



ROLLING STOCK CERTIFICATE

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

1.	SHELL No:	4001	DISPATCH DATE:			9.6.2014
2.	Rly:	EC	Type:	MEMU/TC2	Coach No.:	41190
3.	Booked to	SSE/C&W/DNR				
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:	ESCORTS			
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	VIBGYOR	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			AAR KAY FOAMS	
	lii	PVC			RESPONSIVE	
	Iv	FLOOR BOARD			TAYAL	
	V	UIC VESTIBULE			KRP	
	Vi	LP SHEETS			PUNJAB LAMINATES	
	Vii	BODY SIDE WINDOW			GI	
	Viii	EMERGENCY WINDOW			ABC	
	Xi	DOOR WINDOW			AGF	
	X	WATER TANK			RUBICON	
	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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Shell no:-4001

DATE-16-04-2014

RLY	E	C	Type	M	E	M	U	T	C		Coach No.	4	1	1	9	0		
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5.0 Details of Bogies:

+Items	Alarm side				Non Alarm Side			
Bogie No	145061				145062			
Frame No.	ASR-49				ASR-52			
Axle No.	S-5461		V-9282		V-9300		8457	
wheel Diameter	952.00	952.00	953.00	953.00	953.00	953.00	952.00	952.50
Wheel Disc No.	03884/9 61	96394/9 56	95281/9 34	04269/9 57	04055/9 28	04027/9 46	03919/9 50	03920/9 40
R. B. No.	B-1313	B-0555	A-0835	A-0828	A-0826	A-0819	M-2309	A-0747
R. B. Make	NBC		NBC		NBC		NBC	
Type	Direct Mounted Spherical Roller Bearing							

5.1 Traceability:

SNO	ITEM	PP Side Bogie	NPP side Bogie	Make
		Sr. nos.	Sr. nos.	
1	BRAKE CYLINDER	E-973,E-996	929,5924	ESCORTS
2	SECONDARY VERTICAL DAMPER	10328,9850	10442,10327	GAB

5.2 MODIFICATION (IF ANY):

5.3 DEVIATION (IF ANY):

MEMU/TC2—4001



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

1.	SHELL No:	4004	DISPATCH DATE:		9.7.2014		
2.	Rly:	EC	Type:	MEMU/TC2	Coach No.:	41191	
3.	Booked to	SSE/C&W/DNR					
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	1032/1035			
	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	VIBGYOR	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		AAR KAY FOAMS			
	lii	PVC		RESPONSIVE			
	Iv	FLOOR BOARD		TAYAL			
	V	UIC VESTIBULE		KRP			
	Vi	LP SHEETS		NA			
	Vii	BODY SIDE WINDOW		GHR			
	Viii	EMERGENCY WINDOW		ABC			
	Xi	DOOR WINDOW		AGF			
	X	WATER TANK		RUBICON			
	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		
		4004	EC		MEMU-TC		41191		18-06-14		
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'										
12.2	Wheel & Axle Details:	PP Side					NPP Side				
	i.	Bogie No.	145075					145076			
	ii.	Frame No.	ASR/TC-65					ASR/TC-61			
	iii.	Axle No.	V-9660		8123		1896		272		
	iv.	Wheel Diameter	953.00	953.00	953.00	953.00	955.00	955.00	955.00	955.00	
	v.	Wheel Disc No.	04140/942	04075/944	04063/944	03744/937	03911/940	03956/944	04195/944	03981/944	
	vi.	R.B. Nos.	X-2071	X-2066	X-994	X-1093	X-1440	X-1437	X-1465	X-1391	
	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)					GABRIEL				
12.4	i.	Modification/ Trail (if any):					NIL				
	ii.	Deviations (if any):					NIL				

MEMU/TC2—4004



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1.	SHELL No:	4003	DISPATCH DATE:			9.7.2014
2.	Rly:	EC	Type:	MEMU/TC2	Coach No.:	41189
3.	Booked to	SSE/C&W/DNR				
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		1030/1032	
	x)	Shaku Coupler Make:	ESCORTS			
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			AAR KAY FOAMS	
	lii	PVC			RESPONSIVE	
	Iv	FLOOR BOARD			TAYAL	
	V	UIC VESTIBULE			KRP	
	Vi	LP SHEETS			NA	
	Vii	BODY SIDE WINDOW			GI	
	Viii	EMERGENCY WINDOW			GI	
	Xi	DOOR WINDOW			AGF	
	X	WATER TANK			RUBICON	
	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		
		4003	EC		MEMU-TC		41189		12-06-14		
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'										
12.2	Wheel & Axle Details:	PP Side					NPP Side				
	i.	Bogie No.	145073					145074			
	ii.	Frame No.	ASR/TC-66					ASR/TC-68			
	iii.	Axle No.	T-4751		5852		R-1267		RWF-92557		
	iv.	Wheel Diameter	955.00	955.00	955.00	955.00	952.50	953.00	952.00	952.50	
	v.	Wheel Disc No.	04045/942	04038/945	04448/944	04060/944	04171/1946	03778/960	04181/962	03302/957	
	vi.	R.B. Nos.	X-2086	X-2456	X-2407	X-2079	X-2433	X-2423	B-1339	B-1350	
	vii.	R.B. Make	FAG		FAG		FAG		NBC		
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing								
12.3	Items Traceability:										
	i.	BRAKE CYLINDER (Make)					ESCORTS				
	ii.	SECONDARY Shock Absorber (Make)					ESCORTS				
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:	4002	DISPATCH DATE:			30.6.2014
2.	Rly:	EC	Type:	MEMU/TC2	Coach No.:	41188
3.	Booked to	SSE/C&W/DNR				
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:	ESCORTS			
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	VIBGYOR	AVERAGE GLOSS VALUE	
	8.1	PAINT	PU PAINT	ADVANCE	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		AAR KAY FOAMS		
	iii	PVC		RESPONSIVE		
	iv	FLOOR BOARD		TAYAL		
	v	UIC VESTIBULE		KRP		
	vi	LP SHEETS		NA		
	vii	BODY SIDE WINDOW		GI		
	viii	EMERGENCY WINDOW		GI		
	xi	DOOR WINDOW		AGF		
	x	WATER TANK		RUBICON		
	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				
		4002	EC	MEMU-TC	41188	29-04-14				
12.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a'									
12.2	Wheel & Axle Details:	PP Side				NPP Side				
	i.	Bogie No.	145064				145065			
	ii.	Frame No.	ASR-57				ASR-37			
	iii.	Axle No.	V-9192		U-6746		P-3730		S-5132	
	iv.	Wheel Diameter	954.00	954.00	953.00	953.00	952.50	953.00	953.00	953.00
	v.	Wheel Disc No.	04027/ 942	04181/ 950	04196/ 944	04026/ 962	02386/ 937	02382/ 958	04006/ 944	03993/937
	vi.	R.B. Nos.	B-1064	B-1079	Y-1516	Y-1871	B-1137	B-1143	B-1148	B-1108
	vii.	R.B. Make	NBC		FAG		NBC		NBC	
	viii.	R.B. Type	Direct Mounted Spherical Roller Bearing							
12.3	Items Traceability:									
	i.	BRAKE CYLINDER (Make)				ESCORTS				
	ii.	SECONDARY Shock Absorber (Make)				GABRIEL				
12.4	i.	Modification/ Trail (if any):				NIL				
	ii.	Deviations (if any):				NIL				

MEMU/TC2—4002