

**Government of India
Ministry of Railways
Research, Designs & Standards Organisation
Manak Nagar, Lucknow - 226 011**

No. EL/3.2.30/CG

Dated : 5.5.1984

**SPECIAL MAINTENANCE INSTRUCTIONS NO.
RDSO/ELRS/SMI/118**

**TIGHTENING OF CONNECTING TERMINAL (1206) WITH NUT (1207) ON
CONTACT PINS (1208 & 1209) OF TAP CHANGER NO. 32 OF HBB MAKE**

1. Object

Railways have reported a few cases of overheating at the joints of terminals. Investigations has shown that this was due to the defective nuts used during terminal assembly of stage III tap changer at HBB works, with the result the terminal assembly got loose and overheated in service.

2. Instruction

Following are the general guide lines for terminal assembly --

- Tighten the Nut (1207) to terminal on contact pins (1208 & 1209)_ with a torque of 1.4 kg.m.
- Maintain a minimum gap of 2.5 mm between terminal face and nut face i.e. Gap B = 2.5 mm (min)
- Similarly tighten the nut on the transformer pins with a torque of 1.4 kg. m.
- Maintain a minimum gap of 2.5mm between terminal face and nut face i.e. Gap A = 2.5 mm (min)

- Note :**
- i) Reduced gap A & B can be permitted especially if the torque 1.4 kg.m. is maintained for successive tightening. If there is no gap, the nut is to be replaced by a new nut, to be obtained from M/s HBB
 - ii) Connectors are now being checked using a dummy plug and full tightening of nut is ensured by M/s HBB from tap changer No. 31180130 onwards.

3. Reference

Item 2.1.7.1 (page 7) of minutes of the meeting held between Railways and HBB in March 1982 and minutes circulate divide this office letter of even number dated 3/21.4.82

HBB's sketch No. TC 91

4. **Periodicity**
 - A special cyclic check to be made on all stage III tap changers before serial No. 31180130 in service.
 - During AOH/IOH/POH on all No. 32 tap changers
 - Earlier in case of any abnormality.
5. **Instruction Drawing**

RDSO SK EL 3743
6. **Application of class of locomotives**

All electric locomotives fitted with No. 32 tap changer of HBB make
7. **Agency of implementation**

CLW - during assembly/mounting.
All electric loco sheds and repair shops of Railways.
8. **Distribution**

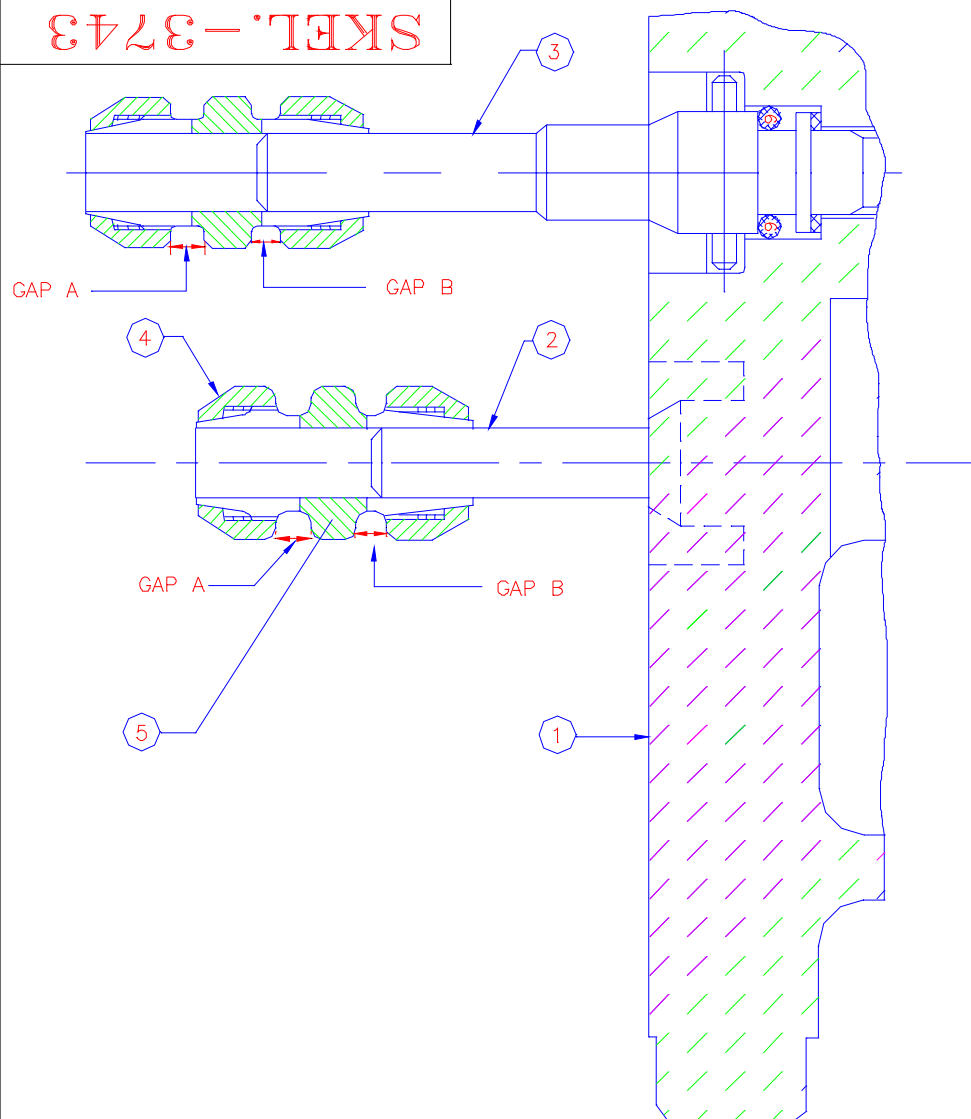
As per attached list.



(K. Vishwakumar)
for Director General (Elec)

Encl. : SK EL 3743
and Mailing list

SKEL.-3743



5	CONNECTING TERMINAL	1206		
4	NUT TO TERMINAL	1207		
3	CONTACT PINS INNER	1208		
2	CONTACT PINS OUTER	1209		
1	CONTACT PLATE	1201		
PART NO.	DESCRIPTION	QTY	MTL SPEC	

REF :- HBB SKETCH No SCALE:- NTS APPROVED:-

TERMINAL ASSEMBLY WITH NUTS (TAP CHANGER NO.32)

RDSO.ELEC. DTE.

SKEL.-3743

Dt	
D	
T	
C	

