

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. The Section Controller on duty at 16.00 hrs. shall transmit the time signal to the stations in the section controlled by him. In case the duty of the Section Controller changes at 16.00 hrs. the outgoing Section Controller shall transmit the signal. In the non controlled section, the signal shall be transmitted by the controlling station.

4.02. ADHERENCE TO ADVERTISED TIME. - No passenger train or mixed train shall be despatched from a station before the advertised time.

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 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) Attendance of Guards:-

(a) where trains originate-

(i) Guards of Passenger Trains shall report for duty 30 minutes and those of Through Goods Trains 45 minutes before booked departure of their trains.

(ii) Except where otherwise ordered, guards of parcel trains, van trains and shunting trains shall report for duty 60 minutes before the booked departure of their trains.

(b) For through goods trains at intermediate stations, where trains are stopped for change of running staff, the Guard should sign 'On' 10 minutes before the scheduled/expected arrival of the train and 35 minutes before the scheduled/expected departure of the train and the halt of trains at intermediate stations should be regulated accordingly.

(c) Any Guard who cannot attend owing to sickness must give sufficient previous notice which will be supported by a medical certificate to the Station Master.

S.R. 4.04.(2) Attendance of Drivers and Assistant Drivers/Firemen:-

(a) At station where trains originate or loco changing station, crew shall report for duty in the shed 45 minutes before their engine is due to leave shed. In the case of

Diesel and Electric Locos where Shunters/Engine Turners are provided for taking out locos from shed and attaching on load, the Driver shall be called out as laid in Sub-para (b) below.

- (b) *For through trains, at intermediate stations where only crew is required to be changed, the crew should sign 'On' 15 minutes before the arrival of the train. This time may be increased depending upon the local conditions subject to the maximum limit of 45 minutes.*

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 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.
- (c) The Driver shall observe the sanctioned sectional speed except when either one speedometer in case of electric loco or two speedometers in case of other locomotives are defective. In such cases of defective speedometers both the maximum permissible speed and booked speed of coaching trains shall be reduced by ten percent from the speed otherwise permissible.

(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) Subject to all temporary and permanent speed restrictions and the maximum permissible sectional speeds as laid down in the Working Time Table for each section concerned, the general maximum limits of speed along with explanations are given in "General Instructions of Working Time Table in force". Driver must not violate the maximum permissible speed limit prescribed in the Working Time Table.

S.R. 4.08.(2) In the event of a Railway Official noticing that a Driver is exceeding the sanctioned sectional speed or the maximum permissible speed for the class of the train or the speed restriction either temporary or permanent, he shall take measures to advise the Drivers of the fact at the next stop and submit a report, as early as possible, to the DOM/Sr.DOM and DME/Sr. DME concerned.

S.R. 4.08.(3) Speed of trains entering dock platform lines- The speed of trains entering dock platform lines shall not exceed 8 KMPH.

S.R. 4.08.(4) Attaching of goods stock to Passengers trains-

- (i) Goods stock, duly certified "fit to run on passenger trains" by train examining staff, can be attached to run on Passenger trains (except Mail and Express trains) with strict adherence of marshalling orders of Mixed trains.*
- (ii) The maximum speed of such trains should not exceed 75 kmph on Board Gauge and 50 kmph on Meter Gauge. The Driver of such a train must be apprised about attaching of goods stock by issue of a Caution Order instructing him not to exceed the above speed limits.*
- (iii) Goods stock must be attached next to the train engine unless the content are live-stock, explosives, dangerous or inflammable goods in which case these should be attached in the rear.*
- (iv) On Metre Gauge section having gradients of 1 in 100 or steeper the mixed trains should be marshaled with the coaching vehicles next to the train engine and goods vehicles attached in the rear of coaching vehicles.*
- (v) Vacuum/Air braked piped vehicles are not permitted to be attached behind rear brake van of a fully vacuumed/air braked train. They may, however, be attached*

inside the rear brake van, provided interference to electric connection is not caused. The last 3 vehicles including the brake van must however be with effective vacuum/air brake and operative cylinders.

- (vi) *SE(C&W) at all stations where coaching and goods trains are examined 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, this examination will be confined to the goods stock only and will be a "Safe to run" examination.*
- (vii) *On sections where no C&W staff is provided at the terminal station, the C&W staff at the originating station of the mixed train will give the certificate for both the outward and the inward journey of the wagons whether loaded or empty indicating the terminal station.*

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 white paper with green fonts and be made out and signed in full.**

Provided that as a temporary measure the Caution Order may be issued on the white paper with a green band running diagonally across the form.

S.R.4.09. Rules with regard to the issue and delivery of caution orders are given in Appendix 'A'.

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 turn-outs and cross-overs 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.**

S.R. 4.10.(1) Speed at which trains may run over facing points at interlocked and non-interlocked stations is shown in the Working Time Table.

S.R. 4.10.(2) Where the speed over the facing points at a station is less than the speed sanctioned at other stations on the same section, a permanent Speed Indicator should be fixed on the post of the first approach signal of the station. Where for sighting convenience, the signal is situated at some distance from the track, Speed Indicator Board with the inscription 'on facing points' may be fixed alongside the track with the Outer Signal or Warner/Distant Signal.

S.R. 4.10.(3) The Driver must observe the prescribed speed limits over turn-outs and cross overs and shall not resume normal speed until the entire length of the train has cleared the same and until this has been so indicated to him by the Guard by exchanging an "All Right" signal. In such cases the Guard shall not give all right signal to the Driver unless the last vehicle of his train has cleared the trailing points.

Note:- The term "Section" in so far as this Rule is concerned does not necessarily mean a section from one Junction to another but, a portion of the line on which the speed on facing points is the same at all stations, (but for few exceptions) as shown in Working Time Table.

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.(a) Trains arranged to run through the station without stopping shall, as far as possible always do so on the straight line.

(b) When the straight line is blocked a train may be passed through on the loop at a speed not exceeding 15 kms. an hour or such speed as prescribed by approved special instructions and notified in the working time table.

(c) When it is necessary for a non-stopping train to be run through over the loop line, the Authority to Proceed must not be given to the Driver on the Line Clear Picking Apparatus but must be handed over to him opposite the Station Office.

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 kilometers 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.**

S.R. 4.12.(1) Position of brake-van or trains being pushed- When a train is being pushed outside station limits the leading vehicle should, if possible, be a brake-van. The Guard must ride in the leading vehicle or in the nearest vehicle to it which if fitted with a vacuum/air brake valve or a hand-brake, which he can work from the position in the vehicle and guide the driver with the hand signals.

S.R. 4.12.(2) When a train, due to unforeseen circumstances has to return to a Station from which it has proceeded, it must be brought to a stand, on the single line at the first stop signal, and on the double line at the last stop signal of the same line or the first stop signal of the opposite line whichever comes first and must be piloted from there in to the station by one of the station staff.

S.R. 4.12.(3) Limits of speed of trains being pushed- When the engine is pushing the train-

(a) The speed must not exceed-

- (i) 25 KMPH on the straight line or 8 KMPH over a turn-out or where the gradient is steeper than 1 in 150 when the brake-van is leading; and*
- (ii) 8 KMPH in all cases when the brake-van is not leading.*

(b) When approaching points which are in his facing direction, the Guard must stop the train and satisfy himself that the points are correctly set and locked.

S.R. 4.12.(4) The movement of train or vehicle outside station limit with engine pushing during night or in thick, foggy or tempestuous weather impairing visibility without the leading vehicle being equipped with head light, marker light and without the guard or staff with facility to control the movement with application of vacuum/air brake shall not be permitted, except in case of emergencies, when such movement will be at a speed not exceeding 8 KMPH with the driver continuously whistling.

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. In case of goods trains where head light and cowcatcher have been provided on the tender, the goods trains may be worked upto a speed of 40 KMPH.

C. EQUIPMENT OF TRAINS AND TRAIN CREW.

4.14. HEAD LIGH, MARKER LIGHTS AND SPEEDOMETERS.-

- (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.**
- (5) **In case of defective electric head light of locomotive running in a section provided with reflective type of engineering fixed signal, during night or thick foggy weather impairing visibility on BG and MG, the Driver shall work the train cautiously at a speed not exceeding the severest temporary speed restriction imposed in the block section or 40 kmph which ever is less.**
- (6) **Coaching locos should not be turned out from home shed if the speedometer/recorders are in defective condition. In case of speedometer/recorder becoming defective during the run the train should run at a speed prescribed by special instructions.**

S.R. 4.14.(1) A flashing yellow light shall be provided on both sides of driver's cab on BG Diesel and Electric Locomotives which should be put 'ON' by the Driver in case the train comes to a stop on a double line section for any unknown reason.

S.R. 4.14.(2) The shunting engines working in station yards need not be provided with headlights.

S.R. 4.14.(3) The speed of the trains running with tender foremost or without headlight shall be as follows:

- (a) (i) *Engine Foremost : During night, the Driver shall work the train cautiously at a reduced speed not exceeding 50 KMPH on B.G. and 40 KMPH on M.G. The engine whistle shall be used frequently.*
 - (ii) *Tender Foremost: The speed during night or in thick and foggy weather shall be restricted to 15 K.M. per hour. The engine whistle shall be used frequently, particularly while approaching and passing unmanned and manned level crossing preceded by whistle boards or otherwise known or visible to driver.*
- (b) *The Driver of the train engine the headlight of which has become defective shall inform the Power Controller about the defect so that the latter shall in turn advise the Station Master ahead and the Foreman/Shedman in charge of the shed to which the engine is booked. The Power Controller shall also try to arrange for necessary attention to the defect enroute by the staff of the nearest loco shed/Electric Chargeman.*

S.R. 4.14.(4) Electric headlights are not to be used during engine movement within station or running shed yards.

4.15. TAIL AND SIDE LIGHTS. -

- (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) When the number of track on any section permit, under normal working conditions, of two trains running in the same direction at the same time, the Brake-van side-lamp adjacent to the other line or lines shall show a white light to the front and rear while passing over such section.

S.R. 4.15.(2) When a train is shunted or detained to give precedence to another train running in the same direction, the Guard shall as soon as the train is clear of the running line, reverse the two side lamps of the train (or in the case of fixed side-lamps reverse the slides) to show red towards the train engine, and white towards the rear before the train commences to move on to the running line.

S.R. 4.15.(3) When an engine is employed in shunting within station limits or in siding, tail lights need not be provided.

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 either a steady or flashing red light to indicate last vehicle check device and flashing amber light to exhibit obstruction on track shall be lit, or**
 - (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) An unlit red painted tail lamp of approved design may be permitted in lieu of tail board during day.

S.R. 4.16.(2) Light engines, single or coupled, must carry in the rear a red tail board of approved design by day, and a red tail lamp by night. Coupled engines must carry a tail board of approved design on the rear engine during the day and red tail lamp by night and the tail board/tail lamp on the leading engine must always be removed.

S.R. 4.16.(3) Red flag in place of a tail board during the day may be used in emergencies with the prior approval of an officer of the Operating Department.

S.R. 4.16.(4) Tail Light/Tail Board on EMUs –

- (a) The Guard is responsible for seeing that the tail light / tail board etc. as the case may be, are correctly exhibited.*
- (b) Use of Electric Flashing Amber Light on EMUs by Guard – In case of any stoppage out of course or a stoppage of more than 2 minutes at a station, the Guard shall switch 'on' the Electric Flashing Amber Light whether by day or by night and shall also switch it 'off' when the train is on the move.*

(c) Use of Electric Flashing Amber Light on EMUs by motorman –

- (i) If EMU train comes to a stop to on account of an accident or any other cause which is not immediately obvious and the motorman finds that his train can not proceed and feels necessary to stop the train on the adjacent line as his own/adjacent line may be fouled or for conveying any message for assistance, he shall immediately switch 'on' the Electric Flashing Amber Light whether by day or by night and give 4 bell code signals (4 sharp hooters in case of failure of bell code signal) to apprise the Guard of his inability to proceed further. He will thereafter switch 'off' the head-light of the driving cab if it is in the use during night, thick foggy or tempestuous weather impairing visibility. Besides this, if it is obvious that the adjacent line is fouled, he should also atonce take action to protect the adjacent line as per G&SRs 6.03.*
- (ii) When the Driver/Motorman of the adjacent line sees the Electric flashing light, he shall stop his train well short of the stranded train, communicate with the Motorman about the problem or assistance required and thereafter continue his journey only after ascertaining that the line on which he is proceeding is free from any obstruction.*
- (iii) The Driver/Motorman of the train proceeding on the adjacent line and who has communicated with the Motorman on the stranded train must stop at the next station and report the occurrence and the assistance required immediately.*
- (iv) The Motorman of the stranded train should switch 'off' the Electric flashing Amber light after he has conveyed the help message to the first Motorman/Driver of the train passing on the adjacent line, provided his train is not fouling the adjacent line.*
- (v) The Motorman should also switch 'on' the flasher light fitted on the front driving cab of Electric Multiple Unit while running on the wrong line, on double/multiple line section or when proceeding on authority to proceed for opening the communication during total interruption of communication on single/temporary single line section.*

In case, the Electrical Multiple Unit train running on the wrong line without switching 'on' the flasher light is noticed by the Station Staff, Gatemen and Gangmen, they should stop the train immediately.

