		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 (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1276							
RLY	SWR	COACH NO	197780/C		DATE OF DISPATCH		18/12/2019		
Type	LWS	Shell No.	96118	DISPATCH TO	Sr.DME/MYS		FUR.NO.	DDG-243	
1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-21.11.2019 2. Tare Weight of Coach : 40.66 Tonnes 3. Carrying Capacity : (a) Seating: 100 (c) Luggage: NIL									
4. Special feature:									
S NO	DESCRIPTION						MAKE/SUPPLIER		
A	Cushion transverse side luggage rack which can serve as seat during rush						M/S- H.F.GLASS VADODARA		
B	Honey comb partition frame.						M/S- H.F.GLASS VADODARA		
C	DGFRP/GFRE paneling.						M/S- H.F.GLASS VADODARA		
D	Lavatory with DGFRP/GFRE paneling.						M/S- H.F.GLASS VADODARA		
E	Additional Hand hold.						M/S- H.F.GLASS VADODARA		
F	Counter top wash basin.						M/S- H.F.GLASS VADODARA		
G	Gel coating & Anti Graffiti measures.						M/S-KANSAL NEROLAC		
H	Air spring in secondary suspension (capacity-140KN).						M/s-TAYAL & CO		
I	Fire Extinguishers						M/s-DEVIKA FIRE SAFETY NDLS		
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)								
K- 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	1105, 1102	
6. TRACEABILITY OF SHELL ITEMS:									
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO						
1	Under frame	Front PP END	M/S-RAIL TECH	3					
		Part NPP END	M/S-RAIL TECH	3					
		Complete	M/S-RAIL TECH	3					
2	Lav. side wall	M/S-JSL HARYANA	LAV.1	LAV.2					
		M/S-JSL HARYANA	LAV.3	LAV.4					
3	Side wall	LH SIDE	MCF/RBL(CONT V4U)		13/01				
		RH SIDE	MCF/RBL(CONT V4U)		13/02				
4	End wall	PP END	M/s-RSM MOHALI						
		NPP END	M/s-RSM MOHALI						
5	Roof	M/S-TI	48						
6	Centre Buffer Coupler	M/S- FRONTIER LTD	PP END	168 P2	NPP END	197 P1			
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.	09sec					
		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	K.NEROLAC	M/S-KANSAL NEROLAC		76/89	15/11/2019		
2	Insulation	Satisfactory							

SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, 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/2019-20/1276

RLY	S	W	R	Coach No.	1	9	7	7	8	0	/	C	-	DATE OF DISPATCH	1	8	1	2	2	0	1	9
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DISPATCH	Sr.DME/MYS	Type	L	W	S	C	Z	-	Shell No.	9	6	1	1	8	FUR.NO	DDG-243
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192505				192506			
Bogie Type	FIAT				FIAT			
Frame no.	RBL-LS5-557				MCF/RBL-LS5-0410			
Bolster no.	SCI-416				SCI-387			
Axle No	19 S - 4805 RWF		19 S - 2440 RWF		19 S - 7603 RWF		19 S - 3656 RWF	
Wheel Dia	917.475	917.476	917.459	917.442	917.515	917.493	917.493	917.473
Wheel Disc No	TZ 01-19 63115-9RS1	TZ 07-19 63117-9RS1	TZ 08-19 72199-9RR5	TZ 07-19 66498-9RN8	TZ 07-19 61802-9RM4	TZ 07-19 62580-9RN0	TZ 08-19 74211-9SK2	TZ 08-19 74205-9SK6
R.B. Nos.	10-19-39369	08-19-29423	08-19-28799	08-19-30147	10-19-29273	08-19-28787	08-19-28814	08-19-30123
CT R B Make	TIMKEN		TIMKEN		SKF		SKF	

10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	TAYAL & CO. 19-07 2415	TAYAL & CO. 19-07 2480	TAYAL & CO. 19-07 2455	TAYAL & CO. 19-07 2331

11. TRACEABILITY OF BOGIE ITEMS :-


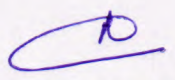
S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18092,18097	18104,18096
2.	Primary outer Spring	CMFSK	10-19-1100-114(1035,1047,118,966)	10-19-1100-114(2206,883,2255,2247)
3.	Primary Inner Spring	CMFSK	10-19 1101-101(586,1746,1768,416)	10-19 1101-101(1344,2032,1318,1973)
4.	Primary Damper	KONIC	03-19 (06084,06048,06035,07996)	03-19 (05344,05395,08101,05370)
5.	Secondary Damper	GB	07-19 (01179,01190)	07-19 (01189,01175)
6.	Lateral Damper	KONIC	04-19 02432	04-19 02582
7.	Brake Cylinder	ESCORT	48908,49015,49014,48305	49257,48295,48293,49255
B19-	Brake Caliper	ESCORT	28264,28355,28354,28261	2845,227567,27565,28450
9.	Brake Disc	KBI	24200036 0075-36/19,24200051 0030-36/19 24200036 0069-36/19,24200051 0029-36/19	24200036 0076-36/19,24200051 0036-36/19 24198277 0026-34/19,24198274 0041-34/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	ARYAN		
16.	Leveling Valve	ESCORT	1906,1906	1906,1906
17.	Check Valve	ESCORT	1904	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	SF/PACL	112,120,155,119	20,144,198,49
22.	Control Arm Lower	PACL/SF	38,20,44,(SF-12),	PACL-240,439,511,(SF-512),
23.	Phonic Wheel	KBI	05-19	05-19

