Note-

1. Coaches should be offered in the lot of 7 to 8 Nos. (Ex. 04 Coaches in Stage-III + 02 Coaches in Stage IX + 01 to 02 Coaches in Final Testing), so that 5-6 days visit of 2 Engineers may be planned in one go accordingly.
2. Dedicated staff names of RCF for these Stages and Final activities are to be provided and to be accompanied during coach inspection activities.
3. Each Coach must be pre-inspected by RCF inspector as per RCF SIP (Self Inspection Plan) and by using these check sheets before offering the coach to RITES. Filled SIP and these check sheets of Stage-III, Stage-IX and Testing to be submitted to RITES.
4. 100% checks by RCF to be done unless otherwise specified in accordance with the check sheet mentioned below.
5. The Intensive Check specified in Part B and General Check specified in Part C to be done 100% by RCF & 25% and 5% by RITES on sample basis respectively.

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES Inspector:
Name of RCF officials:

Part A – Document Check Checksheet- Design

Check Sheet-D1

Ref. RCF Kapurthala PO No.: 02259001101961 dated 18.10.2025.
"Safety Inspection of 02 model rakes at RCF Kapurthala as per spec EDML 269 Rev 0 issued vide Letter No. ED RCF/HSQ/ED/2129 (Audit) dated 01.10.2025"

Reference -

i) RITES Audit Report No. QA/NR/ISA/RCF/ABLSLRD/01 Rev.01 APRIL 2025.
ii) RCF letter no. RCF/HSQ/ED/2129(Audit) dated 16.09.2025 issued with Document No. RCF/AUDIT/ISA/ABLSLRD Rev.0 Annexure-A, dated 16.09.2025.

1. Check if revised work instructions have been issued for:
   - Manufacture of Model Rake (which essentially involves inclusion of this check sheet)
   - Testing of coach and rake as per Audit Report to include Illumination check.

Part B- Manufacturing Inspection Checksheet - Quality

Check Sheet-Q1

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Intensive Check (100% by RCF & 25% by RITES)

Reference -

i) RDSO Code of Practice for 'Prevention of Fire in AC Coaches – Doc. No. RDSO/PE/O/0008-2005 (Rev-0)'.
ii) RDSO Specification and Code of Practice for Wiring In 750 V EOG System Coaching Stock - Doc. No. ELPS/SPEC/EOG/01, March 1994.
iii) RCF work instructions as mentioned.
iv) RITES Audit Report No. QA/NR/ISA/RCF/ABLSLRD/01 Rev.01 APRIL 2025.
v) RCF letter no. RCF/HSQ/ED/2129(Audit) dated 16.09.2025 issued with Document No. RCF/AUDIT/ISA/ABLSLRD Rev.0 Annexure-A, dated 16.09.2025.

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
5	1	Sheet 1 - 1.2, Sheet - 2, S. No. 1 & 9 of Cl 7.4	Check availability of Ferrules at all CS wire, fan wire light ckt, under frame all wiring etc. There should not be any handwritten /missing ferrules/ Colour Code mismatch.		
6	2	Sheet 1- 1.3	Check provision of correct Identification marking of HOG panel CT1, CT2 and PT1, PT2. Check availability of Fire barrier at HOG panel cable entry area.		
7	3	Sheet 1 - 2.1, Sheet 2 S No. 2 of	Check Fire retardant property and Specifications are mentioned on internal		

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
		Cl 7.4	cables of Speaker, PACIL alarm card circuit.		
8	4	Sheet 1-2.2, Sheet 2 - S No. 8 of Cl 7.4	Check LV panel bottom cable entry area, LV panel bottom side EPDM cable entry area, HOG panel main -ve cable. There should not be any PMA joint. Cable should be secured properly. The proper size of hardware should be applied and tightened properly.		
10	6	Sheet 1 - 2 .7	Check provision of proper size hardware at PP Side Gangway light cables, Guard room gangway top side 20 mm PVC conduits, Panel room side-wall top side, Guard room near JB, LV panel top side cable entry area, 9KVA T/F secondary cable.		
12	8	Sheet 1 - 2.12	Check PP Side Gangway light cables and Guard room Lavatory Flushing system main supply cable. Cables should be secured with PMA jacket properly.		
13	9	Sheet 1 - 2.13 & 5.3	Check provision of Grommets at HT panel inside D&ED cable entry area.		
16	12	Sheet 1 - 3.2 & 10.1	Check provision of internal earth cable in FL, Fan, Flushing System.		
17	13	Sheet 1 - 3.3	Check proper sealing is provided at PACIL and Through box cable entry near rubber hose		

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
			area.		
19	15	Sheet 1 - 3.7, Sheet 2 - S No 10 of cl 7.4, Sheet 4 - Cl 3.23	Check marking of earth shunt on provision of LV and HT panel as per respective specifications. Check provision of proper mounting hardware for Earth cable.		
20	16	Sheet 1 - 7.1	Check internal loop cables inside Battery box are secured with PMA hose or PMA Jacket		
21	17	Sheet1- 9.1 Sheet 2- S No 11 of Cl 7.4	Check provision of proper hardware for 70 mm conduit pipe clamp mounting as per modified drawing of pipe bracket for feeder conduit (drawing no. ----------)*. It should be properly tightened.		
22	18	Sheet 1 - 10.7	Check rating of Guard Room Fan (all Fan fixed 400mm Sweep) and Ladies Compartment single seater Bracket Fan. It should be as per drawing no. ------*.		

*RCF is requested to provide the applicable drawing no.

Check Sheet-Q3

Inspection Check sheet for Cabling and Harness

Reference -

i) EDTS 410 Rev-Nil.
ii) ELRS/SPEC/ELC/0019 Rev-4,
iii) Work instruction EDW 003, EDW006, EDW007
iv) RITES Audit Report No. QA/NR/ISA/RCF/ABLSLRD/01 Rev.01 APRIL 2025.
v) RCF letter no. RCF/HSQ/ED/2129(Audit) dated 16.09.2025 issued with Document No. RCF/AUDIT/ISA/ABLSLRD Rev.0 Annexure-A, dated 16.09.2025

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
23	19	Sheet 2 - S No 6 Cl 7.4	Check inclusion of fire safety testing in the acceptance tests of conduit system for cable management & Thin-walled flexible elastomeric cable with copper conductors.		
24	20	Sheet 2 - S No 7 of Cl 7.4	Check HOG & EOG neutral cable connection and ensure the crimping should be proper.		
25	21	Sheet 2 - S No 12 of Cl 7.4	Check ratings and complete specification of Control Transformer (CT 1 and CT 2), Rotary switch (S2S03, S2S05 WP/NWP) and Rotary NO block (S2SRA-HA) on LHS		

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
			door rear side in HOG Panel. It should be as per RDSO specification no. RDSO/PE/SPEC/ TL/0195-2019 Rev 0. Check provision of Surge Suppressor of contactors and Fire barrier at cable entry area at HOG panel inside HOG (HOG A&B), Feeder (S2K01 & S2K03) and Bus coupler (S2K02) contactors.		

Check Sheet-Q3

Inspection Check sheet for Preparation of harness

Ref specification-

i) All Harness specifications.
ii) RITES Audit Report No. QA/NR/ISA/RCF/ABLSLRD/01 Rev.01 APRIL 2025.
iii) RCF letter no. RCF/HSQ/ED/2129(Audit) dated 16.09.2025 issued with Document No. RCF/AUDIT/ISA/ABLSLRD Rev.0 Annexure-A, dated 16.09.2025

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
26	22	Sheet 3-Cl 5.1	Check proper fitting of Guard room FL light near Lavatory. There should not be any gap.		
27	23	Sheet 3 - 5.4	- Check proper fitting of Guard room side light. There should not be any gap.		

Check Sheet-Q4

Inspection Check sheet for Precaution to be taken while laying of cables

Ref specification-

i) All cables specification
ii) RITES Audit Report No. QA/NR/ISA/RCF/ABLSLRD/01 Rev.01 APRIL 2025.
iii) RCF letter no. RCF/HSQ/ED/2129(Audit) dated 16.09.2025 issued with Document No. RCF/AUDIT/ISA/ABLSLRD Rev.0 Annexure-A, dated 16.09.2025

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

S. No. of Annex A	S. No. of Audit	Clause No.	Operative Part of relevant clause	RCF Observations	RITES Observations (Accepted / Rejected)
28	24	Sheet 4 – Cl 3.1	Check bending radius of cable inside Fuse box. It should not be less than 4D.		
29	25	Sheet 4- Cl 3.10	Check provision of proper size hardware used for securing 20 mm PVC conduit pipe at Guard room lavatory top side, and all PVC Conduit pipe.		
30	26	Sheet 4- Cl 3.13	Check provision of rubber beading at 9KVA T/F secondary RVH clamp.		

