# **HUCK/LOCK BOLTS**

Almost all new wagons specially stainless steel wagons are provided with lock bolting instead of riveting. In repair/maintenance CP top of all wagons irrespective of materials are to be lock bolted. Entire lock bolting is to be done with zinc plated/galvanized lock bolts (grade-8) having a minimum yield strength of 250 N/mm<sup>2</sup>.

Lock Bolts have been introduced in the fabrication of Wagons. Lock bolt fasteners consist of Lock bolt pin and collar, and are installed with the help of special installation tools, as follows-

- 1. Lock bolt pin is placed in drilled hole, and collar is placed onto the lock bolt pin.
- 2. Installation tool engages and pulls the lock bolts pin.
- 3. Tool swages the collar onto lock bolt grooves.
- 4. Pin tail breaks off the lock bolt pin.

## The advantages of Lock bolts are -

- High strength
- Vibration resistant
- Fast and easy installation
- Maintenance free



#### **LOCK BOLT**

# **Proper Installation of lock bolts:-**

## It should be ensured that:

- The collar of lock bolt are completely swaged. The collar of lock bolt fasteners not completely swaged may be causes of improper tool operation or worn anvil in nose.
- The pintail of fastener break without fail. The pintail of fastener fails to break due to improper installation/incorrect fasteners.
- After breaking of pintail, the extruded/projected portion of lock bolt should be in the range of 2.00 to 10 mm and collar should always be on annular groove of lock bolt.
- Mismatch of holes to be reamed properly to align and gas cutting to match holes is strictly prohibited.

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