



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4021	DISPATCH DATE				15.10.2014
2.	Railway	NER	Type	LS3	Coach No.	14497	
3.	Booked to	SSE/C&W/GKP					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	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	1105			
v)	Buffer/CBC (Make)	ESCORTS	Fiba Device	NA			
7.	Air Brake Testing:	Description				Specified	Observed
7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²	6 –10 sec	6 Sec			
		Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00			
		All Brake are applied	OK	OK			
7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min	No brake application	OK			
7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec.	Brake must apply	OK			
8.	PAINTING DEATAILS:	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE			
8.1	PAINT	PU PAINT	GS	88/87			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:	Make					
I	BRAKE EQUIPMENT	KBI					
ii	SEAT & BERTH	AAR KAY FOAMS					
iii	BODY SIDE DOORS	JBM, SUKATA					
iv	WATER TANKS	RUBICON					
v	FLOOR BOARD	ORIENTAL					
VI	PVC	RESPONSIVE					
10.							
10.1	Modification / Trail (if any):	NIL					
10.2	Deviations if any:	NIL					



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12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4021		NER		LS3		14497		06-10-2014	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	146841						146842			
	ii.	Frame No.	FIAT-3490						FIAT-3499			
	iii.	Bolster No.	4243-VT						4260-VT			
	iv.	Axle No.	127794/987		128324/991		128644/989		126172/471			
	v.	Wheel Dia.	917.00	917.00	916.00	916.00	916.00	916.00	916.00	916.00		
	vi.	Wheel Disc No.	018-11605	295-63302	060-10570	293-11611	004-11605	295-11611	079-11611	176-63305		
	vii.	R.B. Nos.	31407	32239	31904	02813	31565	31983	32000	31566		
	viii.	R.B. Make	SKF		SKF		SKF		SKF			
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
12.2	Secondary suspension load deflection Values:											
Description		Secondary 1		Secondary 2		Secondary 1		Secondary 2				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner			
i.	Make & nos.	G-14-4-217	G-14-4-379	G-14-4-215	G-14-4-350	G-14-4-251	G-14-4-370	G-14-4-233	G-14-4-350			
ii.	Ht. attest load	513	470	512	467	515	470	514	470			
iii.	Align .deviation	5	11	4	10	4	11	2	11			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-13-11		G-13-11		GF			
	ii.	Primary inner Spring			G-14-4		G-14-4		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							KBI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							GMT			
	xi.	Traction center make							EMSON,SARITA			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							GMT			
	xiv.	Traction centre elastic							SGA			
	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			
12.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					



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ROLLING STOCK CERTIFICATE

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1.	SHELL No.	4022	DISPATCH DATE				25.10.2014
2.	Railway	NER	Type	LS3	Coach No.	14499	
3.	Booked to	SSE/C&W/GKP					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	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	1105		
	v)	Buffer/CBC (Make)	ESCORTS	Fiba Device	NA		
7.	Air Brake Testing:		Description	Specified	Observed		
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²	6 –10 sec	6 Sec		
			Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00		
			All Brake are applied	OK	OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min	No brake application	OK		
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec.	Brake must apply	OK		
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	PU PAINT	GS	87/86		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT			KBI		
	ii	SEAT & BERTH			AAR KAY FOAMS		
	lii	BODY SIDE DOORS			JBM & SUKATA		
	lv	WATER TANKS			RUBICON		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



