure regarding bell signals and in addition any Communication made by electrical communication instruments including the use of a private number, as laid down under special instructions, is correctly carried out,**
 - (c) in the case of stopping trains, the incoming token is surrendered by the Driver before an outgoing token is delivered to him,**
 - (d) when he receives the token of an incoming train, it is put in the electrical block instrument immediately, and**
 - (e) no one except the person authorised by special instructions opens the electrical block instruments.**

(2) (a) A token shall not be taken out of an electrical block instrument earlier than necessary and when taken out, its number shall be recorded in the Train Signal Register, and it shall be kept in the personal custody of the Station Master till issued to a Driver or returned to the instrument.

(b) On arrival of the train at the block station in advance, the Driver shall give up the token in accordance with special instruments, and this token shall then be placed in the electrical block instrument at that station.

(c) If the train has to return to the block station from which it started, the token shall, on such return, be replaced in the electrical block instrument from which it was extracted.

14.13. Failure of electrical block instruments or track circuits or axle counters -

(1) If the electrical block instruments, track circuits or axle counters or their electric connections fail. Line Clear shall be obtained through the electrical communication instruments.

(2) When Line Clear has been so obtained, an entry to that effect shall be made in the Train Signal Register, and the train may be allowed to proceed on the issue of a written authority to proceed, which shall also bear a remark to that effect.

S.R. 14.13-1. Instructions for working of trains during failure of block instruments on double line and single line sections are given in paras 4.20 and 10.12 respectively of block Working Manual.

Instructions regarding working of trains during abnormal conditions of tokenless block instruments and during failure of single line tokenless block instruments are given in paras 10.14 and 10.15 respectively of Block Working Manual.

14.14. Closing of Intermediate Block Post - If the electrical block instruments provided at the stations on either side of an Intermediate Block Post or the track circuiting provided beyond the Last Stop signal, or the axle counters provided at either end of block section fail, the Intermediate Block Stop signal shall be treated as defective and the Intermediate Block Post shall be deemed to be closed and the section between the stations on either side of the Intermediate Block Post shall be treated as one block section.

C. Block Stations at which Electrical Block Instruments are not provided.

14.15. Transmission of signals - For the working of trains at such stations where electrical block instruments are not provided, signals as prescribed under special instructions shall be transmitted, as occasion may require, on the electrical communication instruments.

14.16 Train Signal Register - The Train Signal Register referred to in Rule 14.07 shall also be maintained at block stations where block instruments are not provided.

14.17. Forms for messages and written authority to proceed -

(1) All messages despatched in connection with the working of trains, and all written authorities to proceed, shall be written on forms specially provided for the purpose by the Railway Administration.

(2) Such forms shall be bound up in books and kept at each block station by the Station Master, or by some railway servant appointed in this behalf by special instructions.

14.18. Distinction of messages -

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- (1) Every messages despatched in connection with the working of a train shall distinctly describe the train to which it relates.
- (2) For every train a separate inquiry and reply shall be sent.

14.19. Writing and signing of messages and written authorities to proceed

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- (1) All messages despatched in connection with the working of trains, and all written authorities to proceed, shall be written up in ink and signed by the person authorised to despatch or issue the same.
- (2) No messages or written authority to proceed shall be written out, either in full or in part, or signed, until necessary.

14.20. Completion of messages - No part of any message shall be despatched or acted upon until the whole message has been written out except with a view to the prevention of an accident, or in some other case of emergency.

14.21. Preservation of messages and written authorities to proceed -

Messages and written authorities to proceed shall be destroyed at such time after issue as may be prescribed by special instructions :

Provided that no message or written authority to proceed shall be destroyed before one month after issue.

S.R. 14.21-1. Preservation of messages and authorities to proceed - Messages and authorities to proceed where Morse instruments are in use must be preserved for a period of six months.

14.22. Cancellation of Line Clear - On a single line when a Line Clear has been cancelled, no train shall be allowed to leave in the opposite direction until a message has been received acknowledging such cancellation and stating that the train for which the Line Clear has been given is and shall be detained.

14.23. Driver to have authority to proceed - The Driver shall not take his train from a station unless he has in his possession, as his authority to proceed ,a Line Clear Ticket duly signed by the Station Master.

S.R.14.23-1. Driver's responsibility in regard to Line Clear Tickets -The Driver is responsible for seeing that the Line Clear Ticket is correct in all respect and that it is intended for his train and that it contains a Private Number.

S.R.14.23-2. Delivery of Line Clear Ticket if a Driver is illiterate or is not conversant with English - If a Driver is illiterate or is not conversant with English,

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the Station Master must hand over the Line Clear Ticket to the Guard, who will verify that it is the correct one for the section. After making a note of the Private Number on the Line Clear Ticket on the journal against the name of the Station at which it is delivered, he will either himself hand it over to the Driver or send it to him with ~~the Assistant Guard or~~ a member of the station staff in uniform.

S.R.14.23.3. Line Clear Tickets, Disposal of - On completion of the journey, the Driver must hand over all the Line Clear Tickets to the Guard. The Guard must forward them to the Divisional Railway Manager alongwith his journal.

14.24. Authority to proceed : when to be given to Driver - An authority to proceed shall not be given to the Driver until the procedure prescribed for the purpose, so far as it is applicable in the particular case, has been followed.

S.R.14.24-1. Line Clear Tickets, delivery of, to Drivers of trains proceeding in opposite direction.- When two trains from opposites directions cross at a station the Station Master shall first obtain Line Clear for the train which is to leave first and after ensuring that the Line Clear Ticket has been sent to the Driver of the first train, he may then, and not before, obtain Line Clear for the second train and send it to the Driver.

When a Driver is illiterate, or is not conversant with English, Line Clear Ticket will be sent through the Guard as required in S.R.14.23.-2. In case of two stopping trains crossing, when the Driver is illiterate or he is not conversant with English, the Guard of each train shall be held responsible for seeing that correct Line Clear Ticket is delivered either by himself or by a member of the station staff in uniform to the Driver.

D. Line Clear Tickets.

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14.25. Line Clear Tickets –

(1) When owing to failure or non-provision of electrical block instruments the authority to proceed is a Line Clear Ticket, it shall, except under special instructions, be in the following form -

Form No. T/B 1425 _____ **Central**
Railway

Sr. No. _____

~~PAPER LINE CLEAR TICKET~~

(Driver/Record)

Down

Number of Train _____ **Down (Description)** _____

Date _____ **Time** _____ **hours** _____ **minutes.**

From _____ **Station Master** _____

To **The Driver of Train No.** _____ **Down**

The line is clear and you are authorized to proceed to _____ **station.**

Last train No. _____ **cleared section**

at _____ **station.**

Private No (in words) _____ **(in figures)** _____

~~AUTHORITY TO PASS SIGNAL AT 'ON' POSITION~~

~~*You are authorized to pass last Stop Signal in danger, when the signal is interlocked with Block Instrument.~~

Signature of Station Master

**Station Master's
Stamp**

~~*Strike out which ever is not applicable~~

BLOCK WORKING

Form No. T/D 1425
Railway

Central

Sr. No. _____

PAPER LINE CLEAR TICKET
(Driver/Record)

Down

Number of Train _____ Down (Description) _____
Date _____ Time _____ hours _____ minutes.

From Station Master _____

To The Driver of Train No. _____ Down

The line is clear and you are authorized to proceed to _____ station.

Last train No. _____ cleared section
at _____ station.

Private No (in words) _____ (in figures) _____

AUTHORITY TO PASS SIGNAL AT 'ON' POSITION

*You are authorized to pass last Stop Signal in danger, when the signal is
interlocked with Block Instrument.

Signature of Station Master

Station Master's
Stamp

*Strike out which ever is not applicable

C/S 8/4 (Ref Rly. Board's letter No. 2005/Safety (A&R)/19/01 dated
05.05.2005)

Form No. T/C 1425
Railway

Central

Sr. No. _____

**PAPER LINE CLEAR TICKET
(Driver/Record)**

Up

Number of Train _____ Up (Description) _____ Date
_____ Time _____ hours _____ minutes.

From Station Master _____

To The Driver of Train No. _____ Up

The line is clear and you are authorized to proceed to _____ station.

Last train No. _____ cleared section
at _____ station.

Private No (in words) _____ (in figures) _____

AUTHORITY TO PASS SIGNAL AT 'ON' POSITION

***You are authorized to pass last Stop Signal in danger, when the signal is
interlocked with Block Instrument.**

Signature of Station Master

Station Master's
Stamp

***Strike out which ever is not applicable**

**[C/S 7/7] further revised vide [C/S 8/4] (Ref Rly. Board's letter No. 97/Safety (A&R)/29/15
dated 29.01.2003)**

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(2) Each such ticket shall bear a serial number which shall be recorded in the Train Signal Register, the numbers for the Down direction being clearly distinguished from those for the UP direction.

(3) The Ticket referred to in Sub-rule (1) and (2) shall be printed on white paper with blue font to distinguish paper line clear ticket for Up and Down direction, water mark arrow pointing Up and Down will be printed on the ticket.

[CS 4/12 dated 23/01/2001]

E. Use and Operation of Block Working Equipment.

14.26. Use and operation of block working equipment - The use and operation of electrical block instruments shall be governed by special instructions to be issued with the prior approval of the Railway Board.

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PERMANENT WAY AND WORKS

CHAPTER XV

PERMANENT WAY AND WORKS

A. Railway Servants Employed on the Permanent Way or Works.

15.01. Condition of Permanent Way and Works - Each Inspector of Way or Works shall be responsible for the condition of the permanent way and works under his charge.

15.02. Maintenance of line - Each Inspector of Way or Works shall -

(a) see that his length of line or works in his charge are efficiently maintained, and

(b) promptly report to the Engineer-in-charge all accidents to or defects in the way or works, which he considers likely to interfere with the safe running of trains, at the same time taking such actions as may be necessary to prevent accidents.

S.R.15.02-1. A Permanent Way Inspector, who receives a report that a locomotive has received a lurch, shall immediately inspect the track and take all possible measures to remove the defect. Until the repairs are completed, he shall take such precautions for protection as are necessary.

15.03. Keeping of material -

Each Inspector of Way or Works shall see to the security of all rails, chairs, sleepers, and other material in his charge, and ensure that such of the said articles as are not actually in use are properly stacked clear of the line so as not to interfere with the safe running of trains.

S.R. 15.03-1. Permanent Way Materials and Tools -

Loose permanent way material, tools, etc. must not be left by the side of the line where they might be made use of by ill-disposed persons to form dangerous obstructions. Such material must be collected at gate lodges or gang huts and subsequently taken into stations at the earliest opportunity. This does not apply in the case of remodelling of yards doubling and relaying where special watchmen are engaged.

15.04. Inspection of Permanent Way and Works -

(1) Every portion of the permanent way shall be inspected daily on foot by some railway servant appointed in this behalf by special instructions :

Provided that the interval between such inspections may, under approved special instructions, be increased to once in two days in the case of lines with light and infrequent traffic.

(2) All bridges and works including signals, signal wires, interlocking gear, points and crossings, overhead equipment and any other equipment

PERMANENT WAY AND WORKS

affecting the safety and working of trains shall be inspected regularly in accordance with special instructions.

S.R.15.04-1. Permanent way, inspection of -

The Keyman of each gang must walk daily over his length starting at sunrise and when necessary, more frequently than once daily. He must tighten or replace any loose keys or fastenings. On lines with light and infrequent traffic this patrolling by Keyman may be once in two days under approved special instructions.

S.R.15.04-2.

(1) Patrolling of line during the monsoon months -

(a) The line is to be patrolled at night from the commencement until the close of the monsoon, ordinarily from June 1st, until October 31st, but the exact date of commencement and termination will be decided by the Assistant Engineer of the section.

Patrolling should not be started until the monsoons actually arrive on any section.

(b) Patrol charts, prepared by Divisional Engineers for the different sections, will be distributed to the Assistant Engineers, Permanent Way Inspectors and Controller and a copy of the relevant portion of the chart will be supplied to each Station Master with instructions to -

- (i) record timings of arrival and departure of Patrolmen in the patrol books and initial them, and
- (ii) record timings of arrival and departure of patrolmen and their names in the station diary.

(2) Copies of the patrol charts shall be sent to the loco shed Foreman by the Divisional Engineer.

(3) (a) The Patrolman, whose beat commences at Station A, will present the patrol book in his possession to the Station Master A, who will enter there-in the date and time of arrival and departure of the patrolman and sign the book and return it to him. He will then walk over his beat and handover the patrol book to the patrolman of the next beat, and so on, until the book from station A continues its journey to Station 'B'. In a similar manner, a patrol book from Station B will be transmitted to station 'A'. The Station Master at A is to enter the date and time of arrival of patrolman in the book from Station B, sign it and hand it back to the patrolman for re-transmission to Station B. The Station Master at Station B will enter the date and time of arrival of the Patrolman in the book from station A, sign it and hand it back to the patrolman for re-transmission to station A. In this manner, each patrol book makes one journey in each direction per night.

(b) If a Patrolman, on arrival at the end of the beat, does not find the next Patrolman waiting to take over his book, he must not wait, but must walk on until he meets him and should report the absence of any man from his beat, to the Gangmate in the morning.

(c) Where stations are close together, the patrol books may be passed through one or more intermediate stations before it is returned to the original

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station. The Station Master of each intermediate station will enter the date and actual time of arrival and departure of the Patrolman and sign the book.

(d) In order that the movement of the Patrolman can be checked accurately, it is essential that the Station Master on duty should record in the patrol book, the actual timings of the arrival at and the departure from the station. He should also record in his station diary the name of the Patrolman and the actual time of his arrival and departure from the station.

(4) (a) Station Masters will see that the Patrolmen come on duty sober.

(b) if a Patrolman does not turn up within 15 minutes of his scheduled arrival, the Station Master on duty will take the following action -

(i) he must stop run-through trains proceeding into the block section.

(ii) he must advise the Station Master at the other end of the section to take similar action and also advise the Controller.

(iii) he must issue a Caution Order Form T-409B to all trains proceeding into the block section advising the Driver to be on the alert and specify a speed restriction of 40 kilometres per hour during the day when the visibility is also clear, and 15 kilometres per hour during the night or during the day when visibility is not clear.

(iv) he shall also initiate action to ascertain the reason for the Patrolman not turning up by either sending a Gangman or a Pointsman, if available, in the concerned section.

The Caution Orders referred to under item (iii) above will be issued until the Patrolman has arrived and reported that the line is safe for passage of trains.

(5) Immediately danger is apprehended or when damage is observed, the Patrolman should protect the line, as indicated below -

(a) In case where one Patrolman is employed on a single line section,

(i) Place a red light in a prominent position to warn a train which may be approaching from one direction; then run in the opposite direction and fix one detonator at 600 metres in case of Broad Gauge and 400 metres in case of Narrow Gauge and 3 detonators, 10 metres apart at 1200 metres in case of Broad Gauge and at 800 metres in case of Narrow Gauge from the affected point. If, while on his way to fix detonators, the Patrolman finds a train approaching the affected point, he should immediately place detonators on the line and stop the train by showing a danger signal.

(ii) return to the affected point and protect the other side with detonators similarly.

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(iii) in the event of it being impossible to get to the other side or the affected point (as in a wash away), place a red light so that it can be seen from as great a distance as possible, for the approaching train from that direction.

(b) In cases where one Patrolman is employed on a double-line section -

(i) Place the red light in a prominent position, so as to warn an approaching train on one track, then run along the other track towards a possible approaching train and place detonators, as in sub para (a) (i) above; *displaying the danger signal*.

(ii) run back and protect with detonators the other line on which the red light was shown.

(c) In cases where two Patrolmen are employed -

(i) danger signals shown at once in both directions;

(ii) the two Patrolmen should then proceed in opposite directions, showing hand danger signals and at 600 metres in case of Broad Gauge and 400 metres in case of Narrow Gauge from the point of danger each should clip one detonator on the rail; they should then proceed to a distance of 1200 metres in case of Broad Gauge and 800 metres in case of Narrow Gauge from the point of danger and fix 3 more detonators on the rail, 10 metres apart.

On the double line, the detonators must be placed on each line so that the approaching trains on both the directions are protected.

(iii) should the nature of the obstruction be such as to render it impossible for either of the Patrolmen to get across the gap, as for instance, wash away with a strong flood, one of them should show a danger signal and endeavour to stop trains approaching the gap from the other side, while the other man should act as per para (6) below.

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(6) After protecting the line, as described above in para (5), in places where two Patrolmen are employed, one of the Patrolmen shall act as follows -

(a) Proceed with all haste away from the affected point in the direction of the nearest station or if cut off by an impassable obstruction, to the station in the opposite direction and report the occurrence to the Station Master who will -

(i) stop trains entering the block section,

(ii) advise the Station Master at the other end of the block section,

and

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(iii) advise the Controller and all concerned.

(b) If on his way to the station, he passes gang quarters, report the occurrence to the Gangmate, who should proceed with his gang to the kilometreage and ensure proper protection and attend to repairs as necessary.

Where a single Patrolman is employed, the Patrolman shall remain at the place where he has fixed three detonators and send word about the danger through the first Railway employee or other person he is able to contact at the spot itself.

~~— S.R.15.04-3. The flare signals shall be used on Double/Multiple lines, Ghat, Suburban and Automatic Block signalling sections.~~

~~— S.R.15.04-4. PWI of the section shall ensure that Patrolmen deputed are conversant with the use of flare signals. Each Patrolman should have one flare signal with him before proceeding for patrolling duties. Deleted CS 10 item 24 & 25~~

15.05. Patrolling of lines -

(1) In addition to the inspection referred to in Rule 15.04, whenever any portion of a railway is likely to be endangered by abnormal conditions such as heavy rains, breaches, floods, storms and civil disturbances, the line shall be patrolled in accordance with special instructions.

(2) When a railway servant deputed to patrol the line, notices any condition likely to affect the safety of trains or otherwise apprehends danger, he shall take action in accordance with special instructions prescribed for the purpose to protect the obstruction on line and thereafter inform the nearest Station Master by the most expeditious means.

See also Rule 3.62.

S.R. 15.05-1. In these circumstances patrolling of the line shall be done in accordance with the instructions given in S.R. 15.04-2.

15.06. Work involving danger to trains or traffic - A gang shall not commence or carry on any work which will involve danger to trains or to traffic without the previous permission of the Inspector of Way or Works, or of some competent railway servant appointed in this behalf by special instructions; and the railway servant who gives such permission shall himself be present to superintend such work, and shall see that the provisions of Rules 15.08 and 15.09 are observed :

Provided that, in case of emergency, when the requirements of safety warrant the commencement of any such work before the said railway servant can arrive, the Gangmate may commence the work at once and shall himself ensure that provisions of Rule 15.09 are observed.

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S.R. 15.06-1. Engineering Works involving interference with Traffic -

- (a) For the purpose of these rules, Engineering and Signal and Interlocking Works are classified under the following categories :-
- (i) *Category A* - Works of normal routine, maintenance, such as lifting and packing, renewals of keys and bolts, isolated renewals of a chair, pot or sleeper, etc.
 - (ii) *Category B* - Works such as scattered renewals of pots or sleepers, oiling of bolts and greasing of fishplates, or painting of bridges or other works necessitating observance of hand signals or 'Stop' or 'Proceed with Caution' signals etc.
 - (iii) *Category C* - Works such as shifting and erection of signals, overhauling of signal and interlocking frames, etc. which require the issue of a Circular Notice but not blocking a running line.

Note : Works normally falling under this category but requiring power block on electrified sections would be treated as falling under category D below.

- (iv) *Category D* - Works involving breaking of the road, interference with signals and interlocking arrangements, temporary diversions, relaying or other works causing interference with traffic.
- (b) (1) Category A - Works of a normal routine nature etc. no special precautions are necessary and no advice need be given to any Operating Official.
- (2) Category B -
- (i) Works under category (B) will be carried out according to programme of which all concerned will be advised and notices of speed restrictions, if any, or cautions to be observed will be advised to all concerned.
 - (ii) The Permanent Way Inspector or the Official-in-charge of the work will issue messages to all the authorities mentioned in S.R.4.09-1 (ii). The message will detail the nature of the work, the kilometrage or kilometrages, the speed restriction and any other precautions required to be observed by the Driver and will also state if Engineering Speed Restriction Indicators in accordance with S.R.4.08-1 have been provided.
 - (iii) The Station Masters will acknowledge the message to the Official-in-charge direct, copy to the Controller, who will also advise the stations concerned by a notice and obtain their acknowledgement. Before the work is taken in hand, the Permanent Way Inspector or the Official-in-charge will personally satisfy himself that all concerned have acknowledged the message. If acknowledgements are not received, the Work should not be taken in hand.
 - (iv) Caution Orders will be issued to Drivers/Guards of all trains in accordance with S.R.4.09-1.
 - (v) The site of work will be protected in accordance with S.R. 15.09-1.
 - (vi) On completion of the work, the Official-in-charge will issue a message advising all concerned, included in the original message of the completion of the work, and at the same time advise the Controller on the phone

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personally. On receipt of this message the issue of Caution Order will be discontinued unless otherwise specifically instructed.

(3) Categories (C) & (D) -

(i) In all cases of Engineering or Signal and Interlocking works which involve the breaking of the open line or interference with signal and interlocking arrangements or observance of any other restrictions in normal working, the Engineering/Signal Department will arrange with the Operating Department for the issue of a Circular Notice by the Divisional Railway Manager in accordance with standing instructions.

(ii) The Circular Notice referred to in sub-para(i) shall be valid for 3 months from the date of issue, i.e. the work notified must be taken in hand within 3 months. If the work cannot be commenced within 3 months, a fresh Notice must be issued.

Once the work is taken in hand the Notice will be effective as long as the work is in progress.

(iii) The Divisional Engineer or the Divisional Signal & Telecommunication Engineer will be responsible for obtaining the sanction of the Commissioner of Railway Safety where necessary and sending to him the safety certificates on the completion of the works in accordance with standing orders.

(iv) On receipt of advice from the Official-in-charge of the work, and before the work is taken in hand, the Divisional Operating Manager will issue an all concerned message to the Officials mentioned in the aforesaid Circular Notice and will arrange for the blocking of the line on the date and time specified. This message will be issued so as to give not less than 2 days clear notice.

(v) In the case of daily work on relaying, the message may cover a period of seven days, on the expiry of which a fresh message must be issued.

(vi) The work must not be taken in hand until acknowledgements have been received from the Station Master concerned, the Controller, the Power(Traction) Controller and the Loco Foreman. If acknowledgements are not received, the Divisional Operating Manager will take steps to prevent the work being taken in hand.

(vii) Before the line is blocked for the work to be commenced, the Official-in-charge of the work will consult the Controller in regard to the movement of trains on the section and the latter, after verifying that the Station Masters on either side of the block section on the single line and the Station Master of the block station in rear on the double line and the Notice stations for issuing Caution Orders for the block section where the work is to be undertaken as indicated in S.R. 4.09-1 (iii) have received and acknowledged the message referred to in sub-para (iv) above, will issue a Train Notice to the Station Master concerned authorising him to block the line. On receipt of the message from the Controller, the Station Master will block the line and hand over a written memo to Official-in-charge of the work that the line has been blocked, and specify therein the duration of the block. Except as provided in S.R.15.06-2, the Official-in-charge of the work will personally satisfy himself that the line has been actually blocked in accordance with the rules and that on the single line, the Token has been extracted or the paper Line Ticket filled in.

