

GOVERNMENT OF INDIA, MINISTRY OF RAILWAYS
RESEARCH DESIGNS & STANDARDS ORGANIZATION

KANAK NAGAR, LUGUNOW-226 011

No. EL/3.1.3/DA2

Dated: September 1981.
27/3/82

MODIFICATION SHEET NO. RDSO/WAI/4/120

SHIFTING OF POWER CONTACT CTR-1 (4-10)
IN RF 2-5 CIRCUIT

1. Object of Modification:

1.1 On WAI/4 locomotive fitted with rheostatic braking, the brake resistor blower has been connected across a tapping on RF 2-5. The CTR contact CTR-1 (4-10) in the circuit of RF 2-5, for isolating this resistor during traction, is located close to motor No. 5. With this arrangement, the blower motor, which is rated for 325V, is subjected to about 500V stress to earth in 3C-2P combination. It is considered desirable to reduce the voltage stress on resistor blower motor during traction operation within the rated voltage of the motor.

1.2 The above object is achieved by shifting the contact CTR-1 (4-10) in the RF 2-5 circuit from near traction motor No. 5 to traction motor No. 2.

2. Work to be carried out:

The power circuit of the WAI/4 locomotive provided with rheostatic braking has to be modified in line with RDSO drawing No. SI.EL-3431.

3. Application to class of locomotive:

All WAI/4 locomotives with rheostatic braking.

4. Material required:

Power cables/copper bars, as necessary.

5. Material rendered surplus: NIL.

6. Reference: NIL.

7. Modification drawing: RDSO Drawing No. SI.EL-3431.

8. Agency for Modification:

CLW - For locomotives under production.
Railways - For locomotives in service.

9. Distribution: As per attached list.

Encl: Drg. No. SI.EL-3431.

(A. S. Sharma)

SECRETARY (ELEC. TRACTION)

Secretary (Elec. Traction), Railway Board, Rail Bhawan,
New Delhi-110 001.

Chief Electrical Engineer,

- ~~Central Railway, Bombay VT-400 001~~
- ~~Eastern Railway, Fairlie Place, Calcutta-700 001~~
- ~~Northern Railway, Baroda House, New Delhi-110 001~~
- ~~Southern Railway, Madras-600 003~~
- ~~South Central Railway, Rail Nilavan, Secunderabad-500 371~~
- ~~South Eastern Railway, Garden Reach, Calcutta-700 043~~
- ~~Western Railway, Churchgate, Bombay-400 020~~

3. Addl. Chief Electrical Engineer, Kanchrapara Shops,
Eastern Railway, Kanchrapara-743 145 (W. Bengal).

4. Deputy Chief Electrical Engineer (POH), Elec. Loco POH Shops,
Central Railway, Hushavai-425 201.

5. Deputy Chief Electrical Engineer (Ins), Chittaranjan,
Locomotive Works, Chittaranjan-713 331.

6. Dy. Chief Electrical Engineer (DOV), Chittaranjan Locomotive
Works, Chittaranjan-713 331.

7. Dy. Chief Electrical Engineer (TRS) Works, South Eastern Rly.,
Tatanagar-831 002 (Bihar).

8. Dy. Chief Electrical Engineer, Traction Machine Workshop,
Central Railway, Nasik Road-422 001 (Maharashtra).

9. Senior Divisional Electrical Engineer (TRS), Elec. Loco Shed.,

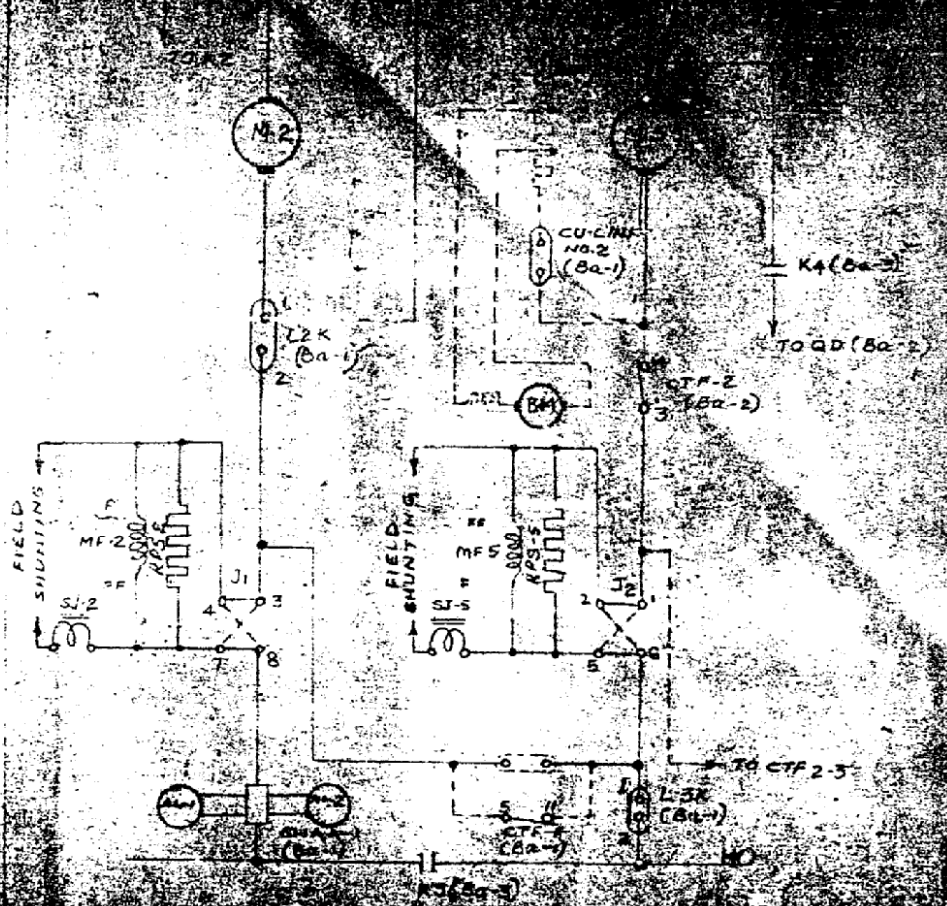
- ~~Central Railway, Kalyan-421 301~~
- ~~Eastern Railway, Mughalsarai-232 101~~
- ~~Eastern Railway, Asansol-713 301~~
- ~~Northern Railway, Kanpur-203 001~~
- ~~Northern Railway, Ghaziabad-201 001~~
- ~~South Eastern Railway, Tatanagar-831 002~~
- ~~Delhi Marshalling Yard/SE Rly., Delhi-490 001~~

10. Divisional Electrical Engineer (TRS),

- ~~Electric Loco Shed, Central Railway, Hushavai-425 201~~
- ~~Electric Loco Shed, Western Railway, Baroda-390 002~~
- ~~Electric Loco Shed, S.E. Railway, Waltair-530 004~~
- ~~Electric Loco Shed, SC Railway, Vijayawada-520 001~~

11. Joint Director Inspection (Elec.)/RDSO, Chittaranjan Locomotive
Works, Chittaranjan-713 331.

12. Asstt. Design Engineer (Documentation)/Elec. Dte., RDSO, Lucknow.



REPAIR WORKS REPORT