



ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	4059	DISPATCH DATE			10.04.2015	
2.	Railway	ECR	Type	LS3	Coach No.	15432	
3.	Booked to	SSE/C&W/DANAPUR					
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	VIBGYOR	85/88		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
I	BRAKE EQUIPMENT			KBI			
li	SEAT & BERTH			SAVITRI			
lii	BODY SIDE DOORS			SUKATA			
lv	WATER TANKS			RAIL FAB			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
Vii	LP SHEET			NA			
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	
			4059		ECR		LS3		15432		17-03-2015	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	156218						156219			
	ii.	Frame No.	FIAT-3845						FIAT-3821			
	iii.	Bolster No.	4527-GT						4600-P			
	iv.	Axle No.	A-3089			A-2810			C-4578		A-3083	
	v.	Wheel Dia.	916.00	916.00	915.50	916.00	916.50	916.50	916.00	916.00		
	vi.	Wheel Disc No.	075-10570	078-10583	052-10559	045-10583	321-63301	002-10583	253-10579	113-10533		
	vii.	R.B. Nos.	01401	02432	02327	02613	36014	35925	35911	36409		
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN			
ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING										
12.2	<u>Secondary suspension load deflection Values:</u>											
Description		Secondary 1		Secondary 2		Secondary 1		Secondary 2				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner			
i.	Make & nos.	FSK-15-01-10	G-14-03-243	FSK-15-01-22	G-14-03-097	FSK-15-01-24	G-14-03-205	FSK-15-01-01	G-11-03-251			
ii.	Ht. at test load	513	471	513	471	516	469	516	470			
iii.	Align .deviation	6	16	6	19	6	20	7	23			
12.3	<u>Items traceability:</u>											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			FSK-14-12		FSK-14-12		FSK			
	ii.	Primary inner Spring			G-14-3		G-14-3		GF			
	iii.	Primary Damper							GEREP			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							KBI			
	viii.	Brake Disc							FTI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							GMT			
	xi.	Traction center make							SARITA			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							GMT			
	xiv.	Traction centre elastic							GMT,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							SARITA			
12.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					

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1.	SHELL No.	4063	DISPATCH DATE				05.05.2015
2.	Railway	ECR	Type	LS3	Coach No.	15436	
3.	Booked to	SSE/C&W/DANAPUR					
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	VIBGYOR	85/87		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:					Make	
I	BRAKE EQUIPMENT					KBI	
ii	SEAT & BERTH					SAVITRI	
iii	BODY SIDE DOORS					--	
iv	WATER TANKS					RAIL FAB	
v	FLOOR BOARD					RESPONSIVE/PREMIER POLY.	
VI	PVC					TAYAL	
Vii	LP SHEET					NA	
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	
			4063		ECR		LS3		15436		15-04-2015	
12.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	156292					156293				
	ii.	Frame No.	FIAT-3770					FIAT-3746				
	iii.	Bolster No.	4687-VT					4138-ECBT				
	iv.	Axle No.	114165/374		126689/468			106529/628		125837/477		
	v.	Wheel Dia.	916.00	916.00	917.00	917.00	917.00	917.00	916.50	916.50		
	vi.	Wheel Disc No.	234-10568	188-11611	001-10583	208-10570	287-10533	296-10533	357-63301	156-63301		
	vii.	R.B. Nos.	02807	04516	02812	02911	02732	02642	01868	02387		
	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.	DN-14-01-289	DN-14-02-340	DN-14-01-401	DN-14-02-418	DN-14-01-309	DN-14-02-313	DN-14-01-723	DN-14-02-159			
ii.	Ht. at test load	516	470	516	472	513	468	515	472			
iii.	Align .deviation	8	8	10	10	10	11	10	12			
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-14-03		G-14-03		GF			
	iii.	Primary Damper							GEREP			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							KONI			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper							----			
	viii.	Brake Disc							FTI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							GMT			
	xi.	Traction center make							SARITA			
	xii.	Traction lever make							SARITA			
	xiii.	Ball joint traction lever							GMT			
	xiv.	Traction centre elastic							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							SRITA,EMSON			
12.4	i.	Modification / Trial (if any):					NIL					
	ii.	Deviations (if any):					NIL					