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(viii) Caution Orders will be issued by the Station Masters concerned in accordance with S.R. 4.09-1 to Drivers/Guards of all trains proceeding towards the affected area.

(ix) The Engineering Official-in-charge will also arrange for the protection of the affected area in accordance with S.R. 15.09-1.

(x) A material lorry may be allowed to work in the block section for which the line has been blocked, but the Engineering Official-in-charge must ensure that before the line is declared safe for traffic, the lorry is removed off the track. Only when specially mentioned in the Circular Notice, will a material train be allowed to work in the block section during the period of the block. This train will be given an 'Authority to proceed without Line Clear' and will be piloted by a responsible Engineering Official not below the rank of a Permanent Way Inspector grade III and will work under his personal supervision.

(xi) When Special Working Rules have to be issued, the Divisional Railway Manager will arrange for their issue in good time so as to give not less than 3 days clear notice. He will also be responsible for obtaining the approval of the Principal [Chief Operations Manager](#) where necessary.

(xii) On completion of the work, the Official-in-charge will hand over to the Station Master a safety certificate for resumption of normal traffic and specify therein whether any speed restriction is to be observed or Caution Order to be issued. On receipt of this certificate, the Station Master will advise the Controller and all concerned specified in the Circular Notice, cancel the block and resume normal working. In addition, if necessary, the Officer-in-charge will also hand over a certificate stating that the block section has been cleared of the material train.

(xiii) In the case of urgent repairs or renewals when previous notice can not be given for the issue of a Circular Notice or when, for any other reason, special precautions at short notice are necessary, the Permanent Way Inspector or other Official-in-charge of the work must advise the Controller and issue a written message to the Station Master giving not less than 4 hours notice before the work is to be taken in hand.

(xiv) On receipt of this advice, the Station Master will obtain permission from the Controller on control section and at the same time advise the Station Master at the other end of the block section and also the Notice Stations for issuing Caution Orders for that block section as indicated in S.R.4.09-1(ii) and obtain their acknowledgements, on receipt of which the Station Master will block the line in accordance with sub-para (vii) above, and advise the Engineering Official-in-charge in writing to take the work in hand. The Station Master will also stop all trains and issue Caution Orders where necessary until acknowledgements from Station Masters of Notice stations are received.

(c) General -

(i) In the case of working of the tunnel or hill-side parties on the Thull and Bhoire Ghats, 48 hours, previous notice must be given by the Permanent Way Inspector or the Assistant Engineers to the Divisional Operating Manager, the Traction Engineer (Distribution), the Foreman Traction Running Shed,

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Traffic Controller, Station Master, Lonavla or Igatpuri, as the case may be, and also Station Master, Karjat or Kasara.

(ii) On the electrified area before any slewing alterations to superelevation, excavation or levelling of tracks are commenced, 48 hours previous notice shall be given to the Traction Engineer (Distribution), so that the overhead equipment may be adjusted to conform to the new conditions if necessary. If it is necessary to carry out any work which involves risk of coming in contact with the overhead equipment, a permit must be obtained from the Traction Engineer (Distribution).

(iii) Rail Bonds - Any deficiency or defect noticed in Rail Bonds including cross bonds, connections to impedance bonds, structure bonds and Traction Substation negative feeders shall be reported immediately to the Traction Engineer (Distribution) and D.S.T.E. All bonds removed by the staff of the Engineering Department shall be replaced by the staff of the Engineering Department and all such removals and replacements shall be reported, to the Traction Engineer (Distribution) and D.S.T.E. without delay.

S.R. 15.06-2. Blocking the line on the field telephone -

When for special reasons it is decided to permit blocking of the line on the field-telephone the following procedure will be followed in lieu of that laid down in para (vii) of S.R. 15.06-1 (b) (3). This procedure is permissible on Controlled Sections only.

(i) The name of the Engineering Official in-charge of the work, who shall not be below the rank of a P.W.I. must be mentioned in the Circular Notice. The Railway Official so nominated and no other person will be authorised to obtain blocks on the field telephone.

(ii) The all concerned message issued by the Divisional Railway Manager will mention the name of the Engineering Official in-charge of the work and will also state that the block will be allowed on advice from the section on the field telephone. (iii) On an application to the Divisional Railway Manager the Official in-charge of the work will be issued a Private Number sheet to be used as follows. On completion of the work the Private Number sheet must be returned to the Divisional Railway Manager.

(iv) Before leaving the station for the site of the work, the Engineering Official-in-charge will consult the Controller who will advise him the approximate time and nominate the last train after which the block will be allowed.

(v) After the passage of the nominated train the Engineering Official in-charge will arrange to protect the place of obstruction in accordance with S.R. 15.09-1 and after having satisfied himself that the obstructed area is properly protected, will call the Controller on the field telephone, give his name and designation and also reference number of the Circular under which the work is being carried out.

(vi) The controller will then call the Station Master at each end of the block section and ascertain from them if the block section is clear of all trains.

(vii) The Engineering Official-in-charge will then issue a message on the field telephone as follows.-

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S.C.R _____ S.Ms. A and B No. _____ Ref. D.R.M's
message No. _____ of _____ Line (Up or
Down line in the case of double line) between stations A and B will be blocked from
_____ to _____ hrs.

Private No _____

Name _____

Designation

(viii) The Controller will then issue a message to the Station Masters A and B and also to the Engineering Official in-charge as follows -

S.Ms. A and B copy - P.W.I.

T.N.No. _____ aaa. You are authorised to block the line (Up or
Down line in the case of double line) between stations A and B from
_____ to _____ hours.

Section Controller (Name) _____

(ix) The Station Master concerned will acknowledge the Controller's message supported by a Private Number. The Controller will make a note in his charge in the 'Remarks' column and record the name of the Engineering Official in-charge and the private Numbers received from the Engineering Official and the Station Masters.

(x) On receipt of the above message from the Controller the Station Master concerned will block the line in accordance with the rules and issue a message to the Engineering Official-incharge, copy to the Controller, on the telephone as follows -

From S.M. _____
To P.W.I _____
No _____ Line (Up or Down line in the case of double
line)
has been blocked from _____ to _____
hours.

Private No _____

S.M. (Name) _____

(xi) The Engineering Official in-charge will then commence the work. He will keep himself in constant touch with the Controller.

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(xii) On completion of the work and after the track is made safe for the passage of trains, the Engineering Official in-charge will contact the Controller on the field telephone again and advise him of the completion of the work. The Controller will call the Station Masters at both ends of the block section and the Engineering Official in-charge will then issue a message in the following form -

S.Ms. A and B copy - S.C.R.

No. _____ Your No. _____ Track safe for traffic
aaa Train working may now be resumed (speed restriction, if any to be mentioned) aaa Private No. _____

Designation _____

Name _____

(xiii) On receipt of the above message the Controller will issue a Train Notice to the Station Masters concerned and authorise them to cancel the block and resume normal working, and obtain their acknowledgements.

(xiv) When the Control Phone is interrupted or where the control is not in operation, the procedure laid down in para (vii) or S.R.15.06-1 (b) (3) must be complied with strictly.

15.07. Work in thick, foggy or tempestuous weather impairing visibility
- **In thick, foggy or tempestuous weather impairing visibility, no rail shall be displaced and no other work which is likely to cause obstruction to the passage of trains shall be performed, except in cases of emergency.**

15.08. Precautions before commencing operations which would obstruct the line - No person employed on the way or works shall change or turn a rail, disconnect points or signals, or commence any other operation which would obstruct the line until Stop signals have been exhibited and where prescribed detonators used; and if within station limits, he has also obtained the written permission of the Station Master and all necessary signals have been placed at 'On' :

Provided that the exhibition of Stop signals may be dispensed with, if such operations are performed or carried out after the necessary signals, other than Automatic Stop Signals, have, in addition to being placed in the 'On' position, been disconnected, so that such signals cannot be taken 'Off' again until it is safe to do so and the corresponding adequate distance beyond such signals is kept clear :

Provided further that when the area of work is controlled by Automatic signals, the railway servant in charge of the work shall post a competent railway servant at an adequate distance in rear of the site of the work to stop and warn any train approaching the affected area.

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S.R. 15.08-1. If the line where Automatic signalling is in use has to be blocked against traffic, the Official-in-charge will clamp the special short circuiting device across the two outer copper wires of the impedance bond at the entering end of the track where the work is in progress. This will put the Automatic signal to 'On'. In addition to this a railway servant with detonators and hand signals must be stationed not less than 20 metres outside the signal concerned. He shall place one detonator on the line and display a red flag by day and a red light by night.

15.09. Showing of signals -

(1) Whenever due to lines being under repair or due to any other obstruction it is necessary to indicate to the Driver that he has to stop or proceed at a restricted speed, the following signals shall be shown and, where prescribed, detonators used, if on a double line in the direction from which trains approach, and if on a single line in each direction -

- (a) When the train is required to stop and the restriction is likely to last only for a day or less - A banner flag shall be exhibited at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge and three detonators shall be placed, 10 metres apart, at a distance of 1200 metres on the Broad Gauge and 800 metres on the Matre Gauge and Narrow Gauge from the place of obstruction. In addition, Stop hand signal shall be shown at a distance of 30 metres from the place of obstruction, at the banner flag and at a distance of 45 metres from the three detonators. The railway servant at the place of obstruction shall give proceed hand signal to indicate to the Driver when he may resume normal speed after the train has been hand-signalled past the place of obstruction.
- (b) When the train is required to stop and the restriction is likely to last for more than a day - A stop indicator shall be exhibited at a distance of 30 metres from the place of obstruction and a caution indicator at 1200 metres on the Board Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the place of the obstruction. In addition, termination indicators shall be provided at the place where a Driver may resume normal speed.
- (c) When the train is not required to stop and the restriction is likely to last only for a day or less - Proceed with caution hand signals shall be exhibited at a distance of 30 metres and again at a distance of at least 800 metres from the place of obstruction. The distance of 800 metres shall be suitably increased by special instructions, where required. The railway servant at the

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place of obstruction shall give Proceed hand signal to indicate to the Driver when he may resume normal speed after the train has been hand-signalled past the place of obstruction.

- (d) When the train is not required to stop and the restriction is likely to last for more than a day - A speed indicator shall be exhibited at a distance of 30 metres from the place of obstruction and again a caution indicator at a distance of at least 800 metres from the place of obstruction. The distance of 800 metres shall be suitably increased by special instructions, where required. In addition, termination indicators shall be provided at the place where a Driver may resume normal speed.

(2) In case the place of obstruction is within station limits -

- (a) the provision of sub-rule (1) may be dispensed with if the affected line has been isolated by setting and securing of points or by securing at 'On' the necessary manually controlled Stop Signal or signals, and
- (b) approach signals shall not be taken 'Off' for a train unless the train has been brought to a stop at the first Stop signal, except in cases where the Driver has been issued with a Caution Order at a station in rear, informing him of the obstruction and the details thereof.

(3) If the place of work is situated in Automatic Signalling territory, and if the distance between the place of obstruction and the Automatic signal controlling the entry of train in the signalling section concerned is less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and provided the Automatic Signal has been secured at 'On' -

- (a) the banner flag and three detonators referred to in clause(a) of sub-rule (1) may be provided at 90 and 180 metres respectively; and
- (b) the caution indicator referred to in clause(b) of sub-rule (1) may be dispensed with.

(4) The shapes and sizes of the indicators referred to in clauses (b) and (d) of sub-rule-(1) may be prescribed by special instructions.

S.R. 15.09-1. Engineering works on Open Line hand signalling arrangements for -

- (a) Proceed with caution hand signals -

When proceed with caution hand signal has to be shown in terms of G.R.15.09 (1) (c), these signals will be exhibited as follows, in the direction of

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approaching train on the double line and on both sides of the cautious driving area on the single line (see sketch).

- (i) At a minimum distance of 30 metres (Position B) from the nearest point of the affected area, a Railway servant with 'Proceed with Caution' hand signal.
 - (ii) At a distance of 800 metres (Position A) beyond the nearest point of the cautious driving area, a Railway servant with 'Proceed with Caution' hand signal.
 - (iii) At a distance of 700 metres on Broad Gauge and 180 metres on Narrow Gauge (Position C) beyond the farthest point of the Cautious driving area a Railway servant with 'Proceed' hand signal.
 - (iv) If an occasion arises for the train to be brought to a dead stop short of the affected area before passing over at dead slow speed, the railway servant at position B will display a red hand signal and after the train comes to a stand he will permit the train to proceed after obtaining instructions from the Engineering Official at the site not below the rank of Gangmate/ Keyman and will then give 'Proceed with Caution' hand signals as necessary.
 - (v) If the view from the direction of approaching train is not clear, additional Flagman will be posted to exhibit 'Proceed with Caution' hand signals as necessary.
- (b) Engineering obstruction, hand signals for -

When danger signals have to be shown short of an obstruction in terms of G.R.15.09(1)(a), following hand signals have to be shown in the direction of approaching train on the double line and on both sides of obstruction on the single line. (see sketch).

- (i) At a distance of 30 metres from the obstruction, a hand danger signal (Position C)
- (ii) At a distance of 600 metres for Broad Gauge and 400 metres for Narrow Gauge from the place of obstruction one banner flag (position B). A Railway servant equipped with hand danger signal shall also be posted at the banner flag.
- (iii) At a distance of 600 metres in case of Broad Gauge and 400 metres in case of Narrow Gauge from the banner flag 3 detonators 10 metres apart on line. A Railway servant showing hand danger signal shall be posted 45 metres ahead from the nearest detonator (Position A).
- (iv) On receiving orders from the official-in-charge of the work to allow the approaching train to pass, the railway servant at position A shall remove the three detonators and allow the train to proceed cautiously. The person at position B shall also remove the banner flag and exhibit 'Proceed with Caution' hand signal. The last person at position 'C' will continue exhibiting the danger signal to an approaching train until it has come to a stand, and the signature of the Driver of the train obtained in the restriction book maintained for the

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purpose. After satisfying from the official in-charge of the work that the train can be allowed to pass, he shall exhibit 'Proceed with Caution' signal and shall allow train to proceed. When the train has passed, the banner flag, detonators and the hand signals will be replaced.

- (v) In case of double or quadruple lines 'Proceed with Caution' signals as in S.R. 15.09-1(a) above, must also be shown on the adjoining line or lines. In the case of relaying work in progress Drivers of trains while approaching the zone of obstruction on the adjoining line or lines shall whistle continuously to warn the staff at work spot. In the case of other major works like regirdering, the official in-charge of the work shall specify the speed restriction to be observed by Drivers of trains on the adjoining line or lines in the zone of obstruction. The prescribed engineering speed restriction indicators shall also be provided.

Note :When providing temporary speed restriction for trains descending Bhore Ghat, Thull Ghat, Barkhera Ghat, Bhadbada Ghat, Chinchonda Ghat, Navegaon Ghat and Maramjhiri Ghat, the distance of 900 metres between Caution indicator and the Speed Indicator and 1300 metres between Caution indicator and the Stop indicator will apply.

(c) Obstruction in the vicinity of or inside station limits - When an obstruction is in the vicinity of or inside station limits and the engineering signals overlap the fixed signals, the Operating and Engineering officials on the spot will confer how best to protect the point of obstruction. It is not sufficient to maintain signals governing the approach of train toward the obstruction in the 'On' position. A banner flag and detonators must also be placed on the line in accordance with S.R.15.09-1(b) wherever necessary, preceding the point of obstruction. All trains proceeding towards the obstruction must be brought to a stand at the first Stop signal or banner flag. The banner flag and detonators may then be removed, signals taken 'Off' and the train then hand signalled or piloted past the obstruction as necessary. This must be done only under the personal instructions of the Engineering official in-charge. After the train has passed complete, the banner flag and detonators must be replaced.

(d) The Engineering official in-charge of the work is personally responsible for satisfying himself that instructions in regard to the protection of the line are strictly carried out. No person other than Engineering official in-charge of the work shall give signals for removal of the banner flag and this work must not be delegated to any of his subordinates.

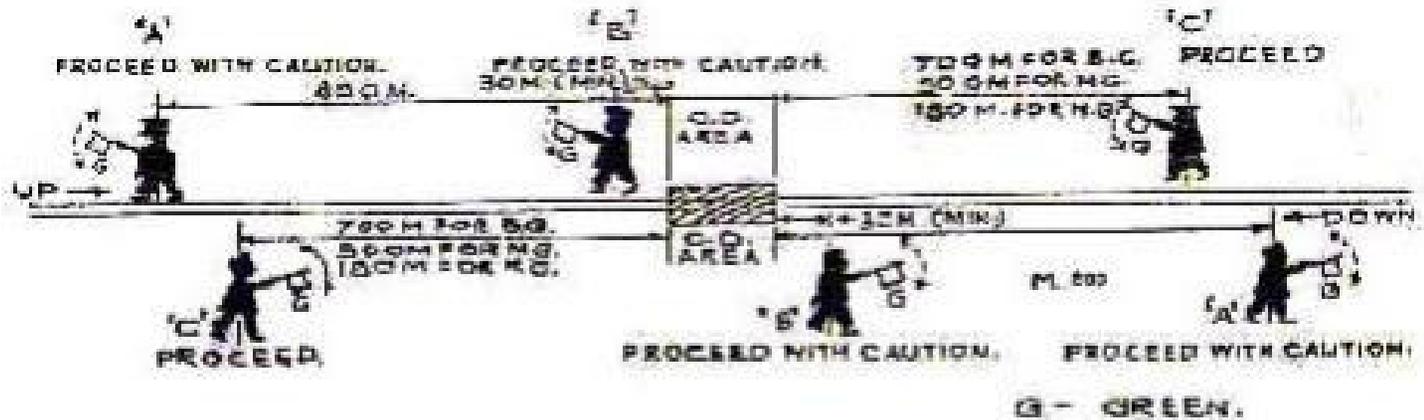
(e) Diagrams explaining the method of protection on single and double lines as laid down in clauses (a) and (b) are shown in Diagrams I, II, III and IV.

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DIAGRAM ILLUSTRATING THE POSITION OF 'PROCEED WITH CAUTION', SIGNALS IN TERMS OF GR.15.09(1)(c) AND S.R. 15.09-1(a)

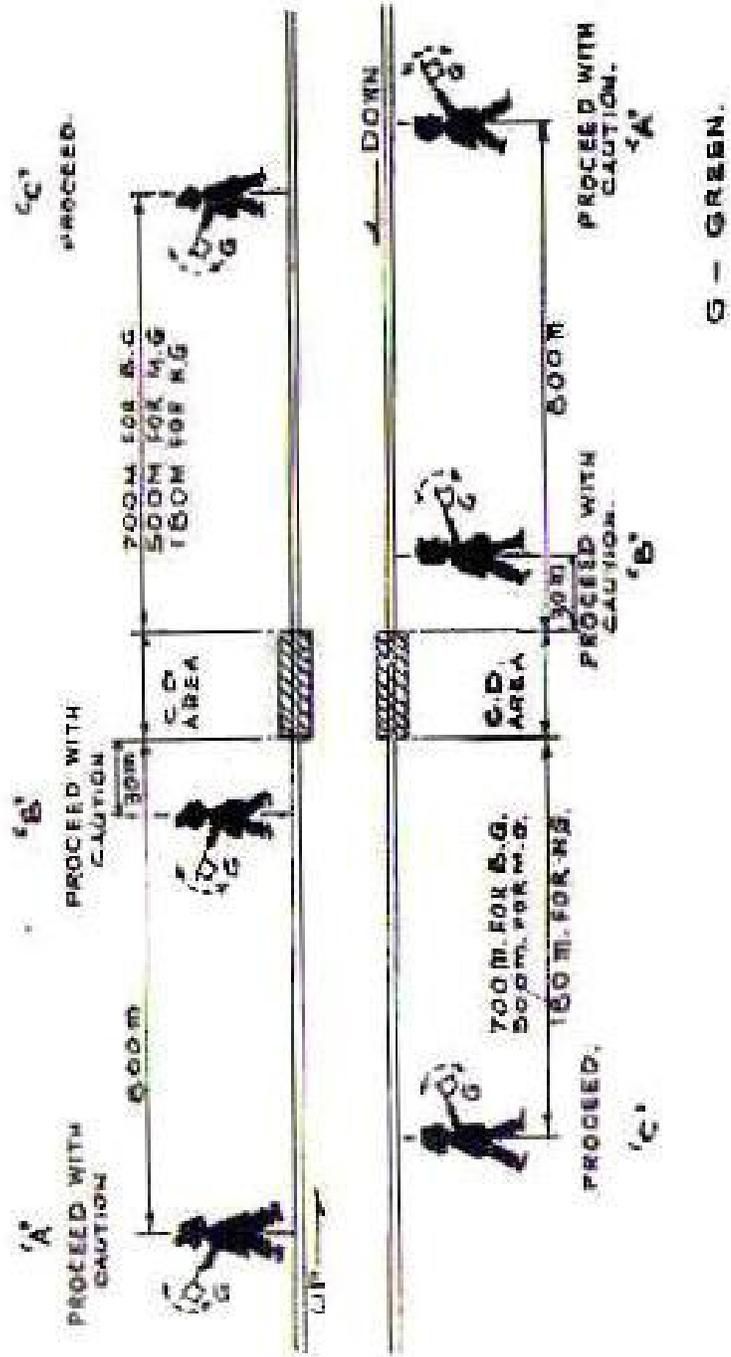
I. SINGLE LINE

4
4
3



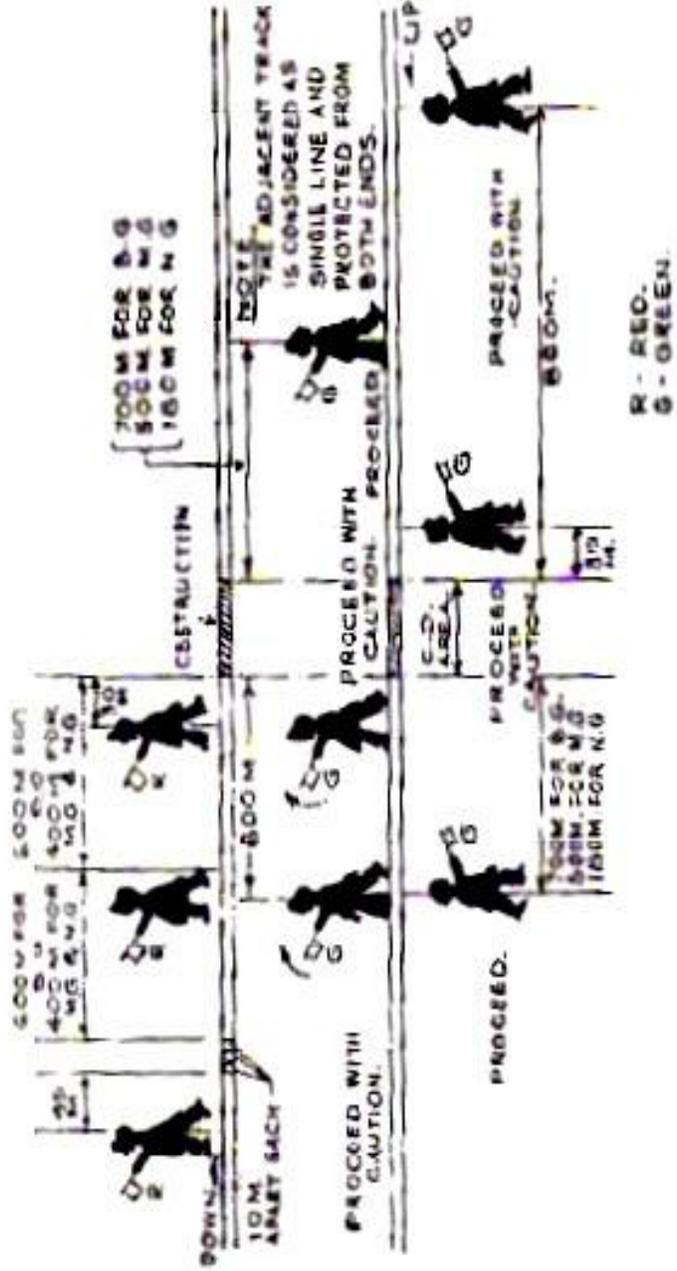
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II. DOUBLE LINE



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IV. DOUBLE LINE



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15.10 Assistance in protection of trains - Every railway servant employed on way or works shall, on the requisition of the Guard of a train or the Driver thereof, render assistance for the protection of the train.

