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GOVERNMENT OF INDIA - MINISTRY OF RAILWAYS
RESEARCH DESIGNS & STANDARDS ORGANISATION
MANAK NAGAR, LUCKNOW-226011.

No. TM/HM/11

Dated: 17 - 11- 98

The General Manager(Engg/Works)

1. Central Railway, Mumbai-CST-400 001.
2. Eastern Railway, Fairlie Place, Calcutta-700 001.
3. Northern Railway, Baroda House, New Delhi-110 001.
4. North Eastern Railway, Gorakhpur-273 012.
5. Northeast Frontier Railway, Maligaon, Guwahati- 781 011.
6. South Eastern Railway, Garden Reach, Calcutta-700 043.
7. Southern Railway, Park Town, Chennai-600 003.
8. South Central Railway, Rail Nilayam, Secunderabad-500 371.
9. Western Railway, Churchgate, Mumbai-400 020.

Sub: Final maximum permissible speed certificate for Ballast
Regulator Model 66-2 supplied by M/s KERSHAW (USA).

Ref: This office letter no. CT/TM/SC/BR dated 31-1-90.

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1.0 Vide letter under reference, M/s KERSHAW (USA)'s Ballast Regulator, Model 66-2 as per diagram no. EDO/T-2157 with maximum axle load of 12.97 t, has been permitted to run at provisional maximum speed of 60 kmph when running on its own power and 40 kmph when running in train formation as a dead vehicle.

As per provision of Policy Circular No.6 governing procedure for issue of speed certificate, CCRS was requested vide letter no. TM/HM/11/7 dated 30/31-3-98 to accord approval for dispensation with detailed oscillation trials for issue of final maximum permissible speed certificate. Vide CCRS' letter No. M15013/1/97-RS dated 16-4-98, this dispensation has been granted.

In view of the above, the machine may now be permitted to run on regular basis up to maximum speed of 60 kmph when running on its own power and 40 kmph when running in train formation as a dead vehicle, subject to the conditions in the following paragraphs:

1.1 TRACK

1.1.1 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.

1.1.2 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 dt.19/20.10.66 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.

1.1.3 The maximum permissible speed on curves shall be decided on the basis of the existing provisions of the Indian Railways Permanent Way Manual-1986.

1.1.4 Maximum speed on points and crossings shall be restricted to 10 kmph as per para 1227 of the Indian Railways Permanent Way Manual -1986.

1.2 BRIDGES

1.2.1 The clearance in regard to bridges refers to standard design of girders, slabs, pipe culverts, piers and abutments etc. issued by RDSO for BGML, RBG and MBG-87 standard loadings.

1.2.2 All other designs of superstructures and sub-structures are to be examined under the directions of the Chief Engineer concerned and certified safe by him in terms of current IRS Bridge Rules, Steel Bridge Code, Bridge Sub-structures and Foundation Code etc. read with up-to-date correction slips

1.3 SIGNALLING

The speed of vehicle/machine while running through a station will be decided by Zonal Railways 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 a station.

1.4 GENERAL

1.4.1 The design of the machine infringes clauses 2 (ii), 19 (a), 20 (a) and 21 (a) of Chapter IV(A) of BG Schedule of Dimensions-1973, vide details as per Annexure-I. Necessary condonation is required to be obtained from Railway Board by the concerned railway before placing the machine on track.

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

1.4.3. When the machine is being moved non-working either on its own power or hauled in a train, it shall be ensured that all the protruding parts are withdrawn and suitably locked.

DA: One drawing
No.EDO/T-2157
& Annexure I

P. Bhattacharya
(P. BHATTACHARYA)
Executive Director Standards (Motive Power)

Copy to:-

The Secretary (Engg.), Railway Board, Rail Bhawan, New Delhi - 110,001.

DA: One drawing
No.EDO/T-2157
& Annexure I

P. Bhattacharya
(P. BHATTACHARYA)
Executive Director Standards (Motive Power)

ANNEXURE-I.

