

भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

(E-File No.:3325657)

No.2020/M(C)/650/2

New Delhi, Date: 08.11.2024

General Managers,
All Zonal Railways

Sub: Board Meeting held on 30.10.2024- Issue related to derailment of NMG coaches.


Ref: RDSO letter no. MC/BLB dated 30.10.2024.

The case of derailment of NMG Coach in Delhi Division/NR on 25.10.2024 was discussed in the Board meeting held on 30.10.2024 and the following decision was taken:.

- In case of NMG trains, it must be ensured that side buffers are maintained properly. Appropriate instructions detailing precautions to be observed be issued.
- While forming the train with NMG coaches with screw coupling, the couplers should be properly tightened.

In this regard, RDSO has issued instructions regarding the Maintenance of side buffers (ICF coaches) vide letter under reference (ii) above which may be referred for the maintenance of the NMG side buffers also.

All Zonal Railways are advised to ensure that the above Board's instructions are immediately implemented in all workshops and depots.


(रवि जैन)

कार्य.निदेशक / यांत्रिक इंजी. को.
रेलवे बोर्ड

Copy to:

- PCMEs/ All Zonal Railways- for kind information and necessary action please.
- PED/RS/RDSO - for kind information and necessary action please.

No. MC/ BLB

Dated: 30.10.2024

महाप्रबन्धक (यांत्रिक)

1. मध्य रेलवे, छत्रपति शिवाजी टर्मिनस, मुम्बई – 400 001.
2. पूर्व रेलवे, फेयरली प्लेस, कोलकाता – 700 001.
3. उत्तर रेलवे, बड़ौदा हाउस, नई दिल्ली – 110 001.
4. दक्षिण रेलवे, पार्क टाउन, चेन्नई – 600 003.
5. दक्षिण मध्य रेलवे, रेल निलायम, सिकन्दराबाद – 500 071.
6. दक्षिण पूर्व रेलवे, गार्डेन रीच, कोलकाता – 700 043.
7. पूर्वोत्तर रेलवे, गोरखपुर – 273 012.
8. पूर्वोत्तर सीमान्त रेलवे, मालीगौ, गुवाहाटी – 781 011.
9. पश्चिम रेलवे, चर्चगेट, मुम्बई – 400 020.
10. पूर्व मध्य रेलवे, हाजीपुर – 844 101.
11. पूर्व तटीय रेलवे, बीडीए रेंटल कालोनी, रेलवे काम्प्लेक्स, चन्द्रशेखरपुरा, भुवनेश्वर, उड़ीसा – 751 016.
12. उत्तर मध्य रेलवे, हास्टिंग रोड, इलाहाबाद – 211 001.
13. उत्तर पश्चिम रेलवे, जयपुर – 302 006.
14. दक्षिण पश्चिम रेलवे, हुबली – 580 023.
15. पश्चिम मध्य रेलवे, जबलपुर – 482 001.
16. दक्षिण पूर्व मध्य रेलवे, आर ई आफिस काम्प्लेक्स, बिलासपुर – 495 004.
17. कोंकण रेलवे कार्पोरेशन लि., कार्पोरेट आफिस, बेलापुर भवन, नवी मुम्बई – 400 614.

Sub: Maintenance of side buffers (ICF coaches).

Proper maintenance of side buffers (ICF coaches) is essential for reliability in train operation. In this regard, it is to advise that maintenance instructions for side buffers (ICF coaches) are placed in chapter 9, page 5 to 8 of CAMTECH maintenance manual for B G coaches of ICF design. However, the important maintenance instructions are reiterated below for necessary compliance.