15.11. Gangmate in each gang - Each Inspector of Way or Works shall see that in every gang employed in his length of line there is a competent Gangmate.

15.12. Knowledge of signals and equipment of gang - Each Inspector of Way or Works shall see -

- (a) that every Gangman and Gangmate employed under him has a correct knowledge of hand signals and detonating signals; and
- (b) that every gang employed in his length of line is supplied with a permanent way gauge, two sets of flag signals, two hand signals lamps and twelve detonators, in addition to such other tools or implements as may be prescribed by special instructions.

15.13. Inspection of gauges, signals, tools and implements -

(1) Each Inspector of Way or Works shall at least once in every month inspect the permanent way gauges, flags, signal lamps, detonators, tools and implements supplied to the gangs under clause (b) of Rule 15.12 and ascertain whether the above equipment is complete and in good order.

(2) He shall also see that any defective or missing articles are replaced.

15.14. Responsibility of Gangmate as to safety of line - Each Gangmate shall

- (a) see that his length of line is kept safe for the passage of trains;
- (b) that the signals supplied to him under clause (b) of Rule 15.12, are kept in proper order and ready for use;
- (c) that the men in his gang each have a correct knowledge of hand signals and detonating signals;
- (d) endeavour to prevent any trespassing by persons or cattle on his length of line or within the fences thereof, and
- (e) when repairing, lifting or lowering the line or when performing any other operation which shall make it necessary for a train to proceed cautiously, himself be present at the spot and be responsible that the caution signals prescribed in Rule 15.09 are shown.

15.15. Blasting - No railway servant employed on the way or on any works shall carry on any blasting operations on or near the railway except as permitted by special instructions.

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S.R.15.15-1. (a) Protection to Railway traffic, track and structures when blasting work is undertaken.

(i) No blasting operation shall be done except under the supervision of an Inspector of Way or Works.

(ii) For all the operations required in blasting, the Inspector of Way or Works shall be assisted by competent qualified staff whether departmental or of the contractor who are in possession of a certificate,.

(iii) The Blasting Chargeman/MATE will be in possession of a valid competency certificate, Detailed instructions regarding issue and renewal of competency certificate will be issued by CE.

(iv) When blasting operations are to be carried out within 100 metres of a running line, they shall be done only under block protection to all the lines falling within a distance of 100 metres of the point of blasting.

(v) Blasting operation may be carried out without block protection if the running line is at a distance of more than 100 metres and the Inspector of way or Works is personally satisfied that the blasting operation will not in any way involve danger to trains or to traffic on such lines. In such situations, depending on the site conditions, the blasting technique adopted and all other relevant factors affecting the blasting operation the lines in the vicinity of the blasting operation shall be protected as considered necessary by the Inspector of Way or Works. The signals to be exhibited for such protection shall be as prescribed under GR 15.09 and Subsidiary Rules thereunder. In such cases, where line protection is considered necessary. No blasting shall be done within 30 minutes of the time when any train is expected to pass on any of the line(s) concerned.

(vi) All tracks or structures within 60 metres of the point of blasting shall be suitably protected against damage by covering it with old wooden sleepers, sand bags or any other means as considered adequate by the Inspector of Way or Works who shall be responsible to ensure that no damage is caused to such tracks or structures. The zone of protection can be suitably extended beyond 60 metres as considered necessary by Inspector of Way or Works.

(vii) For blasting operation in electrified section additional precautions shall be complied with as in (c) below -

(b) Precaution and procedures for blasting operations -

(i) All the materials such as explosives, detonators, fuses etc. used for the blasting operations and their transport, storage and use in blasting shall conform with the relevant I.S. Specification, the Rules and Regulations under the Indian Explosives ACT 1884 and any other Acts or Rules as may be enacted from time to time in this behalf.

(ii) Before commencing the work, all blasting operations shall have the approval of the Assistant Engineer in charge of the section/work, whether it is done departmentally or through a contract. Before approving the blasting operations, the Assistant Engineer will ensure that adequate arrangements have been made to fulfil these instructions.

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(iii) The actual blasting operation shall be carried out under the personal provision of the blasting Mate who is conversant with the conditions for carrying out blasting work and shall be approved by the Assistant Engineer.

(iv) No blasting work can be commenced unless compressor(s) and the necessary drilling equipment (all in working condition) are available at site.

(v) The blasting work near a railway line shall be carefully controlled. For these purpose the charge should be as small as practicable and holes for charges should be drilled in an angular direction going away from the track also minimise possible damage to track and structures. Adequate precautions shall be taken to protect the adjoining track and structures to eliminate the danger to the traffic and damage to track.

(vi) The size, depth, pattern of drill holes-sequence of blasting shall be so controlled by the Inspector of Way or Works so as to limit the size of the blasting product, especially when the blasting operations are carried out near a running line under a block protection for which purpose in bench blasting the depth may be limited to 600 mm.

(vii) Sand bags, suitable wire mesh and other mettings may be used as a blanketing medium as considered necessary by the Inspector of way or works to smother the effect of blasting to protect overhead traction equipment, and other similar installations such as Telephone/Telegraph wires electric power line etc. when the blasting operation is done in their vicinity and the flying debris are likely to damage such installations.

(viii) Adequate warning shall be given to all the persons at the site of blasting operations so that the area within a radius of 150 metres from the point of blasting is kept clear of all human beings, animals, vehicles under other mobile equipment's etc. which are susceptible to damage from flying debris.

(ix) The blasting operations shall be conducted in a manner consistent with the type of explosive, detonators, fuses, etc. used, the location of the blasting area and other relevant factors. The Inspector of way or works may adopt for this purpose the technical guidelines available in the Explosives Manufacturers' Manual of Instructions of statutory instructions, if any, and other authentic documentation on the subject.

(x) The blasting Mate shall be responsible for tallying the number of shots actually heard with the shot intended to be fired. After the blasting he shall carefully inspect the work site and satisfy himself that all charges have exploded and that the blasting product does not contain any unexploded charge or fuses of explosives.

(xi) After completing the inspections as specified here in above under (vi) and making the line (s) safe after removal of all the debris, other obstructions and the protective coverings provided if any, the Inspector of way or Works shall issue necessary messages for resumption of traffic where the blasting operation is done under block protection and take other actions as appropriate in other cases to facilitate unhampered resumption of traffic.

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(c) When the blasting work is under taken in the vicinity of running lines in electrified sections, the following instructions should be followed in addition to clause (a) and (b) above.

(i) The programme of blasting work should be advised by the concerned AEE Traction Distribution Maintenance/construction one week in advance, to ensure that the Breakdown staff is on the alert to meet any emergency.

(ii) AEE TRD Maintenance/ construction will arrange for adequate OHE staff under the charge of an OHE inspector so as to be presented near the place where blasting is to be done. They will make sure about adequate protection to the over head structures and in the event of OHE break down will assess the same, certify the lines for traffic, if safe, other wise intimate the extent of damage to the breakdown party at the District headquarters who can attend to the break down.

(iii) In the event of damage to the track /OHE structures the concerned AEN/AEE(TD) shall be immediately informed for restoring the traffic. If the damages are due to construction activities necessary assistance required by AEN/AEE(TD) shall be given by concerned construction organisation.

(iv) The Inspector of Way or Works in charge of the blasting operation at the site shall maintain a log register for (each continuous series) detonations and the Inspector of way or Works and OHE Inspector shall signify their approval to the precautions by signing this register before the detonations take place. After each series of explosions, remarks if no damages had occurred shall be recorded and signed jointly.

15.16. Putting in or removing points or crossings - Except in cases of emergency, no railway servant shall put in or remove any points or crossings otherwise than as permitted by special instructions.

S.R. 15.16-1. Alterations or additions in Transportation Yards -

(a) Except in cases of emergency, no alteration or addition or connection whether permanent or temporary shall be made to a transportation yard, without first obtaining the approval of the Divisional Railway Manager.

(b) When in an emergency, any points, crossings or signals are interfered with within station limits, without previous notice to the Divisional Railway Manager, the Station Master must be immediately informed. If at an interlocked station any running line is affected, the Station Master will treat the line controlled by the such points, crossings or signals which are interfered with as non-interlocked. An advice must be sent at once to the Signal Inspector, Assistant Signal and Telecommunication Engineer and the Divisional Railway Manager.

(c) When extensive alterations are to be made in a station yard, special working rules must be drawn up by the Divisional Railway Manager for the working of the yard during the progress of the work.

15.17 Duties of Gangmate and Gangman when apprehending danger -

If a Gangmate or Gangman considers that the line is likely to be rendered unsafe, or that any train is likely to be endangered in consequence of

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any defect in the way or works or of abnormal rain or floods or any other occurrence, he shall take immediate steps for securing the stability of the line and the safety of trains, by using the prescribed signals for trains to proceed with caution or to stop, as necessity may require; and shall as soon as possible report the circumstances to the nearest Station Master and the Inspector of Way or Works.

S.R.15.17-1 In the event of a rail/weld failure, the Keyman/Gangmate/P.Way Maistry or Cold Weather Patrolman, shall, after protecting the line, make necessary emergency repairs to the track and pass traffic at 20 KMPH. The temporary/permanent repairs to track shall be done by the P.W.I. as soon as possible and restored traffic at normal speed.

[CS 3/5 dated 14/08/2000]

B. The Working of Lorries, Trolleys and Motor Trolleys.

15.18. Distinction between trolley, lorry and motor trolley -

- (1) A vehicle which can be lifted bodily off the line by four men shall be deemed to be a trolley and any similar but heavier vehicle shall be deemed to be a lorry.
- (2) Any trolley which is self-propelled, by means of a motor is a motor trolley.
- (3) A trolley shall not, except in cases of emergency, be used for the carriage of permanent way or other heavy material; and when a trolley is so loaded, it shall be deemed, for the purposes of these rules, to be a lorry.

S.R. 15.18-1(A) Light motor trolley/moped trolley/scooter trolley be treated at par with motor trolley.

S.R. 15.18-1(B) RULES FOR WORKING OF A TROLLEY/MOTOR TROLLEY/LORRY -

- (1) Subject to their being certified competent, the following officials and staff are permitted to use trollies/motor trollies/lorries -
 - (i) Trollies - All Officers and Inspectors of the Engineering and Signal and Telecommunication departments and such Officers and staff of the Operating, Commercial and OHE departments as may be required.
 - (ii) Lorries- All Inspectors of the Engineering and Signal and Telecommunication department.
 - (iii) Motor Trollies - All Officers of the Engineering, Signal & Telecommunication, Operating and Commercial Departments and such Inspectors, as may be prescribed and Motor Trolley Drivers.

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(2) No Railway servant shall use a trolley unless he is in a possession of a permit signed by the Principal Chief Engineer, Chief Track Engineer, Chief Bridge Engineer, Chief Operations Manager, Principal Chief Signal and Telecommunication Engineer, Chief Signal and Telecommunication Engineer(Construction), Divisional Railway Manager and Junior Administrative Officers of the Engineering and Signal and Telecommunication Departments of the division.

(3) The permit will only be issued after the person, in whose name this issued, has been examined and declared to be conversant with the rules for running of trollies/motor trollies/lorries. The permit shall be valid for a period of one year from the date of issue. It shall, therefore, be renewed annually after the person holding it has been examined as mentioned above.

(4) Each trolley/motor trolley/lorry must have marked on it the number, designation, and code initials of the Headquarters station of the official, to whom it is allotted, painted in white letters conspicuously.

(5) Whenever a trolley/motor trolley/lorry be placed on the platform for being loaded on a train or for any other purpose, it should be placed parallel to the track, properly locked and in charge of a Railway servant. It should be so placed as not to come in the way of passengers and railway staff.

(6) (a) Trollies or Lorries shall always be pushed and not pulled. Use of sails or any other unauthorised aid for their propulsion is strictly prohibited.

(b) The Official incharge of the lorry/trolley/motor trolley, while approaching a level crossing, should look out for road traffic and ensure safe passage of his lorry/trolley/motor trolley.

(7) EQUIPMENT OF TROLLIES/LORRIES -

The following equipment must be provided on a trolley/lorry when placed on running line :

- (i) During the day a red flag fixed to a staff of not less than 180 CMs in height placed on the trolley frame so as to be clearly visible.
- (ii) During the night, a light shall be placed to show conspicuously, on the double line, white to the front and red to the rear, and on single line, red both to the front and the rear.
- (iii) On Thull and Bhole Ghats and other sections where there are tunnels, the night signals prescribed for single line or double line must be displayed during the day in addition to the red flag. Further, trollies or lorries not provided with head lights must carry a petromax lamp or its equivalent and a five cell electric torch to illuminate the track ahead.
- (iv) In addition to the equipment prescribed in Rule No. 15.20 each trolley/lorry shall be provided with (a) 3 red flags and 3 Hand Signal lamps for single line.(b) 1 Hand signal lamp and one red flag, for double line.
- (v) Every trolley and lorry must be fitted with an efficient hand brake in terms of Rule No.15.21. A trolley working in the ghat section must, in addition , be fitted with a screw down brake.

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- (vi) A portable field telephone in working order must be provided on each material lorry.

Note : Lorries are not permitted to work in ghat sections.

(8) EQUIPMENT OF MOTOR TROLLIES

- A motor trolley must be provided with -

- (i) A motor trolley must be provided with equipment as given in Rule No.15.20 and 15.21.
- (ii) A head light which will throw a white light towards the front. A red light must also be shown conspicuously towards the rear. When there is no head light, during the night, a light showing conspicuously, on the double line white to the front and red to the rear, and on the single line, red both to the front and the rear, should be exhibited.

(9) MAXIMUM NUMBER OF PERSONS ON A TROLLEY AND MOTOR TROLLEY -

The total number of persons including trollymen, which can be carried on a trolley, must not exceed 10.

On a motor trolley, the total number of persons including trollymen must not exceed 7 in the case of 4 HP and 10 in the case of 6 HP motor trollies.

(10) MINIMUM NUMBER OF TROLLYMEN -

(a) On a trolley -

- (i) When a trolley is run under block protection, it must be accompanied by not less than 4 trollymen.
- (ii) When running without block protection, a trolley must be accompanied by 4 trollymen on double or single line. On such part of the line where, on account of curves, cuttings or tunnels the view is obstructed, or on length where there are frequent train services, extra men must be taken from the gangs, for pushing the trolley. One or more of the regular trollymen, who have passed the vision test, will be used for protecting the trolley in the rear on the double line, and on either side on single line.
- (iii) On electrified sections, 5 trollymen must accompany a trolley.

(a) On a motor trolley - A motor trolley must, in all cases, be manned by not less than 4 able bodied trollymen.

(b) On a lorry - The minimum number of men accompanying a lorry must be 8 exclusive of Flagmen. It should be increased as required by the official accompanying lorry depending on the type of material loaded, nature of gradient, curves, cutting etc. The official incharge of the lorry shall ensure that the men deputed for protection of the lorry are permanent employees who are well conversed with the rules for protection of material lorry.

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(11) When a motor trolley is running, there shall be at least 2 persons seated in front.

(12) WORKING OF TROLLIES -

(a) At night time -

During night, all trollies must work under block protection except in a grave emergency.

(b) On Bhore and Thull Ghats -

(i) Trollies of all departments except the Engineering and the Distribution section of the Traction branch must work under block protection. The officials of the Engineering and Traction (Distribution) branches must also work their trollies under block protection whenever possible.

(ii) When working a trolley without block protection, the official-in-charge must, before entering the block section, notify the Station Master of the station at which the trolley will be placed on line, the place or places at which the trolley will stop and the duration of the halt. The official-in-charge will also ascertain particulars of trains running of the section.

(iii) Protection of the trolley should be arranged in terms of sub-clauses (ii) and (iii) below.

(c) Working without block protection -

(1) When it is proposed to work a trolley outside station limits without block protection, the official-in-charge of the trolley shall ascertain the whereabouts of trains that he is likely to encounter on the section before he places the trolley on the line.

(2) Where due to curves, cuttings, or gradients, a clear view is not available for a distance of 1200 metres, the trolley must be protected in accordance with G.R. 15.27 and S.R. 15.27-1.

(3) When the nature of the line is such that the Flagmen cannot be seen by the person in-charge of the trolley, the latter must arrange, before entering the section, to take with him sufficient Gangmen with hand signals and banner flag so that the required number of Flagmen can be provided for repeating the signals to the person in-charge of the trolley.

(d) (i) On the following sections special precautions should be taken while working trollies without block protection due to sharp curves, cuttings, tunnels etc.-

MUMBAI DIVISION

- (1) Kasara-Igatpuri
- (2) Karjat-Lonavla

BHUSAWAL DIVISION

- (1) Mandwa-Dongargaon
- (2) Nepanagar-Chandni
- (3) Chandni-Asirgarh Road

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(4) Bodwad-Varangaon

BHOPAL DIVISION

- (1) Talvadya-Kaigaon
- (2) Mathela-Talvadya

JHANSI DIVISION

- (1) Dhaura-Jakhlaun
- (2) Dhaura-Mohasa
- (3) Budni-Barkhera
- (4) Manikpur-Bahilpurwa
- (5) Bahilpurwa-Karwi
- (6) Bharatkup-Badausa
- (7) Hamirpur Road-Yamuna South Bank

JABALPUR DIVISION

- (1) Sontalai-Bagratawa

NAGPUR DIVISION

- (1) Maramjhiri-Dharakhoh
- (2) Chichonda-Teegaon

SOLAPUR DIVISION

- (1) Jath Road-Dhalgaon
- (2) Sulgare-Belanki
- (3) Belanki-Arag

(i) The precautions to be taken are as under -

- (1) The official in-charge of the trolley shall advise in writing to the Station Master on duty, where he intends to place the trolley on line, specifying the period the trolley will work in the block section.
- (2) On receipt of this advice, the Station Master will advise the official in-charge of the trolley about the particulars of running of trains, and will also issue a message to the Station Master at the other end of the block section and also to the mail stopping stations, on either side, to this effect. On the double line, the message need only be issued to the stations in rear according to the line on which the trolley is working. The Station Master receiving the message will acknowledge receipt.
- (3) The Station Master at the station at either end of the block section where the trolley is working, or the last stopping station, in the case of mail and express trains must issue Caution Orders to the Drivers of all trains proceeding into the block section where the trolley is working, until the trolley clears the block section.

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- (4) Immediately the trolley has cleared the block section the Station Master on duty at the station where the trolley has arrived, will cancel the message referred to in sub-clause (2) above after which the issue of Caution Orders to Drivers will be discontinued.

(e) When two trollies are running together in the same direction, as far as possible, they shall be kept one telegraph post apart.

(13) USE OF PRIVATE TROLLIES - No Private trollies will be permitted to be used by a non-Railway official, unless he is in possession of a permit signed by the Chief Engineer, Principal Chief Operations Manager or the Divisional Railway Manager. Such permits will be granted in special circumstances for the use of a push trolley on sidings only, where there is no passenger traffic, such officials being required to execute a bond indemnifying the Railway against all liability and risk. The issue of trolley permits will be subject to the observance of the prescribed rules in which the person concerned should be tested before issue of the permit. A Head Trolleyman who should be a competent railway servant duly nominated by the Railway Administration, should always accompany the trolley.

(14) WORKING OF MOTOR TROLLIES -

(a) A motor trolley must run under block protection and should be treated and signalled as a train.

A motor trolley/trollies, however, is/are permitted to follow a train/motor trolley at an adequate distance after advising the Station Master concerned, in accordance with the procedure laid down in para 14-(g) below.

The official in-charge of the motor trolley may, during day light and if visibility is good, pass the Outer signal at danger, after coming to a stop, and proceed with caution and stop at the next Stop signal (facing points), until hand signalled by a member of the station staff in uniform into a vacant line. A motor trolley may also be received, after stopping the same, on an occupied line, on hand signals from the cabin or facing points, as convenient.

(b) BREAKDOWN OF MOTOR TROLLEY -

- (i) In the event of a complete breakdown of a motor trolley in the section, the trolley must be removed clear of the tracks and the Station Master of the nearest Station advised in writing to clear the section. The token or Line clear Ticket, if any, must also be sent with the memo. The same procedure must be observed if, for any other reason, a motor trolley is removed from the tracks while in the section. Once a motor trolley has been removed from the line, it must not be replaced on the line unless the line has been blocked for it.

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- (ii) Before a motor trolley is replaced on the line, intimation in writing must be sent to the nearest Station Master stating in which direction the trolley will proceed. The Station Master will, when the train service permits, arrange to block the line between the two requisite stations from a specified hour or after the passage of a named passenger or goods train. A manuscript authority to proceed will then be sent to the Officer in-charge of the motor trolley in the following form -

“Line will be blocked for your motor trolley,
from _____ hours _____ minutes
after the passage of _____ train until the
arrival of your trolley at _____”

A carbon copy of this message should be kept by the issuing Station Master. On the single line, Token or Line Clear Ticket must also be sent by the Station Master.

- (c) Working of Motor Trolleys on single Line sections where Tokenless Block instruments are provided -

- (i) The Station Master of the block station from which the motor trolley has to leave, will obtain Line Clear from the Station Master at the other end of the block section on block telephone without the operation of block instruments. He will then prepare an authority to enter the block section in manuscript in duplicate in the form given below, which will indicate the Private Number obtained in support of the Line Clear obtained from the station in advance. One copy of the same will be handed over to the official-in-charge of the motor trolley.

From S.M. _____
To,
Official -in-charge,
Motor Trolley No.....

You are permitted to take your motor trolley into the block section between stations _____ and _____ and on arrival at _____ station, you are required to sign the Train Signal Register in token of your having arrived _____ station with the motor trolley intact.

Private Number _____
Date _____

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Station Master.

