



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/ 10

Coach No.		1	8	2	1	5	/	C	-	Date of dispatch					1	2	-	0	4	-	1	8		
Rly	C	R	-	-	Type	L	W	S	C	N	Shell No.	7	7	2	2	0	-	2	0	1	8	-	1	9

1. Railway Board's Order No. : 2017/M(C)/142/2 Dated-05-01-2018
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) 1095 (NPPE) 2) 1099 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part	M/S Manjit techno fab raebareli
		Complete	M/S Manjit techno fab raebareli
2.	Side wall	M/S V4U(CONTRACTOR)	RH 77220 LH 77220
3.	End wall	PP END	M/S E.c.blades & tool pvt. Ltd CDG
		NPP END	M/S E.c.blades & tool pvt. Ltd CDG
4.	Roof	M/S Pennar ind. Ltd. Thiruvallur CHENNAI	
5.	Centre Buffer Coupler	M/S FRONTIER	PP END 317 NPP END 317
6.	Buffers	N.A.	

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 DAETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -BERGER	Supply & apply	89/87
2.	Insulation			Satisfactory	

[Signature]
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडि०का०, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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Coach No.	1	8	2	1	5	/	C	-	-	DATE OF DISPATCH	1	1	0	4	2	0	1	8						
RLY	C	R	-	-	Type	L	W	S	C	N	-	Shell No.	7	7	2	2	0	-	-	-	-	-	-	-

8. DETAIL OF BOGIES :

ITEMS	NPP Side				PP Side			
Bogie No	180007				180008			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-529				ECBT-540			
Bolster no.	MCF/RBL -1550				MCF/RBL -1235			
Axle No	17 D-2770 RWF		17 D- 1613 RWF		17 D- 1249 RWF		17 D - 1663 RWF	
Wheel Dia	917.456	917.495	917.529	917.538	917.567	917.582	917.528	917.558
Wheel Disc No	TZ 05-17 18801-7NJ8	TZ05-17 2089-70K0	TZ07-17 24738-7RH4	TZ06-17 23209-7QK6	TZ07-17 24739-7RH4	TZ05-17 18803-7NJ8	TZ05-17 15580-7QP1	TZ05-17 13051-70J1
R.B. Nos.	01-18 00109	01-18 00162	01-18 00868	01-18 00432	01-18 00838	11-17 16537	01-18 01042	01-18 00528
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.	DN16W-2027-1978	CMFSK02-17-F08-2311-62	DN16X1934-1934	CMFSK02-17-F08-2311-212	DN16W-2010	CMFSK02-17-F08-2311-233	DN16W-1978-2027	CMFSK02-17 F08-2311-64
Compressed Ht. at Tested Load	514	471	514	468.5	514	468	514	472
Alignment deviation (mm)	7	3	7	4	11	8	12	8

10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	SV	383,447	373,269
2.	Primary outer Spring	CMGBD	05-17 1100- (39-111,44-135,44-38,42-167)	05-17 1100-42 (115,34,29,12)
3.	Primary Inner Spring	CMRSK	07-17 06X (4091,3808,6081,5209)	07-17 06X (3768,3908,5584,5401)
4.	Primary Damper	KNORR	12-17(13462,13177,13178,13175)	12-17(13464,13457,13473,13458)
5.	Secondary Damper	GABRIEL	04-17(900,901)	04-17(903,902)
6.	Lateral Damper	IAI	01-18 198540	01-18 198480
7.	Brake Cylinder	KBI	A0779K29,A0505K29,A0507K29,A078K29	A0786,A0508,A0506,A0780
8.	Brake Caliper	KBI	9786-29,9781-29,9783-29,9787-29	9785-29,9784-29,9782-29,9784-29
9.	Brake Disc	KBI	24124438 0010-05/18,24124434 0018-05/18 24124434 0019-05/18,24124438 011-05/18	24124434 0034-05/18,24124438 0002-05/18 24124439 0020-04/18,24124435 0026-05/18
10.	Ball Joint Control Arm	MTC		
11.	Lateral Bump Stop	PRAG		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	MTC		
15.	Ball joint traction centre	MTC		
16.	Secondary Rubber Pad	TECSPAK		
17.	Rubber Spring	GMT/BONY		
18.	Anti roll bar make	SARITA		
19.	Roll Link make	SARITA/ AR/BONY		
20.	Fork make	EMSON/SARITA		
21.	Control Arm Upper	SAF	6758,7011,5800,6758	5800,5068,7011,5790
22.	Control Arm Lower	RVE/PTC	150218-2,(PTC-188,256),030218-3	030218-2,(PTC-0231,0147,0226)