Check Sheet-Q5

Inspection Check sheet for Testing Stage:

Ref.

i) RDSO Specification and Code of Practice for Wiring In 750 V EOG System Coaching Stock - Doc. No. ELPS/SPEC/EOG/01, March 1994.

ii) RDSO Specification No. RDSO/PE/SPEC/TL/0091-2016 (REV-1) 'Specification for Energy Efficient LED Based Luminaire Units for Passenger Coaches'.

iii) RCF Work Instructions No. EDW 0032 Ver 1.0 dt. 05.08.2025, EDW 0024 Ver 1.0 dt. 09.06.2025.

iv) RITES Audit Report No. QA/NR/ISA/RCF/ABLSLRD/01 Rev.01 APRIL 2025.

v) RCF letter no. RCF/HSQ/ED/2129(Audit) dated 16.09.2025 issued with Document No. RCF/AUDIT/ISA/ABLSLRD Rev.0 Annexure-A, dated 16.09.2025

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

SN of Annex A	S.No. of Audit	Clause no.	Operative part of Check	Specified Value	RCF Observation	RITES Observations
31	1	11.1	illumination (uniformity and lux measurement) Test as per as per RDSO spec RDSO/PE/SPEC/TL/0091-2016 (REV-1) **- To be performed on one coach per variant only.**	The voltage during the test shall be maintained at 110V with a tolerance of +0 / -3V**.** The test shall be conducted as per Annexure-1 and in accordance with Clauses 6.12 and 6.13 of the specification no. RDSO/PE/SPEC/TL/0091-2016 (REV-1) Refer RCF Work Instructions No. EDW 0032 Ver 1.0 dt. 05.08.2025.		
33	3	12.5.1	Check Insulation resistance Test record for 750, 415, 110, 24 V	Refer RCF Work Instructions No. EDW 0024 Ver 1.0 dt. 09.06.2025 s. no | Rated voltage | Megger ring | Insulation value		

<table>
<tr><th>SN of Annex A</th><th>S.No. of Audit</th><th>Clause no.</th><th>Operative part of Check</th><th>Specified Value</th><th>RCF Observation</th><th>RITES Observations</th></tr>
<tr><td></td><td></td><td></td><td>circuit before and after high voltage test.</td><td>
<table>
<tr><td></td><td></td><td>voltage</td><td></td></tr>
<tr><td>1</td><td>750 V AC</td><td>1000V DC</td><td>≥5Ω</td></tr>
<tr><td>2</td><td>415 V AC</td><td>500 V DC</td><td>≥3Ω</td></tr>
<tr><td>3</td><td>230 V AC</td><td>500 V DC</td><td>≥2Ω</td></tr>
<tr><td>4</td><td>190 V AC</td><td>500 V DC</td><td>≥2Ω</td></tr>
<tr><td>5</td><td>110 V AC</td><td>500 V DC</td><td>≥2Ω</td></tr>
<tr><td>6</td><td>24 V DC</td><td>500 V DC</td><td>≥2Ω</td></tr>
<tr><td colspan="4">Insulation resistance values measured immediately after the high voltage tests shall not be less than the original value</td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>34</td><td>3</td><td>12.5.2</td><td>Check High Voltage Test</td><td>Refer RCF Work Instructions No. EDW 0024 Ver 1.0 dt. 09.06.2025

<table>
<tr><th>S.NO</th><th>CIRCUIT CABLES</th><th>Applied voltage for HV test for 1 minute</th></tr>
<tr><td>1</td><td>750V AC</td><td>2500 VOLTS</td></tr>
<tr><td>2</td><td>415V AC</td><td>1800 VOLTS</td></tr>
<tr><td>3</td><td>230V AC</td><td>1500 VOLTS</td></tr>
<tr><td>4</td><td>190V AC</td><td>1400 VOLTS</td></tr>
<tr><td>5</td><td>110V AC</td><td>1200 VOLTS</td></tr>
<tr><td>6</td><td>110V DC</td><td>1200 VOLTS</td></tr>
</table>
</td><td></td><td></td></tr>
</table>

Check Sheet-Q6

Checks on embedded devices such as WSP or any other embedded device fitted on coach –

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

A. WSP

SN	Operative part of Check	Observation by RCF official	Observations by RITES officials (Accepted/ Not Accepted)
1	Check if line diagram, circuit diagram and specification have been issued		
2	- Check if use of Fire-retardant material has been specified. - Check if the same has been checked through Quality Audit/ inspection.		

B. Any other equipment of this category

SN	Operative part of Check	Observation by RCF official	Observations by RITES officials (Accepted/ Not Accepted)
1	Check if line diagram, circuit diagram and specification have been issued		
2	- Check if use of Fire-retardant material has been specified. - Check if the same has been checked through Quality Audit/ inspection.		

Part C- Manufacturing Inspection

Checksheet – Electrical Production

Checksheet-P1

STAGE-III ROOF/PRE-CEILING OF LSLRD, LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

Variant: LSLRD
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Note- RCF check - 100%, RITES check - 5%.

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
1	Ensure DC 110 V +ve & -ve wires routed in separate conduit/sleeve		
2	Ensure roof all cabins rooftop, sidewall and doorway area **20 mm** PVC conduits C-clamping tightness with proper hardware at regular distance		
3	Ensure all cables are as per specification number ELRS/SPEC/ELC/0019 Rev-04		
4	Ensure that all PVC, PMA shall be routed through the dedicated 'Through-hole' wherever applicable		
5	Ensure that there is no conduit damage and use a PVC pipe connector at the joining areas		
6	Ensure all PMA hoses/Sleeves are secured properly and have no joint		
7	Ensure necessary sharp edge protection for cables using PMA hose (for metal contact) & Sleeves (for non-metallic contact)		
8	Check all roof cables (LED, Fan, AEL, Alarm card, PACIL, Charging socket, Exhaust fan etc) for size, colour code and printed ferrules as per EDTS-410 Rev-Nil		
9	Ensure all Rooms JB/cage clamp Cables are provided with printed ferrules		
10	Ensure that Cables are properly connected at all Cage clamps terminals/Wago with 1A glass fuses, and no strands to be visible outside		
11	Ensure all alarm card cable connection with proper wago connector		

CONFIRMING/NON-CONFIRMING

RCF REPERESENTATIVE SIGNATURE & DATE		RITES REPERESENTATIVE SIGNATURE & DATE	
NAME		NAME	

Check sheet - P2

ROOF QUALITY CHECK OF LSLRD-LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

Variant: LSLRD
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Note- RCF check - 100%, RITES check - 5%.

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
	LED FITTING		
1.1	Ensure all LED cable wago coupler connections are properly made.		
1.2	Ensure all LED fittings are mounted with proper hardware without any gaps.		
1.3	Ensure all LED fitting diffuser covers are provided.		
	CHARGING SOCKETS FITTING		
2.1	Ensure all CS switch cable connections are properly made.		
2.2	Ensure the 1A glass fuse provision in each CS.		
2.3	Ensure that any switches are not fixed in reverse position.		
2.4	Ensure all switch plates are mounted with screws and washers without any gaps.		
	AEL FITTING		
3.1	Ensure all AEL are mounted with proper hardware without any gaps		
3.2	Ensure all AEL cable wago coupler connections are properly made		
3.3	Ensure all AEL covers are closed with proper hardware		
3.4	Ensure the correct orientation of the AEL fittings		
	BLDC FAN		
4.1	Ensure the tightness of fan main mounting bolts with washers		
4.2	Ensure the tightness of fan guard mounting bolts with washers		
4.3	Ensure all Fan cable WAGO coupler connections are properly made		
4.4	Ensure the fitment of guard ring with proper		

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
	hardware		
	PACIL		
5.1	Ensure the fitment of PACIL with proper hardware		
5.2	Ensure the cable connections of PACIL		
5.3	Ensure the application of Water sealant corners of the PACIL		
	LAVATORY LIGHT		
6.1	Ensure all Lavatory light WAGO coupler connection		
6.2	Ensure the tightness of all Lavatory Light		
6.3	Ensure all cables are properly secured		
	FLASHER UNIT		
7.1	Ensure the Flasher unit mounting.		
7.2	Ensure the Flasher unit RVH secure with clamp.		
	BRACKET FAN		
8.1	Ensure the mounting arrangement of Bracket Fan with proper hardware for seat 31.		
8.2	Ensure the cables are secured properly		
	HOG PANEL		
9.1	Ensure the mounting arrangement of panel with proper hardware.		
9.2	Ensure the HOG panel body double earthing is provided.		
9.3	Ensure that the Panel PMA conduits are properly secured and the PMA end fittings are tightened with gaskets		
9.4	Ensure all cables are properly crimped with suitable lugs, mounted using proper plain and spring washers, and the cable bending radius is not less than 4D		
9.5	Ensure that all cables printed ferrules are provided as per the Harness No. EDTS-410 Rev- Nil		
9.6	Ensure that all the electrical components identification number as per the Specification No. RDSO/PE/SPEC/TL/0195-2019 Rev-0		
9.7	Ensure that all cables are routed neatly in the cable tray and are secured with sleeves		
9.8	Ensure the Polycarbonate sheet covers are fitted properly		
9.9	Ensure that bottom area covers are mounted with proper hardware		
9.10	Ensure that all the cable entry are Fire barriers are provided		
9.11	Ensure that surge suppressors of the contactors		
9.12	Ensure that the Aerosol based Fire suppression Cartridge (2 Nos) are properly mounted at the designated location		
9.13	Ensure that the provision of 2 Nos of HOG coupler		

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
9.14	Ensure that the panel light is mounted properly and the limit switch functions correctly with the top RHS door in open/close condition		
9.15	Ensure that the HOG panel doors are properly closed and the panel key provision is in place		
	TAIL LIGHT		
10.1	Ensure that the tail light is mounted using proper hardware		
10.2	Check the tail light WAGO coupler connection		
10.3	Ensure the application of Water sealant at the corners of the tail light.		
	HOG COUPLER		
11.1	Check the HOG coupler connection.		
11.2	Check the HOG coupler mounting with gasket.		
	EXHAUST FAN		
12.1	Ensure the exhaust fan connection with 4 terminal wago connector at guard room lavatory		
12.2	Ensure the exhaust fan connection with 3 terminal wago connector at ladies and PWD compartment's lavatory		
12.3	Ensure all cables are properly secured		
12.4	Check the mounting of exhaust fans with proper hardware		
	COMMON POINTS FOR ALL ELECTRICAL EQUIPMENTS		
13.1	Ensure and all electrical equipment have nameplates indicating ratings as per RCF/RDSO specifications and note down Inventory details		

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF REPERESENTATIVE SIGNATURE & DATE		RITES REPERESENTATIVE SIGNATURE & DATE	
NAME		NAME	

Check sheet - P3

STAGE-IX WSP (WHEEL SLIDING PROTECTION SYSTEM) OF LSLRD-LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

Variant: **LSLRD**
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Note- RCF check - 100%, RITES check - 5%.

S.NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
1.	WSP unit Make _____ & S. No _____		
2.	Ensure WSP unit 110 V DC input supply fuse ratings (6.3 A, 2 Nos) are provided with identification numbers F63 (+VE) and F65 (-VE)		
3.	Check K-05 Off delay timer relay setting (10 Min) and its performance		
4.	Ensure that when FP pressure is **0 kg/ Cm^2** the pressure limit switch will not operate, and supply will not come in WSP microprocessor. As soon as FP pressure reaches beyond **1.8 kg/Cm^2** the pressure limit switch will make the contact, and supply will reach to microprocessor.		
5.	Ensure the WSP microprocessor will display **99(F)/9999 (K)/9.9 (E & J) F-FAIVELY, K-KNOOR, E-ESCORTS, J-JUPITER,** which shows system healthy?		
6.	Ensure WSP microprocessor working are checked by putting fault in sensor cable and dump valve by shorting/opening the wore of sensor cable connection and dump valve connection one by one, fault code showing in display of microprocessor with respect to sensor cable and dump valve should be as per WSP testing format.		
7.	Ensure for clearing of all faults by pressing as per respective microprocessor, microprocessor should display healthy code.		
8.	Check the dump valves. After applying brakes press button S2 (i.e. Test mode) dump valves will operate sequentially.		
9.	Ensure Fault/Activity data recorder function will be checked by downloading data. Date and time of fault/activity verified.		

S.NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
10.	Check the cable layout of speed sensor as per ICF drawing **No. ICF/SK3-3-5-046.**		
11.	Check the Mounting Bracket for Junction box as per ICF drawing no. **AAD11918, Alt-d** and **AAA11835, Alt-f**		
12.	Ensure that no hole will be found in Junction box.		
13.	Ensure the Air brake wires should be properly connected in panel and in pressure limit switch at air brake unit.		
14.	Check the Ferrule no. as per vendor drawing. Printed-shrinkable ferrule provided.		
15.	Check that the WSP microprocessor panel mounting hardware is properly tightened and fitted.		
16.	Ensure that WSP Unit body earthing is connected with proper hardware.		
17.	Ensure that WSP wiring is properly dressed and secured with sleeves.		

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF REPERESENTATIVE SIGNATURE & DATE		RITES REPERESENTATIVE SIGNATURE & DATE	
NAME		NAME	

Check sheet - P4

UNDERFRAME QUALITY CHECK OF LSLRD- LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

Variant: LSLRD
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Note- RCF check - 100%, RITES check - 5%.

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
	750V FEEDER PIPE, CABLE TRAY & FEEDER JUNCTION BOX		
1.1	Ensure all 70 mm Conduit clamps are tightened with a head bolt, nylock nut and plain washer.		
1.2	Ensure the tightness of 70 mm conduit clamps in both PP and NPP bogie areas.		
1.3	Ensure the FDB is fitted with proper hardware and torque markings are done.		
1.4	Ensure the provision and tightness of clip clamps on the rubber hoses at the feeder conduit pipe joint area.		
1.5	Check for providing Silicon Sealants at the Rubber Hose and Conduits joints at the feeder box.		
1.6	Ensure the closing of dummy holes in the feeder junction box with proper caps.		
1.7	Check underframe cable tray laying and ensure it is properly secured with clamps using spring and plain washers		
1.8	Ensure that Cable tray joints are done with min 2 set of hardware and that there is no gap between the cable trays		
1.9	Ensure that there is no cable tray infringing with brake pipe lines.		
1.10	Ensure the tightness of all FDB cover earth cable with proper hardware		
1.11	Ensure the tightness of all FDB covers with proper hardware and rubber gaskets.		
1.12	Check the sharp edge protection at the feeder cable entry area in the FDB and ensure the bending radius should not be less than 4D		
1.13	Ensure that PMA hoses are properly secured with clamps at the rear side of the FDB and both cable tray and non-cable tray area		

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
	POSITIVE (+VE) AND NEGATIVE (-VE) FUSE BOX		
2.1	Check the fitment of +VE & -VE fuse boxes with proper hardware		
2.2	Ensure that dummy holes are closed in both fuse boxes		
2.3	Ensure that stenciling is done both fuse boxes		
2.4	Ensure the provision of Fuse Safety covers in both fuse boxes. (3Nos)		
2.5	Ensure PMA hose has no joint and their end fittings are provided with gasket		
2.6	Ensure all cable tightness in +VE and -VE fuse box and the bending radius is not less than 4D for the size of cable greater than 25 sqmm		
2.7	Ensure the tightness of both fuse box body earthing with proper hardware		
	9 KVA TRANSFORMER		
3.1	Ensure that transformer PMA conduits are properly secured with clamps and have no joint		
3.2	Ensure that PMA end fittings are tightened and provided with gasket		
3.3	Ensure the 9 KVA transformer is fitted with proper hardware and torque markings are done.		
3.4	Ensure the transformer holding safety chain is provided		
3.5	Ensure the transformer fixing frame is properly painted		
3.6	Ensure all cables are properly crimped with suitable lugs and mounted using proper head bolt, plain and Spring washer		
3.7	Ensure double earth cables are properly crimped with suitable lugs and mounted using proper hardware on a non-painted surface		
3.8	Ensure Transformer door to be closed with proper bolts and wing nuts		
	RBC Cum EBC		
4.1	Ensure that PMA conduits are properly secured with clamps and have no joint.		
4.2	Ensure that PMA end fittings are tightened and provided with gasket		
4.3	Ensure the RBC Cum EBC is fitted with proper hardware and torque markings are done.		
4.4	Check the RBC WAGO connections are properly made and no wire strands are visible outside		
4.5	Ensure terminal Box cover are tightened with proper hardware and dummy holes are arrested		
4.6	Ensure RBC door is closed with proper hardware and ensure the provision of door stay arrangement		
	BATTERY BOX & BATTERY (110V, 120 Ah)		
5.1	Ensure that PMA conduits are properly secured with		

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
	clamps and have no joint.		
5.2	Ensure that PMA end fittings are tightened and provided with gasket.		
5.3	Ensure the battery bank is properly loaded in the battery box with adequate packing (19 cells each having the capacity of 6V)		
5.4	Ensure wooden stoppers are provided inside the battery box, if required		
5.5	Ensure all batteries are of the same make and the lug date is within six months		
5.6	Check that no battery cells are damaged or leaking.		
5.7	Ensure the battery cell top stopper plate is properly tightened		
5.8	Ensure the battery box is properly mounted with correct hardware		
5.9	Ensure the battery box doors are closed with wing nuts, and the lower part of the doors is welded. The welded area shall be properly painted		
5.10	Ensure the tightness of inter-cell loop cable connections with proper hardware		
5.11	Ensure the provision of petroleum jelly and terminal caps at all battery terminals		
5.12	Ensure the tightness of Battery Box body earthing with proper hardware		
5.13	Ensure Battery box dummy holes are closed		
	SPEED SENSOR CABLE AND DUMP VALVE		
6.1	Ensure that PMA conduits are properly secured with clamps and have no joint		
6.2	Ensure that PMA end fittings are tightened and provided with gasket		
	HT & LV PANEL		
7.1	Ensure that PMA conduits are properly secured with clamps and have no joint		
7.2	Ensure that PMA end fittings are tightened and provided with gasket		
7.3	Ensure both HT & LV panel mounting tightness with proper hardware (Plain Washer, Spring Washer, Check nut and Safety Pin)		
7.4	Check the tightness of all PMA hose clamps and end fittings with O-rings, and ensure that there are no joints in the PMA hoses		
7.5	Check proper use of Fire barriers at LV & HT panel cable entry area.		
7.6	Ensure the D&ED, Control Transformer and all Fuse base mounting with proper hardware		
7.7	Ensure all Contactors, MPCBs, RCBO, RC Filters, Fuses and Relays etc. Identification Numbers as per EDTS 355		