S.R. 4.16.(5) whenever an Inspection carriage or SLR is not the last vehicle on the train and another vehicle is attached in rear of such inspection carriage/SLR, the built in electric red light as well as Tail Lamp of such Inspection carriage/SLR should be switched off. It is the duty of the Guard to ensure that Tail Lamp/Tail board is affixed only in rear of the last vehicle.

S.R. 4.16.(6) SLRs, 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 to ensure that the fixed tail lamp is not lit when vehicles are attached behind such SLRs, Brake Vans or other vehicles.

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,**
 - (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**
 - (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 each installed and is functioning and there is 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 conforming to the provisions of sub-clause (1) above, the Station Master shall still advice 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) and (c) of sub-rule 2 in such cases.**

S.R. 4.17.(1)(a) For run through trains and for other trains which come to a stop at a place where the Station Master can conveniently inspect the tail lamp/tail board or its authorized substitute in the rear of the last vehicle of the train personally the duty of ascertaining that the train has arrived complete will devolve on the Station Master.

- (b) At station where two or more cabins are provided, whenever stopping trains come to a stand so far from the Station Master's office that he can not readily see if the train has arrived complete, this duty will devolve on the Cabinman nearest to which the last vehicle comes to rest. In such a case, as soon as a stopping train arrives, the Cabinman will satisfy himself that it has arrived complete by seeing the tail lamp/tail board or its authorized substitute affixed in the rear of the last vehicle on the train and until he has so satisfied himself he must not replace the Home Signal lever to normal. After the train has arrived complete, he will put the home signal lever to normal and report the complete arrival of the train by telephone to the Station Master. Where there is a key transmitter, the transmission of the Home Signal key back to the Station Master is the Cabinman's assurance that the train has arrived complete. In other cases, the Cabinman must give a Private Number. Until the key or Private Number is transmitted the Station Master must not send the 'train out of section' signal.*
- (c) In case of a train arrives incomplete in respect of the tail lamp/tail board or its authorized substitute, the Cabinman will inform the Station Master by telephone and the Station Master will acknowledge this information with a Private Number.*

After he receives the private number, the Cabinman will put the Home Signal lever to normal and transmit the key if any. The Station Master will then send the Complete Arrival Register to the Guard to certify whether the train is complete or not against the entry of his train in the Complete Arrival register. On receiving back the Register and satisfying himself that the Guard has certified the complete arrival of the train, the Station Master shall then inform the Cabinman that the train has arrived complete and will give another private number in token thereof.

- (d) *At station other than those provided with two or more cabins, a Complete Arrival Register shall be maintained for the purpose of obtaining complete arrival certificates from Guards of stopping trains. This register shall have the following columns:*

Date	Train No.	Time of Arrival		Guard's signature in token of complete arrival of his train
		Hrs.	Minutes	

The Station Master shall send the register to the Guard through one of his station porters after entering the date and train number. The Guard shall, after satisfying himself that the last vehicle of his train is standing clear of all fouling marks, record the arrival time and his full signature in the appropriate columns. Thereafter he and the Station Porter together shall signal to the Station Master on duty by waving green flag during day and green lights during the night as an indication of the train having arrived complete. The Station Master shall close the line on receipt of hand signals from the Guard and Station Porter but shall not give line clear or obtain line clear from the Block Station from which the train has just arrived unless he has received back Register and satisfied himself that the Guard has certified the complete arrival of the train.

S.R. 4.17.(2)(a) If a train passes a station without a tail lamp or tail board, the Station Master shall take immediate steps to stop the train if possible, or failing this, he shall send a message to the station in the direction in which the train is proceeding the code word "LAMOUT" being used with a Private Number. When block instruments are in use the signal 000000 – 00 (Six Pause Two) will be sent and confirmed immediately with an exchange of Private Numbers between the two Block Stations concerned.

On double/multiple line sections, if a train passes the station without tail lamp/tail board the SM/Switchman/Cabinman shall immediately stop the movement of trains on the adjacent line/lines, the driver of which shall be given a caution order containing instruction to keep a sharp lookout for any obstruction on either line/lines and report at the next Station.

Normal working on other line shall be resumed after it is ascertained that there is no obstruction on adjacent line/lines.

- (b) *On section on which Train Control is in operation the Station Master of a Station through which the train passes without a tail lamp or tail board shall also inform control of the occurrence who will record it and arrange to stop the train at the next station.*

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. When an alarm chain is pulled, the Assistant Driver must assist the Guard in charge of the train in putting back the disk to its normal position. In this case, the Guard before starting train should also satisfy him self that the correct amount of vacuum or brake air pressure as the case may be, is available in the train.

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).

S.R. 4.19.(1) Guard's Personal Equipment: - In addition to above, the following articles are supplied as personal equipment to Guards. These equipment shall be available with the Guard either in a locker assigned to him at his H.Q. or station near the area where he reports for duty, so that during the period of waiting for working the train he can consult the Books/Manuals for updating his knowledge. It can also be available at a place identified by the Sr.DOM in consultation with the Divisional Railway Manager.

Items for Guards working Mail/Express/Passenger trains:

<i>Sr. No.</i>	<i>Name of Item</i>
(1)	<i>Torch cum Hand Signal Lamp</i>
(2)	<i>Two Red Flags and one Green Flag mounted on Stick</i>
(3)	<i>Detonators in a Tin Case (10 Nos)</i>
(4)	<i>Extract of relevant rules</i>
(5)	<i>Working Time Table with Appendix</i>
(6)	<i>One Whistle</i>
(7)	<i>Tail Lamp</i>
(8)	<i>Rough Journal</i>
(9)	<i>Guard's Certificate Book</i>
(10)	<i>Guard's Memo Book</i>
(11)	<i>Padlocks (3 Nos - 2 large and 1 small)</i>
(12)	<i>Chain with a suitable lock for securing Briefcase</i>
(13)	<i>Carriage Key</i>
(14)	<i>ACP Resetting Keys</i>
(15)	<i>Complaint/Suggestion Book</i>

Items for Guards working Goods trains:

(1)	<i>Torch cum Hand Signal Lamp</i>
(2)	<i>Two Red Flags and one Green Flag mounted on Stick</i>
(3)	<i>Detonators in a Tin Case (10 Nos)</i>
(4)	<i>Extract of relevant rules</i>
(5)	<i>Working Time Table with Appendix</i>
(6)	<i>One Whistle</i>
(7)	<i>Tail Lamp</i>
(8)	<i>Rough Journal</i>

- (9) *Guard's Memo Book*
 (10) *Padlocks (3 Nos - 2 large and 1 small)*
 (11) *Air Pressure Gauge*
 (12) *Chain with a suitable lock for securing Briefcase*

In addition each Guard while on duty shall continue to have with him two pairs of such spectacles as he is required to wear under medical advice and a watch.

SR. 4.19.(2) Brake van equipment for coaching trains-

Following complement of brake van equipment shall be provided in a cupboard to be provided in the brake van of all coaching trains. The box shall be kept locked by a universal key.

<i>Sr. No.</i>	<i>Items</i>	<i>Quantity</i>	<i>Maintained/Supplied By</i>
(i)	<i>Portable control telephone</i>	<i>2*</i>	<i>Jr. Eng. (Tele.)</i>
(ii)	<i>Portable train lighting equipment</i>	<i>1</i>	<i>Jr. Eng. (Elec. G.)</i>
(iii)	<i>Portable Fire Extinguishers</i>	<i>2</i>	<i>Jr. Eng. (C&W.)</i>
(iv)	<i>Wooden Wedges/Skids</i>	<i>2</i>	<i>Jr. Eng. (C&W.)</i>
(v)	<i>Stretcher</i>	<i>1</i>	<i>SM.</i>
(vi)	<i>First Aid Box</i>	<i>1</i>	<i>SM</i>
(vii)	<i>Vacuum Gauge for vacuum Goods trains</i>	<i>1</i>	<i>Lobby incharge</i>

** (a) For Inter Railway trains one each for electrified and non electrified territory.*

(b) Either for electric or non electric or both depending upon traction over which the train travels with in Zonal Railway.

Note:- *(i) Equipment would be loaded and run on end to end basis and will be kept in the cupboard provided in the brakevan in locked condition by a universal key.*

(ii) No coaching train shall start without full complement of brakevan equipment. The authority to permit the trains to run with deficient safety equipment in the train for all type of trains may not be below DRM/ADRM for Inter Railway trains, Sr. DOM/DOM for Intra Railway passenger trains and CHC/CTNL for other types of services.

(iii) In order to ensure safety of equipment and proper handing over and taking over, the brakevan equipment shall be loaded by respective staff, shown to guard at originating station and acknowledgement taken from him.

(iv) Each guard while taking over charge enroute will sign for the intactness or otherwise of brakevan equipment in the relieved guard's rough journal book.

(v) At the terminating station, the equipment shall be handed over by guard to the staff of respective departments. At stations where staff of C&W and/or other departments are not posted, the equipment will be handed over to the authorized representative of SS/SM under acknowledgement, who will also be responsible for its loading in the return direction taking acknowledgement from the Guards.

(vi) In case of any consumption enroute or any defect noticed during journey, it will be advised in writing to relieving guard by the relieved guard.

At the terminal station, same shall be advised in writing to the SS/SM who will advise the same to the authorized representative of the department concerned. Thereafter, representative of the concerned department will recoup the shortage. However, responsibility to ensure full complement of brakevan equipment in working condition will be with the primary maintenance depot. In case of any defect noticed enroute, responsibility fixed on the supervisor who has supplied the equipment.

S.R. 4.19.(3) The Drivers shall be supplied with following articles as their personal equipment which he must carry with him at all times, while performing duty on the foot-plate :-

FOR DIESEL HYDROLIC/DIESEL ELECTRIC LOCOS.

<i>Sr. No.</i>	<i>Description</i>	<i>Quantity</i>
(1)	<i>G & SR Rules Book or Driver's Rule Book with up-to-date correction slips.</i>	<i>1</i>
(2)	<i>DSL Loco trouble shooting booklet.</i>	<i>1</i>
(3)	<i>DSL Loco Operating Manual.</i>	<i>1</i>
(4)	<i>Electric torch (three celled).</i>	<i>1</i>
(5)	<i>Screw Driver.</i>	<i>1</i>
(6)	<i>Duster.</i>	<i>1</i>
(7)	<i>Driver's hand book.</i>	<i>1</i>
(8)	<i>Water Bottle.</i>	<i>1</i>
(9)	<i>Standard Vacuum test plate.</i>	<i>1</i>
(10)	<i>Spare hose pipe (complete with clamps).</i>	<i>1</i>
(11)	<i>One Flare signal (fusee) for Drivers working on Double/Multiple line sections, Ghat sections and Automatic block sections.</i>	<i>1</i>
(12)	<i>Hand Signal Lamp LED based red and green flashing lamp cum torch (one for Driver and one for Astt. Driver).</i>	<i>2</i>
(13)	<i>ACP reset key for Air Brake trains.</i>	<i>1</i>
(14)	<i>Detonators (in a case).</i>	<i>10</i>
(15)	<i>Engine lamps required to exhibit the prescribed head and tail lights (See GRs and SRs 4.14 & 4.15).</i>	
(16)	<i>Red hand signal flag.</i>	<i>1</i>
(17)	<i>Washers.</i>	<i>5</i>
(18)	<i>Miscellaneous emergency tools.</i>	

S.R. 4.19.(4)(a) Hand signal lamp referred to in rule 4.19 (1) (c) shall be LED based red and green flashing lamp cum torch.

(b) Red and green hand signal flags referred to in rule 4.19(1) (e) and above SR shall be mounted on sticks.

(c) First aid box shall also be supplied to the Guards of material trains with workers and mixed trains.

- (d) As per sub-rule (3) under rule 4.19 each Guard and Driver shall have two separate pairs of spectacles for near and distant vision if they do not have bi-focal spectacle.
- (e) One spark proof dry cells torch shall be supplied to Guards working on sections where there is significant volume of POL/LPG traffic. Such sections shall be decided by Divisional Railway Manager.

FOR ELECTRIC LOCOS

Sr.No.	Description	Quantity
1.	G&SR Rules Book or Driver's Rule Book with upto date correction slips	1
2.	Screw Driver 8"	1
3.	Wooden Wedge for contractors	4
4.	Standard vacuum test plate	1
5.	Rubber washer	5
6.	Scissors for trimming lamp wicks	1
7.	Duster	1
8.	Water Bottle	1
9.	Electric Torch (three celled)	1
10.	Driver's pocket book	1
11.	Competency Certificate	1
12.	Electric Loco Operating Manual Part I & II	1 for each type of loco
13.	Insulated pliers	1
14.	Double ended open jaw spanner size 14 mm x 17mm	1
15.	Adjustable Spanner 12"	1
16.	Pin Punch	1
17.	Chisel flat 9" or 10"	1
18.	Fusee (for drivers working on Double/Multiple line sections and on Ghat, Suburban and Automatic Block territories only.)	1
19.	Hand signal lamp in efficient working order (one for Driver and one for Asst. Driver)	2[inclusive one given in G.R. 4.19 (1)]
20.	ACP reset key for Air Braked trains	1

S.R. 4.19.(5) In addition to the items listed above, every Driver shall also carry while on duty on the foot-plate a tool box containing the following items.

