4. Four-wheeler vehicles or wagons with rigid wheel base of less than 3.05 metres should not be attached to a passenger train on the M.G. When such wagons or vehicles are attached to mixed trains, the maximum speed of such trains must not exceed 40 KMPH.
5. Four-wheeler inspection carriages fitted with standard WA 16 springs and shackle plates may be attached to passenger trains booked to run at a speed of more than 75 KMPH on B G and 50 KMPH on MG.
6. Four-wheeler inspection carriages with type of suspensions other than those mentioned in para 8.5.4 above should not be attached to passenger trains, the maximum permissible speeds of which exceeds 75 KMPH on BG and 50 KMPH on MG.
7. A single four-wheeler vehicle not carrying public passengers may be marshaled between the engine and a bogie vehicle to avoid delays in shunting en route, subject to the following exceptions –

   Vehicles carrying livestock shall not be attached behind the engine except on the electrified sections.

8.6. Four-wheelers not carrying public passengers fitted with automatic vacuum brake may be marshaled between the rear brake-van and a restaurant car or a Officer's bogie saloon to facilitate shunting subject to para 8.5 above.

8.7. Kit wagons of staff on transfer to stations beyond two goods terminals may be attached to parcel or passenger trains, when room permits.

8.8. No goods stock will be attached to run on passenger train unless certified by the Train Examiner that it is fit to run on passenger trains. Piped vehicles are not to be attached to passenger trains.

9. Marshalling of goods trains:

9.1. Every goods train on leaving a terminal station must be properly marshaled in accordance with the instructions issued by the Divisional Railway Manager. There must be at least one goods brake-van in the rear of the train. Instructions with regard to attaching of brake-vans on goods trains, number and tonnage shall be given in the Working Time Table.

9.2. No load which infringes the standard moving dimensions shall be attached to a train without the sanction of the PCOM.

9.3. A single 4-wheeler must not be marshaled between 2 bogies but a single 4 -wheeler may be attached between the engine and a bogie vehicle to avoid delays in shunting en route.

Note: This rule is not applicable whenever banking engine/assisting not required engine is attached in rear of rear brake-van.

9.4. In the case of military specials carrying motor vehicles belonging to the Defence department, two four-wheeler dummy wagons (either empty or loaded with non-inflammable goods) should be attached in the front next to the engine.

9.5. Dead Engines:

The following combinations of Working and Dead locomotives are permitted:

1. For Goods trains:-
   (i) One Live Loco + One Dead Loco;
   (ii) Two Live Locos + One Dead Loco or One Live Loco + Two Dead Locos;
   (iii) Two Live Locos + Two Dead Locos.

2. For Coaching Trains except Rajdhani/ Shatabdi/Duranto-

(i) One Live Loco + One Dead Loco;

(ii) Two Live Locos + One dead Loco;

(iii) Two Live Diesel Locos (WDM2/WDG3A/WDM3A/WDM3D) + Two Dead Diesel Locomotives (WDM2/WDG3A/WDM3A/WDM3D), on KZJ-SC/HYB section.

9.5.1. Conditions for attaching of dead locomotive-

(i) Certificate of 'fit to run' is issued by Section Engineer/Loco Inspector/Power Controller for passenger/goods train.

(ii) Escorting of dead locomotive attached to freight and passenger carrying trains is not necessary if the brakes are fully operational and the dead locomotive is attached next to the train engine.

(iii) The dead locomotive shall be escorted by competent person not lower than Assistant Loco Pilot when attached in the rear of the brake van or has defect in under gear equipment.

(iv) In case of maximum permissible speed of the dead locomotives is less than the maximum permissible speed of the train, suitable speed restriction shall be imposed on the train while attaching the dead locomotives.

(v) As far as possible brakes should apply on Dead Locomotive(s) in synchronisation with Working Locomotive(s).

(vi) Running of double/triple/quadruple heads is permissible on the section over which the dead locomotive(s) is/are to be hauled.

(vii) If the dead locomotive brakes are functional, it should be attached to next to working locomotive(s) and MR & BC equalising pipes are connected so that the brake power of the dead locomotives can be utilized

(viii) 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.

(ix) As a final check, the coupled locos should be run for about 500 metres and the Loco Pilot 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.

(x) On Dead Locomotive(s) all the Circuit Breakers and Battery Knife Switches shall be off and such other steps be taken to ensure that the Dead Locomotive cannot be started inadvertently.

(xi) It should be ensured that the reverser handles are placed in neutral position and removed. For long distance movement of Dead diesel-electric/Electric locomotives, the traction motor brushes shall be lifted and properly secured.

(xii) The locomotive(s) brakes shall be fully released. The brake pipes and main reservoir pressures shall be fully discharged or vacuum fully destroyed. The MU2B valve shall be placed in trail/dead position.

(xiii) The Guard & Loco-Pilot of the train shall be issued with Caution Order informing that they shall work the train carefully as the dead locomotive is attached.

(xiv) When dead locomotive is attached in rear of the train as last vehicle and cannot work as piped vehicle: (For example pure air brake loco attached to vacuum brake train, breakage of Brake Pipe / its angle cock or any other reason) -

(i) Only one dead locomotive is permitted to haul.