A. Inspection and Maintenance in Workshops (Schedule: Every POH)

1. After dismantling, cleaning of the components by any suitable method (Bosch tanks, hot water jet etc.) thoroughly before inspection and check for cracks, distortions, wear, corrosion & pitting. Further, the components worn beyond limit are to be discarded. Wear limits for various components are contained in table given below:

| Wear limits for Buffer Casing | | |
|--|--------------------------|-------------------|
| Wear location | Wear limit | Suggested gauge |
| Buffer casing body wall thickness 11.5 mm | 5.5 mm in wall thickness | Inside micrometer |
| Fixing hole in the base 26 mm dia | 2 mm on dia | 28 mm flat |

| Wear limits for Buffer Plunger | | |
|---|------------|--|
| Wear location | Wear limit | Suggested gauge |
| Buffer plunger tube wall thickness 9 mm | 4mm | Micrometer |
| Plunger face/face plate 19 mm | 11 mm | 1905 mm curvature gauge with depth measurement |

| Wear limits for Buffer Spindle | | |
|----------------------------------|----------------|-----------------------|
| Wear location | Wear permitted | Suggested No Go gauge |
| Buffer spindle body 40 mm dia | 5 mm | 35 mm snap |
| Threads M 39 | 0.5 mm | Thread profile gauge |

2. Maintenance of Buffer Pad Assembly:

- Buffer pads should invariably be changed as a set at every alternate POH. The set should not be formed from different supplies.
- Free height of a set of buffer pad pack to is to be measured and if required, parting plates to be added so that it should be in the range of 484 +/- 2 mm.
- Furthermore, the pads should be checked every POH for perishing or permanent set to a length below 424 mm. Individual pad as per RDSO Drg. no. SK-K2048 (Copy attached) to be tested and same should be more than 106 mm. Rubber buffer pads are to be procured and used as a pack from approved suppliers.

3. The dimension of Recoil Spring should be maintained as 78 mm (RDSO Sketch-98145 is attached).

4. Check the destruction tube for bulging, corrosion. Replace the damaged/corroded destruction tube

5. The Disk lock washer(M-24), Nylock nut (M-24) & Hex HD Bolt (M-24x90) required to be replaced with new during overhauling.

B. Examination and Repair Practice in Carriage Maintenance Depot (in Schedule – A&B and IOH)

1. During maintenance at Carriage maintenance depot, examination and repair of buffer assembly required to be done as follows:

- Checking of tightness of buffer fixing bolts, drooping of buffers and slackness in buffer plunger to ensure destruction tubes are not damaged.
- The projection of buffer from head should be within 600 mm to 635 mm.
- Inspect buffer plunger face plate for wear and profile.

2. During maintenance at Schedule A & B following shall be examined and repaired:

- Visually examine buffer plungers for damage/drooping/stroke length.
- Examine buffer mounting bolts, attend if necessary.
- Examine buffer casing for cracks/ damage.
- Greasing shall be done on buffer plunger and face plate of buffer.

Zonal Railways are required to ensure compliances of above instructions as well as other instructions stipulated in the CAMTECH Manual for ensuring reliability of the side buffer in train operation.

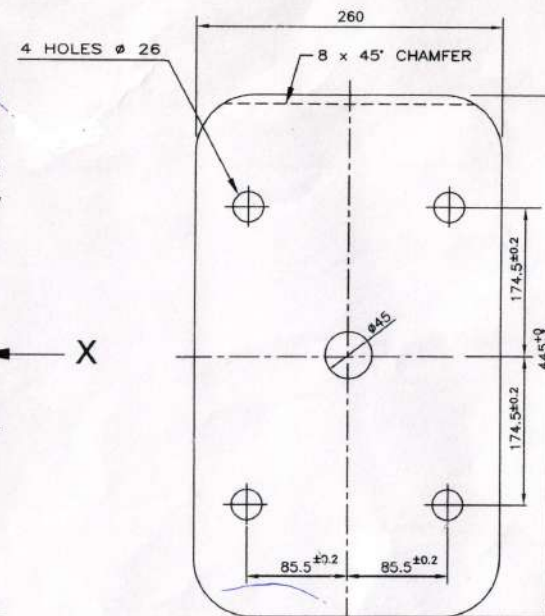
DA: As above.

