



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6016	DISPATCH DATE				28.04.17
2.	Railway	WR	Type	LWFCWAC	Coach No.	170266	
3.	Booked to	SSE/C&W/MUMBAI					
4.	Tare Weight of Coach	43.6 T					
5.	Carrying Capacity	Seating	24	Sleeping	24	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)		ESCORT		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		3.00 ± 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	87/88	
8.2	APPLICATION OF PCN-123		SATISFACTORY				
8.3	INSUALTION		SATISFACTORY				
9.	Traceability of Furnishing Items:				Make		
i.	BRAKE EQUIPMENT				FAIVELEY		
ii.	BIO TOILET				RAIL TECH+MK		
iii.	SEATS/ BERTHS				RAJENDER DASS		
iv.	BODY SIDE DOOR				SUKATA		
v.	VESTIBULE SLIDING DOOR				HP		
vi.	SALOON DOOR				KALSI		
vii.	WATER TANKS				SHIVALIK(AUX) & SHIVALIK,MANOJ(U/S)		
viii.	UIC VESTIBULE				ESCORT		
ix	FLOOR BOARD				TWPL		
x	PVC FLOORING				RESPONSIVE		
10.							
i	Modification / Trail (if any):				NIL		
ii	Deviations if any:				NIL		



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6016	WR	LFCWAC	170266	28-12-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	167134				167135			
	ii.	Frame No.	FIAT-5395				FIAT-5360			
	iii.	Bolster No.	6497-P				6481-P			
	iv.	Axle No.	R-3357		R-3391		R-3363		P-9680	
	v.	Wheel Dia.	916.00	916.00	916.00	916.50	917.00	916.50	916.00	916.00
	vi.	Wheel Disc No.	00069-6133	00159-6133	00060-6133	00098-6133	00123-6109	00076-6138	00170-6103	00168-6168
	vii.	R.B. Nos.	87135	81750	87022	81763	86371	94794	80553	93317
	viii.	R.B. Make	SKF		SKF		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-16-6-757	RSK-16-3-959	RSK-16-6-973	RSK-16-3-1123	RSK-16-7-761	RSK-16-3-985	RSK-16-7-877	RSK-16-3-1197	
ii.	Ht. at test load	507	466	509	465	512	468	512	467	
iii.	Align .deviation	15	33	15	34	12	26	11	25	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			GBD-16-11		GBD-16-11		GBD	
	ii.	Primary inner Spring			G-12-6		G-12-6		GF	
	iii.	Primary Damper			446,464,538,495		448,444,416,460		GABRIEL	
	iv.	Secondary damper			0691,0404		600,0688		SV	
	v.	Lateral Damper			0133		0241		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			L16076/600,L16048/600 L16079/600,L16089/600		G16245/600,G16260/600 G16246/600,G16253/600		FTI	
	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							SGA	
	xiv.	Traction centre elastic							SGA	
	xv.	Secondary rubber pad							TECSPACK	
	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			

LWFCWAC-6016



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ROLLING STOCK CERTIFICATE

Form No. : QMF 9454; Version: 1

1.	SHELL No.	6011	DISPATCH DATE				26.04.17
2.	Railway	WR	Type	LWFCWAC	Coach No.	170286	
3.	Booked to	SSE/C&W/MUMBAI					
4.	Tare Weight of Coach	43.6 T					
5.	Carrying Capacity	Seating	24	Sleeping	24	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	1095			
v)	Buffer/CBC (Make)	SANROK	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	3.00 ± 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	86/87			
8.2	APPLICATION OF PCN-123	SATISFACTORY					
8.3	INSUALTION	SATISFACTORY					
9.	Traceability of Furnishing Items:	Make					
i.	BRAKE EQUIPMENT	FAIVELEY					
ii.	BIO TOILET	RAIL TECH+MK					
iii.	SEATS/ BERTHS	ARR KAYEE					
iv.	BODY SIDE DOOR	SUKATA					
v.	VESTIBULE SLIDING DOOR	HP					
vi.	SALOON DOOR	KALSI					
vii.	WATER TANKS	SHIVALIK(AUX) & AMIT(U/S)					
viii.	UIC VESTIBULE	ESCORT					
ix	FLOOR BOARD	TWPL					
x	PVC FLOORING	RESPONSIVE					
10.							
i	Modification / Trail (if any):	NIL					
ii	Deviations if any:	NIL					