FOR DIESEL HYDRAULIC/DIESEL ELECTRIC LOCOS

Sr.No.	Description	Quantity
1.	Adjustable spanner 1.1/8" x 10"	1
2.	Pin punch 3/32"	1
3.	Hand hammer ball panel (2 lbs)	1
4.	Wooden plugs of size 1.1/2", 1", 7/8", 5/8" and 3/4" (for plugging various pipes in the case of breakage)	1 each

5.	<i>D.C. compression key</i>	<i>1 (for Driver working WDM-4 locos only)</i>
6.	<i>Pinch Bar 24"</i>	<i>1</i>
7.	<i>Tallen tape (to plug the leakage of brake and feed pipe)</i>	<i>1</i>
8.	<i>M.U. washers (for changing the worn out washers if leakage starts enroute)</i>	<i>2</i>
9.	<i>Long wire 1/8" thickness (for securing hanging gears of dangerous wagon)</i>	<i>2 metre</i>

Note: Item 7&8 will be for BG only and shall be used on air brake trains.

FOR ELECTRIC LOCOS

<i>Sr.No.</i>	<i>Description</i>	<i>Quantity</i>
1.	<i>Hammer 2 ½ lb.</i>	<i>1</i>
2.	<i>Tommy bar 24"</i>	<i>1</i>
3.	<i>Brush Banister</i>	<i>1</i>
4.	<i>Cotton rope for panto</i>	<i>1</i>
5.	<i>Leather Bag (for small tools)</i>	<i>1</i>
6.	<i>Emergency Telephone</i>	<i>1</i>
7.	<i>Tallen tape (to plug the leakage of brake and feed pipe)</i>	<i>1</i>
8.	<i>M.U.washers ((for changing the worn out washers if leakage starts enroute)</i>	<i>2</i>
9.	<i>Long wire 1/8" thickness (for securing hanging gears of dangerous wagon)</i>	<i>2 metre</i>

Note: Item 7&8 will be for BG only and shall be used on air brake trains.

S.R. 4.19.(6) (i) The Driver of a light engine will also carry one red flag and one hand signal lamp, which will be issued to him for each particular occasion.

(ii) Drivers and fireman/Asst. Driver who are supposed to wear glasses must possess two pairs of suitable spectacles while on duty and they should also sign in the 'Appearance Book' that they are carrying one spare pair of glasses. In case a Driver or Fireman uses separate spectacles for near and distant vision then he must carry a spare pair of each.

(iii) Asst. Driver must carry one Red and one Green flag at all time with him while performing duty on the footplate.

S.R. 4.19.(7) Loco Equipment: Each Loco coming out of out-pit/shed will have the following equipment available on the engine.

FOR DIESEL HYDRAULIC/DIESEL ELECTRIC LOCOS

<i>Sr.No.</i>	<i>Description</i>	<i>Quantity</i>
(i)	<i>Engine Repairing Book</i>	<i>1</i>
(ii)	<i>Fire extinguishers</i>	<i>2 (one in Engine Room & one in Driver's Cabin)</i>
(iii)	<i>Loco Log Book</i>	<i>1</i>
(iv)	<i>Brush</i>	<i>1</i>
(v)	<i>Loco Key</i>	<i>1</i>
(vi)	<i>Emergency field telephone</i>	<i>1</i>
(vii)	<i>Spare hose pipe for BP and FP (complete with clamp and palm)</i>	<i>1 (for air brake locos)</i>

FOR ELECTRIC LOCOS

(i)	<i>Fire Extinguishers</i>	<i>4</i>
(ii)	<i>Loco log book</i>	<i>1</i>
(iii)	<i>Loco keys (Brun Key, B.L. Key, Panto Selector Key and Reverser key)</i>	<i>1 set</i>
(iv)	<i>Spare hose pipe (complete with clamp)</i>	<i>2</i>
(v)	<i>Emergency Field Telephone</i>	<i>1</i>
(vi)	<i>Spare hose pipe for BP and FP (complete with clamp and palm)</i>	<i>1 each (for air brake loco)</i>
(vii)	<i>Spare high tensile coupling</i>	<i>1</i>
(viii)	<i>Wooden Blocks</i>	<i>4</i>

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.**

S.R. 4.20.(1) In controlled sections where emergency portable telephones are provided on the train/engine, information regarding the incapacitation of the driver may be given to the control.

S.R. 4.20.(2) Leaving road by first Fireman/ Diesel Asst. / Assistant Driver-

(a) No Driver or shunter passed Driver and/or Diesel Asst./Leading fireman and in

the case of electric traction only, an Asstt. Driver as well may be sent out for working a train until he has thoroughly learnt the road and signed a certificate that he is fully acquainted with it. For this purpose they should be given three round trips before they are put to work independently.

- (b) *A driver or a shunter passed driver or an Assistant Driver or leading fireman, who has become unfamiliar with the road due to an absence of 3 months or more from the section concerned, should not be allowed to work train until he has again learnt the road and furnished a certificate that he is fully acquainted with the same. For this purpose he should be given road learning trips as per schedule given below to refresh his knowledge of the road.*

<i>Duration of Absence</i>	<i>No. of Trips</i>
<i>3 to 6 months</i>	<i>1</i>
<i>Over 6 months to 2 years</i>	<i>2</i>
<i>Over 2 years</i>	<i>3 (as per new entrants)</i>
<i>If a driver reports to SSE(Loco)/ Traction Foreman of not learning the road fully.</i>	<i>4th trip may be allowed</i>

In case of drivers only, the SLI/SSE(Loco)/TF of the Section/Shed will test their knowledge and sign on the certificate confirming that the driver is fully acquainted with all the signals and terrain of the section on which he is required to work.

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.**

SR 4.21.(1) If the control from leading driving cab of an electric loco becomes defective, the driver shall also inform the Traction Loco Controller at the first opportunity and seek assistance.

SR 4.21.(2) In such of the electric locos where manual control is not possible from the driving cab and the master control and the emergency electric control fails, the driver shall clear the

block section by working the train with manual control from inside the High Tension Compartment at a restricted speed of 15 KMPH. During this period Assistant Electric Driver, shall operate the manual control and the Driver shall be in the leading cab and apply the emergency brakes in the event of emergency.

SR4.21.(3)(a) Only Drivers of Electric Rolling Stock shall be allowed to drive the Electric Rolling Stock on any part of the running line.

(b) To train up Assistant Drivers, Drivers may allow them to drive the engines under their direct supervision on certain sections as specified by Divisional Electrical Engineer.

(c) Staff under training for driving an electric engine, when specially authorized by the Divisional Electrical Engineer (Rolling Stock), may drive such engine under the supervision of a certified Instructor. While the trainee is driving under these conditions, the supervising Instructor shall keep a continuous watch over the trainee and keep himself in readiness to take any action, that may be required to control the engine in an emergency.

(d) No person shall be allowed to move an Electric Rolling Stock within the limit of the loco shed and stabling sidings unless he has been certified by an officer of the Electrical Traction (Rolling Stock) to do so.

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. Person authorised to ride on an Engine- No person other than the Driver/ Assistant Driver and Fireman shall ride on the engine or tender except as stated below:-

- (i) Holders of metal passes and Officers or Inspectors holding card passes specially endorsed 'available to ride on engine' when on duty.*
- (ii) Holders of special passes signed by the Chief Operations Manager.*
- (iii) Transportation or any other authorised official (a) carrying out shunting or piloting operations or (b) proceeding to work a stabled train or returning after having done so on relief to headquarters.*

In case of item (b) the duty pass of the official must be endorsed by the Station Master on duty to the effect "permitted to proceed by light engine".

- (iv) Drivers /Asst. Drivers / Diesel Asst. / Fireman / TTM Operator learning the road if in possession of a permit issued by the Divisional Mechanical Engineer or SSE (Loco) concerned.*

- (v) *The number of authorised persons other than Engine crew travelling in engine must not be more than 3 at any time except in case of emergency or when specially required.*

4.23. BRAKE VANS.–

- (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) Goods train without brakevan may be run for operational exigencies only under inescapable circumstances and not as a regular measure. The decision to run a goods train without brakevan /match truck shall be taken by Sr. DOM/DOM or any other operating officer of the division for each individual train personally, and the details of the train i.e. date, train number, from and to stations, last vehicle numbers, shall be recorded along with the reasons for running train without brakevan in a separate register maintained in the control office. Running of such train is strictly prohibited during total failure of communication and single line working on double line section.

Whenever a goods train is running without brakevan, the following precautions should be observed :-

- (i) *The train shall be worked on the last vehicle numbers principle.*
- (ii) *Before starting the train, the Guard shall relay the number and description of the last vehicle in writing to the SM/Yard Master of the train originating station.*
- (iii) *The number and description of the last vehicle must be repeated to the Section Controller and the SM of the station in advance while making the line clear enquiry as well as while giving train entering section signal from each station. The Section Controller, in turn must alert the Station Master enroute of the train number as also the number and description of the last vehicle.*
- (iv) *While granting the line clear, SM of the station in advance must clearly repeat the number and description of last vehicle under exchange of private number. These private numbers, should be recorded along with last vehicle numbers and its description in the “Remarks” column of Train Signal Register in addition to recording of usual private number obtained / given for line clear.*

The number and description of last vehicle shall also be repeated by each Station Master to the station in advance and to Section Controller while giving “Train Entering Section” signals.

- (v) *The Guard shall ensure that train has a continuous vacuum / air pressure brake system from train engine to the last vehicle with effective and adequate brake power, including for rear most pistons in working order. The Guard shall fix a Tail Board by day or tail lamp by night on the last vehicle and shall also ensure that couplings are secured before starting and enroute.*

- (vi) *The Guard of the train shall travel on the engine and frequently look back to ensure that train is running in safe manner.*
- (vii) *The Driver and his Assistant also shall look back frequently during the journey to see that the rear portion of the train is following in safe and proper manner.*
- (viii) *If the gradient of the section is steeper than 1 in 100, engine should be attached in the rear of the train without brakevan as banker/assisting engine. In such cases, the Guard shall ride on the engine in rear.*
- (ix) *Whenever tail board by day or tail lamp by night has been fixed on the last vehicle of train, such train should run at prescribed sectional speed and be treated at par with trains running with the brakevan fitted with tail board or tail lamp.*

However, for any reason, tail board/tail lamp cannot be fixed on the last vehicle, the following additional precautions should be taken:-

- (a) *The trains shall run through station at a restricted speed of 20 kmph during day, provided the visibility is clear. At night or in thick foggy weather, when visibility is affected, such a train should stop at each station for verification of the last vehicle number and to ensure complete arrival of the train.*
- (b) *Between stations, the train without brakevan running on last vehicle number may run at the sectional speed subject to other speed restrictions in force. However in thick foggy weather, the train shall run duly observing the precautions laid down in the G&SR when visibility is restricted.*
- (c) *The Station Master on getting the train number of the train without brakevan and its last vehicle number, will inform the end-cabins under exchange of private numbers.*
- (d) *Before closing the block section, Station Master / Cabinman/ASM of the cabin must personally and physically check and verify the last vehicle number of the train which was obtained from station in rear / section controller. In case, last vehicle number does not tally, or unable to read the last vehicle number of the train, the train shall be stopped at station in advance to confirm the last vehicle number, mean while closing of the block section should be with held.*
- (e) *If the actual last vehicle number does not tally with that obtained from SM, the Guard traveling on the engine should be asked to certify complete arrival of the train by issuing an arrival certificate indicating the correct number of the vehicle.*
- (f) *Whenever there are no end cabins, the responsibility to tally the last vehicle number shall devolve on the Station Master.*
- (x) *When a train running without Brakevan encounters trouble enroute, the following steps are taken by the Guard of a train:-*
 - (a) *Guard alongwith Diesel /Elect. 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/Air pressure trouble occurs within the station limits.*

(b) *The Guard should arrange to connect the hose pipe, plug the leakage etc. with the help of Diesel/Elect. Assistant Driver and start his train after ensuring that the Vacuum/Air pressure trouble has been fully attended to and the requisite amount of Vacuum/Air pressure is maintained on the locomotive.*

Note: *Record of such running of Goods train without brake vans shall be maintained in a separate Register in the control office.*

S.R. 4.23.(2) Attaching of Inspection Carriage to Light Engine :- Maximum of three inspection carriages, each one of them occupied by an officer and fitted with hand brakes which can be operated by its occupant, may be attached to a light engine. The officer occupying the last carriage is responsible to see that a red flag is fixed to serve as a tail board by day, that the tail lamp is lit after dark and also that the hose coupling is duly connected and the inspection carriages are marshaled as per Rules. Signing of Train Intact Register is not necessary, but the Station Master detaching/attaching the carriage shall satisfy himself that the red flag or tail lamp is duly exhibited before clearing the section in rear. In the absence of a red flag or tail lamp, the Station Master shall make, personal enquiries from the officer occupying the last carriage and ascertain whether there was more than one carriage.

S.R. 4.23.(3) Fully vacuum/Air Brake Trains:- In case of trains worked with vacuum/air pressure throughout, not more than two bogies or their equivalent (four-wheelers) may be attached in the rear of the rear brake-van, subject to the condition that the vehicles are fitted with vacuum/air brake in good working order.

In case of goods train, an inspection or officers carriage (bogie or four-wheeler) may be attached in place of a bogie or two four-wheelers provided it is fitted with vacuum/air brake in good working order.

However, in case of trains carrying passengers, an inspection or officer's carriage (bogie or four wheeler) may be attached in addition, provided it has its own hand brakes.

S.R. 4.23.(4) Partly vacuum trains- In case of partly vacuum trains only one inspection or officer's carriage (bogie or four-wheelers) may be attached in rear of the rear brake-van, subject to the condition that it is fitted with handbrake in a good working order which can be operated by its occupant during its run.

S.R. 4.23.(5) Power Plant Bogie- Only on mixed and goods trains with full vacuum brakes- In case of only mixed trains and goods trains working with vacuum throughout, not more than two Power Plant Bogies in place of two bogies or 4 four-wheelers may be attached in the rear of the brake van provided the condition prescribed for carriage of inflammable goods are complied with.

Note:- *No carriage passengers shall be intervening between the rear brakevan and the Power Plant Bogies which will be the last vehicle on a train.*

4.23.(6) One damaged vehicle, certified as fit to run and accompanied by a competent Railway servant may be under special instruction of the Divisional Operations Manager be attached in the rear of the rear brakevan(as a last vehicle) of a goods train, during day lights hours only.

4.23.(7) *In all cases where vehicles are attached behind the rear brakevan, the last vehicle must carry a red tail board during day time and a red tail lamp by night. The tail lamp of the brakevan must be turned out at night and officers who get their saloons attached behind the brakevan should ensure that this is done [See S.R. 4.16(2) also].*

4.23.(8) *Medical Relief Van- A Medical Relief Van should be sent, attached to an engine without brakevan. In the event of parting etc., the handbrake provided on the Medical Van must be applied by the Guard who should travel in the Medical Van. If a Guard is not available, the Medical Van should not be detained and Assistant Station Master or other qualified group 'C' employee of the Operating Department should be deputed to perform the duties of Guard. Those Medical Vans not fitted with handbrakes, must be provided with wooden wedges, four chains and four padlocks for use in the event of parting etc., for securing of van.*

These instructions also applied to Medical Relief Van working on the Ghat Section except that it must be dispatched with a brake-van attached to it in rear and the Guard or the other person performing duties of the Guard should travel in the brake-van.

4.24. POSITION OF BRAKE -VAN 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 brake-van.

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) In an emergency running of train without Guard should be done with the specific order of Sr. DOM/DOM and in that case such of the duties of the Guard, as can be performed by the driver, shall devolve on the later as may be specified by special instructions:-

- (i) *It should be ensured that the train is provided with continuous vacuum/air pressure from the engine to the rear most vehicle, which may be a brakevan. If the Guard is not provided at the originating station of the train, the SE (C&W) shall mention the number and type of the rear most vehicle in the brake power certificate issued for such a train. And if no Guard is provided at any intermediate point, the crew changing station, the driver on being informed by the SM, shall examine the brake power of the train and ensure that the rear most four pistons are in working order. Before signing the vacuum/ brake power certificate the driver shall ensure that the required amount of vacuum/ air pressure is provided in the brake van. Vacuum/pressure gauge shall be provided by the originating station.*
- (ii) *L.V. Board/tail lamp must be made available to the Driver and the last vehicle indicator shall invariably be fixed at the tail end of the rear most vehicle by the driver. The tail lamp is essential in running such a train in the night time.*

- (iii) Caution Order shall be issued to the driver by the SM with necessary endorsement stating that the train is to run without Guard and section controller shall also be advised of the fact under exchange of private numbers, who will inform the station enroute. The SM on getting the train number, will inform the end cabin, where provided, and gatemen of all the level crossing gates en route provided with telephonic communication accordingly under exchange of private numbers.*
- (iv) The fact that the train is running without Guard and also the last vehicle number shall be mentioned in each line clear inquiry and reply message, and with the departure report while working train on Automatic Block System. Line clear enquiry message and reply shall be recorded in the train signal register. A separate private No. shall include the number of the last vehicle of the train and this No. shall be exchanged stating that the train is running without Guard.*
- (v) The SM of the Block station working the intermediate block stop signal, on becoming aware that the train is running without Guard, shall before dispatching such a train, treat the entire section upto the block station immediately ahead of the intermediate block post as one block section and obtain line clear for the block section between intermediate block stop signal and the block station in advance.*
- (vi) Asstt. Driver/Fireman will keep a continuous look out, while running through a station, towards the rear, and shall acknowledge any danger signal shown by the station staff.*
- (vii) When such a train stops at a station the Station Master/Switchmen/Cabinmen shall ensure that the train has arrived complete and is standing clear of the fouling mark.*
- (viii) During thick, foggy and tempestuous weather and during total failure of communication and single line working on double line section running of train without Guard is strictly prohibited.*
- (ix) Extra sets of detonators should be carried by the Driver who shall be responsible for protection of the train.*
- (x) When such a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the driver finds that his train cannot proceed further, he shall immediately on single line, protect the train in front and the Asst. Driver/Fireman in the rear. In case of double line, when adjacent line is not blocked, the driver shall protect in front and Asst. Driver/Fireman in rear. In case adjacent line is blocked the driver shall first protect the adjacent line and then his own line in front and Asst. Driver/Fireman in the rear.*
- (xi) In case of passenger carrying trains, the driver shall also be provided with first aid box, portable field telephone and emergency light equipment.*
- (xii) In automatic block sections/CTC territory, no train shall be allowed to follow until the preceding train which has been allowed to run without Guard has arrived complete at the next block station in advance.*

S.R. 4.25.(2) When two or more Guards are running with a train, the Head Guard shall ride in the rear brake van except in the case of Rajdhani Express when he will travel with Train Superintendent.

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. When a vestibuled coach is the last vehicle on a train or any coach is isolated and the vestibule is not in use the doors of the unused vestibules must be closed and properly secured by the Train Examining staff. An endorsement to this effect should be made on the Brake Power Certificate Form by the SE (C&W).

D. VEHICLES AND CRANES.

4.27. CRANES.-

- (1) No traveling crane shall be attached to a train until it has been certified by a duly authorized 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) The principal parts of a Traveling Crane are described in para 607, Chapter VI of Loco Manual.

S.R. 4.27.(2) Attaching of traveling cranes to trains-

(a) Steam Cranes-

- (i) Before traveling, Blocking screws or stops over the axle box must be completely withdrawn to make the spring gear operative.*
- (ii) The outriggers must be in the retracted position and properly secured against the possibility of working out on the run.*
- (iii) The jib of a crane may be kept either leading or trailing but it must be fully lowered and resting in a central position on the bolster of the dummy truck and securely fastened against all possibility of getting dislodged on the run. Steam cranes are generally provided with means of locking the swiveling base to the floor to the truck on which they are mounted and the same must be made use of.*
- (iv) It is usually necessary to approach a site of accident from the station nearest to it, with the crane leading. Some cranes have reversible dummy trucks, which means that the dummy truck, if required, can be lifted bodily by the crane itself and placed in rear. In case of such cranes, the dummy truck, being in front, is not hindrance and the site may be approached with the jib lowered fully and supported on the dummy truck. In case of cranes, which do not have a reversible dummy truck, the truck should be marshaled in rear of the crane at the previous station and the site approached with jib trailing.*

Thus, it is possible in most cases, to avoid traveling with the jib hoisted but should an occasion arise necessitating the crane to run with the jib unsupported on a dummy truck, the jib must be in the central position, and its swiveling movement prevented by a dependable locking arrangement such as is provided under the swiveling

base and the speed must not exceed 6 kmph. The supervisor in charge of the crane shall see that the jib is hoisted only to the extent which would rule out the possibility of its fouling with any structure of overhead wires.

- (v) *The crane Driver, who must always travel on the crane, is responsible for the safety of the crane throughout the journey.*
- (b) *Hand cranes-*
 - (i) *The precautions laid down for steam cranes must also be observed for hand cranes.*
 - (ii) *Counter balance box, if provided, should be moved inward to the fullest extent and securely fastened. The weight of the balance box shall be marked on it and no alteration in the weight shall be made except under written sanction of the Chief Mechanical Engineer.*
 - (iii) *The operating handles must all be removed from the shafts.*
 - (iv) *The gear for relieving the weight on the central pillar where provided must be locked in the traveling position.*
- (c) *Any crane not fitted with buffing gear, spring gear, enclosed axle boxes or not provided with a match truck, will not be considered as a traveling crane and must not be attached to any train without the specific orders of the Chief Mechanical Engineer.*
- (d) *Cranes must not be attached to passenger trains except in case of emergency when they may be attached to slow passenger trains or mixed trains under the joint permission of Divisional Mechanical Engineer and Divisional Operations Manager.*
- (e) *Cranes can be attached to all goods trains and should as far as possible, be attached with the dummy truck and the crane itself next to the engine.*

S.R. 4.27.(3) (i) Broad Gauge - The 140/120/75/65/40 tonne crane can be permitted to run at the authorized speed which can be upto a speed of 75 kmph. or at the sectional speed whichever is less on all sections subject to the observance of all permanent and temporary restrictions that may be in force from time to time.

(ii) Metre Gauge - The 35 tonne crane shall be permitted to run at a speed of 50 kmph. or the sectional speed, whichever is less, subject to the observance of all permanent and temporary restrictions that may be in force from time to time, except on the following sections, where the speed shall not exceed as shown against each section.

<u>Division</u>	<u>Section</u>	<u>Permissible speed</u>
Ajmer	Mavli Jn.- Barisadri	8 kmph

S.R. 4.27.(4) Restrictions over bridges - There is no special restriction over bridges for 35 tones steam crane. If it is necessary for two steam cranes to be on a single span of any bridge, the approval of the Chief Engineer must be obtained before hand.

S.R. 4.27.(5) Crane working within Station Limits-

- (i) *Before commencing the operations, the Supervisor will notify the Station Master in writing the nature of the work, the line or lines likely to be fouled during the*

period of operation and, time required for the work. He will commence the operation only after obtaining the written permission from the Station Master.

On controlled sections where running lines are fouled, the Station Master on duty will not give the permission except with prior approval of the Controller on duty. Record of such approval and permission asked for and given must be entered in red ink in the TSR.

- (ii) Once permission is given to the supervisor of the crane to commence operation, the Station Master will be responsible to see that no shunting or other movements are allowed which will interfere with the crane working.*
- (iii) Before commencing the work, the supervisor shall have the line on which, the crane will work as well as the line(s) which are likely to be fouled in the course of operation blocked and protected by banner flags on both sides as per S.R. 15.09 (2).*
- (iv) Crane operations within station limits will be deemed 'Obstructions' on the line or lines concerned for purpose of taking off signals.*
- (v) If during the course of crane operations train movements or other operations are required to be performed on the line blocked on lines which may foul crane working, all crane working shall be stopped by the Supervisor on obtaining a written request from the SM to suspend operation. After doing so, the Supervisor will give written memo to the SM that crane working is suspended, that the jib of the crane is parallel to the track and the tail locked and no obstruction is fouling the line or lines where train movement or shunting movements are to take place. On receipt of the memo, the SM will take off signals concerned for the train or to perform other movements.*
- (vi) After the crane work is over, the Supervisor will issue a memo to the SM on duty to the effect that the work is over and the lines blocked and/or fouled are clear of obstructions and are safe for the passage of trains.*

S.R. 4.27.(6) Crane Operations in Block Section-

- (i) A traveling crane operating in a block section will work under the normal train working rules, the section being blocked for the duration of the work.*
- (ii) When a traveling crane is working on a double line block section, the Supervisor in charge should see that the adjacent line is not infringed and if any infringement is required, the adjacent line should also be blocked. Trains passing on the adjacent line should be issued Caution Order by the station immediately in rear.*
- (iii) Banner flags should be provided to protect the line on which the crane is working and also the adjacent line in the case of double line. Such banner flags shall be removed only when the jib is turned parallel to the track and the tail locked. The Supervisor in charge of the crane will show hand signal to the Driver past the site of crane operations.*

S.R. 4.27.(7) Caution Order - Drivers of trains passing stations where any running lines are "blocked" for crane operations shall be issued Caution Orders. Likewise on double line Drivers of trains passing by a site of crane operations shall be issued Caution Orders.