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
	Rev-1 or Latest		
7.8	Ensure all Cable ferrules as per EDTS-410 Rev Nil or Latest		
7.9	Ensure all Cable crimping with proper lug and heat shrink sleeve provision		
7.10	Ensure all Cable tightness with proper hardware and not more than two cables are connected at any terminal		
7.11	Ensure D&ED cables are secured properly with sleeves and grommet is provided at the cable entry area of the D&ED		
7.12	Ensure all cable dressing, tray covers, Poly carbonate sheet and fuse safety covers are provided.		
7.13	Ensure provision of Each 1 Nos. at LV and HT panel Aerosol based Fire Suppression system with proper fitment and verify their locations		
7.14	Check the Double earthing for HT & LV panel with proper hardware		
7.15	Ensure door stay is provided to hold the power panel door open during service		
7.16	Ensure the sharp edge protection is provided at both panel corner areas		
7.17	Ensure HT & LV panel doors are closed with proper hardware		
	750V IV COUPLER AND FEEDER JUNCTION BOX (FJB/FDB- 4 Nos)		
8.1	Ensure tightness of IV coupler and dummy socket with proper hardware and rubber gasket		
8.2	Ensure IV coupler length is 1535 mm and Safety chain tightness		
8.3	Ensure proper closing of IV socket limit switches		
8.4	Ensure all cables are properly crimped with suitable lugs, mounted using proper head bolts with plain and spring washers, terminal caps are provided, and the cable bending radius is not less than 4D		
8.5	Ensure the securing and connection of C1 and C2 control cables at the wago terminals and provision of end stoppers.		
8.6	Ensure the tightness of FDB body earth and PE cable with proper hardware on a non-painted surface		
8.7	To ensure IV Coupler Safety Chain is provided with Rubber Sheet Protection.		
8.8	Check the Power cable entering in junction box sharp edge protection, crimping and tightness of the connection.		
	EMERGENCY FEEDER TERMINAL (EFT- 4 Nos) & BATTERY CHARGING SOCKET (BCS - 2 Nos)		
9.1	Ensure the tightness of EFT and BCS box with proper hardware		
9.2	Ensure EFT fixing pad tightness with proper hardware		

S. NO	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
9.3	Ensure all EFT and BCS cable crimped with suitable lug and heat-shrink sleeves are provided		
9.4	Ensure the tightness EFT & BCS cables with proper hardware		
9.5	Ensure EFT Terminal Colour coding by paint (Outer side Terminal is +VE, Inner side terminal is –VE)		
9.6	Ensure BCS Colour coding done by paint (RHS terminal is +VE, LHS terminal is –VE)		
9.7	Ensure EFT and BCS doors are properly closed		
9.9	To ensure BCT fuse 2 no's. (40A)		
	WHEEL SET EARTHING EQUIPMENT		
10.1	To ensure Earthing Cable to be connected to the coach body and tightened with proper grinding.		
10.2	To ensure Both bogies earth insulator bush fixed properly		
10.3	Ensure both bogie earth cables are properly crimped with suitable lugs and mounted using proper hardware on a non-painted surface		
10.4	Ensure both bogie earth insulator bushes are fixed properly		
	DUMP VALVE		
11.1	Ensure earth cables are properly crimped with suitable lugs and mounted using proper hardware on a non-painted surface		
	COMMON POINTS FOR ELECTRICAL EQUIPMENTS		
12.1	Ensure underframe all cables size, colour code and ferrules as per harness EDTS-357 Rev C or latest.		
12.2	Ensure all Electrical equipment mounting bolts torque markings are done.		
12.3	Ensure all electrical equipment have nameplates indicating ratings as per RCF/RDSO specifications and note down Inventory details.		
12.4	Ensure the earth marking of the all-electrical equipment.		
12.5	Check all Power & earth cable crimping to ensure that (i) no excess cable insulation is removed, (ii) no strands are visible outside, (iii) proper crimping sockets are used, (iv) cable strands are inserted up to the inspection hole and (v) heat shrink sleeves are provided.		

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF REPERESENTATIVE SIGNATURE & DATE		RITES REPERESENTATIVE SIGNATURE & DATE	
NAME		NAME	

Checksheet-P5

ELECTRICAL SAFETY CHECKSHEET OF SLRD LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

Variant: LSLRD
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Note- RCF check - 100%, RITES check - 5%.

S.no.	LOCATION/ CIRCUITS	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
1.	Battery & DC circuit	1. Check 40 A HRC fuse in positive box (1 No) & Negative box (2 Nos). 2. Ensure 2Nos of 40A fuses at Battery charging socket (BCS)		
2.	Regulated Battery Charger (RBC)	1. Check the provision of 20A 3 Pole MCB for RBC and 1 Pole 25A MCB for EBC at LV panel. (Note: 3 Pole 20A MCB for RCB and 20A 1 Pole MCB for EBC should be removed from RBC terminal box as per Letter No. EL/7.10.1/LHB Dated: 21-10-2024) 2. Check 40A fuse is provided for coach Load +VE in RBC. 3. Check DC polarity in RBC.		
3.	9KVA Transformer	Check that HRC fuses are provided with ratings of 20A (Primary-750V), 16A (secondary-415V) and 25A (Tertiary-190V), 3Nos each.		
4.	HT panel	1. Ensure 25A Fuses (3Nos) for 415V side, 16A Fuses (3Nos) for 190V side. 2. Ensure F63(+VE) and F65(-VE) glass fuse with ratings of 6.3A (2Nos) for WSP Ensure 2A-1.2KV AC fuses for primary and 2A-500 V AC in secondary (Each 2 Nos) in 100VA control Transformer		

S.no.	LOCATION/ CIRCUITS	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
5.	LV Panel	1. Ensure 16A Fuse for Light circuits +VE (L1 & L2) each 1 Nos. 2. Ensure 16A Fuse for FAN circuit +VE 3. Ensure 16A Fuse for EFT circuit +VE 4. Ensure 40A Fuse for L1, L2, Fan, EFT circuits –VE 5. Ensure 6A fuses for AEL circuit (2 Nos) 6. Ensure sort link tightness for PACIL circuit +VE & -VE (Each 1 No) 7. Check 1A glass fuses for all LED, Fan, and Alarm Card circuits (both +VE and –VE) at the roof JB		
6.	For Charging sockets	1. Check provision of 6A fuses for CS circuit R, Y, B & N (4 Nos) in LV panel. 2. Check 1A glass for each CS		
7.	Light fitting for NON-AC coach	3. Check 16A +ve Fuse for doorway/gangway light, cabin area light. 4. Check 16A +ve Fuse for FAN circuit 5. Check 40A –ve circuit Fuse respectively in LV panel.		
8.	Lavatory Exhaust fan	Check 2Nos of MPCB with ratings of 0.63-1A in LV panel with set point of 0.63A. (For Set point RDSO guidance required		
9.	Insulation failure of 110 V AC (CS circuit)	Check Auto and Manual tripping of RCBO in LV panel (4 Pole 16 A).		
10.	110V DC IR	Check 110V DC IR with Test lamp with full load on condition		
12.	100 VA control transformer in NON - AC Coach	Check 2 A-1.2KV AC fuses for primary and 2 A-500 V AC in secondary		
13.	Aerosol Based FDSS	i) Ensure the provision and proper fitment of aerosol-based Fire Suppression cartridges: 1 No each in the LV panel and HT panel, and 2 Nos in the HOG panel. Verify and confirm their installed locations.		

