



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	5016	DISPATCH DATE				04.04.2016
2.	Railway	NR	Type	LWCBAC	Coach No.	163809	
3.	Booked to	SSE/C&W/NDLS					
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	1105			
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 ²	Max Pressure in BC	6 -10 sec	6 Sec		
		All Brake are applied		3.80 ± 0.15 Kg/cm ²	3.80		
				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	86/87			
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 FAB					
iii.	SEATS/ BERTHS	AAR KAY FOAMS					
iv.	BODY SIDE DOOR	JBM					
v.	VESTIBULE SLIDING DOOR	KALSI					
vi.	SALOON DOOR	HANSPAL					
vii.	WATER TANKS	E C BLADES, SHIVALIK, MANOJ					
viii.	UIC VESTIBULE	SUNCREAST					
ix	FLOOR BOARD	NARBADA					
X	PVC	RESPONSIVE					
Xi	LP SHEET	NA					
10.							
10.1	Modification / Trail (if any):	NIL					
10.2	Deviations if any:	NIL					



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5016	NR	LWCBAC	163809	09-02-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166119				166120			
	ii.	Frame No.	FIAT-3994				FIAT-4519			
	iii.	Bolster No.	5403-VT				5486-P			
	iv.	Axle No.	128185/984	125850/477	127973/988	128078/984				
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	6210-00159	6210-00029	6227-00167	06230-00159	06223-00190	06223-00186	06230-00158	06230-00157
	vii.	R.B. Nos.	05078	01525	04949	01852	01683	05080	01747	01353
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	RSK-14-8-87	RSK-15-10-456	RSK-14-8-53	RSK-15-10-443	RSK-14-8-7	RSK-15-10-480	RSK-14-8-116	RSK-15-10-322	
ii.	Ht. at test load	511	467	511	468	512	468	511	468	
iii.	Align .deviation	8	39	10	40	13	30	13	34	
11.3	Items traceability:									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	RSK-14-5		RSK-14-5		RSK			
	ii.	Primary inner Spring	RSK-12-5		RSK-12-5		RSK			
	iii.	Primary Damper	1275,1317,2351,2295		117,293,276,1155		GEREP			
	iv.	Secondary damper	764,751		70,714		GEREP			
	v.	Lateral Damper	144		548		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	K2069/691,K2115/691 K2068/691,K2114/691		K2066/691,K2116/691 K2067/691,K2113/691		KBI			
	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					SGA			
	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					SARITA			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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Form No. : QMF 9454; Version: 1

1.	SHELL No.	5024	DISPATCH DATE				30.03.2016
2.	Railway	NR	Type	LWCBAC	Coach No.		163813
3.	Booked to			SSE/C&W/NDLS			
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	1105	
	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 ²		6 –10 sec	6 Sec	
			Max Pressure in BC		3.80 ± 0.15 Kg/cm ²	3.80	
			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	NEROLAC	89/89		
	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 FAB	
	iii.	SEATS/ BERTHS				AAR KAY FOAMS	
	iv.	BODY SIDE DOOR				JBM	
	v.	VESTIBULE SLIDING DOOR				KALSI	
	vi.	SALOON DOOR				HANSPAL	
	vii.	WATER TANKS				E C BLADES, KUTEER, MANOJ	
	viii.	UIC VESTIBULE				SUNCREAST	
	ix	FLOOR BOARD				NARBADA	
	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.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5024	NR	LWBAC	163813	13-02-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166132				166134			
	ii.	Frame No.	FIAT-4529				FIAT-4379			
	iii.	Bolster No.	5470-P				5489-P			
	iv.	Axle No.	128426/983	128788/990	127996/988	129027/986				
	v.	Wheel Dia.	917.00	917.00	917.00	917.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	7282-00115	7282-00126	7216-00117	6227-00049	06226-00135	7273-00044	07301-00070	06234-00192
	vii.	R.B. Nos.	01565	01409	01676	01205	05006	05209	04606	04282
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	RSK-14-8-102	RSK-15-10-454	RSK-14-8-139	RSK-15-10-450	RSK-14-8-170	RSK-15-10-441	RSK-14-8-173	RSK-15-10-435	
ii.	Ht. at test load	511	468	512	467	508	466	510	467	
iii.	Align .deviation	11	40	13	38	9	39	8	37	
11.3	Items traceability:									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	RSK-14-5		RSK-14-5		RSK			
	ii.	Primary inner Spring	RSK-14-5		RSK-14-5		RSK			
	iii.	Primary Damper	1576,1882,1900,1879		1576,1279,1545,1502		GEREP			
	iv.	Secondary damper	594,607		390,408		GEREP			
	v.	Lateral Damper	120		9		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	H15095/600,H15113/600 H15140/600,H15121/600		H15063/600,H15079/600 H15064/600,H15075/600		FTI			
	viii.	Brake Disc					KBI			
	ix.	Ball joint Control arm					GMT,MGN			
	x.	Lateral Bump stop					MGN			
	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					SARITA			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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Form No. : QMF 9454; Version: 1

