



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/2019-20/1224

RLY	N	F	R	Coach No.	1	9	7	7	3	2	/	C	DATE OF DISPATCH	1	1	-	1	2	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	6	5	FUR.NO.	LSCN-1355
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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) 1099 (NPPE) 2) 1100 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO.
1.	Under frame	PP END M/S-M.TECH	252
		NPP END M/S-M.TECH	252
	Complete	M/S-M.TECH	252
2.	Lav. side wall	M/S- JSL HARIYANA	LAV.1 - LAV.2 -
		M/S- JSL HARIYANA	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	338/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	338/02
4.	End wall	PP END M/S-PD STEEL PANCHKULA	---
		NPP END M/S-PD STEEL PANCHKULA	---
5.	Roof	M/S-ECBT	392
6.	Centre Buffer Coupler	M/s-SANROK ENT.	PP END 14534 NPP END 14554

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	09 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 -AXALTA	M/S-EMPRISE WOW	95/94	07.11.19
2.	Insulation	Satisfactory				

Signature
SSE/QC/MCF/RBL

वरिष्ठ अभियंता
गुणवत्ता विभाग
रेडिओ, रायबरेली (जालगंज)



गुणवत्ता / परीक्षण



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192523				192524			
Bogie Type	FIAT				FIAT			
Frame no.	RBL/LS5-568				RBL/LS5-571			
Bolster no.	SECPL-460				SECPL-447			
Axle No	19 S- 4074 RWF		19 N- 4819 RWF		19 S- 8064 RWF		19 N- 4432 RWF	
Wheel Dia	917.521	917.474	917.357	917.472	917.5	917.5	917.376	917.503
Wheel Disc No	TZ 07-19 65561-9RN3	TZ 07-19 63328-9RP6	TZ 08-19 74472-9SK8	TZ 08-19 72155-9SJ5	TZ 08-19 72125-9SJ9	TZ 08-19 72169-9SJ8	TZ 08-19 72157-9SK7	TZ 08-19 75611-9SL4
R.B. Nos.	10-19-39043	08-19-29855	08-19-28800	08-19-28702	08-19-29070	10-19-39640	08-19-29710	08-19-29682
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.07-19 2541	TAYAL & CO. Sr.NO.07-19 9502	TAYAL & CO. Sr.NO.07-19 2420	TAYAL & CO. Sr.NO.07-19 2552

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18417,16909	16908,16898
2.	Primary outer Spring	CMFSK	10-19 1100-114 (1807,1884,2249,1970)	10-19 1100-114 (1949,2253,1104,1938)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (1979,1978,2048,1984)	10-19 1101-101 (1976,1983,1982,2043)
4.	Primary Damper	KONIC	03-19 (04861,05342,04844,04899)	03-19 (04690,06375,07019,08169)
5.	Secondary Damper	IAI/KONI	09-19 (272700,272980)	04-19 (04690,03928)
6.	Lateral Damper	KONI	04-19 02442	04-19 08469
7.	Brake Cylinder	ESCORT	47978,47899,47900,47975	47705,47839,47837,47704
8.	Brake Caliper	ESCORT	27540,27482,27483,27542	27375,27429,27427,272374
9.	Brake Disc	KBI	24198278 0064-35/19,24198279 0060-35/19 24200053 0015-36/19,24200052 0018-36/19	24198278 0062-35/19,24198278 0063-35/19 24200052 0043-36/19,24200052 0041-36/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1906,1906	1906,1906
17.	Check Valve	ESCORT	1906	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	242,107,3,4	239,203,190,155
22.	Control Arm Lower	SF	201,190819-3,140,230819-3	355,393,223,38
23.	Phonic Wheel	FAV	FT/KEP-1396	FT/KEP-1396

Signature of SSE/Bogie/QC

वरि०अनु० अभियंता

गुणवत्ता विभाग

रेडि०का०, रायबरेली (लालगंज)



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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORT LTD	2019040121
2.	Distribution valve	M/S- ESCORT LTD	1904A121
3.	Pull box	M/S- FAIVELY LTD	
4.	FIBA	M/S- FAIVELY LTD	PP-F18128
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	NPP-F18136
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-SHREE RAM PNL GOVINDGARH	
8.	PVC	M/S -RESPONSIVE INDS. DEHLI	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-ELASTOMER LINING WORKS, MUMBAI	
11.	UIC Vestibule (NPPE)	M/S-ELASTOMER LINING WORKS, MUMBAI	
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- MESIDONE INDS, 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 NDLS	
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- RAIL FAB KXH & IMI	
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 VADODARA	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104749-104750

SSE/QC/MCF/RBL

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गुणवत्ता विभाग

रेल डि० कार०, 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:

- 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 गुणवत्ता विभाग
रेडिओ, रायबरेली (लाहगंज)

वरिष्ठ यांत्रिक अभियन्ता/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



आधुनिक रेल डिब्बा कारखाना, रायबरेली



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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		197732/C			
RAILWAY		NFR	ELECT.FIT DATE		09-12-2019		FUR.NO	SCN-1355	
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 : AMIT ENGG. On Board Sr no : AE/USBC-NIL HT Panel Sr no : AE/USBC-1553	EDTS 333, Rev`01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0134 Sr no.1 : 3450 Sr no.2 : 3484 Srno.CPA: sr no - 2019/11/0144-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: LIGHT ENGG.	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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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 : SSK	LW 71002, Alt-F	01
13.	Regulated battery charger Make : SIGNOTRON Sr no: 11190647	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2610	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 : MAA LAXMI INDUSTRIES	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : DARSHAN ENTERPRISES	EDTS101, REV-C, AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 190001-60527-0041	M/s : ESCORT	01 set
19.	110V, 120AH, VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WITH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 11/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : HITECH	CC 91205	01

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