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1.	SHELL No.	4071	DISPATCH DATE				11/5/2015
2.	Railway	ECR	Type	LS3	Coach No.	15442	
3.	Booked to	SSE/C&W/DANA PUR					
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)	FAVELLY	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	VIBGYOR	85/87			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:	Make					
I	BRAKE EQUIPMENT	FAVELLY					
ii	SEAT & BERTH	AAR KAY FOAMS					
lii	BODY SIDE DOORS	JBM, SUKATA					
lv	WATER TANKS	RAIL FAB					
v	FLOOR BOARD	TAYAL					
VI	PVC	RESPONSIVE					
Vii	LP SHEET						
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		
			4071		ECR		LS3		15442		24-03-2015		
12.1	Wheel & Axle Details:		PP Side						NPP Side				
	i.	Bogie No.	156228						156229				
	ii.	Frame No.	ECBT-899						ECBT-941				
	iii.	Bolster No.	4622-P						4631-P				
	iv.	Axle No.	C-4221			B-9928			R-3285		C-4753		
	v.	Wheel Dia.	916.00	916.00	915.50	915.50	916.00	915.50	916.00	916.00			
	vi.	Wheel Disc No.	226-10583	196-10583	072-10559	303-10503	111-63305	222-63309	044-11611	038-63302			
	vii.	R.B. Nos.	01025	01414	02627	01212	36519	35905	01540	36135			
	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	
i.	Make & nos.	FSK-14-02-17	FSK-14-02-52	FSK-14-02-7	FSK-14-02-95	FSK-14-02-8	FSK-14-02-5	FSK-14-02-19	FSK-14-02-35				
ii.	Ht. at test load	516	470	515	471.50	512	468	514	470				
iii.	Align .deviation	5	5	7	6	8	6	8	7				
12.3	Items traceability:												
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make		
	i.	Primary Outer Spring			RSK-11-11			RSK-11-11			RSK		
	ii.	Primary inner Spring			RSK-11-11			RSK-11-11			RSK		
	iii.	Primary Damper									GEREP		
	iv.	Secondary damper									GEREP		
	v.	Lateral Damper									GEREP		
	vi.	Yaw Damper									NIL		
	vii.	Brake cylinder & Caliper									----		
	viii.	Brake Disc									FTI,KBI		
	ix.	Ball joint Control arm									MGN		
	x.	Lateral Bump stop									GMT		
	xi.	Traction center make									SARITA		
	xii.	Traction lever make									SARITA		
	xiii.	Ball joint traction lever									GMT		
	xiv.	Traction centre elastic									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,SARITA		
12.4	i.	Modification / Trial (if any):					NIL						
	ii.	Deviations (if any):					NIL						

