

(42) (48)

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RESEARCH DESIGNS AND STANDARDS ORGANISATION

Manak Nagar, Lucknow-226011.

Ref: EL/3.1.3/32

24 Nov., 1977.

MODIFICATION SHEET NO. RDSO/WAM/54.

1. Title of modification:

Modification to vane type air flow relay of M/s. Rotomac.

2. Application to Class of Locos:

WAM and WAM1.

(NOTE: This modification is applicable in principle to all classes of electric locos at similar locations).

3. Object of modification:

3.1 There have been many cases of failure of vane type air flow relays supplied by M/s. Rotomac, Calcutta due to the following reasons:

a) Due to sudden air impact during starting of blowers, specially of MVMT and MVRE, the relay flap some times moves to an extreme position and gets stuck up, thereby causing maloperation.

b) Relay setting adjustment nuts become loose due to vibration thereby altering the setting causing erratic operation and shorting to earth between the two halves (item 5) see SERIAL 2737.

3.2 To avoid such failures, it is proposed to limit the flap movement to an angle of approx 60° by providing $50^\circ \pm 5$ a stop and to lock the setting adjustment nuts with araldite drops on both sides of the sleeve.

4. Modification drawing No:

RDSO Drg. No. SK EL 2737.

5. Agency for modification:

Railways: All existing locos

CLW: Locomotives under production.

..... 2/-

6. Material required and specification:

- a) Steel stopper pin 1 No.
 Semi precision screw with rubber sleeve around the head of screw M3 x 10 1 No.
 Araldite

7. Work to be carried out:

Drill a hole of 2 mm dia in the relay casing and fix (drive fit) a steel pin (item 3) as shown in the drawing. Drill another hole of 2/2.25 mm dia and tap it to fix 3 mm dia semi precision screw of size M3 x 10 (item 2).

Adjust the relay setting by adjusting the position of the insulating sleeve (item 5) so that the relay contact should close after the flap has moved about 30°-35° from its zero position. The relay should pick up/dropout values should conform to RDSO Specification No.E-12/3/04 - May 1975 - appendix 'A' for different application viz QWMT, QVRH, OVSL & OVSI.

8. Reference:9. Distribution:

Secretary (Elec Traction), Railway Board, New Delhi.

General Manager (Electrical),

Central Railway, Bombay VT.
 Eastern Railway, Fairlie Place, Calcutta.
 Northern Railway, Baroda House, New Delhi.
 South Eastern Railway, Garden Reach, Calcutta.
 Western Railway, Churchgate, Bombay.
 Chittaranjan Locomotives Works, Chittaranjan.

Superintendent Workshop,
 Eastern Railway, Kancharapara.

Dy. Chief Electric Engineer

Central Railway, POH shop, Bhusaval,
 Eastern Railway, Kancharapara.

Dy. Chief Elec Engineer (Design),
 Chittaranjan Locomotive Works, Chittaranjan.

..... 3/-

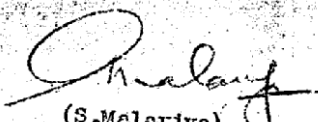
Senior Divisional Elec Engineer (TES),
 Central Railway, Kalyan
 Eastern Railway, Asansol/Mughalsarai
 Northern Railway, Kanpur.
 South-Eastern Railway, Tatanagar/Bhilai.

Divisional Elec Engineer (TES),
 Central Railway, Bhusaval
 Northern Railway, Ghaziabad
 Western Railway, Baroda (Gujarat).

By, Director, Inspection (Elec)/RDSO
 3/A Chittaranjan Locomotive Works, Chittaranjan.

M/s. Rotondo Electricals Ltd., 15, Mande Ville Gardens,
 3rd Floor, Calcutta-700019.

Remarks:


 (S. Malaviya)
 for Director General/Elec.