



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 9454 VER:1.00)

1.	SHELL NO	8031	BOGIE NO	187046	/ 187047	DISPATCH DATE	06-OCT-18
2.	RAILWAY	CR	TYPE OF COACH	LWSCZ		COACH NO	181440
3.	BOOKED TO	SSE/C&W/CSTM					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	102	Sleeping	NIL	Luggage	NIL
6.	6.1 Leading Dimensions:						
	i)	Maximum length over Body		23700+10/-0			
	ii)	Maximum width over Body		3240-8/+0 mm, 3050 mm (for LWSCZDAC)			
	iii)	Maximum height from Rail Level		4250 (for LWACCN), 4039 (for LWACCW, LGS, LWSCN, LWSCZAC, LWFAC, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)			
	iv)	CBC Height	Specified: 1105 +0/-15 mm		1100	1102	
	v)	CBC (Make)			SANROK	SANROK	
	vi)	Buffer (Make)					
7.	Air Brake Testing:		Description		Specified		
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²		06 - 10 Sec		
			Max Pressure in BC		3.80±0.15 Kg/cm ²		
			All Brake are applied		OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm ² /mi		No brake application		
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm ² /Sec, After 02 Sec		Brake must apply		
8.	Painting Details:		Type of Paint		Make	Average Gloss Value	
	8.1	Paint	PU PAINT		VIBGYOR	86 / 85	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT		KBI			
	2	BIO-TOILET		JSL			
	3	FLOOR BOARD		TWPL, SRI RAM			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		RAIL FAB			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		SUTLEJ			
	10	LP SHEET		PL			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

QMF 9827, VER:1.00

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8031		CR		LWSCZ		181440		06-OCT-18	
11.1 <u>Wheel & Axle Details:</u>												
i.	Bogie No.	187046						187047				
ii.	Frame No.	RBKYG-H18-177						RBKYG-H18-165				
iii.	Bolster No.	GT-6223						AMIT-753				
iv.	Axle No.	F - 7440			W - 2849			A - 8164			B - 3559	
v.	Items/locations	Earthing end side	Phonic wheel side	Phonic wheel side	Plain side	Earthing end side	Phonic wheel side	Phonic wheel side	Plain side			
vi.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
vii.	Wheel Disc No.	30959-8QN2-TZ	30931-8QM7-TZ	12592-8MS4-TZ	12626-8PN3-TZ	18627-8PN3-TZ	11628-8MV6-TZ	12599-8MS4-TZ	18625-8PN5-TZ			
viii.	RB Nos.	08261	09809	07925	09078	08280	08513	07968	08538			
ix.	RB Make	TIMKEN			TIMKEN			TIMKEN			TIMKEN	
x.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING										
11.2 <u>Secondary suspension load deflection Values:</u>												
Description		Lateral Damper Side		Non-Lat. Damper Side		Lateral Damper Side		Non-Lat. Damper Side				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	
i.	Make & Nos.	FSK-17-11-280	FSK-17-11-193	FSK-17-11-112	FSK-17-11-179	FSK-17-11-127	FSK-17-11-216	FSK-17-11-300	FSK-17-11-279			
ii.	Ht. at test load	512.00	463.00	511.00	466.50	511.50	463.00	511.50	463.00			
iii.	Align. deviation	8.00	9.00	13.00	9.00	12.00	8.00	12.00	10.00			
<u>Items traceability:</u>												
11.3 <u>Sno. Item</u>												
i.	Primary Outer Spring	GBD-18-1				GBD-18-1				GBD		
ii.	Primary inner Spring	GBD-17-12				GBD-17-12				GBD		
iii.	Primary Damper	10562, 10590, 2978, 10369				10512, 10278, 3417, 2034				GABRIEL		
iv.	Secondary Damper	664, 967				745, 670				SV		
v.	Lateral Damper	405				019				SV		
vi.	Break cylinder & Caliper	A2064-691,A4395-691, A4892-691,A1987-691				A4903-691,A4530-691, A4908-691,A4529-691				KBI		
vii.	Break Disc									FTI		
viii.	Contral arm top									HAPL		
ix.	Control arm bottom									KUMAR		
x.	Top rubber Pad									GMT		
xi.	Vertical Bump Stop									GMT		
xii.	Ball Joint Control arm									MB		
xiii.	Lateral Bump stop									AVADH		
xiv.	Traction center make									EMSON		
xv.	Traction lever make									SARITA		
xvi.	Ball joint traction lever									GMT		
xvii.	Traction center elastic									GMT		
xviii.	Secondary rubber pad									BHAM		
xix.	Rubber spring									GMT		
xx.	Anti roll bar make									EMSON		
xxi.	Ball joint roll link									SARITA		
xxii.	Fork make									EMSON		
11.4												
i.	Modification/Trail(if any):		NIL									
ii.	Deviations (if any):		Deviations (If any): NIL									