S.no.	LOCATION/ CIRCUITS	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
		ii) Ensure the Aerosol based Fire Suppression system Safety pin status as per the Letter No. EL/7.1.108/MSSBC dated 07.02.2023 FirePro - Safety pin should be removed STATX - Safety pin should not be removed HAFEX - Safety Allen key should be removed. PYROGEN – Not Applicable DSPA BV - Not Applicable iii) Ensure the Action Temperature setting as 68-72 deg C as per Letter No. EL/7.1.108/SBC/MAIN dated 06.08.2025		
14	HOG PANEL	Check i) Two sets of 250 VA, 750 V/415 V Control Transformers with 4 Nos. of 4 A fuses provided for each set (Primary and Secondary). ii) Two sets of 100 VA Potential Transformers, each set provided with 3 Nos. of fuses: 2 A on the Primary side and 6 A on the Secondary side. iii) FEL-1 and FEL-2 relay settings. iv) FOL-1 and FOL-2 relay settings. v) Check Emergency OFF push button functionality. vi) Ensure 2 Nos. of 10 A fuses are provided for the 110V/24V DC converter vii) All control fuses rating as per the Specification No. RDSO/PE/EPEC/TL/0195-2019 Rev-0		

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF REPERESENTATIVE SIGNATURE & DATE		RITES REPERESENTATIVE SIGNATURE & DATE	
NAME		NAME	

Checksheet-P5

FUNCTIONAL TEST OF SLRD, LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

Variant: LSLRD
Coach / Shell No.:
Date/ Dates:
Locations:
Name of RITES inspector:
Name of RCF officials:

Note- RCF check - 100%, RITES check - 5%.

<table>
<tr><th>S. No</th><th>CHECK POINTS</th><th>RCF OBSERVATION</th><th>RITES OBSERVATION</th></tr>
<tr><td>1</td><td colspan="3">CABLE CONTINUITY</td></tr>
<tr><td>1.1</td><td>Check Continuity test of all cables connected at the RCF shop floor</td><td></td><td></td></tr>
<tr><td>2</td><td colspan="3">INSULATION RESISTANCE TEST</td></tr>
<tr><td>2.1</td><td>Group and sort the cables as per the voltage range
<table>
<tr><th>S. NO</th><th>CABLE CIRCUIT V</th><th>MEGGERING VOLTAGE</th><th>ACCEPTABLE INSULATION VALUE</th><th>OBSERVED VALUE IN MΩ (BEFORE HV)</th><th>OBSERVED VALUE IN MΩ (AFTER HV)</th></tr>
<tr><td>1</td><td>750 V AC</td><td>1000V DC</td><td>≥ 5 MΩ</td><td></td><td></td></tr>
<tr><td>2</td><td>415 V AC</td><td>500 V DC</td><td>≥ 3 MΩ</td><td></td><td></td></tr>
<tr><td>3</td><td>230 V AC</td><td>500 V DC</td><td>≥ 2 MΩ</td><td></td><td></td></tr>
<tr><td>4</td><td>190 V AC</td><td>500 V DC</td><td>≥ 2 MΩ</td><td></td><td></td></tr>
<tr><td>5</td><td>110 V AC</td><td>500 V DC</td><td>≥ 2 MΩ</td><td></td><td></td></tr>
<tr><td>6</td><td>24 V DC</td><td>500 V DC</td><td>≥ 2 MΩ</td><td></td><td></td></tr>
<tr><td colspan="6">Insulation resistance values measured immediately after the high voltage tests shall not be less than the original value</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>3</td><td colspan="3">HIGH VOLTAGE (HV) TEST</td></tr>
</table>

<table>
<tr><th>S. No</th><th>CHECK POINTS</th><th>RCF OBSERVATION</th><th>RITES OBSERVATION</th></tr>
<tr><td>3.1</td><td>Perform the HV test ensuring that after Megger values are satisfactory
<table>
<tr><th>S.NO</th><th>CIRCUIT CABLES</th><th>APPLIED HV VOLTAGE FOR 60 SEC</th></tr>
<tr><td>1</td><td>750V AC</td><td>2.5 KV</td></tr>
<tr><td>2</td><td>415V AC</td><td>1.8 KV</td></tr>
<tr><td>3</td><td>230V AC</td><td>1.5 KV</td></tr>
<tr><td>4</td><td>190V AC</td><td>1.4 KV</td></tr>
<tr><td>5</td><td>110V AC</td><td>1.2 KV</td></tr>
<tr><td>6</td><td>110V DC</td><td>1.2 KV</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>4</td><td colspan="3">110V DC CIRCUITS</td></tr>
<tr><td>4.1</td><td>Check L1 Circuit performance with rotary control
Check L1 Circuit Full Load Current - _____A</td><td></td><td></td></tr>
<tr><td>4.2</td><td>Check L2 Circuit Performance with rotary control
Check L2 Circuit Full Load Current- _____A</td><td></td><td></td></tr>
<tr><td>4.3</td><td>Check Fan performance with Rotary control
Check Fan Circuit Full Load Current- _____A</td><td></td><td></td></tr>
<tr><td>4.4</td><td>Check All Fan and Lavatory Lights individual Switch control</td><td></td><td></td></tr>
<tr><td>4.5</td><td>Check AEL performance with AEL Test Push Button and Ensure the fuse control</td><td></td><td></td></tr>
<tr><td>4.6</td><td>Check Alarm card and PACIL performance</td><td></td><td></td></tr>
<tr><td>4.7</td><td>Check EFT & BCS 110V DC Supply and their Polarity</td><td></td><td></td></tr>
<tr><td>4.8</td><td>Check K05 Relay setting (10 Min) and its performance</td><td></td><td></td></tr>
<tr><td>4.9</td><td>Check all Lavatory Flusher Unit Input supply & Polarity</td><td></td><td></td></tr>
<tr><td>4.10</td><td>Check the performance of both Guard Room side lights with their individual switch controls at the flasher unit</td><td></td><td></td></tr>
<tr><td>4.11</td><td>i) Check the performance of the Flasher unit and Tail light through the ON/OFF Rotary, MAIN/STANDBY mode selector, and Switch control.
ii) Ensure RED and Green LED Indications are functional.
iii) MAIN mode- Tail light and the green LED of the Flasher unit shall glow continuously
iv) STANDBY Mode - Tail light and the green LED of the Flasher unit shall flicker and verify the Buzzer performance by ON/OFF push button.</td><td></td><td></td></tr>
<tr><td>4.12</td><td>Ensure 110V DC circuits are free from insulation failure by using a test lamp</td><td></td><td></td></tr>
<tr><td>5</td><td colspan="3">HOG PANEL PERFORMANCE</td></tr>
<tr><td>5.1</td><td>Check the HOG panel performance as per the as per the Annexure C</td><td></td><td></td></tr>
<tr><td>6</td><td colspan="3">750V & 415V CIRCUIT TEST</td></tr>
<tr><td>6.1</td><td>Check Disconnecting & Earthing Device (D&ED) Performance</td><td></td><td></td></tr>
<tr><td>6.2</td><td>Check MMR Relays (S1K03 & S1K04) Setting & Its performance</td><td></td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>CHECK POINTS</th><th>RCF OBSERVATION</th><th>RITES OBSERVATION</th></tr>
<tr><td>6.3</td><td>Check 100VA (750V/110V) TRANSFORMER PERFRORMANCE</td><td></td><td></td></tr>
<tr><td>6.4</td><td>Net -1 (S1K01) & Net- 2 (S1K02) performance as per the sequence table
<table>
<tr><th>750V SUPPLY</th><th>D&ED POS</th><th>PS POS</th><th>FS POS</th><th>CHECK K01</th><th>CHECK K02</th></tr>
<tr><td>NET 1</td><td>ON</td><td>ON</td><td>NET 1</td><td>ON</td><td>OFF</td></tr>
<tr><td>NET 1</td><td>ON</td><td>ON</td><td>NET 2</td><td rowspan="4">OFF</td><td rowspan="4">OFF</td></tr>
<tr><td>NET 1</td><td>ON</td><td>ON</td><td>OFF</td></tr>
<tr><td>NET 1</td><td>ON</td><td>OFF</td><td>NET 1/ 2</td></tr>
<tr><td>NET 1</td><td>OFF</td><td>ON</td><td>NET 1/2</td></tr>
<tr><td>NET 2</td><td>ON</td><td>ON</td><td>NET 2</td><td>OFF</td><td>ON</td></tr>
<tr><td>NET 2</td><td>ON</td><td>ON</td><td>NET 1</td><td rowspan="4">OFF</td><td rowspan="4">OFF</td></tr>
<tr><td>NET 2</td><td>ON</td><td>ON</td><td>OFF</td></tr>
<tr><td>NET 2</td><td>ON</td><td>OFF</td><td>NET 1/2</td></tr>
<tr><td>NET 2</td><td>OFF</td><td>ON</td><td>NET 1/2</td></tr>
</table>
D&ED POS – Disconnecting and Earthing Device Position
PS POS- Power supply ON/OFF Rotary Position
FS POS- Feeder Selector Rotary Switch POS</td><td></td><td></td></tr>
<tr><td>6.5</td><td>Check 9KVA Transformer Voltage and Full Load Current
<table>
<tr><th>TERMINALS</th><th>PRIMARY (V)</th><th>SECONDARY (V)</th><th>TERTIARY (V)</th></tr>
<tr><td>RY</td><td></td><td></td><td></td></tr>
<tr><td>YB</td><td></td><td></td><td></td></tr>
<tr><td>BR</td><td></td><td></td><td></td></tr>
<tr><td>RN</td><td></td><td></td><td></td></tr>
<tr><td>YN</td><td></td><td></td><td></td></tr>
<tr><td>BN</td><td></td><td></td><td></td></tr>
<tr><td>RE</td><td></td><td></td><td></td></tr>
<tr><td>YE</td><td></td><td></td><td></td></tr>
<tr><td>BE</td><td></td><td></td><td></td></tr>
<tr><td>NE</td><td></td><td></td><td></td></tr>
<tr><th colspan="4">FULL LOAD CURRENT (A)</th></tr>
<tr><td>R</td><td></td><td></td><td></td></tr>
<tr><td>Y</td><td></td><td></td><td></td></tr>
<tr><td>B</td><td></td><td></td><td></td></tr>
<tr><td>N</td><td></td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
<tr><td>6.6</td><td>Check 415V & 190V AC RC FILTER PERFORMANCE (Ensure the N-</td><td></td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>CHECK POINTS</th><th>RCF OBSERVATION</th><th>RITES OBSERVATION</th></tr>
<tr><td></td><td>E voltage should be less than 5V)
<table>
<tr><th>RC FILTER AT HT PANEL</th><th>R-E (V)</th><th>Y-E (V)</th><th>B-E (V)</th><th>N-E (V)</th></tr>
<tr><td>415 V SIDE</td><td></td><td></td><td></td><td></td></tr>
<tr><td>190 V SIDE</td><td></td><td></td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
<tr><td>6.7 a</td><td>Check RBC Cum EBC performance
<table>
<tr><th>MODE</th><th colspan="2">AC INPUT SUPPLY (V)</th><th>DC OUTPUT (V)</th><th>BATTERT CHARGING CURRENT (A)</th><th>COACH LOAD (A)</th></tr>
<tr><td rowspan="3">RBC</td><td>RY</td><td></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td></tr>
<tr><td>YB</td><td></td></tr>
<tr><td>BR</td><td></td></tr>
<tr><td>EBC</td><td>RN</td><td></td><td></td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
<tr><td>6.7 b</td><td>Check RBC Performance control with S1F160 3P 20A MCB</td><td></td><td></td></tr>
<tr><td>6.7 c</td><td>Check EBC Performance control with S1F170 1P 25A MCB</td><td></td><td></td></tr>
<tr><td>6.7 d</td><td>Check mode change from RBC to EBC and from EBC to RBC</td><td></td><td></td></tr>
<tr><td>6.7 e</td><td>Check 40A Coach Load fuse control</td><td></td><td></td></tr>
<tr><td>6.7 f</td><td>Check RBC Cum EBC LED’s performance</td><td></td><td></td></tr>
<tr><td>6.8 g</td><td>Check +VE & -VE Earth Leakage</td><td></td><td></td></tr>
<tr><td>6.8 h</td><td>Check RBC OK, EBC ON and Battery not healthy LED indication at LV panel (As per Letter No. EL/7.10.1/LHB Dated 20.11.2024)</td><td></td><td></td></tr>
<tr><td>7</td><td colspan="3">190V & 110V AC CIRCUIT TEST</td></tr>
<tr><td>7.1</td><td>i) Check Guard room Lavatory Exhaust Fan (190V AC, 3 Ph, 200 W) Performance with MPCB control S1F85 for Ex. Fan 1
ii) Note down the Load Current
<table>
<tr><th>CURRENT (A)</th><th>R</th><th>Y</th><th>B</th></tr>
<tr><td>EX. FAN 1</td><td></td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
<tr><td>7.2 a</td><td>i) Check Ladies (2 Nos) and PWD (1 No) Lavatory Exhaust Fans (Each 110V AC, 1 Ph, 40W) Performance. (MPCB controls are not mentioned in Drawing, RDSO/RCF guidance required)
ii) Note down the Load Current
<table>
<tr><th>CURRENT (A)</th><th>R</th><th>N</th></tr>
<tr><td>EX. FAN 2</td><td></td><td></td></tr>
<tr><td>EX. FAN 3</td><td></td><td></td></tr>
<tr><td>EX. FAN 4</td><td></td><td></td></tr>
</table></td><td></td><td></td></tr>
</table>