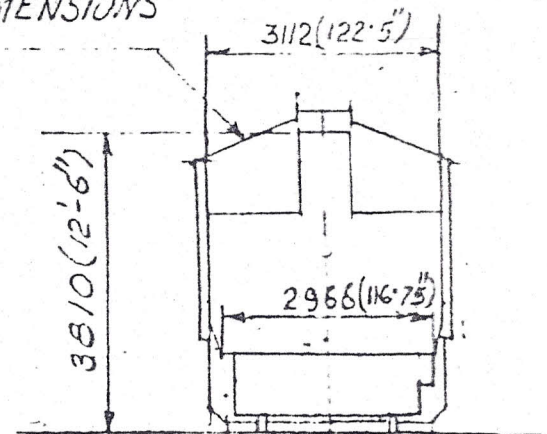
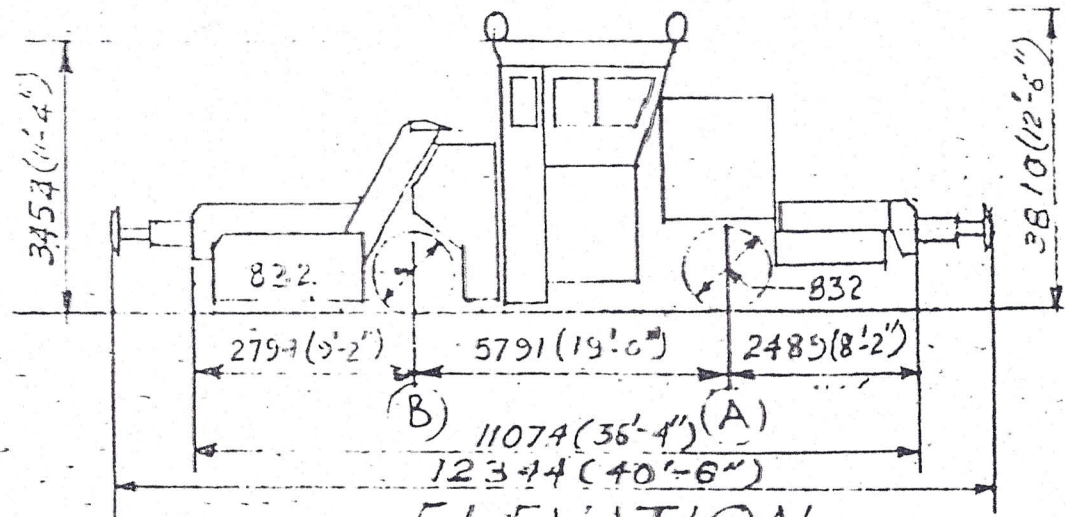
BALLAST REGULATOR MODEL 66-2

DETAILS OF INFRINGEMENTS TO SCHEDULE OF DIMENSIONS-1973.

Ref: RDSO's Drg.No.EDO/T-2157

S.No.	Item of Chapter IV(A) of SOD	Description	Dimensi-on as per schedule	Actual dimension in the machine
1.	2 (ii)	Minimum dia on wheel tread measured at 63.5 mm from gauge face.	914mm	832 mm
2.	19 (a)	Maximum length of body or roof for 4-wheeled vehicle	8540 mm	11074 mm
3.	20(a)	Maximum length of under frame over head stocks for 4-wheeled vehicle	8540 mm	11074 mm
4.	21 (a)	Maximum length over side buffers for 4-wheeled vehicle.	9810 mm	12344 mm

{ MAX. MOVING DIMENSIONS
OF 1929



SIDE ELEVATION

ELEVATION

BALLAST REGULATOR MODEL 66-2

AXLE LOAD

- (A) FRONT AXLE - 10977 Kg (24200 lbs)
- (B) REAR AXLE - 12973 Kg (28600 lbs)

WHEEL DIA: NEW - 832 (32'-75")

2. DIAGRAM BASED ON DRGS. OF M/S KERSHAW.
1. ALL DIMENSIONS ARE IN MILLIMETRES.

NOTE

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EDO/T-2157

DES. BY CH. BY APPD. BY
1/1/1959