

**APPENDIX “III”**

**LIST OF IMPORTANT MODIFICATIONS TO BE CARRIED OUT ON FREIGHT  
STOCK**

(IRCA letter No. M/129/Policy/W dated 12.4.99 & Rly Bd. L. No. 98/M(N)/951/11 dt.6.4.99)

**I. BOGIE & ITS COMPONENTS**

Sr. No.	ITEM DESCRIPTION	RDSO'S REFERENCE	TO BE DONE IN			
			Sick line	ROH	POH	New Built
1.	The existing push rod support arrangement are to be removed and replaced by shown in SK69597Alt 15 for 22W & WD 85054 S/4 Alt.4 22W(M) bogies	MW/BOXN/MAINT dt.10/11.9.90 and WM/PLANG/CSNB Dt.13.9.94	NO	YES	YES	YES
2.	Retrofitment of elastomeric pads and constant contact side bearer pads in CAS. 22W bogies	MW/PLNG/CSNB dt.15.1.90	NO	YES	YES	Not under manufacture
3.	Fitment of strengthened brake shoe adjuster to Drg No. WD 88012-S/1 Alt 7 (item 4)	MW/PLNG/CSNB dt.10.11.90	NO	YES	YES	Not under manufacture
4.	Replacement of nylon bush by steel bushes on CASNUB bogies	MW/Nylon BG/Comp. dt 18.5.94	NO	YES	YES	YES
5.	Modification of Centre pivot Bottom on CAS 22W(M) type bogies to avoid jamming	MW/PLNG/CSNB/M dt.31.1.94	NO	YES	YES	Not under manufacture
6.	Provision of wear liner on wearing surface of CASNUB 22(W),NLM,NLB bogie. Alternatively wearing surfaces may be reclaimed by welding.	MW/PLNG/CSNB/M dt.28.12.93 & MW/BOXN/MAINT dt.6.1.93	NO	YES	YES	YES
7.	Conversion of top centre pivot arrangement from bolted to riveted design on BCNA/BRN wagons, BTPN, BOXN, BCN wagons	MW/PLNG/CSNB/M dt.3.5.94 & MW/BTPN dt.18.7.94 &MW/BOXN/MAINT dt.28.6.93	NO	YES	YES	YES
8.	Use of bulb cotters in place of standard split cotters in CASNUB bogies	MW/PLNG/CSNB/M dt.14.9.94	YES	YES	YES	YES
9.	The brake beam to WD-89033-S/1 Alt 14 to be strengthened by providing stiffener plate	MW/PLNG/CSNB dt.17.11.95	NO	YES	YES	YES
10.	In centre pivot details WD-85079-S/2 Alt-15, assembled height with tolerances given and material of top pivot changed to AAR 201 Gr. C	MW/PLNG/CSNB dt. 2.4.96	NO	YES	YES	YES
11.	Instruction for welding of bottom centre pivot with bolster has been given by welding size and type of electrodes	MW/PLNG/CSNB dt. 2.4.96	NO	YES	YES	YES

Sr. No.	ITEM DESCRIPTION	RDSO'S REFERENCE	TO BE DONE IN			
			Sick line	ROH	POH	New Built
12.	Use of modified Elastomeric pads to Drg No. WD-95005-S/1 for casnub type bogies		NO	YES	YES	YES

**II. WHEELS, AXLES , BEARINGS**

1.	Adoption of worn wheel profile for all BG wheels	MW/CWSC/58 dt.18.3.92	YES	YES	YES	YES
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**III. WAGON SUPER STRUCTURE AND BRAKE RIGGING**

