

Government of India
Ministry of Railways
Research Design & Standards Organisation
Lucknow-226011.

No. SL/3.1.3/A2

Dated: 27/28 March, 19

Modification sheet No. RDSC/WM/55

1. Title of Modification

Modification to tap changer circuit Double Plus operation.

2. Application to class of Locomotive:

WM4 locomotives

(This modification is applicable in principle to other classes of AC & AC/DC locomotives fitted with BBC design Master Controllers. Suitable changes in wire numbers would be necessary in para 7 for other class of locomotive)

3. Object of Modification

Cases of Bumping of WM/2 electric locos into dead ends were reported on account of Master Controller being left inadvertently in Double Plus (4) position. The present modification makes the Double Plus operation ineffective electrically.

4. Modification Drawing No.

R.D.S.O. K.L. 2746

5. Agency for Modification

Railways: All existing Locomotives

C.L.W. : Loco under production and future builds.

6. (a) Material Required and Specification

(i) One silicon diode rated 800V Nominal Inverse Voltage and about 10A nominal currents already in use as blocking diode (V's)
(Type-Find Rectifiers: 93B8; Button Φ : 12W80)

(ii) Ten meter length control wire of 3/2.5 mm sq.

(b) Material Rendered Surplus:

Nil.

7. Work to be carried out:

Wire No. 048 connected to incoming terminal (anode) of diode. The out going terminal (cathode) of diode is connected to Wire No. 079. The diode can be mounted in AC₂ Panel in the space vacated by VS11 due to modification No. WAM/11G dated 10.9.75.

8. Reference :

Railway Board's letter No. 75/Elec(TRS)/113/6 dated 24.10.75 alongwith ACRS's report.

9. Distribution :

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

General Manager (Electrical),
Central Railway, Bombay V.T.
Eastern Railway, Fairlie Place, Calcutta.
Northern Railway, Baroda House, New Delhi.
South Eastern Railway, Garden Reach, Calcutta.
Western Railway, Churchgate, Bombay.
Chittaranjan Locomotive Works, Chittaranjan, W.Bengal.

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Dy.Chief Elec Engineer
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Eastern Railway, Asansol/Mughalsarai.
Northern Railway, Kanpur.
South Eastern Railway, Tatanagar/Bhilai.

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

Dy.Director Inspection (Elec)/RDSO.
c/o Chittaranjan Locomotive Works, Chittaranjan.
West Bengal. (Two copies each).

10. Remarks if any :

Nil.

(N.A.P.S. Rao)
for Director General (Elec.)