



ROLLING STOCK CERTIFICATE

Form No. : **QMF4254; Version: 05**

1.	SHELL No:	4029	DISPATCH DATE:			30.10.2014
2.	Rly:	NR	Type:	MEMU/TC2	Coach No.:	31293
3.	Booked to	SSE/C&W/GZB				
4.	Tare Weight of Coach :	33.15 T				
5.	Carrying Capacity :	Seating:	80	Standing	272	Luggage: NIL
6.	Shell Details: (SG-90004 alt 'b')					
	6.1	Leading Dimensions;				
	i)	Maximum height above rail to top of Roof ventilator			4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only)	
	ii)	Maximum length over Body			21337 ± 10	
	iii)	Maximum length over Buffer			22297 ± 15	
	iv)	Maximum width over Body			3245 ± 5	
	v)	Maximum width over Flasher light			3402 +0/-5	
	vi)	Minimum height above rail level to the lowest fitting			181.5 mm (AE63143)	
	vii)	Buffer/CBC Height	Specified : 1104 +0 /-10 mm		NA	NA
	vii)	Make :	NA			
	ix)	Shaku Coupler Height	Specified : 1035 +0 /-5 mm		1030/1035	
	x)	Shaku Coupler Make:	SANROK			
7.	Air Brake Testing:					
		Description			Specified	
	7.1	Emergency Application	Time for 0 to 3.6 Kg/cm2 of BC		Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type)	
			Brake release time to reach .4 Kg/cm2		Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type)	
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 n 60 sec		No brake application	
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 in 6 sec		Brakes "ON"	
	7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"	
	7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm (NAC)	
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			ESCORTS	
	ii.	SEAT & BERTH			MOHAN	
	lii	PVC			RESPONSIVE	
	Iv	FLOOR BOARD			ORIENTAL	
	V	UIC VESTIBULE			KRP	
	Vi	LP SHEETS			PUNJAB LAMINATE	
	Vii	BODY SIDE WINDOW			ABC	
	Viii	EMERGENCY WINDOW			ABC	
	Xi	DOOR WINDOW			AGF	
	X	WATER TANK			RUBICON, RAIL FAB	
	Xi	LAV WINDOW			MECIDON	
	xii	LAV DOOR			SAVITRI	
10.	10.1	Modification/ Trial (if any):			NIL	
	10.2	Deviations (if any):			NIL	



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12.	Bogie Details:	Shell No.	Railway		Type		Coach No.		Dispatch Date	
		4029	NR		MEMU-TC		31293		10-10-2014	
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'									
12.2	Wheel & Axle Details:	PP Side				NPP Side				
	i.	Bogie No.	145109				145110			
	ii.	Frame No.	ASR-102				ASR-94			
	iii.	Axle No.	7244		RWF-107120		3647		S-6912	
	iv.	Wheel Diameter	954.00	954.00	953.00	953.00	952.00	952.00	955.00	955.00
	v.	Wheel Disc No.	06339/ 944	05704/ 956	06266/ 942	06358/ 944	06438/ 960	06325/ 956	06345/ 954	06307/94 4
	vi.	R.B. Nos.	U-1284	U-1321	U-2452	U-2475	U-2459	U-2466	T-2263	T-1687
	vii.	R.B. Make	FAG		FAG		FAG		FAG	
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing							
12.3	Items Traceability:									
	i.	BRAKE CYLINDER (Make)				PEW				
	ii.	SECONDARY Shock Absorber (Make)				KNOR-BREMSE				
12.4	i.	Modification/ Trail (if any):				NIL				
	ii.	Deviations (if any):				NIL				



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Form No. : QMF4254; Version: 05