1.	Modification to blank flange arrangement on BTPN	MW/WT dt.23.12.93	NO	NO	YES	YES
2.	Modification to brake gear in BTPN wagon to prevent breakage/bending of pull rod.	MW/BTPN dt. 3.1.94	NO	NO	YES	YES
3.	Strengthening of horizontal lever support (large on BOXN/BCNA wagons)	MW/BOXN/MAINT/d t.24.1.94	NO	YES	YES	YES
4.	Provision of anti rotation lug on empty tie rod coupling nut of BOXN/BCN wagons	MW/BOXN/MAINT/d t.15.1.94	YES	YES	YES	YES
5.	Provision of stiffener angle on axle guard of BVZC wagon	MW/CWSC/Secretariat dt. 23.11.93 & 28.2.94	NO	NO	YES	YES
6.	Increase in the diameter of control rod from 28 to 32 mm of IRSA-600 Slack Adjuster	MW/SLA dt 23/29.12.93 & 10.5.94	NO	YES	YES	YES
7.	Provision of side bracket with link on BRH/BRN wagons to facilitate securing of steel plant consignment to wagon body	MW/ACT/BG dt. 27.5.94	NO	YES	YES	YES
8.	Modification to empty/load spindle bracket	MW/BTPN dt. 1.11.94	NO	NO	YES	YES
9.	Provision of extra roller type pull rod supports as per drg. WD-90016-S/1 Alt 12		NO	YES	YES	Not under manufacture
10.	Modification of main pull rod to prevent hitting with train pipe on BTPN wagons	MW/BTPN dt. 9/10.5.96	NO	YES	YES	YES
11.	Underframe strengthening of all welded BRN wagons	MW/BRN dt 12.12.98	NO	NO	YES	Not under manufacture
12.	Modification of existing door hold stiffener of BOBRN	MW/DOM/BOBR dt. 14.6.90	NO	YES	YES	YES
13.	Modification to securing of Dome arrangement of BTPN wagons	MW/BTPN dt.6.6.97	NO	NO	YES	YES

Sr. No.	ITEM DESCRIPTION	RDSO'S REFERENCE	TO BE DONE IN			
			Sick line	ROH	POH	New Built
14.	Modification to anchoring tee joint on BTPN wagons	MW/BTPN dt.24/26.8.98	NO	NO	YES	NA

**IV. NON AIR BRAKE FREIGHT STOCK**

1.	Split COTTERS TO BE REPLACED BY BULB COTTERS IN UIC BOGIES (Ref. Drg No. 4000/9)	MW/BOX/Drg. Dt 29.2.96	YES	YES	YES	Not under manufacture
2.	Bulb cotters are to be used in place of flat cotters in 4 wheeler tank wagons/CR/RTs	MW/WMG dt. 18/26.9.95	YES	YES	YES	Not under manufacture
3.	Increase in lateral clearance from 2.5 mm to 12 mm to provide better lateral flexibility in CRT suspension	MW/CRT dt.2/3.12.93	NO	NO	YES	Not under manufacture
4.	IRS specification R-66-81 introduced in place of IRD-R-8 in the following drawings a) WD/1 b) WD/SN-6303 c) W/SN-4727	MW/BOX/Spring/s.d. dt.1.6.93	NO	NO	YES	YES
5.	Fitment of glass wool in place of wood dust bags on BVG brake vans	MW/CWSC/59 dt. 10.2.95	NO	NO	YES	Not under manufacture

**V. COUPLER & DRAFT GEARS**

1.	Fitment of modified striker casting wear plate in CBC	MW/CPL/BG/HT dt.6.1.88	NO	NO	YES	YES
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**VI. AIR BRAKE SYSTEM**

1.	Standardisation of isolating handle cock on DV	MW/APB/TP/M dt.27.9.88	NO	YES	YES	YES
2.	Modification to filtering arrangement of C3W DV of SCL	MW/APB/TP/M dt.24.11.88	NO	YES	YES	YES
3.	Provision of additional APD to DV	MW/APB/TP/M dt.1/6-5-92	NO	YES	YES	YES
4.	Modification to quick release valve of DV of Escorts make	MW/APB/TP/M dt.3/9-7-92	NO	YES	YES	YES
5.	Strengthening of APD for DV	MW/APB/TP/M dt.15.7.92	NO	NO	YES	YES
6.	Modification to the piping of BVZC wagon for fitment of quick coupling and detachable pressure gauge	MW/APB/TP/M dt.3/6-12-93	NO	YES	YES	YES
7.	Modification to hose coupling support	MW/APB 8/10-4-94	NO	YES	YES	YES
8.	Modification to the locking arrangement of barrel with leader nut casing of DRV2-600	MW/SLA dt. 20/21-7-88	NO	YES	YES	YES