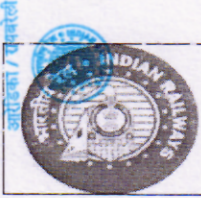


LSCN- 871



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/2018-19/1083

RLY	N	R	-	Coach No.	1	9	1	2	2	9	/	C	DATE OF DISPATCH	2	4	-	0	1	-	1	9
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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	8	-	2	0	1	8	-	1	9
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- Railway Board's Order No. : 2018/M(C)/142/2, Dated-28-11-2018
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL
- 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) 1105 (NPPE) 2) 1105 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/s- SFPL, MOHALI 11/18
		NPP END M/s- SFPL, MOHALI 11/18	
	Complete	MCF/RBL	87448
2.	Lav. side wall	M/S- RAIL TECH, KXH	LAV.1 - LAV.2 -
		M/S- RAIL TECH, KXH	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL (CONTRACTOR V4U)	334/01
		RH SIDE MCF/RBL (CONTRACTOR V4U)	334/02
4.	End wall	PP END M/s- TACPL, CNB	---
		NPP END M/s- SFPL, MOHALI	---
5.	Roof	M/s- PIL, THIRUVALLUR	249
6.	Centre Buffer Coupler	M/S- SANROK, ENG	PP END 10710 NPP END 10795

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 ² . ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm ² . OK	06 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

7. PAINTING DETAILS:

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	

Signature
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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REV NO.: 01

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/1083

Coach No.		1	9	1	2	2	9	/	C	-	DATE OF DISPATCH				2	4	.	0	1	.	1	9			
RLY	N	R	-	-	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	8	-	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182547				182548			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1455				MCF/RBL-1458			
Bolster no.	MCF/RBL-2071				MCF/RBL-1992			
Axle No	17 G - 3101 RWF		18 F - 8764 RWF		18 F- 8336 RWF		18 D - 3858 RWF	
Wheel Dia	917.602	917.563	917.547	917.622	917.544	917.581	917.573	917.611
Wheel Disc No	TZ07-18 39736-8RQ6	TZ07-18 39735-8RS4	TZ07-18 26218-8RS4	TZ07-18 36219-8RP6	TZ07-18 39738-8RQ6	TZ07-18 39737-8RQ6	TZ07-18 38238-8RM1	TZ07-18 36217-8RP6
R.B. Nos.	05-18 27376	05-18 36400	05-18 27401	05-18 36356	05-18 27614	04-18 25548	05-18 28351	05-18 36405
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.	CMRSK12-16- 5101-512-108	CMGBD05-18- 5100-64-329	CMRSK12-18- 5101-512-71	CMGBD05-18- 5100-66-201	CMFSK12-18- 5101-512-58	CMGBD05-18- 5100-64-416	CMFSK12- 185101-512-23	CMGBD05-18- 5101-411-70
Compressed Ht. at Tested Load	511.5	472	513	472	514	468	514	471
Alignment deviation (mm)	11	5	12	05	8	11	11	11

10. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13496,14131	13500,14130
2.	Primary outer Spring	CMGBD	10-18 1100(121-42,121-27,122-136,121-16)	10-18 1100 (121-74,122-512,121-5,121-41)
3.	Primary Inner Spring	CMGBD	05-17 1101- (21-3086,21-3084,32-3095,32-3072)	03-18 1101-32(3057,3088,3055,3419)
4.	Primary Damper	ESCORT	08-18(6602,6732,6730,6731)	08-18(6733,6648,6658,6662)
5.	Secondary Damper	GEREP	KW 16-2018 301550739	KW16-2018 301550739
6.	Lateral Damper	SV	01-18 237218	01-18 237222
7.	Brake Cylinder	KBI	A-(5560,8953,8969,9533)K29	A-(9542,8954,8957,9553)K29
8.	Brake Caliper	KBI	A-(7673,7775,7764,7684)-29	A-(7683,7762,7774,7631)-29
9.	Brake Disc	FAV	12-18(6869,6237),11-18(6237,6203)-D133561-300	11-18 (6243,6238,6198,6197)-D133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	PPI/UK		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	PPI/AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/PPI/UK, SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	281118-2,301118-2,291118-1,301118-2	381118-2,301118-1,301118-2,301118-2
22.	Control Arm Lower	RVE	231118-2,281118-3,281118-3,211118-1	051218-4,271118-3,051218-4,081118-2

Signature of SSE/Bogie/QC



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

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RLY	N	R	-	Coach No.	1	9	1	2	2	9	/	C	DATE OF DISPATCH	2	4	-	0	1	-	1	9
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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	8	-	2	0	1	8	-	1	9
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11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	1910 52/18
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2018 M 6452
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s- E.G. WOOD BOARD, HYDRABAD	
7.	PVC	M/S- RESPONSIVE IND.DELHI	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
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- HARE KRISHNA COMPONENT,KXH	
12.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COMPONENT,KXH	
13.	Body Side Window	M/S- AGF, KOLKATA	
14.	Emergency Window	M/S- AGF, KOLKATA	
15.	Hopper Window	M/S- BEI PVT. LTD. PUNJAB	
16.	Side panel	M/S-SUNGLLOW 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 INDUSTRIES ,LDH	
20.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Bio Tank	M/s- RASANDIK ENG INDUSTRIES GURUGRAM	
23.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
24.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. MOHALI	
25.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
26.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
27.	Lavatory Doors	M/s- KALSI, LDH	
28.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
30.	Seat & Berth	M/s- OVPL. INDUS. MUMBAI	
31.	Snack Table	N/A	

[Signature]
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडि०का०, रायबरेली (लालगंज)



MCF/RBL



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	8	-	2	0	1	8	-	1	9
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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 Frequency	REFERENCE & PERIOD OF TRIAL

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 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 रेडिओका 0, रायबरेली (लालगंज)	 AME/QC/MCF/RBL Assistant Mechanical Engineer आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	 Dy.COM/MCF/RBL Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli
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MCF/RBL



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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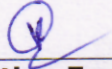
DATE: 18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	191229/C
RAILWAY	NR	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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PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2017/04/082 HT Panel Sr no : 2017/08/238	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2018/12/109 Sr no.1 : 18120150 Sr no.2 : 18120144 Sr no.CPA: 2018/12/175-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : VGS	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SSK/SALZER	EDML 086,Rev-03, ITEM-01	10
06.	Fitment of Switch Plate Assly Corridor Side),Make : SSK/SALZER	EDML 086, Rev 03, ITEM-02	10
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : CG POWER	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: RT VISION	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 : AGASTYA	CC76289 & CC76443	10

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 NONAC SCN COACHES

11.	Battery fuse box +ve Make : INTEG	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : NEC	LW 71002,Alt-F	01
13.	Regulated battery charger Make : SIGNOTRON Sr no: 01191186	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : PAN-18018041	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : MLI/S.INTERNATIONAL	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : SIDWAL	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0118340205	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 02/18	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : HITECH	CC 91205	01

SSE/EL/QC	SEE(P)/MCF/RBL/ DYCEE/P&P/MCF/RBL

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

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