	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/2018-19/1055

RLY	E	C	R	Coach No.	1	9	1	1	8	6	/	C	DATE OF DISPATCH	1	8	-	0	1	-	1	9				
DISPATCH TO		Sr.DME/DNR		Type	L	W	S	C	N	1	Shell No.		8	7	2	4	4	-	2	0	1	8	-	1	9

1. Railway Board's Order No. : 2018/M(C)/142/2 Dated-28-11-2018
2. Tare Weight of Coach : 41.24 Tones
3. 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) 1104 (NPPE) 2) 1098 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	PP END M/s- M.TECH	93
		NPP END M/s- M.TECH	96
	Complete	MCF/RBL	87244
2.	Lav.side wall	MCF/RBL, CONTRACTOR V4U	LAV.1 189 LAV.2 190
		MCF/RBL, CONTRACTOR V4U	LAV.3 191 LAV.4 192
3.	Side wall	LH SIDE MCF/RBL, CONTRACTOR V4U	201/01
		RH SIDE MCF/RBL, CONTRACTOR V4U	201/02
4.	End wall	PP END M/S- SFPL, MOHALI	---
		NPP END M/S- SFPL, MOHALI	---
		M/S- PENNAR, THIRUVALLUR	167
5.	Roof	M/S- PENNAR, THIRUVALLUR	PP END 2578 NPP END 2496
6.	Centre Buffer Coupler	M/S- DELLNER INDIA PVT.LTD.	

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	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

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 -VIBGYOR	Supply & apply	89/87
2.	Insulation			Satisfactory	

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 SSE/QC/MCF/RBL

गुणवत्ता विभाग
 रेडिओका, रायबरेली (लालमंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/1055

Coach No.		1	9	1	1	8	6	/	C	-	DATE OF DISPATCH				1	8	.	0	1	.	1	9			
RLY	E	C	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	2	4	4	-	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182411				182412			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1136				ECBT-0036			
Bolster no.	Vs-327				APEX-60			
Axle No	18 F - 9531 RWF		18 G - 8439 RWF		18 F - 9465 RWF		18 G - 0815 RWF	
Wheel Dia	917.418	917.459	917.388	917.511	917.436	917.603	917.425	917.601
Wheel Disc No	TZ04-18 15322-8MX1	TZ04-18 15317-8NG8	TZ07-18 40184-8RL9	TZ07-18 40201-8RL9	TZ05-18 17119-8MS7	TZ05-18 19955-8RR3	TZ08-18 44655-8RP8	TZ05-18 17118-8MS7
R.B. Nos.	05-18 28793	05-18 39734	05-18 12323	05-18 12865	05-18 12956	04-18 25577	05-18 11904	04-18 25931
CT R B Make	SKF		SKF		SKF		SKF	

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.	CMFSK09-17- 5101-320-118	CMRSK12-16-F08- N12-08Y-1674	CMFSK09-17- 5101-320-25	CMRSK12-16-F08- N12-08Y-1563	CMGBD09-17- 5101-87	CMRSK03-18-F08- N73-08Y-777	CMGBD09-17- 5101-98	CMRSK03-18-F08- N73-08Y-1767
Compressed Ht. at Tested Load	515	469	516	469	516	472	515	470
Alignment deviation (mm)	9	11	8	9	9	10	9	10

10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	1077,1093	1066,1342
2.	Primary outer Spring	CMGBD	10-18 1100 (121-357,121-405,121-163,122-389)	10-18 1100-122(85,120,119,68)
3.	Primary Inner Spring	CMGBD	03-18-1101(31-2512,31-2899,31-2909,32-2943)	10-18 1101-31-(3046,3062,3056,3094)
4.	Primary Damper	KNORR	05-18(21418,21395,21404,21380)	05-18(20260,20246,20248,20262)
5.	Secondary Damper	GABRIEL/GEREP	01-17 870,06-17 1116	16-2018 301550739
6.	Lateral Damper	SV/GB	01-18 019949	11-18 51001
7.	Brake Cylinder	FAV	L18(491,394,391,483)	L18-(635,560,563,634)
8.	Brake Caliper	FAV	M18(483,782,481,484)B	M18(640,637,638,639)B
9.	Brake Disc	FAV	12-18 (6717,6718,6508,6507)-D133561-300	12-18 (6517,6518,6519,6520)-D133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SF/SARITA		
13.	Traction lever make	SF/JI		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR/GMT		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SF/PPI, SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	211118-2,211118-2,231118-1,211118-3	RVE,031118-1,021118-2,221118-1
22.	Control Arm Lower	RVE	11118-2,RVE,191118-4,191118-3	191118-2,191118-3,271118-2,191118-2