- (ii) While leaving the station, an authority on Form T.32.B will be issued to pass the last Stop signal in the 'On' position. The relevant starting signals, when free, may, however, be taken 'Off'
- (iii) At the receiving station, the Station Master will arrange for the reception signals to be taken 'Off'
- (iv) On arrival at the other end of the block section, the official-in-charge of the motor trolley will deliver the authority to the Station Master with the endorsement that the motor trolley has arrived complete and sign with date and time on it. The authority will be retained by the Station Master and pasted in the station diary.
- (v) Out and in reports of the motor trolley will be given by the Station Masters concerned.
- (vi) To cancel Line clear for a motor trolley, messages will be exchanged between the Station Masters with Private Numbers. "Cancel last signal" signal will then be given.
- (d) Working of Motor Trolleys double line where Lock and Block instruments have been provided -

When a Motor Trolley has to enter the block section, the Station Master of the station from which the motor trolley has to leave will obtain Line Clear from the Station Master at the other end of the block section on telephone attached to the block instruments, as the block instruments are not operated.

He will then issue an authority on form T.32.B to the official-in-charge of the motor trolley, to pass the last stop signal in the 'On' position. The Private Number received from the Station Master in advance will be recorded on T-32-B and it should be clearly endorsed that 'Line Clear' has been obtained from the station in advance. An authority to enter the block section on the prescribed form given in sub-clause 14(c)(i) shall be given to the official-in-charge of the motor trolley.

At the receiving station, the Station Master will arrange for the reception signals to be taken 'Off'. On arrival at the station in advance, the official-in-charge of the motor trolley will deliver the authority to the Station Master with the endorsement that the motor trolley has arrived complete and sign with date and time on it. The authority must be retained by the Station Master at the receiving end and pasted in the station diary. The Station Master will then clear the block section supported by a Private Number.

To cancel Line Clear for a motor trolley, messages will be exchanged between the Station Master with Private Numbers. 'Cancel last Signal' signal will then be given.

- (e) Speed of motor trolley -

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The speed of motor trollies while passing over points and crossings, irrespective of whether the trolley is running on the straight or turn-outs, shall not exceed 15 KMPH.

(f) Spring Points -

- (i) The Station Master of the station situated short of the place where spring points are located, shall issue Caution Order to the person in-charge of the motor trolley giving the location of the spring points.
- (ii) The motor trolley shall stop dead in the rear of the spring points and then proceed over them only when they have been correctly set and clamped. Boards warning the existence of spring points are provided.

(g) A Motor Trolley following a Train or another Motor Trolley -

- (i) A motor trolley may follow a fully air braked train or another motor trolley, in the same block section during day light hours and clear weather only, both on the single and double line sections. When motor trolley follows a train or another motor trolley at minimum distance of half a kilometre should be kept with the train or trolley to be followed.
- (ii) For this purpose, the official-in-charge of the motor trolley shall obtain a "Motor Trolley Permit" from the Station Master concerned before entering the block section. The Motor Trolley Permit shall be prepared in duplicate by carbon process. One copy will be retained by the Station Master issuing the permit and the other will remain in the custody of the official-in-charge of the motor trolley till the next block station in advance is reached, where this permit shall be handed over to the Station Master on duty. The Trolley permit on collection by the Station Master shall be sent to the Divisional Railway Manager for record. The specimen form of the Motor Trolley Permit is given below -

Motor Trolley Permit

Station Stamp

Division _____
Date _____
_____ (designation of the Official-in-charge of the Motor Trolley).

You are hereby permitted to take your motor trolley into the block section between _____ and _____ stations, and to proceed cautiously upto _____ station _____ train/motor trolley which left _____ station at _____ hours on _____ (date).

On arrival at _____ station, you are requested to hand over

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this permit to the Station Master.

Received.

Station Master

Signature _____

Designation _____

Private Number _____

- (iii) The last Stop Signal shall not be taken 'Off' for the motor trolley following a train or another motor trolley. An authority on Form T.32-B to pass the same in the 'On' position shall be issued to the official in-charge of the following motor trolley.
- (iv) After complete arrival of the train or the preceding motor trolley at the station in advance the Station Master may receive the following motor trolley/trolleys by taking off signals on an unoccupied line, or take off the calling on signal or hand signal the motor trolley/trolleys on an occupied line, as convenient.
- (v) The 'Out' report for the preceding train or motor trolley shall be given and acknowledged in the usual manner and advice shall also be given at the same time of the number of trolleys that will follow. The time of departure of each of the following motor trolleys shall be given(together)to the station in advance after the last motor trolley has left the station in rear. The "IN" report of the preceding train or motor trolley shall not be given, until the last following motor trolley has arrived. The time of arrival of the preceding train or motor trolley and the time of arrival of each of the following motor trolleys supported by a Private Number shall be given together and recorded in the Train Signal Register of the despatching and receiving stations. Where token instruments are in use the token received from the preceding train or motor trolley shall be kept in the safe custody of the Station Master on duty and inserted in the block instrument, only after the arrival of the last following motor trolley.
- (vi) If there is more than one motor trolley to follow a preceding train or motor trolley, the Station Master will prepare and hand over a 'Motor Trolley Permit' to each official-in-charge and will add the words, 'Last Motor Trolley' on the permit of the official-in-charge of the last motor trolley. Each Official-in-charge of a motor trolley will hand over the trolley permit to the Station Master on duty at the station in advance. The official-in-charge of the last motor trolley besides handing over the trolley permit to the Station Master on duty at the station in advance, will also sign the Train Signal Register in token of his motor trolley having arrived intact indicating the time of arrival. The Station Master of the station in advance will only then clear back the block section.

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The Official-in-charge of the last motor trolley will ensure that his trolley is the last one to arrive at the station, even if the order of the other trollies is changed enroute due to any reason.

- (vii) In the event of a breakdown of the preceding motor trolley both on the single and double lines, the provisions contained in sub-clause (b)(i) and (ii) of Clause 14 above must be complied with.

In the case of a breakdown of the following motor trolley in section, it must be removed clear of the track and the official-in-charge must send an intimation in writing to the Station Master of the nearest station to this effect alongwith the 'Motor Trolley Permit'.

If the breakdown of the preceding motor trolley, this advice may be sent to the Station Master of the station in advance through the official-in-charge of the following motor trolley.

On the single line section, the official-in-charge of the preceding motor trolley will also hand over to the official-in-charge of the following motor trolley, Line Clear Ticket or token as the case may be, which shall be handed over to the Station Master at the station in advance by the official-in-charge of the following motor trolley in addition to the 'Motor Trolley Permit' in his possession.

Once a motor trolley has been removed from the track it must not be replaced unless the line has been blocked for the purpose.

- (h) Working of Motor Trolley during total interruption of communications-

If there is total interruption of communications, the Station Master on duty must advise the official-in-charge of the motor trolley of the same and the motor trolley shall be worked in the section in accordance with S.Rs.6.02-3 and S.R. 6.02-4.

15. Working of Lorries -

(a) Working of a lorry within station section.- Whenever a lorry has to work within station section, the Permanent Way Inspector or other official in-charge of the work will advise the Station Master in writing specifying the period during which it will work. The Station Master on duty, when granting 'Line Clear' or authorising the taking 'off' of signals for the reception and despatch of trains, will personally satisfy himself that the official-in-charge of the lorry is advised and that the lorry does not fall the path of trains. Slide collars shall be used on those slides governing the Home Signals of the line on which a lorry would be working.

- (b) Running of lorries -

(i) A lorry shall normally be run during day light hours.

(ii) A lorry may be worked without block protection when the official-in-charge, before putting a lorry on the line, has ascertained from the Station Master on duty whether line clear can be obtained for the lorry without causing detention to a train, and if no detention would be caused, Line Clear should be obtained. If line clear cannot be obtained without causing detention to a train,

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the official-in-charge of the lorry, after considering the urgency of the work to be done, should decide whether to place the lorry on the line without line clear being obtained or wait until line clear can be obtained for it.

(iii) Notwithstanding the provisions above, a lorry shall invariably be worked under block protection when -

- (1) it is necessary during an emergency to run it at night or when the visibility is restricted due to dust, storm, fog, rain or any other cause.
- (2) it is loaded with rails or girders.
- (3) it is loaded with specially heavy materials which cannot be readily unloaded, and
- (4) When it is working in certain sections with heavy curves, cuttings or on ghat sections, which are indicated in sub-clause (d) (i) of clause 12 above.

(iv) In circumstances other than those mentioned in item (iii) above, the following precautions must be taken while working a material lorry without block protection, sub-para (2) to (g) are retained.

(2) When the official-in-charge intends to place the lorry on the line in mid section, he shall issue a message on field telephone to the Station Masters of the stations on either side on single line and the Station Master of the station in rear on double line indicating the exact kilometerage where he will be placing the lorry on the line. This message shall be supported by a Private Number.

The Station Master who receives notice about the lorry to be put on line shall inform the official-in-charge of the lorry about particulars of trains which are expected to run on the section and also the time at which the lorry can be placed on the line.

When permission has been asked to keep the lorry on line from the block section, the Station Masters shall block the line and issue a message to the official-in-charge of the lorry intimating that the line has been blocked for the lorry. This message shall be supported by a Private Number.

The official-in-charge of the lorry shall under no circumstances keep the lorry on the line unless he has obtained acknowledgement in writing from the Station Master of the station at which the lorry enters the section that he has advised the Station Masters concerned in regard to the issue of Caution Order, or a message on telephone supported by a Private Number to the effect that the line has been blocked when the lorry is kept on line from the section.

TROLLY/LORRY NOTICE

(Working without Line Clear)

Notice No. _____

Station _____

Date _____ To,
Station Master _____ (Station) Trolley/Lorry No.

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is required to work between _____ and _____ stations
at _____ kms. from _____ hrs. to _____
hrs. It will leave _____ station at _____ hours of this
day for _____ station/Km No. _____.

Official-in-charge

To,
The official-in-charge of Trolley/Lorry
Trains due to arrive/pass this station at _____ hours have actually done so
except :

Train No. _____ is _____ minutes late.

I have exchanged advice with _____ station and
shall issue Caution Order to all Drivers until I receive advice of the removal of the
trolley/lorry.

*The line has been blocked for your Trolley/Lorry between _____
station to _____ station on Up/Down line and the block will be
removed only on receipt of the removal report of the Trolley/Lorry.

Private No. _____

Station Master

* Applicable when permission is given on the telephone.

(3) On receipt of this notice, the Station Master will indicate the particulars
of trains running on the section as shown in the form.

(4) The Station Master will then issue a message to the Station Master of
the station at the other end of the block section indicating the time and kilometre
where the material lorry will be working.

(5) On receipt of this message, the Station Master concerned will issue
Caution Orders mentioning the particulars as indicated under sub-clause (4)
above to all trains proceeding into the block section in which the lorry is working
without block protection.

(6) The above Caution Orders will continue to be issued till the removal
report in the prescribed form or through the field telephone supported by a Private
Number has been received from the Permanent Way Inspector, or the

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Official-in-charge of the material lorry and the 'lorry removed from the section 'signal has been received and acknowledged.

REMOVAL REPORT

Reference : Trolley/Lorry Notice No. _____ Date _____

Trolley/Lorry No. _____ arrived at _____ was removed from the track at Km _____ at _____ hours.

Removal Report received at _____ hours.

Station Master _____ Station.

*Private No. _____

_____ Official-in-charge

*To be given when the removal report is given on field telephone.

(7) A material lorry must be protected in accordance with G.R. 15.27 and S.R.15.27-1.

(8) On receipt of this message (of Lorry working without block protection), the Station Master concerned will issue Caution Orders as indicated under sub-clauses (4) and (5) above, to all trains proceeding into the block section in which the lorry is working to restrict the speed so as to enable the Driver to stop short of the Km, where the lorry might be working, on observing the danger signal.

In case, there is a gradient of 1 in 200 or steeper, additional speed restrictions must be recorded in Caution Order issued to the Drivers of goods/material trains and light engines proceeding in that direction. The speed restriction shall be B.G. 40 KMPH and N.G. 25 KMPH.

(9) When temporary single line working is introduced on a double line section, no material lorry shall be allowed to work in that section except in case of an emergency.

(c) LORRIES FOLLOWING ONE ANOTHER -

When lorries follow one another, a minimum distance of 2 telegraph posts should be kept. This should be increased by the official-in-charge of the lorry as required in accordance with gradient and other local conditions.

(d) WORKING OF LORRY DURING TOTAL INTERRUPTION OF COMMUNICATIONS -

Material lorries shall not be allowed to enter a block section when there is total interruption of communications. If, however, in a grave emergency, it is necessary for a material lorry to enter a block section when there is total interruption of communications, it is the responsibility of the official-in-charge of the material lorry to have it protected in accordance with the provision of G.R. 15.27 and S.R.15.27-1 and sub-clauses (c) (ii) and (iii) of Clause (12) above.

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(e) On double line, material lorries must go out on the right line and if necessary, they must push back on the same line. On no account a lorry must be transferred from one line to another in a block section.

(16) ADJACENT RUNNING LINES NOT TO BE FOULED.-

- (i) When working a trolley, motor trolley or lorry on the double line section, if the same is removed from the rails in the block section, it should be removed in such a way that the adjacent running lines are not fouled or infringed.
- (ii) In the case of lorries working in the block section on double line, when material is unloaded, it should be ensured that no running line is fouled.

(17) WHEN VISIBILITY IS IMPAIRED - when a trolley or lorry is working on a block section during day without block protection, if the visibility is impaired due to rain, dust, storm, fog, or any other cause, the trolley or lorry should be removed from the line and should not be replaced until the visibility is adequate.

(18) MILITARY RAIL PATROL BY CONVERTED MOTOR TROLLEY VEHICLES - Military rail motors used for patrol and other purpose will be treated in all respects as trains.

- (a) Such vehicles belonging to the Military Department and worked by a military Driver will only be allowed to run when accompanied by a competent railway servant or a military officer or other rank, who is in possession of a certificate issued by the ~~Chief Safety Officer~~ Chief Operation Manager or the Divisional Railway Manager. Such a person will act as a pilot and will be responsible for the observance of the General and Subsidiary Rules.
- (b) Military Drivers must at all times and in all circumstances obey the pilot's instructions in connection with the running of the rail motor.
- (c) Unless otherwise approved by the Commissioner of Railway Safety, the maximum speed of these rail cars will be -
 - 30 KMPH between stations,
 - 8 KMPH over turn-outs.

(d) In the event of a breakdown when a rail motor cannot be lifted and removed clear of the track, it will have to be pushed into the nearest block station. Until then the block section will remain blocked. While the vehicle is being pushed, it must be protected in accordance with G.R. 15.27 and S.R. 15.27-1.

(19) The running of trollies, motor trollies or lorries is prohibited between CSTM and Thane and on the Harbour Branch.

(20) UNAUTHORISED PERSONS ON TROLLEY/MOTOR TROLLEY / LORRY -

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Persons authorised to work a trolley, motor trolley or lorry shall not take anyone with them on trolley/motor trolley/lorry unless employed on the Railway ,and then only if duty requires, it ,except in case of sickness or other emergency, when a report should be made to their Divisional Officers.

(21) CONVEYANCE OF MOTOR TROLLIES, TROLLIES AND LORRIES IN TRAINS -

- (a) Motor trollies and trollies may be carried in the brakevans of goods and mixed trains, and also by passenger trains if there is room and provided the loading and unloading can be done without delaying the passenger train and they are not likely to cause damage to the packages in the van. Lorries will ordinarily be carried in the brakevans of goods and mixed trains and on sections where goods services are insufficient, by passenger trains, provided the conditions for the carriage of trollies and motor trollies by passenger trains are fulfilled.
- (b) Motor trollies and trollies may also be carried in suburban trains except during the peak hours of 8 to 11 and 16 to 20. Between CSTM and Kurla on the Suburban Section of the main line they must not be loaded and unloaded at any station except Byculla and Dadar.

S.R. 15.18-2. (A) (1) Cycle trollies are trollies which are propelled by pedalling instead of pushing. Cycle trollies can be removed from the track by two men. Seats should also be provided in cycle trollies for at least one person other than the person or persons pedalling to sit facing towards the rear continuously to give adequate warning of approaching trains.

(2) Cycle trollies shall be treated as push trollies in all respects for the purpose of these rules except where otherwise provided for.

(CS 14/2 vide Rly Board's letter no. 2014/Safety(A&R)/19/13 dated 07.07.2014)

(B) Rules for working of a Cycle trolley -

(1) Subject to their being certified competent the following officials and staff are permitted to use cycle trolley.

- (i) All Officers and Inspectors of the Engineering and Signal Telecommunication Departments.
- (ii) Such staff of the Signal and telecommunication and Engineering Departments as authorised.
- (iii) All officers, Inspectors and other staff of Operating and Commercial Departments as authorised.

(2) No Railway servant shall use a cycle trolley unless he is in possession of a permit signed by Principal Chief Engineer, Chief Track Engineer, Chief Bridge Engineer, Principal Chief Operations Manager , Principal Chief Signal and Telecommunication Engineer, Chief Signal and Telecommunication Engineer (Construction), Divisional Railway Manager and Junior administrative officers of the Engineering and Signal and Telecommunication Departments of the division.

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(3) The permit will only be issued after the person, in whose name it is issued, has been examined and declared conversant with the rules for running of cycle trollies. The permit shall be valid for a period of one year from the date of issue.

(4) Each cycle trolley must have marked on it the number, designation and code initials of the headquarters station of the official, to whom it is allotted, painted in white letters conspicuously.

(5) (a) a Cycle trolley shall normally be driven or pedalled. It may be pushed when necessary but should not be pulled. Use of sails or any other unauthorised aid for their propulsion is strictly prohibited.

(b) The official-in-charge of cycle trolley while approaching a level crossing, should look out for road traffic and ensure safe passage of his cycle/moped trolley.

(c) Whenever a cycle trolley placed on a platform for being loaded on a train, or for any other purpose, it should be placed parallel to the track properly locked and in-charge of a railway servant. It should be so placed as not to come in the way of passengers and railway staff.

(6) Equipment of Cycle Trolley - The following equipment must be provided on a cycle trolley when placed on a running line -

(i) During the day a red flag fixed to a staff placed in the trolley frame so as to be clearly visible.

(ii) During night, a light shall be placed to show conspicuously, on the double line, white to the front and red to the rear and on single line, red both to the front and in the rear. Further a five cell electric torch must also be carried and used to illuminate the track ahead.

(iii) 10 detonators , 2 red flags, 2 green flags, 1 padlock and chain and 2 hand signal lamps.

(iv) Every cycle trolley must be fitted with an efficient hand brake.

(7) The total number of persons including the persons pedalling or driving, which can be carried on a cycle trolley must not exceed five.

(8) Minimum number of trolley on :

(i) When a cycle trolley is run under block protection, it must be accompanied by three Persons including the persons pedalling or driving.

(ii) When running without block protection, a cycle trolley must be accompanied by 3 persons including the person pedalling or driving. One man must sit on the rear seat facing in rear and keep a look out for any following train.

(9) Working of cycle trollies -

(a) At night time, all cycle trollies must invariably work under block protection. If the speed of the moped trolley is more than 15 KMPH it should work under block protection.

(b) Working without block protection: When it is proposed to work cycle trolley outside station limits, without block protection, the official-in-charge of

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cycle trolley shall ascertain the whereabouts of trains that he is likely to encounter on the section before he places cycle trolley on the line.

(c) Use of Cycle/Moped trolley is not permitted in ghat sections and sections where series of cuttings and curves restrict clear visibility in front or in rear to less than 800 metres and where observance of GR.15.26 would require more than a total of 2 men to protect the trolley from front or rear. The sections on which cycle trollies are not permitted to work on the above basis on each division will be notified by the Divisional Railway Manager.

(d) Cycle/Moped trolley shall invariably be worked on line clear under the system of working on sections where special precautions in accordance with G.R.15.27 are necessary.

(10) Spring points - The official-in-charge of cycle trolley shall enquire about the location of spring point before starting. He shall stop dead in the rear of the spring point and shall lift the cycle trolley and place it beyond the spring point.

(11) Adjacent running lines not to be fouled : When working cycle trolley on the double line section, if the same is removed from the rails, in the block section, it should be removed in such a way that the adjacent running lines are not fouled or infringed.

When two cycle trollies are running together in the same direction they should be kept one telegraph post apart.

S.R. 15.18-3. Working of Dollys -

(1) Subject to their being certified competent, all Inspectors and Maistries of Permanent way are permitted to use Dollys.

(2) No Railway servant shall use a Dolly unless he is in possession of a permit signed by an Engineering Official not lower in rank than that of Senior DEN/DEN.

(3) The permit will only be issued, after the person, in whose name, it is, issued, has been examined and declared to be conversant with the rules for working of dollys. The permit shall be valid for a period of one year from the date of issue. It shall ,therefore, be renewed annually after the person holding it has been examined as mentioned above.

(4) Each dolly must have marked on it, the number, designation and code-initials of the head quarter station of the official, to whom it is allotted, painted in white letters, conspicuously.

(5) Dollys should always be pushed and not pulled.

(6) Dollys shall normally be worked during day light hours. If it is necessary to work at night, it shall be worked under block protection.

(7) The official in charge of the dolly, while approaching a level crossing should look out for road traffic and ensure safe passage of his dolly.

(8) Equipment of Dollys -

(i) Following equipment should be provided on Dollys when placed on running line.

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- (a) During the day time a red flag, fixed to a staff of not less than 180 cm. in height should be displayed on each dolly so as to be clearly visible.
- (b) During the night, a light shall be placed to show conspicuously, on the double line, white to the front and red to the rear and on single line, red both to the front and the rear.

(ii) A portable field telephone in working order must be carried with the in-charge of dolly when dollies are put on track.

(9) Minimum number of Dollymen -

A minimum number of 3 dollymen should man each dolly exclusive of flagmen to protect them with flags and detonators.

(10) System of working of Dollies -

(a) At night time all dollies must work under block protection.

(b) Working of Dollies within station section -

Whenever a dolly has to work within Station section, the official in-charge of the Dolly will advise the Station Master in writing specifying the line and the period during which it will work. The Station Master on duty before authorising taking 'off' of signals for reception and despatch of trains, will personally satisfy himself that the official in-charge of the dolly is advised and that the dolly does not foul the path of trains. Slide/Lever Collars shall be used on those slides/levers governing the signals of the line on which dolly would be working. The speed of Dolly will not exceed 3 KMPH at any time.

(c) Working Dollies in Block section without Block protection -

(i) Dollies shall normally be worked without block protection. When it is proposed to work dollies outside the station section, without block protection, the official in-charge of the dolly shall ascertain the whereabouts of trains that he is likely to encounter on the section before he places the dolly on the line.

(ii) Where due to curves, cuttings or gradients, a clear view is not available for a distance of 1200 Meters, the dollies must be protected in accordance with G.R.15-27 and SR 15-27-1.

(iii) When the nature of the line is such that the flagmen cannot be seen by the person in-charge of the dollies, the later must arrange, before entering the section, to take with him sufficient number of Gangmen with hand signals and banner flags so that the required number of flagmen can be provided for repeating the signals to the person in charge of the dollies.

(iv) If the visibility is impaired due to rain, dust, storm, for or any other cause the dolly shall be removed from the line and should not be replaced until the visibility is adequate.

(v) On the sections enlisted under Rule SR 15-18-1(12)(d)-(i) special precautions should be taken as in SR 15-18-1(12)(d)-(ii) 1 to 4, when working dollies without block protection due to sharp curves, cuttings tunnels etc.

