



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/2019-20/1155

RLY	N	F	R	Coach No.	1	9	7	6	7	5	/	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	5	FUR.NO.	LSCN-1346
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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) 1098 (NPPE) 2) 1098 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

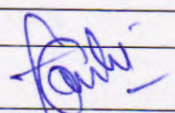
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-NECHD	09/2019
		NPP END M/S-NECHD	10/2019
	Complete	MCF/RBL	97525
2.	Lav. side wall	M/S- COMPETENT JUC	LAV.1 - LAV.2 -
		M/S- COMPETENT JUC	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	243/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	243/02
4.	End wall	PP END M/S- PD STEEL PKL	---
		NPP END M/S- PD STEEL PKL	---
5.	Roof	M/s-ECBT	372
6.	Centre Buffer Coupler	M/s-FRONTIER	PP END 04P1 NPP END 146P1

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 -VIBGYOR	Supply & apply	90/89	05.11.19
2.	Insulation			Satisfactory		


SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रेलवे जं०, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192221				192222			
Bogie Type	FIAT				FIAT			
Frame no.	RAIL TECH-10				RAIL TECH-10			
Bolster no.	RBL-2739				RBL-1702			
Axle No	19 S- 4469 RWF				19 L- 5054 RWF			
Wheel Dia	917.809	917.408	917.421	917.341	917.43	917.35	917.504	917.517
Wheel Disc No	TZ 07-19 64706-9RQ1	TZ 08-19 73777-9SL1	TZ 07-19 66054-9RK8	TZ 07-19 68386-9RQ6	TZ 07-19 66511-9RR2	TZ 07-19 62634-9RL5	TZ 08-19 73711-9SL2	TZ 07-19 66055-9RR8
R.B. Nos.	08-19-20424	09-18-22231	09-18-22912	09-18-22426	09-18-21898	09-18-22529	09-18-22238	09-18-17973
CT R B Make	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.	CMAFI06-19-5101-172	CMFSK05-19-5100-27-66	CMAFI06-19-5101-167	CMFSK05-19-5100-27-123	CMAFI06-19-5101-153	CMFSK05-19-5100-027-72	CMAFI06-19-5101-119	CMFSK05-19-5100-027-88
Compressed Ht. at Tested Load	515	470.5	515	467.5	515	470	515	467.5
10Alignment deviation (mm)	10	14	10	14	10	11	10	9

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14618,18099	18108,16270
2.	Primary outer Spring	CMFSK	10-19 1100-114 (982,1080,1065,1007)	10-19 1100-114 (1010,1078,1056,856)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (1227,1756,1757,1847)	10-19 1101-101 (1230,1833,464,679)
4.	Primary Damper	KONIC	03-19 (05296,06912,08410,05391)	03-19 (05410,06915,06920,07731)
5.	Secondary Damper	IAI	09-19 (272749,272940)	09-19 (273023,272445)
6.	Lateral Damper	IAI/KNORR	05-19 250905	05-19 9549
7.	Brake Cylinder	ESCORT	(43354,43354,28365,28496)	(49304,49030,48307,49346)
8.	Brake Caliper	ESCORT	(28504,28419,49027,49305)	(28495,28368,27579,28506)
9.	Brake Disc	KBI	24203753 0041-42/19,24203754 0002-42/19 24203753 0051-42/19,24203746 0048-42/19	24203753 0057-42/19,24203752 0028-42/19 24203757 0075-42/19,24203751 0074-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	AR/GMT		
16.	Secondary Rubber Pad	AR		
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	210819-3,210819-3,210819-3,210819-3	290819-2,260819-2,210819-3,210819-3
22.	Control Arm Lower	RVE	270819-1,270819-1,300819-2,270819-2	160819-2,160819-2,200819-2,180819-3
23.	Phonic Wheel	KBI	K-04-19	K-04-19

Signature of SSE/Bogie/QC

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मॉडर्न कोच फैक्ट्री, रायबरेली (लाल गंज)





Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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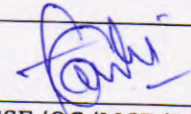
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORTS LTD RAILWAY EQUIPMENT	2019040129
2.	Distribution valve	M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.	1904A129
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-EXCEL +FP KOLKATA	
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 with ele. Pneu. flushing	M/s-RASANDIK ENGG. INDUSTRIES GURGAON &IMI	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. 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.103731-103732


SSE/QC/MCF/RBL

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मोडर्न कोच फैक्ट्री, रायबरेली (लाजपतगंज)



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DISPATCH TO	Sr.DME/DBRG			Type	L	W	S	C	N	1	Shell No.	9	7	5	2	5	FUR.NO.		LSCN-1346			
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 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 गुणवत्ता विभाग रेल डिब्बा कारखाना, रायबरेली	SME/QC/MCF/RBL Assistant Mechanical Engineer / Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy. COM/MCF/RBL उप मुख्य गुणवत्ता प्रबंधक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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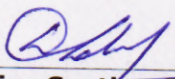
DATE: 18.01.2017

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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	197675/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 : HIND RECTIFIERS On Board Sr no : H.355.19.G.323 HT Panel Sr no : H.355.19.H.379	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0062 Sr no.1 : 19100461 Sr no.2 : 19100501 Srno.CPA: sr no - 2019/11/009-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 : 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


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 : SSK	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: W4K5H 19638	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2528	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 : ESCORT Sr no : 180641-60147-0097	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH 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 वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आपरेटिंग/लालगंज/रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL