

**S.R. 15.26.9. Passing of Level Crossings:**

The Official in-charge of the Light Motor Trolleys/Moped Trolleys/Scooter Trolleys, while approaching level crossings, shall look out for the road traffic and ensure safe passage for his Cycle/Moped Trolley

**S.R. 15.26.10. Trolley when not in use:**

Whenever a Trolley is not in use and is placed on the platform for being loaded on a train or any other purpose, it shall be placed parallel to the track, properly locked and in charge of a railway servant. It should be so placed as not to come in the way of passengers and railway staff.

**15.27. Protection of Lorry on the line.—**

- (1) Whenever it is proposed to place a Lorry, whether loaded or empty on the line, the line shall, if it is possible to do so, without interference with the working of trains, be blocked under the rules for working of trains.**
- (2) Except under approved special instructions, when the line has not been so blocked and a Lorry whether loaded or empty is placed on the line, the Lorry shall be protected —**
  - (a) on double line, by one or two men as required, at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge, carrying a banner flag across the track and another man plainly showing a Stop hand signal at a distance of not less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the Lorry in the direction from which trains may approach, or**
  - (b) on single line, by one or two men as required, following and preceding the Lorry at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge, carrying a banner flag across the track and another man plainly showing a Stop hand signal at a distance of not less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the Lorry on either side.**
- (3) Each man so following or preceding the Lorry at a distance of 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge shall be provided with detonators and place three on the line, 10 metres apart, immediately the Lorry comes to a stand for the purpose of either unloading or loading or should any train be seen approaching, and continue to display the Stop hand signal.**
- (4) The man or men carrying the banner flag shall immediately fix the banner flag across the track immediately the Lorry comes to a stand or a train is seen approaching, and continue to display the Stop hand signal.**
- (5) In all cases where the flagmen in advance or in rear cannot be kept in view from the Lorry, additional intermediate flagmen shall be posted to relay the signals.**
- (6) The Stop signals and detonators shall not be removed until the flagmen have received the orders to withdraw them from the official-in-charge of the Lorry.**

## S.R.15.27.1. Working of Lorries - Within station section:

1. Whenever a Lorry has to work within station section, the official in-charge of the Lorry will advise the Station Master in writing on Trolley / Lorry Notice form T/1518 specifying the period during which the Lorry will work and the line or lines over which the Lorry will pass. The written notice shall be prepared in duplicate and one foil shall be handed over to the Station Master obtaining his acknowledgement on the other foil.
2. As soon as the Lorry is placed on the line, the Station Master shall ensure that 'line blocked' pins/collars are placed on the Station Master's control slide and cabin levers concerned and they are removed only when the Lorry is removed off the track.
3. The Station Master on duty when granting Line Clear for a train and before authorizing the taking 'off' of signals for the reception and despatch of the train will personally satisfy himself that the official in charge of the Lorry is advised and that the Lorry does not foul the route for the passage of the train.

## S.R.15.27.2. Working of Lorries - Outside station section:-

1. On sections other than those indicated in S.R.15.26.2.1 during day, and when the weather is clear, a Lorry can be worked without 'block protection' in accordance with S.R. 15.26.2.2. to 2.10. prescribed for Trolleys. The Station Master receiving the Trolley/Lorry Notice shall also advise the Station Master of Notice Stations concerned, who will acknowledge receipt of this message and intimate the first train number, in which Divisional Caution Order, intimation about the Lorry on line, has been included. The PWI or the official in charge of the Lorry will, in no circumstances, place a Lorry on line, unless he has obtained the acknowledgment in writing from Station Master of the station at which the Lorry enters the block section that he has advised the other Station Master concerned in regard to the issue of Caution Orders. However during day, when there is thick, foggy or tempestuous weather impairing visibility and during night a Lorry shall only be worked under the rules for working of trains.
2. On sections indicated in S.R.15.26.2.1 a Lorry shall only be worked under the rules for working of trains both during day and night.
3. A Lorry shall always be worked under 'Block Protection', when it is loaded with rails, girders or specially heavy materials which may cause delay in unloading.
4. Whenever a Lorry is working on a section without Block Protection, the precautions laid down in Rule 15.27 (2) to (6) shall be complied with by the official in-charge for protecting the Lorry.
5. The distance of 1200 metres on the BG and 800 metres on the MG specified in Rule 15.27 (3) for following or preceding the Lorry is the minimum which may be suitably increased on steep gradients, sharp curves or where the view is restricted to such an extent as will be adequate to ensure the removal of the Lorry before the arrival of the train.
6. The issue of Caution Orders to the Loco Pilots of trains will in no way relieve the official in-charge of the Lorry of his duty to protect his Lorry. The Lorry shall be removed from the line in time to ensure safety and without causing delay to any train.