LWSCZ - 8031



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ
RAILWAY CR

Shell No : 8031
COUPLING TYPE : CBC

COACH_NO : 181440
DATE OF FITMENT: 04-OCT-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name UNDER FRAME				
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	KNOOR-BREMSE INDIA PVT LTD.	0118024262
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-391
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	061712487
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABOL ENGG	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LAXMI	
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL	
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	2017-114367
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
0	33650184-0, BATTERY BOX MOUNTING FOR LHB COACH AND 9 HOLES OF DIA 25 mm AS PER SKED-383 IN DRG.NO. 3 10113.0.76	1 10113.0.76.700.005 EXCEPT ITEM NO. 5,22,23,25 TO 27 ALT 'C'.	MEENAKASHI ENG. WORKS	
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	AMARA RAJA BATTERIES LTD	
Group Name COMPARTMENT				
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL



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ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181440
RAILWAY CR DATE OF FITMENT: 04-OCT-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		COMPARTMENT		
0	35983528-0, BRUSHLESS DC FAN 110V,DC 400MM SWEEP FIXED TYPE	RDSO/PE/SPEC/TL00 21 REV-0,DEC.2000 BUT WITH DIMENSIONS AND CONSTRUCTION TO RCF DRG.NO.CC76260	LIGHT ENGINEERING CORPORATION	LEC
0	45978257-0, ACCIDENT EMERGENCY LIGHT UNIT IN ROLLING STOCK	GA DRAWING NO CC76240 AND TECHNICAL DETAILS AS PER SPEC.NO EDTS162	DR AUTO INDUSTRIES	
Group Name		UNDER FRAME NPP SIDE		
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
SSE/EL/QC		AME/WM QC/DY CQM I		



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 9454 VER:1.00)

1.	SHELL NO	8036	BOGIE NO	187090	/ 187091	DISPATCH DATE	10-OCT-18
2.	RAILWAY	CR	TYPE OF COACH	LWSCZ		COACH NO	181441
3.	BOOKED TO	SSE/C&W/CSTM					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	102	Sleeping	NIL	Luggage	NIL
6.	6.1 Leading Dimensions:						
	i)	Maximum length over Body		23700+10/-0			
	ii)	Maximum width over Body		3240-8/+0 mm, 3050 mm (for LWSCZDAC)			
	iii)	Maximum height from Rail Level		4250 (for LWACCN), 4039 (for LWACCW, LGS, LWSCN, LWSCZAC, LWFAC, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)			
	iv)	CBC Height	Specified: 1105 +0/-15 mm		1100	1102	
	v)	CBC (Make)			SANROK	SANROK	
	vi)	Buffer (Make)					
7.	Air Brake Testing:		Description		Specified		
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²		06 - 10 Sec		
			Max Pressure in BC		3.80±0.15 Kg/cm ²		
			All Brake are applied		OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm ² /mi		No brake application		
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm ² /Sec, After 02 Sec		Brake must apply		
8.	Painting Details:		Type of Paint		Make	Average Gloss Value	
	8.1	Paint	PU PAINT		VIBGYOR	86 / 87	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT		FAVELLY			
	2	BIO-TOILET		JSL			
	3	FLOOR BOARD		SRI RAM			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		RAIL FAB, AMIT			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		SUTLEJ			
	10	LP SHEET		PL			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

