



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 01

DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1136

RLY	N	F	R	Coach No.	1	9	7	6	4	4	/	C	DATE OF DISPATCH	2	7	-	1	1	-	1	9
DISPATCH TO	Sr.DME/DBRG			Type	L	W	S	C	N	1	Shell No.	9	7	5	1	2	FUR.NO.	LSCN-1341			

1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 21-11-2019
2. **Tare Weight of Coach** : 41.24 Tones
3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. **Special feature: -1.-** Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiveley) letter no. MC/LHB/Brake, Dated 27.09.2018

2.- RFID(Radio frequency identification) fitted for traceability of coach

5. 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/-10	1) 1100 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S-SFPL
		NPP END	M/S-SFPL
	Complete	MCF/RBL	97512
2.	Lav. side wall	M/S- RAIL TECH KXH	LAV.1
		M/S- RAIL TECH KXH	LAV.2
		M/S- RAIL TECH KXH	LAV.3
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)
		RH SIDE	MCF/RBL(CONTRACTOR V4U)
4.	End wall	PP END	M/s-P.D.STEEL PANCHKULA
		NPP END	M/s-P.D.STEEL PANCHKULA
5.	Roof	M/s-ECBT	364
6.	Centre Buffer Coupler	M/S- ESCORTS	PP END 1984
			NPP END 2033

7. 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	08 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

8. PAINTING DETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
1.	Paint	P.U	M/s -NEROLAC	(SUPPLY & APPLY)	90/88	02.11.19
2.	Insulation			Satisfactory		

Ramesh
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेलवे, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	1	2	FUR.NO	LSCN-1341
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192234				192233			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1710				MCF/RBL-2037			
Bolster no.	MCF/RBL-2888				MCF/RBL-2827			
Axle No	19 P- 2807 RWF		19 L - 5001 RWF		19 L - 4980 RWF		19 L - 5132 RWF	
Wheel Dia	917.477	917.468	917.437	917.438	917.427	917.441	917.547	917.503
Wheel Disc No	TZ 08-19 72843-9SK2	TZ 07-19 69528-9RM9	TZ 07-19 61884-9RP7	TZ 07-19 62516-9RNO	TZ 07-19 71051-9RN5	TZ 07-19 71048-9RN5	TZ 08-19 73712-9SL1	TZ 08-19 75757-9RR6
R.B. Nos.	09-19-37181	10-19-39609	08-19-27943	10-19-39458	08-19-26680	10-19-39274	08-19-27686	08-19-28091
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10. 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.	CMAFJ06-19-5101-104	CMFSK05-19-5100-027-317	CMAFJ06-19-5101-118	CMFSK05-19-5100-027-318	CMAFJ06-19-5101-98	CMFSK05-19-5100-027-536	CMAFJ06-19-5101-101	CMFSK05-19-5100-027-486
Compressed Ht. at Tested Load	516	469.5	515	468	515	467.5	515	470
10Alignment deviation (mm)	15	9	15	10	15	9	15	9

9+11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14677,13349	13334,13345
2.	Primary outer Spring	CMFSK	10-19 1100-114 (2122,2141,2115,2145)	10-19 1100-114 (2150,2113,2134,2119)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (337,240,211,308)	10-19 1101-101 (336,297,301,338)
4.	Primary Damper	KONIC	03-19 (06430,05059,06722,06355)	03-19 (06403,06478,06472,06711)
5.	Secondary Damper	IAI	09-19 (272743,272825)	09-19 (272842,2730)
6.	Lateral Damper	IAI	07-19 9566	07-19 9580
7.	Brake Cylinder	FAV	K19(597,515,514,165)	(N19-033,K-19-472,465,175)
8.	Brake Caliper	FAV	L19(613,611,610,612)B	L19(717,715,518,580)B
9.	Brake Disc	KBI	24203755 0041-42/19,24203754 0050-42/19 24203754 0047-42/19,24203707 0038-41/19	24203751 0087-42/19,24203751 0013-42/19 24203752 0046-42/19,24203753 0012-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	ARYAN/SGA		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	290819-2,210819-2,290819-2,210819-2	290819-2,290819-3,280819-2,210819-2
22.	Control Arm Lower	RVE	230819-3,RVE,230819-3,290819-3	RVE,290819-3,290819-3,RVE
23.	Phonic Wheel	KBI	K-05-19	K-05-19