1.	SHELL No:	4022	DISPATCH DATE:				28.11.2014
2.	Rly:	NR	Type:	MEMU/TC2	Coach No.:	31294	
3.	Booked to	SSE/C&W/GZB					
4.	Tare Weight of Coach :	33.15 T					
5.	Carrying Capacity :	Seating:	80	Standing	272	Luggage: NIL	
6.	Shell Details: (SG-90004 alt 'b')						
	6.1	Leading Dimensions;					
	i)	Maximum height above rail to top of Roof ventilator			4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only)		
	ii)	Maximum length over Body			21337 ± 10		
	iii)	Maximum length over Buffer			22297 ± 15		
	iv)	Maximum width over Body			3245 ± 5		
	v)	Maximum width over Flasher light			3402 +0/-5		
	vi)	Minimum height above rail level to the lowest fitting			181.5 mm (AE63143)		
	vii)	Buffer/CBC Height	Specified : 1104 +0 /-10 mm		NA	NA	
	vii)	Make :	NA				
	ix)	Shaku Coupler Height	Specified : 1035 +0 /-5 mm		1035/1035		
	x)	Shaku Coupler Make:	SANROK				
7.	Air Brake Testing:						
		Description			Specified		
	7.1	Emergency Application	Time for 0 to 3.6 Kg/cm2 of BC		Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type)		
			Brake release time to reach .4 Kg/cm2		Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type)		
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 n 60 sec		No brake application		
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 in 6 sec		Brakes "ON"		
	7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"		
	7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm (NAC)		
8.	PAINTING DEATAILS:						
			TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE		
	8.1	PAINT	PU PAINT	ADVANCE	85/86		
	8.2	APPLICATION OF PCN-123			SATISFACTORY		
	8.3	INSUALTION			SATISFACTORY		
9.	Traceability of Furnishing Items:				Make		
	i.	BRAKE EQUIPMENT			ESCORTS		
	ii.	SEAT & BERTH			MOHAN		
	lii	PVC			RESPONSIVE		
	Iv	FLOOR BOARD			TAYAL		
	V	UIC VESTIBULE			KRP		
	Vi	LP SHEETS			LP, MS, S STEEL		
	Vii	BODY SIDE WINDOW			ABC		
	Viii	EMERGENCY WINDOW			ABC		
	Xi	DOOR WINDOW			AGF		
	X	WATER TANK			RAIL FAB		
	Xi	LAV WINDOW			MECIDON		
	xii	LAV DOOR			AMIR CHAND		
10.	10.1	Modification/ Trial (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	NR		MEMU-TC		31294		20-11-2014	
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'									
12.2	Wheel & Axle Details:	PP Side				NPP Side				
	i.	Bogie No.	145127				145128			
	ii.	Frame No.	ASR-118				ASR-126			
	iii.	Axle No.	S-1525		V-0068		S-9003		W-3099	
	iv.	Wheel Diameter	953.00	952.50	953.00	952.50	953.00	953.00	953.00	953.00
	v.	Wheel Disc No.	06370/ 951	06352/ 940	06355/ 946	05857/ 938	06282/ 913	06371/ 928	06334/ 941	06334/94 4
	vi.	R.B. Nos.	S-648	S-502	S-662	S-653	S-500	S-422	S-498	S-650
	vii.	R.B. Make	FAG		FAG		FAG		FAG	
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing							
12.3	Items Traceability:									
	i.	BRAKE CYLINDER (Make)				ESCORTS,AJT				
	ii.	SECONDARY Shock Absorber (Make)				GABRIEL,KNORR BREMSE				
12.4	i.	Modification/ Trail (if any):				NIL				
	ii.	Deviations (if any):				NIL				

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Form No. : QMF4254; Version: 05

1.	SHELL No:	4032	DISPATCH DATE:			11.12.2014
2.	Rly:	NR	Type:	MEMU/TC2	Coach No.:	31297
3.	Booked to	SSE/C&W/GZB				
4.	Tare Weight of Coach :	33.15 T				
5.	Carrying Capacity :	Seating:	80	Standing	272	Luggage: NIL
6.	Shell Details: (SG-90004 alt 'b')					
	6.1	Leading Dimensions;				
	i)	Maximum height above rail to top of Roof ventilator			4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only)	
	ii)	Maximum length over Body			21337 ± 10	
	iii)	Maximum length over Buffer			22297 ± 15	
	iv)	Maximum width over Body			3245 ± 5	
	v)	Maximum width over Flasher light			3402 +0/-5	
	vi)	Minimum height above rail level to the lowest fitting			181.5 mm (AE63143)	
	vii)	Buffer/CBC Height	Specified : 1104 +0 /-10 mm		NA	NA
	vii)	Make :			NA	
	ix)	Shaku Coupler Height	Specified : 1035 +0 /-5 mm		1035/1035	
	x)	Shaku Coupler Make:			WSF	
7.	Air Brake Testing:					
		Description			Specified	
	7.1	Emergency Application	Time for 0 to 3.6 Kg/cm ² of BC		Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type)	
			Brake release time to reach .4 Kg/cm ²		Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type)	
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm ² n 60 sec		No brake application	
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm ² in 6 sec		Brakes "ON"	
	7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"	
	7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm (NAC)	
8.	PAINTING DEATAILS:					
			TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE	
	8.1	PAINT	PU PAINT	ADVANCE	85	
	8.2	APPLICATION OF PCN-123	SATISFACTORY			
	8.3	INSUALTION	SATISFACTORY			
9.	Traceability of Furnishing Items:					Make
	i.	BRAKE EQUIPMENT			ESCORTS	
	ii.	SEAT & BERTH			MOHAN	
	lii	PVC			RESPONSIVE	
	Iv	FLOOR BOARD			ORIENTAL	
	V	UIC VESTIBULE			KRP	
	Vi	LP SHEETS			LP, MS. S STEEL	
	Vii	BODY SIDE WINDOW			ABC	
	Viii	EMERGENCY WINDOW			ABC	
	Xi	DOOR WINDOW			AGF	
	X	WATER TANK			RAIL FAB	
	Xi	LAV WINDOW			MECIDON	
	xii	LAV DOOR			RCF	
10.	10.1	Modification/ Trial (if any):				NIL
	10.2	Deviations (if any):				NIL



