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No. EL/3.2.61/Gen.

Dated. 23.09.2015

**Chief Electrical Engineer,**

1. Northern Railway, Baroda House, New Delhi-110 001
2. Eastern Railway, Fairlie Place, Calcutta-700 001
3. South Eastern Railway, Garden Reach, Calcutta-700 043
4. Central Railway, Mumbai CST-400 001
5. Western Railway, Churchgate, Mumbai-400 020
6. Southern Railway, Park Town, Chennai-600 003
7. South Central Railway, Rail Nilayam, Secunderabad-71
8. East Central Railway, Hazipur (Bihar)
9. East Coast Railway, BDA Colony, Rly Complex, Chandrasekharapur, Bhubaneswar
10. South East Central Railway, Bilaspur-495 004
11. West Central Railway, Jabalpur-482 001
12. North Central Railway, Hasting Road, Allahabad-211 001
13. Chittaranjan Locomotive Works, Chittaranjan- 713331

**SPECIAL MAINTENANCE INSTRUCTION NO. RDSO/2015/EL/SMI/0285 (REV. '0'),**  
**Dated 23.09.2014**

**1.0 TITLE:**

Re-application of RTV 1080 sealant in Schneider make VCBs fitted in conventional and 3-phase locomotives.

**2.0 BRIEF HISTORY:**

In the past, failures of flashover were reported by Zonal Railways. Based on the failure investigation and discussion held with M/s Schneider, RDSO had issued SMI No. RDSO/2014/EL/SMI/0281 Rev.0 dated 27-6-14 to use loctite 518 in place of RTV1080 to seal upper and lower insulator. However, the cases of water ingress have been further reported by few Zonal Railways. The issue has been taken up with M/s Schneider and M/s Schneider has stated that there may be cases of water ingress in a suspected lot of VCBs manufactured between February 2013 to June 2014 bearing S. No. between 49069/L1 to 54932/L1 from joint of base plate and Bottom Insulator. In order to prevent water ingress from base plate to bottom insulator this SMI is being issued.

**3.0 OBJECT:**

Re-application of RTV 1080 sealant to prevent water ingress from base plate to bottom insulator.

**4.0 MODIFIED INSTRUCTIONS:**

- 4.1 Takeout the layer of RTV 1080 applied on the joint of base plate and Bottom Insulator with the help of knife.
- 4.2 Clean the surface with dry cloth.
- 4.3 Re-apply RTV 1080 on the surface, covering the joints and forming continuous layer all around. After applying, do the finishing of the RTV 1080, taking care that RTV 1080 should cover the wall of base plate (it should cover minimum 5 mm after wall) to ensure the proper sealing of joints. Layer of RTV1080 should also make approx angle of 20°. Please see picture in the Annexure attached.

**5.0 APPLICATION TO THE CLASS OF LOCOMOTIVES:**

All Conventional and 3-phased electric locomotives having M/s Schneider make VCBs. One cycle in suspected lot of S. No. 49069/L1 (February'2013) to S. No. 54932/L1 (June '2014) is necessary however general checks shall be made in all VCBs of M/s Schneider make and this shall be ensured wherever required.

**6.0 MATERIAL REQUIRED:** RTV 1080 sealant.

**7.0 MATERIAL RENDERED SURPLUS:**

Nil

**8.0 REFERENCE :** MOM held between RDSO and M/s Schneider on 08-9-15.

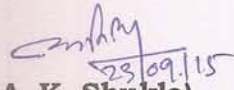
**9.0 PERIODICITY OF IMPLEMENTATION:**

Maintenance Instruction should be implemented in each schedule or unscheduled maintenance of locomotives in Loco shed in suspected lot. General check shall be done in each schedule maintenance at Loco sheds/POH for one cycle. CLW to check in new supply.

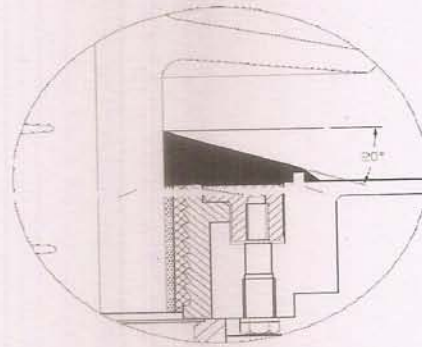
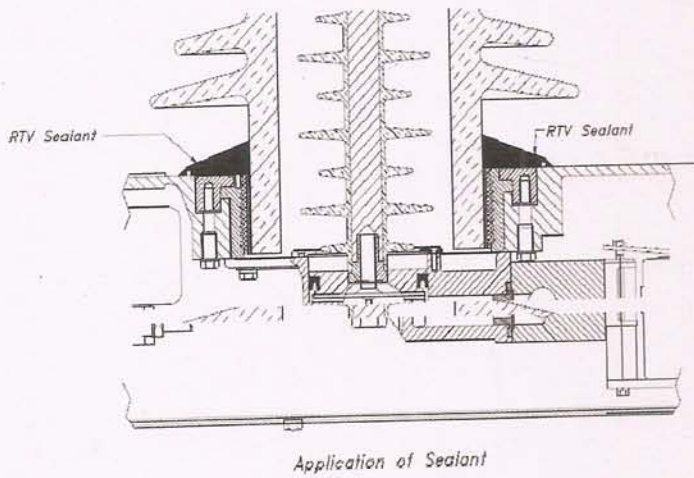
**10.0 AGENCY OF IMPLEMENTATION:**

All Electric Loco Sheds and POH Workshops/CLW with Conventional and 3-Ph electric locomotives having M/s Schneider make VCBs.

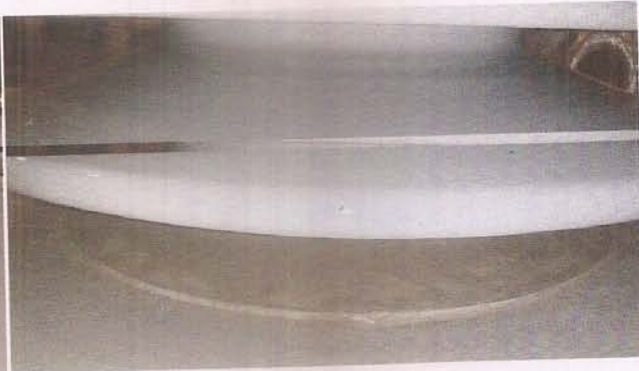
DA: As above.

  
(A. K. Shukla)  
for Director General (Elect.)





**Reference wall is covered**  
**Correct application**



**Reference wall is not covered**  
**Wrong application**