QMF 9827, VER:1.00

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8036		CR		LWSCZ		181441		10-OCT-18	
11.1 Wheel & Axle Details:												
i.		Bogie No.		187090				187091				
ii.		Frame No.		RBKYG-158				RBKYG-157				
iii.		Bolster No.		VT-7780				AMIT-769				
iv.		Axle No.		D- 8724		D- 8473		F- 2569		F- 2754		
v.		Items/locations		Earthing end side	Phonic wheel side	Phonic wheel side	Plain side	Earthing end side	Phonic wheel side	Phonic wheel side	Plain side	
vi.		Wheel Dia.		916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
vii.		Wheel Disc No.		30566-7SG0-TZ	12879-7OL4-TZ	31980-7SJ1-TZ	22330-8PR4-TZ	32170-7SG4-TZ	32168-7SJ0-TZ	19798-7PK3-TZ	32169-7SJ0-TZ	
viii.		RB Nos.		03961	04403	04246	02935	04068	04464	04516	03316	
ix.		RB Make		TIMKEN		TIMKEN		TIMKEN		TIMKEN		
x.		RB Type		UIC CARTRIDGE TAPER ROLLER BEARING								
11.2 Secondary suspension load deflection Values:												
Description			Lateral Damper Side		Non-Lat. Damper Side		Lateral Damper Side		Non-Lat. Damper Side			
			Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner		
i.	Make & Nos.		FSK-17-8-20	FSK-17-8-35	FSK-17-8-152	FSK-17-8-9	FSK-17-11-75	FSK-17-11-157	FSK-17-8-65	FSK-17-8-114		
ii.	Ht. at test load		511.50	467.00	510.00	466.00	509.50	468.00	510.00	468.00		
iii.	Align. deviation		7.00	7.00	7.00	7.00	13.00	12.00	12.00	10.00		
Items traceability:												
11.3												
Sno.	Item								Make			
i.	Primary Outer Spring			AFJ-17-11-116-47-121-113			AFJ-17-11-129-119-149			AFJ		
ii.	Primary inner Spring			GBD-17-12-286-96-377-412			GBD-17-12-383-369-370-238			GBD		
iii.	Primary Damper			10012, 100433, 9951, 10430			10386, 9962, 9966, 10387			GABRIEL		
iv.	Secondary Damper			1000, 100			320, 1019			SV		
v.	Lateral Damper			559			083			SV		
vi.	Break cylinder & Caliper			E18519-600,F18386-600, F18518-600,F18384-600			G18004-600,F18392-600, G18001-600,F18389-600			FTI		
vii.	Break Disc									FTI		
viii.	Contral arm top									KUMAR		
ix.	Control arm bottom									KUMAR		
x.	Top rubber Pad									GMT		
xi.	Vertical Bump Stop									GMT		
xii.	Ball Joint Control arm									BONY	GMT	
xiii.	Lateral Bump stop									AVADH		
xiv.	Traction center make									RNG		
xv.	Traction lever make									SARITA		
xvi.	Ball joint traction lever									GMT		
xvii.	Traction center elastic									SB		
xviii.	Secondary rubber pad									BHAM		
xix.	Rubber spring									GMT		
xx.	Anti roll bar make									SARITA		
xxi.	Ball joint roll link									SARITA		
xxii.	Fork make									EMSON		
11.4												
i.	Modification/Trail(if any):			NIL								
ii.	Deviations (if any):			Deviations (If any): NIL								

LWSCZ - 8036



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ
RAILWAY CR

Shell No : 8036
COUPLING TYPE : CBC

COACH_NO : 181441
DATE OF FITMENT: 06-OCT-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARSAHN ENTERPRISES	
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARSHAL ENTERPRISES	
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARSAHN ENTERPRISES	
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name UNDER FRAME				
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	SAB WABCO	12/18/560
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	SAB-WABCO	12/18/560
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	SAB WABCO	12/18/560
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-341
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-341
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-341
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	06170712479
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	06170712479
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	06170712479



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181441
RAILWAY CR DATE OF FITMENT: 06-OCT-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		UNDER FRAME		
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABROL ENGG CO.	
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABROL ENGINEERING COMPANY (P)LTD.	
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABROL ENGINEERING COMPANY (P)LTD.	
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABROL ENGINEERING COMPANY (P)LTD.	
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABROL ENGINEERING COMPANY (P)LTD.	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LUXMI INDUSTRIES	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LAXMI	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LUXMI INDUSTRIES	
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	NEC-2017-11-4353
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	NEC-2017-11-4353
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	2017-11-4353
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
0	33650184-0, BATTERY BOX MOUNTING FOR LHB COACH AND 9 HOLES OF DIA 25 mm AS PER SKED-383 IN DRG.NO. 3 10113.0.76	1 10113.0.76.700.005 EXCEPT ITEM NO. 5,22,23,25 TO 27 ALT 'C'.	MEENAKASHI ENG. WORKS	
0	33650184-0, BATTERY BOX MOUNTING FOR LHB COACH AND 9 HOLES OF DIA 25 mm AS PER SKED-383 IN DRG.NO. 3 10113.0.76	1 10113.0.76.700.005 EXCEPT ITEM NO. 5,22,23,25 TO 27 ALT 'C'.	MEENAKASHI ENGG WORKS	
0	33650184-0, BATTERY BOX MOUNTING FOR LHB COACH AND 9 HOLES OF DIA 25 mm AS PER SKED-383 IN DRG.NO. 3 10113.0.76	1 10113.0.76.700.005 EXCEPT ITEM NO. 5,22,23,25 TO 27 ALT 'C'.	MEENAKASHI ENGG. WORKS	
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	AMARA RAJA BATTERIES LTD	