## S.R.15.27.3. Working of Lorries on Double Line section –

1. A Lorry shall be run on the proper line, the direction in which trains run except when returning to the station from which it has started. It shall be ensured by the person in- charge of a Lorry that under no circumstances a Lorry be changed from one line to the other.

2. When working a Lorry on a double line section, if the same is removed from the rails in the block section, it should be removed in such a way that the adjacent running line is not fouled or infringed in any way.
3. In case of Lorries working in the block section on Double line, when materials are unloaded, it should be ensured that no running line is fouled.

#### S.R.15.27.4. Speed of Lorries:–

The speed of a Lorry shall not exceed 10 KMPH over the straight; and when the view ahead is not clear, the speed shall not exceed 6 KMPH.

#### S.R.15.27.5. Lorries following one another:–

When two Lorries are required to be worked in the same direction on the same line, care shall be taken to ensure that they are kept at least 2 (two) OHE masts or 150 mtrs apart.

#### S.R.15.27.6. Working of Lorries during total interruption of communications:–

Normally Lorries are prohibited to be placed on line on a section, where there is total interruption of communications. However, when circumstances warrant the necessity for the working of Lorry on this section, the following procedure shall be strictly adhered to:–

1. When Lorries can be placed on line without 'block protection' in accordance with the rules prescribed under S.R.15.26.2.2 to 2.10 for Trolleys, the Station Master shall advise the official in-charge of the Lorry about the total interruption of communications prevailing on the section and make an endorsement in the form T/1518 accordingly, and it will be the personal responsibility of the official in-charge to protect the Lorry as per rules. When communication is restored, Caution Orders will be issued till the removal report is received by the Station Master concerned.
2. When Lorries are required to be worked in accordance with the rules prescribed for working of trains under 'block protection' the same shall be worked as per SR 6.02.4.

#### S.R.15.27.7. Lorries when not in use:–

When a Lorry is not in use and is placed on the platform for being loaded onto a train or for any purpose it should be placed parallel to the track properly locked and in charge of a railway servant. It should be so placed as not to come in the way of passengers or railway staff.

#### S.R.15.27.8. Rail dolly:–

1. Rail dolly is a device with two or more wheels which in balanced condition can be moved manually on one rail of track and can carry one rail/sleeper in suspended condition. When necessary the suspended material can be dropped and rail dolly cleared off the track.
2. Manning of Rail dolly - Every rail dolly shall be manned by not less than two able bodied persons. The person in charge for the working of rail dolly shall be a railway servant not lower in rank than a Keyman. The official in charge should have passed in medical category A3 and must hold a valid certificate of competency for working rail dollies.

Certificate of competency shall be issued by the PWI of the section who must satisfy himself that the person, to whom competency certificate is being issued, is fully aware of the rules for the working of rail dollies and is also well acquainted with the concerned section.

The certificate of competency shall be issued in the following form.