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- (vi) Dollys shall invariably be worked under block protection when -
 - (a) it is necessary during an emergency to work it at night
 - (b) the visibility is restricted due to dust, storm, fog, rain or any other causes.
 - (vii) During total interruption of communications or when TSL working is in force on a Double line section Dollys shall not be allowed to enter a block section. In case of extreme emergency, if it is indispensable to work dollys, the person in charge of dollys should arrange for protection as in GR 15-27 and S.R.15.27-1 and ensure that the speed of the dolly does not exceed 3 KMPH at any time.
- (11) Mode of working Dollys -
- (i) For carrying of single rail, 2 rail dollys shall be used and for transporting a 3 rail panel 6 number of rail dollys shall be deployed. The minimum number of dollymen shall be 3 (three) per dolly.
 - (ii) Rail dolly should run on the cess rail in case of double line to ensure safety of adjacent track.
 - (iii) As soon as the train is sighted, the dolly shall be instantly released by the release lever arm from the running line thus allowing the rail to drop on the ballast shoulder far away from the running line. Simultaneously the rail dolly is turned over and all infringements cleared before the passage of the train. All these operations normally should not take more than 2 minutes.
- (12) On Ghat sections, rail dollys are not to be worked.

15.19. Red flag or light to be shown - Every lorry or trolley when on the line shall show a red flag by day and a red light by night, during thick, foggy or tempestuous weather impairing visibility or in a tunnel in the directions from which a train may come.

15.20. Equipment of trolley, lorry or motor trolley - Each trolley, lorry or motor trolley shall have the following equipment -

- (a) two hand signal lamps,
- (b) two red and two green hand signal flags,
- (c) sufficient supply of detonators,
- (d) a chain and a padlock,
- (e) a copy of the Working Time Table and all correction slips and appendices, if any, in force on that section of the railway over which the trolley, lorry or motor trolley is to run,
- (f) a motor horn and a search light (for motor trolley only),
- (g) two banner flags (for lorry only), and
- (h) such other articles as may be prescribed by the Railway Administration in this behalf.

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Note : The Official in charge of the trolley, lorry or motor trolley shall also be in possession of a watch in addition to the prescribed equipment.

15.21. Efficient breaks - No lorry or trolley shall be placed on the line unless it is fitted with efficient breaks.

15.22. Qualified person to be incharge of lorry or trolley when on the line -

(1) No lorry or trolley shall be placed on the line except by a qualified person appointed in this behalf by special instructions.

(2) Such qualified person shall accompany the lorry or trolley, and shall be responsible for its proper protection and for its being used in accordance with special instructions.

S.R..15.22.1. Officials who are qualified to work a trolley/lorry/motor/moped trolley and cycle trolley are enlisted in S.R. 15.18-1 (1) and 15.18-2 (B)(1).

The instructions for protection of trollies/lorries are given in S.R. 15.27-1.

15.23. Attachment to train prohibited - No lorry or trolley shall be attached to a train.

15.24. Time of running - A lorry shall ordinarily be run only by day and when the weather is sufficiently clear for a signal to be distinctly seen from an adequate distance, which shall never be less than 800 metres.

15.25. Motor Trolley - A motor trolley shall only be run in accordance with special instructions.

15.26. Protection of trolley on the line - The qualified person in charge of a trolley shall, before leaving a station ,ascertain the whereabouts of all approaching trains, and shall , when a clear view is not obtainable for an adequate distance.-

(a) on a single line, in both directions, or

(b) on a double line, in the direction from which trains may approach, take such precautions for the protection of his trolley as may be prescribed by special instructions.

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15.27. Protection of lorry on the line -

(1) Whenever it is proposed to place a lorry, whether loaded or empty on the line, the line shall, if it is possible to do so, without interference with the working of trains, be blocked under the rules for working of trains.

(2) Except under approved special instructions, when the line has not been so blocked and a lorry whether loaded or empty is placed on the line, the lorry shall be protected -

(a) on double line, by one or two men as required, at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge, carrying a banner flag across the track and another man plainly showing a Stop hand signal at a distance of not less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the lorry in the direction from which trains may approach, or

(b) on single line, by one or two men as required following and preceding the lorry at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge, carrying a banner flag across the track and another man plainly showing a Stop hand signal at a distance of not less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the lorry on either side.

(3) Each man so following or preceding the lorry at a distance of 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge shall be provided with detonators and place three on the line, 10 metres apart, immediately the lorry comes to a stand for the purpose of either unloading or loading or should any train be seen approaching, and continue to display the Stop hand signals.

(4) The man or men carrying the banner flag shall immediately fix the banner flag across the track immediately the lorry comes to a stand or a train is seen approaching and continue to display the Stop hand signal.

(5) In all cases where the Flagmen in advance or in rear cannot be kept in view from the lorry, additional intermediate Flagmen shall be posted to relay the signals.

(6) The Stop Signals and detonators shall not be removed until the Flagmen have received the orders to withdraw them from the official-in-charge of the lorry.

S.R.15.27-1. Protection of Lorry on the line -

When a lorry, whether loaded or empty, is placed on the line, without block protection, the lorry shall be protected :

PERMANENT WAY AND WORKS

- (a) On double line, by two men at a distance of 600 metres on Broad Gauge and 400 metres on Narrow Gauge, carrying a banner flag held with staff of 2 metres height across the track and another man plainly showing a danger hand signal at a distance of not less than 1200 metres on B.G. and 800 metres on N.G. from the lorry in the direction from which trains may approach.
- (b) On a single line, by two men, following and preceding the lorry at a distance of 600 metres on B.G. and 400 metres on N.G. carrying a banner flag held with staff of 2 metres height across the track and another man plainly showing a danger hand signal at a distance of not less than 1200 metres on B.G. and 800 metres on N.G. from the lorry on either side.
- (c) Each man so following or preceding the lorry at a distance of 1200 metres on B.G. and 800 metres on N.G. shall be provided with detonators and place three on the line 10 metres apart immediately the lorry comes to a stand for any purpose or should any train be seen approaching, and continue to display the danger hand signal.
- (d) The men carrying the banner flag shall immediately fix the banner flag across the track immediately the lorry comes to a stand or a train is seen approaching, and continue to display the hand danger signal.
- (e) The danger signals and detonators shall not be removed until the flagmen have received the orders to withdraw them from the official-in-charge of the lorry.
- (f) When the nature of the line is such that the flagmen cannot be seen by the person in charge of the lorry, the latter must arrange, before entering the section, to take with him sufficient gangmen with hand signals so that the required number of flagmen can be provided for repeating the signals to the person in-charge of the lorry.

15.28. Lorries and trollies out of use - A lorry or trolley when not in use, shall be placed clear of the line, and the wheels thereof be secured with a chain and padlock.

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LEVEL CROSSINGS

CHAPTER XVI

LEVEL CROSSINGS

16.01. Knowledge of signals - No person shall be appointed to be a Gateman unless he has a knowledge of signals.

SR-16.01-1 :- Gateman competency certificate:

a) ~~No person shall be appointed to work as a Gateman unless he is in possession of a certificate of competency. This certificate shall be issued as per the guidelines given below :-~~

Particulars of staff	Competency Certificate to be signed by	Counter signed by
Gateman working on Interlocked Traffic gates.	TI / Safety Counselor (Tfc.) and SE (Sig) / Safety Counselor (S&T)	ADSO
Gateman working on Interlocked Engineering gates.	SE (P.Way)/Safety Counselor (P.Way) and SE (Sig)/Safety Counselor (S&T)	ADEN
Gateman working on Non interlocked Traffic gates.	TI / Safety Counselor (Tfc.)	ADSO
Gateman working on Non interlocked Engineering gates.	SE (P.Way)/Safety Counselor (P.Way)	ADEN

b) ~~Preferably, these certificates shall be issued at the time of refresher or initial training in divisional training centers after proper training, counselling and evaluation of knowledge and understanding of the gateman. The validity of the certificate will be three years.~~

c) ~~The controlling officials must ensure that Gatemen posted at a level crossing gate under their control are fully conversant with its working before they are posted to work independently and in possession with the competency certificate.~~

d) ~~The competency of Switchman/ Cabin man / Lever man regarding working of gate should be checked at ZTC/Divisional Training Centre. The Switchman/ Cabin man /Lever man competency certificate should include their competency regarding~~

LEVEL CROSSINGS

operation/ working of gates also. The format of the competency certificates should be modified accordingly.

[CS 7/6 Ref: Office note T.361.P. G&SR revision dated 22.01.03]

SR 16.01-1:- Gateman competency certificate:

- (a) No person shall be appointed to work as a Gateman unless he is in possession of a certificate of competency. This certificate shall be issued as per the guidelines given below:

Particulars of staff	Competency Certificate to be signed by	Counter signed by
Gateman working on Interlocked Traffic gates.	TI and SE (Sig)	AOM(G)
Gateman working on Interlocked Engineering gates.	SE (P.Way) and SE (Sig)	ADEN
Gateman working on Non-interlocked Traffic gates.	TI	AOM(G)
Gateman working on Non-interlocked Engineering gates.	SE (P.Way)	ADEN

- (b) Preferably, these certificates shall be issued at the time of refresher or initial training in divisional training centers after proper training, counseling and evaluation of knowledge and understanding of the gateman. The validity of the certificate will be three years.
- (c) The controlling officials must ensure that Gatemen posted at a level crossing gate under their control are fully conversant with its working before they are posted to work independently and in possession with the competency certificate.
- (d) The competency of Switchman/ Cabin man / Lever man regarding working of gate should be checked at ZRTI/Divisional Training Centre. The Switchman/ Cabin man / Lever man competency certificate should include their competency regarding operation/ working of gates also. The format of the competency certificates should be modified accordingly.

[CS/11/19 (Ref: This office note No.TR/G&SR/Rev./101 dated 11.03.2011.)]

LEVEL CROSSINGS

16.02. Supply and care of equipment - Every Gateman shall -

- (a) be supplied with day and night hand signals, detonators, and other prescribed equipment, and
- (b) keep such signals, detonators and other equipment in proper order and ready for use.

S.R.16.02-1. The following equipment should be available at every manned level crossing -

- (i) Whistle
- ~~(ii) Three Hand signal lamps with Red and Green slides.~~
- (ii) Three LED based flashing tri-colour Hand signal lamps.
- (iii) Hand signal flag (Green)-1 (mounted on stick).
- (iv) Hand Signal Flags (Red)-3 (mounted on sticks).
- (v) Spare chains with padlocks -2.
- ~~(vi) (a) Three Fusees - On Ghat, Suburban, Automatic Block Signalling and Double and Multiple Line sections and~~
~~(b) One Fusee - On single line sections. [CS 3/6] Deleted CS10/26~~
- (vii) Detonators in a tin case-10 (or more if prescribed).
- (viii) Tommy-bar-1
- (ix) Water-pot or bucket-1
- (x) Mortar-Pan-1
- (xi) Rammer-1
- (xii) Pick-exe-1
- (xiii) Staves suitable for exhibition of red flag or red lamp-2
- (xiv) Phowrah-1
- (xi) Banner Flags - 2

S.R. 16.02-2. Each manned level crossing must also have the following and should be maintained upto date.

- (i) Working instructions of the level crossing gate
- (ii) Gateman's Rule Book
- (iii) Gate Inspection Book
- (iv) Duty Roster
- (v) Public Complaint Book

16.03 Road Traffic –

LEVEL CROSSINGS

(1) Subject to such special instructions in that behalf as are permitted by these rules, all gates at level crossings shall be kept constantly closed and securely fastened across the thoroughfare on both sides of the railway and shall only be opened when it is necessary and safe to open them for the passage of road traffic:

Provided that any Railway Administration may from time to time issue special instructions for any particular level crossing or class of level crossing and may by such special instructions permit the gates at any level crossing or class of level crossing to be normally kept open to road traffic and may therein prescribe the conditions under which gates are to be kept closed against road traffic for the passage of a train or trains or for the purposes of any other railway operation; and all such special instructions so long as they be not cancelled or superseded shall for the purposes only of the Railway Administration issuing the same be deemed to be General Rules within the meaning and subject to the provision of section 47 of the Act.

(2) If for any reasons the gates at level crossings cannot be so closed/fastened across the thoroughfares on both sides of the track, action to prevent the approaching trains, if any, from running into the gate may be taken in accordance with stipulation laid down under General Rules 16.06.

(3) Gatemen, where provided, shall, at all level crossings be prepared, whenever such level crossings be open to road traffic, to show a Stop hand signal to any approaching train.

(4) Where no Gateman is specially provided for night duty at a level crossings, the gates there at shall, subject to special instructions, be locked at night and opened only to pass road traffic in such manner as may be prescribed by special instructions.

S.R.16.03-1.

- (a) The detailed working instructions of level crossing gates including its normal position will be incorporated in the Station Working Rules in respect of level crossing gates which are situated within station limits and also of those engineering gates which are provided with telephonic communication with the station. All the gate working instructions, including Traffic and Engineering gates will be signed by ~~Sr.DSO / D.S.O~~ Sr.DOM/DOM/AOM and D.E.N. In case of interlocked gates, the gate working instructions will be signed by Sr. DSO / D.S.O., D.E.N. and D.S.T.E. In addition to English version a signed copy of the instructions in regional language should be available at the level crossing gates.
- (b) The normal position of all non interlocked gates will be closed to road traffic. On exceptional circumstances, B & C class level crossing gates where road traffic is heavy may be kept open for road traffic with the prior approval of ~~ESO~~ PCOM and PCE provided the following conditions are satisfied.
- (i) The level crossing should not be on a suburban section.

LEVEL CROSSINGS

- (ii) All level crossings should be equipped with Co-acting lifting barriers except those located on branch lines or on sections where road traffic is heavy and rail traffic is comparatively light where provision of lifting barriers need not be insisted upon.

[CS 1/6]

- (iii) The section concerned should not have automatic block signalling.
- (iv) The level crossing should be provided with a telephonic connection with the Station Master and should have a system of obtaining private number from Gateman in token of having closed the gate.
- (v) The railway track at the level crossing should be straight on either side to afford a clear view of an approaching train.
- (vi) As long as the gate is kept open for road traffic a red flag by day time and a red light during night should be displayed towards the approaching train on either side of the level crossings.
- (vii) The level crossing shall be provided with Whistle Board on either side at an adequate distance to enjoin the Driver of approaching train to give audible warning of the approach of train to the road users.
- (viii) Adequate numbers of Gatemen are provided. All such proposals should be personally decided by the D.R.M and with details submitted for approval of the PCOM and C.E.

Review of such level crossings should be taken every year and attempts should be made to provide necessary facilities and upgrade them to 'A' class at the earliest.

All gates shall be closed for road traffic in the event of failure of telephone and also, if the visibility is impaired due to rain, thick, foggy or tempestuous weather and shall be opened only when necessary provided no train is approaching.

- (c) Where no gateman is specially provided for night duty at a level crossing, the gates there at shall be closed and locked against road traffic by the gateman of day duty after his duty hours and should give his private number to the station/cabin concerned and the key should be kept with the gateman only. In a traffic gate, such gateman should give his private number after ensuring the closure and padlocking of gate and handover the keys to the Station Master concerned. Likewise, while the gateman resumes his duty at a gate in the day time, he should give his private number to the station/cabin concerned as an assurance of having resumed duty.

[CS 1/5]

- (d) Where there is no rail traffic during night, the gateman of day duty, after his duty hrs, may leave the gate open for road traffic. Before leaving the gate, the gateman will ask permission to do so from the controlling SM under exchange of private number. SM will give such permission only after ensuring that there is no train in the block section. Keys of gate lodge will be kept by gateman. Likewise, while the gateman resumes his duty at a gate in the day time, he will exchange private number with the controlling SM as an assurance of having

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resumed duty. SM will ensure the availability of gateman at the gates in the section before resumption of train working in the block section.

[CS 7/10 Ref: Office note T.361.P. G&SR revision dated 05.01.04]

S.R. 16.03-2.

(a) *Non-interlocked level crossing gate not provided with telephone :*

(i) Traffic Gate : It will be the responsibility of the Station Master to ensure that before taking 'Off' signals for reception/despatch of trains or for passage of trains at stations where signals are not provided or become defective or during shunting operations, the level crossing gates are closed and locked to the road traffic and key of the gate is in possession of the Station Master. The detailed instructions should be incorporated in the Station Working Rules.

(ii) Engineering Gate : The normal position of gate shall be closed and locked to the road traffic. A Stop Board (with luminous paint and with carex reflector) shall be fixed at a distance of 100 metres in either side of the gate. All trains must stop at the Stop board and Driver, after ensuring that the gate is closed to the road traffic shall pass his train cautiously.

The Gateman, before opening the gate for road traffic, shall ensure that no train is approaching to the gate then he shall display danger signal at either side of the track at a distance of 5 metres then he shall open the gate for passing road traffic keeping a red flag, hand signal lamp ready in his hand to stop any approaching train. After passing road traffic, the gateman shall again close and lock the gate. Thereafter, he will remove the danger signal planted on either side of the gate.

~~———— (b) (1) Interlocked gates provided with signals, the normal position of which is closed to road traffic and Non interlocked gates provided with telephonic communication with Station/Cabin ————~~

~~———— (i) Before permitting each train to enter the block section, the Station Master shall ask the Gateman on the telephone whether the gate is closed to the road traffic for the passage of a train. The Gateman after ensuring that the gate is actually closed to the road traffic and locked, shall give a private number to the Station Master in assurance of gate being actually closed and locked to the road traffic.~~

~~———— (ii) The Station Master shall not permit any train to enter the block section unless he is assured of the closure and locking of the gate against the road traffic by the Gateman supported by a private number.~~

~~———— (iii) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master shall adhere to the procedure prescribed in S.R. 16.03 2 (e) & (f) below.~~

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- ~~(iv) In case the Gateman desires to open the Gate for passing road traffic, he should ensure that he has not exchanged any private number with the station/cabin as per (b)(i) above and no train is approaching the gate. Before opening the gate for road traffic he shall display danger signal at either side of the track at a distance of 5 metres. Then he shall open the gate for passing the road traffic keeping a red flag/hand signal lamp ready in his hand to stop any approaching train.~~
- ~~(v) In the event of failure of the telephone, if the gate is required to be opened for the passage of road traffic, the Gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He will then plant a red banner flag, during day and a hand signal lamp with the red light during night, 5 metres away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag/hand signal lamp ready in his hand to stop any approaching train till the road traffic is clear. After the passage of road traffic he shall close the gate against the road traffic and lock it retaining the key in his personal custody. Thereafter he will remove the danger signal planted on either side of the gate.~~
- ~~(vi) The Station Master and Gateman shall maintain records of exchange of private numbers for all trains in a register as per the proforma given below:~~

SR 16.03-2 (b) Non-interlocked gates provided with telephonic communication with Station/Cabin, the normal position of which is closed or open to road traffic -

- (i) Before permitting each train to enter the block section, the Station Master shall ask the Gateman on the telephone whether the gate is closed to the road traffic for the passage of a train. The Gateman after ensuring that the gate is actually closed to the road traffic and locked, shall give a private number to the Station Master in assurance of gate being actually closed and locked to the road traffic.
- (ii) The Station Master shall not permit any train to enter the block section unless he is assured of the closure and locking of the gate against the road traffic by the Gateman supported by a private number.
- (iii) In case the Gateman is not responding on the telephone or in case the telephone becomes defective or private number is not received from the Gateman, the Station Master shall adhere to the procedure prescribed in S.R. 16.03-2 (e) & (f) below.
- (iv) (a) In case the Gateman desires to open the Gate for passing road traffic, he should ensure that he has not issued any private number to the station/cabin as per (b)(i) above and no train is approaching the gate. Before opening the gate for road traffic he shall display danger signal at either side of the track at a distance of 5 metres. Then he shall open the gate for passing the road traffic

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keeping a red flag/hand signal lamp ready in his hand to stop any approaching train.

- (b) For 'Closed to Road Traffic' Level crossing Gates - Gateman shall immediately close the Gate against the road traffic after passage of Road traffic and thereafter he will remove the danger signal planted on either side of the gate.

Note : Normal position of all Non-Interlocked Level Crossing Gates should be strictly adhered to, by Gateman.
(CS 15)

- (v) In the event of failure of the telephone, if the gate is required to be opened for the passage of road traffic, the Gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He will then plant a red banner flag, during day and a hand signal lamp with the red light during night, 5 metres away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag/hand signal lamp ready in his hand to stop any approaching train till the road traffic is clear. After the passage of road traffic he shall close the gate against the road traffic and lock it retaining the key in his personal custody. Thereafter he will remove the danger signal planted on either side of the gate.
- (vi) The Station Master and Gateman shall maintain records of issue of private numbers for all trains in a register as per the proforma given below:

(Note: No change in proforma.)

CS 11/20(Ref: This office note No.TR/G&SR/Rev./101 dated 11.03.2011.)

STATION MASTERS/GATEMENS REGISTER

Gate	Train No.	Time ASM asked assurance for closure of gate.	Time and Private number given by Gateman in assurance of closure of the gate.	
			Time	Private Number

~~SR 16.03.2 (b)(2) : Working of trains at non interlocked gates provided with telephone which are kept normally open to road traffic and situated on branch lines where the running time of any train between gate and station is more than 10 minutes :~~

- ~~i) A permanent speed restriction board of 15 Kmph will be erected at a distance of 500 metres from the level crossing in each direction of the approaching train.~~
- ~~ii) The SM will advise the gateman about the train, before permitting a train into the block section under exchange of private number.~~

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- iii) On getting advise from the SM, the gateman shall be ready for closing the gate after ensuring that no vehicle is stuck in between the gates and level crossing has been cleared off of all the obstructions for safe passage of the train. Then the gateman will close and lock the gate and show green hand signal to the driver. After passage of the train, he will advise the time to SM.
- iv) The Driver shall sound whistle continuously from the whistle board and observe the speed restriction of 15 kmph, on getting green hand signal from the gateman, he may resume normal speed.
- v) If the driver does not find the gateman, he will stop the train before level crossing, advise the assistant driver to close the gate and pass the gate cautiously. He will also report the fact to the SM of the next station.
- vi) The SM will issue caution order to all drivers advising the fact and advise SE (P.Way) to make arrangement for gateman.
- vii) In case of failure of telephone or when gateman fails to attend the phone, trains should be worked as per procedure laid down in the SR 16.03.2 (e).
- viii) The Gateman and the SM shall keep record of the private numbers exchanged and train timings in the following proforma :

Gatemen—SM's register

Train No.	Time of information given received	Private number		Time of closing and locking the gate	Time train passed the gate.
		SM	G/man		

[CS 6/5 (a&b) Ref : Office note No. T.361.P G&SR Rev . dated 20/12/01 and 22/1/2002 CS 6/5

Existing SR 16.03.2(b) issued vide correction slip no. 6 item no. 5 is deleted.

In any section where the working of the gates can not be done in accordance with the SRs given under GR 16.03, the suitable gate working instructions will be made by the division and sent to HQ for COM's approval as special instructions.