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12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4022		NER		LS3		14499		09-10-2014	
12.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	146847					146848				
	ii.	Frame No.	FIAT-3465					FIAT-3479				
	iii.	Bolster No.	4225-VT					4057-VT				
	iv.	Axle No.	106262/629		128885/990			125713/473		128453/983		
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	917.00	917.00	917.00	917.00		
	vi.	Wheel Disc No.	341-11605	355-11605	051-11611	250-10579	257-11603	246-11611	217-10559	303-11603		
	vii.	R.B. Nos.	01570	01241	01099	01550	35926	00543	00366	00631		
	viii.	R.B. Make	TIMKEN		TIMKEN			TIMKEN		TIMKEN		
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
12.2	Secondary suspension load deflection Values:											
Description		Secondary 1		Secondary 2		Secondary 1		Secondary 2				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner			
i.	Make & nos.	G-14-4-229	G-14-4-353	G-14-4-219	G-14-4-320	G-14-4-221	G-14-4-315	G-14-4-244	G-14-4-316			
ii.	Ht. attest load	515	468	513	470	513	471	512	470			
iii.	Align .deviation	3	13	4	15	5	10	3	8			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			G-14-4		G-14-4		GF			
	ii.	Primary inner Spring			G-13-11		G-13-11		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							KBI			
	ix.	Ball joint Control arm							SGA			
	x.	Lateral Bump stop							GMT			
	xi.	Traction center make							EMSON			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							GMT			
	xiv.	Traction centre elastic							SGA			
	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			
12.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4015	DISPATCH DATE				25.10.2014
2.	Railway	NER	Type	LS3	Coach No.	14500	
3.	Booked to	SSE/C&W/GKP					
4.	Tare Weight of Coach	40.665 T					
5.	Carrying Capacity	Seating	100	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	1105		
	v)	Buffer/CBC (Make)	FAIVELEY	Fiba Device	NA		
7.	Air Brake Testing:	Description		Specified	Observed		
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²	6 -10 sec	6 Sec		
			Max Pressure in BC	3.00 ± 0.15 Kg/cm ²	3.00		
			All Brake are applied	OK	OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min	No brake application	OK		
	7.3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, After 02 Sec.	Brake must apply	OK		
8.	PAINTING DEATAILS:		TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	PU PAINT	ADVANCE	89/88		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
	I	BRAKE EQUIPMENT			KBI		
	li	SEAT & BERTH			AAR KAY FOAMS		
	lii	BODY SIDE DOORS			JBM		
	lv	WATER TANKS			RUBICON		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
10.							
	10.1	Modification / Trail (if any):			NIL		
	10.2	Deviations if any:			NIL		



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12.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			4015	NER	LS3	14500	04-10-2014			
12.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	146837				146838			
	ii.	Frame No.	FIAT-3476				FIAT-3231			
	iii.	Bolster No.	4207-GT				4223-VT			
	iv.	Axle No.	105856/627		125630/379		128817/990		127849/987	
	v.	Wheel Dia.	916.00	916.00	917.00	917.00	916.00	916.00	917.00	916.50
	vi.	Wheel Disc No.	109-10570	027-63302	095-10533	346-11605	345-11603	231-10570	302-11603	140-11611
	vii.	R.B. Nos.	01015	01438	35826	36503	01290	01393	00933	00461
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
12.2	Secondary suspension load deflection Values:									
Description		Secondary 1		Secondary 2		Secondary 1		Secondary 2		
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	
i.	Make & nos.	G-14-4-248	G-14-4-375	G-14-4-205	G-14-4-362	G-14-4-198	G-14-4-363	G-14-4-195	G-14-4-322	
ii.	Ht. attest load	516	469	515	467	512	471	514	469	
iii.	Align .deviation	5	9	4	10	4	13	7	14	
12.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			G-14-4		G-14-4		GF	
	ii.	Primary inner Spring			G-13-3		G-13-11		GF	
	iii.	Primary Damper							KONI	
	iv.	Secondary damper							SACHS	
	v.	Lateral Damper							KONI	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper							KBI	
	viii.	Brake Disc							KBI	
	ix.	Ball joint Control arm							GMT	
	x.	Lateral Bump stop							MTC	
	xi.	Traction center make							SARITA	
	xii.	Traction lever make							SARITA	
	xiii.	Ball joint traction lever							SGA	
	xiv.	Traction centre elastic							SGA	
	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	
12.4	i.	Modification / Trial (if any):				NIL				
	ii.	Deviations (if any):				NIL				