1.	SHELL No.	5029	DISPATCH DATE				05.04.2016
2.	Railway	NR	Type	LWCBAC	Coach No.	163812	
3.	Booked to	SSE/C&W/NDLS					
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	1100	1105			
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 ²	6 -10 sec	6 Sec			
		Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80			
		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	87/88			
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 FAB				
iii.	SEATS/ BERTHS		AAR KAY FOAMS				
iv.	BODY SIDE DOOR		JBM				
v.	VESTIBULE SLIDING DOOR		KALSI				
vi.	SALOON DOOR		HANSPAL				
vii.	WATER TANKS		E C BLADES, KUTEER, SHIVALIK, AMIT				
viii.	UIC VESTIBULE		SUNCREAST				
ix	FLOOR BOARD		NARBADA				
X	PVC		RESPONSIVE				
Xi	LP SHEET		NA				
10.							
10.1	Modification / Trail (if any):				NIL		
10.2	Deviations if any:				NIL		



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5029	NR	LWCBAC	163812	08-02-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166117				166118			
	ii.	Frame No.	FIAT-4627				FIAT-4568			
	iii.	Bolster No.	5464-P				5498-P			
	iv.	Axle No.	128685/989	128575/989	128270/991	128060/988				
	v.	Wheel Dia.	917.00	917.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	6234-00005	6202-00021	6206-00022	06229-00058	6226-00070	06229-00136	6226-00055	6226-00004
	vii.	R.B. Nos.	05324	05629	04947	01823	01784	04935	04884	05132
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	RSK-14-8-56	RSK-15-10-358	RSK-14-8-124	RSK-15-10-250	RSK-14-8-93	RSK-15-03-496	RSK-14-8-120	RSK-15-10-268	
ii.	Ht. at test load	511	467	511	464	510	464	509	468	
iii.	Align .deviation	5	23	6	26	8	39	10	41	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			RSK-14-5		RSK-14-5		RSK	
	ii.	Primary inner Spring			RSK-14-5		RSK-14-5		RSK	
	iii.	Primary Damper			153,832,1521,1393		1509,1371,1347,1511		GEREP	
	iv.	Secondary damper			749,710		717,98		GEREP	
	v.	Lateral Damper			9		113		GEREP	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			M15045/600,M15036/600 M15050/600,M15017/600		L15106/600,L15112/600 L15101/600,L15113/600		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,SGA	
	xiv.	Traction centre elastic							SGA	
	xv.	Secondary rubber pad							TESPAK	
	xvi.	Rubber spring							GMT	
	xvii.	Anti roll bar make							EMSON, SARITA	
	xviii.	Ball joint roll link							SARITA	
	xix.	Fork make							SARITA	
11.4	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.	5036	DISPATCH DATE				06.04.2016
2.	Railway	NR	Type	LWCBAC	Coach No.	163814	
3.	Booked to	SSE/C&W/NDLS					
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	1105		
	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 ²	6 -10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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	89/89		
	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 FAB				
	iii.	SEATS/ BERTHS	AAR KAY FOAMS				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON DOOR	HANSPAL				
	vii.	WATER TANKS	E C BLADES, KUTEER, MANOJ, AMIT				
	viii.	UIC VESTIBULE	ESCORTS				
	ix	FLOOR BOARD	NARBADA				
	X	PVC	RESPONSIVE				
	Xi	LP SHEET	NA				
10.							
	10.1	Modification / Trail (if any):				NIL	
	10.2	Deviations if any:				NIL	



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5036	NR	LWBAC	163814	15-02-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166141				166142			
	ii.	Frame No.	FIAT-4672				FIAT-4587			
	iii.	Bolster No.	5378-VT				5495-P			
	iv.	Axle No.	128763/990	126242/471	125793/473	114885/369				
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	6210-00110	6227-00172	6210-00144	06234-00063	7216-00191	7290-00097	6227-00089	06227-00119
	vii.	R.B. Nos.	01861	01776	01122	07492	05649	01268	01331	01456
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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-12-8-2665	RSK-15-10-249	DN-12-8-2770	RSK-15-10-279	DN-12-8-2711	RSK-15-10-323	DN-12-8-2800	RSK-15-10-459	
ii.	Ht. at test load	506	461	505	464	509	466	507	466	
iii.	Align .deviation	16	39	19	41	22	44	23	47	
11.3	Items traceability:									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	RSK-12-5		RSK-12-5		RSK			
	ii.	Primary inner Spring	RSK-11-11		RSK-11-11		RSK			
	iii.	Primary Damper	1916,1927,1901,1953		1902,1960,1914,1632		GEREP			
	iv.	Secondary damper	229,267		221,288		GEREP			
	v.	Lateral Damper	150		85		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	H15086/600,H15066/600 H15082/600,H15063/600		H15065/600,H15082/600 H15066/600,H15083/600		FTI			
	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					SGA,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			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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Form No. : QMF 9454; Version: 1