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1.	SHELL No.	4067	DISPATCH DATE			11/5/2015	
2.	Railway	ECR	Type	LS3	Coach No.	15440	
3.	Booked to	SSE/C&W/DANA PUR					
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)	FAVELLY	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	VIBGYOR	85/86		
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:			Make			
I	BRAKE EQUIPMENT			KBI			
ii	SEAT & BERTH			SAVITRI			
lii	BODY SIDE DOORS			JBM, SUKATA			
lv	WATER TANKS			RUBICONE			
v	FLOOR BOARD			TAYAL			
VI	PVC			RESPONSIVE			
Vii	LP SHEET						
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	
			4067		ECR		LS3		15440		13-03-2015	
12.1	Wheel & Axle Details:		PP Side				NPP Side					
	i.	Bogie No.	156202				156203					
	ii.	Frame No.	FIAT-3822				FIAT-3612					
	iii.	Bolster No.	4557-GT				4602-P					
	iv.	Axle No.	A-2815		C-4004		B-9710		A-2855			
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00		
	vi.	Wheel Disc No.	311-10582	225-10582	199-10579	378-63309	056-11600	208-63307	057-10570	169-10559		
	vii.	R.B. Nos.	01720	02590	02091	02519	02075	02644	02332	02191		
	viii.	R.B. Make	TIM		TIM		TIM		TIM			
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.	GBD-14-7-5101	G-14-4-369	GBD-14-7-5101	G-14-4-208	GBD-14-7-5101	G-14-4-326	GBD-14-7-5101	G-14-4-343			
ii.	Ht. at test load	514	471	516	470	513	468	513	472			
iii.	Align .deviation	4	14	8	18	6	13	7	15			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring			GBD-14-7		GBD-14-7		GBD			
	ii.	Primary inner Spring			G-14-3		G-14-3		GF			
	iii.	Primary Damper							KONI			
	iv.	Secondary damper							GEREP			
	v.	Lateral Damper							GEREP			
	vi.	Yaw Damper							NIL			
	vii.	Brake cylinder & Caliper			465/691,535/691, 460/691,538/691		464/691,537/691, 467/691,539/691		KBI			
	viii.	Brake Disc							FTI			
	ix.	Ball joint Control arm							MGN			
	x.	Lateral Bump stop							GMT			
	xi.	Traction center make							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							SRITA,GMT			
	xix.	Fork make							EMSON			
12.4	i.	Modification / Trial (if any):				NIL						
	ii.	Deviations (if any):				NIL						

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1.	SHELL No.	4066	DISPATCH DATE				19.05.2015
2.	Railway	ECR	Type	LS3	Coach No.		15438
3.	Booked to	SSE/C&W/DANA PUR					
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		1104	
	v)	Buffer/CBC (Make)	FAVELLY		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	VIBGYOR	85/87		
	8.2	APPLICATION OF PCN-123	SATISFACTORY				
	8.3	INSUALTION	SATISFACTORY				
9.	Traceability of Furnishing Items:					Make	
	I	BRAKE EQUIPMENT			KBI		
	ii	SEAT & BERTH			ARR KAYEE		
	lii	BODY SIDE DOORS			JBM, SUKATA		
	lv	WATER TANKS			RUBICONE		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
	Vii	LP SHEET			NA		
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



