receipt of hand signals from the official-in-charge by waving of a green signals to withdraw the danger signals for indicating that rail dolly(s) have been removed.

- The official in-charge of the rail dolly shall keep a look out for approaching trains and will get the rail dolly(s) and material cleared off the track as soon as an approaching trains is sighted.
- If the visibility is impaired during working due to rain, dust, storm, fog or any other cause the dolly shall be removed from the line and should not be replaced until the visibility is adequate.

b. With block protection : When -

- It is necessary during an emergency to work it at night.
- The visibility is restricted due to dust, storm, fog, rain or any other causes.
- It is worked in deep cuttings, steep grades, sharp curves and heavily built up areas where the visibility is not clear for 1200 meters on BG and 800 metre on MG/NG.
- 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 in deep cuttings and curves.

Protection Arrangement without Block Protection* (SINGLE LINE)

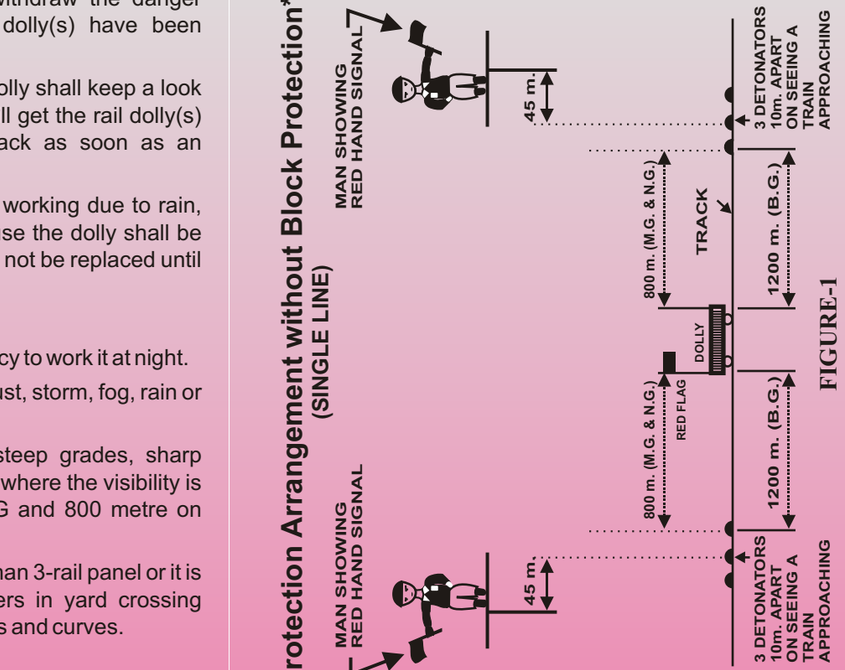


FIGURE-1

Protection Arrangement with Block Protection* (SINGLE LINE)

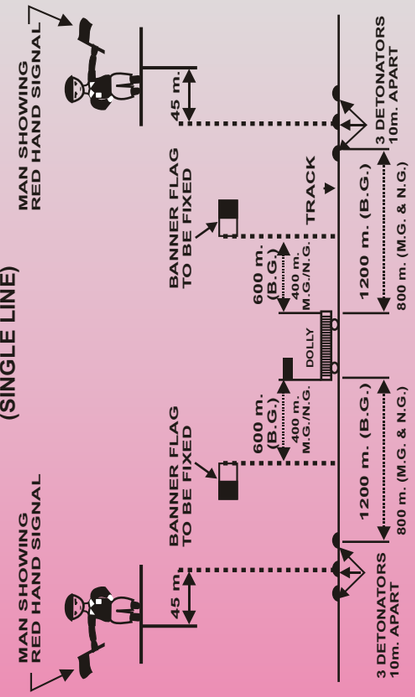


FIGURE-2

***Note :** (a) In MG guage sections where maximum speed is more than 75 kmph, the distance of protection will be increased as specified by the administration.

(b) **In double line** the flag-man is to be deputed either to follow or to precede the dolly, as the case may be i.e. towards the direction of approaching train.

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GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

WORKING OF RAIL DOLLY

CAMTECH/C/2004/RD/1.0
SEPTEMBER - 2004

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WORKING OF RAIL DOLLY

Definition : 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.

Equipment of Dolly : Individual/group of rail dolly(s) when on line shall exhibit :

- **During daytime,** a red flag, fixed to a staff of not less than 180 cm. in height should be displayed so as to be clearly visible.
- **During night,** a H.S. Lamp shall be placed to show conspicuously, on the double line, white light to the front and red to the rear and on single line, red light both to the front and the rear side.

Competent person/Official In-charge :

- He should have passed in medical category A-3 and must hold a valid certificate of competency issued by a PWI of the section.
- He shall be a railway servant not lower in rank than a keyman.
- He shall be fully responsible for the safe working of rail dollys.

Manning of Dolly : Rail dolly shall be manned by not less than two able bodied person **exclusive** of flagmen to protect them with flag and detonators.

Speed : Not to exceed 3 KMPH at any time.

General Precautions for safe working of dollys :

- The railway servant in-charge of rail dollys 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 material and remove the rail dolly in the event of an approaching train. He shall get the ballast heaps cleared and work the dolly(s) only when the visibility is clear for at least 1200 metre on Broad guage and 800 metre on MG/NG and the rails/sleepers can be dropped off safely without affecting the safety of trains and workers both.
- Dolly(s) should always be pushed and not pulled.
- Rail dolly shall not be worked on sections having gradients steeper than 1 in 200.
- For carrying of single rail, 2 rail dollys shall be used and for transporting a 3 rail panel 6 number of rail dollys shall be deployed.
- Not more than 6 rail dollys should be worked in a group in any one block section.
- Rail dolly should run on the cess rail in case of double line to ensure safety of adjacent track.
- While approaching level crossings, the official in-charge shall look out for road vehicles and ensure safe passage of rail dolly(s).
- Rail dolly must not be worked after sunset and before sunrise and in bad weather when the visibility is poor.
- During total interruption of communications or when TSL working is in force on a Double line section Dollys shall not be allowed to enter a block section. In case of extreme emergency, if it is indispensable to work dollys, the person in-charge of dollys should arrange for protection as per fig. 2.

System of working of dollys :

(1) Working of dollys within station limit :

The official in-charge of the Dolly will advise the Station Master in writing specifying the line and the period during which it will work. The Station Master on duty before authorising taking 'off' of signals for reception and despatch of trains, will personally satisfy himself that the official in-charge of the dolly is advised and that the dolly does not foul the path of trains. Slide/Lever Collars shall be used on those slides/levers governing the signals of the line on which dolly would be working.

- When 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 in deep cuttings and curves then it should work **under block protection.**

(2) Working of Dollys in Block section :

a. Without Block Protection :

- No traffic block or caution order is normally necessary for working of rail dollys except as indicated in para 2(b). The official in-charge of the dolly shall ascertain the whereabouts of trains that he is likely to encounter on the section before he places the dolly on the line.
- Every rail dolly/group of rail dolly when on line shall exhibit a red flag.
- The rail dolly shall be protected by a flagman at a distance of 1200 m on BG and 800 m on MG/NG from the rail dolly, on a double line in the direction from which trains may approach, and by 2 flagman one on either direction on single line. The flagman shall also carry three detonators for use in any emergency.
- Where necessary intermediate Flagman should be posted to relay signals.
- When a train is sighted, the Flagman should wave the red flag vigorously to warn the official in-charge of the dolly of the train and at the same time place three detonators 10M apart on the line to protect the rail dolly(s). The detonators should be removed only on