

LSCN.753



# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE: 16.05.2016

### ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2018-19/717

RLY	E	C	o	Coach No.	1	8	2	1	6	2	/	C	DATE OF DISPATCH	3	0	-	1	0	-	1	8
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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	8	7	1	7	2	-	2	0	1	8	-	1	9
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- Railway Board's Order No. : 2018/M(C)/142/2, Dated-27-08-2018
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL

#### 4. 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) 1096 (PPE)

#### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	PP END M/s- SICO	1203
		NPP END M/s- SICO	1227
	Complete	MCF/RBL	87172
2.	Lav.side wall	M/s- JSL LIFE STYLE, HARYANA	LAV.1 --- LAV.2 ---
		M/s- JSL LIFE STYLE, HARYANA	LAV.3 --- LAV.4 ---
3.	Side wall	LH SIDE M/s- CONTRACTOR V4U, LUCKNOW	147/01
		RH SIDE M/s- CONTRACTOR V4U, LUCKNOW	147/02
4.	End wall	PP END M/s- NECHD, CHANDIGARH	---
		NPP END M/s- NECHD, CHANDIGARH	2018
5.	Roof	M/s- PENNAR, THIRUVALLUR	144
6.	Centre Buffer Coupler	M/S- SANROK, FARIDABAD	PP END 8399 NPP END 8457

#### 6. 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 <sup>2</sup> . ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	07 Sec. 3.0 kg/cm <sup>2</sup> OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, after 06 Sec.	Brake must apply	OK

#### 7. PAINTING DAETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -GS	Supply & apply	90/89
2.	Insulation			Satisfactory	

*SSE/QC/MCF/RBL*





MODERN COACH FACTORY, RAEBARELI

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RLY	E	Co	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	1	7	2	-	-	-	-	-	-	-

## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	181659				181660			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1262				MCF/RBL-1116			
Bolster no.	MCF/RBL-1850				MCF/RBL-1468			
Axle No	18 E -0416 RWF		17 D- 3780 RWF		18 D- 9237 RWF		18 D- 8973 RWF	
Wheel Dia	917.44	917.565	917.413	917.548	917.319	917.508	917.393	917.533
Wheel Disc No	TZ06-18 29811-8QP1	TZ06-18 28529-8QN9	TZ07-18 35442-8RG8	TZ06-18 28530-8RG1	TZ06-18 29697-8QP1	TZ07-18 35443-8RH6	TZ06-18 29809-8QP1	TZ07-18 33687-8RG5
R.B. Nos.	07-18 14579	07-18 14391	07-18 14451	07-18 16242	07-18 14387	07-18 15548	07-18 14319	06-18 11489
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

## 9. 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.	CMFSK03-18- 5101-388-35	CMGBD03-18- 5100-41-403	CMFSK03-18- 5101-388-88	CMGBD03-18- 5100-41-450	CMFSK03-18- 5101-382-24	CMGBD03-18- 5100-41-382	CMFSK03-18-5101- 382-23	CMGBD03-18- 5100-41-401
Compressed Ht. at Tested Load	512	472	513	472	515	469	514	470
Alignment deviation (mm)	8	6	7	6	11	12	13	12

## 10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	1911,2057	1964,1954
2.	Primary outer Spring	CMGBD	05-17 1100(46-530,39-543,30-424,49-554)	05-17 1100 (42-427,42-426,42-432,39-557)
3.	Primary Inner Spring	CMGBD	05-18-1101 (56-688,56-594,57-595,56-607),	05-18-1101 (56-507,57-615,57-682,56-703),
4.	Primary Damper	KNORR	06-18 (24169,24200,24180,24232)	07-18 26442,06-18 24185,07-18(26435,26463)
5.	Secondary Damper	GEREP	KW 17-2017 301550739	KW 17-2017 301550739
6.	Lateral Damper	KNORR	06-18 3748	06-18 3741
7.	Brake Cylinder	FAV	G18(206,277,368,202)	G18(136,126,117,135)
8.	Brake Caliper	FAV	H18(1035,1033,1034,1036)B	H18(1156,1153,1154,1155)B
9.	Brake Disc	KBI	24158709 0041-36/18,24158709 0054-36/18 24158710 0039-36/18,24158710 0038-36/18	24158711 0018-36/18,24158711 0017-36/18 24158711 0019-36/18,24158711 0020-36/18
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	PRAG		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	S-BLOC		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	DUREL		
17.	Rubber Spring	AR		
18.	Anti roll bar make	SARITA		
19.	Roll Link make	SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	120918-1,130918-2,100918-1,140918-5	110918-2,RVE,120918-1,200918-2
22.	Control Arm Lower	RVE	070918-2,070918-2,070918-2,070918-2	070918-2,130918-2,040918-1,180918-3

