

No. EL/3.2.19/2

Dated 31.12.2002

Chief Electrical Engineer,

Central Railway, Mumbai CST-400 001
Eastern Railway, Fairlie Place, Kolkata-700 001
Northern Railway, Baroda House, New Delhi-110 001
Southern Railway, Park Town, Chennai-600 003
South Eastern Railway, Garden Reach, Kolkata-700 043
Western Railway, Churchgate, Mumbai-400 020
South Central Railway, Rail Nilayam, Secunderabad-500 071
East Central Railway, Hazipur(Bihar)
Chittaranjan Locomotive Works, Chittaranjan-713 331

Modification Sheet No. ELRS/MS/0321 Rev. '0'

1.0 Title :

Integration of audio visual indication of flasher light circuit with audio visual indication of Passenger Alarm Chain System provided on dual & air brake locomotives.

2.0 Object :

Passenger Emergency Alarm Indication for air brake train was provided on locomotives in terms of RDSO reference no. MC/ABP dated 26.6.95. This was subsequently modified through Modification Sheet No. ELRS/MS/0264 dated 9/13.8.99. Further system for “ Automatic Switching ON ” of flasher light was provided on locomotives in terms of Railway Board's letter No. 94/M (L)/466/32 dated 23.2.2001. Thus, presently there are two sets of audio visual indication put in separate boxes in the loco cabs, one for ACP circuit and the other for auto flasher light circuit. Both the circuits are required to carry out same functions i.e giving audio visual indication to the driver and also switching ON flasher light automatically. These two systems for audio visual indication in the loco cabs can be integrated, needing only one audio visual indication in the cabs instead of two numbers provided presently. This will decongest the driver

cab and simplify equipment also resulting in cost reduction. This will also facilitate operation of “Automatic Switching ON” of flasher light in case of ACP, pending modification of increasing the orifice size of alarm chain pneumatic circuit on all coaches.

This system was evolved by ELS/Kanpur and same was put on trials on two locomotives after clearance by RDSO vide letter No. EL/3.2.19 dated 29.03.2001. ELS/Kanpur vide letter No. 230-Elect./TRS/CNB/Tech-20/696 dated 7.12.2002 has indicated that modified system provided on two locomotives has been

working satisfactorily for last 7 months. In view of the experience gained with the system working on locomotives of ELS/CNB and the fact that it only simplifies the system with reduction in cost and does not in any way compromise requirement of audio visual indication and switching ON of flasher light in case of ACP and train parting etc., the system is proposed for adoption on all air and dual brake Electric Locomotives.

3.0 Work to be carried out :

- (i) Auto Flasher Circuit to be modified as given in enclosed drawing i.e normally open interlock of RGAF to be provided in parallel to normally close interlock of P2.
- (ii) The existing audio visual indication circuit for ACP to be removed.

4.0 Application to the class of locomotive :

All Air Brake / Dual Brake Electric Locomotives having circuit for “Automatic Switching ON” of flasher light.

5.0 Material Required : Nil

6.0 Material Rendered Surplus :

- (i) Pressure Switch RGPA
- (ii) Relay QBI & Q121
- (iii) Buzzer B1 & B2
- (iv) Indication Lamp LPAR 1 & 2
- (v) Switch BIS 1 & 2
- (vi) Isolating Switch HRS

7.0 Reference :

Suggestions and trial feed back received from CNB Shed of N. Railway.

8.0 Modification Drawing : Enclosed as Annexure

9.0 Agency for Implementation :

All Electric Loco Sheds, Workshops and CLW.

Encl: As above

(Ram Prakash)
for Director General (Elect.)