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



No. EL/3.1.10/1 (WLU)

Dated: As signed

Principal Chief Electrical Engineer,

1. Central Railway, Mumbai, CST-400 001.
2. East Central Railway, Hazipur-844101.
3. East Coast Railway, Chandrashekharapur, 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

Sub: Special Maintenance Instructions No. RDSO/2025/EL/SMI/0337 (Rev. '0') - 2025 Dated 09.06.2025.

A Special Maintenance Instructions (SMI) for maintenance instruction for Waterless Urinal fitted in Electric Locomotives.

Copy of above SMI can be downloaded from RDSO's website through the following path.

www.rdsolndianrailways.gov.in---->Specifications/drawings---->Loco, EMU & Power supply---->other important links for Loco---->SMI/MS/TC---->serial number wise---->MASTER LIST OF SPECIAL MAINTENANCE INSTRUCTION.

This is for your reference and record please.

Encl: As above

(Signature)
09.06.25

(Nirdosh Kumar Gupta)
for Director Standards/Electrical/Mech



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SPECIAL MAINTENANCE INSTRUCTION No. RDSO/2025/EL/SMI/0337 (Rev. '0')

Dated: 09.06.2025

1.0 Title:


Maintenance instructions for Waterless Urinal fitted in Electric Locomotives.

2.0 Object:

Waterless Urinal is being provided in the electric locomotives suitable for use of both men and women. Periodic maintenance is required to ensure hygienic condition and proper working of Waterless Urinal.

3.0 Maintenance schedule:

SN	Activities	TI	IA	IB	IC
1.	Cleaning of commode including top cover, floor and drain holes by water & alkaline based cleaning agent (having pH value 7 to 8.5) with soft brush.	✓	✓	✓	✓
2.	Working of door opening when loco is stationary. (The door should be open)	✓	✓	✓	✓
3.	Working of door opening when loco is moving. (The door should not be open)	✓	✓	✓	✓
4.	Working of door when waterless urinal is electrically isolated. (The door should not be open)	✓	✓	✓	✓
5.	Working of LED light.	✓	✓	✓	✓
6.	Working of exhaust fan.	✓	✓	✓	✓
7.	Working of Perfume dispenser and refill it, if required.	✓	✓	✓	✓
8.	Working of Sanitizer and refill it, if required.	✓	✓	✓	✓
9.	Working of Emergency Push Button.	✓	✓	✓	✓
10.	Working of Occupancy Sensor	✓	✓	✓	✓
11.	Working of door handle & mechanical lock.	✓	✓	✓	✓
12.	Working of all indication light.	✓	✓	✓	✓
13.	Ensure tightness of supporting clamps of waterless urinal.	X	✓	✓	✓
14.	Visual check for any mechanical defects and welding cracks of complete unit & mounting base etc.	X	✓	✓	✓
15.	Cleaning of Urinal membrane cartridge by normal water	✓	X	X	X
16.	Cleaning of Urinal membrane cartridge by alkaline based cleaning agent (having pH value 7 to 8.5)	X	✓	✓	✓
17.	Dust Cleaning of exhaust fan, LED light, Perfume dispenser, Sanitizer etc.	X	✓	✓	✓
18.	Cleaning of electrical panel.	X	✓	X	✓



Note:

- Cleaning of commode including top cover, floor and drain holes by water & alkaline based cleaning agent (having pH value 7 to 8.5) with soft brush may also be carried out at pooling/stabling points & major crew changing points, wherever it is possible.
- The chemical based cartridge shall be replaced once in a year. The mechanical based cartridge shall be replaced once in three years, if required.

4.0 Do's & Don't of operation and Maintenance of Waterless Urinal:


SN	Description	Do's	Don't
1.	Cleaning of Urinal Membrane.	Use only alkaline based cleaning agent (having pH value 7 to 8.5) & water.	Don't use any kind of acid.
2.	Cleaning of commode.	Use only alkaline based cleaning agent (having pH value 7 to 8.5) & water with the help of soft brush.	Don't use any kind of acid or hard brush.
3.	Cleaning of urinal floor.	Use only alkaline based cleaning agent (having pH value 7 to 8.5) & water with the help of soft brush.	Don't use any kind of acid.
4.	Cleaning of urinal drain pipe	Use only alkaline based cleaning agent (having pH value 7 to 8.5)/ drain cleaner & water with the help of round brush.	Don't use any kind of acid.
5.	Cleaning of electrical panel and components.	Cleaning with soft cloth & low pressure dry air.	Don't use moist air pressure.

5.0 Application to Class of Locomotives:

All Electric locomotives fitted with Waterless Urinal.

6.0 Agency of Implementation:

All Electric Loco sheds/trip sheds.


 (Nirdosh Kumar Gupta)
 Director Standards Electrical/Mech.