Signature of SSE/Bogie/QC







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**11.TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	K 18015 B
2.	Pull box	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	
3.	Distribution valve	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	18085613 B
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/s- KOHINOOR INDUSTRIES, JALANDHAR	
6.	Floor board	M/s- SHRI RAM GOVINDGERH (PB)	
7.	PVC	M/s- PREMIER POLYFILM, GAZIABAD	
8.	Lavatory Inlay	M/s OASIS IND. JAGADHARI	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
12.	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
13.	Body Side Window	M/S AGF INDS, KOLKATA	
14.	Emergency Window	M/S AGF INDS, KOLKATA	
15.	Hopper Window	M/S - BEI (P) LTD. PUNJAB	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/S- SYNTHETIC MODULAR KOLKATA	
18.	Door way ceiling	M/s RAJA IND. KHANNA	
19.	Body Side Door	M/s JVR INDS, LDH	
20.	Vestibule Door(PPE)	M/s JBM, FARIDABAD	
21.	Vestibule Door(NPPE)	M/s JBM, FARIDABAD	
22.	Bio Tank LAV-2, 4	M/S-M.K. METAL PARTS, MUMBAI	
23.	Bio Tank LAV-1,3	M/s- FLASH FORGE (P)LTD. VIZAG	
24.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/s- SHIVALIK FAST, MOHALI	
26.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST, MOHALI	
27.	Controlled Discharge Tap	M/s - AGMECO PVT. LTD.	
28.	Lavatory Doors	M/s- KALSI, LUDHINA	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Seat & Berth	M/S- ORIENTAL VENEER PRODUCTS MUMBAI	
32.	Snack Table	N/A	

SSE/QC/MCF/RBL

मुद्रावस्था विभाग  
रेडि०का०, रायबरेली (जालगंज)





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12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT	REFERENCE & PERIOD OF TRIAL
			Frequency	

**15. WARRANTY:**

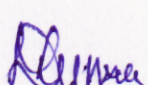
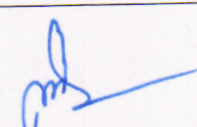
S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, clutch wire etc. ( items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30 months from the 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 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 रे0डि0का0, रायबरेली (लालयांज)	AME/QC/MCF/RBL सहायक यंत्रिक अभियन्ता/गुणवत्ता-1 Assistant Mechanical Engineer / Quality-1 आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.COM/MCF/RBL जोगिंदर सिंह Joginder Singh उप मुख्य गुणवत्ता प्रबन्धक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



	<b>Modern Coach Factory Raebareli</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>	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 NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	182162/C
RAILWAY	ECoR	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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
DATE:18.01.2017

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>SSK</b> On Board Sr no : <b>2017-06-165</b> HT Panel Sr no : <b>2017-10-280</b>	EDTS 333, Rev`01'Am-1	<b>01</b>
02.	Pump equipment with PLC controller & pump box Make : <b>DR AUTO</b> Sr no PA: <b>2018/09/117</b> Sr no.1 : <b>18090018</b> Sr no.2 : <b>18090055</b> Srno.CPA: <b>2018/09/041 -DR AUTO</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL), Make : <b>CONCORD CONTROL SYSTEM.</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Passenger Alarm Cum Indication Light (PACIL) Make: <b>KAVERI</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	<b>02</b>
05.	Fitment of Switch Plate Assly(Cabin Side) Make : <b>SSK</b>	EDML 086,Rev-03, ITEM-01	<b>10</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>SSK</b>	EDML 086, Rev 03, ITEM-02	<b>10</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: <b>IMT CABLES .</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
08.	Cabin,Corridor,doorway and Gangway Lights. Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	<b>04</b>
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : <b>INTRA ELECT.</b>	CC76289 & CC76443	<b>10</b>

  
**Senior Section Engineer**  
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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : <b>AECO</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>SSK</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>SIGNOTRON</b> Sr no: <b>09180607</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>PANTRONICS</b> Sr no : <b>PAN-18017753</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	<b>01</b>
15.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>MAA LAXMI INDUSTRIES.</b>	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	<b>01 set</b>
16.	Feeder junction boxes. Make : <b>ISG</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthing equipment. Make : <b>DARSHAN INTERPRISES.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>25/18/1033</b>	M/s : <b>FAIVELEY</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>HBL</b> Lug date : <b>12/17</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
20.	Battery box for LHB coaches. Make : <b>HITECH</b>	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>SEE(P)/MCF/RBL/ DYCEE/P&amp;P/MCF/RBL</b>

वरिष्ठ अनुभाग अभियन्ता  
गुणवत्ता नियंत्रण  
आपरेटिंग/लालगंज/रायबरेली  
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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