S. No	CHECK POINTS	RCF OBSERVATION	RITES OBSERVATION
7.2 b	Check the performance of Seat-31's Bracket fan with switch control		
7.3 a	Check Charging socket supply 110V AC control through Mobile charging Socket (MCS) ON/OFF Rotary and RCBO in LV panel		
7.2 b	Check the supply at each Charging Socket with its individual switch control and local LED indication		
7.2 c	Check RCBO tripping by sorting each Charging Socket earth terminal to coach body with a test lamp, one by one.		
8	**ILLUMINATION TEST**		
8.1	Measure the Illumination at coach level _____ lux Illumination level shall be maintained at not less than 60 lux		
9	**OTHER POINTS**		
9.1	Check and record Temperature Rise by Thermal imaging of LV & HT panel in Annexure A		
9.2	Note the Inventory details in Annexure B.		

Additional Remarks (if any)

RCF Representative Signature with Date		RITES Representative Signature with Date	
Name		Name	

ANNEXURE A OF FUNCTIONAL TEST OF SLRD, LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

THERMAL IMAGING FOR LSLRD, LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

(Ref Letter No: EL/7.1.108/SBC/Main Dated 26-11-2024)

COACH NO	DATE	MEASURED BY

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
1	S1F50	25A Fuse (Net-1) R						
2	S1F51	25A Fuse (Net-1) Y						
3	S1F52	25A Fuse (Net-1) B						
4	S1F53	25A Fuse (Net-2) R						
5	S1F54	25A Fuse (Net-2) Y						
6	S1F55	25A Fuse (Net-2) B						
7	S1K01	Net-1 contactor R						
8		Net-1 contactor Y						
9		Net-1 contactor B						
10	-	Net-1 Neutral						
11	S1K02	Net-2 contactor R						
12		Net-2						

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
		contactor Y						
13		Net-2 contactor B						
14	-	Net-2 Neutral						
15	S1F44	Fuse of 415V R						
16	S1F45	Fuse of 415V Y						
17	S1F46	Fuse of 415V B						
18	S1F47	Fuse OF 190V R						
19	S1F48	Fuse OF 190V Y						
20	S1F49	Fuse OF 190V B						
21	S1F85	EX. Fan 1 MPCB R						
22		EX. Fan 1 MPCB Y						
23		EX. Fan 1 MPCB B						
24	S1F86	EX. Fan 2 MPCB R						
25		EX. Fan 2 MPCB Y						
26		EX. Fan 2 MPCB B						
27	CS-R 6A	Fuse of CS circuit R						
28	CS-Y 6A	Fuse of CS circuit Y						
29	CS-B 6A	Fuse of CS circuit B						
30	CS-N 6A	Fuse of CS						

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
		circuit N						
31	L1	16A Fuse L1 +VE						
32	L2	16A Fuse L2 +VE						
33	FAN	16A Fuse Fan +VE						
34	DC -VE	40A Fuse -VE						
HOG PANEL								
35	S2K01	Feeder A Cont. R						
36		Feeder A Cont. Y						
37		Feeder A Cont. B						
38	S2K03	Feeder B Cont. R						
39		Feeder B Cont. Y						
40		Feeder B Cont. B						
41	S2K02	Bus coupler R						
42		Bus coupler Y						
43		Bus coupler B						
44	HOG A	HOG A Cont. R						
45		HOG A Cont. Y						
46		HOG A Cont. B						
47	HOG B	HOG B Cont. R						
48		HOG B Cont. Y						
49		HOG B Cont.						

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
		B						
50	S2K04	Working A Cont. R						
51		Working A Cont. Y						
52		Working A Cont. B						
53		Working A Cont. N						
54	S2K05	Working A Cont. R						
55		Non-Working A Cont. Y						
56		Non-Working A Cont. B						
57		Non-Working A Cont. N						
58	S2K06	Working B Cont. R						
59		Working B Cont. Y						
60		Working B Cont. B						
61		Working B Cont. N						
62	S2K07	Non-Working B Cont. R						
63		Non-Working B Cont. Y						
64		Non-Working B Cont. B						
65		Non-Working B Cont. N						
66	S2K08	HOG-B Interlock						

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
		Control						
67	S2K09	HOG-A Interlock Control						
68	S2K10	Bus Coupler Control						
69	S2K11	Bus Coupler Control						
70	S2K12	Feeder-1 Control						
71	S2K13	Feeder-2 Control						
72	S2K14	Safety Loop-1 Control						
73	S2K15	Safety Loop-1 Control						
74	S2K16	Feeder-1 Overload						
75	S2K17	Safety Loop-2 Control						
76	S2K18	Safety Loop-2 Control						
77	S2K19	Feeder-2 Overload						
78	S2K20	DC control Supply 24V ON						
79	S2K21	F1/HOG-A Earth Leakage						
80	S2K22	F2/HOG-B Earth Leakage						
81	S2K25	Hooter control						

