



भारत सरकार - रेल मंत्रालय  
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No. EL/0.3.1

Date: 25.08.2017

<b>Chief Electrical Engineer,</b> 1. Central Railway, Mumbai, CST-400 001. 2. East Central Railway, Hazipur-844 101. 3. East Coast Railway, Chandrashekharpur, Bhubaneswar-751 016. 4. Eastern Railway, Fairlie Place, Calcutta-700 001. 5. North Central Railway, Block-A, Subedarganj, Allahabad-211 033. 6. Northern Railway, Baroda House, New Delhi-110 001. 7. North Western Railway, Jaipur-302 006 8. North Eastern Railway, Gorakhpur-273001 9. North East Frontier Railway, Maligaon, Guwahati-781011 10. South Central Railway, Secunderabad-500 071. 11. South East Central Railway, Bilaspur-495 004. 12. South Eastern Railway, Garden Reach, Kolkata-700 043. 13. Southern Railway, Park Town, Chennai-600 003. 14. South Western Railway, Hubli-580020 15. West Central Railway, Jabalpur-482 001. 16. Western Railway, Churchgate, Mumbai-400 020 17. Chittaranjan Locomotive Works, Chittaranjan-713 331 18. Diesel Locomotive Works, Varanasi-221 004. 19. Integral Coach Factory, Chennai-600 038 20. Rail Coach Factory, Kapurthala, Punjab 21. Metro Railway, Metro Bhawan, 33/1, J.L. Nehru Road, Kolkata-700 071	<b>मुख्य विद्युत अभियंता,</b> 1. मध्य रेलवे, मुंबई सीएसटी -400 001 2. पूर्व मध्य रेलवे, हाजीपुर-844 101 3. पूर्व तटीय रेलवे, चन्द्रशेखरपुर, भुवनेश्वर-751 023 4. पूर्व रेलवे, फेयर्ली प्लेस, कोलकाता-700 001 5. उत्तर मध्य रेलवे, ब्लाक ए-2, सुबेदारगंज इलाहाबाद - 211 033 6. उत्तर रेलवे, बड़ौदा हाऊस, नई दिल्ली-110 001 7. उत्तर पश्चिम रेलवे जयपुर-302006 8. उत्तर पूर्व रेलवे गोरखपुर-273001 9. उत्तर पूर्व फ्रेंटीयर रेलवे मालीगाँव गुवाहाटी-781011 10. दक्षिण मध्य रेलवे, रेल निलायम, सिकंदराबाद-500 371 11. दक्षिण पूर्व मध्य रेलवे, बिलासपुर - 495 004 12. दक्षिण पूर्व रेलवे, गार्डेनरीच, कोलकाता-700 043 13. दक्षिण रेलवे, पार्क टाउन, चेन्नई-600 003 14. दक्षिण पश्चिम रेलवे हुबली-580020 15. पश्चिम मध्य रेलवे, जबलपुर-482 001 16. पश्चिम रेलवे, चर्चगेट, मुंबई-400 020 17. चित्तरंजन रेल इंजन कारखाना, चित्तरंजन - 713 331 18. डीजल रेल इंजन कारखाना, वाराणसी-221004 19. इंटीग्रल कोच कारखाना, चेन्नई-600038 20. रेल कोच कारखाना, कपूरथला (पंजाब) 21. मेट्रो रेलवे, मेट्रो भवन, 33/1, जे.एल. नेहरू मार्ग, कोलकाता-700 071
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**Special Maintenance Instruction No. RDSO/2017/EL/SMI/0312 (Rev '0')**

**Dated 25.08.2017**

- Title:** Use of Dye Penetrant Testing (DPT) for crack detection of Traction Motor (TM) nose stay & lifting lugs to eliminate chances of falling of traction motor during service in EMUs/MEMUs/Metro Railway.
- Brief History:**
  - 2.1 Few cases of breakage of TM nose stay and derailment had happened in conventional electric locomotives. To prevent such cases, instructions to carry out DPT of TM nose stay had already been issued in form of Special Maintenance Instruction No. RDSO/2017/EL/SMI/0308 (Rev '0') dated 28.06.2017 for conventional electric locomotives.

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2.2 As it is a safety item, need is felt to extend the instructions for DPT to EMUs/MEMUs/Metro Railway also.

3. **Object:**

Use of Dye Penetrant Testing (DPT) for crack detection of Traction Motor (TM) nose stay & lifting lugs to eliminate chances of falling of traction motor during service in EMUs/MEMUs/Metro Railway.

4. **Modified Instructions to replace existing instructions:**

- 4.1 During all major overhauling and repair of traction motors, proper DPT of welded joints of nose stay and lifting lugs shall be carried out to eliminate weld failures and any cracks.
- 4.2 For carrying out DPT, grinder shall not be used for cleaning of weld area. Cleaning shall be done by cleaning agents and wire brush etc.
- 4.3 Checking of condition of nose stay along with sandwich pins etc. shall be the focus of under frame examination. Gap between TM nose stay and bogie transom bracket shall be checked and maintained within prescribed limits.

5. **Application to class of Locomotives:**

All EMUs/MEMUs/Metro Railway.

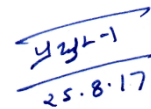
6. **Agency of Implementation:-**

All EMUs/MEMUs/Metro Railway Car sheds/Workshops and Production Units

7. **Periodicity of Implementation:**

POH.

Encl: nil

  
25.8.17

(P. K. Saraswat)  
for Director General/Electrical

**Distribution:** As per standard mailing list