Office Note No. T. 361.P.CS/G&SR 1999 edition Dated 21.01.2004 CS 8/1

~~(e) Interlocked Level Crossing gate provided with telephone and gate signals—~~

- ~~(i) The normal position of gate generally is open to road traffic.~~
- ~~(ii) The Station Master shall advise the Gateman of the passage of train on the telephone, before permitting a train to enter into the block section.~~

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~~(iii) On getting advice of a train, the Gateman shall ensure that the gate is closed and locked to the road traffic and then take off Gate signals.~~

~~(iv) In case the Gateman is not responding on the telephone or in case the telephone becomes defective, the Station Master shall adhere to the procedure prescribed in S.R. 16.03-2 (e) and (f).~~

~~(v) In the event of failure of the telephone, the gateman shall act as follows—~~

~~He shall ensure that the gate signal is in 'On' position and the signal lights are burning brightly during night. Where the normal position of gate is open to road traffic, he shall keep a good look out to ensure that no train is approaching from either side. Whenever he finds a train approaching the gate he shall ensure that the gate is closed and locked to the road traffic and then take off the gate signal. Through the Driver of the first train, he shall inform the Station Master that the gatephone is not working.~~

~~(vi) In case the interlocking of the gate and signals fails due to damage to the gate leaves/ barriers or any other reason the gate signal protecting the gate shall be treated as defective and it should be ensured that the signal is kept in 'On' position. The signal shall not be taken 'Off' unless the interlocking is restored. The train shall be worked as per the procedure laid down in S.R. 16.03-2(b).~~

21. The Existing SR 16.03-2(c) at page no. 390 of G&SR 1999 edition is revised to read as under –

SR 16.03-2(c) Interlocked Level Crossing gate provided with telephone and gate signals -

(i) The normal position of which is closed or open to road traffic.

(ii) The Station Master shall advise the Gateman of the passage of train on the telephone, before permitting a train to enter into the block section.

(iii) On getting advice of a train, the Gateman shall ensure that the gate is closed and locked to the road traffic and then take off Gate signals.

(iv) In case the Gateman is not responding on the telephone or in case the telephone becomes defective, the Station Master shall adhere to the procedure prescribed in S.R. 16.03-2 (e) & (f).

(v) In the event of failure of the telephone, the gateman shall act as follows -

He shall ensure that the gate signal is in 'On' position and the signal lights are burning brightly during night. Where the normal position of gate is open to road traffic, he shall keep a good look out to ensure that no train is approaching from either side. Whenever he finds a train approaching the gate he shall ensure that the gate is closed and locked to the road traffic and then take off the gate signal. Through the Driver of the first train, he shall inform the Station Master that the gate phone is not working.

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(vi) In case the interlocking of the gate and signals fails due to damage to the gate leaves/ barriers or any other reason the gate signal protecting the gate shall be treated as defective and it should be ensured that the signal is kept in 'On' position. The signal shall not be taken 'Off' unless the interlocking is restored. The train shall be worked as per the procedure laid down in S.R. 16.03-2(b).

CS 11/21(Ref: This office note No.TR/G&SR/Rev./101 dated 11.03.2011.)

(d) A level crossing gate once closed for road traffic, after the advice of the approach of a train received from Station/Cabin, shall not be reopened until after the passage of the entire train past the gate. In the case of extreme emergency (e.g. train parting, accident etc. in the section). When the Gateman has to open the gate for road traffic before the passage of the train, he shall put back the signal, if any, to 'On' if a train is not approaching it. The Gateman shall also advise the Station/Cabin before opening the gate and take his guidance, if any. The Gateman shall plant the staves on either side of the gate with red banner flag/lamp at 5 metres length on the line and then open the gate for road traffic. In addition, he shall be prepared to stop any approaching train short of the gate with hand danger signal.

(e) In the event of failure of the telephone or the Gateman failing to attend the telephone, the Station Master shall not allow any train to enter the section, unless the Guard and Driver have been advised to the effect by means of a Caution Order. The Station Master having the telephonic communication with the gate, shall advise the Station at the other end under the exchange of private numbers to issue Caution order before he grants 'Line Clear'.

(f) The Driver on receipt of Caution Order shall -

- (i) use engine whistle frequently to attract the attention of the Gateman.
- (ii) Proceed cautiously and be prepared to stop short of the level crossing gate.
- (iii) Pass the gate cautiously, if the Gateman is present and the gate is closed.

If the Driver does not find the Gateman at the gate, he must stop short of the level crossing and depute his Assistant Driver to see the condition of the gate. If the gate is closed, the Assistant Driver will give the all right signal. If the gate is not closed the Assistant Driver must close the gate and then give the all right signal. In the absence of the Assistant Driver, the Driver may take the assistance of the ~~Assistant Guard~~/Guard.

After passing the gate, the Driver shall stop clear of it to pick up the Assistant Driver who will reopen the gate for passage of road traffic.

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In case, Driver does not find the Gateman at the gate, he must stop at the next station (even if it is a run through train) and advise the Station Master stating the condition of the level crossing gate.

The Station Master, on receipt of the message from the Driver, will advise the station in rear, Notice station and Section Controller, P.W.I. and ASM concerned and the Gangmate of the gang for posting of a gateman.

The Caution Order will continue to be issued till such time the Station Master has got the assurance of the presence of the Gateman at the gate.

16.04. Gateman to observe passing trains - Except where otherwise prescribed under special instructions, the Gateman shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.

S.R. 16.04-1. The Gateman at all level crossing gates should stand attentively at the gate lodge side facing the track with furred red and green flags during day in right and left hands respectively and at night hold the hand signal lamp with the white light pointing towards **him train crew**. He shall watch all passing trains to see any unusual condition like hot axle, chain hanging, any vehicle/wagon on fire, load shifted etc. and take prompt action to warn the **Driver-Loco Pilot** and Guard of the train by showing a danger signal.

CS 13/18 (Ref: Office Note No. TR/G&SR/Rev/101 dated 21.03.13.)

16.05. Channel for flange of wheels.- The Gateman shall see that the channel for the flange of the wheels is kept clear.

S.R. 16.05-1. Level crossing gates- Maintenance of road surface at -

In case of level crossing gates where Gatemen are provided, the maintenance of the road surface will be done by Permanent Way gangs and the watering and ramming of road surface and keeping clear of the channel for flange of wheels will be done by the Gateman.

In the case of level crossing gates, which are operated by Levermen/ Cabinmen of the nearby cabins, or by Pointsmen deputed from the stations, the clearing of the channel for flange of wheels shall be done by Keyman and maintenance of road surface, watering and ramming will be done by the Permanent Way gangs.

16.06. Defects at level crossings - If any gate or the fastenings thereof, or any fixed signal pertaining to the gate becomes out of order, the Gateman shall -

- (a) Take action to close the gates, if possible, against road traffic.
- (b) After closing the gates, hand signal the train movement past the level Crossing.
- (c) If the gates can not be closed put the banner flag or level crossing flag in such manner as to warn the approaching train to stop short of the gate and thereafter hand signal the train.
- (d) Report the fact to his superior or the nearest gang mate.

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S.R. 16.06-1. Gate Signal Defective -

(a) If any Gate signal of a level crossing gate outside station limits which has been provided with a 'G' marker becomes defective, it shall be kept at 'On' and the light shall be kept burning at night. The Driver of an approaching train, finding a Gate signal with a 'G' marker at 'On' shall sound a long whistle and bring his train to a stop in rear of the signal. If after waiting for one minute by day and two minutes by night the signal is not taken 'Off' he should draw his train ahead cautiously and stop again short of the level crossing. The Gateman, after closing and locking the gate across the road, shall hand signal the train past the level crossing. In the absence of the Gateman, this duty will be performed by one of the engine crew or by ~~the Assistant Guard or~~ the Guard.

(b) If any Gate signal of a level crossing gate in non-automatic signalling territory, which has not been provided with 'G' marker prescribed in S.R. 3.34-1, becomes defective, it shall be kept in the 'On' position and the light shall be kept burning at night. The Driver of an approaching train finding such Gate signal without 'G' Marker in the 'On' position, shall bring his train to a stop in rear of the signal and sound his whistle to attract the attention of the Gateman. The Gateman after closing and locking the gates against road traffic, shall proceed to the signal, report the defect to the Driver and Pilot the train past the level crossing gate.

(c) In respect of Gate signals referred to in(a) and (b) above, the Driver of the first train shall stop the train at the next station and report the defective signal to the Station Master on duty, who will then advise the station at the other end when gate signal has failed in 'Off' position. The Station Master of the station immediately in rear shall stop all trains and issue Caution Order.

16.07. Obstructions at level crossing - Every Gateman, on noticing any obstruction on the line, shall at once remove it or, if unable to do so, shall -

- (a) take action to ensure that the fixed signals, if any, protecting the gate are kept at 'On'**
- (b) show Stop hand signal and do his best to stop approaching trains and**
- (c) shall protect the obstructions as per Rule 3.62.**

S.R. 16.07-1. In the case of an obstruction at the level crossing, the Gateman should maintain the Gate signals, if any, in the 'On' position and if unable to remove it, protect the line as follows -

- (i) Double line :

~~If both the lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 metres away duly fixed to the staff on the line~~

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~~on which a train is expected to arrive first. Then he will similarly plant the other stave with the danger hand signal on the other line 5 metres away from the site of obstruction. The Gateman shall immediately lit the flare signal before proceeding to place detonators to protect the gate during night or in thick and foggy weather or when the visibility is impaired otherwise. Then he shall proceed exhibiting the third danger hand signal on the line, on which a train is expected to arrive first, to a point 600 metres on B.G. and 400 metres on N.G. and place one detonator on the line. Thereafter he shall proceed to a distance not less than 1200 metres on B.G. and 800 metres on N.G. from the level crossing and place 3 detonators on the line about 10 metres apart. Having thus protected the line on which a train is expected to approach first, he shall return to the level crossing gate picking up the intermediate detonator on his way back. Then he shall proceed on the other line, showing the danger hand signal, place detonator similarly and return to the site of obstruction, picking up the intermediate detonator on his way back. Then he must take steps to remove the obstruction.~~

If both the lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 metres away duly fixed to the staff on the line on which a train is expected to arrive first. Then he will similarly plant the other stave with the danger hand signal on the other line 5 metres away from the site of obstruction. The Gateman shall immediately proceed exhibiting danger hand signal to place detonators to protect the gate during night or in thick and foggy weather or when the visibility is impaired otherwise. Then he shall proceed exhibiting the third danger hand signal on the line, on which a train is expected to arrive first, to a point 600 metres on B.G. and 400 metres on N.G. and place one detonator on the line. Thereafter he shall proceed to a distance not less than 1200 metres on B.G. and 800 metres on N.G. from the level crossing and place 3 detonators on the line about 10 metres apart. Having thus protected the line on which a train is expected to approach first, he shall return to the level crossing gate picking up the intermediate detonator on his way back. Then he shall proceed on the other line, showing the danger hand signal, place detonator similarly and return to the site of obstruction, picking up the intermediate detonator on his way back. Then he must take steps to remove the obstruction.

(CS 10 Item 27 Ref : i) Rly Bd's letter No. 2001/Safety (A&R)/19/2 dated 14.12.2009

ii) Gazette of India GSR 848(E) No.680 dated 27.11.2009)

(ii) On Single Line :

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If the line is obstructed the Gateman shall plant a red banner flag by day and red light by night duly fixed to the staff 5 metres away towards the direction in which a train is expected to approach. Then he will similarly plant the other staff with the danger hand signal towards the other direction 5 metres away from the site of obstruction. Thereafter he shall proceed exhibiting danger hand signal on the line, towards the direction a train is expected to arrive, to a point 600 metres on B.G. and 400 metres on N.G. and place one detonator on the line. Then he shall proceed further to a distance not less than 1200 metres on B.G. and 800 metres on N.G. from the level crossing and place 3 detonators on the line about

10 metres apart. Having thus protected the line on one side, the Gateman shall return to the level crossing gate picking up the intermediate detonator on his way back. Then he shall proceed with all haste exhibiting danger hand signal on the other side, place detonator similarly and return to the site of obstruction, picking up the intermediate detonator on his way back. Then he should take steps to remove the obstruction.

16.08. Parting of a train - If a Gateman notices that a train has parted, he shall not show a Stop hand signal to the Driver, but shall endeavour to attract the attention of the Driver and the Guard by shouting, gesticulating or other means.

S.R. 16.08-1. Gateman's duty when a train parts -

If a Gateman observes a train running in two or more portions, he will draw the attention of the Driver, Guard ~~or Assistant Guard~~ by shouting and/or whistling. He should also show green hand signal during day and white light during night waving up and down vertically as high and as low as possible. He should show no other signal. Should he fail to attract the attention of the Driver and if there is sufficient distance between the parted portions of the train, he must place 3 detonators on the line 10 metres apart for the following portion or portions to attract the attention of the Guard by shouting and/or whistling. He should also wave green hand signal during day and wave white light up and down at night vertically as high and as low as possible.

16.09. Trespassing.- Every Gateman shall, as far as possible, prevent any trespassing by persons or cattle.

16.10. Transfer of charge of gate.- Except in accordance with special instructions, no Gateman shall leave his gate unless another Gateman has taken charge of it.

16.11. Height gauges -

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- (1) Adequate arrangements shall be made to erect height gauges on either side of the overhead equipment or other equipment at every level crossing so as to ensure that all vehicles and moving structures passing under the height gauge also pass under the overhead equipment or other equipment with adequate clearance.
- (2) The adequate clearance referred to in sub-rule (1) shall be sanctioned under approved special instructions.
- (3) Vehicles and moving structures, which cannot pass under the height gauge without striking or touching it, shall not be permitted to pass the overhead equipment or other equipment except in accordance with special instructions.

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CHAPTER XVII

WORKING OF TRAINS ON ELECTRIFIED SECTIONS OF RAILWAYS

17.01. Applicability of General Rules - All rules referring to the working of trains shall also apply to electrified sections except as otherwise provided in the rules contained in this chapter.

S.R. 17.01-1. (1) All Subsidiary rules, which control the movement and operation of Diesel trains shall also apply to movement and operation of electric trains, except as otherwise provided in these rules.

(2) (a) All officials connected with movement of rolling stock shall have a thorough knowledge of these rules. They shall also be responsible for ensuring that staff, working under them, are thoroughly conversant with the instructions relating to their work and correct procedure to be followed under normal condition as well as in an emergency.

(b) Every Railway employee, supplied with these rules shall make himself thoroughly acquainted with the rules and shall be held responsible for knowledge of and compliance with them. Ignorance of the rules will not be accepted as an excuse for non-compliance.

(3)(a) The Power Distribution Subsidiary Rules and the Traction Subsidiary Rules which have already been issued, shall be applicable only to D.C. Traction system on 1500 V and shall not be applicable to A.C. Traction on 25 KV.

(b) The A.C. Traction Manual containing the rules for the operation of A.C. Traction equipment shall be applied to only 25 KV AC Traction System and shall not be applied to AC Traction on 1500 V.

(c) All staff working in an area where electric traction is in use must make themselves thoroughly conversant with the appropriate rules pertaining to their duties on 1500 V D.C. and /or 25 KV A.C. traction described in para 3 (a) and (b) above.

17.02. Special definitions applicable to this Chapter - In these rules unless the context otherwise requires -

(1) **“electrical way and works” means the traction installations including overhead equipment and other connected works provided on the electrified sections of the railway;**

(2) **“feeding post” means a supply control post, where the incoming feeder lines from grid sub-station are terminated.**

(3) **“neutral section” means a short section of insulated and dead overhead equipment which separates the areas fed by adjacent sub-stations or feeding posts;**

(4) **“Power Block” means blocking of a section of line to electric traffic only;**

(5) “supply control post” means an assembly of interruptors, isolator switches, remote control equipment and other apparatus provided for controlling power supply to overhead equipment. It includes feeding posts, sectioning and paralleling posts, sub-sectioning and paralleling posts and sub-sectioning posts;

(6) “tower wagon” means a self-propelled vehicle which is used for the maintenance and repairs of overhead equipment;

(7) “Traction Power Controller” means a competent railway servant who may for the time being be responsible for the control of power supply on the traction distribution system.

S.R.17.02-1.(i) “Phase Conductor” means a conductor which carries current to the traction overhead equipment.

(ii) “Return Conductor” means a conductor which carries return current from the tracks to the sub-station. Return Conductor also includes conductor carrying return current from booster transformer to the track.

S.R.17.02-2. “Traction Power distribution system” means a distribution system provided for traction purposes. This is also referred to as “Power distribution system”.

S.R.17.02-3.(i) “Earthed” or “Connected to Earth” means electrically connected with the general mass of earth in such manner as to ensure at all times an immediate discharge of energy without danger.

(ii) “Earth” for the purpose of the overhead equipment only includes the track return circuit and the structures supporting the overhead equipment, provided such structures are connected to earth or track return.

S.R.17.02-4. “Feeder” means a conductor connecting a switching station to a grid sub-station, and a switching station or switch gantry to a feeding point and includes a conductor connecting O.H.E. to switching station.

S.R.17.02-5. “Voltage” means the difference of electric potential measured in volts between any two conductors or between any part of either conductor and the earth as measured by a suitable voltmeter.

S.R.17.02-6.(i) All overhead electrical equipment, distribution lines, transmission lines and feeders may be collectively referred to as “overhead lines”

(ii) “Pantograph” means a collapsible devices mounted on and insulated from the roof of an electric engine or motor coach and provided with a means for collecting current from the overhead equipment.

S.R. 17.02-7 (i) “Rail Bond” means an electrical connection across a joint in or between adjacent length of rail.

(ii) “Bond Continuity” means a rail bond used for maintaining continuity of the rail return circuit at points and crossings.

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(iii) “Bond cross” means a rail bond used for connecting together two rails of a track or rails of adjacent tracks.

(iv) “Bond Impedance” means a bond installed on a double rail track circuit by the S.&T. department, which provides a low impedance path for the traction return current and relatively high impedance path for track circuit current.

(v) “Bond, joint” means an electrical connection across a joint between two adjacent lengths of rail as part of the track return.

(vi) “Bond Structure” means an electrical connection between the steel work of a track structure, bridge or station building to which the traction overhead equipment is attached, and the track return.

S.R. 17.02-8 (i) “Single Unit Train” means the combination of a motor coach and trailer or motor coach and trailers adopted as an operating unit.

(ii) “Multiple Unit Train” means a train consisting of two or more single unit trains coupled together and operated as one train.

S.R. 17.02-9. (i) “Switch (Electrical)” means a device for opening or closing an electric circuit.

(ii) “Switch, Alternate Feed” means a switch used for connecting the overhead equipment of a loop or siding or crossover to alternative sections of the overhead equipment.

(iii) “Switch, Gang operated, Earth type” means a special switch used for isolating and earthing the O.H.E. over electric loco inspection pits and in electric loco sheds (and carriage, coaching section) and for providing a dead section in front of it. Simultaneously and for energising both sections in one operation.

(iv) “Switch, Inter-connecting, section or isolator” means a switch used for connecting or disconnecting adjacent elementary sections of overhead equipment or of distribution mains.

(v) “Switchgear” means isolator switches, Circuit Breakers, Interruptors, Cut-Outs and other apparatus used for the operation, regulation and control of electrical circuits.

(vi) “Siding Switch” means a switch used for connecting or disconnecting the overhead equipment of sidings to or from the general overhead equipment system. This is used in D.C. traction areas.

S.R. 17.02-10 Additional definitions in use on Central Railway-

(1) “Apparatus” means electrical apparatus and includes all machines fittings, accessories and appliances in which conductors are used.

(2) “Assistant Electrical Engineer (Traction Distribution) / (AEE /Tr.D)” means an Assistant Executive Officer-in-charge of maintenance and repairs of the Power distribution system in a division or in an area and responsible to the Divisional Electrical Engineer (Traction Distribution).

(3) “Assistant Electrical Engineer (Rolling Stock)/(AEE/RS)” means an Assistant Executive Officer in-charge of maintenance and repairs of electrical

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rolling stock in a division or in an area and responsible to the Divisional Electrical Engineer (Rolling Stock).

(4) “Assistant Traction Foreman (A.T.F.O.)” -

(a) “Overhead Equipment “OHE” means a subordinate of the area concerned responsible to the Traction Foreman for inspection and maintenance of traction overhead lines, rail bonds and for the staff employed thereon.

(b) “Rolling Stock (RS)” means a subordinate of the area concerned responsible to Traction Foreman (Rolling Stock) for the maintenance of electric rolling stock and for the staff employed thereon

(5) “Bare” means not covered with insulating material.

(6) “Cable” means length of Insulated single conductor (solid or stranded) or of two or more such conductors, each provided with its own insulation, which are laid up together.

Such insulated conductor or conductors may or may not be provided with an overall mechanical protective covering.

(7) “Caution Notice” means notice attached to or placed near live equipment calling attention to the danger of touching or interfering with such equipment, and bearing the words “Caution - Live Equipment”.

(8) “Chargeman” means an authorised person in charge of a gang of workmen and/or Linemen, authorised to work on specific types of traction equipment such as overhead equipment, switching station feeder lines, remote control equipment, electric rolling stock etc.

(9) “Circuit” means an arrangement of conductor or conductors for the purpose of conveying electrical energy and forming a system or a branch of a system.

When they form a closed path through which a current can circulate, the circuit is referred to as ‘closed’. When the path is not closed, the circuit is referred to as ‘Open’.

(10) “Circuit Breaker” means a device for closing and opening an electrical circuit under all conditions unless otherwise specified and so designed as to open the circuit automatically under abnormal conditions.

(11) “Competency Certificate” means a certificate issued to a person by the Railway Administration authorising him to carry out specified duties pertaining to his employment.

(12) “Contact Wire” means an overhead conductor from which electric power is supplied to electric rolling stock.

(13) “Cut-out”(fuse) means any appliance for automatically interrupting the transmission of energy through any conductor when the current rises above predetermined value.

(14) “Danger” means danger to health or to life or any part of body from stock, burn or other injury to persons, or property, or from fire or explosion, attendant upon transmission, transformation, conversion, distribution or use of electrical energy.

(15) “Danger Notice” means a notice attached to dead equipment to convey a warning against such equipment being made alive, and bearing the words “Danger-Men Working”

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(16) “Danger Zone” means the zone lying within two metres of any live equipment in the 25 KV AC traction system or one metre in the case of 1500 V.D.C. system in which no work is permitted when the equipment is alive.

Notwithstanding the above the Driver of an electric loco is permitted to change the headlight bulb of the loco while standing on the buffer beam projection at the floor level of the cab.

(17) “Divisional Electrical Engineer (Traction Distribution) (D.E.E./Tr.D)” means an Executive Officer responsible for the traction power distribution system including power supply arrangements and remote control equipment in a division or in an area.

(18) “Divisional Electrical Engineer(Rolling Stock)/(D.E.E./R.S.)” means an Executive Officer responsible for the electric rolling stock in a division or in an area.

(19) “Dropper” means a fitting used in overhead equipment construction for supporting the contact wire from the catenary.

(20) “Electrified Track” means track provided with overhead equipment.

(21) “Emergency telephone” means a telephone circuit provided for contacting the Traction Power Controller.

(22) “Grid sub-station” means a sub-station equipped with transformer and switchgear belonging to the power supply authority from which power at 25 KV is supplied for electric traction.

(23) “Guarded” means covered, shielded, fenced or otherwise protected by means of suitable casing, barrier, rails or metal screens to remove the possibility of dangerous contact or approach by persons or objects to a point of danger.

(24) “Insulated (Air-gap) Overlap-Span” means an arrangement of overhead equipment over a track where two sets of traction conductors overlap each other for a short distance providing for a smooth passage for the pantograph of electric rolling stock, the two sets of wires being insulated from each other by an adequate air-gap.

(25) (i) “Interruptor” means a single phase oil circuit breaker without an automatic tripping device.

