

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

No. EL/3.2.30/JCG

Dated : 27.3.1982

**Modification Sheet No. WAM4/124**  
**Modification to Special Washer used in Transition**  
**Resistance Assembly of Tap Changer No. 32 HBB Make.**

**1. Object :**

Railways have reported many cases of cutting of insulated tubes of the RGR support bars. Investigation has shown that this was caused due to the hitting of special M.S. washers on the insulation of the tube continuously in service as inner dia of the special washer projects beyond the inner surface of the resistor element (grid).

**2. Work to be carried out :**

- Dismantle the RGR resistor assembly.
- Replace the existing special M.S. washers of inner dia 22.5 mm. with the Special M.S. Washer of inner dia 26 mm having semi circular surface of radius 0.5 to 0.7 mm as shown in SK EL 3456.
- Assemble the RGR resistor.

**3. Application :**

Locos fitted with No. 32 tap changer of HBB make.

**4. Material required. :**

Special M.S. washers of inner dia 26 + 0.5 mm obtainable from M/s HBB, P.B. No. 140 Maneja Vadodra 390 001.

**5. Material surplus :**

Existing special M.S. washers of inner dia 22.5 +0.5 mm.

**6. Reference :**

1. Para 2.2.1 (page 4) of the minutes of the meeting held between railways and M/s HBB in August 1981 and minutes circulated vide RDSO letter No. EL/3.2.30/JCG dated 3.10.81.
2. M/s HBB's Drawing No. TC-82
3. Modified special washer introduced by M/s HBB from Dec. 1981 onwards.

**7. Modification drawing :**

RDSO SK EL 3456

**8. Agency of implementation :**

All elec. locomotive sheds and POH shops.

**9. Distribution :**

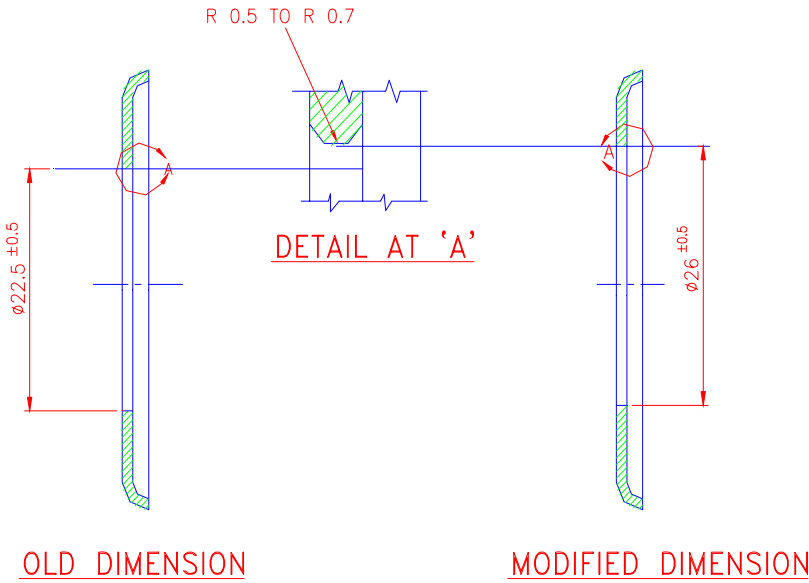
As per list attached.

Encl : SK EL 3456 &  
Mailing list.

A handwritten signature in red ink, appearing to read 'K. Viswakumar', with a horizontal line underneath.

(K. Viswakumar)  
for Director General/Elec.

SKEL.3456



REF :-HBB DRG. NO.TC-82	SCALE:-2:1	APPROVED:-
SPECIAL WASHER FOR TRANSITION RESISTANCE ASSYLY TAP CHANGER No.32		
RDSO.ELEC. DTE.		SKEL-3456

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