GOVERNMENT OF INDIA MINISTRY OF RAILWAYS RESEARCH DESIGNS AND STANDARDS ORGANISATION MANAK NAGAR LUCKNOW - 226 011

No. EL/3.2.61 Dated 22-05-1998

SPECIAL MAINTENANCE INSTRUCTIONS NO. RDSO/ELRS/161 (REV. 01) SEALING OF CRADLE COVER OF VCB

1.0 OBJECT:

- 1.1 Railways have further reported cases of flashover on the live parts inside the cradle cover even after implementation of SMI/161. Investigation have shown that due to the inadequate thickness of the sealing rubber strip seepage of water at the ormature portions of the cradle cover to the live parts takes place.
- 1.2 In the above SMI No.161 the thickness of the rubber sealing indicated is 3 mm. In order to overcome the problem of water sepage, the thickness of this rubber sealing is proposed to be increased to 6 mm.
- 1.3 This SMI No.161 (Rev.1) supersedes SMI No.161 issued earlier.

2.0 INSTRUCTIONS:

- Apply approximately 10 mm wide band of rubber based adhesive such as Duroflex to the edge of cradle opening, all edges of cradle cover and on face of all sealing rubber strips. ensure that all these surfaces are free from dust before applying adhesive.
- Let the adhesive to be air dried. It will take about 5 to 10 minutes.
- Ensure that no foreign particles, dust or dirt atick to the surfaces where adhesive had been applied.
- Stick the sealing rubber strip (9.5 mm wide x 6 mm thick) adjacent to the edges of cradle cover opening as shown in Fig. A of SKEL-4471.
- Stick the sealing rubber strips (9.5mm wide 6.6 mm thick) adhacent to all the edges of cradle cover shown in Fig. 'B' of SKEL-4471.
- Fill the gaps if any in the sealing rubber strips with silicon rubber paste.
- Bolt the cradle cover to the cradle.

- Apply silicon rubber paste all around the cradle cover and allow the same for curing at room temperature for about 30 minutes.

Note:-

- 1. Apart from M/s GEC, Nainin, the rubber adhesives can also be obtained from :
 - i) Rubber Based adhesive

Type: "SUPER STIK" All purpose synthetic adhesive No.90 Manufacturer: M/s S. N. Adhesives, Surajpur, Distt. Ghaziabad.(U. P.)

OR Equivalent.

- ii) Silicon Rubber RTV Sealant Type: "SILASTIC" 1080 RTV Sealant Manufacturer: M/s Universal Silicones & Lubricants P. Ltd., 404-405, Amit Industrial Estate, 61, Dr. S. S. Rao Road, Pb. No.6060, Parel, Mumbai-400012.
- 2.0 The sealing rubber strips may be obtained from M/s GEC Alsthm India Ltd., Naini Works, Allahabad.
- 3.0 This SMI superseads RDSO SMI No.161
- **3.0 REFERENCE**: GEC Instructions.
- **4.0 INSTRUCTIONS DRAWING:** SKEL-4471.

5.0 APPLICATION TO CLASS OF LOCOMOTIVES:

All locos fitted with GEC Alsthem India make VCB type 20 CB.

6.0 AGENCY OF IMPLEMENTATION:

Sheds/Shops.

7.0 PERIODICITY OF IMPLEMENTATION

- 7.1 One cycle to be completed on all locos at the earliest.
- 7.2 Subsequently during IC schedule.

Encl: Drawing SKEL – 4471.