1.	SHELL No.	5040	DISPATCH DATE				29.03.2016
2.	Railway	NR	Type	LWCBAC	Coach No.		163811
3.	Booked to			SSE/C&W/NDLS			
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	1105	
	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 ²		6 –10 sec		6 Sec
			Max Pressure in BC		3.80 ± 0.15 Kg/cm ²		3.80
			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					FAIVELEY
	ii.	CDTS/ BIO TOILET					RAIL FAB
	iii.	SEATS/ BERTHS					AMIR CHAND
	iv.	BODY SIDE DOOR					JBM
	v.	VESTIBULE SLIDING DOOR					KALSI
	vi.	SALOON DOOR					HANSPAL
	vii.	WATER TANKS					E C BLADES, KUTEER, MANOJ
	viii.	UIC VESTIBULE					SUNCREAST
	ix	FLOOR BOARD					NARBADA
	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.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5040	NR	LWBAC	163811	11-02-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166131				166133			
	ii.	Frame No.	FIAT-4631				FIAT-4524			
	iii.	Bolster No.	5482-P				5379-VT			
	iv.	Axle No.	125897/477	128694/989		R-3272		129310/982		
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	917.00	917.00	917.00	917.00
	vi.	Wheel Disc No.	06226-00009	06222-00131	06222-00107	06237-00194	7216-00067	7273-00046	06226-00218	7273-00213
	vii.	R.B. Nos.	04253	04678	05010	05494	05185	04709	03267	03449
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	RSK-14-8-136	RSK-15-10-509	RSK-14-8-147	RSK-15-10-2673	RSK-14-8-166	RSK-15-10-505	RSK-14-8-189	RSK-15-10-683	
ii.	Ht. at test load	512	467	512	468	509	466	509	468	
iii.	Align .deviation	9	36	7	30	13	44	12	42	
11.3	Items traceability:									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
i.		Primary Outer Spring	RSK-14-5		RSK-14-5		RSK			
ii.		Primary inner Spring	RSK-14-5		RSK-11-11		RSK			
iii.		Primary Damper	1870,1861,1853,1840		1837,1824,1585,588		GEREP			
iv.		Secondary damper	395,592		756,112		GEREP			
v.		Lateral Damper	65		394		GEREP			
vi.		Yaw Damper					NIL			
vii.		Brake cylinder & Caliper	L15019/600,L15056/600 L15023/600,L15052/600		H15069/600,H15059/600 H15075/600,H15060/600		FTI			
viii.		Brake Disc					KBI			
ix.		Ball joint Control arm					GMT			
x.		Lateral Bump stop					MGN			
xi.		Traction center make					EMSON,SAR ITA			
xii.		Traction lever make					SARITA			
xiii.		Ball joint traction lever					GMT,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					SARITA			
11.4	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.	5046	DISPATCH DATE				06.04.2016
2.	Railway	NR	Type	LWCBAC	Coach No.	163815	
3.	Booked to	SSE/C&W/NDLS					
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	1102	1104		
	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 ²	6 -10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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		FAIVELEY			
	ii.	CDTS/ BIO TOILET		RAIL FAB			
	iii.	SEATS/ BERTHS		AAR KAY FOAMS			
	iv.	BODY SIDE DOOR		JBM			
	v.	VESTIBULE SLIDING DOOR		KALSI			
	vi.	SALOON DOOR		HANSPAL			
	vii.	WATER TANKS		E C BLADES, KUTEER, MANOJ, AMIT			
	viii.	UIC VESTIBULE		SUNCREAST			
	ix	FLOOR BOARD		NARBADA			
	X	PVC		RESPONSIVE			
	Xi	LP SHEET		NA			
10.							
	10.1	Modification / Trail (if any):			NIL		
	10.2	Deviations if any:			NIL		



