

टैलेक्स : 0535-2424 RDSO-IN

फैक्स : 91-0522-458500

तार : 'रेलमानक' लखनऊ

Telegram : 'RAILMANAK', Lucknow

टेलीफोन/टेली : 451200 (PBX)  
450115 (DID)



भारत सरकार - रेल मंत्रालय  
अनुसंधान अभिकल्प और मानक संगठन

लखनऊ - 226011

Government of India-Ministry of Railways  
Research Designs & Standards Organisation  
LUCKNOW - 226 011

No. MC/TW



Dated 21-12-99

The General Manager (Engg):

1. Central Railway, Mumbai CST - 400001.
2. Eastern Railway, Fairlie Place, Calcutta - 700001.
3. Western Railway, Churchgate, Mumbai - 400020.
4. Northern Railway, Baroda House, New Delhi - 110001.
5. Southern Railway, Park Town, Chennai - 600003.
6. South Central Railway, Secunderabad - 500371.
7. South Eastern Railway, Garden Reach, Calcutta-700043.

Sub: Final maximum permissible speed certificate for operation of  
BG 4 - wheeler over head equipment inspection car Mark-II,  
manufactured by Kanchrapara Workshop of Eastern Railway

Ref: Railway Board's letter No. 76/WDO/SR/20 dated 17-6-1977

- 1.0 BG overhead equipment inspection cars (Mark-II) have been designed and manufactured by Kanchrapara Workshop of Eastern Railway as per their Drg.No. TCB-169. The maximum axle load for this car is within 6.3t under gross load condition. The OHE car has been provided with vacuum brake system.
- 2.0 The above OHE car have been cleared for operation at a maximum speed of 40 km/h vide Railway Board's letter No. 76/WDO/SR/20 dated 17-6-77.
- 2.1 The Mark-II Tower Wagons have been performing satisfactorily at the above speed for the past many years.
- 2.2 The Chief Commissioner of Railway Safety, vide his letter No.M-15013/1/97-RS-I dated 5-1-99 has approved dispensation of oscillation trials.
- 3.0 Based on the above it is certified that B.G. 4-wheeler OHE inspection car Mark II manufactured by Kanchrapara Workshop of Eastern Railway may be permitted to run at maximum speed of 40 km/h, subject to the following conditions.

### 3.1 Track

- 3.1.1 The track shall be to a minimum standard of 90R rails on sleepers to M+4 density and depth of ballast cushion below sleepers of 200 mm which may consist of at least 75 mm clean and the rest in caked up condition, on compacted and stable formation.
- 3.1.2 For track of lower standard than that mentioned above the Chief Engineer concerned shall decide the lower maximum permissible speed. In this connection, Railway Board's letter No. 65/WDO/SR/26 dated 19/20-10-1966 may be seen. When the Chief Engineer considers that the road bed is not compacted or there is improper drainage, he may suitably restrict the maximum permissible speed depending on the local conditions.
- 3.1.3 The maximum permissible speed on curves shall be decided on the basis of the existing provisions of the Indian Railways Permanent Way Manual, 1986.

### 3.2 Bridges

- 3.2.1 The clearance in regard to bridges refers to standard design of girders, slabs, pipe, culverts, pier and abutments, etc. issued by RDSO for BGML, RBG & MBG - 1987 standard loadings.
- 3.2.2 All other designs of superstructures and sub-structure are to be examined under the direction of the Chief Engineer concerned and certified safe by him in terms of current IRS Bridge Rule, Steel, Bridge Code, Bridge Sub-Structure and Foundation Code etc. read with upto date correction slips.
- 3.2.3 The clearance is subject to the following parameters of the above.

Maximum Axle Load	...	6.3 t
Maximum Tractive Effort	...	1.62 t
Maximum Braking Force	...	9.6 t

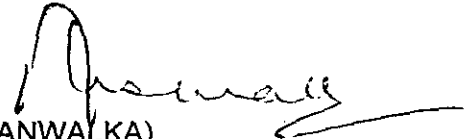
### 3.3 Signalling

- 3.3.1 The speed of the inspection car while running through a station will be decided by Zonal Railway depending upon type of route release circuit adopted, length of FVT track circuit provided ahead of last stop signal and standard of interlocking existing at station.

### 3.4 General

- 3.4.1 All the permanent and temporary speed restrictions in force and those that may be imposed from time to time due to track, bridges, curves, signalling and interlocking, etc. shall be observed.

3.4.2 The Mark-II Tower Wagon infringes item No. 2 (ii), 26 (a), 27 (a), 28 (a) and 31 of Chapter IV (A) of the B.G. Metric Schedule of Dimensions (1973). These infringements have been condoned by Railway Board vide their letter No. 76/WDO/SR/20 dated 17-6-1977.



( A.K. SANWALKA )  
EXECUTIVE DIRECTOR STANDARDS (MOTIVE POWER)

DA : i) Drawing No. TCB-169  
ii) Railway Board's letter no. 76/WDO/SR/20  
dt. 17.6.77

(i) The General Manager (Mech./Elect./Optg.):

1. Central Railway, Mumbai CST – 400001.
2. Eastern Railway, Fairlie Place, Calcutta – 700001.
3. Western Railway, Churchgate, Mumbai – 400020.
4. Northern Railway, Baroda House, New Delhi – 110001.
5. Southern Railway, Park Town, Chennai – 600003.
6. South Central Railway, Secunderabad – 500371.
7. South Eastern Railway, Garden Reach, Calcutta-700043.

(ii) The Secretary (Elec./Engg.), Railway Board, Rail Bhavan,  
New Delhi – 110001.

( A.K. SANWALKA )  
EXECUTIVE DIRECTOR STANDARDS (MOTIVE POWER)