



## NOTE:

1. CENTRE PIVOT HOUSING AND SIDE BEARERS TO BE FILLED WITH ONE LITRE EACH OF IOC SERVOLINE 100 OR BPC-BHARAT UNIVOL 100 OR HPC-YANTROL 100 OIL.
2. FOR OPEN TOLERANCES REFER DRG.No.ICF/STD-9-0-001.
3. GALVANISING TO SPEC. IS:1573 TO SERVICE GRADE No.2 OF TAB.2
4. ZINC ELECTROPLATED TO GRADE A3L OF ANNEX-E OF IS:1367(PART-ELEVEN) 2002.
5. NECESSARY QTY. OF ITEM-26 SHALL BE PROVIDED TO GET THE REQUIRED LATERAL CLEARANCE OF 40 mm.
6. DIMENSION 378 SHALL BE MAINTAINED BY ADJUSTING THE THICKNESS OF ITEM-27 IF NECESSARY.
7. THE VERTICAL AND LATERAL DAMPER FIXING BOLTS SHALL BE TIGHTENED TO A TORQUE VALUE OF 20 kgfm.
8. THE AIR SPRING FIXING SCREWS SHALL BE TIGHTENED TO A TORQUE VALUE OF 35kgfm.
9. 1mm GAP BETWEEN TRANSOM RUBBING PLATE AND RUBBING PAD SHALL BE MAINTAINED BY ADJUSTING PACKING PLATES (ITEM-5&6).
10. THE WEARING SURFACES OF THE MANGANESE STEEL LINERS SHALL BE SUFFICIENTLY LUBRICATED WITH ROLLER BEARING GREASE.
11. THE MATING SURFACES OF AIR SPRING SPIGOT AND CORRESPONDING HOLE IN BOGIE BOLSTER SHALL BE THOROUGHLY CLEANED AND ROLLER BEARING GREASE SHALL BE APPLIED ON THE SURFACES FOR EASY ASSEMBLY.
12. THE DAMPERS SHALL BE SO ASSEMBLED THAT THE DUST COVER PORTION IS IN UPPER SIDE.
13. ITEM-10 SHALL BE TIGHTENED TO A TORQUE VALUE OF 12 kgfm.
14. FIXING HARDWARE FOR AIR SPRINGS (ITEMS-23,24 & 25) SHALL BE PROCURED / SUPPLIED ALONG WITH AIR SPRING.
15. LEAK TEST FOR AIRSPRING ASSEMBLY  
AIR SPRING TO BE PRESSURISED TO 6 kg/sq.cm AND LOCKED AT THAT PRESSURE FOR 30 MINUTES. PRESSURE DROP AFTER 30 MINUTES SHALL BE NIL.
16. THE FIXING SCREWS OF LOCKING PLATE SHALL BE TIGHTENED TO A TORQUE VALUE OF 7.5 kgfm.
17. THE SCREWS (ITEMS-8,16&18) SHALL BE APPLIED WITH ANAEROBIC ADHESIVE FOR THREADED JOINTS TO ROSO SPEC C-8517 DURING ASSY.
18. INTERLOCK WASHER:  
18.1) INTERLOCK WASHERS SHALL BE COATED/PLATED WITH ENVIRONMENT FRIENDLY COATING.  
18.2) INTERLOCK WASHERS SHALL BE PROCURED AS PAIRS GLUED TOGETHER TO FASTEN AS SUCH.
19. BOLTS/SCREWS SHALL BE OF MAKE - TVS OR UNBRAKO OR LPS ONLY.

NO. OF ASSEMBLY REQUIRED PER COACH				
TYPE OF COACH	COLS.	COL-1	COL-2	COL-3
① HHP DMU/DPC BODIES WITH 180/150KN AIR SPRING		2	-	-
# AC/DC EMU - MOTOR BODIES } WITH 180/150KN AIR SPRINGS ICF/MRV/C - MOTOR BODIES		-	2	-
\$ ALL TYPES OF AC/DC EMU & ICF/MRV/C - TRAILER BODIES AC EMU - TRAILER BODIES AC EMU / MOTOR BODIES		-	-	2

TABLE-2

ITEM NO.	DESCRIPTION	ALL COACHES OF MRVC/M-PHASE-I	ALL OTHER COACHES WITH 20t AIR SPRING BODIES
1	BOGIE BOLSTER ARRANGEMENT	ICF/MRV/C/M-0-4-001/COL1	DMU/DPC10-0-4-001/COL1

ICF/MRV/C/M-0-0-0-001	AC/DC EMU/D2-0-0-0-201
AC/DC/EMU/C2-0-0-0-201	AC/DC/EMU/M6-0-0-0-601
AC/DC/EMU/D5-0-0-0-501	DMU/DPC10-0-0-0-001
AC/EMU/M/ASR-0-0-0-002	
AC/EMU/M/ASR-0-0-0-001	