*S.R. 4.27.(8) Crane Operations-**(A) Special Rules for Hand Traveling Crane-**(a) Precautions before lifting-**Before using hand Crane for lifting, the following precautions must be taken:-*

- (i) The jib must be raised and secured in the position.*
- (ii) The blocking screws and wedges must be applied.*
- (iii) The tail may then be liberated.*
- (iv) Handles must be secured to the winding shaft.*

(b) Precautions while lifting-

- (i) Jib struts must be used when the Crane is handling a load up a bank or for warping a load which is beyond the sweep of the jib or in any other case when ordinary means do not appear adequate to ensure the equilibrium of the Crane. These struts cannot be used if the jib is to be slowed with the load suspended.*
- (ii) The Crane handles must not be left unmanned either in lifting or lowering. Lowering with the check of the brake only is strictly prohibited.*

*(B) Special Rules for Steam Crane-**(a) Precautions before lifting -*

- (i) Crane swivel should be unlocked and the jib hoisted until it is at the proper radius.*
- (ii) The blocking screws or stops must be applied over the laminated springs.*
- (iii) If it is necessary to use outriggers, the outriggers must be pulled out to the correct marking on the girder and supported on packing.*

(b) Precautions while in use-

- (i) Rail clips or grippers, if provided, must be used whenever the outriggers are in use.*
- (ii) The Crane is not to be used on any line until the sleepers on which Crane is to stand, while working, have been examined. If weakness of the track or the formation is suspected, it is all the more important that outriggers be applied and concentration of load on the track thus reduced.*

S.R.4.27.(9) Competency Certificate for persons authorised to supervise crane operation-

- (a) Only persons having certificates of competency granted by Divisional Mechanical Engineers shall be authorised to supervise crane operations. Such certificates shall be issued to SSE(Loco), SE(Loco), Fitter Chargemen, Divisional and Chief Carriage and Wagon Inspectors, SE(C&W), scale Rs. 5000-8000 and above, Bridge Inspectors and Asstt. Bridge Inspectors, after having been tested, found satisfactory and fully conversant with Crane Working Rules and Instructions. Asstt. Mechanical Engineer are not authorised to issue such competency certificate.*

- (b) *In the case of transportation cranes of under 20 tonnes capacity, crane Drivers and crane Jamadars shall also be competent to conduct crane operations provided they have the necessary Competency Certificate (which will also be granted by DMEs after testing them) and also provided such operations are confined to sidings without infringing running lines. Staff of the Engineering, Store and other departments who are required to supervise crane operations should also have the competency certificate from DME concerned for supervising crane operations confined to sidings which are not infringing the running lines. In all cases of operations involving running lines, the supervisors mentioned in S.R. 4.27 (9) (a) only will be competent.*
- (c) *The form to be used for granting competency certificate for conducting crane operation is shown below:-*

COMPETENCY CERTIFICATE

No.

Name

Designation

The above named has been tested by me and is certified as competent to take charge of and be responsible for the correct and safe working during operations of a (type) crane of tonnes capacity.

Station

Signature

Date

Divisional Mechanical Engineer

Seal of the office.....

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 (1) of section 72 of the Act, or such varied carrying capacity, 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) When timber or other articles have to be loaded on three trucks, in consequence of their being too long to be accommodated on two trucks, the central truck shall not carry any part of the load, in order to allow the free movement of the central truck while running round curves.

Note:- The above instructions will, however, not be applicable to long welded rail panels loaded under the supervision of an authorized Engineer Official and subject to such other rules and regulations as may be in force in this behalf.

S.R. 4.28.(2) *Inspection of loads on Open trucks- Loads on open trucks will be inspected by SE(C&W) at the station where the train is examined. On the run between these stations the Guard is responsible for carrying out General Rule 4.28, he may, if he thinks necessary, call on any available SE (C&W) to examine a load and certify whether or not it is fit to run.*

S.R. 4.28.(3) *Loading gauges- At station where loading gauges have been provided, wagons must, where necessary, be passed under the gauge to ensure that the load is within the permissible dimensions.*

S.R. 4.28.(4) *The maximum weight that may be loaded in any wagon or truck is distinctly marked on each vehicle, and must not be exceeded.*

S.R. 4.28.(5) *Crane should be exercised that goods are so loaded that, as far as possible there shall be the same weight borne by each wheel.*

S.R. 4.28.(6) *Carriages, machinery, timber and other large articles loaded in open trucks must be loaded with special care. In using pairs of trucks, the loads must be evenly distributed on both trucks, heavy goods must be so loaded as to bear evenly on the springs.*

S.R. 4.28.(7) *When low- sided truck without bolsters are used for rails, angle or bar iron, etc., the load should be so placed as not to interlock with articles loaded in the next trucks, and, if necessary, should be protected by a dummy truck.*

S.R. 4.28.(8)(a) *When a load is so long that it cannot be accommodated in two trucks, it must, if possible, be loaded in three trucks so that the entire weight is carried on the centre vehicle and the end trucks are idlers. The load must be placed on packing in the centre truck so that it is clear of the floor of the end trucks by not less than 15 mm and there must be not less than 30 mm upside clearance in the end trucks between each side of load and side of truck. The weight of the load must not exceed the carrying capacity of the centre wagon and if on the Broad Gauge an F Class wagon is used the ends may be removed. This method of loading must be used in preference to that given in sub-para (b) if possible.*

(b) *If the weight of the load is such that it cannot be carried on the centre truck as given in (a) then the load must be carried as equally as possible on the end trucks and the centre vehicle must be an idler. There must be not less than 15 mm clearances between under side of load and floor of the centre vehicle and not less than 30 mm side clearance between each side of load and side of wagon in all vehicles. The load must rest on the end trucks on bolsters arranged to allow the trucks to run one end of the load must be secure to the end vehicle and the other end must be free to slide on the bolster longitudinally.*

(c) *The greatest weight on any pair of wheels shall not exceed that for which the vehicles are designed, and this weight shall be nearly as possible be evenly distributed on the two rails. In no case must the load rest on one end of a vehicle in such a manner that the weight on any pair of wheels shall be more than double that on any other pair of wheels in the same vehicles.*

S.R. 4.28.(9) Normally an over dimensional consignment is one which when loaded upon a wagon would infringe the following maximum moving dimensions at any point on the entire route from the booking station to the destination including via brake of gauge. Therefore, any consignment exceeding the dimension quoted below shall not be registered for booking unless prior sanction for its acceptance has been obtained from the Divisional Railway Manager/Chief Operations Manager. (for details see concerning paras of the Operating Manual).

(i) Broad Gauge:-

Height at centre	4115 mm.	} These dimensions include lashing and packing.
Height at sides	3505 mm.	
Maximum width (in bogie wagon)	3050 mm.	
Maximum width (in 4 wheeled wagon)	3200 mm.	

(ii) Metre Gauge :-

Height at centre	3430 mm.	} These dimensions include lashing and packing.
Height at sides	3200 mm.	
Maximum width	2590 mm.	
(iii) Narrow Gauge (762 mm) :-		
Height at centre	3200 mm.	}
Height at sides	2895 mm.	
Width	2290 mm.	

Note :- The heights given in (i), (ii) and (iii) above are from rail level. The floor heights of different types of vehicles are laid down in the Operating Manual, which may be referred to whenever necessary.

S.R. 4.28.(10) When a truck is used as a dummy in terms of sub-rule (3) of GR 4.28, the same must not bear any portion of the load of the truck it is protecting, but may itself be loaded.

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) Hot axles-

- (a) Any railway servant observing a hot axle on a running train is bound to do every thing in his power to stop the train and warn the train staff. Station Masters and their staff are also required to observe the condition of vehicles on trains passing their stations, and in the event of any defect or irregularity being

detected, immediately steps shall be taken to stop the train if possible. If the train cannot be stopped, a message shall be promptly given to the next station in the direction in which the train is proceeding, the code word "GAMMER" being used with a private number. When block instruments are in use, the signal 000000-0 (Six pause one) shall be sent.

(b) On controlled sections, control must be advised to take suitable action.

(c) (i) The Station Master receiving advice of a hot axle on a train shall, where possible, receive the train on the main line. If he is unable to do so, he shall bring it to a stop outside that first stop signal before admitting it into the loop line on which it is to be received.

The hot axled wagon shall be examined by the SE (C&W) staff (in case of train examining station) or by the Driver after the train has come to a stop at the allotted line in the station yard.

(ii) When the Station Master receives advice of a vehicle on a train which is derailed or whose running gear is in any way considered dangerous, he shall bring the train to a stop outside signals since the further movement of such vehicle, especially over points in the station yard is likely to cause a serious accident. The train shall be thoroughly examined before being admitted into the station yard.

S.R. 4.29.(2) Examination of hot axle by Driver- If an axle box is found running hot at station other than a Train Examining station, the Driver must decide if the vehicle is safe or unsafe to run any further, and if safe, give a certificate to the Guard accordingly.

S.R. 4.29.(3) Hot axle between stations- If an axle is observed to be running hot between stations, the train must be brought to a stand and the axle examined by the Driver. If he considers it safe to run after repacking and oiling the box, the train will proceed up to the station where such vehicle can be detached, at such speed, as he considers safe.

S.R. 4.29.(4) Guards shall enter in their journals particulars of cases of axles running hot and dangerous wagon during the journey and also report the same by memo, such wagon should he got attended at the next train examining station in the direction of movement.

S.R. 4.29.(5) Other instructions regarding hot axle- It is a criminal offence knowingly to allow a hot box to remain in use unless under supervision of the Train Examining Staff. It is also criminal to commit any act, such as stealing waste or removing a cover, which will cause an axle box to become unsafe and any person detected in such crime is liable to be prosecuted.

The greatest danger exists when an axle runs hot enroute on a non-stopping train. Station staff and Cabinman must keep a sharp lookout and arrange to send ahead the 'Stop and Examine' signals if a hot axle is detected or suspected. On a controlled section the Station Master must advise the Controller on duty of the fact so that he can take immediate action.

S.R. 4.29.(6) (1) The signs of an axle running hot in stages are as follows-

(a) The box commences to warm up and can only be detected in this stage by feeling with the hand, which should be placed on the side of the box facing the rear.

- (b) *There is a strong smell of heated oil and waste, which can be detected at some distance from the vehicle.*
- (c) *A whistling noise may commence at any time during the process of heating. A box which is whistling must be examined.*
- (d) *The box becomes sufficiently hot to ignite the waste and oil. Flames and smoke can be seen issuing from the box and the metal of the box becomes red hot. In this condition the axle will break within a few kilometres.*

(2) *The signs of a roller bearing Hot Boxes are as follows-*

- (a) *There is splashing of grease around the roller bearing axle box and the wheel/bogie surrounding it.*
- (b) *There is an emission of smoke from the axle boxes due to burning of grease and is often visible during day time, usually it is also accompanied by a smell of burning grease.*
- (c) *Unusual metallic sound like whistling or cracking sound is heard on roller bearing hot box. Axle Box cover may also get damaged /missing.*
- (d) *In some cases, the grease may run so hot as to catch fire and flames can be seen.*
- (e) *Skidding of wheels and tilting of particulars spring usually takes place at the last stage when due to breakage of roller bearing components the wheels may get locked. A roller bearing hot box may cause a seizure of wheels within a short time leading to derailment.*

S.R. 4.29.(7) At roadside stations where there are no Train Examining Staff, before a wagon is dispatched, the axle-boxes must be examined. If the covers are deficient, it is simple matter to see if the box contains waste or not. If any box is empty, the wagon must be detained and message sent to the nearest SE (C&W) who will arrange to pack it. Station Master must see that orders are made known to all the Group 'D' staff at their stations.

S.R. 4.29. (8) Water must not be thrown on axle-box or axle, when hot. When it is decided that a vehicle should be cut off, a message must be sent to the nearest SE (C&W) stating the number and the owning railway giving a copy to the booking and destination stations.

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 therefrom whether there is anything requiring their special attention on that section of the railway over which they have to work.

S.R. 4.30. The Guards and the Drivers before proceeding on duty shall sign the appearance book in their respective booking offices indicating the time at which they have reported for duty. They shall also sign in the Assurance Register after going through the requisite notices, safety literatures in token of having read and understood them.

