



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/2019-20/1711

RLY	SWR	COACH NO	201773/C	DATE OF DISPATCH	28-Feb-20
Type	LWSCN1	Shell No.	97738	DISPATCH T	Sr.DME/MYS
				FUR.NO.	LSCNG-390

1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-07.02.2020

2. Tare Weight of Coach : 41.24 Tonnes

3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature:

A	Epoxy flooring in lavatory	M/s-ACME INDIA NDLS
B	Anti slip friendly Grab Bar	M/s-ACME INDS NDLS
C	Provision of Health Faucet in lavatories	M/s-ACME INDS NDLS
D	Washbasin counter Top (Corian of Duport or Montelli)	M/s-ACME INDS NDLS
E	GFRE ceiling instead of NFTC	M/s-ACME INDS NDLS
F	DGFRP panels instead of LP panels	M/s-ACME INDS NDLS
G	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/s-ACME INDS NDLS
H	Venturi arrangement in lavatory	M/s-ACME INDS NDLS
I	Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiv.) letter no. MC/LHB/Brake, DT. 27.09.18	

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	NPP/PP 1097/1105

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-AMIT ENGG.	52
	Front Part	NPP END M/S-AMIT ENGG.	50
	Complete	MCFRBL-V4U AIRCON	97738
2	Lav. side wall	M/S-MIDAS GUJRAT LAV.1	LAV.2
		M/S-MIDAS GUJRAT LAV.3	LAV.4
3	Side wall	LH SIDE M/S-ECBT CDG	78
		RH SIDE M/S-ECBT CDG	78
4	End wall	PP END MCFRBL	
		NPP END MCFRBL	
5	Roof	M/S-UNIVERSAL	7
6	Centre Buffer Coupler	M/s- FRONTIER PP END	317P2 NPP END 299P1

7. AIR BRAKE 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 .	6 - 10 sec.	08 sec.
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²
		All Brake are applied	OK	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	GSI	M/S-GSI	76/95	27.02.2020
2	Insulation			Satisfactory		

वरिष्ठ निरीक्षक
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओ का. रायबरेली (नालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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RLY	S	W	R	Coach No.	2	0	1	7	7	3	/	C	-	DATE OF DISPATCH	2	8	0	2	2	0	2	0
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DISPATCH	Sr.DME/MYS	Type	L	W	S	C	N	1	Shell No.	9	7	7	3	8	FUR .NO	LSCN-G-390
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8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191994				191993			
Bogie Type	FIAT				FIAT			
Frame no.	SCI - 2834				SCI - 2833			
Bolster no.	AMIT - 163				MCF/RBL/LS-5 -753			
Axle No	19 P - 6259 RWF		19 P - 6251 RWF		19 P - 2447 RWF		19 S - 4413 RWF	
Wheel Dia	917.595	917.557	917.584	917.532	917.591	917.552	917.601	917.587
Wheel Disc No	TZ 08 -19 72841-9SK2	TZ 08 -19 73421-9SK6	TZ 08 -19 74149-9SK1	TZ 08 -19 73723-9SL1	TZ 08 -19 72256-9SJ9	TZ 08 -19 72821-9SK2	TZ 08 -19 75871-9RM1	TZ 08 -19 75474-9RK9
R.B. Nos.	08-19 27841	09-18 21791	09-18 22045	09-18 22316	09-18 23301	09-18 22763	09-18 21443	09-18 21846
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
Make & Nos.	Avadh Rail indra.LTD Sr.NO- 07-19 4153	Avadh Rail indra.LTD Sr.NO-07-19 4178	Avadh Rail indra.LTD Sr.NO-07-19 4167	Avadh Rail indra.LTD Sr.NO-07-19 4131

10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16303,16298	16291,16299
2.	Primary outer Spring	CMSTL	06-19 F07-N86-07A-5286,F07-N84-07A(3428,3384),F07-S35-07A-3634	06-19 07A(3231,5499,3302,5580)
3.	Primary Inner Spring	CMFSK	10-19 1101-101(19,30,60,404)	10-18 1101-101(35,74,6,402)
4.	Primary Damper	KONI	03-19 (06071,08448,01719,08531)	03-19 (01219,03297,06409,00475)
5.	Secondary Damper	KONI	04-19 (01065,01098)	04-19 (00377,00335)
6.	Lateral Damper	KONI	04-19 02454	04-19 01538
7.	Brake Cylinder	KBI	B(9653,8666,8756,9766)-K-29	B(9618,8743,8710,9649)-K-29
8.	Brake Caliper	KBI	B(5962,6670,6745,6601)-29	B(6509,6734,6771,6564)-29
9.	Brake Disc	KBI	24203752-0054-42-19,24203750-0071-41-19, 24203755-0049-42-19,24203755-0031-42-19	24203752-0053-42-19,24203752-0055-42-19, 24203753-0020-42-19,24203752-0056-42-19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	16-19-B-7513, 16-19-B-7376	16-19-B-7235, 16-19-B-7596
17.	Check Valve	KNORR	07-19 20409	07-19 19865
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR		
20.	Fork make	SARITA		
21.	Control Arm Upper	RVE	300719-2,100819-3,210819-2,100819-3	290819-3,110819-3,280819-2,190819-3
22.	Control Arm Lower	RVE	160819-3,160819-2,210819-2,260819-2	160819-2,100819-2,100819-2,100819-3
23.	Phonic Wheel	KBI	K-08-19,K-08-19	K-08-19,K-08-19

