

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

No. EL/3.2.10/2

10.7.79

MODIFICATION SHEET NO. RDSO/WAM4/81

**MODIFICATIONS TO BASE PLATE FIXING ARRANGEMENT AND
TERMINAL CONNECTION SCREWS FOR VANE TYPE AIR FLOW
RELAY OF M/S ROTOMAC.**

1. OBJECT

- 1.1** Sheds have reported cracking and breakage of bakelite base plate at the brass insert location. This probably occurs when tightening the terminal connections. M/s. Rotomac have agreed to change over to a stronger grade of bakelite conforming to grade 4 of IS: 1300 for the base plate in future supplies.
- 1.2** Sheds may ensure that replacements of these base plate are also in bakelit of grade 4 of IS:1300 without metal inserts.
- 1.3** In order to minimise failures in existing relay the following modifications may be made to reduce the stresses on the bakelite baseplate.

2. Work to be carried out:

- 2.1** Remove the relay from the loco and dismantle the relay carefully. Remove the threads of the both metal inserts in the base plate by drilling carefully at high speed with 5.2 mm drill (see drg. No. SK EL 3109).
- 2.2** Check that the surfaces on which the base plate is supported are smooth and in level plane. If not, they should be dressed with a fine file.
- 2.3** Replace the base plate in position using M5x20 CSK screws, plain washers, spring washers and nuts as shown in SK EL 3109. Tighten the screws on both sides alternately by hoding the nut and avoiding excessive strain on the base plate.
- 2.4** Apply drops of araldite on the screw head and on the nuts.
- 2.5** Remove the existing 3 nos. choose head terminal screws and substitute by hexagonal head screws without slot, m4x10-3 nos.

2.6 Assemble the relay, clean the components and test for proper function.

3. **Application**

WAM4, WCAM1 and other locos where rotomac relays are fitted.

4. **MATERIAL REQUIRED:**

As per SK EL 3109.

5. **MATERIAL RENDERED SURPLUS:**

Following materials are rendered surplus:

- a) CSK screws M5x14-2 nos.
- b) Choose head seveus M4x10-3 nos.

6. **DRAWING:**

SK EL 3109.

7. **AGENCY FOR MODIFICATION:**

Railways-locos in service

CLW- locos under production.

8. **Distribution:**

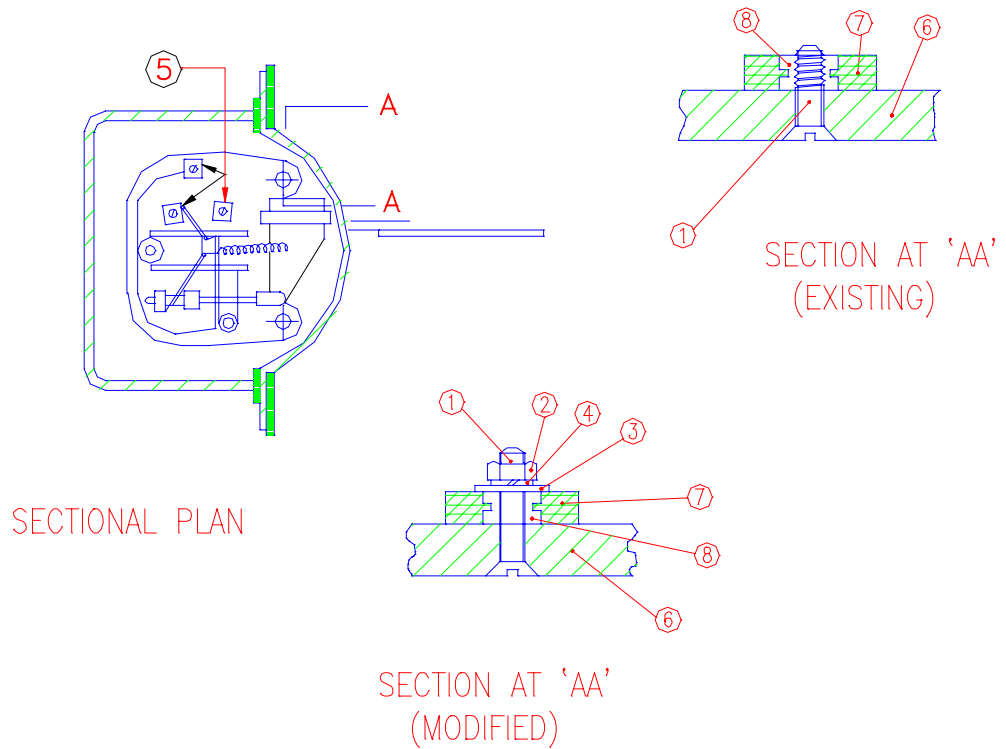
As per list enclosed.

T. V. S. Sastri

(T. V. S. SASTRI)
for Director General/Elect.

Encl: 1 Mailing list
1 drg. No. SK EL 3109.

SK.EL-3109



8.	METAL INSERT	—	2	BRASS	—	EXISTING MODIFIED
7.	BASE PLATE	—	1	BAKELITE GR.4, IS :1300	—	EXISTING
6.	RELAY BODY	—	—	ALUMINIUM	—	EXISTING
5.	SCREW, HEX. HEAD W/O SLOT	M4x10	3	STEEL IS : 2389	CD. PLATING BS : 3382-PT.1	REQUIRED
4.	FAN DISC WASHER-A	M5	2	STEEL IS : 5556	CD. 8 IS : 1572	REQUIRED
3.	PLAIN WASHER (OD = 3X ID)	M5	2	STEEL IS : 5370	CD. 8 IS : 1572	REQUIRED
2.	NUTS	M5	2	STEEL IS : 2389	CD. PLATING BS : 3382-PT.1	REQUIRED
1.	CSK SCREW	M5x20	2	STEEL IS : 1365	CD. PLATING BS : 3382-PT.1	REQUIRED
PART NO.	DESCRIPTION	SIZE	QTY.	MATERIAL & SPECIFICATION	FINISH & SPECIFICATION	REMARKS

REF:—

SCALE:—

APPROVED BY:—

FOR D.G.

MODIFIED FIXING ARRGT. FOR BASE PLATE
OF ROTOMAC AIR FLOW RELAY

RDSO.ELEC.DTE.

SKEL-3109

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