Signature of SSE/Bogie/QC





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12. TRACEABILITY OF FURNISHING ITEMS:

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S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	
2.	Pull box	M/S- KBI, FARIDABAD	3618 35/19
3.	Distribution valve	M/S- KBI, FARIDABAD	
4.	FIBA	N/A	2019H8826
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s- A.B.COMPOSTE KOLKATA	
8.	PVC	M/s- A.B.COMPOSTE KOLKATA	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
13.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
14.	Body Side Window	M/s- A.B.COMPOSTE KOLKATA	
15.	Emergency Window	M/s- A.B.COMPOSTE KOLKATA	
16.	Hopper Window	M/s- A.B.COMPOSTE KOLKATA	
17.	Side panel	M/s- A.B.COMPOSTE KOLKATA	
18.	Roof ceiling	M/s- A.B.COMPOSTE KOLKATA	
19.	Door way ceiling	M/s- A.B.COMPOSTE KOLKATA	
20.	Body Side Door	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank (Pressurized flushing)	M/s-RASANDIK ENGG. INDUSTRIES & IMI	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FAST. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
28.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
29.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
30.	Lavatory Doors	M/s- A.B.COMPOSTE KOLKATA	
31.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104719,104720

Reema
SSE/QC/MCF/RBL
वारि०अनु० अभियंता

गुणवत्ता विभाग
#०डि०का०, रायबरेली (लालगंज)





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DISPATCH TO	Sr.DME/DBRG				Type	L	W	S	C	N	1	Shell No.	9	7	5	1	2	FUR.NO.	LSCN-1341			
13. MODIFICATION (IF ANY)											:	NIL										

13. MODIFICATION (IF ANY) : NIL

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL : NIL

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

16WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30 months from the 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 qualityrcfrbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from date of Application for any manufacturing /Application as per clause -4, para- V of RDSO specification no .M&C/PCN/100/2013-Given below

S.No	Time period	Gloss Retention (initial gloss >85 unit at 60°)	Colour Retention rating on 0-10 scale (initial rating of painted panels/coach or ISC/RAL shade card shall be taken as 10)	Adherence of paints (with each other and with substrate)Cross-cut tape adhesion test as per ASTM D:3359/97(or latest)
1	After 1 year	80% of initial gloss	7	5B
2	After 2 year	70% of initial gloss	6	5B
3	After 3 year	60% of initial gloss	5	4B

If any imperfection is noticed or any defect arises during the warranty -period due to improper material used or due to bad workmanship, the contractor shall be bounded to set right the defect/ imperfection on free of cost basis at the base depot of the coach.

SSE/QC/MCF/RBL	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ यांत्रिक अभियंता/गुणवत्ता विभाग
70डि0का0, रायबरेली (लालगंज)

वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

जोगिन्दर सिंह
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli





Modern Coach Factory Raebareli
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197644/C
RAILWAY	NFR	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





Modern Coach Factory Raebareli
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H.355.19.H.376 HT Panel Sr no : H.355.19.H.325	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/0109 Sr no.1 : 5662 Sr no.2 : 5833 Srno.CPA: sr no -NIL-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: KAVERI	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : RECORD/SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: ORIENT	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: DR AUTO	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	04
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : INTRA	CC76289 & CC76443	09

(Signature)

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





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ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

11.	Battery fuse box +ve Make : SSK	LW 71001, Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002, Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5G 19112	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2527	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0', Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES	As per spec No EDTS 105, Rev` e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : AECO	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : PRIME ELECT.	EDTS101, REV-C, AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119242197	M/s : KNORR	01 set
19.	110V, 120AH, VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WITH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 06/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : ANANYA	CC 91205	01

SSE/EL/QC	AWM(ELECT.)/MCF/RBL
वरिष्ठ अनुभाग अभियन्ता	SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
S: Electrical Engineer / RCF / RBL