ANIL KUMAR
SINGH

(A.K.Singh)

Executive Director Standard/Carriage

CC: EDME/Chg./RB: For kind information



| | | | | | | | | |
|----|----------------------------|--|------------------------------------|-----------|--------------------------|--------------------------------------|---------|---------------------|
| 12 | 20 | DISK LOCK WASHER M-24 | 4 | 16 | IS:7002-2005 10-9 | REFER ICF DRG NO. ICF/STD-2-2-009 | | |
| | 19 | NYLOCK NUT M-24 | 4 | 16 | IS:7002-2005 10-9 | | | PHOSPHATE COATED |
| | 18 | M-24K90 HEX.HD. BOLT | 4 | 16 | IS:1364-2002 P-1-10.9 | | | GALVD. |
| | 17 | HEX. NUT M-39 | 4 | 15 | | IS:1875-1992 STEEL CL-4 | | |
| | 16 | END PLATE M 12 X #170 | 8 | 5 | T-2-2-802 | | | (ITEM-6) |
| | 15 | DESTRUCTION TUBE | 4 | 5 | T-2-2-802 | | | (ITEM-4) |
| | 14 | WASHER | 4 | 5 | T-2-2-802 | | | (ITEM-1) |
| | 13 | BUFFING SPRING PARTING PLATE | 8 | 5 | SK-K3008 | | | |
| | 12 | RECOIL SPRING WASHER | 4 | 5 | W/BD-350 | | | |
| | 11 | SIDE BUFFER RECOIL SPRING PARTING PLATE | 12 | 5 | W/BD-2253 | | | |
| | 10 | SIDE BUFFER RECOIL SPRING | 12 | 5 | W/BD-2252 | | | |
| | 9 | RUBBER BUFFER SPRING | 16 | 5 | SK-K2048 | | C-K210 | |
| | 8 | BULB COTTER | 4 | 5 | WD-94068 -S-1 | | | (ITEM-2) |
| | 7 | BUFFER SPINDLE | 4 | 5 | W/BD-353 | | | |
| | 6 | FLAT CSK HD. RIVET (FORGED) | 24 | 5 | | IS:1929-82 TAB 2 & IV | | |
| | 5 | FACE PLATE FOR BUFFER PLUNGER | 4 | 5 | SK-94254 | | | |
| | 4 | BUFFER PLUNGER (FORGING) | 4 | 5 | SK-94256 | | | |
| | 3 | BUFFER PLUNGER (CASTING) | 4 | 5 | SK-94255 | | | |
| | 2 | SIDE BUFFER CASING (FORGING) | 4 | 5 | SK-94044 | | | |
| | 1 | SIDE BUFFER CASING (CASTING) | 4 | 5 | SK-94043 | | | |
| | ITEM | DESCRIPTION & DIMENSIONS | No. OFF PER COACH | REF. DRG. | WT. OF ONE Kg. | MTL. & SPEC. | REMARKS | |
| | SUPERSEDED BY:- | | | | | | | |
| | SUPERSEDES:- <i>ALT-11</i> | | | | | | | |
| | SCALE | | ICF/RCF COACHES | | | | | |
| | C <i>Sw</i> | | ENHANCED CAPACITY SIDE BUFFERS | | | | | |
| | D <i>SPAwathi</i> | | WITH FACE PLATE FOR COACHING STOCK | | | | | |
| | T | | (1225 Kg. METRE) | | | | | |
| | JS CD/3498 | | | | | | | |
| | BG RDSO (C) | | GROUP <i>12</i> | | SKETCH - 98145 | | | |

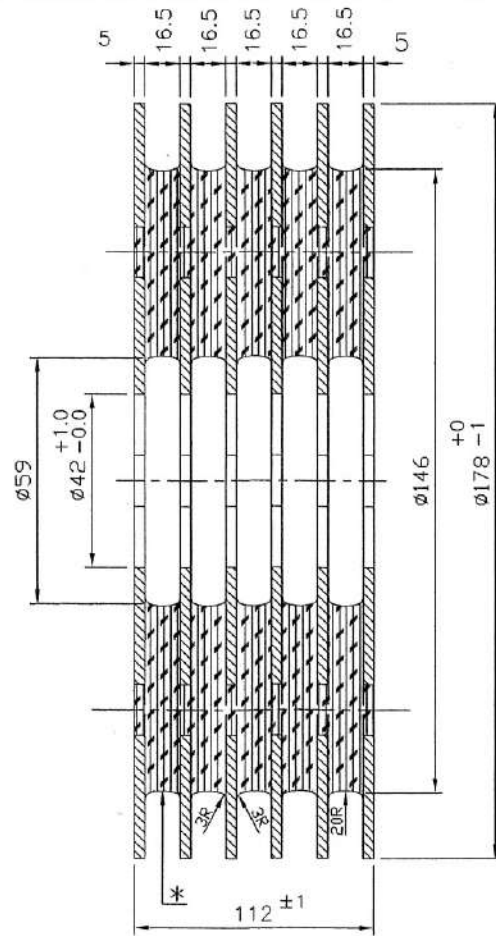
1. MANUFACTURER SHOULD COMPLY WITH STR NO. ICF/MD/SPEC-252.