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
82	S2HK1	Conv-A Enable						
83	S2HK2	Conv-B Enable						
84	S2KRA-HA	RA HOG-A Enable						
85	S2KRA-HB	RA HOG-B Enable						
86	PTR 1 - F1, F2, F3	Potential Transformer-1 HT fuses 2 A						
87	PTR 1 - F7, F8, F9	Potential Transformer-1 LT fuses 6 A						
88	PTR 2 - F4, F5, F6	Potential Transformer-2 HT fuses 2 A						
89	PTR 2 - F10, F11, F12	Potential Transformer-2 LT fuses 6 A						
90	CT-1	Control Transformer-1 HT Fuses						
91	CT-1	Control Transformer-1 LT Fuses						
92	CT-2	Control Transformer-2						

S. NO	ID. NUMBER	DESCRIPTIONS	AMPIENT TEMPERATURE IN °C	TEMPERATURE AFTER THE 30 MIN OF FULL LOAD IN °C		TEMPERATURE RISE IN °C		REMARKS (ACCEPTABLE TEMP RISE IS ≤25 °C)
				AT BODY	AT TERMINAL	AT BODY	AT TERMINAL	
		HT Fuses						
93	CT-2	Control Transformer-2 LT Fuses						

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF Representative Signature with Date		RITES Representative Signature with Date	
Name		Name	

ANNEXURE B OF FUNCTIONAL TEST OF SLRD, LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

INVENTORY OF ELECTRICAL EQUIPMENTS OF SLRD
(LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH)

COACH NO	DATE	NOTED BY

SL NO	DESCRIPTION OF ITEM	MAKE	SERIAL NO	QUANTITY
1	HOG PANEL			1
2	LV PANEL			1
3	HT PANEL			1
4	WSP UNIT			1
5	RBC CUM EBC			1
6	9 KVA TRANSFORMER			1
7	LIGHT FITTING (LED)			21
8	LAVATORY LIGHT (LED)			4
9	110 V LAPTOP CHARGING SOCKET			17
10	IV COUPLER & SOCKET			3 & 1
12	FEEDER JUNCTION BOX			4
13	AEL			4
14	PACIL ALARM			3
15	PACIL LIGHT			2
16	WHEEL SET EARTHING EQUIPMENT			2
17	110 V, 120 AH BATTERY BANK		LUG DATE:	1 SET
18	BATTERY BOX			1
19	POSITIVE FUSE BOX			1
20	NEGATIVE FUSE BOX			1
21	EFT			4
22	BCS			2
23	BLDC FAN (32 W)			15
24	Guard Room Lav. Exhaust Fan (200 W)			1
25	Lavatory Exhaust Fan (40 W)			3
26	Bracket Fan near Seat 31			1
27	LED near Seat 31			1
28	Flasher Unit			1

INVENTORY OF ELECTRICAL EQUIPMENTS OF SLRD (LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH)				
29	Tail Light			1
30	Guard Side Light			2
31	HOG Coupler			1

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF Representative Signature with Date		RITES Representative Signature with Date	
Name		Name	

ANNEXURE C OF FUNCTIONAL TEST OF SLRD, LHB-SECOND CLASS CUM LUGGAGE AND BRAKE VAN WITH DIVYANGJAN COMPARTMENT COACH

HOG PANEL PERFORMANCE OF LSLRD COACH

COACH NO	DATE	CHECKED BY

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
1	110V DC Circuit	i) Connect the 110V DC supply from the Battery Bank of the LSLRD coach. Connect +110V DC to TB3-11 and Connect –110V DC to TB3-12. ii) Ensure the EMERGENCY Push Button (PB) is in the released position to make the panel operational. iii) Press PB '110V DC ON' (S2S84) and verify the following: S2K49 contactor should operate (pick up). '110V DC OK' indication lamp (S2H21) should glow.		
2	Timer circuit	i) Once the 110V DC supply is energized and S2K49 contactor is picked up, verify that Timer T1 gets activated. ii) After the preset time (SET time) of T1 elapses, S2K49 contactor shall de-energize automatically. This results in cut-off of the 110V DC supply. iii) To re-energize the 110V DC supply: Press PB '110V DC ON' (S2S84) again. iv) Ensure proper cut-off/reset sequence of Timer T1 through the following contacts: S2K1, K3, K5, K7, HOGA, and HOGB contactors.		
3	DC-DC Converter (110 V/24 V)	Check the operation of DC-DC Converters No.1 and No.2 through the respective 2-Pole MCBs S2M11 and S2M12. **CONVERTER** / **INPUT (V)** / **OUTPUT (V)** **1** / / **2** / /		
4	24V DC Circuit	Connect 24V DC supply on TB2 - 4 & 6 (to be obtained from FIREALARM system - FIRE SYSTEM HFALTHY contact), check system interlocked with aux. contactor S2KF. Panel should not operate in case		

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
		FIRE SYSTEM IS NOT HEALTHY.		
		Connect 24V DC supply on TB2-3 & 6 (to be obtained from FIREALARM system - FIRE ALARM SYSTEM contact – FIRE / SMOKE detection system alarm contact), check operation of S2KFA aux. Contactor and indicating light "Fire Alarm ON". Check activation of Hooter when operated. Press hooter OFF PB to turn off hooter. Fire alarm/smoke detection indication should remain active if present in system.		
		Make sure EMERGENCY PB is in released position &Turn on 24V DC power supply ON selector switch S2S23 and check operation of S2K20 ,S2K25 contactor.		
6	Separate 110V DC supply is used for Converter Circuits. We have two +110V DC contactors S2HK1 and S2HK2 for Converter-A and Converter-B. Connect +110V DC at terminals number 11 & 110V at terminals number 12. Operation of +110V DC is mainly operated from selector switch of S2S52			
7	In both HOG Couplers (A & B) i) short pin 5&1 , Check Conv -A O/p Available indication led glow in SBC panel. ii) short pin 5&2 , Check Conv -A Faulty indication led glow in SBC panel. iii) short pin 5&6 , Check Conv -B O/p Available indication led glow in SBC panel. iv) short pin 5&7 , Check Conv -B Faulty indication led glow in SBC panel. v) short pin 5&10 , Check input contactor led glow in SBC panel. vi) In SBC panel press Conv-A reset ,Check continuity in HOG coupler pin no 3&4. vii) In SBC panel press Conv-B reset ,Check continuity in HOG coupler pin no 8&9.			
8	Select RA-HOGA Sel. Switch in position HOG A mode. Select converter selection switch S2S52 at CONV-A or CONV- A+B. Turn on HOG-A select switch S2S54 ,Check CONV-A ON indication lamp will glow. Check 110 V DC voltage at Converter A IV coupler plug pin no 7 & HOG -A Coupler socket pin no 12			
9	Select RA-HOGB Sel.Switch in position HOG B mode.			

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
	Select converter selection switch S2S52 at CONV-B or CONV- A+B. Turn on HOG-B select switch S2S55 ,Check CONV-B ON indication lamp will glow. Check 110 V DC voltage at Converter B IV coupler plug pin no 7 & HOG -B Coupler socket pin no 12			
SELECTOR SWITCH S2S52 (Plant selector switch) have three Mode of operation:				
10	MODE-1: CONVERTER-A ONLY	Give 750 V 3 phase supply at HOG A side Select RA-HOG-A Selector switch in position 1.(RA-HOGA) Select S2S52 at position PLANT A only. Turn ON HOG-A Selector switch S2S54. Indication lamp of Converter-A ON will glow Check S2HK1 Contactor and HOG-A Contactor status energized, check indication lamp conv-A o/p available will glow. Press PB S2S12 of Bus coupler S2K2 and Bus coupler is getting close and operation of check. Operation of both feeders S2K1, S2K3 through safety loop closed.		
11	MODE-2: CONVERTER A & B	a) Give 750V 3 phase supply at both HOG A and HOG B side b) Select RA-HOG-A Selector switch in position 1. c) Select RA-HOG-B Selector switch in position 1. d) Select S2S52 at position Convertor-A+B. e) Turn ON HOG-A Selector switch S2S54. f) Indication lamp of Converter-A ON will glow. g) Check S2HK1 Contactor and HOG-A Contactor status energized, check indication lamp conv-A o/p available will glow. h) Turn ON HOG-B Selector switch S2S55. i) Indication lamp of Converter-B ON will glow. j) Check S2HK2 Contactor and HOG-B Contactor status energized, check indication lamp conv-B o/p available will glow. k) Press PB S2S12 of Bus Coupler S2K2 and Bus Coupler is not getting ON due		

