

INDIAN RAILWAYS

(MECHANICAL DEPARTMENT)

The previous “Maintenance Manual for Wagons” was published in 1979. Since only vacuum brake system was existing on Indian Railways at that time, this manual did not contain any details of Air Brake System. The induction of Air Brake stock on Indian Railways transformed the complete scenario of operating and maintenance disciplines in Railways.

Railway Board nominated a committee of officers comprising of Executive Director/CAMTECH/GWL, ED(Wagon)/RDSO/LKO, CRSE/W.Rly/Mumbai and DME(Freight) / Railway Board vide letter No. 70/M(N)/7/16(H.T.)-Pt.I dated 4.9.98 for updation and revision of “Indian Railways Unified Maintenance Manual for Wagons”. The revision and updation of manual has been completed taking into account latest fleet of freight stock currently running on Indian Railways.

The present manual bridges this gap and covers detailed treatise of Air Brake System including its maintenance. The other salient features of the manual are as follows:

- The manual has been divided into logical chapters covering various sub-assemblies and systems. The constructional details and functioning has been explained before describing the detailed maintenance procedures.
- The important dimensions, clearances, material specifications, drawing references etc. have been given immediately after the paragraphs where they have been referred to while describing maintenance procedures.
- Clear sketches and isometric views of the important sub-assemblies/components have been given in the manual.
- A separate chapter titled “YARD MAINTENANCE” has been added covering the maintenance work to be done in yards.
- A separate chapter titled “SPECIAL TYPE OF WAGONS” is included in the manual.

For convenience of indexing of reference, the paragraphs have been numbered according to a 3 /4 figure “Code”, in which the last two figures give the number of the paragraphs and the remaining figures the number of the chapter. Thus paragraph 101 of any code is paragraph 1 of chapter 1 of that code and paragraph 1103, paragraph 3 of chapter 11.

The page number in each chapter in this manual starts from 1. The reader can easily identify the chapter number to which a page belongs by reading the footer of the page at the bottom where chapter number as well as chapter title is given. This scheme of page numbering is adopted to provide flexibility of easily revising the chapters in future, on account of design or procedure changes or induction of new stock without disturbing the page numbers of succeeding chapters.

The tables in each chapter consist of two numbers separated by a decimal point. The number before decimal point indicates the chapter number whereas the number after the decimal point indicates the running serial number of the table which start from 1 in every chapter. The convention adopted for numbering the figures is also identical to the numbering scheme adopted for the tables.

The items of maintenance required to be carried out in sickline, ROH & POH have been listed out separately towards the end of various chapters under appropriate headings for each system/subassembly covered in the manual for easy reference and guidance of maintenance units.

Future addition/ deletion/ modification to this manual will be processed by RDSO and will be require approval of the Railway Board.

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M.L.Gupta
Exe. Director
CAMTECH

N.P.Singh
Sr.Exe.Director Std.(W)
RDSO

K.K.Gupta
CRSE
W.Rly.

Arun Arora
Dir.Mech. Engg.(Freight)
Rly. Bd