



Modern Coach Factory Raebareilly

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE:

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2016-17/ 345

Coach No.		1	6	2	9	4	/	C	-	DATE OF DISPATCH				0	5	0	1	2	0	1	7		
RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	1	3	8	-	2	0	1	6	-	1	7

- Railway Board's Order No. : 2016/M(C)/142/1 Dated- 18.05.2016
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. SHELL LEADING DIMENSIONS:

S NO	DESCRIPTION	DIMENSION (MM)
1.	Maximum length over body	23700
2.	Maximum width over body	3240
3.	Maximum height from Rail Level	4039
4.	CBC height/Buffer height from Rail level 1105 +0/-15	1)1102 (NPPE) 2)1096 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part M/s E.C.Blade & Tool Chandigarh	PP END 67138 NPP END 67138
		Complete M/s-MCF/RBL	
2.	Side wall	M/s-MCF/RBL	RH 67138 LH 67138
3.	End wall	PP- M/s E.C.Blade & Tool Chandigarh	PP END 67138 NPP END 67138
		NPP- M/s E.C.Blade & Tool Chandigarh	
4.	Roof	M/s-DTL Ancillaries Ltd. PUNE	
5.	Centre Buffer Coupler	M/s ESCORTS	PP END 6524 NPP END 6573
6.	Buffers	N.A.	

6. AIRBRAKE TEST REPORT:

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm ² . ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm ² . OK	8 sec. 3.0 kg/cm ² OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.	Brake must apply	OK

7. PAINTING DETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE
1.	Paint	P.U	VIBGYOR	95/91
2.	Insulation		Satisfactory	

7th
 डिब्बा अभियंता
 SSE/QC/MCF/RBL
 गुणवत्ता विभाग
 रेडिओका, रायबरेली (मालगंज)





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8. DETAIL OF BOGIES :

ITEMS	NPP SIDE				PP SIDE			
Bogie No	160779				160780			
Bogie Type	FIAT				FIAT			
Frame no.	VS/RBL-282				ECBT-292			
Bolster no.	RBL-924				RBL-843			
Axle No	S-3012		S-2972		S-1568		S-1812	
Wheel Dia	917.369	917.263	917.326	917.338	915	915	915	915
Wheel Disc No	000064-6043 06-16	00045-6018 07-16	00141-6047 06-16	00098-6018 06-16	08038-6QL6 06-16	08040-6QL5 06-16	01011-6QJ9 05-16	07869-6QL2 06-16
R.B. Nos.	09-16 07677	09-16 07808	09-16 07901	09-16 07491	07-16 02295	09-16 07607	06-14 01670	07-14 2593
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES

DESCRIPTION		BOGIE NPP SIDE				BOGIE PP SIDE			
		SECONDARY 1		SECONDARY 2		SECONDARY 1		SECONDARY 2	
		OUTER	INNER	OUTER	INNER	OUTER	INNER	OUTER	INNER
Make & Nos.		DN-15-0-1354	G16-6-04	DM-15-0-1305	G16-6-004	DN-15-0-1307	G16-6-018	DN-15-0-1331	G16-6-058
Compressed Ht. at	Tested Load	515	472	515	470	512	470	510	470
Alignment deviation (mm)		9	7	10	9	13	5	14	5

10. TRACEABILITY OF BOGIE ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO	
			NPP SIDE	PP SIDE
1.	Primary outer Spring	CMGBD/L&S	10-16 1100(81,27,47,101)	07-16 2612
2.	Primary Inner Spring	G/CMFSK	G16-6	07-16 76,11-16 234,91-16 117,11-16 226
3.	Primary Damper	GEREP/KONI	KW 24-2016 301530049	06-2016(34778,34757,33435,34801)
4.	Secondary Damper	GEREP	KW 24-2016 301550739	KW 24-2016 301550739
5.	Lateral Damper	KONI	22-2016 5375	22-2016 4653
6.	Yaw Damper	KBI	4767K29,4610K29,4637K29,4771K29	4675K29,4594K29,4593K29,4752K29
7.	Brake Cylinder & Caliper	KBI	4314-29,4331-29,4328-29,4315-29	4276-29,4295-29,4294-29,4278-29
8.	Brake Disc	KBI/FAV	24085283 (0024,0026) 38/16 24085282 (0015,0040) 37/16	03-16(974,975) D 133561-300,KBI 24083565 0033-30/16,02-16(455) D 133561-300
9.	Ball Joint Control Arm	MGN/SGA		
10.	Lateral Bump Stop	SGA		
11.	Traction Centre make	SARITA/EMSON		
12.	Traction lever make	J-I		
13.	Ball joint traction lever	S-BLOC		
14.	Ball joint traction centre	GMT		
15.	Secondary Rubber Pad	TECSPAK		
16.	Rubber Spring	GMT		
17.	Anti roll bar make	EMSON/SARITA		
18.	Roll Link make	SARITA/SGA		
19.	Fork make	SARITA		

