



रेल डिब्बा कारखाना, कपूरथला  
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	5009	DISPATCH DATE				10.08.2015
2.	Railway	ECR	Type	LWCBAC	Coach No.		14801
3.	Booked to		SSE/C&W/SPJ				
4.	Tare Weight of Coach		40.9 T				
5.	Carrying Capacity	Seating	NIL	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b')						
	6.1	Leading Dimensions:					
	i)	Maximum length over Body	23700+10/-0 mm				
	ii)	Maximum width over Body	3240-8/+0 mm, 3050 mm (LWSCZDAC)				
	iii)	Max. Height From Rail Level	4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC)				
	iv)	Buffer/CBC Height	Specified : 1105 +0 /-15 mm	1104	1102		
	v)	Buffer/CBC (Make )	FAIVELEY	Fiba Device	NIL		
7.	Air Brake Testing:		Description		Specified		Observed
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup>	6 -10 sec		6 Sec	
			Max Pressure in BC	3.80 ± 0.15 Kg/cm <sup>2</sup>		3.80	
			All Brake are applied	OK		OK	
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min	No brake application		OK	
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, After 02 Sec.	Brake must apply		OK	
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	PU PAINT	ADVANCE	90/89		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
	i.	BRAKE EQUIPMENT	FAIVELEY				
	ii.	CDTS/ BIO TOILET	RAIL TECH				
	iii.	SEATS/ BERTHS	AAR KAY FOAMS				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON DOOR	KALSI				
	vii.	WATER TANKS	E C BLADES, KUTEER, SHIVALIK				
	viii.	UIC VESTIBULE	SUNCREAST				
	ix	FLOOR BOARD	TAYAL				
	X	PVC	RESPONSIVE				
	Xi	LP SHEET					
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



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11.	<b>Bogie Details:</b>		<b>Shell No.</b>		<b>Railway</b>		<b>Type</b>		<b>Coach No.</b>		<b>Dispatch Date</b>	
			5009		EC		LWBAC		14801/C		12-08-2015	
11.1	<b>Wheel &amp; Axle Details:</b>		<b>PP Side</b>						<b>NPP Side</b>			
	i.	<b>Bogie No.</b>	156595						156596			
	ii.	<b>Frame No.</b>	FIAT-4183						SCI/FM-179-			
	iii.	<b>Bolster No.</b>	4940-VT						4957-VT			
	iv.	<b>Axle No.</b>	C-4654		126997/426		129231/992		B-9668			
	v.	<b>Wheel Dia.</b>	914.00	914.00	916.00	916.00	912.00	912.00	913.00	913.00		
	vi.	<b>Wheel Disc No.</b>	145-11610	238-63301	124-51915	206-62314	170-51908	035-10533	017-10582	074-11611		
	vii.	<b>R.B. Nos.</b>	02066	21771	30419	03246	02054	02057	23356	01227		
	viii.	<b>R.B. Make</b>	SKF		SKF		SKF		SKF			
	ix.	<b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	<b>Secondary suspension load deflection Values:</b>											
<b>Description</b>		<b>Secondary 1</b>		<b>Secondary 2</b>		<b>Secondary 1</b>		<b>Secondary 2</b>				
		<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>	<b>Outer</b>	<b>Inner</b>			
i.	<b>Make &amp; nos.</b>	DN-13-02-3026	G-11-12-3697	DN-13-02-3015	G-11-12-4101	DN-13-02-2966	G-11-12-3679	DN-13-02-3022	G-11-12-4073			
ii.	<b>Ht. at test load</b>	509	466	508	466	507	466	505	465			
iii.	<b>Align .deviation</b>	14	19	14	17	14	20	14	19			
11.3	<b>Items traceability:</b>											
	<b>Sno.</b>	<b>Item</b>			<b>PP Side Bogie</b>			<b>NPP side Bogie</b>			<b>Make</b>	
	i.	Primary Outer Spring			RSK-13-5			RSK-13-5			RSK	
	ii.	Primary inner Spring			RSK-13-5			RSK-13-5			RSK	
	iii.	Primary Damper			22762,23707,22774,22791			22812,23513,22305,22749			KONI	
	iv.	Secondary damper			4246,4619			4893,4845			KONI	
	v.	Lateral Damper			18			256			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			F15080/600,F15083/600, F15073/600,F15099/600			F15090/600,F15120/600, F15091/600,F15111/600			FTI	
	viii.	Brake Disc									KBI	
	ix.	Ball joint Control arm									GMT	
	x.	Lateral Bump stop									MGN	
	xi.	Traction center make									SARITA	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									GMT,MGN	
	xiv.	Traction centre elastic									MGN,GMT	
	xv.	Secondary rubber pad									TESPAK	
	xvi.	Rubber spring									GMT	
	xvii.	Anti roll bar make									EMSON	
	xviii.	Ball joint roll link									SARITA	
	xix.	Fork make									EMSON	
11.4	i.	Modification / Trial (if any):			NIL							
	ii.	Deviations (if any):			LESS WHEEL DIA							

