



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/2019-20/1114

RLY	N	F	R	Coach No.	1	9	7	6	4	9	/	C	DATE OF DISPATCH	2	3	-	1	1	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	3	5	6	FUR.NO.	LSCNG-301
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated-25-10-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
4. Special features :

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S-ACME INDIA NDLS
B.	Anti slip friendly Grab Bar	M/S-ACME INDIA NDLS
C.	Provision of Health Faucet in lavatories	M/S-ACME INDIA NDLS
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S-ACME INDIA NDLS
E.	GFRE ceiling instead of NFTC	M/S-ACME INDIA NDLS
F.	DGFRP panels instead of LP panels	M/S-ACME INDIA NDLS
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S-ACME INDIA NDLS
H.	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	
I.	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) 1099 (NPPE) 2) 1102 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S- CHENNAI RADHA ENG.
			NPP END M/S- CHENNAI RADHA ENG.
		Complete	M/S- CHENNAI RADHA ENG.
2.	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1 - LAV.2 -
		M/S-MIDAS GUJRAT	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF(CONT. V4U)	181/01
		RH SIDE MCF(CONT. V4U)	181/02
4.	End wall	PP END M/s- DTL PUNE	--
		NPP END M/s- DTL PUNE	--
5.	Roof	M/S-ECBT	282
6.	Centre Buffer Coupler	M/s- SANROK	PP END 13407 NPP END 13390

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/cm². ➤ 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 - VIBGYOR	SUPPLY & APPLY	89/88	28.08.19
2.	Insulation			Satisfactory		

(Signature)
SSE/QC/MCF/RBL
मुख्य निरीक्षक

रेडिओका, रायबरेली (लालांज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	3	5	6	FUR.NO	LSCN-G-301
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192372				192371			
Bogie Type	FIAT				FIAT			
Frame no.	RBL/LS5 - 1083				RBL- 1207			
Bolster no.	SECPL-182				SECPL-203			
Axle No	19 S- 4756 RWF		19 S - 5398 RWF		19 S - 4809 RWF		19 L- 5600 RWF	
Wheel Dia	917.488	917.46	917.455	917.449	917.51	917.531	917.527	917.486
Wheel Disc No	TZ 07-19 62429-9RP0	TZ 06-19 61148-9QL1	TZ 07-19 63972-9RQ8	TZ 07-19 65816-9RQ0	TZ 08-19 73051-9SJ7	TZ 07-19 68052-9RN4	TZ 07-19 61885-9RP7	TZ 07-19 7150-9RN5
R.B. Nos.	09-18 22067	09-18 22026	09-18 21514	09-18 23303	09-19 22745	09-18 21695	09-18 21520	07-19 22334
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
Make & Nos.	TAYAL & CO. Sr.NO.19-07 2346	TAYAL & CO. Sr.NO.19-07 2484	TAYAL & CO. Sr.NO.19-07 2448	TAYAL & CO. Sr.NO.19-07 2431

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16283,18103	16273,16272
2.	Primary outer Spring	CMFSK	10-19 1100-115 (741,1137,778,788)	10-19 1100-114 (897,846,1156,1166,)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (549,530,901,539)	10-19 1101-101 (551,546,524,547)
4.	Primary Damper	KONIC	03-19 (06683,06589,06432,07755)	03-19 (07933,05929,07802,05929)
5.	Secondary Damper	GB	04-19 (01393,01378)	04-19 (242855,272831)
6.	Lateral Damper	KONI	05-19 01929	05-19 251468
7.	Brake Cylinder	FAV	K19(494,422,418,495)	K19(766,605,646,779)
8.	Brake Caliper	FAV	L19(713,711,710,712)B	K19(892,890,791,893)B
9.	Brake Disc	KBI	24200057 0051-38/19,24200057 6045-38/19 24200058 0077-37/19,24200053 0017-37/19	24200060 0027-38/19,24200060 0030-38/19 24200057 0044-38/19,24200060 0036-38/19
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	GMT		
16.	Leveling Valve	KNORR	19 B- 7585,19 B- 6433	19 B- 7446,19 B- 7468
17.	Check Valve	KNORR	20316	20322
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE/SF	240819-3,280819-2,230819-3,240819-2	290819-1,290819-4,290819-1,290819-4
22.	Control Arm Lower	RVE/SF	270819-3,280819-2,210819-3,290819-2	270819-1,270819-3,270819-1,270819-2
23.	Phonic Wheel	KBI	05-19	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 FAIVELY TRANS. TECH.INDIA LTD	D19133B
2.	Distribution valve	M/S FAIVELY TRANS. TECH.INDIA LTD	19045632B
3.	Pull box	M/S-KBI, FARIDABAD	
4.	Foot Step	M/S-SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/S- TWPL MUMBAI	
7.	PVC	M/S-ACME INDIA NDLS	
8.	Lavatory Inlay	M/S-SEEMA INDS BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S-RAKESH IRON &STEEL WORKS KXH	
12.	Gangway bridge mounting (NPPE)	M/S-RAKESH IRON &STEEL WORKS KXH	
13.	Body Side Window	M/S-ACME INDIA NDLS	
14.	Emergency Window	M/S-ACME INDIA NDLS	
15.	Hopper Window	M/S-ACME INDIA NDLS	
16.	Side panel	M/S-ACME INDIA NDLS	
17.	Roof ceiling	M/S-ACME INDIA NDLS	
18.	Door way ceiling	M/S-ACME INDIA NDLS	
19.	Partition frame	M/S-ACME INDIA NDLS	
20.	Partition pillar	M/S-ACME INDIA NDLS	
21.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- HANSPAL KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL KXH	
24.	Bio Tanks	M/S- JSL LIFESTYLE LTD GURGAON	
25.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/s- SHIVLIK FAST MOHALI	
27.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
28.	Health Faucet	M/s- KAPCO VALES JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALES JALANDHAR	
30.	Controlled Discharge Tap	M/s- AGMECO PVT LTD U.K	
31.	Lavatory Doors	M/S-ACME INDIA NDLS	
32.	Seat & Berth	M/S-ACME INDIA NDLS	
33.	Snack Table	N/A	
34.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.-106661-104665

(Signature)
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



Modern Coach Factory Raebareli

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DISPATCH TO		Sr.DME/DBRG		Type	L	W	S	C	N	1	Shell No.	9	7	3	5	6	FUR.NO.		LSCNG-301		

13. MODIFICATION (IF ANY)

13. MODIFICATION (IF ANY)

: Partition frame & Partition pillar

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

16. WARRANTY:

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 गुणवत्ता विभाग २०डि०का०, रायबरेली (लालगंज)	SME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.CQM/MCF/RBL 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
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

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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	197649/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
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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FOR ELECTRICAL ITEMS

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

01.	Switch board cabinet Make : MREM On Board Sr no : MREM-355047 HT Panel Sr no : MREM-355050	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/58 Sr no.1 : 3230 Sr no.2 : 6198 Srno.CPA: 2019/11/010-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 : SALZER/SSK	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: 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 : DR AUTO	CC76289 & CC76443	09

Senior Section Engineer
Quality control / Electrical
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FOR ELECTRICAL ITEMS

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

11.	Battery fuse box +ve Make : INDORAIL	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 19185	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2490	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0`,Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	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 : FAIVELEY Sr no : 10702	M/s : FAIVELEY	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 : ANANYA	CC 91205	01

 SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	 AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL
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गुणवत्ता नियंत्रण
आपरेटिंग/लालगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL

