Rail Coach Factory, Kapurthala

Office of the
Principal Chief Elect. Engineer

RCF/HSQ/ED/LHB/2008
Dated: 04.05.2024

Chief Electrical Service Engineer

1. Central Railway, CST, Mumbai-400 001
2. Eastern Railway, Fairly Place , Kolkata-700 001
3. East Central Railway, Dighi, Disst- Vaishali, Hajipur-844 101
4. East Coast Rly., Chandra Shekharpur, Bhubneshwer-751 016
5. Northern Railway, Baroda House, New Delhi-110 001
6. North Central Railway, Hastings Road, Prayagraj – 211 001
7. North Eastern Railway, Gorakhpur-273 001
8. North East Frontier Rly., Maligaon, Guwahati-781 001
9. Northern Western Rly., Jaipur-302 006
10. Southern Railway, Park Town, Chennai-800 003
11. Southern central Rly., Rail Nilayam Secundrabad-500 371
12. South Coast Railway, Visakhapatnam-530004.
13. South Eastern Rly., Gardern Reach, Kolkata-700 043
14. South East Central Rly., Bilaspur-495 004
15. South Western Rly., 4th Floor, DRM Office, Sh. Laxmi Narayan Complex, Station Road Hubli-580 020
16. Western Railway , Church gate, Mumbai-400 020
17. West Central Rly., Jabalpur-482 001

Sub: Coach Alteration instruction sheet to up-grade the existing Switch Plate Modules with 2A Glass fuse in LHB AC and 1A glass fuse in LHB Non AC coaches .

Ref: Railway Board's letter No. 2024/DG(Safety)/Inspection/8, New Delhi, dated: 16.04.2024,

In reference to above, to up-grade the existing Switch Plate Modules with provision of 2A Glass fuse in LHB AC and 1A glass fuse in LHB Non AC coaches, **Coach Alteration instruction sheet** ED/CAI/035 Dated 02.05.24 is being issued for implementation by all zonal railways.

This is for your information and necessary action pl.

DA: As Above.

(Sukhbir Singh)
DYCEE/DP

RAIL COACH FACTORY, KAPURTHALA

CAI N O. : ED/CAI/035 Dated: 04.05.2024

COACH ALTERATION INSTRUCTION SHEET FOR PROVISION/UPGRADADTION OF GLASS FUSES IN EXISTING SWITCH PLATE ASSEMBALIES WITH MOBILE CHARGING SOCKETS - IN LHB COACHES

RAIL COACH FACTORY, KAPURTHALA

CAI NO.: ED/CAI/035, Dated: 04.05.2024

RDSO vide letter EL/7.1.57 dated 28.03.2014 had advised that all Mobile/Laptop charging points in all types of AC & Non-AC Coaches shall be provided with glass fuses of rating 1A & 0.5A respectively. PUs had subsequently amended the specifications for Switch Plate Assemblies and cut-in the same in all Coaches turned out thereafter.

With increased usage of higher capacity chargers, the need was felt to enhance glass fuse ratings after taking feedback from user Railways. RCF issued revised specifications for Switch Plate Assemblies being provided in LHB AC & Non-AC Coaches by enhancing glass fuse ratings to 2A & 1A respectively. Revised specifications have also been communicated to all Zonal Railways vide letter no. RCF/HSQ/ED/PTI/2019, dated 28.09.2022.

This CAI is being issued for implementation of the provision of Switch Plate Assemblies having 3/5 Pin mobile Charging sockets with enhanced capacity glass fuses in terms of revised specification issued by RCF in all LHB AC and Non-AC Coaches. Railway Board letter No. 2024/DG(Safety)/Inspection/8, New Delhi, dated: 16.04.2024 may also be referred for the same.

This Coach Alteration Instruction Sheet is being issued for provision of Mobile Charging Sockets with glass fuses as per revised specification for enhanced electrical safety protection in all existing LHB AC and Non-AC Coaches in service.

