



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/2019-20/1004

RLY	C	R	-	Coach No.	1	9	7	2	2	5	/	C	DATE OF DISPATCH	3	1	-	1	0	-	1	9
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DISPATCH TO	SSE(STOCK)/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	9	FUR.NO.	LSCNG-341
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- Railway Board's Order No. : 2019/M(C)/142/2, Dated-13-06-2019
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
- Special feature: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
B.	Anti slip friendly Grab Bar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
C.	Provision of Health Faucet in lavatories	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
E.	GFRE ceiling instead of NFTC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
F.	DGFRP panels instead of LP panels	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
H.	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	
I	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) 1101 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-M.TECH	443
	Complete	NPP END M/S-M.TECH	442
2.	Lav. side wall	MCF/RBL(CONTRACTOR V4U)	97409
3.	Side wall	M/S- ATHANACY RBL	LAV.1 - LAV.2 -
	LH SIDE	M/S- KANSAL MOHALI	LAV.3 - LAV.4 -
	RH SIDE	M/S- KANSAL MOHALI	08/KANSAL
4.	End wall	PP END M/s-DTL PUNE	08/KANSAL
	NPP END	M/s-DTL PUNE	--
5.	Roof	M/S- E.C.BLADES & TOOL PVT. LTD CDG	--
6.	Centre Buffer Coupler	M/s- SANROK	362
		PP END 13221 NPP END 14152	

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	07 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-NEROLAC	M/s- KANSAL NEROLAC	91/89	18.10.19
2.	Insulation					

Satisfactory

SSE/QC/MCF/RBL

वरिष्ठ अभियंता

गुणवत्ता विभाग

रेलवे, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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DISPATCH	SSE/STOCK/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	9	FUR .NO	LSCN-G-341
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191806				191805			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-39				MIPL-57			
Bolster no.	RBL-2241				RBL-2701			
Axle No	19 S- 2467 RWF		19 S- 2491 RWF		19 S- 1612 RWF		19 S- 2826 RWF	
Wheel Dia	917.466	917.58	917.419	917.561	917.513	917.52	917.529	917.558
Wheel Disc No	TZ 06-19 53548-9PG8	TZ 06-19 51858-9PJ9	TZ 07-19 65738-9RL9	TZ 07-19 65738-9RL9	TZ 07-19 68160-9RR1	TZ 06-19 51930-9PJ6	TZ 06-19 54411-9PD8	TZ 06-19 51856-9PJ6
R.B. Nos.	07-19 21595	07-19 20904	08-19 27245	08-19 25990	07-19 16556	07-19 21059	07-19 19573	07-19 19411
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	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMGBD09-19-F09-757-70	CMFSK05-19-5100-027-120	CMGBD09-19-F09-757-28	CMFSK05-19-5100-027-244	CMGBD09-19-F03-750-78	CMFSK05-19-5100-027-367	CMGBD09-19-F09-757-87	CMFSK05-19-5100-027-231
Compressed Ht. at Tested Load	515.5	470	516	471	515	471	514	471.5
Alignment deviation (mm)	20	7	21	7	17	9	17	9

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18554, 18558	18553, 18552
2.	Primary outer Spring	CMSTL	07-19 07A (3858,3807,4568,2442)	07-19 07A (4236,3943,4663,4544)
3.	Primary Inner Spring	CMSTL	07-19 06A (109,710,198,26)	07-19 F06-N91-06A (72,202,60,795)
4.	Primary Damper	KONIC	07-19 (65579,65596,65590,65621)	03-19 (06584,06630,06798,06637)
5.	Secondary Damper	KONI	04-19 (1064,0643)	04-19 (00882,00585)
6.	Lateral Damper	IAI	05-19 2541404	05-19 250864
7.	Brake Cylinder	KBI	B(8819,7966,8333,9289)K29	B(8799,7673,7730,7804)K29
8.	Brake Caliper	KBI	B(5871,6000,6383,6259)-29	B(5850,5901,5839,5768)-29
9.	Brake Disc	FAV	06-19 (6124,6125,6210,6211) D 133561-300	06-19 (6187,6186,6189,6188) D 133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	AR		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	RVE,300719-1,310719-2,300719-1	300719-1,200719-1,260719-1,290719-1
22.	Control Arm Lower	RVE	220619-1,080619-2,100619-2,120619-3	220719-1,280719-1,220719-1,200719-1
23.	Phonic Wheel	KBI	K08-19	K08-19

Signature of SSE/Bogie/QC



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DISPATCH TO	SSE(STOCK)/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	9	FUR.NO.	LSCNG-341
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	
2.	Distribution valve	M/S- KBI, FARIDABAD	3700 36/19
3.	Pull box	M/S- KBI, FARIDABAD	2019 J 8874
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s- T.W.P.L. INDUS. MUMBAI	
7.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
8.	Lavatory Inlay	M/S- SEEMA INDS. 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- RAKESH IRON STORE, KXH	
12.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
13.	Body Side Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
14.	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15.	Hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16.	Side panel	M/S- (DGFRE)HINDUSTAN FIBRE GLASS WORKS,	
17.	Roof ceiling	M/S- (GFRE)HINDUSTAN FIBRE GLASS WORKS,	
18.	Door way ceiling	M/S- (GFRE)HINDUSTAN FIBRE GLASS WORKS,	
19.	Partition frame	M/S-SARITA INDS UMB	
20.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
21.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
24.	Bio Tank	M/s- FLASH FORGE (P)LTD. VIZAG	
25.	Auxiliary Water Tank	M/s- MANOJ ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FASTNERS PVT.LTD. MOHALI	
27.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
28.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
30.	Controlled Discharge Tap	M/s- EAU BATHING SOLUTION PVT LTD. GURGRAM	
31.	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
33.	Snack Table	N/A	
34.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106715-106716

(Signature)
SSE/QC/MCF/RBL

वार 0 अनु 0 अभियंता
गुणवत्ता विभाग
रेडि 0 का 0, रायबरेली (लाह गंज)



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DISPATCH TO	SSE(STOCK)/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	9	FUR.NO.	LSCNG-341
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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, 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	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अभियंता
गुणवत्ता विभाग
रेलवे भवन, रायबरेली (लालाबाग)

वरिष्ठ अभियंता
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



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

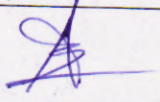
DATE:18.01.2017

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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	197225/C
RAILWAY	CR	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
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/08/282 HT Panel Sr no : 2019/08/295	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0035 Sr no.1 : 19090092 Sr no.2 : 19090119 Srno.CPA: NIL-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: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SALZER/SSK	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: ORIENT	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 : DR AUTO	CC76289 & CC76443	09

Senior Section Engineer
Quality control / Electrical
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : INDORAIL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19475	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2145	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 : ESBEE	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 : 0119211985	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 09/19	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 वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL For SEE(P)/MCF/RBL

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

स० कार्य प्रबन्धक / विद्युत
आ०रे०डि०का० / रायबरेली
A.W.M./Electrical/MCF/RBL