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181441
RAILWAY CR DATE OF FITMENT: 06-OCT-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		UNDER FRAME		
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	AMARA RAJA BATTERIES LTD	
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	AMARA RAJA BATTERIES LTD	
Group Name		COMPARTMENT		
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-017
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-017
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-017
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-09
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-09
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-09
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL
0	35983528-0, BRUSHLESS DC FAN 110V,DC 400MM SWEEP FIXED TYPE	RDSO/PE/SPEC/TL00 21 REV-0,DEC.2000 BUT WITH DIMENSIONS AND CONSTRUCTION TO RCF DRG.NO.CC76260	LIGHT ENGINEERING CARPORATION	LEC



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181441
RAILWAY CR DATE OF FITMENT: 06-OCT-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name	COMPARTMENT		
0	45978257-0, ACCIDENT EMERGENCY LIGHT UNIT IN ROLLING STOCK	GA DRAWING NO CC76240 AND TECHNICAL DETAILS AS PER SPEC.NO EDTS162	DR AUTO INDUSTRIES

Group Name	UNDER FRAME NPP SIDE		
1	33642230-1, Z S COUPLING PP- SIDE	EDTS-105, REV-B	PRIME ELECTRICAL
2	33642230-2, Z S COUPLING NPP SIDE	EDTS-105, REV-B	PRIME ELECTRICAL

SSE/EL/QC	AME/WM QC/DY CQM I



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 9454 VER:1.00)

1.	SHELL NO	8032	BOGIE NO	187078	/ 187079	DISPATCH DATE	12-OCT-18
2.	RAILWAY	CR	TYPE OF COACH	LWSCZ		COACH NO	181442
3.	BOOKED TO	SSE/C&W/CSTM					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	102	Sleeping	NIL	Luggage	NIL
6.	6.1	Leading Dimensions:					
	i)	Maximum length over Body		23700+10/-0			
	ii)	Maximum width over Body		3240-8/+0 mm, 3050 mm (for LWSCZDAC)			
	iii)	Maximum height from Rail Level		4250 (for LWACCN), 4039 (for LWACCW, LGS, LWSCN, LWSCZAC, LWFAC, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)			
	iv)	CBC Height	Specified: 1105 +0/-15 mm		1105	1105	
	v)	CBC (Make)			SANROK	SANROK	
	vi)	Buffer (Make)			---	---	
7.	Air Brake Testing:	Description		Specified			
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²		06 - 10 Sec		
			Max Pressure in BC		3.80±0.15 Kg/cm ²		
			All Brake are applied		OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm ² /mi		No brake application		
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm ² /Sec, After 02 Sec		Brake must apply		
8.	Painting Details:	Type of Paint		Make	Average Gloss Value		
	8.1	Paint	PU PAINT		VIBGYOR	85 / 85	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT		KBI			
	2	BIO-TOILET		RAIL TECH			
	3	FLOOR BOARD		TWPL			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		RAIL FAB			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		SUKATA			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