11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6011	WR	LWFCWAC	170286	06-04-2017			
11.1	Wheel & Axle Details:									
	i.	Bogie No.	176313			176314				
	ii.	Frame No.	ECBT-026			ECBT-025				
	iii.	Bolster No.	6833-P			6830-P				
	iv.	Axle No.	W-3005		W-2948		S-9859		V-2485	
	v.	Items/locations	Earthing end side	Phonic wheel side	Phonic wheel side	Plane side	Earthing end side	Phonic wheel side	Phonic wheel side	Plane side
	vi.	Wheel Dia.	917.00	917.00	917.00	917.00	916.50	916.50	916.00	916.00
	vii.	Wheel Disc No.	00178/6194	00057/6215	00151/6070	00086/6070	00119/6226	00149/7274	00088/274	00102/6225
	viii.	R.B. Nos.	79609	86178	86185	76731	78094	79085	77117	79086
	ix.	R.B. Make	SKF		SKF		SKF		SKF	
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.	RSK-16-7-686	RSK-16-10-263	RSK-16-7-687	RSK-16-10-239	RSK-16-7-690	RSK-16-10-240	RSK-16-7-584	RSK-16-10-201	
ii.	Ht. at test load	508	468	506	468	510	468	509	466	
iii.	Align .deviation	9	7	8	7	11	12	10	12	
11.3	Items traceability:									
	Sno.	Item						Make		
	i.	Primary Outer Spring		GBD-16-12		GBD-16-12		GBD		
	ii.	Primary inner Spring		G-12-6		G-12-6		GF		
	iii.	Primary Damper		34223,34081,34235,34232		34228,34035,34069,34220		KONI		
	iv.	Secondary damper		1322,1317		1289,164		GEREP		
	v.	Lateral Damper		0191		0170		SV		
	vi.	Brake cylinder & Caliper		G16115/600,G16040/600 G16110/600,G16038/600		K16007/600,K16046/600 K16148/600,K16156/600		FTI		
	vii.	Brake Disc						KBI		
	viii.	Control arm top						KUMAR		
	ix.	Control arm bottom						KUMAR		
	x.	Top Rubber Pad						SGA		
	xi.	Vertical Bump Stop						GMT		
	xii.	Ball joint Control arm						MGN		
	xiii.	Lateral Bump stop						GMT		
	xiv.	Traction center make						EMSON		
	xv.	Traction lever make						SARITA		
	xvi.	Ball joint traction lever						SGA		
	xvii.	Traction centre elastic						MGN		
	xviii.	Secondary rubber pad						TECSPAK		
	xix.	Rubber spring						GMT		
	xx.	Anti roll bar make						EMSON, SARITA		
	xxi.	Ball joint roll link						SARITA		
	xxii.	Fork make						RNG		
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.	6020	DISPATCH DATE				03.05.2017
2.	Railway	WR	Type	LFCWAC	Coach No.	170276	
3.	Booked to		SSE/C&W/MUMBAI				
4.	Tare Weight of Coach		43.6 T				
5.	Carrying Capacity	Seating	38	Sleeping	38	Luggage NIL	
6.	Shell Details: WA900001						
	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	1101	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 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	VIBGOR	85/87		
	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 TECH, JSL				
	iii.	SEATS/ BERTHS	AAR KAY FOAMS				
	iv.	BODY SIDE DOOR	JVR, SUKATA				
	v.	VESTIBULE SLIDING DOOR	HP				
	vi.	SALOON DOOR	KALSI				
	vii.	WATER TANKS	SHIVALIK				
	viii.	UIC VESTIBULE	KRP				
	ix	FLOOR BOARD	NARBADA				
	x	PVC FLOORING	RESPONSIVE				
10.							
	i	Modification / Trail (if any):				NIL	
	ii	Deviations if any:				NIL	



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11.	Bogie Details:		Shell No.	Railway	Type	Coach No.	Dispatch Date			
			6020	WR	LFCWAC	170276	12-12-2016			
11.1	Wheel & Axle Details:		PP Side				NPP Side			
	i.	Bogie No.	167105				167104			
	ii.	Frame No.	FIAT-5302				FIAT-5345			
	iii.	Bolster No.	6463-P				6455-GT			
	iv.	Axle No.	R-2920		P-9311		R-3093		R-3371	
	v.	Wheel Dia.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00
	vi.	Wheel Disc No.	00007-6006	00012-6133	00158-6133	00032-6176	00088-6006	00002-6176	00147-6133	00142-6006
	vii.	R.B. Nos.	94409	79868	93392	94114	94428	94199	94025	93388
	viii.	R.B. Make	SKF		SKF		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-16-5-391	RSK-16-5-873	RSK-16-5-698	RSK-16-5-659	RSK-16-5-947	RSK-16-5-177	RSK-16-5-NIL	RSK-16-5-NIL	
ii.	Ht. at test load	509	467	511	467	512	466	512	466	
iii.	Align .deviation	14	44	18	45	10	32	13	33	
11.3	Items traceability:									
	Sno.	Item			PP Side Bogie		NPP side Bogie		Make	
	i.	Primary Outer Spring			GBD-16-8		GBD-16-8		GBD	
	ii.	Primary inner Spring			RSK-16-3		RSK-16-3		RSK	
	iii.	Primary Damper			236,487,508,473		106,349,455,043		GEREP	
	iv.	Secondary damper			424,0420		405,0453		SV	
	v.	Lateral Damper			0403		0447		SV	
	vi.	Yaw Damper							NIL	
	vii.	Brake cylinder & Caliper			3731/691,3724/691 3733/691,3724/691		3717/691,3726/691 3716/691,3703/691		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							AFW, SARITA	
	xiii.	Ball joint traction lever							SGA	
	xiv.	Traction centre elastic							SGA	
	xv.	Secondary rubber pad							TECSPACK	
	xvi.	Rubber spring							GMT	
	xvii.	Anti roll bar make							SARITA	
	xviii.	Ball joint roll link							SARITA	
	xix.	Fork make							SARITA	
11.4	i.	Modification / Trial (if any):			NIL					

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