<u>CERTIFICATE OF COMPETENCY</u>		Form No.E1527
<p>Certified that Sri _____ s/o Sri _____</p> <p>Desig. _____ staff No. _____ of Gang No. _____ has been examined in the rules for working Rail Dollies. He is fully aware of the rules for working of Rail Dollies and is also well acquainted with the section.</p> <p>This certificate is valid up to _____</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>Station: _____</p> <p>Date : _____</p> </div> <div style="width: 45%;"> <p>Signature: _____</p> <p>Designation: _____</p> </div> </div>		

The certificate of competency issued by PWI will be valid for a period of five years from the date of issue.

#### S.R.15.27.8.3. Working of Rail Dollies:–

1. The railway servant in charge of the rail dolly must inspect the section in advance particularly in reference to heaping of ballast, girder bridges and any other special features which make it difficult to drop the materials and remove the rail dolly. He shall get the ballast heaps cleared and work the dolly in such locations only when visibility is clear for at least 1200 metres and the rails can be dropped safely without affecting train safety.
2. Rail dollies shall not be worked on sections having gradients steeper than 1 in 200
3. Not more than 6 rail dollies should be worked in a group in any one block section.
4. Normally not longer than 3 rail welded panels should be carried by rail dollies. The rail dollies must not be worked after sunset and before sunrise and in bad weather when the visibility is poor. Rail dollies should not be worked in deep cuttings, steep grades, sharp curves, heavily built up areas etc., where the visibility is not clear for 1200 metres on BG and 800 metres on MG. In such locations the rail dolly should be worked under 'block protection'.
5. In case, a rail dolly is to carry rails longer than 3 rail panel or it is required to move over crossovers in yard, crossing more than one line, then it should work under 'block protection'.

#### S.R.15.27.8.4. Protection of Rail Dollies:–

1. No traffic block or Caution Order is normally necessary for working of rail dollies except as indicated in para 8.3 (iv) and (v) above.
2. Every rail dolly/group of rail dollies when on line shall exhibit Stop hand signal during day. No rail dolly should work during night or tempestuous weather.
3. On single line, depute Flagmen with detonators and whistles to exhibit Stop hand signal at a distance of not less than 1200 metres on BG and 800 metres on MG ahead and behind on each direction.
4. Where necessary i.e., in case of group of dollies, intermediate Flagmen should also be deputed with flags and whistles for relaying signals.
5. On double line, the Flagmen should be deputed in the direction from which the trains may approach. Rail dolly should not be worked during the period when traffic block has been granted on the other line.

6. The Official in-charge of the rail dolly shall keep a sharp look out for approaching train and will get the rail dolly and materials cleared off the track as soon as an approaching train is sighted.
7. When a train is sighted, the Flagman ahead or behind the dolly or group of dollies should wave the red flags vigorously to warn the official in charge of the dolly and intermediate Flagman if any, of the approaching train and at the same time place 3 detonators 10 metres apart on the line and show Stop hand signal to the Loco Pilot of approaching train to protect the rail dollies. The detonators should be removed by the end Flagman who has noticed the approaching train, only on receipt of signal from the Official in-charge by way of Proceed hand signals indicating that the rail dollies have been removed and track is clear. After removing the detonators, the Flagman should show Proceed hand signals to the approaching train.
8. While approaching level crossings, the official in charge shall look out for road vehicles and ensure safe passage of rail dollies.
9. The official in charge shall be fully responsible for the safe working of rail dollies.

#### S.R.15.27.9. RAIL-CUM-ROAD VEHICLE (RRV):

##### S.R.15.27.9.1 Description:

1. RRV is a self-propelled one which can run on railway track as well as on road. It shall be treated and signalled as a train.
2. RRV will normally run on road and would run on track only on the section, where some maintenance work is required to be done. Its running on track shall be under 'block protection' only.

##### S.R.15.27.9.2. In charge of RRV:

1. The RRV shall run under the supervision of SSE/SE/JE-Permanent way who hereinafter will be referred to as in charge. He will be responsible for all safety aspects regarding the movement of the RRV and is also responsible for obtaining and cancellation of 'traffic block' and protection of RRV.
2. The Driver, hereinafter to be referred as Operator and other staff on RRV shall work under direct supervision of the in charge.