(ii) Such type of dead loco movement is permitted only on gradients not steeper than 1 in 100.

(iii) Dead Locomotive shall be accompanied by a competent person not less than Assistant Loco-Pilot. This competent person shall be provided with suitable equipment including walkie-talkie set, flags, detonators, etc. Guard of the train to which dead locomotive has been attached shall personally ensure that the dead locomotive is accompanied by such a competent person. It will be the duty and the responsibility of the competent person to switch on the flasher light and apply the handbrakes judiciously in case of runaway occurring.

(xv) Instructions concerning brake system for hauling dead locomotives should be notified to the crew through SOB for both Diesel and Electric locomotives separately

(xvi) Instructions related to Bridges on SCR for haulage of dead locomotives (Two live and Two dead), if any, shall be incorporated by Engineering department.

9.5.2. Attaching/hauling of dead locomotives by passenger trains:

(i) Only one dead locomotive (diesel/electric) can be attached.

(ii) In exigencies like MU loco failures, it is permitted to haul two dead locomotives with two live locos (electrical or diesel) on coaching trains in all sections of SCR to clear the section with a restricted speed of 20 kmph strictly up to the next feasible station where the failed loco may be detached

(iii) Movement of two dead locomotives with working diesel locomotives on coaching trains (except Rajdhani, Shatabdi and Duranto) is permitted between KZJ and SC/HYB section, subject to compliance of the following conditions:

1. Dead locomotives are attached next to working locomotives and brakes on dead locomotives are functional;
2. As a result of attachment of dead locomotives, the maximum permissible length and maximum permissible load of the train should not be exceeded.
3. In case of maximum permissible speed of the dead locomotive(s) is less than the maximum permissible speed of the train, suitable speed restriction shall be imposed on the train while attaching the dead locomotive(s).
4. Certificate for ‘Fit’ to run is issued by Section Engineer / Loco Inspector, Power controller of passenger train.
5. As a final check, the coupled locos should be run about 500 meters and the driver shall check for any abnormal rise in temperature of the wheels of the dead locomotive and shall also check it at subsequent stops during the journey.
6. Locomotive with defects in under gear equipment should not be attached.

(iv) Dead locomotive may be attached at originating station or en-route provided that the brake power of mail/express/passenger/mixed train (excluding dead locomotive) is at least 90% when dead locomotive is attached;

(v) If the dead locomotive brakes are not functional and it is to be hauled as piped vehicle and when hauled as piped vehicle following conditions shall be observed:

i) Only one dead diesel/electric locomotive is attached to the train and

ii) Brake Power of mail/express/passenger/mixed train (excluding dead locomotive) is at least 90% when dead locomotive is attached.

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 piped vehicle. If the locomotive is fitted with pure air brake system and vacuum pipe is not provided on locomotive, then it should be attached with air brake trains only.

(vi) Dead locomotive can be attached to Mail / Express train including super fast trains but excluding Rajdhani and Shatabdi / Duranto trains.

9.5.3. Attaching/hauling of dead locomotives by goods trains:

Dead locomotive to be treated as piped vehicle when –

a) the dead locomotive brakes are functional but it is not attached next to working locomotive or

b) MR and BC equalising pipes are not connected or

c) the dead locomotive brakes are not functional.

The conditions to be satisfied in these cases are as under:

a) Only one dead locomotive is permitted to haul.

b) If the dead locomotive is not placed next to the train locomotive, it may be marshaled anywhere on the goods train provided that the distance between the dead loco and the train loco/banking loco (if any) shall be equaled to the largest span of the bridge in the section duly following the below given safety requirements from the point of view of brakes.

1. Dual brake dead loco on Vacuum train: Vacuum pipe of the dead loco can be connected with the vacuum train pipe of rolling stock and at least twenty fully vacuum braked 4 wheeler units shall be attached behind the dead locomotive and

2. Dual Brake dead loco/airbrake loco on air brake train: brake pipe of dead locomotive shall be attached to brake pipe of the train and at least ten fully braked wagons shall be attached behind the locomotive.

9.6. Empty water tanks—

An empty water tank must not be attached between two loaded wagons or outside the rear brake--van. An empty water tank may be attached next to the engine or inside the rear brake-van or between empty wagons.

9.7. Metre Gauge timber trucks and ballast wagons—

Metre Gauge timber trucks and ballast wagons fitted with rigid buffers shall not be attached to passenger or mixed trains. They may, however, be attached to goods trains in front of the rear brake-van subject to a maximum of 4 such wagons on any train.

10. Railway Officers saloons –

1. No saloon will be attached to race specials, postal express trains and military specials.

2. The saloons of the General Manager, the Heads of Departments and the Commissioner of Railway Safety may be attached to any train except those mentioned under 10.1 above. Not more than one saloon will be attached to a mail train.

3. The saloons of Heads of Departments and Divisional Railway Managers shall ordinarily be attached to Passenger, parcel and Goods trains. The PCOM’s permission must be obtained for attaching their saloons to Mail or Express trains.