



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/2019-20/1177

RLY	N	F	R	Coach No.	1	9	7	7	0	2	/	C	DATE OF DISPATCH	3	0	-	1	1	-	1	9
DISPATCH TO	Sr.DME/DBRG			Type	L	W	S	C	N	1	Shell No.	9	7	5	2	6	FUR.NO.	LSCN-1360			

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) 1104 (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-NECHD
		NPP END M/S-NECHD	09/2019
	Complete	MCF/RBL	10/2019
2.	Lav. side wall	M/S- R.TECH KXH	97526
		M/S- R.TECH KXH	LAV.1 - LAV.2 -
		M/S- R.TECH KXH	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	327/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	327/02
4.	End wall	PP END M/S- PD STEEL PANCHKULA	---
		NPP END M/S- PD STEEL PANCHKULA	---
5.	Roof	MCF/CONT.	153
6.	Centre Buffer Coupler	M/s- ESCORT ENT.	PP END 1954 NPP END 1929

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 -GS	(SUPPLY & APPLY)	90/89	18.11.19
2.	Insulation	Satisfactory				

[Signature]
SSE/QC/MCF/RBL

वरिष्ठ अनु० अभियंता
गुणवत्ता विभाग
रेडि०का०, 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. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192239				192240			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1700				ECBT-1126			
Bolster no.	MCF/RBL-2852				APEX-35			
Axle No	19 S- 1764 RWF		19 L - 5289 RWF		19 R - 7306 RWF		19 R- 7085 RWF	
Wheel Dia	917.49	917.529	917.492	917.511	917.506	917.469	917.534	917.473
Wheel Disc No	TZ 07-19 71475-9RN9	TZ 08-19 75215-9SK6	TZ 07-19 68828-9RM5	TZ 07-19 67913-9RM6	TZ 07-19 69255-9RL6	TZ 07-19 64913-9RP0	TZ 08-19 75886-9SK6	TZ 08-19 74454-9SK8
R.B. Nos.	09-19-36630	09-19-17962	08-19-28129	0919-38532	09-19-37366	09-19-38512	09-19-38299	09-19-38698
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.	CMAFJ06-19-5101-152	CMFSK05-19-5100-027-463	CMAFJ06-19-5101-105	CMFSK05-19-5100-027-434	CMAFJ06-19-5101-117	CMFSK05-19-5100-027-466	CMAFJ06-19-5101-141	CMFSK05-19-5100-027-557
Compressed Ht. at Tested Load	516	469.5	516	472	516	469	516	469
10Alignment deviation (mm)	8	7	10	8	10	13	7	12

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16263,18089	17073,18087
2.	Primary outer Spring	CMFSK	10-19 1100-114 (955,61,148,55)	10-19 1100-114 (147,122,104,106)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (339,335,363,2078)	10-19 1101-101 (321,354,2137,309)
4.	Primary Damper	KONIC	03-19 (06928,04752,01989,05722)	03-19 (05858,02182,02140,02414)
5.	Secondary Damper	IAI	09-19 (272746,272828)	09-19 (272649,272744)
6.	Lateral Damper	IAI	05-19 251546	05-19 251243
7.	Brake Cylinder	FAV	K19(550,467,475,575)	K19(158,1026,1025,156)
8.	Brake Caliper	FAV	L19(67581,579,714,716)B	L19(548,54,6547,549)B
9.	Brake Disc	KBI	24203757 0065-42/19,24203757 0024-42/19 24200059 0058-38/19,24200057 0022-38/19	24203756 0033-42/19,24203756 0071-42/19 24203758 0001-42/19,24203757 0051-42/19
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	SGA/ ARYAN		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	230819-2,270819-3,270819-3	290819-3,230819-3,230819-3,210819-3
22.	Control Arm Lower	RVE	230819-3,RVE,230819-3,290819-2	240819-3,230819-3,210819-3,RVE
23.	Phonic Wheel	KBI	K-05-19	K-05-19

Signature of SSE/Bogie/QC

वरिष्ठ अनुसंधान अभियंता

गुणवत्ता विभाग

रेलवे, रायबरेली (लालगंज)





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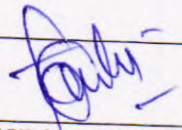
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DISPATCH TO		Sr.DME/DBRG			Type	L	W	S	C	N	1	Shell No.	9	7	5	2	6	FUR.NO.	LSCN-1360		

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI FARIDABAD	
2.	Distribution valve	M/S- KBI FARIDABAD	2019040111
3.	Pull box	M/S- KBI, FARIDABAD	1904A111
4.	FIBA	NA	
5.	Foot Step		
6.	Decoupling arrangement	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
7.	Floor board	M/S-ELASTOMER LINING WORKS, MUMBAI	
8.	PVC	M/s-SHREE RAM PNL GOVINDGARH	
9.	Lavatory Inlay	M/S -RESPONSIVE IND DEHLI	
10.	UIC Vestibule (PPE)	M/s- SEEMA IND. BHOPAL	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S-SUNCREST IND.KOLKATA	
13.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
14.	Body Side Window	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
15.	Emergency Window	M/s-MECIDON BHOPAL+FP KOLKATA	
16.	Hopper Window	M/s-AGF INDS KOLKATA	
17.	Side panel	M/S- SHATABDHI VADODARA + VEDANSH RBL	
18.	Roof ceiling	M/s-WONDER LAMINATE KOLKATA	
19.	Door way ceiling	M/s-ACME INDS DELHI	
20.	Body Side Doors 1,3	M/s-ZAAM TOOLS RBL	
21.	Body Side Doors 2,4	M/S- JVR INDS LDH.	
22.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Bio Tanks	M/S- JBM INDUSTRIES, FARIDABAD	
25.	Auxiliary Water Tank	M/s-RAIL FAB KXH	
26.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. MOHALI	
27.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST MOHALI	
28.	Controlled Discharge Tap	M/S- AMIT ENG. MOHALI	
29.	Flexible Faucet	M/s- EAUSET PVT LTD GURGAON	
30.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
31.	Lavatory Doors	M/s-KAPCO VALES JALANDHAR	
32.	Seat & Berth	M/s-J.R. JALANDHAR	
33.	RFID	M/S- HINDUSTAN FIBRE GLASS WORKS	
		M/s-ID TECH SOLUTION GURGAON	
			Sr.104727-104728


SSE/QC/MCF/RBL

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रेल डिब्बा कारखाना, रायबरेली (सालगंज)



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DISPATCH TO	Sr.DME/DBRG			Type	L	W	S	C	N	1	Shell No.	9	7	5	2	6	FUR.NO.	LSCN-1360			

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 qualityrcfbl@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.COM/MCF/RBL

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गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली

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

जोगिन्दर सिंह
Joginder Singh
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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PAGE 1 OF 3

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	197702/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





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PAGE 2 OF 3

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.G.351 HT Panel Sr no : H.355.19.G.320	EDTS 333, Rev`01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0066 Sr no.1 : 19100183 Sr no.2 : 19100041 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: DR AUTO	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 : RECORD/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: RT VISION	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

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Quality control / Electrical
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PAGE 3 OF 3

FOR ELECTRICAL ITEMS

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11.	Battery fuse box +ve Make : ISGPL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5K-19968	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2542	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 : AUTO	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 180641-60147-0074	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 09/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : TECHNO	CC 91205	01

 वरिष्ठ अनुभाग अभियन्ता SSE/EL/QC आयुक्त निर्यंत्रण आयुक्त निर्यंत्रण / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL
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