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12.	Bogie Details:	Shell No.	Railway		Type		Coach No.		Dispatch Date		
		4032	NR		MEMU-TC		31297		12-11-2014		
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'										
12.2	Wheel & Axle Details:	PP Side					NPP Side				
	i.	Bogie No.	145123					145124			
	ii.	Frame No.	ASR-113					ASR-119			
	iii.	Axle No.	V-9098		U-6770		P-5730		U-8640		
	iv.	Wheel Diameter	954.00	954.00	954.00	954.00	952.00	952.00	954.00	954.00	
	v.	Wheel Disc No.	06300/946	06285/946	06383/945	06297/948	05538/939	02238/997	05581/944	06326/941	
	vi.	R.B. Nos.	E-2872	E-2875	E-2933	E-2936	V-1434	V-1241	E-2876	E-2866	
	vii.	R.B. Make	NBC		NBC		FAG		NBC		
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing								
12.3	Items Traceability:										
	i.	BRAKE CYLINDER (Make)					AJT				
	ii.	SECONDARY Shock Absorber (Make)					GABRIEL				
12.4	i.	Modification/ Trail (if any):					NIL				
	ii.	Deviations (if any):					NIL				

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Form No. : QMF4254; Version: 05

1.	SHELL No:	4030	DISPATCH DATE:			11.12.2014
2.	Rly:	NR	Type:	MEMU/TC2	Coach No.:	31295
3.	Booked to	SSE/C&W/GZB				
4.	Tare Weight of Coach :	33.15 T				
5.	Carrying Capacity :	Seating:	80	Standing	272	Luggage: NIL
6.	Shell Details: (SG-90004 alt 'b')					
6.1	Leading Dimensions;					
i)	Maximum height above rail to top of Roof ventilator				4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only)	
ii)	Maximum length over Body				21337 ± 10	
iii)	Maximum length over Buffer				22297 ± 15	
iv)	Maximum width over Body				3245 ± 5	
v)	Maximum width over Flasher light				3402 +0/-5	
vi)	Minimum height above rail level to the lowest fitting				181.5 mm (AE63143)	
vii)	Buffer/CBC Height	Specified : 1104 +0 /-10 mm		NA	NA	
vii)	Make :					NA
ix)	Shaku Coupler Height	Specified : 1035 +0 /-5 mm		1035/1035		
x)	Shaku Coupler Make:					SANROK
7.	Air Brake Testing:					
		Description			Specified	
7.1	Emergency Application	Time for 0 to 3.6 Kg/cm ² of BC			Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type)	
		Brake release time to reach .4 Kg/cm ²			Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type)	
7.2	Insensitivity	BP dipped @ 0.30 Kg/cm ² n 60 sec			No brake application	
7.3	Sensitivity	BP dipped @ 0.60 Kg/cm ² in 6 sec			Brakes "ON"	
7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"		
7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm (NAC)		
8.	PAINTING DEATAILS:					
		TYPE OF PAINT		MAKE	AVERAGE GLOSS VALUE	
8.1	PAINT	PU PAINT		ADVANCE	85/86	
8.2	APPLICATION OF PCN-123			SATISFACTORY		
8.3	INSUALTION			SATISFACTORY		
9.	Traceability of Furnishing Items:				Make	
i.	BRAKE EQUIPMENT				ESCORTS	
ii.	SEAT & BERTH				MOHAN	
lii	PVC				RESPONSIVE	
Iv	FLOOR BOARD				TAYAL	
V	UIC VESTIBULE				KRP	
Vi	LP SHEETS				LP, MS. S STEEL	
Vii	BODY SIDE WINDOW				ABC	
Viii	EMERGENCY WINDOW				ABC	
Xi	DOOR WINDOW				AGF	
X	WATER TANK				RAIL FAB	
Xi	LAV WINDOW				MECIDON	
xii	LAV DOOR				AMIR CHAND	
10.	10.1	Modification/ Trial (if any):			NIL	
	10.2	Deviations (if any):			NIL	