| | | | | |
|-----|------|------------|---|-------|
| 8 | - | CD/01/14 | ITEM 18, LENGTH ADDED. | 01/14 |
| 10 | - | CD/8/13 | ITEM 18 REVISED. | 06/13 |
| 8 | - | CD/6/13 | ITEM 1, 3, 6, 19 & 20 REVISED AND NOTE NO. 1 ADDED | 07/13 |
| 9 | - | CD/3/06 | ITEM 1 & 3 REVISED & REDRAWN. | 03/11 |
| 8 | - | CD/4/06 | ITEM 8 SPLIT COTTR CHANGED TO BULB COTTER AND ITEM 19 & 20 ADDED. | 07/06 |
| 7 | - | CD/1/06 | MATERIAL REVISED OF ITEM 17. | 03/06 |
| 6 | - | CD/5/06 | REFERENCE POINT FOR DIMENSION 35 mm CORRECTED AND DRG. NO. OF ITEM 7 CORRECTED. | 11/06 |
| 5 | - | CD/9/05 | ONE PARTING PLATE (ITEM 13) DELETED. | 09/05 |
| 4 | - | SS/19/03 | DIMENSION CORRECTED. | 04/03 |
| 3 | - | SS/7/03 | ITEM 9 AND 13 REVISED. DIMENSION ADDED DIMENSION & CAPACITY CORRECTED. | 03/03 |
| 2 | - | CD/10/2000 | PITCH OF ITEM-17 ADDED. | 10/00 |
| 1 | - | CD/1/2000 | END PLATE DIMENSION CORRECTED. | 1/00 |
| ALT | ITEM | AUTHY. | DESCRIPTION | DATE |

REFERENCE:-

| | | | |
|----|-------------|---|----------------|
| BG | RDSO (C) | GROUP 8008 8009 8010 8011 8012 | SKETCH - 98145 |
|----|-------------|---|----------------|