ASSEMBLY DRAWINGS	
13-02-2016	31-08-2006
0 Num. ALT. DATE OF LATEST ALT	DATE OF FIRST ISSUE
AME/SME	

▽ ROUGH MACHINED		③ ROUGH CLEANED		ALTERATIONS	
▽▽ FINISH MACHINED		④ CHAMFERED		4/2010	
▽▽▽ FINE FINISH MACHINED		⑤ BURRS REMOVED		ITEM-8 ALTD AS FOLLOWS.	
				FROM TO	
SEE & DRG. M1025-4.6				M1040-8.8	
REF. SPEC. 61383 (P-2)				61384 (P-2)	
REMARKS				SEE NOTE-3	
NOTE-16 ADDED.				15-4-2010	
SSE/D				AME/D	
				11/2012	
				ITEMS-31&32, NOTE-17&18	
				AND TABLE 2 ADDED FOR ITEM-2	
				REF.DRG. ALTD. FROM TABLE-1	
				TO ROSO STR NO.C K408.	
				ITEM-22 DELETED. QTY. FOR	
				ITEM-17 ALTD. FROM 12 TO 4	
				IN COL-1 TO 3. FOR ITEM-5	
				8.15 TO 21 AND 23 TO 25	
				DESCRIPTION UPDATED AS PER	
				RELEVANT SPECIFICATION.	
				FROM 50 TO 75. VIEWS	
				ALTD. AS PER DETAIL.	
				-Sd. 05.11.2012	
				SSE/D	
				AME/D	
				02/2013	
				IN NOTE-7 TIGHTENING TORQUE	
				CORRECTED. DM27.5 BETWEEN	
				RESERVOIR & AIR SPRING DELETED.	
				-Sd. 07.02.2013	
				SSE/D	
				AME/D	
				02/2016	
				FOR ITEM-8 PROPERTY CLASS	
				ALTD. FROM 8.8 TO 10.9.	
				NOTE-15&18 MODIFIED.	
				NOTE-19 ADDED.	
				SSE/D	
				SME/BD	

8	8	INTERLOCK WASHER SUITABLE FOR M10 BOLT (MAKE/TYPE - DSC-LOCK / NORD-LOCK)	32						SEE NOTE-18
4	4	INTERLOCK WASHER SUITABLE FOR M10 BOLT (MAKE/TYPE - DSC-LOCK / NORD-LOCK)	31						SEE NOTE-18
1	1	CENTRE PIVOT ARRANGEMENT	30	EMU/M 0-5-001					COL-8
2	2	LATERAL DAMPER 100kg	29	DC/EMU/M/ASR 0-5-005					ITEM-1
2	2	VERTICAL DAMPER 300kg	28	DMU/DPCS 0-5-503					ITEM-2
8	8	SPACER	27	DMU/TC4 0-5-406					ITEM-3
6	6	PACKING PLATE	26	DMU/TC4 0-5-406					ITEM-1
8	8	PUNCHED WASHER A22- IS 2016-STEEL	25	IS: 2016					SEE NOTE-3,14
8	8	PREVAILING TORQUE TYPE NUT ISO 7040-M10-8	24	IS:7002					SEE NOTE-4,14
8	8	HEX SOCKET HEAD CAP SCREW ISO 4762-M20x50-10.9	23	IS:2269					SEE NOTE-14&19
14	14	PUNCHED WASHER A18- IS 2016-STEEL	22	IS: 2016					
12	12	PREVAILING TORQUE TYPE NUT ISO 7040-M10-8	21	IS: 2016					SEE NOTE-3
12	12	HEXAGON HEAD BOLT- IS 1364 (Part-1) / ISO 4014-M16x120-8.8	20	IS:7002					SEE NOTE-4
4	4	HEXAGON HEAD SCREW- IS 1364 (Part-2) / ISO 4017-M16x75-8.8	19	IS:1364(P11)					SEE NOTE-4&19
4	4	SPRING LOCK WASHER B10-IS3063	18	IS:1364(P12)					SEE NOTE-4,17&19
4	4	CHEESE HEAD SCREW- ISO 1207-M10x40-4.8	17	IS: 3063					SEE NOTE-3
4	4	HEXAGON NUT- IS 1363 (Part-3) / ISO 4034-M10-5	16	IS:1363(P13)					SEE NOTE-3&17
2	2	LATERAL RUBBER STOP	15	IS:1363(P14)					SEE NOTE-3
2	2	LATERAL DAMPER 200kg	14	DMU/DPCS 0-5-502					ITEM-1
2	2	VERTICAL DAMPER 400kg	13	DC/EMU/M/ASR 0-5-005					ITEM-2
2	2	WEARING PLATE	12	DMU/DPCS 0-5-503					ITEM-1
2	2	SCREW	11	EMU/M 0-5-047					ITEM-1
2	2	WEARING PIECE	10	EMU/M 0-5-018					ITEM-2
8	8	HEXAGON HEAD SCREW- IS 1364 (Part-2) / ISO 4017-M10x40-10.9	9	EMU/M 0-5-010					ITEM-1
4	4	LOCKING PLATE	8	IS:1364(P12)					SEE NOTE-4,16,17&19
4	4	PACKING PLATE	7	ICF/SK3 0-5-505					ITEM-1
4	4	PACKING PLATE	6	DMU/DPCS 0-5-508					ITEM-2
4	4	PACKING PLATE	5	DMU/DPCS 0-5-508					ITEM-1
4	4	MANGANESE STEEL RUBBING PAD	4	ICF/SK 0-5-166					COL-1
1	1	CENTRE PIVOT ARRANGEMENT	3	EMU/M 0-5-001					COL-5
2	2	AIR SPRING ASSEMBLY	2	ROSO STR NO.C K408					
1	1	BOGIE BOLSTER ARRANGEMENT	1	SEE TABLE 2					SEE NOTE-14
QTY	DESCRIPTION & DIMENSION	ITEM	REF.DRGS	MAT.SPEC	WEIGHT/UNIT	REMARKS			
3	2	1	GROUP: 0-5						
							SUPERSEDED BY:		
							SCALE: SSE/D 1:5		
							CHD R. Muralidhar		
							DRN M. Sabapathynathan		
							Alpha Alt-1		
							INTEGRAL COACH FACTORY CHENNAI-38		
							DMU/DPC10-0-5-001		

BOLSTER SUSPENSION ARRG.

FOR 20T BODIES WITH 180/150KN AIR SPRINGS

INDIAN RAILWAY  
STANDARDSSHEET  
2 OF 2