

Telegram : 'RAILMANAK', Lucknow  
Fax : 91-522-2465765  
Telephone : 91-522-2465765,  
Rly. : 42806  
E-Mail: dti5rdso@gmail.com



भारत सरकार-रेल मंत्रालय  
अनुसंधान अभिकल्प और मानक संगठन  
लखनऊ-226011  
Government of India - Ministry of Railways  
Research Designs & Standards  
Organisation LUCKNOW - 226011



No.TI/OHE/INSCOM/GEN

Date: 02.11.2019

**The Principle Chief Electrical Engineer,**

1. Central Railway, Station Building, Mumbai CST - 400 001.
2. Eastern Railway, Fairlie Place, Kolkata-700 001.
3. East Central Railway, Hajipur-844 101.
4. East Coast Railway, Bhubaneshwar-751 023
5. Northern Railway, Baroda House, New Delhi - 110 001.
6. North Central Railway, Allahabad-211 001.
7. North Eastern Railway, Gorakhpur-220 055.
8. North Frontier Railway, Mailgaon - 781 011.
9. North Western Railway, Jaipur - 302 017.
10. Southern Railway, Park Town, Chennai- 600 003.
11. South Central Railway, Railnilayam, Secunderabad-500 371.
12. South Eastern Railway, Garden Reach, Kolkata-700 043.
13. South East Central Railway, Bilaspur-495 004.
14. South Western Railway, DRM's Office, Hubli-580 028.
15. Western Railway, Chuchgate, Mumbai-400 020.
16. West Central Railway, Jabalpur- 482 001.

**Sub: Instruction for cleaning of 25 kV Composite Insulators.**

As discussed during 30<sup>th</sup> MSG, based on the meeting with manufacturers and feedback received from zonal Railways the Instruction No.TI/IN/0040 Rev. '0' for cleaning of 25 kV Composite Insulators has been prepared and enclosed herewith for implementation.

  
2.11.19

(Arvind Kumar)  
Joint Director/TI-1  
For Director General/TI

Encl: As stated above.

**Copy to:**

The Secretary (Electrical), Railway Board, Rail Bhavan, New Delhi-110 001.

GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS



सत्यमेव जयते



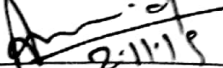
Instruction for cleaning of 25 kV Composite Insulators  
used in Indian Railways Traction system

No. TI/IN/0040 Rev. '0'

(November, 2019)

ISSUED BY

TRACTION INSTALLATION DIRECTORATE  
RESEARCH DESIGNS AND STANDARDS ORGANISATION  
MANAK NAGAR, LUCKNOW – 226011

Prepared By	Checked By	Issued By
 2.11.19	 22/11/19	 2.11.19
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**1.0 Scope:**

This instruction covers the guidelines for cleaning of 25 kV Composite Insulators used in Indian Railways Traction System. By cleaning of Composite Insulator failure on account of external reason may be avoided.

This instruction has been prepared on the basis of comments/suggestions received from the manufactures of Composite Insulators and Zonal Railways.

**2.0 Objective:**

Composite insulator performs service in OHE system under significantly adverse condition like higher degree of surface contamination including open environmental stresses such as rain, fog/ mist, UV and humidity. Surface contamination adversely affects the electrical properties of Composite Insulators which stimulates external Flashover.

This Instruction will be helpful in avoiding external failure of Composite insulators on account of surface contamination.

**3.0 General Instruction:**

For cleaning of 25 kV Composite Insulators installed in polluted/heavily polluted area, following schedule shall be followed:

SN.	Type of Insulator	Pollution level	Periodicity
1.	Stay Arm Insulator	Polluted Area/ Heavily Polluted Area	Once in a year
2.	Bracket Tube		
3.	9-Tonne		
4.	Sectioning		

**4.0 Method:**

- (i) Composite Insulator shall be cleaned with DRY SOFT COTTON CLOTH to remove the dust/pollution from the insulator.
- (ii) No water, detergents, any solvents and abrasive materials should be used for cleaning as use of such material leads to deterioration of electrical properties thus causing failure.

**5.0 Precautions:**

Please note that purpose of cleaning of Composite Insulator is only removal of dust/pollutants or any other deposition that adversely affects the electrical properties of Composite Insulators hence Care should be taken that during dry cleaning, the insulator should not be rubbed excessively to make it bright.

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Prepared By	Checked By	Issued By
<i>h.d.</i> 2.11.19	<i>M.D.</i> 2.11.19	<i>A.</i> 2.11.19
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