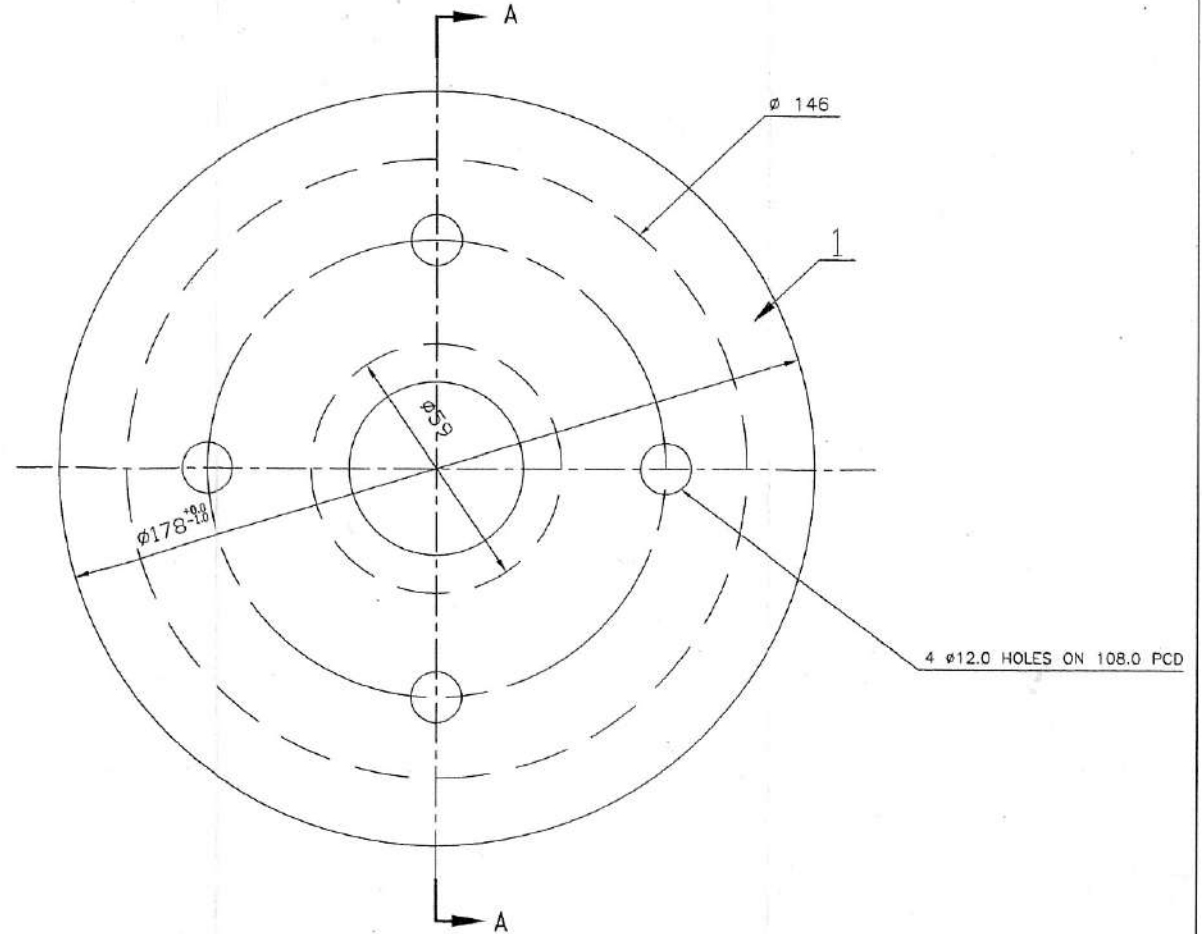
© "यह (ड्राइंग) अनुसंधान अभिरूपण एवं मानक संघान (रेल मंत्रालय) लखनऊ-225011, भारत के संयुक्ति है और एवं लिखित अनुमति के बिना इसका अधिक या एवं रूप से प्रयोग नहीं है."



SECTION-AA

NOTE:-

1. IDENTIFICATION PARTICULARS TO BE EMBOSSED IN 5 mm. TYPE AT LOCATION MARKED THUS *
a. DRAWING NUMBER
b. MANUFACTURER'S NAME/INITIAL/TRADE MARK.
c. QUARTER AND YEAR OF MANUFACTURE IN FIGURES.
2. TOP & BOTTOM SURFACE OF THE STEEL PLATE AS WELL AS OTHER EXPOSED SURFACES OF THE STEEL PLATE TO BE COATED WITH RUBBER 0.25 mm THICKNESS (MIN.) EDGES OF THE STEEL PLATES, IF NOT COVERED WITH 0.25 mm. THICK RUBBER SHALL BE PROTECTED WITH ANTI CORROSIVE SOLUTION.



| 1 | RUBBER SPRING ELEMENT. | 4 | - | - | C-K210 | |
|----------------|-------------------------|--------------------------|------------------------------|---------------|-----------|---------|
| ITEM | DESCRIPTION & DIMENSION | No.OFF / ASSLY | REF. DRG. | WT. OF ONE kg | MTL&SPEC. | REMARKS |
| SUPERSEDED BY: | | | | | | |
| ASSEMBLY DRGS | SUPERSEDES | MAIN LINE COACHING STOCK | | | | |
| REFERENCE :- | SCALE | P | RUBBER BUFFER SPRING | | | |
| | 1:5 | C | FOR 1225 KgM CAPACITY BUFFER | | | |
| | | T | | | | |
| | | D | | | | |
| | | J.S. | SS/16/02 | | | |
| FLOPPY No. :- | B.G. | R.D.S.O. | GROUP | | | |
| | | [C] | SKETCH- K2048 | | | |

| ALT. | ITEM | AUTH. | DESCRIPTION | CKD. | DATE |
|------|------|-------|-------------|------|------|
| | | | | | |

ORIGINAL