##### S.R.15.27.9.3 Certificate of Competency:

1. For Transportation Training, the operator shall undergo training at Zonal Railway Training Institute (ZRTI) Moula-ali. The syllabus will be that of applicable to Assistant Loco Pilot.
2. On successful completion of training, Principal/ZRTI/MLY will issue a Certificate of Competency, which will be valid for a period of 3 years and will be renewed at the time of refresher training. Refresher training modules applicable to Loco Pilots hold good to Operators.
3. The Operator shall keep the certificate of competency in his personal custody while on duty and it shall be produced whenever required. The Operator shall also possess 'heavy vehicle driving license' for road vehicles. In charge shall ensure that driving license of Operator is renewed on time.

##### S.R.15.27.9.4. Safety Equipment:–

1. Auto flasher lights are to be provided on both sides of RRV.
2. RRV shall have provision to fix tail board / tail lamp on both sides.

3. The Operator and in charge shall be responsible for ensuring that the equipment is complete and in working condition. The equipment will be the same as referred under SR. 4.65.5.

S.R.15.27.9.5. Rules for operation:–

S.R.15.27.9.5.1. General:

1. Advance weekly programme of Mobile Maintenance Units (MMU) shall be finalized at the level of Sr.DOM and Sr.DEN and circulated to all concerned.
2. RRV shall not be moved between running lines and siding / stabling lines without the permission of Station Master on duty. It will be treated as shunt movement.
3. On double or multiple line section, RRV shall run on proper line.

S.R.15.27.9.5.2 Movement from one block station to another block station:—

1. The in charge shall give requisition to the Station Master for the movement of RRV.
2. On receipt of the requisition, the Station Master shall obtain permission of SCOR, obtain Line Clear and dispatch it as a train.
3. The Station Master at the other end of the block section shall receive RRV by taking 'off' reception signals.
4. On arrival of RRV, the in charge shall issue a certificate of complete arrival of RRV to the Station Master.
5. On receipt of certificate of complete arrival of RRV, the Station Master shall close the block section.

S.R.15.27.9.5.3. Movement of RRV on Section / Station with track circuiting / Block proving axle counter / RRI / Panel interlocking:–

1. When RRV is to be dispatched from a station or received into a station provided with track circuiting / block proving axle counter / RRI / Panel Interlocking, such movements in the block section would be dealt only on PLCT.
2. In case of IB signaling both axle counter section and IB section shall be treated as one block section for the purpose of working of RRV.
3. RRV shall not be permitted on tracking from LC gates in Automatic Block section. On tracking of RRV shall be permitted from reporting station only.
4. Ferrule / slide pins / lever collars will be used to indicate the presence of RRV whenever RRV is stabled at a station and occupation / clearance will be physically verified by Station Master on duty.

S.R.15.27.9.5.4. On tracking and off tracking in mid-section:–

1. On tracking and off tracking in mid-section shall be done from a level crossing (LC) gate.
2. RRV has a unique facility for on tracking and off tracking. The turn table attached to RRV is used to rotate the complete vehicle through an angle of 360 degrees in either direction during on tracking or off tracking of the vehicle at level crossing gate.
3. RRV has a loading platform of adequate capacity with facility of roller on one side of loading platform for easy loading and unloading of two pieces of 6 metres (maximum) long rails. The pay load capacity of vehicle is 3500 kg.
4. Seating capacity: Seven persons, including Operator are permitted in cabin and four persons are permitted on loading platform.

5. It has facility of 12V / 250 watts swivel type work light which can be used during night operations.

S.R.15.27.9.5.5. On tracking:

1. The in charge shall give a message supported by a PN, to the Station Master through LC gate phone, indicating – LC gate number, approximate time of on tracking, approximate time needed for movement of RRV and the place of off tracking (Station / next LC gate).

*Note:* In charge shall have an exclusive private number (PN) sheet.