रेल डिब्बा कारखाना, कपूरथला
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12.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			4066		ECR		LS3		15438		18-03-2015	
12.1	Wheel & Axle Details:		PP Side					NPP Side				
	i.	Bogie No.	156220					156221				
	ii.	Frame No.	FIAT-3615					SCI-FM-134				
	iii.	Bolster No.	4613-P					4610-P				
	iv.	Axle No.	C-0007		C-4609			B-9773		A-2899		
	v.	Wheel Dia.	915.50	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
	vi.	Wheel Disc No.	069-10559	129-10533	293-10582	021-10583	326-10582	054-61077	109-11600	315-10533		
	vii.	R.B. Nos.	01451	01378	01069	021-10583	36513	02688	36637	02561		
	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.	FSK-15-01-18	G-11-4-33		FSK-15-01-30	G-11-4-96		FSK-15-01-21	G-14-3-295		FSK-15-01-25	G-14-03-249
ii.	Ht. at test load	513	471		514	468		515	469		516	469
iii.	Align .deviation	6	11		7	16		7	19		8	20
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			GBD-14-7			GBD-14-7			GBD	
	ii.	Primary inner Spring			G-14-3			G-14-3			GF	
	iii.	Primary Damper									GEREP	
	iv.	Secondary damper									GEREP	
	v.	Lateral Damper									GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper									KBI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									GMT	
	xi.	Traction center make									SARITA	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									GMT	
	xiv.	Traction centre elastic									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	
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.	4061	DISPATCH DATE				30.05.2015
2.	Railway	ECR	Type	LS3	Coach No.	15435	
3.	Booked to	SSE/C&W/DANA PUR					
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	1100	
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		VIBGYOR	85/87	
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:				Make		
I	BRAKE EQUIPMENT				KBI		
ii	SEAT & BERTH				SAVITRI		
iii	BODY SIDE DOORS				SUKATA		
iv	WATER TANKS				RAIL FAB		
v	FLOOR BOARD				TAYAL		
VI	PVC				RESPONSIVE		
Vii	LP SHEET				NA		
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	
			4061		ECR		LS3		15435/C		15-04-2015	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	156306						156304			
	ii.	Frame No.	FIAT-3787						FIAT-3936			
	iii.	Bolster No.	4581-GT						4680-VT			
	iv.	Axle No.	126978/486		C-4340		125622/377		127812/987			
	v.	Wheel Dia.	916.50	916.00	917.00	916.50	917.00	917.00	916.00	916.00		
	vi.	Wheel Disc No.	233-10570	061-63301	021-10579	067-63301	312-10582	171-10533	078-10559	263-11611		
	vii.	R.B. Nos.	02554	02903	01947	02693	03421	02814	02841	02803		
	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.	DN-14-03-732	DN-14-01-220	DN-14-03-776	DN-14-02-443	DN-14-03-741	DN-14-03-327	DN-14-03-667	DN-14-03-337			
ii.	Ht. at test load	512	470	513	468	511	468	513	472			
iii.	Align .deviation	12	9	11	7	10	10	8	9			
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-14-03			G-14-03			GF	
	iii.	Primary Damper			1014,1582,1308,1367			1525,1581,1618,1552			GEREP	
	iv.	Secondary damper			1076,934			1086,1126			GEREP	
	v.	Lateral Damper			2949			2788			KONI	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			169/691,712/691, 183/691,205/691			166/691,203/691, 160/691,287/691			KBI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									GMT	
	xi.	Traction center make									SARITA	
	xii.	Traction lever make									SARITA	
	xiii.	Ball joint traction lever									GMT	
	xiv.	Traction centre elastic									SGA,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	
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.	4069	DISPATCH DATE				01.06.2015
2.	Railway	ECR	Type	LS3	Coach No.	15443	
3.	Booked to	SSE/C&W/DANA PUR					
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	1102	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	VIBGYOR	85/87		
	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			RUBICONE		
	v	FLOOR BOARD			TAYAL		
	VI	PVC			RESPONSIVE		
	Vii	LP SHEET			NA		
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	
			4069		ECR		LS3		15443/C		25-03-2015	
12.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	156238						156239			
	ii.	Frame No.	FIAT-3812						FIAT-3720			
	iii.	Bolster No.	4483-GT						3913-VT			
	iv.	Axle No.	A-2973			C-4657			C-4445		C-4483	
	v.	Wheel Dia.	915.00	915.00	915.00	915.50	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	192-11596	332-11610	240-10583	119-10582	025-10570	284-11611	325-11611	201-10559	325-11611	201-10559
	vii.	R.B. Nos.	24314	24092	36170	35796	36433	36528	36250	35836	36250	35836
	viii.	R.B. Make	SKF			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.	DN-14-03-685	G-13-12-187	DN-14-03-686	G-13-12-256	DN-14-03-683	G-13-12-364	DN-14-03-715	G-13-12-257			
ii.	Ht. at test load	515	472	514	471	515	471	513	471			
iii.	Align .deviation	10	14	10	13	8	15	8	14			
12.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			RSK-11-11-73,115,96,114			RSK-11-11-42,65,13,48			RSK	
	ii.	Primary inner Spring			RSK-11-11-073,24,47,48			RSK-11-11-42,65,13,25			RSK	
	iii.	Primary Damper			567,1448,1424,1627			1644,1398,1476,1383			GEREP	
	iv.	Secondary damper			864,1066			849,837			GEREP	
	v.	Lateral Damper			156			221			GEREP	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			178/691,321/691,191/691,122/691			199/691,216/691,196/691,220/691			KBI	
	viii.	Brake Disc									FTI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									GMT	
	xi.	Traction center make									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									SARITA	
12.4	i.	Modification / Trial (if any):						NIL				
	ii.	Deviations (if any):						NIL				

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