Signature of SSE/Bogie/QC



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Rly	C	R	-	-	Type	L	W	S	C	N	Shell No.	7	7	2	2	0	-	2	0	1	8	-	1	9

11. TRACEABILITY OF FURNISHING ITEMS:

SNO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI Faridabad. New Delhi	0090-50/17
2.	Pull box	M/s KBI Faridabad. New Delhi	
3.	Distribution valve	M/s KBI Faridabad. New Delhi	2017M4006
4.	Foot Step	M/s Super spark pvt. ltd. faridabad	
5.	Decoupling arrangement	M/s Kohinoor Industries Faridabad	
6.	Floor board	M/S TWPL mumbai	
7.	PVC	M/s Premier polyfilm, New Delhi	
8.	Lavatory Inlay	M/s Oasis Fabrication Jagdhari	
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 EXCEL india Pvt. Ltd, Kolkata	
14.	Emergency Window	M/s EXCEL india Pvt. Ltd, Kolkata	
15.	Hopper Window	M/S Rail tech pvt.ltd. KXH	
16.	Side panel	M/S-Deco mica ahemdabad	
17.	Roof ceiling	M/s Syntetic modular KOLKATA	
18.	Door way ceiling	M/s RAJA IND. KHANNA	
19.	Body Side Doors	M/s JVR Faridabad	
20.	Vestibule Door(PPE)	M/s JBM Faridabad	
21.	Vestibule Door(NPPE)	M/s JBM Faridabad	
22.	Bio Tank	M/s P.D.Steel	
23.	Auxiliary Water Tank	M/s MANOJ ENT. mohali	
24.	Under Slung Water Tank(2X685L)	M/s Amit eng. Baddi	
25.	Under Slung Water Tank (1X685L)	M/s MANOJ ENT. mohali	
26.	Controlled Discharge Tap	M/s Kalsi Pumps JALANDHER	
27.	Lavatory Doors	M/s JR Industries Jalandhar	
28.	Seat & Berth	M/s SUKATA CDG	
29.	Snack Table	M/s Gandhi JALANDHER	

SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (लाजपत)



Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली

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Rly	C	R	-	-	Type	L	W	S	C	N	Shell No.	7	7	2	2	0	-	2	0	1	8	-	1	9

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, curtain 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 रेडिंकड, रायबरेली (लालगंज)	AME/QC/MCF/RBL जोमिन्दर सिंह सहायक यांत्रिक अभियंता/ गुणवत्ता आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.CQM/MCF/RBL जोमिन्दर 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

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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	18215/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



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : ISG On Board Sr no : 17-02-0161 HT Panel Sr no : 17-10-0005	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : KIND Sr no PA: 0040 Sr no.1 : 17070307 Sr no.2 : 17070308 Sr no.CPA: 2017/07/0026	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : VGS +MAAVE ELECT.	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	EDML 086,Rev-03, ITEM-01	10
06.	Fitment of Switch Plate Assly Corridor Side),Make : RECORD	EDML 086, Rev 03, ITEM-02	10
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : LIGHT ENGG.	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 : AGASTYA	CC76289 & CC76443	10


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 : SSK	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : HIREL Sr no: 16120283	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : 16016069	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : S.INTERNATIONAL	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : ISG	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : MAA LAXMI INDUSTRIES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0117494187	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 : 01/18	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
लखनऊ/रायबरेली/लखनऊ
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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