4.31. EXAMINATION OF TRAINS BEFORE STARTING. - When a train 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.

S.R. 4.31. Starting a train from non C&W Station - Whenever a train has to be started from a non C&W station or a load stabled for more than 24 hrs.(Including for traction changing) has to be cleared from a road side station, following action will be taken by the Guard and Driver of the train:-

- (a) *The Guard and Driver of the train shall examine the load by walking along the length of the train Driver on one side, Guard on the other side and will ensure that there is no loose or missing fitting in the under gear which may endanger safe running of train.*
- (b) *SM Should maintain an “Examination-cum-Brake Power” Register wherein coming train number, composition incoming BPC number, from-to, date, percentage of Brake Power, composition of outgoing train, time of arrival of outgoing train engine, old BPC/manuscript BPC, percentage of Brake Power, faults detected by Guard & Driver departure time, remarks, signature of ASM, signature of Guard should be recorded.*
- (c) *Driver will conduct a “Brake Feel Test” at the earliest to ensure that the train has adequate brake power.*
- (d) *However, if the incoming train has come with an invalid BPC or if the incoming train has come with a valid BPC, but the rake integrity has been disturbed beyond permissible limits action shall be taken as under:*
 - (i) *The Driver will first create at least 46 cms of vacuum on the engine and 38 cms in the brake van.*
 - (ii) *The Guard on seeing, 38 cms of vacuum in the brake van, shall show “Red Hand Signal” to the Driver to destroy the vacuum.*
 - (iii) *In such cases while checking the load, the Guard and Driver shall jointly ascertain the brake power of the train.*
 - (iv) *Thereafter, the Guard shall prepare a memo in triplicate indicating the number of operative as well as inoperative pistons as also the number of piped vehicles and percentage brake power which shall be signed jointly by the Guard and Driver, in addition to filling in the “Examination-cum-brake Power” Register, one copy of this certificate will be retained by the Driver, one copy by the Guard and one copy will be given to the Station Master for station record.*
- (v) *Performa for joint check by the Driver and Guard*

1. Date	_____
2. Train No. & Description	_____
3. From	_____ to _____
4. Engine No.	_____
5. Engine attached at	_____
6. Total Load	_____

7. (i) Total No. of cylinder _____
 (ii) Total No. of working cylinders _____
 (iii) Brake Power _____ percent.
8. Vacuum/air pressure available in
 (i) Engine _____
 (ii) Brakevan _____

Signature of Driver

Signature of Guard

Note :- (i) The certificate is valid up to next C&W examination station where the train will be offered for examination.

(ii) Before issuing BPC the Driver and Guard will jointly examine the train by walking by the side of the train, Driver on the station side and Guard on the off side to ensure that there is no loose or missing fitting which may endanger safe running of the train.

(iii) In case of invalid BPC, or if integrity of the incoming train with a valid BPC has been disturbed beyond permissible limits, the Guard and Driver shall ascertain the Brake Power of the train as per SR 4.31 and prepare the BPC as per above proforma.

- (e) These instructions will not be applicable for crew changing and for loads having valid BPCs for the outgoing train like Agni, King, Rocket etc. rakes with detention less than 24 hrs. at that station. In these cases, only ASM will record the particulars in the Register.*
- (f) At train originating station or engine changing station where SE (C&W) is available, the brake continuity test is to be carried out by SE (C&W) otherwise by Driver and Guard. Whenever there is change in train composition by attaching or detaching of Rolling Stock at Roadside stations or a stabled load is started the Driver and Guard should test the brake continuity and prepare joint certificate in 3 foils i.e. one for Driver, one for Guard and one for station record.*

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) When taking over charge and turning out diesel/electric loco from shed/yard the Driver shall test and ensure the efficient working of the flasher light and make an entry in the engine book maintained in shed.

S.R. 4.32.(2) Coupling between engine and train- Driver is responsible for ensuring that the coupling and hose pipe connection between the engine and train are tightly and properly attached before starting.

S.R. 4.32.(3)(i) 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 and prescribed working order.

- (ii) When taking over from another Driver, it will be his duty to ascertain whether any defects exist and the man handing over must acquaint the relieving Driver of any faults or defects likely to affect the working of the train.

S.R.4.32.(4)(A) Brake continuity test on Air Brake goods train must invariably be conducted in the following manner and circumstances-

- (i) At originating station including at station from where stable load is cleared.
 (ii) A fresh locomotive or additional locomotive is attached.
 (iii) Whenever any vehicle is attached /detached or train is remarshalled.
 (iv) When brake pipe is disconnected and after any brake defect or irregularity, which affected the continuity of brake system has been rectified.

The procedure to be observed for the above test, by the Driver & Guard or in absence of Guard by Competent Railway Servant shall be as under before starting a train.

- (1) By Driver – When the B.P. pressure in the locomotive is charged to the value i.e. 5.0 ± 0.2 Kg/cm², sound five short whistles (ooooo).
 (2) By Guard - On hearing the five short whistles –
 (i) Ensure B.P. pressure of 4.8 ± 0.2 Kg/cm² or 4.7 ± 0.2 Kg/cm² if load is more than 55 wagons.
 (ii) Show a red flag by day or red light by night to the Driver. Press the Guard's emergency brake valve handle and reduce B.P. pressure by 1.0 Kg/cm² and then close the handle.
 (iii) Get down from brake van and observe that the brakes are getting applied and released in at least last 5 wagons from brake van.
 (iv) Return to brake van and ensure that the B.P. pressure has charged to original value.

Note :- (a) In case pressure gauge is not available in the brake van, reduce the B.P. pressure by keeping the emergency brake valve handle continuously pressed for 30 seconds and then close the same. Thereafter get down from the brake van and ensure the application and release of brakes of 5 wagons as above.

(b) In case of conventional type of brake van or when brake van is not provided or when brake van is not the rear most vehicle, reduce the B.P. pressure partially by operating the rear end B.P. angle cock of rear most wagon for continuously 30 seconds and then close the same. Thereafter ensure the application and release of brakes of 5 wagons as above.

- (3) By Driver –
 (a) Observe –
 (i) Reduction of B.P. pressure.

- (ii) *Deviation of air flow indication needle.*
 - (iii) *Glowing of LSAF lamp.*
 - (b) *Ensure personally or through Assistant Driver the application and released of brakes and the leading 10 wagons from locomotive.*
 - (c) *Observe-*
 - (i) *B.P. pressure as recharged to be original value.*
 - (ii) *Air flow indication needle returns to normal position.*
 - (iii) *LSAF lamp has extinguished.*
 - (4) *By Guard* - *Show a green flag by day and a white light by night to the Driver to confirm the orderly completion of continuity test.*
 - (5) *By Driver* - *Acknowledge the same signal to the Guard.*
 - (6) *In case of any defect/deviation from above indicating a fault, the continuity test to be carried out from the first step after the fault is rectified.*
- (B) *Brake continuity test on Air Brake coaching stock trains must invariably be conducted in the following manner and circumstances –*
- (i) *At originating station.*
 - (ii) *A fresh locomotive or additional locomotive is attached.*
 - (iii) *Whenever any vehicle is attached /detached or train is remarshalled.*
 - (iv) *Whenever feed pipe and/or brake pipe is disconnected between two coaches during trouble shooting and after any brake defect or irregularity which affected the continuity of brake system has been rectified.*

The procedure to be observed for the above test, by the Driver and Guard or in absence of Guard by the competent railway servant shall be as under before starting a train.

- (1) *By Driver* - *See that the F.P & B.P in the locomotive is charged to the value $6.0 \pm 0.1 \text{ Kg/cm}^2$ and $5.0 \pm 0.1 \text{ Kg/cm}^2$ respectively.*

Note :- *In case train is single piped then only BP pressure should be seen.*

- (2) *By Guard-*
 - (i) *See that the F.P. & B.P pressure in the Guards brake van is charged to the value i.e. F.P between 6.0 & 5.8 Kg/cm^2 and B.P. 5.0 & 4.8 Kg/cm^2 respectively.*
 - (ii) *Press the Guards emergency brake valve handle and then release it. This will reduce B.P pressure by about 1.0 Kg/cm^2 .*
 - (iii) *See that B.P. pressure is charged and pressure gauge register the original value. This confirm the continuity of pressure from locomotive to Guards brake van/rear most coach.*
 - (iv) *Now sign the Brake Power Certificate, which is sent to Driver by SE (C&W). However at other than the train originating station when required amount of*

pressure is registered in the gauge, the Guard instead of signing of brake power certificate shall communicate the Driver on Walkie-Talkie or by other means of communication, if provided. The Guard shall as well as make an entry to this effect in his Rough Journal. When the Guard is unable to inform the Driver on the Walkie-Talkie etc. about the pressure, the Brake Power Certificate shall be signed by the Guard as if train is starting from an originating station.

Note:-(a) *In case train is single piped then F.P. pressure reading not to be seen.*

(b) *The Guards brake van is not the rear most coach, go to the rear most coach and reduce the B.P. pressure by opening the rear end B.P. angle cock of rear most coach for continuously 30 seconds (instead of pressing the Guards emergency brake valve handle) and then close the same. Come back to brake van and see that B.P. & F.P pressure are charged and pressure gauges register the original value. Then communicate the Driver on Walkie-Talkie etc, as per above.*

(3) By Driver-

(a) *On Guards action as per above, Driver will observe –*

(i) *Drop in B.P. & F.P. pressure.*

(ii) *Deviation of Air flow indication needle.*

(iii) *Glowing of LSAF lamp.*

(iv) *B.P.& F.P. pressure have recharged to the original value.*

(v) *Air flow indication needle returns to normal position.*

(vi) *LSAF lamp has extinguished.*

(b) (i) *After receiving the Brake Power Certificate duly signed by the Guard at train originating station or on being confirmed by the Guard about the availability of required amount of pressure on Walkie – Talkie etc. at other than train originating station, record the amount of pressure as communicated by the Guard on the Brake Power Certificate and check that B.P. pressure in Brake Power Certificate is not higher than B.P. pressure in locomotive.*

(ii) *Reduce B.P. pressure to Zero.*

(iii) *B.P. & F.P. Pressure are recreated and built upto original value.*

(iv) *Then sign the Brake Power Certificate.*

(4) By Guard-

(i) *After sending the Brake Power Certificate to the Driver duly signed by the Guard at train originating station or after communicating to Driver on the Walkie-Talkie etc. at other than originating station about the B.P. pressure, see that the B.P. pressure in the pressure gauge falls to Zero. This corresponds to the Driver having dropped the pressure from the locomotive.*

(ii) *The B.P. pressure in the pressure gauges will rebuilt upto the original value. This confirms the continuity of pressure from the rear most coach to the locomotive.*

(iii) Give train starting signal only after ensuring that B.P. & F.P. pressure have been registered to the original value and other necessary conditions before starting the trains have been complied with.

(5) In case of any defect / deviation from above indicating a fault, the continuity test to be carried out from first step after the fault is rectified.

S.R. 4.32.(5) Precaution before moving an engine – Drivers and Shunters must personally satisfy themselves before moving an engine that no body is working under it or in a position to be harmed by the moving of the engine.

S.R. 4.32.(6) The Driver shall in addition carry out the inspection and tests in accordance with specific instructions issued by the Divisional Electrical Engineer (Rolling Stock).

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 the 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 TRAIN. - 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 orders, 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) The Guard must also satisfy himself when taking over charge and on the journey, that his brake is in working order; that the side chains of vehicles are placed on the hooks provided for the purpose or hooked to each other, and are not allowed to drag on the ballast, and that open wagons containing any goods of an inflammable nature are properly sheeted to protect the goods from sparks.

S.R. 4.34.(2) At starting and engine changing stations, the Traffic staff should couple the engine to its train. Whenever engines have to be uncoupled from their trains for locomotive requirements, the engine staff will uncouple and recouple them.

S.R. 4.34.(3)(i) While taking over charge of a train at the train originating station, the Guard before signing the Brake Power Certificate, must see that SE (C&W) has made an endorsement

on the Brake Power Certificate, certifying that the Vestibule connections, fittings and doors of all carriages / wagons are in proper working order and can be closed and fastened.

- (ii) *The Guard of the train should also examine the setting of the handle of the empty/ loaded device on wagons when taking over the train and ensure correct setting.*

4.35. STARTING OF TRAINS.-

- (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 not intended for the use of passengers.**
- (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 sections 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) Warning Bell- At terminal, junction, engine changing and refreshment stations, a warning bell or gong will be sounded five minutes before the starting time of a passenger train.

S.R. 4.35.(2) Station Master's permission to start the train will be given.

(A) for passenger trains by sounding three beats for up trains and two beats for Down trains on the station bell. At large junctions, where local conditions do not permit ringing of the bell, the exact nature of permission of the Station Master should be mentioned in the Station Working Rules specially and all the staff concerned instructed suitably by the Sr.DOM/DOM concerned.

(B) for goods trains where it is not possible for the Station Master to advise the Guard directly, such permission will be given as follows:-

- (i) On the single line, delivery of "authority to proceed" shall be deemed as Station Master's authority for the train to start and this will be conveyed by the Driver to the Guard by sounding of whistle.*

- (ii) *On double line, the taking 'off' of the Departure Signals shall be deemed to be the permission of the Station Master to start the train. This will also be communicated by the Driver to the Guard by sounding the whistle. The Guard shall give starting signal to the Driver by sounding his whistle and at the same time waving a green flag by day or green light by night horizontally at full stretch of the arm above his head. If due to curvature or any other obstruction the Driver cannot see the Guard's signal the Station Master on duty shall relay the Guard's signal to the Driver.*

S.R.4.35.(3) The Station Master before giving his permission to start a passenger train must satisfy himself that correct starting signal has been taken 'OFF' or written permission to start has been delivered to the Driver.

