



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/2019-20/1157

RLY	N	F	R	Coach No.	1	9	7	6	7	7	/	C	DATE OF DISPATCH	2	9	-	1	1	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	2	1	FUR.NO.	LSCN-1349
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- Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 21.11-2019
- Tare Weight of Coach** : 41.24 Tones
- Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL
- 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) 1102 (NPPE) 2) 1096 (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
2.	Lav. side wall	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)
		RH SIDE	MCF/RBL(CONTRACTOR V4U)
4.	End wall	PP END	M/S- DTL PUNE
		NPP END	M/S- DTL PUNE
5.	Roof	MCF/CONT.	148
6.	Centre Buffer Coupler	M/s- ESCORTS LTD	PP END 1964 NPP END 1983

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	07 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 -AXLATA	EMPRISE	94/94	05.11.19
2.	Insulation			Satisfactory		

(Signature)
SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रेलडि०का०, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192237				192238			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1709				RBL-1703			
Bolster no.	APEX-25				APEX-27			
Axle No	19 L- 5082 RWF		19 L - 5132 RWF		19 L - 4958 RWF		19 L- 5059 RWF	
Wheel Dia	917.529	917.496	917.461	917.561	917.507	917.577	917.495	917.493
Wheel Disc No	TZ 07-19 67911-9RM6	TZ 08-19 66749-9PI7	TZ 07-19 65815-9RQ0	TZ 08-19 75012-9RK9	TZ 07-19 70400-9RM8	TZ 07-19 66745-9PI7	TZ 07-19 62428-9RP0	TZ 06-19 73052-9ST2
R.B. Nos.	09-18-22579	09-18-23374	09-18-22029	09-18-22264	09-18-23274	09-18-21575	09-18-22090	09-18-21339
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.	CMGBD10-19-F09-750-91	CMFSK05-19-5100-027-10	CMGBD10-19-F09-750-757	CMFSK05-19-5100-027-24	CMGBD09-19-757-18	CMFSK05-19-5100-027-119	CMGBD09-19-757-2	CMFSK05-19-5100-027-112
Compressed Ht. at Tested Load	515	472	514	472	516	470	515.5	470
10Alignment deviation (mm)	26	11	26	10	19	14	18	14

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17357,17343	16880,17355
2.	Primary outer Spring	CMFSK	10-19 1100-114 (2109,2139,2183,344)	10-19 1100-114 (2190,218,92169,2192)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (1986,2041,2136,2143)	10-19 1101-101 (347,2109,2123,2104)
4.	Primary Damper	KONIC	03-19 (06700,06461,07949,06421)	03-19 (06576,07843,06391,06716)
5.	Secondary Damper	IAI	09-19 (272852,272833)	09-19 (272923,272963)
6.	Lateral Damper	IAI	05-19 251365	05-19 251522
7.	Brake Cylinder	ESCORT	(47614,47847,47834,47616)	(45911,46003,46207,45975)
8.	Brake Caliper	ESCORT	(27216,27430,27277,27218)	(25731,245703,25934,25795)
9.	Brake Disc	KBI	24203753 0093-42/19,24203753 0051-42/19 24203753 0066-42/19,24203754 0060-42/19	24200058 0010-37/19,24200052 0062-37/19 24200055 0043-37/19,24200057 0002-37/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	SGA		
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/SF	210819-2,210819-2,210819-2,290819-2	350,SF,72,113
22.	Control Arm Lower	RVE/SF	290819-3,230819-2,290819-3,230819-3	91,75,25,SF
23.	Phonic Wheel	KBI	K-05-19	K-05-19

Signature of SSE/Bogie/QC

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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI FARIDABAD	2019040127
2.	Distribution valve	M/S- KBI FARIDABAD	1904A127
3.	Pull box	M/S- KBI, FARIDABAD	
4.	FIBA	NA	
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-SHREE RAM PNL GOVINDGARH	
8.	PVC	M/S -RESPONSIVE IND DEHLI	
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-MECIDON INDS BHOPAL	
15.	Emergency Window	M/s-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI VADODARA + VEDANSH RBL	
17.	Side panel	M/s-WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDS DELHI	
19.	Door way ceiling	M/s-ZAAM TOOLS RBL	
20.	Body Side Doors	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 Tanks	M/s-RASANDIK ENGG. INDUSTRIES GURGAON	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. BADDI	
26.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST MOHALI	
27.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
28.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
29.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
30.	Lavatory Doors	M/s-J.R. JALANDHAR	
31.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104725-104726

SSE/QC/MCF/RBL

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रे०डि०का०, रायबरेली (लालगंज)



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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:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfbl@gmail.com
6. 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 गुणवत्ता विभाग रेडिओ, रायबरेली (लालगंज)	SME/QC/MCF/RBL Assistant Mechanical Engineer / Quality-1 आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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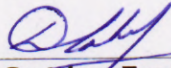
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FOR ELECTRICAL ITEMS

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	197677/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.392 HT Panel Sr no : H.355.19.G.344	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0013 Sr no.1 : 19100056 Sr no.2 : 19100070 Srno.CPA: sr no -2019/11/048-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: RT VISION	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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FOR ELECTRICAL ITEMS

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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: W4K5H 19642	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2531	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 : 170076-11932-0030	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI 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 : ANANYA	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आर०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL