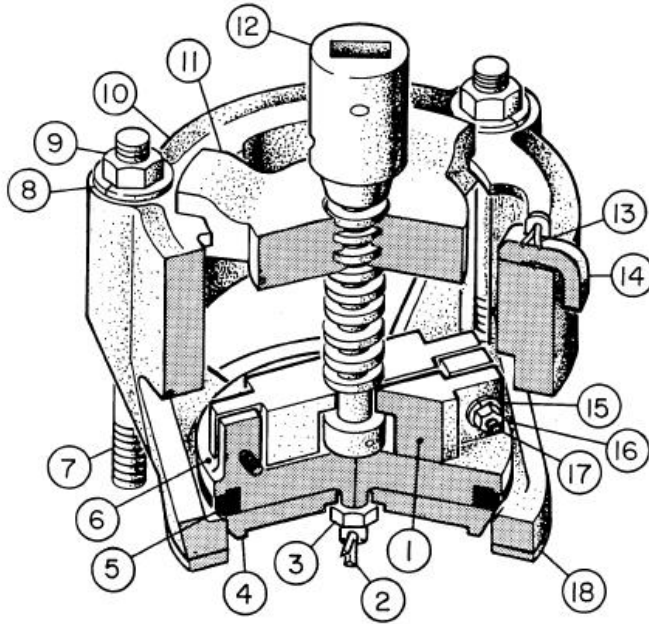




# **MAINTENANCE BULLETIN**

## *ARI 1500 Series Plug Type BOV Maintenance*



Item #	Description
1	Clamp
2	Cotter
3	Nut
4	Guide
5	Gasket
6	Gasket Retainer
7	Stud Bolt
8	Lock Washer
9	Nut
10	Cage
11	Sleeve

Item #	Description
12	Stem
13	Cotter
14	Sleeve Stop
15	Lock Washer
16	Nut
17	Cap Screw
18	Gasket

Only AAR class F facilities are certified to recondition, repair, retest and qualify tank car bottom outlet valves. Personnel performing inspection and test must be certified Level I per AAR Manual of Standards and Recommended Practices, M-1002, Appendix T, 1.4.3.

## **OPERATION**

The loading and unloading of tank cars having bottom outlet valves must be performed in accordance with precautions and regulations as outlined in AAR Pamphlet No. 34 or Parts 173.31 and 174.67 of the AAR Tariff No. BOE 6000, latest revision.

## **MAINTENANCE**

After the valve has been safely cleaned and removed from the car, rotate the stem several turns to expose the valves sealing surfaces. If inspection of these surfaces reveals any abnormalities, the valve must be disassembled and repaired as follows:

### Gasketed Valves

- Remove the sleeve stop by disengaging the cotter key.
- Rotate the sleeve counter-clockwise and lift the complete valve assembly from the cage.
- Remove the gasket retainer and replace the gasket.
- Remove any abnormalities from the cage sealing surface.
- Reassemble the valve. Make sure that the stem rotates freely and that the valve seats completely.

### Non-Gasketed Valves

- Remove the sleeve stop by disengaging the cotter key.
- Rotate the sleeve counter-clockwise and lift the complete valve assembly from the cage.
- Remove all abnormalities from the valve and cage seating surfaces by polishing or machining. (Valve parts may also be replaced as necessary)
- If the valve and/or cage is machined or replaced, the two parts must be lapped before reassembly.
- Reassemble the valve. Make sure that the stem rotates freely and that the valve seats completely .

The undertaking of repair or replacement by the Purchaser, or its agents, without the expressed written consent of American Railcar Industries, Inc. (ARI) shall void ARI's warranty and relieve ARI of all responsibility. Under no circumstances shall ARI be liable for any direct, incidental, consequential or other damages of any kind in connection with the installation, operation, maintenance, repair, inspection or other use of any product purchased from it.



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