2. In case of failure of LC gate telephone communication, the RRV shall be brought by road to the nearest block station on either end and give requisition to the Station Master for the movement of RRV.
3. As soon as the RRV is ready for on tracking, in charge applies for traffic block through LC gate phone. In turn Station Master obtains permission for traffic block from SCOR and conveys it to in charge supported by a PN. The Station Master shall also inform the Station Master at the other end of the block section about traffic block, under exchange of PNs. Before permitting on tracking of RRV, the Station Master at the receiving end should comply the conditions under Rules 8.02, 8.03 and 8.04.
4. In charge starts the process of on tracking of the RRV. On double line section RRV will be on tracked as per the established direction of traffic.
5. Both the Station Masters place traffic block visual indicators on the block instruments.

S.R.15.27.9.5.6. Off tracking:

1. In charge asks permission of Station Master through LC gate phone, seeking permission for off tracking shall be through a message supported by a PN.
2. Permission for off tracking will be conveyed by Station Master to the in-charge supported by a PN.
3. However on double line section, Station Master cautions the in charge about the movement of trains on the other line. In-charge takes all the necessary precautions while off tracking the RRV on double line section.
4. In case of failure of telephone communication at LC gate, the RRV shall be worked to the nearest block station on either end and the in-charge of RRV should give certification to the Station Master that the block section is clear of RRV so that normal traffic can be restored.
5. During the off tracking, the flasher lights of RRV shall be switched 'on'.

S.R.15.27.9.5.7. During on tracking and off tracking of RRV, the LC gate will be closed to road traffic. Care shall be taken that LC gate is not closed to road traffic for more than 10 minutes. In charge of RRV shall make entries including PNs issued and received, in LC` gate register with regard to on tracking/off tracking.

S.R.15.27.9.5.8. If no level crossing gate is situated in the block section where the site of work is situated, then on tracking shall be done at the level crossing of block section in rear and the block shall be taken from such level crossing gate to the station in advance. On arrival at the said block station, the block shall be removed and for entering the required block section, block shall be taken afresh.

S.R.15.27.9.5.9. On double/multiple line section, adjacent line parallel to the portion of RRV working must be protected.

S.R.15.27.9.5.10. Speed – Speed potential of RRV is 80KMPH on road and 60 KMPH on rail in forward direction and 10 KMPH on rail and road in reverse direction.

Note: On tracking/off tracking of RRV shall not be done during the failure of telecommunication at manned Level Crossing gate.

S.R.15.27.9.6. Failures and Accidents:–

1. Accidents involving RRV shall be treated as train accidents.
2. In case of any breakdown of RRV in the block section, it shall be protected as per Rule 6.03/9.10 and relief engine will be called to clear the disabled RRV. It can be cleared by towing with the help of any light engine. The disabled RRV can be towed by linking with the connecting rods and slings similar to that of any road vehicles. The connecting rods and slings should always be kept in the RRV and the same has to be ensured by the in-charge before entering into block section.

S.R.15.27.9.7. Working instructions for RRV in electrified territory:

1. It is to be remembered that the OHE shall always be considered live and staff working under live OHE with Rail-cum-Road Vehicle (RRV) shall take care to see that nothing comes in contact with OHE since danger of electric shock/burns resulting from coming in contact directly or indirectly with live OHE.
2. While Rail-cum-Road Vehicle (RRV) is working in electrified territory, a minimum working clearance of 2 metres shall always be maintained from live parts of OHE with any working staff.
3. Permit-to-work on OHE must be obtained from an authorized TRD official and OHE is to be made dead and earthed, if work is to be carried out or any worker is required to come within 2 metres of 25 KV live overhead equipment.
4. No one should ever climb on to and stand on the roof of the cabin of RRV when it is standing under live OHE. A shut down should invariably be affected before climbing on the roof of stalled RRV. There is danger to the employees getting a shock if inadvertently stand up on the roof in the course of work except when the OHE is dead and earthed. A caution notice to this effect in red colour must be painted on the vehicle.
5. While on tracking/off tracking RRV, care shall be taken that any part of the RRV shall not hit OHE mast.
6. While RRV is on tracking/off tracking or moving in between two tracks it shall always be remembered that in between tracks also, OHE masts exist to hold the OHE. Sufficient mechanical clearance shall be ensured while moving RRV in between tracks on road.
7. While unloading the rails / sleepers, gadgets or heavy tools from RRV, care shall be taken that they shall not fall on traction bonds. OHE mast / anchor foundation blocks or they should not hit OHE mast which will result in damage/disturbance to OHE and consequent disruption to traffic.
8. While loading/unloading rails into or from RRV in electrified tracks, it shall be ensured that no rail or tool or any part of the body of the workers, comes within the danger zone i.e., within 2 metres of live OHE.
9. The flap door of the RRV should be properly closed and secured before placing on the track and should not be kept open or opened while on run to avoid hitting of OHE mast.
10. All movements of the crane jib shall be carefully controlled so as not to foul the traction overhead equipment. No work shall be done within a distance of two metres from the live parts of the OHE without a permit-to-work and all safety precautions are taken.