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
		to safety interlock.		
12	MODE-3: CONVERTER - B:	a) Give 750 V 3 phase supply at HOG B side b) Select RA-HOG-B Selector switch in position 1. c) Select S2S52 at position Convertor-B only. d) Turn ON HOG-B Selector switch S2S55. e) Indication lamp of Converter-B ON will glow f) Check S2HK2 Contactor and HOG-B Contactor status energized, check indication lamp conv-B o/p available will glow. g) Press PB S2S12 of Bus Coupler, S2K2 and Bus Coupler is getting closed. Check Operation of both Feeders S2K1, S2K3 through safety loop closed.		
13	OPERATION OF WORKING & NON-WORKING CONTACTOR	a) Check availability of 110V DC supply. b) Select S2S03 in position 1, check operation of S2K04 contactor, and check Indicating Lamp for working contactor S2K04. Select S2S03 in position 2, check operation of S2K05 contactor, and check Indicating contactor S2K05. c) Select S2S05 in position 1, check operation of S2K06 contactor, and check Indicating contactor S2K06. d) Select S2S05 in position 2, check operation of S2K07 contactor, and check Indicating Working lamp for Non-working contactor S2K07		
14	Feeder-A Safety Loop:	a) Check availability of 24 V DC supply. b) Make sure RA-HOG-A selector switch is in position 1 (HOG-A mode), c) Turn on Safety loop-1 ckt. By pressing S2S18, S2K15 will turn on, turn off Safety loop- 1 ckt. By pressing S2S17, S2K15 will turn off. (Ensure Feeder A safety loop performance- by disconnecting limit Switch)		

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
15	To switch ON Feeder -A	a) Turn on safety loop-1 ckt. By pressing S2S18, turn on feeder-1 contactor by pressing S2S14, check the Status of S2K12, S2K1 & Feeder 1 indication lamp will glow. Turn off Feeder-1 contactor by pressing S2S13. B) During Feeder -1 Contactor ON condition, TURN OFF Safety loop-1 ckt. By pressing S2S17. Feeder-1 contactor Turns OFF.		
16	Feeder-B Safety Loop:	Check availability of 24V DC supply. Make sure RA-HOG-B selector switch is in position 1 (HOG-B mode), Turn on safety loop-2 ckt. By pressing S2S20, S2K18 will turn on, turn off safety loop- 2 ckt. By pressing S2S19, S2K18 will turn off. (Ensure Feeder B safety loop performance by disconnecting IV coupler Socket, S2K18 will Turn OFF)		
17	To switch ON Feeder -B	Turn on Safety loop-2 ckt, By pressing S2S20. Turn on feeder-2 contactor by pressing S2S16, check the Status of S2K13, S2K2 & Feeder 2 indication lamp will glow. Turn off feeder-2 contactor by pressing S2S15. During feeder-2 contactor on, turn off safety loop-2 ckt. By pressing S2S19, Feeder-2 contactor turns off.		
Operation in RA mode				
8	RA operation of A side:	Give 750 V 3 phase supply at Feeder A side Select RA-A selector switch on position 2, turn on RA-A-ON selector switch in ON position, check operation of S2K1, HOG-A contactor will Turn ON. Press PB S2S12 of Bus coupler S2K2 and Bus Coupler is not getting closed due to safety interlock. Remove 7&10 of HOG A, check S2K1&HOG-A will Turn OFF.		
		Check continuity between 7 & 10 of Feeder A IV coupler socket at RA-A mode.		
19	RA operation of B side:	Give 750 V 3 phase supply at Feeder B side Select RA-B selector switch on position 2, turn ON RA-B-ON selector switch in ON		

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
		position, check operation of S2K3, HOG-B contactor will Turn ON. Press PB S2S12 of Bus coupler S2K2 and Bus Coupler is not getting closed due to safety interlock. Remove 7&10 of HOG B, check S2K3&HOGB- will Turn OFF.		
		Check continuity between 7 & 10 of Feeder B IV coupler plug at RA-B mode.		
20	INDICATION LAMPS AS UNDER IN WORKING CONDITION.	a. 110V DC OK ON b. 24V DC OK ON c. FEEDER 1&2 ON d. HOG A & HOG B ON e. Bus coupler ON f. Working/Non-working power Contactor ON g. Safety Loop 1 &2 ON h. Feeder Earth Leakage 1&2 ON j. Battery charger Healthy ON		
21	FAULTS INDICATION LAMPS ON WHEN FOLLOWING FAULTS OCCURS	a. Over load feeder 1. b. Earth leakage Feeder 1. c. Over load feeder 2. d. Earth leakage Feeder 2.		
22	AUDIO INDICATION COMES UNDER ANY OF THE FOLLOWING CONDITION.	a. Over load feeder 1. b. Earth leakage Feeder 1. c. Over load feeder 2. d. Earth leakage Feeder 2.		
23	HOOTER OFF	Audio indication can be cancelled even when fault exist by pressing the hooter OFF push button leaving the visual indication only.		
24	INSTRUMENTS AT THE SBC ARE CHECKED FOR PROPER FUNCTIONING OF SELECTOR SWITCH IN RA/HOG MODE.			

S.NO	CIRCUIT	TEST ACTIVITY	RCF OBSERVATION	RITES OBSERVATION
	Digital Voltmeter Digital Ammeter Digital Frequency meter Digital Multifunction meter			

MODE	LSLRD RSW positions									Push Button					Contactor ON/OFF status								
	HOG A/RA A (S2KRA-HA)	HOG B/RA-B (S2KRA-HB)	CONV A/B (S2S52)	CONV A ON/OFF (S2S54)	CONV B ON/OFF (S2S55)	RA A ON/OFF	RA B ON/OFF	WP/NWP -A	WP/NWP -B SEL.SWITCH	SAFETY LOOP1ON (S2S18)	SAFETY LOOP 2 ON (S2S20)	FEEDER 1 ON (S2S14)	FEEDER2 ON (S2S16)	BUS COUPLER ON (S2S12)	S2K01 FEEDER 1 CONTACTOR	S2K03 FEEDER 2 CONTACTOR	S2K02 BUS COUPLER	HOG A	HOG B	S2K04 (WP NET1)	S2K05 (NWP NET 1)	S2K06 (WP NET2)	S2K07 (NWP NET2)
1)HOG-A SUPPLY in FEEDER-A	**HOG A**	I	**CONV A/A+B**	**ON**	–	–	–	–	–	**ON**	–	**ON**	–	–	**ON**	–	–	**ON**	–	–	–	–	–
2)HOG-A SUPPLY in FEEDER-A&B	**HOG A**	I	**CONV A/A+B**	**ON**	–	–	–	–	–	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	–	–	–	–	–
3)HOG-B SUPPLY in FEEDER-B	–	**HOG B**	**CONV B/A+B**	–	**ON**	–	–	–	–	–	**ON**	–	**ON**	–	–	**ON**	–		**ON**	–	–	–	–
4)HOG-B SUPPLY in FEEDER-B&A	–	**HOG B**	**CONV B/A+B**	–	**ON**	–	–	–	–	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	–	**ON**	–	–	–	–
5)HOG A SUPPLY IN FEEDER A & HOG B SUPPLY IN FEEDER B	**HOG A**	**HOG B**	**CONV A+B**	**ON**	**ON**	–	–	–	–	**ON**	**ON**	**ON**	**ON**	–	**ON**	**ON**	**OFF**	**ON**	**ON**	–	–	–	–
6)RA A MODE	**RA A**	–	–	–	–	**ON**	–	–	–	–	–	–	–	–	**ON**	–	**OFF**	**ON**	–	–	–	–	–
7)RA B MODE	–	**RA B**	–	–	–	–	**ON**	–	–	–	–	–	–	–	–	**ON**	**OFF**	–	**ON**	–	–	–	–

COACH LOAD SUPPLY	NET 1 SUPPLY	AS WORKING POWER CAR WHEN MODE 1/2/4/5/6	WP-A	–		ON	–	–	–
			NWP-A	–		–	ON	–	–
		AS NON-WORKING POWER CAR WHEN SUPPLYAVAILABLE AT FEEDER A	NWP-A	–		–	ON	–	–
	NET 2 SUPPLY	AS WORKING POWER CAR WHEN MODE 2/3/4/5/7	–	WP-B		–	–	ON	
			–	NWP-B		–	–	–	ON
		AS NON-WORKING POWER CAR WHEN SUPPLYAVAILABLE AT FEEDER A	–	NWP-B		–	–	–	ON

Additional remarks (if any):

CONFIRMING/NON-CONFIRMING

RCF Representative Signature with Date		RITES Representative Signature with Date	
Name		Name	

Checksheet-P6

Calibration record and Competency Check

1. Training and Competency Matrix for manpower deployed -Check if staff deployed for Model rake in each section has necessary Training and competency and record in format below-

S. No.	Name of Supervisor/ Technician	Section	Training & Competency on Crimping as per scheme recommended vide RITES letter No. RITES/RCF/Safety Audit/24 dated 16.07.2025 - Imparted/ Not Imparted	Training on Manufacturing & Testing Revised check list imparted/ not imparted

2. Check the validity of Calibration certificates of Testing instruments used in Stage and Final Testing. No Testing results to be accepted if all instruments used in preparation of Model rake are not calibrated.

S. No.	Section / Shop	Name of Test instrument used for Stage/ Final Testing	Calibration Certificate due date	Calibration Certificate Valid/ Expired
1				
2				
--				

RCF REPERESENTATIVE SIGNATURE & DATE		RITES REPERESENTATIVE SIGNATURE & DATE	
NAME		NAME	