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	5010	DISPATCH DATE				10.09.2015
2.	Railway	ECR	Type	LWCBAC	Coach No.		15801
3.	Booked to		SSE/C&W/SPJ				
4.	Tare Weight of Coach		40.9 T				
5.	Carrying Capacity	Seating	NIL	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b')						
	6.1	Leading Dimensions:					
	i)	Maximum length over Body	23700+10/-0 mm				
	ii)	Maximum width over Body	3240-8/+0 mm, 3050 mm (LWSCZDAC)				
	iii)	Max. Height From Rail Level	4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC)				
	iv)	Buffer/CBC Height	Specified : 1105 +0 /-15 mm	1105	1094		
	v)	Buffer/CBC (Make )	ESCORTS	Fiba Device	NIL		
7.	Air Brake Testing:		Description		Specified		Observed
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup>		6 -10 sec		6 Sec
			Max Pressure in BC		3.80 ± 0.15 Kg/cm <sup>2</sup>		3.80
			All Brake are applied		OK		OK
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min		No brake application		OK
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, After 02 Sec.		Brake must apply		OK
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	PU PAINT	ADVANCE	90/91		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:		Make				
	i.	BRAKE EQUIPMENT	KBI				
	ii.	CDTS/ BIO TOILET	ORIENTAL				
	iii.	SEATS/ BERTHS	AMIR CHAND				
	iv.	BODY SIDE DOOR	SUKATA				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON DOOR	KALSI				
	vii.	WATER TANKS	E C BLADES, KUTEER, SHIVALIK				
	viii.	UIC VESTIBULE	FRIKMART				
	ix	FLOOR BOARD	TAYAL				
	X	PVC	RESPONSIVE				
	Xi	LP SHEET					
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



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11.	12.	<b>Bogie Details:</b>	<b>Shell No.</b>	<b>Railway</b>	<b>Type</b>	<b>Coach No.</b>	<b>Dispatch Date</b>				
			5010	EC	LWCBAC	15801/C	26-08-2015				
11.1	12.1	<b>Wheel &amp; Axle Details:</b>	<b>PP Side</b>				<b>NPP Side</b>				
		i. <b>Bogie No.</b>	156615				156616				
		ii. <b>Frame No.</b>	FIAT-3877				FIAT-4218				
		iii. <b>Bolster No.</b>	4916-VT				5014-VT				
		iv. <b>Axle No.</b>	128472/983		126159/471		127881/987		125628/377		
		v. <b>Wheel Dia.</b>	917.50	917.00	916.50	917.00	917.00	917.00	917.00	917.00	
		vi. <b>Wheel Disc No.</b>	06232-00014	6194-00050	6197-00089	06232-00106	6194-00085	6194-00081	6232-00048	6194-00171	
		vii. <b>R.B. Nos.</b>	21721	23330	23346	16796	22012	02683	22045	22138	
		viii. <b>R.B. Make</b>	SKF		SKF		SKF		SKF		
		ix. <b>RB Type</b>	UIC CARTRIDGE TAPER ROLLER BEARING								
11.2	12.2	<b>Secondary suspension load deflection Values:</b>									
		<b>Description</b>	<b>Description</b>		<b>Secondary 1</b>		<b>Secondary 2</b>		<b>Secondary 1</b>		<b>Secondary 2</b>
					Outer	Inner	Outer	Inner	Outer	Inner	Outer
i.	i.	<b>Make &amp; nos.</b>	DN-13-01-3142	G-13-04-4242	DN-13-01-3031	G-13-04-4251	DN-13-01-3173	G-13-04-4243	DN-13-01-2277	G-13-04-4218	
ii.	ii.	<b>Ht. at test load</b>	508	466	506	467	506	466	507	466	
iii.	iii.	<b>Align .deviation</b>	21	19	22	21	17	21	18	22	
11.3	12.3	<b>Items traceability:</b>									
		<b>Sno.</b>	<b>Item</b>		<b>PP Side Bogie</b>		<b>NPP side Bogie</b>		<b>Make</b>		
		i.	Primary Outer Spring		G-12-10		G-12-10		GF		
		ii.	Primary inner Spring		FSK-12-12		FSK-12-12		FSK		
		iii.	Primary Damper		1625,1698,1536,1613		1724,1661,1726,1645		GEREP		
		iv.	Secondary damper		4616,4683		4240,4570		KONI		
		v.	Lateral Damper		278		503		GEREP		
		vi.	Yaw Damper						NIL		
		vii.	Brake cylinder & Caliper		1304/691,1398/691,1302/691,1396/691		1301/691,1394/691,1309/691,1391/691		KBI		
		viii.	Brake Disc						KBI		
		ix.	Ball joint Control arm						MGN		
		x.	Lateral Bump stop						MGN		
		xi.	Traction center make						SARITA		
		xii.	Traction lever make						SARITA		
		xiii.	Ball joint traction lever						MGN		
		xiv.	Traction centre elastic						MGN		
		xv.	Secondary rubber pad						TESPAK		
		xvi.	Rubber spring						BATEGU		
		xvii.	Anti roll bar make						EMSON		
		xviii.	Ball joint roll link						SARITA		
		xix.	Fork make						EMSON		
11.4	12.4	i.	<b>Modification / Trial (if any):</b>				NIL				
		ii.	<b>Deviations (if any):</b>				NIL				