SSE/BOGIE/QC/MCF/RBL



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11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Palwal Haryana	16J1821
2.	Pull box	M/s KBI ,Palwal Haryana	
3.	DV	M/s KBI ,Palwal Haryana	2016H2597
4.	PVC	M/s Premier polyfilm, New Delhi	
5.	UIC Vestibule (PPE)	M/s Sun crest Industries West Bengal	
6.	UIC Vestibule (NPPE)	M/s Sun crest Industries West Bengal	
7.	Foot Step	M/s Hi-tech Infra RBL	
8.	Lavatory Inlay	M/s Oasis Fabrication Jagdhari	
9.	Decoupling arrangement	M/s Kohinoor Industries, Faridabad	
10.	Body Side Window	M/s AGF Pvt. Ltd. Kolkata	
11.	Emergency Window	M/s AB Composites, Kolkata	
12.	Hopper Window	M/s Aikon Technologies Pvt. Ltd. Solan(H.P.)	
13.	Non-AC Area Ceiling	M/s J.R. Industries, Jalandhar	
14.	Body Side Doors	M/s JBM ,Faridabad/Sukata CDH	
15.	Vestibule Door(PPE)	M/s Hans pal KXH	
16.	Vestibule Door(NPPE)	M/s Hans pal KXH	
17.	Bio Tank	M/s Rail Fab ,KXH	
18.	Auxiliary Water Tank	M/s Manoj Enterprises Mohali Punjab	
19.	Under Slung Water Tank (2X685L)	M/s Shivalik Fasteners, Mohali Punjab	
20.	Under Slung Water Tank (1X450L)	M/s Shivalik Fasteners, Mohali Punjab	
21.	Bib Cock/Controlled Discharge Tap	M/s KPR Industries, Mohali	
22.	Lavatory Doors	N/A	
23.	Seat & Berth	M/s Savitri Engg. Products Ponta Sahib, HP	
24.	Snack Table	M/s Gandhi Enterprises, Jalandhar	

Jh.
SSE/QC/MCF/RBL
वरिष्ठ मुद्रा अभियंता

गुणवत्ता विभाग
रेडि०का०, रायबरेली (मालगंज)





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12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL: NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT	REFERENCE & PERIOD OF TRIAL
			Frequency	

15. WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake blocks, wheels, push gravity cocks, flushing valves, moldings, window glasses, mirrors, roller blinds, curtain & bulbs etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months date of dispatch of coach or 30 months from date of supply of material whichever is earlier.

NOTE:

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- This doesn't cover any consequential liabilities or damages/loss incurred by anybody; furthermore, it shall in no case extend to repayment, return of the coach or replacement of complete coach.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/ suggestion please Mail at qualityrcfbl@gmail.com

V. S. Pandey अभियंता गुणवत्ता विभाग रेडि0का0, रायबरेली (लालगंज)	AME/QC/MCF/RBL जी.एस. पाण्डेय G.S. Pandey सहायक यांत्रिक अभियंता/गुणवत्ता Assistant Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.CME/FUR/MCF/RBL रूप मु.यां.अभि./फनि. DY CME/FURNISHING रेल कोच फैक्ट्री / रायबरेली / लालगंज RCF / RBL / LLJ





**Govt. of India- Ministry of Railways
(MODERN COACH FACTORY RAEBARELI)**



MCF/RBL/QEFSCN-8001

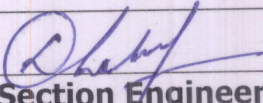
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES			
TYPE COACH	LWSCN	SHELL/COACH NO	16294/C
RAILWAY	CR	DATE OF DESPATCH	
Sr no	Description of test	Remarks	
1.	PUMP EQUIPMENTS	OK	
2.	LIGHTS, NL,LAP CHARGING SOCKETS	OK	
3.	RAILWAY CARRIAGE FAN	OK	
4.	WHEEL SLIDE PROTECTION SYSTEM (WSP)	OK	
5.	WORKING OF 9 KVA TRANSFORMER	OK	
6.	WORKING OF REGULATED BATTERY CHARGER	OK	
7.	SAFETIES :		
7.1.	FUSES AND THEIR RATING	OK	
7.2	CONTROL CIRCUIT	OK	
7.3	POWER CIRCUIT	OK	