A). Procedure for replacement of existing Switch Plate Assemblies:

Following steps are to be taken during replacement of existing Switch Plates module with sockets with Switch Plates modules with sockets having glass fuses:

Step-1: Removal of Existing Switch Plate Assembly with sockets from coach:

1. Remove hardware from Switch Plate Assemblies provided in the coach and to be replaced.
2. Disconnect all the cables from respective Switch Plate Assemblies i.e. cables for switching control of Lights, Night Light, and Mobile Charging sockets, etc. shall be disconnected.
3. Thereafter, the respective Switch Plate Assemblies provided in the coach shall be removed.

Step-2: Provision of Switch Plate Assemblies with glass fuses in Mobile charging Sockets:

1. Switch Plate Assemblies having mobile charging sockets with glass fuses shall be provided as per respective Coach Specification mentioned in Table-1 below.
2. Connect respective cables to Switch Plate Assemblies with glass fuses in Mobile charging Sockets.
3. Install all the Switch Plate Assemblies with glass fuses in Mobile charging Sockets at respective locations with suitable hardware.
4. The modifications, if any, in cut outs as per site requirement shall be made in reference to switch plates assembly envelope.
5. Proper terminations of Earthing cables shall be ensued.
6. Proper rating of glass fuses of 2 Amp and 1 Amp for LHB AC & Non-AC coaches respectively shall be ensured.
7. Switch Plate Assembly with sockets for LHB Non-AC Coaches have been provided with two nos glass fuses. For AC supply, Fuse is to be connected in Phase terminal only. However, for LHB SG Non-AC Coaches, both DC positive and negative shall be connected through glass fuses.
8. Check "ON-OFF" operation of Lights, Night Lights and Mobile Charging Sockets provided with respective switches.

Note:

1. For LHB AC & Non-AC coaches already provided with switch plates with glass fuses, only enhanced rating fuses are to be provided in the same fuse holder assembly.

2. All Coach Variants have been covered in the revised specification as per Table-1 below, however, depending on the requirement of a particular Coach having different combinations of Switch Plate Assemblies, these revised specifications may also be referred to for guidance.

RAIL COACH FACTORY, KAPURTHALA

CAI NO.: ED/CAI/035, Dated: 04.05.2024

B): Table-1: Drawing/Specification:

Sno.	Coach type	Drawing/Specification
LHB AC Coaches		
1.	LHB AC 2-Tier	EDML 064 REV. B, AM-4, Table-1A
2.	LHB AC 3-Tier	EDML 064 REV. B, AM-4, Table-1B
3.	LHB FAC	EDML 064 REV. B, AM-4, Table-2
4.	LHB AC Chair Car & Executive Chair Car	EDML 064 REV. B, AM-4, Table-8
5.	LHB AC Double Decker Coach	EDML 064 REV. B, AM-4, Table-9
6.	LHB AC Composite (FAC + 2Tier)	EDML 064 REV. B, AM-4, Table-10
7.	LHB ACCN (Economy) Coaches (83 Berther)	EDML 172 Rev.-B , Table-1
8.	LHB ACCN (Economy) Coaches (80 Berther)	EDML 172 Rev.-B , Table-2
LHB Non-AC Coaches		
1.	LHB SCN Coach (w/o wider window)	EDML 086 REV 8 Table-1
2.	LHB SCN Coach (with wider window)	EDML 156 REV. 2 Table -1
3.	LHB GS Coach (w/o wider window)	EDML 086 REV. 6 AM-1 Table-2
4.	LHB GS Antodaya / Deendayalu) (with wider window)	EDML 086 REV. 8 Table-2
5.	LHB SLRD Coach (40-SEATER)	EDML 170 Rev. 2
6.	LHB SLRD Coach (31-SEATER)	EDML 170 Rev. 2
7.	LHB SCZ Coach	EDML 125, Rev. 6 (Table-1) -for EOG (Table-2)- for SG

Enclosure:

(i). RDSO vide letter EL/7.1.57 dated 28.03.2014

(ii). Rly. Bd. L.No. 2024/DG(Safety)/Inspection/8, New Delhi, Dt.: 16.04.2024.

(iii) Drawings/Specifications as per Table-1 above.