

फैक्स/Fax : 91-0522-458500
तार : 'रेलमानक' लखनऊ
Telegram : 'RAILMANAK', Lucknow
टेलीफोन/Tele : 451200 (PBX)
450567 (DID)



भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226011
Government of India-Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226011



No. EL/3.1.3

Date: 3 -3-2003

Modification Sheet No. ELRS / MS / 0323

1.0 Title: Modification to improve reliability of headlight circuit for working of headlight while passing neutral section, earlier issued vide RDSO Modification Sheet No. WAM4/173, WAM4/181, WAM4/193 and ELRS/MS/288.

2.0 Object:

S. E. Railway implemented RDSO's modifications and reported reliability problems of

- Raising of both pantographs.
- Non-working of headlight for flashing/melting of contacts of BLPRD/BLPRR/BLPRF.

The above problems were attributed to.

- The way connections have been taken to feed CPR coil and
- Inadequate DC current rating of auxiliary contacts leading to flashing even after providing 2 contacts in parallel (as per modification ELRS/MS/288).

To overcome the problem a simplified circuit has also been suggested by SER, changing the connection at ZPT, facilitating elimination of blocking diodes and also modification in circuit of CPR contacts branch to bypass BLPRD/ BLPRR/ BLPRF during DC operation of headlight (while negotiating neutral section).

SER implemented above modification on 10 locos and reported to be working satisfactorily.

3.0 Work to be carried out:

- Connect the CPR coil feeding circuit at ZPT switch as shown in RDSO's drawing no. SKEL-4670 to take the feed from cable no. 700 instead of 711 & 712.
- Disconnect the parallel connection of N/O interlock of BLPRF.
- Connect N/O interlock of BLPRF in series with N/O interlock of QV60 and CPR coil.
- Connect spare interlock of BL in series with RCPR as shown in RDSO's drawing no. SKEL-4670.

4.0 Application to class of locomotives:

- Electric locomotives not provided with twin beam headlight with DC/DC converter.
- In terms of Railway Board's letter no. 99/Elect (TRS)/113/20 Pt. II dt 23-12-2002 twin beam headlight with DC/DC converter to be provided as standard and RDSO has issued specification no. ELRS/SPEC/PR/0024 - Dec'2002 for twin beam headlight and ELRS/SPEC/DC-DC Converter/0021 - July'2002 for DC-DC converter.

5.0 Material required:

1. Cable = 2.5 sq. mm
2. Lugs = 2.5 sq. mm

6.0 Material rendered surplus:

Blocking diode (S8BR8/ S8BR18)

7.0 References:

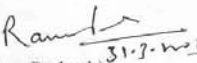
Suggestion received from S. E. Railway vide letter no. CEE/RS/220B dt.13-1-2003.

8.0 Modification Drawing No: SKEL-4670.

9.0 Agency for implementation:

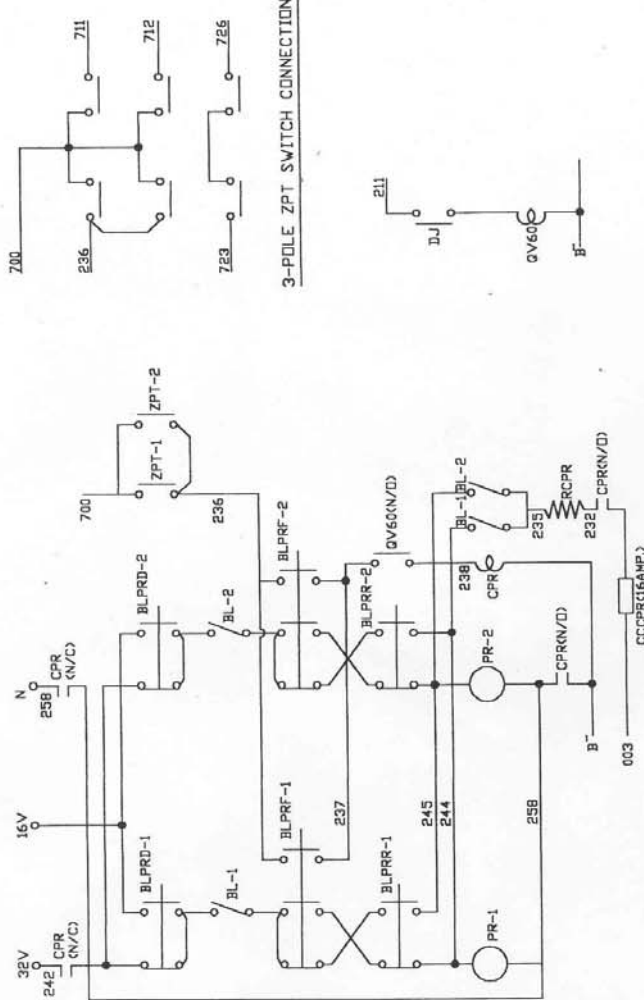
Electric Loco Sheds, POH Shops and CLW.

This modification supercedes RDSO's Modification Sheet No. WAM4/173, WAM4/181 and ELRS/MS/288.

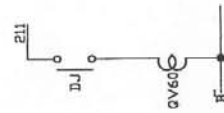

31.3.2003

(Ram Prakash)
for Director General Std/Elect

Distribution: As per Mailing List



3-POLE ZPT SWITCH CONNECTION



REF : SER/No.CEE/RS/ CIR/046	SCALE : NTS	APPROVED BY: <i>R</i>
MODIFIED CKT. FOR WORKING OF HEAD LIGHT WHILE PASSING NEUTRAL SECTION		FIRST ISSUED
RDSO, ELEC. DTE, SKEL-4670		SUPERSEDES SKEL-4242
		SUPERSEDED BY DSE-1

STATUS	ALT	REF No	DESCRIPTION	APPD. BY	DATE

DT	310303
D	R.K.Yadav
C	P.N.Seth
FILE	