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



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MCF/RBL/QEFSCN- 8001

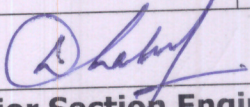
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : TRINITRON On board Sr no : 3377/355/085 HT panel Sr no : NIL	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller& pump box Make: KALSI Sr no PA: 5428/07/16 Sr no.1: 268454/07/16 Sr no.2: 268455/07/16 Srno.CPA: 5469/07/16	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL)	EDTS 151,Rev -c Am-1 & 2	04
04.	Lavatory light fitting assly	LW 76001,Alt nil	04
05.	Fitment of Passenger Alarm cum indication light (PACIL).	As per drg no. LW 76005,Alt -e 02 nos	
06.	Fitment of Switch Plate Assly(Cabin Side)	EDML 086, Rev-03.	10
07.	Fitment of Switch Plate Assly Corridor Side)	EDML 086, Rev 03.	10
08.	Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : R KANWAR	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
09.	Fitment of Fluorescent light fitting for LHB type coaches.	LW 76033,Alt` c,	04
10.	Fitment of Fluorescent light fitting, SINGLE with 110V AC/DC ballast.	CC 76213,Alt` d'.	24
11.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches	CC76289 & CC76443	10


Senior Section Engineer
Quality control / Electrical
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**Govt. of India- Ministry of Railways
(MODERN COACH FACTORY RAEBARELI)**



MCF/RBL/QEFSCN- 8001

VER. 01.06.2016

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

12.	Fitment of Compact Fluorescent Light fitting DOUBLE with 110V AC/DC ballast.	CC 76216, Alt `c'.	02
13.	FL Tubes, 02 Feet ,18Watt ,colour temp 6500K	RDSO/PE/SPEC/TL 0011, Sec I, Rev I, 07 2001.	24
14.	Battery fuse box +ve Make : NEC	LW 71001,Alt-F	01
15.	Battery fuse box -ve Make : INTEG	LW 71002,Alt-F	01
16.	Regulated battery charger Make : HI-REL Sr no: 16100248	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
17.	9KVA transformer Make : PANTRONICS Sr no : 15015637	As per RDSO/PE/SPEC/TL 0158, 2010, Rev `0',Ty I.	01
18.	ZS coupling 400A/750V/03Ph/50hz. Make : S INTERNATIONAL	As per spec No EDTS 105,Rev`e' Am-2	02 sets
19.	Feeder junction boxes. Make : NEC	EDTS-328 REV-C	02
20.	Wheel set earthling equipment. Make : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02
21.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0116212499	M/s : KNORR	01 set
22.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHH MODIFIED TRAY TOSKED-644 Make : AMARARAJA Lug date : 12/2016	RDSO/pe/spec/ac-0009 rev-1-2008 amdt-1	01 set
23.	Battery box for LHB coaches.	CC 91205	01

SSE/EL/QC	Dy CEE(P)/MCF/RBL

वरिष्ठ खण्ड अभियन्ता
विद्युत उत्पादन-गुणवत्ता
रेल कोच फैक्टरी / लालगंज / रायबरेली
Sr. Section Engineer
Electric Production - Quality
RCF / RBL / LLJ

उप मुख्य विद्युत अभियन्ता (उत्पादन)
रेल कोच फैक्टरी-रायबरेली, लालगंज
DY.CEE/P-RCF/RBL/LLJ



Govt. of India- Ministry of Railways
(MODERN COACH FACTORY RAEBARELI)



QUALITY CONTROL RECTIFICATION ATTENDED CALL MEMO

MCF/RBL/QEF/6009

VER. 01.06.2016

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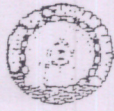
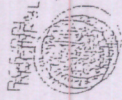
Coach no... LS CW-210

DATE: 05-1-17

1. Nature of QC inspection : Audit/100% ✓
2. Sub Assembly/Assembly/
Component No Reference : —
3. Stage Reference : Stage IX (Outsource)
4. (i) Whether offered initially/
After Rectification : After rectification
(ii) If rectified, QC Defect Report No: QEI Dated: 04-1-17

Please check and advice clearance.

	Signature	
Lawrence Latra	Name	Rajendra Kr
SSE/JE-Elect/QC	Designation	SSE/JE EP-stage- <u>IX</u>



GOVT. OF INDIA- MINISTRY OF RAILWAYS
(MODERN COACH FACTORY-RAEBARELI)



QUALITY CONTROL RECTIFICATION ATTENDED CALL MEMO

MCF/RBL/QEF/6009

VER.01.06.2016

Page 1 of 1

DATE: 05/01/17

Coach no. LSCN-210

1. Nature of QC inspection : Audit/100%
2. Sub Assembly/Assembly/
Component No Reference : _____
3. Stage Reference : Stage - IX
4. (i) Whether offered initially/
After Rectification : After rectification
(ii) If rectified, QC Defect Report No: Q.C.I Dated: 04-1-17

Please check and advice clearance.

	Signature	
Lawrence Lalra	Name	SUDHAKAR
SSE/IE-Elect/QC	Designation	SSE/IE EP-stage-IX/MCF/RBL/LLS