



भारत सरकार-रेल मंत्रालय  
अनुसंधान अभिकल्प औरमानक संगठन  
लखनऊ- 226011

E-mail: [dse4group@gmail.com](mailto:dse4group@gmail.com)  
Telephone : 2465754 & 42226(Rly)

Government of India - Ministry of Railways  
Research, Designs & Standards Organization,  
LUCKNOW – 226011



No. EL/3.2.13/1

Dated: As signed

Principal Chief Electrical Engineer,

1. Central Railway, Mumbai, CST-400 001.
2. East Central Railway, Hazipur-844101.
3. East Coast Railway, Chandrashekharpur, Bhubaneswar-751016.
4. Eastern Railway, Fairlie Place, Calcutta-700001.
5. North Central Railway, Block-A, Subedarganj, Allahabad- 211033.
6. Northern Railway, Baroda House, New Delhi-110001.
7. North Eastern Railway, Gorakhpur-273001.
8. South Central Railway, Secunderabad-500 071.
9. South East Central Railway, Bilaspur-495004.
10. South Eastern Railway, Garden Reach, Calcutta-700 043.
11. Southern Railway, Park Town, Chennai-600 003.
12. South Western Railway, Hubli-580020.
13. West Central Railway, Jabalpur-482001.
14. Western Railway, Churchgate, Mumbai-400 020
15. North East Frontier Railway, Maligaon, Guwahati-781011
16. North Western Railway, Jaipur- 302 006
17. Chittaranjan Locomotive Works, Chittaranjan - 713 331
18. Banaras Locomotive Works, Varanasi- 221004
19. Patiala locomotive Works, Patiyala- 147 003

**Special maintenance instruction No. RDSO/2024/EL/SMI/0331, Rev. '0' April' 24**

**1. TITLE:**

Procedure of checking the Effectiveness of hand brake in 3-phase Electric locomotives.

**2. Brief history:**

There have been various instances of rolling down of stable locomotives. So there is a need to check the effectiveness of hand brake of Electric locomotives as there is no instructions available.

**3. Object:**

To avoid rolling down of electric locomotive when locomotive is idle in order to ensure safety of human and railway resources.

**4. Instruction:**

- i. In Electric Loco Sheds/Trip sheds/Pooling points, user railways have to ensure the effectiveness of hand brake.
- ii. The locomotive shall be parked at level tangent track before checking the effectiveness of hand brake.
- iii. After parking the locomotive at level tangent track, hand brake shall be applied by rotating the wheel then start applying angle transmitter (throttle) while observing the tractive effort on driver display unit.

- iv. In WAP-7/WAG-9HC 3-phase electric locomotives, after application of hand brake locomotives should not move till 20kN of tractive effort.

**5. Reference:**


Railway Board letter no. No.2024/Elect(TRS)/440/7 dated: 04.03.2024

**6. Applicable to class of Locomotives:**

WAP-7/WAG-9HC

**7. Agency of Implementation:**

Electric Loco Sheds/Trip sheds/Pooling points

  
(Nirdosh Kumar Gupta)  
for Director General/Electrical

**Copy to:** As per standard mailing list.