QMF 9827, VER:1.00

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8032		CR		LWSCZ		181442		12-OCT-18	
11.1 Wheel & Axle Details:												
i.		Bogie No.		187078				187079				
ii.		Frame No.		RBKYG-H18-169				RBKYG-H18-518				
iii.		Bolster No.		GT-6235				GT-6508				
iv.		Axle No.		D- 3437		Z- 2680		B- 9939		E- 0442		
v.		Items/locations		Earthing end side	Phonic wheel side	Phonic wheel side	Plain side	Earthing end side	Phonic wheel side	Phonic wheel side	Plain side	
vi.		Wheel Dia.		916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
vii.		Wheel Disc No.		28341-7SJ9-TZ	18617-7OK4-TZ	31115-7GJ5-TZ	28339-7SJ9-TZ	18614-7OK4-TZ	28338-7SJ9-TZ	18615-7OK4-TZ	28340-7SJ9-TZ	
viii.		RB Nos.		03878	05405	03096	02796	03348	05256	03131	01483	
ix.		RB Make		TIMKEN		TIMKEN		TIMKEN		TIMKEN		
x.		RB Type		UIC CARTRIDGE TAPER ROLLER BEARING								
11.2 Secondary suspension load deflection Values:												
Description			Lateral Damper Side		Non-Lat. Damper Side		Lateral Damper Side		Non-Lat. Damper Side			
			Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner		
i.	Make & Nos.		FSK-17-11-316	FSK-17-11-238	FSK-17-11-311	FSK-17-11-149	FSK-17-11-298	FSK-17-11-54	FSK-17-11-289	FSK-17-11-140		
ii.	Ht. at test load		509.50	468.00	511.00	468.00	512.00	463.00	512.00	466.50		
iii.	Align. deviation		8.00	11.00	9.00	11.00	6.00	9.00	9.00	10.00		
Items traceability:												
11.3												
Sno.	Item								Make			
i.	Primary Outer Spring			AFJ-17-11			AFJ-17-11			AFJ		
ii.	Primary inner Spring			GBD-17-12			GBD-17-12			GBD		
iii.	Primary Damper			9991, 9976, 9996, 10018			10017, 10019, 9657, 10057			GABRIEL		
iv.	Secondary Damper			953, 964			734, 948			SV		
v.	Lateral Damper			584			534			SV		
vi.	Break cylinder & Caliper			A3974-691,A3348-691, A3577-691,A3349-691			A3578-691,A3350-691, A3649-691,A3304-691			KBI		
vii.	Break Disc									FTI		
viii.	Contral arm top									HAPL		
ix.	Control arm bottom									KUMAR		
x.	Top rubber Pad									GMT		
xi.	Vertical Bump Stop									GMT		
xii.	Ball Joint Control arm									MB		
xiii.	Lateral Bump stop									AVADH		
xiv.	Traction center make									RNG		
xv.	Traction lever make									SARITA		
xvi.	Ball joint traction lever									GMT		
xvii.	Traction center elastic									SB		
xviii.	Secondary rubber pad									BHAM		
xix.	Rubber spring									AVADH		
xx.	Anti roll bar make									EMSON		
xxi.	Ball joint roll link									SARITA		
xxii.	Fork make									EMSON		
11.4												
i.	Modification/Trail(if any):			NIL								
ii.	Deviations (if any):			Deviations (If any): NIL								

LWSCZ - 8032



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ
RAILWAY CR

Shell No : 8032
COUPLING TYPE : CBC

COACH_NO : 181442
DATE OF FITMENT: 09-OCT-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name UNDER FRAME				
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	KNOOR - BREMSE INDIA PVT.LTD.	0118024256
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-388
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	061712517
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABOL ENGG	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LAXMI	
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	2018-036-785
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
0	33650184-0, BATTERY BOX MOUNTING FOR LHB COACH AND 9 HOLES OF DIA 25 mm AS PER SKED-383 IN DRG.NO. 3 10113.0.76	1 10113.0.76.700.005 EXCEPT ITEM NO. 5,22,23,25 TO 27 ALT 'C'.	MEENAKASHI ENG. WORKS	
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	HBL POWER SYSTEM LIMITED	
Group Name COMPARTMENT				
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-013
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-015
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181442
RAILWAY CR DATE OF FITMENT: 09-OCT-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		COMPARTMENT		
0	35983528-0, BRUSHLESS DC FAN 110V,DC 400MM SWEEP FIXED TYPE	RDSO/PE/SPEC/TL00 21 REV-0,DEC.2000 BUT WITH DIMENSIONS AND CONSTRUCTION TO RCF DRG.NO.CC76260	LIGHT ENGINEERING CARPORATION	LEC
0	45978257-0, ACCIDENT EMERGENCY LIGHT UNIT IN ROLLING STOCK	GA DRAWING NO CC76240 AND TECHNICAL DETAILS AS PER SPEC.NO EDTS162	DR AUTO INDUSTRIES	
Group Name		UNDER FRAME NPP SIDE		
2	33642230-2, Z S COUPLING NPP SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
SSE/EL/QC		AME/WM QC/DY CQM I		