(a) “Bridging Interruptor” means an “Interruptor” which is provided at a neutral section to enable one sub-station to feed a sector of the overhead equipment normally fed by another sub-station during emergencies or when the latter is out of use. This interruptor normally remains in the open position.

(b) “Sectioning Interruptor” means an Interruptor which connects adjacent sub-sectors together to maintain continuity of supply. This interruptor normally remains in the closed position.

(c) “Paralleling Interruptor” means an interruptor which connects overhead equipment of two different tracks. This interruptor normally remains in the closed position to reduce voltage drop.

(ii) “Isolator” means a switch suitable for disconnecting circuit on no load condition (use in 1500 V.D.C. traction).

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(26) “Lineman” means a person authorised to inspect and work on the overhead lines and switches in relation therewith.

Note : This is the lowest grade of employee who is allowed to enter an unattended switching station unaccompanied by his superior.

(27) “Operator” means a person on duty who is in charge of a switching station.

(28) (a) “Remote Control Centre” means the centre from which the equipment’s at various switching stations are remote controlled by the Traction Power Controller.

(b) “Remote Control Cubicle” means a room in a switching station in which remote control equipment and batteries are erected for remote operation of switchgear located at the post.

(29) “Section Insulator” means a device installed in the contact wire for insulating two elementary electrical sections from each other while providing a continuous path for the pantograph.

(30) “Sector” means a section of overhead equipment of a track from a feeding post to a sectioning post.

(a) “Sub-sector” means the shortest section of overhead equipment which can be isolated by opening of Interruptors.

(b) “Elementary Section: means the shortest section of overhead equipment which can be isolated from the rest of the system by switching operations.

(31) “Sectioning and Paralleling post (SP)” means a switching station situated mid way between two feeding posts at a neutral section and provided with bridging and paralleling Interruptors.

(32) “Sub-sectioning and Paralleling Post (SSP)” means switching station where sectioning and paralleling Interruptors are provided.

(33) “Yard Supply Post(YS)” means a Switching station where sectioning interruptors are provided for feeding yards.

(34) “Traction Sub-station” means an electrical installation comprising of converting or rectifying and transforming machinery, batteries and controlling apparatus for supply of energy to the power distribution system.

(35) “Track Sectioning Cabin” means an electrical installation containing track sectioning equipment for D.C. traction. This is also referred to as track cabin.

(36) “Track Return” means the track rails when used as the return conductor for the traction return current to the sub-station.

(37) “Traction” means electric traction.

(38) “Traction Engine Examiner” means an official responsible for inspection and maintenance of electric rolling stock.

(39) (a) “Traction Foreman (T.F.O) Overhead equipment (OHE)” means a subordinate of the area concerned responsible for the operation and maintenance of overhead equipment and for the staff employed thereon.

(b) "Traction Foreman(T.F.O) Rolling Stock (RS)" means a subordinate responsible to Assistant Electrical Engineer (Rolling Stock) for the maintenance and/or inspection of electric rolling stock and for the staff employed thereon.

(40) "Traction Loco Controller (T.L.C.)" means an official under the control of Assistant Electrical Engineer(Rolling Stock) who will be responsible for booking of electric locomotives and running staff to meet the requirements of the traffic.

17.03. Inspection of electrical way and works -

The electrical way and works shall be inspected regularly in accordance with special instructions by officials nominated for the purpose and in accordance with the duties assigned to them.

S.R. 17.03-1 (a) The duties of Permanent Way Inspectors in General Rules 15.01 to 15.10 (inclusive), wherever applicable to electricalway and works shall devolve on the Traction Foreman, (Overhead Equipment) and Assistant Traction Foreman, (Overhead Equipment) in so far as these duties relate to the respective items of electrical way & works in their charges.

(b) The duties of the Gangmate, wherever applicable to overhead equipment, shall devolved on the overhead equipment Linesman.

(2) If due to any defect or damage to the overhead equipment it is necessary to lower pantographs over any particular section of the running lines, the traction official concerned shall communicate with the Traction Power Controller, who, in turn, shall advise the Section Controller for arranging the issue of necessary Caution Orders by the Station Masters to the Drivers as per S.R.4.09-1. The Caution Order shall specify the exact kilometres and structure numbers between which the Driver shall lower the pantographs and trail through.

In addition, the traction official, asking for the Caution Order to be issued, shall arrange with the Assistant Traction Foreman (Overhead Equipment) for the exhibition of suitable indication boards marking the beginning and end of the affected section in which Drivers shall trail through with lowered pantographs.

S.R. 17.03-2. No conductor shall be erected over or along-side an electrified track unless it is adequately guarded in accordance with the rules laid down by the Railway Administration. This guard shall be effectively connected to earth.

S.R. 17.03-3 (1) The inspection of overhead equipment and electrical equipment at supply control posts shall be carried out periodically in accordance with instructions issued by the Divisional Electrical Engineer(Traction Distribution).

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(2) Electrical equipment in rolling stock shall be inspected periodically in accordance with instructions issued by the Divisional Electrical Engineer (Rolling Stock).

(3) (a) Drivers of electric rolling-stock shall, as far as possible and without interfering with their primary duties, watch the overhead equipment.

(b) When a defect on the overhead equipment, which is likely to interfere with the smooth movement of the pantograph or cause damage to it, is noticed ahead, the Driver shall trip the circuit breaker and immediately lower the pantograph by placing the pantograph handle in the 'lower' position.

(c) An emergency stop should be made, if necessary.

(d) If damage to overhead equipment is slight (such as a slight break away of the contact wire from the droppers or catenary), it may be practicable to coast under the defective section, but the defect shall be reported to the Traction Power Controller through the nearest emergency telephone circuit or in case this circuit is not available, through any other telephone.

(e) In the case of a breakdown of overhead equipment requiring trains to be stopped, the Driver noticing such a breakdown shall immediately bring his train to a stop and arrange protection of the line or lines affected in accordance with G.R. 6.03 and Subsidiary Rules thereunder. In the case of a breakdown in an automatic signalling section, the track must be protected in accordance with G.R.9.10. Thereafter he will take immediate action to advise the Traction Power Controller on the nearest emergency telephone circuit giving details of the break down, and, in case this circuit is not available, communicate the information to the nearest Station Master/Cabin A.S.M./switchman on any other telephone circuit. The Traction Power Controller, on receipt of such message, will pass on suitable instructions to the Section Controller, and, if necessary, advise him to stop running of trains in the affected section.

(4) (a) All breakdowns or defects, noted in the overhead equipment or any other traction equipment, including continuity bonds, joint bonds, cross bonds, structural bonds and impedance bonds by any railway employee, shall be reported immediately to the Traction Power Controller. In case he cannot be contacted, the nearest Station Master, Cabin Assistant Station Master, Switchman, Traction Foreman, (Overhead equipment) or the Assistant Electrical Engineer (Traction Distribution) shall be advised. In case of the impedance bonds, the Signal Inspector shall be advised. The Station Master, Cabin Assistant Station Master or Switchman to whom such breakdowns or defects are reported shall convey the information immediately to the Traction Power Controller through the Section Controller. In case of failure of communication, he shall use his discretion regarding movement of traffic and advise the nearest Traction official.

(b) In case of breakage of an overhead line the railway employee detecting it shall ensure that no person comes into contact with the line until an authorised person arrives on the spot. The authorised person will take immediate action to make the affected line dead and earthed.

(5) (a) All overhead line staff, when on patrol, shall watch the pantographs of passing electric rolling stock and, if any defects are noticed, they should immediately try to attract the attention of the Driver/Guard to stop by displaying

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hand danger signals or by gesticulation. If, however, they are unable to attract the attention of Driver/Guard, they must immediately report to the Traction Power Controller through the emergency telephone circuit or any other telephone, if the emergency telephone circuit is not available, giving full particulars including number of the rolling stock, nature of defect and the time when the defect was noticed.

(b) The Traction Power Controller shall communicate reports of a defective pantograph to the Traction Loco Controller who shall arrange to have the electric rolling stock stopped as soon as possible for examination of the defective pantograph.

(6) Traction Foreman(Overhead equipment) shall be responsible for the proper and efficient maintenance of all breakdown equipment, wiring trains, tower wagons, break down lorries etc., so that they are always in a state of good repair. He shall ensure that they are equipped with full quantities of stores and spare parts as per approved inventory. All tools, tackles, straining screws, clamps, ropes and ladders shall be maintained in good condition and ready for use at all times.

(7) The staff concerned shall ensure that equipment, not in immediate use, is always ready for service,except such equipment as may be under repair or overhaul..

S.R. 17.03-4. (1) (a) The keys for all out door switches shall be kept in locked glass fronted boxes in the custody of Station Masters, Cabin Assistant Station Master/ Switchmen or other persons stationed conveniently nearby the switches. The keys shall be issued on demand only to authorised persons,whose signatures for receipt shall be obtained in a book maintained for this purpose.

(b) All chambers or enclosures containing live equipment shall be kept closed and locked, with the keys in the custody of the authorised person. A duplicate key shall be kept in a box with a fixed glass fronted cover in place to be notified by the Divisional Electrical Engineer(Traction Distribution). The key may be removed by breaking open the glass over of the box, in case of emergency, by an authorised person. A record shall be maintained of every such use of the key.

In the event of breaking of the glass of the key board, the key or the keys will be kept in safe custody of the A.S.M., Cabin A.S.M. or Switchmen, until the glass is replaced. The Traction Power Controller will keep a record where such keys are kept so that, in an emergency ,he will be able to direct the parties.

When the glass cover is broken to obtain the duplicate key, the concerned Traction Foreman (OHE) shall be immediately advised to replace the glass. The person replacing the glass shall obtain the signature of the authorised person who shall put down the date of replacement.

(c) Any person, while working in a chamber or enclosure containing electrical equipment which under normal conditions is alive, shall retain the keys of the chamber or enclosure. These keys shall be returned to the person in whose custody they are normally kept, immediately after the chamber or enclosure has been locked.

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(d) Permit-to-work cards shall not be cancelled until the keys have been returned to the box or to the person in whose custody they are normally kept.

(2)(a) In emergency, Station Master or a Cabin Assistant Station Master/ Switchman shall operate such switches as per specific direction of the Traction Power Controller.

(b) In the event of a fault in the overhead equipment necessitating isolation of a section in addition to the faulty one, the Assistant Traction Foreman (Overhead Equipment) or an authorised person shall arrange with the Traction

Power Controller to isolate the healthy section also. However, if necessary, he shall himself open those switches which can be operated conveniently.

(c) Should the Traction Power Controller wish to have any isolator switch opened or closed he shall ask the Assistant Traction Foreman (Overhead Equipment) or Station Master/Cabin Assistant Station Master/Switchman or any authorised person to carry out the required switching operations. The person concerned shall, after carrying out the orders, lock the switch either in 'Open' or 'Closed' position, as the case may be and inform the Traction Power Controller of the action taken. He shall not part with the key until receipt of further orders from the Traction Power Controller. A record of every such operation shall be maintained by the person concerned.

Each instruction regarding the parting with the keys shall be confirmed by exchange of Private Numbers.

(d) Every Station Master, Cabin Assistant Station Master or Switchman shall be fully aware of the location of isolator switches provided for the control of power supply overhead equipment at his station or near his cabin and shall be conversant with the correct method of opening and closing the same in an emergency.

(3) No person other than authorised maintenance staff, their assistants when accompanying them, and persons provided with special permits issued by Divisional Electrical Engineer (Traction Distribution) shall be admitted to supply control posts except the following -

(a) A person escorted by the Divisional Electrical Engineer(Traction Distribution)or by the Assistant Electrical Engineer(Traction Distribution).

(b) A doctor summoned to attend an accident case.

(c) Electrical Inspector to Government for the Railway area concerned.

(d) A person required by an officer to speak from a telephone installed in the premises.

(4) No person below the rank of an Operator or Linesman shall be allowed to enter an unattended supply control post alone.

The Operator as described will include the designation of Asstt. Operator in existence on D.C. Traction System.

S.R.17.03-5 (1) Presence of a responsible person - When repair or adjustment to overhead equipment makes it necessary for a train to proceed

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cautiously, an authorised person shall be present at the site of work and shall be responsible for showing the signals prescribed in G.R. 15.09.

(2) Issue of Caution Orders - Before commencing work on overhead equipment or in cases of breakdown of overhead equipment, when it is necessary for a train to proceed cautiously, the Traction Foreman or Assistant Traction Foreman (Overhead Equipment), responsible for such notification, shall arrange for issue of Caution Orders in accordance with S.R. 4.09-1.

(3) No alteration or addition shall be made to any equipment so as to infringe standard dimensions, whether permanent or temporary. If an infringement is unavoidable, sanction shall first be obtained from the Divisional Electrical Engineer (Traction Distribution).

(4) Care shall be taken to ensure that covers of tank wagons, funnels of steam cranes or such other items are not left in such a position as to foul the traction overhead equipment.

(5) (a) No steam or hand-crane shall be worked adjacent to traction overhead equipment unless such overhead equipment is dead and earthed. All movements of the crane Jib shall be carefully controlled so as not to foul the traction overhead equipment. Wherever possible the direct blast from the crane funnel to the overhead equipment and particularly to section insulators shall be avoided.

(b) Except in an emergency, 24 hours notice of intention to work a crane adjacent to overhead equipment shall be given to the Divisional Electrical Engineer (Traction Distribution) in order to make arrangements for overhead equipment staff to standby. When possible the working of cranes shall be included in the weekly programme detailed in S.R. 17.04-1. In an emergency, the Traction Power Controller shall be advised and he shall make arrangements for overhead equipment staff to standby.

(c) Crane shall not be worked adjacent to traction overhead equipment unless the overhead equipment staff is present.

S.R.17.03-6.(1) No work on live or an unearthed indoor or outdoor equipment above 400 volts is permitted. The only occasion when maintenance staff may work on unearthed equipment, after it has been isolated, is for the purpose of taking 'insulation tests'. On completion of tests the equipment shall be earthed before any work started.

(2) Earthing of feeder lines - After the feeder is made dead, it shall first be discharged by throwing an earthed chain over the conductor. The feeder line is then connected to earth by means of a stranded copper cable of adequate size securely connected to earth and the conductor.

(3) Interruptors or Isolator - switches, which have been opened for the purpose of isolating electrical equipment for maintenance, shall have a danger notice displayed in a prominent position on the Interruptor Operating Handle of the switch or on the enclosure containing Isolator-switch and control apparatus as well as on the corresponding switches in remote control centre.

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(4) Work in the danger zone of overhead equipment - Before any work is undertaken on a section of overhead equipment, which is normally alive, or on any part of the structure adjacent thereto or supporting such equipment situated at a distance less than 2 metres for 25 KV AC system and 1 metre for 1500 V DC system from the live parts, the overhead equipment shall be made dead and earthed. A minimum of two earths shall be provided one on either side of the working party. In case the work is spread over several sub-sectors, additional earths shall be provided close to the feeding points of supply control posts involved.

(5) Work at insulated overlap spans (air-gap sections) - No work shall be attempted on insulated overlap spans or on section insulators unless the adjoining sections of overhead equipment on either side are made dead and earthed. In the case of a sectioning point, the isolator switch, the bridging or sectioning interruptor bridging the overlap span shall be closed.

S.R. 17.03-7. Precautions to be taken by staff - Where overhead equipment for two or more tracks is supported on one structure and work has to be done on the overhead equipment of one track while the overhead equipment of adjacent tracks are alive, access to the overhead equipment to be worked on shall be direct by ladders, trestles or similar means but not by supporting structures. Staff shall not, in any circumstances, walk or climb across live overhead equipment by means of the supporting bridge to gain access to the overhead equipment to be worked on.

S.R. 17.03-8. Working on service buildings and structures in the vicinity on live equipment -

(1)(a) Railway staff, when required to carry out work on service buildings and structures in proximity to overhead equipment, shall exercise special care to ensure that tools, measuring tapes, materials etc. are not placed in a position where they are likely to fall or make contact with electrical equipment.

(b) Wherever such work has to be carried out under conditions which involve risk to the workmen or other persons, arrangements shall be made for authorised overhead equipment staff to be present who shall take such precautions as may be necessary for the safety of the persons concerned.

(2) Protection of the maintenance parties -

(a) A working party shall not commence or carry out any work on or adjacent to overhead equipment involving danger to trains or traffic without the consent of the Divisional Electrical Engineer(Traction Distribution) or The Assistant Electrical Engineer (Traction Distribution).

(b) No person shall disturb the overhead equipment or carry out bonding or other work in such a way as to obstruct the line and necessitate the showing of danger signals,

(i) Until such signals have been shown, and

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(ii) If within the station limits, until he has also obtained the written permission of the Station Master and all the necessary signals have been placed in the 'On' position.

When such work is to be undertaken the traction official responsible for the work shall advise the Station Master(s) concerned and arrange for showing the necessary danger signals.

(c) When defects are noticed on overhead equipment which are likely to cause damage to pantographs or emergency repairs are being effected to overhead equipment and it is not possible to convey the information to the Station Master

(s) concern to enable him/them to issue Caution Orders, the line or lines shall be protected in accordance with G.R. 15.09 and S.R. thereto.

(3) Protection of staff - Every member of the staff shall provide for his own protection independent of every other member except when one is assisting another in which case, the person in-charge of the work is responsible for the proper protection of himself and his assistants.

(4) Working on structures supporting live over-head equipment -

(a) No person other than overhead equipment staff shall climb or work on any structure, which supports the overhead equipment without having received a permit-to-work card. No work shall be carried out on any structure nor anything affixed to a structure without the written permission of the Divisional Electrical Engineer(Traction Distribution).

(b) Before work is commenced on a structure supporting overhead equipment, the limits of the danger zone(s) shall be defined by day by means of a red disc and by night by means of a red lamp which shall be placed in suitable position.

(c) When work is to be carried out in the danger zone of a structure after the overhead equipment is made dead, no staff other than the person authorised to test and earth the overhead equipment shall attempt to climb a structure, until he personally has received definite instructions to climb the structure from the person in-charge of the working party and no message or signal other than these instructions is permissible.

(d) The instructions may be conveyed from the person in-charge of the party to workmen by another person. Such a person shall be individually deputed as a messenger by the person in-charge of the party and shall be not below the rank of a Linesman.

(e) All persons, deputed in clause(d) to convey instructions to workmen, shall be made known to the workmen previously and the workmen shall be advised that orders regarding the climbing of structures shall on no account be accepted from any person other than those deputed.

(f) The person, in-charge or the person deputed under clause (d),shall, before instructing his men to climb a structure, explain which section overhead equipment is dead and which section is alive and which parts of the structure are safe to work upon. The person in charge or the person deputed under clause (d) shall satisfy himself

that his explanation is clearly understood by all the workmen whom he has instructed to climb the structure.

- (g) It shall be the responsibility of every person conveying instructions to climb structures to see that the danger discs or lamps are correctly fixed before work is commenced.
- (h) On structures spanning multiple tracks where work is being carried out adjacent to one or more sections of overhead equipment, the person in charge shall ensure, before any of the line or lines are made alive on completion of work that all men and materials adjacent to the line or lines have been withdrawn from the danger zone and if work is to continue on other parts of the structures, that the danger discs or lamps have been moved to indicate the changed danger zone.
- (i) The special attention of person, in-charge of painting of structures, is directed to this rule.

(5) Painting of structures - Only after permit-to-work has been received and overhead equipment has been correctly earthed, portions of track structures at a distance less than 2 metres in case of 25 K.V. A.C. system and 1 metre in case of 1500 V.D.C. system from any live equipment may be scraped, cleaned or painted. Other portions of structures of overhead equipment may be cleaned and painted while the overhead lines are alive unless special conditions at site render it unsafe or inadvisable, in which case the work shall only be done after making the equipment dead and earthed.

S.R. 17.03-9.(1) Markers are placed wherever possible, along the cable alignment and plans are available indicating generally the position of buried cables. Excavation must not be undertaken in the vicinity of cable routes until the exact position of the cables has been ascertained and a representative of the department concerned is present. This is applicable to cables of Posts and Telegraphs Department also.

(2) If circumstances make it imperative that work be undertaken without sufficient notice, the Assistant Electrical Engineer (Traction Distribution) and Assistant Signal and Telecommunication Engineer concerned must be informed by a message for arranging staff to be present.

~~S.R. 17.03-10. Special precautions by Controllers, Station Master and train crew on electrified sections when a section of OHE is found faulty.~~

~~(1) In electrified sections, in the event of OHE failure, the Traction Power Controller shall immediately locate the faulty section and isolate the same. Also, in case of double and multiple line sections, he will isolate the healthy section on adjacent tracks on the same route length as the faulty section. The Traction Power Controller shall then advise the Section Controller of the section found faulty and the healthy section temporarily isolated by him.~~

~~(2) On receipt of advice from the Traction Power Controller the section Controller shall take action as under:-~~

~~(a) Faulty Section-~~

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~~————— The Section Controller shall, under exchange of private numbers, advise the Station Masters of all stations who are concerned with the working of trains in the affected section to treat the faulty section as if the same is under emergency power block and take action accordingly.~~

~~————— (b) Healthy Section temporarily isolated.~~

~~————— The Section Controller shall check whether any train had entered any of the block sections in the faulty section before the fault on OHE occurred. If not, he shall advise Traction Power Controller to re-energise the healthy section temporarily isolated. If, however, a train had entered a block section in the faulty section before the fault on OHE occurred, the Section Controller shall immediately inform the Station Masters of all stations who are concerned with the working of trains in the faulty section and also in the section in which healthy OHE is temporarily isolated, under exchange of Private numbers, that they shall not allow any train to enter the concerned block section unless both the Driver and the Guard of the first train have been issued caution orders to the following effect.~~

~~————— (i) Proceed at a speed not exceeding 10 KMPH subject to the observance of other speed restrictions, exercising great caution.~~

~~————— (ii) Keep a sharp lookout and be prepared to stop short of any obstruction which may be due to any infringement from the adjacent line/lines and also keep a sharp lookout on the adjacent line/lines to see if there are any OHE abnormalities and~~

~~————— (iii) Immediately on reaching the next station in advance report whether or not the section over which they moved is safe for the movement of trains.~~

~~————— (2) Only after taking this section, the Section Controller shall advise the Traction Power Controller that necessary precautions have been taken.~~

~~————— (3) After receiving advise from the Section Controller that necessary precautions have been taken to ensure safety of trains, the Traction Power Controller shall restore feed to the healthy sections that have been temporarily isolated.~~

~~————— (4) After despatching the first train with caution order in the affected section, no subsequent train shall be allowed to enter the section without permission from the Section Controller. Action to remove speed restrictions shall be taken by the Section Controller in consultation with the Station Masters on receipt of report from the Driver and the Guard as referred to above. The Section Controller shall also then advise the Traction Power Controller of the report of the Driver/Guard of the train indicating whether or not there are any infringements and/or abnormalities in OHE. Till such time it is decided to remove speed restrictions, trains entering the affected section shall continue to be issued caution orders prescribing clearly the speed restrictions and other precautions as pointed out in the above paras.~~

~~————— (5) If a train has already entered the affected section and is held up for no tension in OHE for more than 5 minutes, the Driver shall, on resumption of~~

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~~power supply, proceed to the station in advance at a speed not exceeding 10 KMPH subject to observance of other speed restrictions exercising great caution so as to stop short of any obstruction. Both the Driver and the Guard shall keep a sharp lookout on the adjacent line/lines to see if there are any OHE abnormalities and shall report at the station in advance whether the portion of the section over which the train has moved after stoppage, is safe for passage of trains or not.~~

~~————— (6) When a train comes to a stop in an electrified section and the cause of stoppage is not immediately obvious, the Driver and Guard shall immediately take action to protect the train in accordance with the rules made under Rule No.6.03.~~

17.04. Permit-to-work on electrical equipment - If work is to be carried out adjacent to the electrical equipment or any other part thereof by other than the competent railway servant, such work shall be done only when and for such time as the person-in-charge of the work has obtained a written permit-to-work, duly signed and given by the railway servant authorised for the purpose by special instructions. He, in turn, shall issue the same only with the knowledge of the Traction Power Controller.

S.R. 17.04-1. Work in the danger zone of traction electrical or overhead equipment -

(1) Before commencing work, and for the whole time that work is being performed on any part of the electrical equipment or adjacent thereto, that part of the electrical equipment shall be made dead and earthed save and except as provided in these rules. A permit-to-work shall be obtained from the Traction Power Controller or an authorised person in accordance with sub-rules (4), (5), (9) & (10) below. In the D.C. 1500 V system as laid down in para 133 of the PDSR live line work is permitted under certain conditions.

(2) Procedure for obtaining traffic or power block and permits-to-work on traction electrical or overhead equipment -

(a) All departments in the electrified area who require traffic blocks, power blocks or permits-to-work in the danger zone of traction equipment, or who require overhead line and/or bonding staff to be present at site for scheduled maintenance works, shall deliver at the office of the divisional Electrical Engineer (Traction Distribution) not later than 10 Hours on every Monday morning, statements in the prescribed form showing :

(i) the nature of the work and the date on which it is to be performed,

(ii) by whom the work is to be carried out,

(iii) location of the work and the section of the lines to be blocked,

(iv) the trains between which the block is required and

(v) whether the track will be available for diesel traffic.

(b) The requirements of all departments will be co-ordinated in the office of the Divisional Electrical Engineer (Traction Distribution) and a consolidated statement forwarded to the Divisional Operating Manager concerned, by 12

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hours on every Wednesday for inclusion in the weekly programme of traffic and power blocks.

(c) Works of an urgent character shall be attended to by obtaining emergency blocks and permits-to-work from the Traction Power Controller.

(d) A weekly programme of work involving traffic blocks, power blocks and permits-to-work shall be prepared in the office of Divisional Operating Manager, and despatched to all concerned by Friday evening, for the week commencing on the following Monday.

Note : The procedure detailed in paras (3), (4) & (5) must be followed for obtaining the power blocks and permits-to-work shall be obtained in each case as prescribed even though the work is included in the weekly programme.

(3) Procedure for arranging Power blocks in electrified sections -

(a) When a power block has been sanctioned, Traction Power Controller shall issue to the Section Controller a power block message (in the prescribed form) in duplicate either through messenger or by telephone with exchange of private numbers. The section Controller shall get confirmation from the Station Master (s) or Cabin Assistant Station Master(s) or Switchman that the section will be blocked for electric traffic as detailed in sub-rule(11) (b) below.

He shall then either return one copy of the written message duly acknowledged indicating thereon the time from which the block will be given or send a phone message to the Traction Power Controller giving the same information supported by a private number. The Traction Power controller will thereafter arrange to isolate and make dead the portions of electrical equipment concerned at the time indicated by the Section Controller and issue a permit-to-work thereon, as detailed in sub paras (4) and (5) below.

(b) However in the case of an emergency the Traction power Controller shall switch 'Off' the power first and then advise the Section Controller of the power block imposed and reasons for doing so.

(c) When permit-to-work on the portion of the electrical equipment has been cancelled and the Traction Power Controller has restored normal conditions, he shall cancel the power block message issued to the Section Controller, either by message sent in duplicate or by telephone with exchange of private numbers.

(4) Method of obtaining permit-to-work in the danger zone of traction electrical or overhead equipment for work by authorised persons -

(a) Excepting as detailed in Sub-rule (9) permits-to-work shall be obtained by authorised persons from the Traction Power Controller who shall carry out through remote control or order the switching operations necessary to isolate the portion of the equipment concerned. When the Traction Power Controller receives confirmation that the switching operations have been correctly carried-out, he shall inform by a telephone message with exchange of Private Numbers the authorised person stating clearly that the electrical equipment has been made dead. This information shall constitute a permit-to-work. Permits-to-work will be issued in this manner only to authorised persons not lower in grade than a Linesman. A

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duplicate of every permit-to-work issued should be retained in the personal possession of the authorised person issuing it for the period prescribed by the Railway Administration.

(b) On receipt of a permit-to-work, and before work is commenced, the electrical equipment specified shall be earthed as per rules in force. Each working party shall be protected by independent earths.

(c) On completion of the work the person who received the permits-to-work shall ensure that all men and materials have been withdrawn from the electrical equipment and its vicinity. He shall then remove the earths, and inform the Traction Power Controller either by written memo or by a phone message supported by a Private Number that the work for which the permit to work was issued has been completed, men and materials have been withdrawn from the specified electrical equipment and the same may be made alive. Such procedure shall constitute cancellation of the permits to work.

(5) For work by other than authorised persons -

(a) If work is to be carried out on or adjacent to any part of the electrical equipment by other than authorised persons such work shall not commence until the person in-charge of the work is in possession of a permit-to-work card issued to him by an authorised person.

(b) The permit-to-work shall be taken from the Traction Power Controller by an authorised person who shall earth the electrical equipment specified and hand over a permit-to-work card to the person in-charge of the work holding an acknowledgement on the other copy. A duplicate of every permit-to-work card shall be retained in the personal possession of the authorised person who issued it.

(c) On completion of the work and when all men and materials have been withdrawn from the electrical equipment and its vicinity, the person-in-charge of the working party shall cancel his permits-to-work card and return it to the authorised person who issued it. The authorised person shall in turn cancel the permit-to-work as detailed in 4(c) above.

(6) Local cancellation of permit-to-work when telephones are interrupted - If telephone communication with the Traction Power Controller is interrupted when a permit-to-work is to be cancelled, the authorised person to whom the permit-to-work was issued shall arrange locally for restoring to normal (Live) conditions the portion of traction electrical or overhead equipment, specified in the permit-to-work and for cancelling the power -block, if possible.

(7) Working of more than one party independently on the same portion of traction electrical or overhead equipment - Whenever work has to be carried out by more than one working party the permit-to-work shall be issued by the Traction Power Controller only to one authorised person who alone shall be responsible under this rule, for all work on the portion of electrical equipment, specified in the permit-to-work. Any additional party or parties may work on the same portion of electrical equipment only with the permission of this authorised person who shall inform all parties of the total number of parties working on the same portion of electrical equipment. The authorised person shall cancel the permit-to-work only when he is satisfied that all working parties have withdrawn all men and materials and removed the earths from the electrical

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equipment. In the event of telephone communication being interrupted, the responsible person shall proceed as provided in (6) above.

(8) Entries in the log book.- The number of each permit-to-work issued must be entered in the log book of the Traction Power Controller, together with the particulars and time when the equipment is made dead for the work and re-energised after completion of the work as per information received on the telephone from the authorised person concerned.

(9) Work inside electric loco shed.- In case of work to be done inside electric loco sheds, the application for permit-to-work must be made to the Traction Foreman, Assistant Traction Foreman or Chargeman (Rolling Stock), who shall arrange for the issue of the permit-to-work after getting the switch of the inspection bay or the feeders opened. No intimation to the Traction Power Controller is necessary and the permit-to-work must be returned for cancellation by the person in-charge of the work to the Traction Foreman, Assistant Traction Foreman or Chargeman (Rolling-Stock) before the switches are closed.

(10) Local Blocks -

(a) Local arrangements may be made with the Station Master, Cabin Assistant Station Master, Switchman, Yard Master and others responsible for the movement of traffic, for power blocks in such sidings as do not affect the movement of trains on main running lines, loop lines and reception or departure lines in yards. The Traction Power Controller shall, however, be kept informed as to when the Power block is taken and cancelled. The Station Master, Cabin Assistant Station Master, Switchman, Yard Master and other persons shall also advise the Section Controller of such power blocks.

(b) Local blocks shall be arranged on the forms prescribed for the purpose.

(11) Procedure for preventing admission of electric rolling stock into or over sections of track with dead or earthed overhead lines -

(a) In order to prevent electric rolling stock from being admitted on a cross over or track over which overhead equipment is made dead or for which a permit-to-work has been issued, the levers of signals and points in the signal cabins, governing such movements of electric rolling-stock, shall be protected by means of lever collars in accordance with S.R. 3.38-1. If the points and signals are locally operated, the same should be locked and the keys kept with the Station Master.

(b) The Section Controller, on receipt of a power block message from the Traction Power Controller, shall repeat to all Station Masters/Cabin Assistant Station Masters/Switchmen concerned the said message indicating the time from which the block is to commence. Each Station Master/Cabin Assistant Station Master/Switchman shall record and acknowledge the message with a Private Number and the time of receipt and then block to electric traffic the line or lines described from the time indicated and place lever collars on the appropriate levers. When lever frames or other signal cabins are controlled electrically from a Station Master's office or signal cabin, the Station Master/Cabin Assistant Station

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Master/Switchman shall place the slide collars on the slides of electric slide instruments, or on the keys of electric transmitters or interlocked key boxes. The Station Master/Cabin Assistant Station Master/Switchman shall ensure that lever collars are placed on the relevant levers.

Note: The information in regard to the operation of D.C. OHE switches and the section controlled by them is given in Appendix 'B' of P.D.S.R. As regards AC Traction, this information is given in Appendix to the Station Working Rules of each station.

(c) The lever/slide collars shall not be removed until the Station Master/Cabin Assistant Station Master/Switchman receives from the Section Controller and acknowledges a message supported by Private Number cancelling the power block. The Section Controller shall not issue such a message unless he has received a written message or phone messages supported by a Private Number from the Traction Power Controller cancelling the power block.

Note: In all cases mentioned under paras (2),(3),(10) and (11) of this Subsidiary Rule the Station Master/Cabin Asstt. Station Masters/Switchman must record the information in the Station Master's Diary/Train Signal Register.

(12) (a) All messages relating to operation of switches and issue of permits-to-work shall be confirmed by Private Numbers.

(b) All messages together with the Private Numbers shall be issued from and received into books specially maintained for the purpose.

17.05. Warning to staff and Public -

(1) All electrical equipment shall be regarded as being live at all times and consequently dangerous to human life, save and except in cases, where the electrical equipment has been specially made dead in accordance with special instructions. Caution notices shall be prominently fixed near all vulnerable places to warn staff and public to exercise due caution.

(2) No person shall climb on the top of engines or tenders or on the roofs of carriages or wagons when those vehicles are located beneath overhead equipment except when the overhead equipment is dead and earthed in accordance with special instructions.

S.R. 17.05-1.(1) Work on pantographs and roofs of rolling stock shall normally be carried on special sidings where switches are provided for making such sidings dead and earthed.

(2) Traction Engine Examiner or other authorised person in charge shall be responsible for making dead the overhead equipment over the tracks of inspection lines in loco sheds and stabling siding before permitting work to be done

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on the roof of electric rolling stock. The overhead equipment over these tracks shall not be energised except by the authorised person in-charge, who shall be responsible for every precaution being taken to ensure that everything is in order and that all staff are clear before energising the equipment.

(3) (a) In stations and yards an authorised person shall arrange to make dead and earth the overhead equipment and a permit-to-work card shall be obtained by the staff concerned before work on the roof of rolling stock or engines is commenced. On completion of work, the card shall be returned to authorised person for cancellation. The authorised person shall then satisfy himself that every thing is in order and that all staff are clear before energising the overhead equipment.

(b) Prescribed working rules for isolating and making dead section of overhead equipment for watering of carriages shall be followed at watering stations.

(4) (a) The PDSR lists the appropriate switches in 1500 V.D.C. system and the authorised person who will operate them to make a section dead or alive.

(b) Supplement to the Station Working Rules for A.C. Traction issued to each station, loco shed etc. specify that switches, the operation of which, will make a section dead or alive.

17.06. Alterations to track - Before any alteration to alignment or level of electrified tracks is commenced, due notice shall be given to those responsible for the overhead equipment so that the overhead equipment may be adjusted to conform to the new conditions.

S.R. 17.06-1.(1) Before any slewing, alteration to super-elevation or level of tracks is done, notice shall be given to the Divisional Electrical Engineer (Traction Distribution) to enable him to arrange for adjustment overhead equipment to conform to the new conditions, if necessary. Such work shall be included in the weekly programme detailed in S.R. 17.04-1 (2-d).

(2) (a) All minor alterations to overhead equipment whether permanent or otherwise shall be reported to the Traction Power Controller immediately by telephone and to the Divisional Electrical Engineer (Traction Distribution) or the Assistant Electrical Engineer (Traction Distribution) in writing.

(b) Major alterations affecting the existing disposition of any section of overhead equipment shall not be made unless sanctioned by the Divisional Electrical Engineer (Traction Distribution).

(3) (a) When working on overhead equipment, all staff shall ensure that the wires are not deflected so as to cause pantographs of electric rolling stock passing on other lines to be fouled by steady arm tubes or any other parts of the overhead equipment.

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(b) When the overhead equipment is slewed either temporarily or permanently, the person in charge shall ensure that section insulators, jumpers, distance and other fittings will not foul the pantographs of electric rolling stock passing on other lines.

(4) (a) Whenever any work on track, which is likely to affect rail bonds, is undertaken by permanent way staff, adequate notice shall be given to the Traction Foreman (Overhead Equipment), to enable him to arrange for bonding staff for removal and replacement of bonds.

(b) Bonding staff when working with a Permanent Way Inspector shall work under the latter's instructions who shall then be responsible for the safety of the track and of the staff.

17.07. Tripping of circuit breakers of locomotives and electrical multiple units at neutral sections - Unless otherwise allowed by special instructions, the Driver of the locomotive or electrical multiple unit shall coast through the neutral section, duly switching off power. Necessary indication boards to this effect shall be provided to guide the Driver to switch off and switch on power.

17.08. Tower Wagon - The rules for the movement and working of tower wagons shall be laid down by special instructions.

S.R. 17.08-1.(a) Whenever it is necessary to work a Tower Wagon either for the maintenance of OHE or attending to the site of Break Down or for any other reason, the person in charge of the Tower Wagon shall advise the Station Master/Cabin Assistant Station Master/Switchman about the movement of Tower Wagon.

(b) A Tower Wagon is to be treated like a train and shall be worked without a guard. The duties and responsibilities for protecting the train/track and other duties of the guard shall devolve on the OHE Supervisor accompanying the Tower Wagon.

(c) In case of an arranged OHE block, one or more Tower Wagons can be worked and follow one another. The Station Master, while authorising the following Tower Wagon/Wagons into occupied affected OHE Section, shall issue an "Authority to proceed Without Line Clear", authority on the prescribed form (T-32B) to pass the last Stop signal at 'On' and a Caution Order mentioning the site of work indicating the speed which under no circumstances, shall exceed 8 KMPH. The first Tower Wagon to enter the section shall also not exceed the prescribed limit of 40 KMPH.

(d) ~~A Tower Wagon shall, however, not be permitted to enter the section following a train in Absolute Block Signalling Territory.~~

(d) A Tower Wagon shall not be permitted to enter the section following a train in Absolute Block Signalling Territory, however, in case of integrated block one or more Tower Wagons can be permitted in block along with Material Train/TRT/PQRS, TMMs and SR 4.65-4 in this regard shall be followed.

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(e) After completion of the work, the official incharge of the Tower Wagon which entered last in the section shall certify at the station in advance about clearance of the section and initial against the relevant entry in the Train Signal Register in token of the section having been cleared of the last Tower Wagon.

(f) Tower Wagons have a key role in the maintenance of OHE and for attending to breakdowns. As such as soon as the programmed and sanctioned work is completed they shall be returned to their base depot with the utmost expedition in as much the same way as an Accident Relief Train.

17.09. Additional rules for electrified sections - Special instructions for working of trains on electrified sections shall be notified by the authorised officer.

SR 17.09.1: Accident and Unusual in Electrified Territory:-

- (1) Duties and responsibilities of Traction Power Controller, Section Controller and Station Master in case of No Tension-Fault Tripping in Over-head equipment:-

Fault Isolation:

- (i) In an electrified section in the event of Over-head equipment failure, Traction Power Controller shall immediately identify and localize the faulty section and isolate the same. In case of double and multiple line sections, he shall also isolate healthy section on adjacent track on the same route length as faulty section. The Traction Power Controller shall then advise the Section Controller in writing or on phone under exchange of private number, of the section found faulty and healthy section temporarily isolated.
- (ii) On receipt of the advise from Traction Power Controller, the Section Controller shall take action as under:-
 - a) Section Controller shall, under exchange of private number, advise Station Masters of stations on either side of isolated sections to treat the faulty section as if the same is under emergency power block and take action accordingly.

On Double Line Section - Healthy Section temporarily isolated.

- b) The Section Controller shall check whether any train has entered in the faulty section. If not, he shall advise the concerned SM to issue caution order to the Driver of the first train on unaffected section to 'keep a sharp look out on the adjacent line-lines to see if there are any OHE

abnormalities'. On reaching the next station, Driver, should report whether or not the section over which they have passed is safe for train movement. Then Section Controller will advise the Traction Power Controller in writing to re-energize the healthy section that was temporarily isolated.

- c) If however, a train has entered in faulty section, the Section Controller shall immediately inform SMs of all stations who are concerned with working of train in the faulty section and also in the section in which healthy Over-head equipment is temporarily isolated, under exchange of private number, that they shall not allow any train to enter the effected block sections unless both Driver and Guard of the first train in unaffected section have been issued caution order to this effect.
- (i) "Proceed with speed not exceeding 60 KMPH during day when visibility ahead is clear and not exceeding 30 KMPH during night subject to observance of other speed restrictions."
 - (ii) "Keep a sharp look-out and be prepared to stop short of any obstruction, which may be due to any infringement from the adjacent line-lines and also keep a sharp look-out on the adjacent line-lines to see if there are any Over-head equipment abnormalities. On reaching the next station report whether or not the section over which they have passed is safe for train movement".
 - (iii) Only after taking this action the Section Controller shall advise the Traction Power Controller in writing that necessary precaution have been taken to ensure safety of the train. The Traction Power Controller shall then restore the feed to the healthy section, which was temporarily isolated.
 - (iv) Action to remove speed restrictions shall be taken by the Section Controller in consultation with Station Master on receipt of report from the Driver and the Guard that the section is free of obstruction. Section Controller of the report of Driver-Guard of the train indicating whether or not there are any infringements or abnormalities in Over-head equipment. Till such time, it is decided to remove speed restriction, subsequent train shall be allowed to enter into the section only with permission from the Section Controller and shall continue to be issued caution order prescribing clearly the speed restriction and other precautions, as pointed out in c (i) above.

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(2) Duties and responsibilities of Traction Power Controller and Section Controller in the event of any abnormality in train on Electric Traction necessitating 'Switching off' of over-head equipment supply :-

- i) As soon as Traction Power Controller comes to know about unsafe condition of a train working on Electrified Traction, he shall immediately switch-'Off' the over-head equipment supply of both the lines of relevant Sub-sector. Traction Power Controller shall then advise in writing, the Section Controller of sections in which over-head equipment has been switched 'Off'.
- ii) On receipt of advice from Traction Power Controller, the Section Controller shall, under exchange of private number, advise Station Masters of all stations, who are concerned with working of trains in the affected section to treat the Dead section as if the same is under emergency power block and to ensure that no train is allowed to enter into the section.

Healthy section temporarily isolated:

- iii) Station Masters will not allow any train to enter even healthy line of the affected section unless both Driver and Guard of the first train of unaffected section have been issued caution order to proceed with the restricted speed not exceeding 60 KMPH during day when view ahead is clear and 30 KMPH during night subject to observance of other speed restrictions and keep a sharp look-out and be prepared to stop short of any obstruction, which may be due to any infringement or over-head equipment abnormalities from the adjacent line-lines. Also advise driver to report immediately on reaching the next station whether or not the Section over which they have passed is safe for the train movement.
- iv) If Driver of unaffected section contracts him on phone, the over-head equipment of unaffected portion should be resumed and he will be asked to proceed with the restricted speed not exceeding 60 KMPH during day when view ahead is clear and 30 KMPH during night subject to observance of other speed restrictions and shall keep a sharp look out and be prepared to stop short of any obstruction, which may be due to any infringement from the adjacent line-lines. On reaching the next station Driver will report whether or not the section over which they have passed, is safe for train movement.
- v) After ascertaining that there is no infringement to adjacent track, the Caution Order as indicated shall be withdrawn immediately.

Section-having affected train:

- vi) After getting information from the Crew of the affected train about the nature of abnormality, decision regarding recharging of the over-head equipment shall be taken by the Section Controller in consultation with

Chief Controller/Dy.Chief Controller (Shift duty) and controller of concerned department.

- vii) If the Driver of the affected train contacts Traction Power Controller/Control and no defect is detected in the train, on resumption of over-head equipment he will be asked by control to clear the block section with the restricted speed not exceeding 60 KMPH during day when view ahead is clear and 30 KMPH during night subject to observance of other speed restrictions and shall keep a sharp look out for any abnormality in the train. On arrival at the station the staff of concerned department should check the train. If no abnormality detected the train should resume at normal speed.

3) Duties and responsibilities of the Driver and the Guard in case of over-head equipment tripping / no tension in over-head equipment:-

- (i) In cases of transient Tripping of Over-head equipment the Driver shall resume normal traction and keep a sharp look out including on the adjacent line-lines to see if there are any abnormalities-obstructions and will inform to the Guard through walkie-talkie or whistle code about tripping in over-head equipment. The Guard of the train will look out for any abnormality on his train. The Assistant Driver should look back and observe his train for any abnormality.
- (ii) If no tension in over-head equipment continuous, the Driver shall immediately switch 'ON' the loco flasher and control the speed (not exceeding 60 KMPH at night) so as to be able to stop short of any obstruction and stop his train close to first emergency socket and will communicate with the Traction Power Controller/Control to know the reason for no tension in over-head equipment. The Crew should act according to advice of control.
- (iii) If it is not possible to communicate with the Traction Power Controller/Control immediately, the Driver shall depute the Assistant Driver to get down and check the train with the Guard in order to look for any abnormality for any defect in his train including locomotive. After the train has been checked, the Driver-Guard shall inform Section Controller of the abnormality, and assistance required, if any, or otherwise, through emergency phone of other line, Walkie-Talkie, Level Crossings gate or through train of other direction or by any other means of communication and act in accordance with advice of control. In case no abnormality is noticed in his train, Driver should switch "OFF" the loco flasher.
- (iv) If in the meantime, Power supply to over-head equipment gets restored, the Driver shall resume normal traction no sooner he comes to know of such resumption of supply."

[CS 5/3]

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CHAPTER XVIII

MISCELLANEOUS

18.01. Repeal and saving - The General Rules issued under the notification of the Government of India in the late Railway Department (Railway Board) No. 1078-T, dated the 9'th March 1929, are hereby repealed except as respect things done or action taken or omitted to be done or taken before such repeal.

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