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12.	Bogie Details:	Shell No.	Railway		Type		Coach No.		Dispatch Date		
		4030	NR		MEMU-TC		31295		14-11-2014		
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'										
12.2	Wheel & Axle Details:	PP Side					NPP Side				
	i.	Bogie No.	145125					145126			
	ii.	Frame No.	ASR-117					ASR-103			
	iii.	Axle No.	W-2625		V-9520		7551		8315		
	iv.	Wheel Diameter	952.50	952.00	952.50	953.00	955.00	955.00	954.00	954.00	
	v.	Wheel Disc No.	06315/ 942	06481/ 936	05691/ 928	06330/ 944	04069/ 946	03900/ 939	03949/ 943	04230/96 1	
	vi.	R.B. Nos.	T-2676	S-458	F-0747	F-0606	X-1853	X-1866	X-1865	X-1861	
	vii.	R.B. Make	FAG		NBC		FAG		FAG		
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing								
12.3	Items Traceability:										
	i.	BRAKE CYLINDER (Make)					AJT				
	ii.	SECONDARY Shock Absorber (Make)					GABRIEL				
12.4	i.	Modification/ Trail (if any):					NIL				
	ii.	Deviations (if any):					NIL				



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Form No. : QMF4254; Version: 05

1.	SHELL No:	4036	DISPATCH DATE:			19.12.2014
2.	Rly:	NR	Type:	MEMU/TC2	Coach No.:	31300
3.	Booked to	SSE/C&W/GZB				
4.	Tare Weight of Coach :	33.15 T				
5.	Carrying Capacity :	Seating:	80	Standing	272	Luggage: NIL
6.	Shell Details: (SG-90004 alt 'b')					
	6.1 Leading Dimensions;					
	i)	Maximum height above rail to top of Roof ventilator			4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only)	
	ii)	Maximum length over Body			21337 ± 10	
	iii)	Maximum length over Buffer			22297 ± 15	
	iv)	Maximum width over Body			3245 ± 5	
	v)	Maximum width over Flasher light			3402 +0/-5	
	vi)	Minimum height above rail level to the lowest fitting			181.5 mm (AE63143)	
	vii)	Buffer/CBC Height	Specified : 1104 +0 /-10 mm		NA	NA
	vii)	Make :	NA			
	ix)	Shaku Coupler Height	Specified : 1035 +0 /-5 mm		1033/1035	
	x)	Shaku Coupler Make:	SANROK			
7.	Air Brake Testing:					
	Description			Specified		
	7.1	Emergency Application	Time for 0 to 3.6 Kg/cm2 of BC		Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type)	
			Brake release time to reach .4 Kg/cm2		Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type)	
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 n 60 sec		No brake application	
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 in 6 sec		Brakes "ON"	
	7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"	
	7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm (NAC)	
8.	PAINTING DEATAILS:					
			TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE	
	8.1	PAINT	PU PAINT	ADVANCE	85	
	8.2	APPLICATION OF PCN-123	SATISFACTORY			
	8.3	INSUALTION	SATISFACTORY			
9.	Traceability of Furnishing Items:			Make		
	i.	BRAKE EQUIPMENT			ESCORTS	
	ii.	SEAT & BERTH			OVPL	
	lii	PVC			RESPONSIVE	
	Iv	FLOOR BOARD			ORIENTAL	
	V	UIC VESTIBULE			KRP	
	Vi	LP SHEETS			LP, MS, S STEEL	
	Vii	BODY SIDE WINDOW			ABC	
	Viii	EMERGENCY WINDOW			ABC	
	Xi	DOOR WINDOW			AGF	
	X	WATER TANK			RAIL FAB	
	Xi	LAV WINDOW			MECIDON	
	xii	LAV DOOR			JR	
10.	10.1	Modification/ Trial (if any):			NIL	
	10.2	Deviations (if any):			NIL	



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12.	Bogie Details:	Shell No.	Railway		Type		Coach No.		Dispatch Date		
		4036	NR		MEMU-TC		31300		11-12-2014		
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'										
12.2	Wheel & Axle Details:	PP Side					NPP Side				
	i.	Bogie No.	145143					145137			
	ii.	Frame No.	ASR-134					ASR-123			
	iii.	Axle No.	W-2801		P-6141		Y-6219		RWF-97332		
	iv.	Wheel Diameter	953.00	953.00	953.00	953.00	952.00	952.00	954.00	954.00	
	v.	Wheel Disc No.	06349/951	06430/945	04263/951	06358/940	05604/942	06425/942	97652/941	97679/944	
	vi.	R.B. Nos.	V-1650	V-1631	V-1334	V-969	U-2477	U-2482	U-1684	T-386	
	vii.	R.B. Make	FAG		FAG		FAG		FAG		
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing								
12.3	Items Traceability:										
	i.	BRAKE CYLINDER (Make)					ESCORTS				
	ii.	SECONDARY Shock Absorber (Make)					ESCORTS , K/B				
12.4	i.	Modification/ Trail (if any):					NIL				
	ii.	Deviations (if any):					NIL				

MEMU/TC2—4036