S.R.4.35.(4) Locking of Guard portion of front SLR of Mail/Exp./ Passenger trains- The Guard portion of the front SLR of passenger carrying trains should be locked by the Guards. These instructions were issued when trains were shorter and Assistant Guards were manning many of these trains. In the present system, when the posts of Assistant Guards have been abolished, and trains have become very long, it is not easy for Guards to discharge their responsibility.

In view of the above, this work will be undertaken by Assistant Drivers and following procedure will be followed:

- 1. Drivers working Mail/Express/Passenger trains will be issued a personal lock, which they will carry in their box alongwith other equipments.*
- 2. At all the Crew Changing Points, the incoming Assistant Driver will remove his Driver's lock from the front SLR Guard portion, and the outgoing Assistant Driver will put his Driver's lock on the SLR door. This arrangement will continue till destination of the train or till the train is handed over to some other adjoining Division/Railways.*
- 3. For trains, where the Guard portion of the front SLR may be in open condition and occupied by passengers/outside, the Assistant Driver will make effort to get the Guard portion vacated and lock the platform side door, after closing the off side door from inside using the door latch.*
- 4. For originating and through trains, it will be the duty of RPF staff to assist the Assistant Drivers in getting the Guard portion of front SLR vacated. In case of difficulties, Dy. SS/SM will also be responsible for getting this portion vacated and locked. For this purpose Driver/Assistant Driver should seek assistance of the station staff by informing the Guard on the walkie-talkie, who will, in turn, will inform the station staff.*
- 5. In no case will the Assistant Drivers be expected to leave the train and go to seek assistance of RPF/Station staff or to issue memo in this respect. In case it is not possible to lock the front SLR Guard portion during the scheduled stoppage of the train, the Drivers/Assistant Drivers will start the train and report this as an unusual along with unusual at their destination signing off point.*
- 6. Some Front SLRs attached to trains are escorted by RPF staff for prevention of theft of luggage from front SLR. Such RPF escorts are required to sit in Guard's lobby for the*

purpose of escorting of Front SLR. Asstt. Driver will handover the keys of the locks provided in the Guard lobby of Front SLR to RPF escort party at the station from where RPF starts escorting duty. Key will be given back to Asstt. Driver by RPF escort after locking Guard's lobby on completion of SLR escorting duty. RPF staff will give a receipt on the following proforma to Asstt. Driver at the station from where he starts escort duty.

Acknowledgement

I, HC/CT.....have been directed to escort Front SLR of train No.....Ex stationto.....station. I have received key of lock of Guard's lobby of Front SLR atstation.

*Signature of RPF staff
(Name of RPF staff)*

All Mail/Express/Passenger Drivers should be issued locks. Spare locks will be arranged to be kept in lobbies for issue to out of line Drivers deputed to Mail/Express/Passenger links.

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 the 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.(a) The Driver and the Fireman or the Diesel Assistant or Assistant Drivers as the case may be, shall identify each signal including engineering indicator board at site

affecting the movement of the train as soon as it becomes visible. They shall call out the aspect of the signals to each other.

- (b) The Diesel Assistant or the Assistant Driver or the Fireman shall, when not otherwise engaged assist the Driver in exchanging signals as required.*
- (c) Provisions (a) & (b) above shall, in no way, absolve the Driver of his responsibility in respect of observance of and compliance with the signals.*

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) Should the Driver of a passenger train find that he is unable to see both the brake-van side lights at night, he must take the necessary precautions provided under S.R. 6.08 for the parting of train.

S.R. 4.41.(2) When a train passes a gang working on the line or a manned level crossing gate, the Driver, Assistant Driver or Fireman should look back to ascertain if everything is all right with the train and if any signal is being exhibited by Gateman/Gangman, warning them of a danger of an accident.

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 times 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 for 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)(a) Signals between the Guard and the Driver- The Guard shall exchange “All Right” signal with the Driver when:

- (i) a train starts after stopping from a station;*
- (ii) a train starts after stopping outside station limits;*
- (iii) a brakevan clears the speed restricted zone.*
- (b) The signals shall be exchanged:-*
 - (i) As soon as the rear brakevan clears the station.*
 - (ii) As soon as the train has started, and*
 - (iii) As soon as the rear brakevan has cleared the speed restricted zone.*

S.R. 4.42.(2) Manner of exchange of signals-

- (a) The Guard's signal shall be given to the Driver by holding a green flag steadily by day and holding a green light steadily by night and during thick or foggy weather.*
- (b) The Driver's signal shall be given on his behalf by a Diesel Assistant or Assistant Driver or Fireman who shall show towards the Guard a green flag steadily by day and a green light steadily by night and during thick or foggy weather.*
- (c) On a straight road, these signals shall always be given on the left hand side of the train and, on a curve, on that side from which they can best be seen.*

S.R. 4.42.(3) Exchange of signals when there are more than one Guard- When there are more than one Guard or a Brakesman with a train, the Guard or Brakesman traveling in the first portion of the train will show a green signal to the Head Guard of the train as soon as the train starts that he is at his place and until such a signal is received, the Head Guard shall not exchange green hand signal with the Driver.

S.R. 4.42.(4) Driver to stop; if Guard's signal not received- if a driver does not receive an 'all right' signal from the rear brakevan, he shall stop the train.

S.R. 4.42.(5) (a) (i) In case of a train running through a station, the Station Master shall show an all-right signal to the train if all is right for the train to continue the journey otherwise he shall show Danger signal or other prescribed indication. While running through station, the Driver and the Guard shall be on the look out for such signals which shall be duly acknowledged by the Guard except in case of Rajdhani Express. In case the Driver and the Guard do not receive such signals, they shall exercise extra caution to ensure that all is right for the train to proceed on. Failure on the part of Station Master to display signals shall be reported in the Guard's Journal and also to the Asstt. Station Master on duty at the next stopping station. On controlled sections, the same will be relayed to the Section Controller for taking suitable action by the Asstt. Station Master receiving the report under exchange of Private Numbers.

- (ii) If the Guard fails to exchange "all-right" signal, the Asstt. Station Master on duty should immediately advise the Station in advance and give 'Stop and Examine' bell signal (Six pause one) explaining the circumstances for giving this signal under an exchange of private number. The Section Controller will also be advised.*

Note:- "All-Right Signal" to be shown by the Station Master refers to "Proceed Signal" as defined in General Rule 3.54 i.e. by holding out and showing a green light steadily by night and during thick and foggy weather.

- (b) In the event of the view of the passing train being obstructed by another train or by vehicles or by any other obstruction, the green hand signal shall as far as possible be shown from a place from where it can clearly be seen by the Driver and Guard of the train concerned. When, however, two trains are passing through the station simultaneously or a train be possible for the Station Master to cross over and exchange signals with the train which is running on the other side of the stabled load/train the Station Master shall depute a competent Railway Servant to show "All Right" signal.*

- (c) (i) *Cabins in large yards where shunting is performed by Pilots, shall not exhibit all right signal to the trains running through the stations when there is nothing wrong with the train. Should, however, anything wrong with the train be noticed, danger signal must be displayed to the Driver and the Guard of the train.*
- (ii) *Cabins at other stations should show a similar “all-right” signal to the passing train if all is right for the train to continue its journey. Where, cabin and station buildings are on the same side, and at all panel interlocked stations, the Station Master shall depute one of his competent staff on duty with hand signals to show “all-right” signal from the ‘off’ side to the passing train if all is right. Should, however, they find anything unusual, they must display a danger signal to the passing train and bring this fact to the notice of Station Master on duty who shall take further action as stated in G.R. 4.42 (2).*
- (d) *While showing all right signal the Station Master and Cabin staff shall see whether the train is proceeding safely and particularly look out for Hot Axle.*

S.R. 4.42.(6) Exchange of signal between the Drivers of Electric and Diesel engines and the Station Staff-

- (a) *The Driver of a diesel/electric locomotive must invariably stand up in his cabin and exchange signal while running through. He should exchange signal with the Station Master if the station building is on his side. In case the station building is on the off side, the Assistant Driver should exchange “all right” signal with the Station Master on duty.*
- (b) (i) *The Driver/Assistant Driver of a diesel/electric locomotive should whistle running through a station.*
- (ii) *If the Driver or his assistant fails to exchange signal or whistle, the Assistant Station Master on duty should immediately advise the Station in advance and give “Stop and Examine” signal (six pause one) explaining the circumstances for giving this signal under exchange of private number. The Section Controller will also be advised.*
- (iii) *The Station Master in advance on receiving such advice when the train is booked to run through, will put back the departure signal to ‘ON’ but the departure route must be kept set and locked for the passage of the train. If time permits, three detonators 10 metres apart will be placed immediately beyond the starter signal to draw the attention of the Driver/Assistant Driver.*
- (iv) *In case the Driver comes to a stop at the Starter Signal, the detonator, if placed, will be removed and the train allowed to proceed after ascertaining from the driver the reasons for non-exchange of signal or of not whistling at the last station. The reason given by the driver will be advised to the Controller.*
- (v) *In case the Driver fails to stop at the Starter signal and runs through after exploding detonators and disregarding the departure signals, the station staff should try to attract the attention of the Guard. The Guard on receiving danger*

signal from the station staff will stop the train. The station staff will treat it as an accident (Driver passing signals at danger) and take suitable action as laid down in the Accident Manual.

- (vi) *The station staff will at the same time advise the next station in advance by giving 'train running without proper authority' signal (six pause five) specifically asking the station in advance to raise both reception and departure signals.*
- (vii) *The station in advance will immediately put back all signals to 'ON' and arrange to place detonators as far away from the Home Signal as possible.*

S.R. 4.42.(7) In the case of an electric train, the section controller should advise the Traction Power Controller the section in which the train is working. The TPC will then arrange to switch off the power supply to that section.

S.R. 4.42.(8) If the train stops out side first stop signal, reception of the train should be done as per G.R. 5.09.

S.R. 4.42.(9) Guard and Driver of running trains will be responsible to watch any train passing on the adjacent line and attract the attention of the guard or the Driver of that train by exhibiting danger hand signal, if any condition is noticed which may endanger its safety. In case of train running in opposite direction as on double/multiple lines, the guards and drivers of the two trains will exchange green hand signals after having examined each others train. 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.

4.43. GUARD TO KEEP A GOOD LOOK OUT. - 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".

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 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) The whistle referred to in the above rule should be a long continuous whistle. The Guard should acknowledge this by waving a red flag or red lamp Up and Down until the Driver repeats his whistle.

S.R. 4.44.(2) The Assistant Driver must invariably be sent to the station to enquire the cause and he should remain in the Station Master's office until the train is admitted. In the case of Home signal of an Intermediate Block Post, it is not necessary for a member of the train staff to proceed to the cabin or station, as required by GR 4.44.

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.**

S.R. 4.45. Stopping of trains between stations:- Whenever a train has to be stopped between stations, the Drivers and Guards must see that it is not stopped in an exposed position particularly on tunnels, bridges and high banks etc.

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.

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.

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. Permission to be in writing- the Guard must give his permission in writing.

4.49. STARTING AND STOPPING OF TRAIN.- The Driver shall start and stop his train carefully and a without jerk.

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. Following is the code of engine whistle for use by the Drivers:-

S.No.	Code of Engine Whistle	Indication
1.	0	<p>(a) Before starting :-</p> <ul style="list-style-type: none"> (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. (iii) Engine ready to leave loco yard or after completing loco work. (iv) Engine ready to go to loco – yard. <p>(b) On run :-</p> <ul style="list-style-type: none"> (i) Assistance of other engine not required. (ii) Acknowledgement of Driver of assisting/ banking engine that assistance stopped.

2.	00	(a) Call for Guard's signal. (b) Signal not exchanged by Guard. (c) Signal 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.	000	(a) Guard to apply brakes. (b) Train is out of control, Guard to assist.
5.	0000	(a) Train cannot proceed on account of accident, failure, obstruction or other exceptional cause. (b) Protect train in rear.
6.	-- 00	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) Before starting - Vacuum recreated on Ghat section, remove wooden wedges. (b) Passing an Automatic Stop signal or a Permissive Stop signal in Automatic Signaling Territory at 'ON'. (c) Passing an Intermediate Block Stop signal at 'ON' when the telephone provided on the signal post is out of order and the Driver is thus unable to contact the Station in rear. (d) On run: - Acknowledgement of Guard's signals.
9.	— (Continuous)	(a) Approaching level crossing or tunnel or area of restricted visibility or curves or cuttings or site of accidents or when in consequence of fog, storm or any other reason the view of signals is obstructed. (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.
10.	- 0 - 0	(a) Train parting. (b) Train arriving incomplete.
11.	0 0 -	(a) Alarm chain pulled. (b) Insufficient vacuum/ air pressure in engine. (c) Guard applied vacuum/air brake. (d) Inter communication apparatus Used.
12.	- -	Raise pantograph. To be acknowledged by the other engine.
13.	- 0 -	Lower pantograph. To be acknowledged by the other engine.
14.	- 0 0	(a) Signal arm lowered but light extinguished. (b) Signal arm improperly/insufficiently taken 'Off'. (c) Defective signal.

