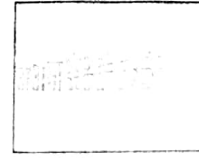




सत्यमेव जयते

भारत सरकार - रेल मंत्रालय  
अनुसंधान अभिकल्प और मानक संगठन,  
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No. TI/OHE/FTGFE/18

25  
Date: 22.02.2019

The Chief Electrical Engineer

1. South Eastern Railway, Garden Reach, Kolkata - 700043.
2. Eastern Railway, Fairlie Place, Kolkata - 700 001.
3. Northern Railway, Baroda House, New Delhi - 110 001.
4. Southern Railway, Park Town, Chennai- 600 003.
5. South Central Railway, Rail Nilayam, Secunderabad -500371.
6. Western Railway, Church Gate, Mumbai- 400 020.
7. Central Railway, 2ndFloor,Parcel Office Building, Mumbai CST-400 001.
8. Central Organization for Railway Electrification, Nawab Yusuf Road, Allahabad- 211 001.
9. South Western Railway, Hubli- 580028.
10. West Central Railway, Jabalpur- 482 001.
11. East Coast Railway, B-2, BDA Rental Colony, Chandrasheharpur, Bhubaneswar-751023
12. East Central Railway, Hazipur (Bihar)-844 101.
13. North Central Railway,Subedarganj, Allahabad -211 001.
14. North Eastern Railway, Gorakhpur-220055.
15. North western Railway, near Jawahar Circle, Jaipur-302017.
16. South East Central Railway, Bilaspur-495 004.
17. North East Frontier Railway, Maligaon, Guwahati-781011.
18. Konkan Railway Corporation Ltd.,BelapurBhavan, Sector-11, CBD-Belapur, Navi Mumbai, Maharastra-400614.

Sub: Maintenance Instruction No. TI/MI/0058 " To Prevent Contact Wire Parting at RRA Location."

Ref: This office letter of even no dated 10.01.2019.

Maintenance Instruction No. TI/MI/0058 for "To prevent Contact Wire Parting at RRA Location" is enclosed herewith for implementation to improve the reliability of OHE.

This issues with the approval of competent authority.

Encl: As above

25/02/19

(Neeraj Kumar Verma)  
Director/TI-2  
For Director General (TI)

Copy to: The Secretary (Electrical), Railway Board, Rail Bhawan, New Delhi 110001-For kind information.

2/L

Page 1 of 2	Effective from .....2019	SMI No. TI/MI/0058
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TI/MI/0058



GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS

SPECIAL MAINTENANCE INSTRUCTION (SMI)  
TO PREVENT  
CONTACT WIRE PARTING AT RRA LOCATION

SPECIAL MAINTENANCE INSTRUCTION NO.TI/MI/0058

February, 2019

ISSUED BY

Traction Installation Directorate  
RESEARCH DESIGNS & STANDARDS ORGANISATION,  
MANAK NAGAR,  
LUCKNOW-226011

**SPECIAL MAINTENANCE INSTRUCTION (SMI) TO PREVENT CONTACT WIRE PARTING AT RRA LOCATION**

1. **OBJECTIVE:** To Prevent contact wire parting at RRA location.
2. **BACK GROUND:** On 25, kV A.C. Traction System, there have been many failures of Contact Wire parting at RRA clamp due to non-availability of curvature on sides of RRA clamp.
3. **FAILURE PROCESS**
  - a) Cantilever rotates (upto 550 mm depending upto tension length) front and back due to temperature variation.
  - b) Non availability of curvature results in groove formation on contact wire & results in failure in tensile mode.
  - c) Contact wire may part on either side of RRA clamp.
4. **Maintenance Instruction:**
  - a) Special Drive to identify locations where RRA Clamp sides are not having curvature.
  - b) Provide correct RRA clamp, i.e. RRA clamp having curvature on both sides.
  - c) Check for cracks/damages of contact wire & replace contact wire piece during RRA clamp replacement or otherwise.
  - d) Ensure stagger as per drawing (both Contact wire & Catenary wire have the same stagger).
  - e) Provide correct RRA dropper length as per drawing. Dropper is in single piece.
  - f) Ensure Proper gradient, relative gradient of contact wire.
  - g) Correct Raised Register Arm Tube (RRT) length as per drawing.
  - h) The above points should also be checked during periodical maintenance.
5. **Note:**
  - a) RRA clamp should be flexible (free) at RRA adjuster.
  - b) Raised register arm tube (25 mm) (RI No. 2431) lengths are 0.3m, 0.6m, 0.8m, 1m, 1.2m, 1.5m, 1.7m.
  - c) Dropper length single piece dropper

Encumbrance	length
900/500	350mm
900/400	450mm
900/350	500mm

6. **REFERENCES**
  - a) ETI/OHE/P/1370-1 (Raised Register Arm Clamp, SGCI), ETI/OHE/P/1770 (Raised Register Arm Clamp, MCI), ETI/OHE/P/2470 (Raised Register Arm Dropper Assembly), ETI/OHE/P/2471(Dropper Clip (25) for Raised Register Arm), ETI/OHE/P/2472-1 (Raised Register Arm Dropper), ETI/OHE/P/2480 (Raised Register Arm Dropper Assembly).
  - b) RE/33/P/2431 (Raised Register Arm Tube 25 mm), RE/33/P/2432 (Raised Register Arm Adjuster 25 mm).

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