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11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			5046		NR		LWBAC		163815		19-02-2016	
11.1	Wheel & Axle Details:		PP Side						NPP Side			
	i.	Bogie No.	166167						166168			
	ii.	Frame No.	FIAT-4635						FIAT-4640			
	iii.	Bolster No.	5502-P						5508-P			
	iv.	Axle No.	126777/468		126760/468		129183/992		114171/371			
	v.	Wheel Dia.	915.00	915.00	917.00	917.00	916.00	916.00	917.00	917.00		
	vi.	Wheel Disc No.	7290-00057	7222-00042	6226-00159	6226-00132	6227-00021	7290-00033	6223-00218	7290-00052		
	vii.	R.B. Nos.	01719	01366	01232	07357	33723	34193	22617	22583		
	viii.	R.B. Make	TIMKEN		TIMKEN		SKF		SKF			
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2	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.	RSK-15-3-344	RSK-15-9-058	RSK-15-3-328	RSK-15-9-385	RSK-15-3-308	RSK-15-9-504	RSK-15-3-362	RSK-15-9-136			
ii.	Ht. at test load	510	468	511	467	510	466	512	465			
iii.	Align .deviation	16	39	18	39	15	36	11	35			
11.3	Items traceability:											
	Sno.	Item			PP Side Bogie			NPP side Bogie			Make	
	i.	Primary Outer Spring			RSK-14-5			RSK-14-5			RSK	
	ii.	Primary inner Spring			RSK-14-5			RSK-14-5			RSK	
	iii.	Primary Damper			2175,2183,2119,2174			2158,2602,2170,1399			GEREP	
	iv.	Secondary damper			384,59			246,468			GEREP	
	v.	Lateral Damper			3607			3352			KONI	
	vi.	Yaw Damper									NIL	
	vii.	Brake cylinder & Caliper			M15053/600,M15082/600 M15049/600,M15076/600			M15051/600MM15055/600 M15030/600,M15083/600			FTI	
	viii.	Brake Disc									FTI,KBI	
	ix.	Ball joint Control arm									MGN	
	x.	Lateral Bump stop									MGN	
	xi.	Traction center make									EMSON	
	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									SARITA	
11.4	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.	5047	DISPATCH DATE				22.03.2016
2.	Railway	NR	Type	LWCBAC	Coach No.	163810	
3.	Booked to	SSE/C&W/NDLS					
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	1105		
	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 ²	6 -10 sec	6 Sec		
			Max Pressure in BC	3.80 ± 0.15 Kg/cm ²	3.80		
			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	86/88		
	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 FAB				
	iii.	SEATS/ BERTHS	AAR KAY FOAMS				
	iv.	BODY SIDE DOOR	JBM				
	v.	VESTIBULE SLIDING DOOR	KALSI				
	vi.	SALOON DOOR	HANSPAL				
	vii.	WATER TANKS	E C BLADES, SHIVALIK, KUTEER, MANOJ				
	viii.	UIC VESTIBULE	SUNCREAST				
	ix	FLOOR BOARD	NARBADA				
	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.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			5047	NR	LWCBAC	163810/C	06-02-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	166111				166112			
	ii.	Frame No.	FIAT-4629				FIAT-4579			
	iii.	Bolster No.	5406-VT				5505-P			
	iv.	Axle No.	128110/984	126896/470	127968/988	127850/987				
	v.	Wheel Dia.	917.00	917.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	7216-00127	7216-00160	6227-00011	6226-00100	06229-00207	06206-00008	6229-00237	06229-00220
	vii.	R.B. Nos.	07429	01804	02278	01673	05029	04583	01262	05086
	viii.	R.B. Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	ix.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
11.2	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.	RSK-14-8-146	RSK-15-10-310	RSK-14-8-96	RSK-15-10-234	RSK-14-8-122	RSK-15-10-276	RSK-14-8-149	RSK-15-10-286	
ii.	Ht. at test load	509	468	511	465	512	466	512	468	
iii.	Align .deviation	15	45	17	47	11	32	12	33	
11.3	Items traceability:									
	Sno.	Item	PP Side Bogie		NPP side Bogie		Make			
	i.	Primary Outer Spring	RSK-14-5		RSK-14-5		RSK			
	ii.	Primary inner Spring	RSK-14-5		RSK-14-5		RSK			
	iii.	Primary Damper	1070,641,1572,1020		1595,1086,1194,1501		GEREP			
	iv.	Secondary damper	109,679		699,76		GEREP			
	v.	Lateral Damper	566		318		GEREP			
	vi.	Yaw Damper					NIL			
	vii.	Brake cylinder & Caliper	L15101/600,N15019/600 L15100/600,L15028/600		L15053/600,L15029/600 L15063/600,L15055/600		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					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					SARITA			
11.4	i.	Modification / Trial (if any):			NIL					
	ii.	Deviations (if any):			NIL					

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