Signature of SSE/Bogie/QC



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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S -KBI	4029K41/19
2	Distribution valve	M/S -KBI	2019K9277
3	Pull box	M/S -KBI	
4	FIBA	M/S -KBI	9299/29,9059/29
5	Foot Step	M/S- SUPER SPARK PVT.LTD.FARIDABAD	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/s-ACME INDIA NDLS	
9	Lavatory inlay	M/s-ACME INDIA NDLS	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
12	Gangway bridge mounting (PPE)	M/S-HARE KRISHNA COMPONENTS KXH	
13	Gangway bridge mounting (NPPE)	M/S-HARE KRISHNA COMPONENTS KXH	
14	Body Side Window(WIDDER)	M/s-ACME INDIA NDLS	
15	Emergency Window (WIDDER)	M/s-ACME INDIA NDLS	
16	Lavatory/hopper Window	M/s-ACME INDIA NDLS	
17	Side panel (DGFRP)	M/s-ACME INDIA NDLS	
18	Roof Ceiling (DGFRP)	M/s-ACME INDIA NDLS	
19	Door way/Gangway Ceiling	M/s-ACME INDIA NDLS	
20	Partition panel Honeycomb	M/s-ACME INDIA NDLS	
21	Partition pillar	M/s-ACME INDIA NDLS	
22	Body Side Doors	M/s-ACME INDIA NDLS	
23	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
24	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
25	Bio Tank	M/S-RAIL FAB KXH	
26	Pressurised Flushing (electro.pneu.)	M/S-IMI	
27	Auxiliary Water Tank	M/S-OASIS	
28	Under Slung Water Tank (2X685L)	M/S-SHIVALIK FAST MOHALI	
29	Under Slung Water Tank (1x685 L)	M/S-AMIT ENGG. MOHALI	
30	Health Faucet	M/s-KAPCO VALES JALANDHAR	
31	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
32	Controlled discharge tap	M/s-EAUSER .LTD .	
33	Lavatory Doors	M/s-ACME INDIA NDLS	
34	Fire Extinguisher	M/s-ACME INDIA NDLS	
35	Seat & Berth	M/s-ACME INDIA NDLS	
36	Ventury grill	M/s-ACME INDIA NDLS	
37	Water purifier(02 NOS)	M/s-ACME INDIA NDLS	
38	RFID	N/A	

वरिष्ठ अभियंता
SSE/QC/MCF/RBL

रेलवे कारखाना रायबरेली (उत्तर प्रदेश)



Modern Coach Factory Raebareilly
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				FUR.NO.	LSCNG-390

13. MODIFICATION (IF ANY) : Partition frame & Partition pillar

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

16. WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain 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 30months 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 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.

[Signature]
वरिष्ठ अभियंता
SSE/QC/MCF/RBL
गुणवत्ता विभाग

[Signature]
वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
SME/AME/QC/MCF/RBL
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly

[Signature]
जोगिन्दर सिंह
Joginder Singh
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareilly



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	201773/C
RAILWAY	SWR	ELECT.FIT DATE	25-02-2020
FUR.NO	SCN-G-390		
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 NONAC SCN COACHES

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H.355.19.G.351 HT Panel Sr no : H.355.19.H.384	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 20/01/0083 Sr no.1 : 19110414 Sr no.2 : 19110478 Srno.CPA: 20/12/0428-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : INTEG	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 : SSK/SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SSK/SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: VENTWELL	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: ENSAVE	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: ENSAVE	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	09

Senior Section Engineer
Quality control / Electrical
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11.	Battery fuse box +ve Make : RICHMOND	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : RICHMOND	LW 71002,Alt-F	01
13.	Regulated battery charger Make : ELECTRIC EQUIPMENT COMPANY Sr no : 10190072	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2911	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 : RSI	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119312653	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 : 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

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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