LWCBAC



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	5013	DISPATCH DATE				11.09.2015
2.	Railway	ECR	Type	LWCBAC	Coach No.	15802	
3.	Booked to	SSE/C&W/SPJ					
4.	Tare Weight of Coach	40.9 T					
5.	Carrying Capacity	Seating	NIL	Sleeping	NIL	Luggage	NIL
6.	Shell Details: (LW90023 alt 'a', LE90009 alt 'nil', LD9009 alt 'b')						
	6.1	Leading Dimensions:					
	i)	Maximum length over Body	23700+10/-0 mm				
	ii)	Maximum width over Body	3240-8/+0 mm, 3050 mm (LWSCZDAC)				
	iii)	Max. Height From Rail Level	4250 (LWACCN), 4039 (LWACCW, LS, LWSCN), 4366 (LWSCZDAC)				
	iv)	Buffer/CBC Height	Specified : 1105 +0 /-15 mm	1105	1100		
	v)	Buffer/CBC (Make )	ESCORTS	Fiba Device	NIL		
7.	Air Brake Testing:	Description			Specified	Observed	
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup>	6 -10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm <sup>2</sup>	3.80		
			All Brake are applied	OK	OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min	No brake application	OK		
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, After 02 Sec.	Brake must apply	OK		
8.	PAINTING DEATAILS:	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE			
	8.1	PAINT	PU PAINT	ADVANCE	86/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:				Make		
	i.	BRAKE EQUIPMENT	KBI				
	ii.	CDTS/ BIO TOILET	RAIL TECH				
	iii.	SEATS/ BERTHS	AMIR CHAND				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON DOOR	KALSI				
	vii.	WATER TANKS	E C BLADES, KUTEER				
	viii.	UIC VESTIBULE	FRIKMART				
	ix	FLOOR BOARD	TAYAL				
	X	PVC	RESPONSIVE				
	Xi	LP SHEET					
10.							
	10.1	Modification / Trail (if any):	NIL				
	10.2	Deviations if any:	NIL				



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11.	<b>Bogie Details:</b>		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5013	EC	LACCW	15802/C	28-08-2015			
11.1	<b>Wheel &amp; Axle Details:</b>		PP Side				NPP Side			
	i.	Bogie No.	156631				156633			
	ii.	Frame No.	VS-06				VS-09			
	iii.	Bolster No.	5021-VT				4985-VT			
	iv.	Axle No.	129042/986	127876/987	126952/476	125746/479				
	v.	Wheel Dia.	917.00	917.00	916.00	916.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	6232-00062	6212-00093	6196-00006	6232-00150	6213-00059	6196-00001	6213-000223	6196-00164
	vii.	R.B. Nos.	03910	03805	03687	03938	04431	03444	03693	03557
	viii.	R.B. Make	TIM		TIM		TIM		TIM	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	<b>Secondary suspension load deflection Values:</b>									
<b>Description</b>		Secondary 1		Secondary 2		Secondary 1		Secondary 2		
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	
i.	Make & nos.	DN-13-02-3009	DN-13-02-1823	DN-13-02-2913	DN-13-02-1912	DN-13-02-2870	DN-13-02-1750	DN-13-02-2211	DN-13-02-1880	
ii.	Ht. at test load	502	460	503	462	502	463	503	465	
iii.	Align .deviation	17	11	18	12	24	12	25	17	
11.3	<b>Items traceability:</b>									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	L&S- 02-13		L&S- 02-13		L&S			
	ii.	Primary inner Spring	L&S-05-12		L&S-05-12		L&S			
	iii.	Primary Damper	731,611,763,745		1585,753,982,1647		GEREP			
	iv.	Secondary damper	5111,5425		5388,5167		KONI			
	v.	Lateral Damper	510		538		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	1335/691,1427/691 1337/691,1425/691		1576/691,1663/691 1577/691,1664/691		KBI			
	viii.	Brake Disc					KBI			
	ix.	Ball joint Control arm					MGN			
	x.	Lateral Bump stop					MGN			
	xi.	Traction center make					SARITA			
	xii.	Traction lever make					SARITA			
	xiii.	Ball joint traction lever					GMT			
	xiv.	Traction centre elastic					GMT,MGN			
	xv.	Secondary rubber pad					TESPAK			
	xvi.	Rubber spring					BATEGU			
	xvii.	Anti roll bar make					EMSON			
	xviii.	Ball joint roll link					SARITA			
	xix.	Fork make					EMSON			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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