15.	— — —	<i>Fouling mark not cleared.</i>
16.	0000000000 (Frequently)	(a) <i>Apprehension of danger.</i> (b) <i>Danger signal to the Driver of an approaching train whose path is fouled or obstructed for any reason.</i> (c) <i>While working on a single line section during total failure of communications or when single line working is introduced on a double line section.</i> (d) <i>Moving in wrong direction on double line or against the direction in the Automatic Block Signalling Territory or against the established direction in the Automatic Block System on single line.</i>

Note: - (1) *The signals above are illustrated by '0' for a short whistle and '—' for a long whistle.*

- (2) *All excessive and useless whistling is prohibited and long drawn out whistles are absolutely forbidden. Special code of whistles applicable to particular stations and sidings, etc. are given in Station Working Rules.*

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.

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.

S.R. 4.52. (1) Should a Driver see a sleeper or any part of the wood work of the line on fire, he should bring his train to a stand as quickly as possible and put out the fire before going ahead. The Driver shall advise the Station Master of the next station in writing about the damaged sleeper. The Station Master shall immediately inform the SE (P.Way) concerned to take necessary action.

S.R. 4.52. (2) Drivers must avoid creating smoke nuisance in the station yards.

S.R. 4.52. (3) Ash pan shall never be cleaned out except on the ash-pits provided for the purpose. If a Driver finds it necessary to clean his ash pan on a siding where there is no ash-pit, this ash must immediately be thoroughly damped and leveled off to rail level. Ashes must never be rake out on wooden sleepers.

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.

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) If the last vehicle is not clear of the fouling marks as required vide G.R. 4.56, the Guard shall show "Proceed with caution" signal as prescribed in G.R. 3.55 towards the Driver who may move to clear the fouling mark. If the last vehicle is still not clear, the Guard shall exhibit Stop hand signal to prevent any movements on the fouled line. The Guard may endorse in Train Intact Register in bold letters and underline that the fouling marks is not clear. He shall also personally inform the Station Master, if the train has reached the terminal station and he goes off duty. Where the Guard continues to be on duty with the train, he shall protect the infringement against any movements as laid down above.

During the precedence of trains, the Guard of the first arriving train if not otherwise busy in shunting operations, etc, shall remain alert and exhibit danger signal in case he finds any irregularity in the setting of points or taking 'off' signals for the approaching train. This however does not absolve the Station Master of his overall responsibility to satisfy that the conditions for taking 'off' signals are complied with.

S.R. 4.56. (2) When engine of Goods or Mixed train has to be detached from its train, the Driver and Guard will be held jointly responsible for taking such measures as will prevent the front portion from fouling another running road.

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. The Guard of a train that is not worked with the automatic brake must screw his hand brake hard on and fasten it immediately the train comes to a stand, so as to obviate any risk of the train rolling back, should the engine be detached for shunting operations or for any other purpose. He must, however, when ready to start and before giving the Driver the starting signal, release the brake to prevent any unnecessary strain on the couplings.

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) If, when the train comes to a stand, the engine Driver finds that his engine is not clear of the fouling mark, he must at once sound the prescribed whistle(— — —), attract the attention of the Guard and on getting “Proceed with caution” signal from the Guard, back his engine clear and inform the Station Master that he has done so. Till that time, he shall exhibit Stop hand signal to prevent any movements on the fouled line.

On receipt of the information from the Driver that fouling mark in front has been cleared, the Station Master must, if he had already received the Train Intact Register again satisfy himself that the last vehicle of the train is still clear of fouling mark and other infringements. In the event of receiving a “Proceed with Caution” signal from the Guard, the Driver shall draw his train ahead until signaled by the Guard that the fouling marks in rear have been cleared by exhibition of a Stop signal.

S.R. 4.58. (2) During the crossing of trains, the Driver of the first arriving train if not other wise busy in shunting operations, etc., shall remain alert and exhibit danger hand signal in case he finds any irregularity in the setting of points or taking ‘off’ signal for the approaching train. This, however, does not absolve the Station Master of his overall responsibility to satisfy that the conditions for taking ‘off’ signals are complied with.

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 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. Whenever it is necessary to move a train carrying passengers after it has been brought to a stand at a station the Guard shall ensure safety of passengers before giving the signal.

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. A Guard should not leave the Station at the end of his run, until he has properly made over his train with the goods parcels, invoices, way bills etc., to the relieving Guard or official appointed to check and receive them, handed in his reports for the journey and obtained the Station Master’s permission to do so.

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. Charge of Engines: - Engines when in steam, must never be left without being incharge of a person authorised to take charge of them. Any engine left standing in steam must have its regulator closed, cylinder cocks open, reversing lever in mid-gear, vacuum brake ejector handle in the ‘ON’ position and hand brake applied.

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)(a) Material trains must not be worked at night or in thick, foggy or tempestuous weather, except under special circumstances, when the special permission of the Divisional Operations Manager must be obtained.

(b) Material coolies are permitted to travel by material trains during the day only. They should not be allowed to travel by material trains at night except when accommodated in covered or second class carriages.

Persons who are not railway employee and have no business connected with the railway should not be permitted to travel by Material train or any other departmental train without the prior sanction of the General Manager or, in exceptional circumstances, of the Chief Safety Officer.

In an emergency warranting journeys of police or military or other non-railway personnel by railway departmental train, permission may be accorded by the Divisional Railway Manager.

S.R. 4.62.(2) In case of special emergency, a material train may be run at any time under the authority of the Engineer incharge.

S.R. 4.62.(3)(a) When running through between block stations and when running with the engine leading, the speed of the material train must not exceed that prescribed for goods trains of similar weight.

(b) When the engine is pushing the train or is placed in an emergency or in exceptional circumstances somewhere of the middle of the train and the brakevan is leading:

(i) the speed must not exceed 25 kmph on the straight line, or 8 kmph over a turnout ;

(ii) the Guard must travel in the leading brakevan and must exhibit hand signals to the Driver;

(iii) the train crew must keep a good lookout especially in the direction in which the train is moving and must be prepared to stop short of any obstruction; and

(iv) when approaching turnout, the Guard must stop the train and satisfy himself that the points are correctly set, all non-interlocked points are padlocked and that the advance facing points are manned.

(c) When the engine is pushing the train or is somewhere in the middle of the train and the brakevan is not leading:

(i) the speed must not exceed 8 kmph;

(ii) the Guard must travel on the leading vehicle and exhibit hand signals to the Driver; and

(iii) sub-clauses (b) (iii) and (iv) must be strictly complied with.

S.R. 4.62.(4) A Material train shall always be worked under the ordinary Line Clear rules in force.

S.R. 4.62.(5) Should work have to be carried out between stations, the Guard must advise the Station Master of the station immediately short of the place where the work has to be done, in writing of the intended stoppage and its duration and he will be responsible to ensure that no delay is caused to other trains, through this time being exceeded.

S.R. 4.62.(6) On the single line, in case a material train has to run out part of the way between two stations and then push back to the station from which it started, the Driver must obtain, in addition to the usual "authority to proceed" a written permission from the Station Master to be allowed to push back into station.

S.R. 4.62.(7) On the return of the train, the Guard will intimate that the whole of the train has returned to the station complete from the section and sign in the Trains Signal Register Book (TSR/TMR) to that effect and return the "authority to push back" to the Station Master which must be cancelled by the latter. The Station Master will then give "obstruction removed" signal on the block instrument/electric-speaking instrument, and endorse the following remarks in the Trains Signal Register "Train Pushed Back" against the entry of the train.

S.R. 4.62.(8) The Station Master at the station where the train starts and pushes back to, must advise the station in advance on the telephone and also the controller on controlled section that the train will push back to the station. He will then obtain the acceptance of the "is line clear for a train stopping in the section" signal, on the block instrument where block instruments are not provided, from the station in advance and then give the "train entering section" signal in the usual way.

S.R. 4.62.(9) When, it has been arranged for a train to push back from the section, it must always do so and not go through to the station in advance.

S.R. 4.62.(10) Before starting, a green flag must be tied to a convenient fixture in front (or on the tender if running tender foremost) of the engine and also at the back of the rear brakevan to indicate to men working on the line that the train will push back.

S.R. 4.62.(11) On the single line, when a material train is required to be pushed back into the station yard, the Driver should bring it to a stop outside the first Stop signal and sound the prescribed code of whistle. The signals may then be taken off for the admission of the train. At non-interlocked stations, the train should, in addition to taking "off" of signals, be piloted.

S.R. 4.62.(12) On the double line, material train must not be pushed back but must run on to the next station, where the engine can be run round the train.

S.R. 4.62.(13) Material trains are on no account to be divided when working outside station limits, that is to say, vehicles are not to be detached and separated from the rest of the train for convenience of loading or unloading.

S.R. 4.62.(14) Material trains are not to be divided also within station limits, if there is a falling gradient and any possibility of wagons escaping.

S.R. 4.62.(15) Material trains must not be unloaded while in motion except in the case of specially constructed trucks and under the orders of the Engineer-in-charge.

S.R. 4.62.(16) Shunting open trucks loaded with materials, with coolies also in them, is strictly prohibited; when any shunting has to be done, the Guards must see that all the coolies are out of trucks.

S.R. 4.62.(17) Guards of Material trains are responsible for their safe working both in Traffic and Engineering sidings, and must personally supervise all shunting operations.

S.R. 4.62.(18) Goods trains may, under the special permission of the Divisional Operations Manager, and during the hours of day light only, be stopped once between stations on load or unload materials; in these cases, they will work under the rules applicable to material trains, and only one such stop, which should not exceed half an hour, may be made by each train.

S.R. 4.62.(19) The Engineering Department will arrange for the protection of the train by danger signals, which must be supplemented by detonators in the manner prescribed in S.R. 3.62.

S.R. 4.62 (20) Where lever collars are provided they must be used to remind Station Master / Switchman that Material train is working in block section. Where lever collars are not provided, Pla card/ visual indicators showing the working of Material train in the block section should be provided on the Block Instrument. A 'Note' of this fact should also be made in the Train Signal Register in red ink.

S.R. 4.62 (21) On stopping a material train on a grade, the Driver should give a long whistle to call the attention of the Guard and thereafter three short whistles, the signal for the application of all hand brakes. The brakes must not be released until the Driver has signalled for this by giving one long one short (– 0) whistle.

Before entering a section on which a material train is required to stand on a grade of 1 in 50 or steeper, the engine should be so attached that when the train is standing, the engine is the down hill end of the train.

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.

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) When a material train is placed on a siding outside station limits for loading, unloading or stabling, it is the Guard's duty to have the necessary brakes put down and the points secured by clamps and padlocked. Catch siding, slip-points or traps and Scotch Blocks must also be set and secured.

S.R. 4.64.(2) Guards booked out with material trains must obtain the necessary clamps from the Station Master of his headquarter station and return them when the Material train is cancelled. For this purpose four clamps will be kept at each Guard's Headquarters station as station equipment.

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. See Appendix 'A' to Chapter XV.

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.

APPENDIX - 'A'

RULES FOR ATTACHMENT AND HAULING OF DEAD LOCOMOTIVE(S)

Subject to other extant technical precautions/ instructions on the subject the following conditions shall be satisfied before attachment of dead locomotives to any train/light engine.

(A) Conditions for attachment of dead locomotive-

- (i) Certificate for "Fit to run" is issued by Section Engineer/SSE(Loco)/Power Controller for passenger/goods train.*
- (ii) The dead locomotive is escorted by a competent person not lower than Assistant Driver.*
- (iii) Maximum permissible speed of the dead locomotive shall not be less than maximum permissible speed of the train.*

- (iv) *Arrangements made to ensure that brakes can be applied on dead locomotives in synchronization with working locomotives.*
- (v) *Running of double/triple headed is permissible on the section over which the dead locomotive is to be hauled.*
- (vi) *When a dead electric locomotive has to be moved on a non-electrified section, special check shall be made regarding its infringement to the schedule of maximum moving dimensions. In the case of any infringement, the dead locomotive shall be treated as an ODC.*
- (vii) *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;

(B) Attaching/Hauling of dead locomotives by Passenger Trains-

- (i) *Only one dead locomotive (Diesel/Electric) can be attached to a Mail or Express or Passenger Train.*
- (ii) *Brake power of the train should be 100% excluding dead locomotive.*
- (iii) *The dead locomotive can be attached next to train engine only.*
- (iv) *As far as possible, brake should be worked 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 worked as piped vehicle.*

In the case of vacuum brake 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. If the locomotive is fitted with pure air braked system and vacuum pipe is not provided on locomotive then it should be attached with air braked trains only.

- (v) *No dead locomotives should be attached to any Superfast train under any circumstances.*

(C) Attaching/Hauling of dead locomotives by Goods trains-

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.