11. While the staff are being transported to site sitting or standing in the trolley of RRV, they shall not hold the tools/measuring gadgets etc., vertically so as to fall within the danger zone of 2 metres of live OHE.
12. No modification / any extension pieces temporarily or permanently be attached to the crane jib which will raise its effective height as well as width and come in the danger zone of OHE.
13. When unloading the rails along the track, care shall be taken to ensure that the rails do not touch each other to form a continuous metallic mass of length greater than 30 metres.
14. In case of a breakage of an overhead line or defect on the overhead equipment which is likely to interfere with movement of RRV, is noticed ahead, the Driver of RRV shall make an emergency stop, if necessary and report to TPC / Station Master / SCOR, and it shall be ensured that no staff comes in contact with the hanging OHE parts.
15. Staff who shall work on RRV shall be in possession of competency certificate for working in electrified area issued by competent authority of division.
16. Before starting work by RRV in electrified area, permission shall also be obtained from Traction Power Controller of concerned section.

S.R.15.27.9.8. Safety precautions for the benefit of staff of Rail-cum-Road Vehicle:

1. Make sure that all persons are clear of the vehicle before performing any operational function.
2. Understand equipment operation and be aware of all pinch points before operating or making adjustments to the equipment.
3. At maximum loaded gross weight on rail (Including Driver's equipment, tools, payload etc.) do not exceed any of the rated values.
4. Do not exceed 60 KMPH when operating vehicle on track. Rail/road rules governing speeds should be observed at all times. Reduce speed when propelling the vehicle through switches, self-guarded frogs, road crossings, curves and branch lines. Operating the vehicle at unsafe speeds could result in derailment of vehicle.
5. Ensure all safety locks are positioned properly.
6. Failure to heed these warnings could result in severe body injury.
7. Observe and follow all rail/road safety rules and regulations.
8. Know the positions and functions of all controls before attempting to operate the vehicle.
9. Always keep pneumatic shut off cocks in selected mode (rail/road) before setting the vehicle in motion on rail or road.
10. When performing maintenance making adjustments or whenever unintended movement of the vehicle could occur apply the parking brake.

ATTENTION - RRV OPERATORS:

11. Ensure that all five pneumatic shut off valve levers are in required mode (Rail/Road) before moving. Otherwise serious accident may occur.
12. Ensure steering lock lever is in closed position on rail mode and in open position on road mode before moving.
13. Ensure that power take off (PTO) of hydraulic pump is in off position before engaging gear for traction of vehicle.

14. Hydraulic pump will be engaged only during hydraulic operation.
15. Before moving the vehicle ensure indicators for parking brake (P) and low air pressure are off on panel board.
16. Before moving the vehicle ensure that turn table base is fully closed and mechanically locked.
17. Ensure that rail attachments are mechanically locked in their position.

**15.28. Lorries and Trolleys out of use.—**

**A Lorry or Trolley, when not in use, shall be placed clear of line, and the wheels thereof be secured with a chain and padlock.**

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