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

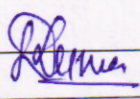
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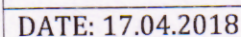
RLY	E	C	R	Coach No.	1	9	1	1	8	6	/	C	DATE OF DISPATCH	1	8	-	0	1	-	1	9
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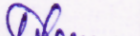
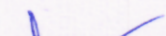

DISPATCH TO	Sr.DME/DNR	Type	L	W	S	C	N	1	Shell No.	8	7	2	4	4	-	2	0	1	8	-	1	9
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11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	L 18127 B
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/s- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	18105685` B
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	N/A	
9.	UIC Vestibule (PPE)	M/s- ELASTOMER, MUMBAI	
10.	UIC Vestibule (NPPE)	M/S- SUNCREST IND. KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S- HAREKRESHNA COMPONENTS, KXH	
12.	Gangway bridge mounting (NPPE)	M/S- HAREKRESHNA COMPONENTS, KXH	
13.	Body Side Window	M/S- AGF, KOLKATA	
14.	Emergency Window	M/S- AGF, KOLKATA	
15.	Hopper Window	M/s-RAIL TECH INDS, KXH	
16.	Side panel	M/s- ACME INDIA	
17.	Roof ceiling	M/s- ACME INDIA	
18.	Door way ceiling	M/s- ACME INDIA	
19.	Body Side Door	M/s-JVR, LDH	
20.	Vestibule Door(PPE)	M/s-JBM FARIDABAD	
21.	Vestibule Door(NPPE)	M/s-JBM FARIDABAD	
22.	Bio Tank	M/s- RAIL FAB, KXH	
23.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
24.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. BADDI	
25.	Under Slung Water Tank (1X685L)	M/s- , SHIVALIC FASTNERS, MOHALI	
26.	Flexible Faucet	M/s- ACME INDIA, NDLS	
27.	Lotah Filler Tap	M/s- ACME INDIA, NDLS	
28.	Controlled Discharge Tap	M/s- HINDWARE, (HSIL LTD) GURGAON	
29.	Lavatory Doors	M/s- ACME INDIA, NDLS	
30.	Seat & Berth	M/S- ORIENTAL VENEER PRODUCTS, MUMBAI	
31.	Snack Table	N/A	


SSB/QC/MCF/RBL
गुणवत्ता विभाग
रेडि0का0, रायबरेली (लालगंज)



 Dy. Chief Quality Manager Modern Coach Factory, Raebareilly	 Dy. Chief Quality Manager Modern Coach Factory, Raebareilly	 Dy. Chief Quality Manager Modern Coach Factory, Raebareilly
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
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		REV NO: 00
		DATE: 18.01.2017

PAGE 1 OF 3

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	191186/C
RAILWAY	ECR	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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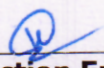
DATE:18.01.2017

PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : AMIT ENGG. On Board Sr no : AE/USBC-816 HT Panel Sr no : AE/USBC-820	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2018/09/129 Sr no.1 : 18070306 Sr no.2 : 18070164 Sr no.CPA: 2018/12/156-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 : RECORD/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 : IMT CABLES	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



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PAGE 3 OF 3

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 : IC ELECTRICAL Sr no: 10-18-0015	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : PAN-17017311	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 : NEC	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : MLI/DARSHAN	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : FAIVELEY Sr no : 33/18/1294	M/s : FAIVELEY	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 : ANANYA	CC 91205	01

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

वरिष्ठ अनुभाग अभियन्ता
गुणवत्ता नियंत्रण
आपरेटिंग/लागू/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