Signature of SSE/Bogie/QC

वरि०अनु० अभियंता

गुणवत्ता विभाग

रे०डि०का०, रायबरेली (ला०प्र०)

		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 (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1276				
RLY	SWR	COACH NO	197780/C	DATE OF DISPATCH		18/12/2019
Type	LWS	Shell No.	96118	DISPATCH TO	Sr.DME/MYS	FUR.NO. DDG-243
12. TRACEABILITY OF FURNISHING ITEMS:						
S NO	ITEM		MAKE/SUPPLIER		SERIAL NO(NPP/PP)	
1	Air Brake Module		M/S-ESCORT		2019030097	
2	Distribution valve		M/S-ESCORT		1903A097	
3	Pull box		M/S- KBI, FARIDABAD			
4	FIBA		M/S- ESCORT		18110290/18110236	
5	Foot Step		M/S SSPL FARIDABAD			
6	Decoupling arrangement		M/S- KOHINOOR MUMBAI			
7	Floor board		M/S-TWPL MUMBAI			
8	PVC		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
9	Lavatory inlay		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
10	UIC Vestibule (PPE)		M/S-ELASTOMER LINING WORKS, MUMBAI			
11	UIC Vestibule (NPPE)		M/S-ELASTOMER LINING WORKS, MUMBAI			
12	Gangway bridge mounting (PPE)		M/S- RIS KXH			
13	Gangway bridge mounting (NPPE)		M/S- RIS KXH			
14	Body Side Window		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
15	Emergency Window		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
16	Lavatory/hopper Window		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
17	Roof Ceiling		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
18	Door way /gang way ceiling		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
19	Body Side Doors		M/s- SUKATA CHANDIGARH			
20	Vestibule Door(PPE)		M/S- JBM INDUSTRIES, FARIDABAD			
21	Vestibule Door(NPPE)		M/S- JBM INDUSTRIES, FARIDABAD			
22	Bio Tank		M/S- JSL LIFE STYLE LTD. GURGAON			
23	Pressurised flushing (Elect pneumatic)		M/S-IMI			
24	Over head water tank (4x390L)		M/S- AMIT ENG.BADDI			
25	Bib cock/controlled discharge tap		M/s- JAQUAR PVT.LTD.ALWAR			
26	Lavatory Doors		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
27	Fire Extinguisher		M/s-DEVIKA FIRE SAFETY UDYOG NDLS		879,1053	
28	Water purified		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
29	Seat & Berth		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
30	Luggage Rack		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
31	Light Luggage Rack		M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA			
32	RFID		N/A			
 SSE/QC/MCF/RBL						

वरि०अनु० अभियंता
गुणवत्ता विभाग
रेडि०का०, रायबरेली (लागोज)



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 (DEEN DAYALU)

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1276

RLY	SWR	COACH NO	197780/C			DATE OF DISPATCH	18/12/2019
Type	LWS	Shell No.	96118	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-243

13. MODIFICATION (IF ANY) : NIL

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:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
6. 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.

SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अभियंता

गुणवत्ता विभाग

रेडिओका, रायबरेली (लालमज)

वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
SME/AME/QC/MCF/RBL
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

उप मुख्य अभियंता प्रबन्धक/शेल
Dy. Chief Quality Manager/Shell
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

FOR ELECTRICAL ITEMS**ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES**

PAGE 1 OF 3

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

SHELL/COACH NO		197780/C	TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	17-12-2019	FUR.NO	DDG-243
Sr no	Description of test				Remarks
2.	LIGHTS, 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

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE: 18.01.2017

FOR ELECTRICAL ITEMS

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

PAGE 2 OF 3

01.	Switch board cabinet Make : MODERN RAILTECH On Board Sr no : NIL HT Panel Sr no : MREM 355047	EDTS 333, Rev `01'Am-1	01
02	Emergency light system for EOG type coaches (AEL), Make : INTEG ELECT.	EDTS 151,Rev -c Am-1 & 2	04
03.	Provision & Mounting of PACIL Assly. Make: KAVERI	As per RDSO/PE/SPEC/TL/0091- 2016,REV-01, TYPE-I Drg no. LW 76098.	02
04.	Fitment of Switch Plate Assly (Cabin Side) Make : SSK	EDML 127,Rev-1& DRG NO 4248ALT-a	10
05.	Fitment of Switch Plate Assly (Corridor Side) Make : SSK	EDML 127,Rev-1 & DRG NO 4249 ALT-a	10
06.	Fitment of 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
07.	Provision of Cabin, Corridor, doorway and Gangway Lights. Make: ENSAVE	As per RDSO/PE/SPEC/TL- 0091(REV-1) TYPE B-1	28
08.	Provision & Mounting of Lavatory Light Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091 -2016,REV-01, TYPE-D & Drg no. LW 76092.	04

(Signature)

**Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli**



Modern Coach Factory Raebareilly
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE: 18.01.2017

FOR ELECTRICAL ITEMS

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

PAGE 3 OF 3

09.	Battery fuse box +ve Make : ISGPL	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
11.	Regulated battery charger Make : WAVES Sr no: W4K5G 19278	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2521	As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI.	01
13.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES.	As per spec No EDTS 105,Rev`e` Am-3 TYPE-2	01 set
14.	Feeder junction boxes. Make : AECO	EDTS-328 REV-C	01 set
15.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 180641-60147-0088	M/s : ESCORT	01 set
17.	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
18.	Battery box for LHB coaches. Make : TECHNO	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ0रे0डि0का0 / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL