

# O-RING KIT INSTRUCTIONS

## MIDLAND BOTTOM OUTLET VALVE

(539, 548 & 549 Series Kits)

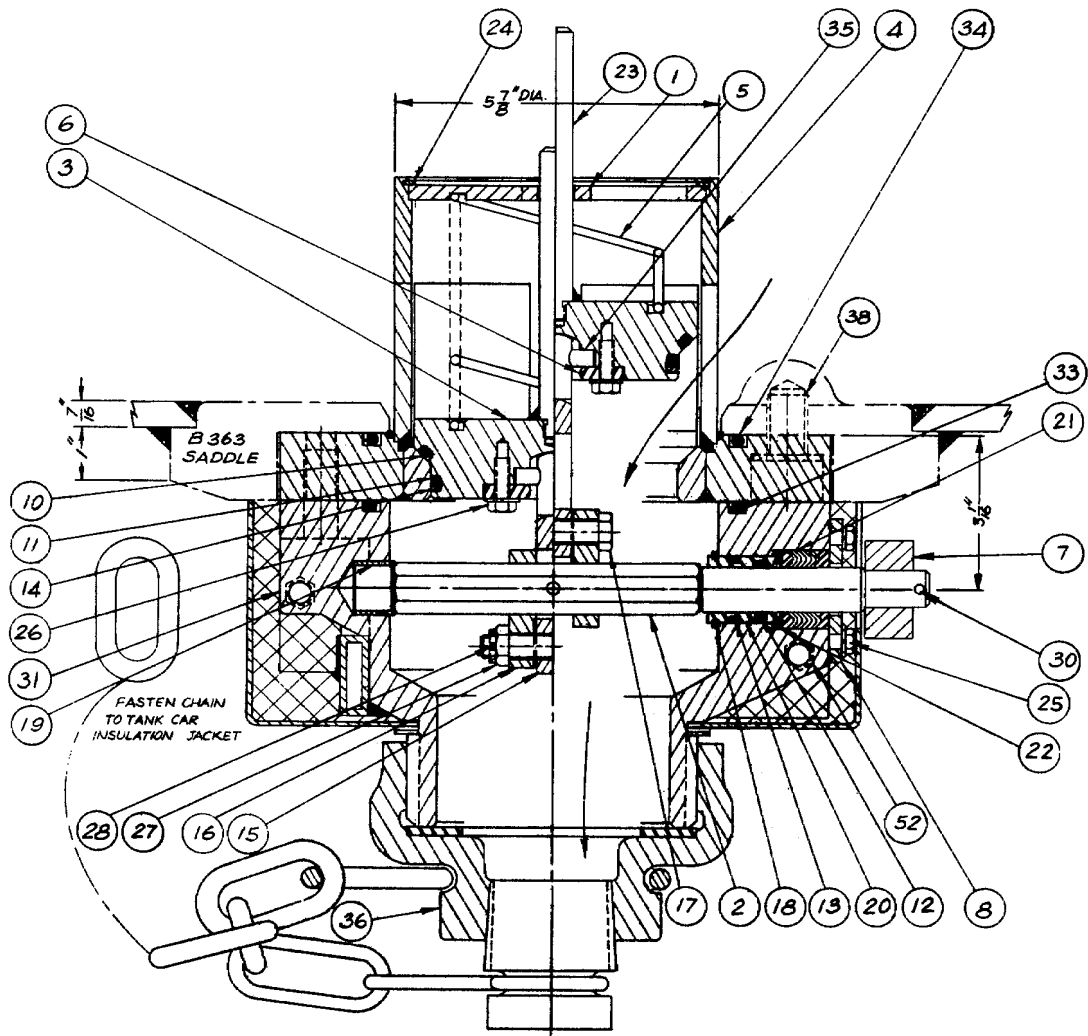
SCOPE: These instructions are specific to installation of new o-rings. For more extensive maintenance instructions refer to Midland's pamphlet Installation, Operating, Maintenance and Inspection Instructions for bottom outlet valves.

### PREPARATION

- Exercise normal safety precautions for commodity involved. Ensure that there is no product or pressure in the car.
- Remove lower half of the valve first by removing outlet cap to access internal working assembly. Then remove cotter pin (#28), slotted nut (#27), and cam bolt (#17) followed by the handle and four 5/8" shear bolts (#32).
- To remove old O-rings, either remove the top half of the valve or remove the gasket retainer from the inside of the car **if car is safe to enter**. Take care to not scratch O-ring grooves when removing O-rings from the retainer.
- Inspect/clean all parts thoroughly and check threads and gasket of outlet cap.

### RE-ASSEMBLY

- O-rings (#10 & #11) are **not** interchangeable. The upper (#10) is harder and less elastic than the lower one.
- Clean out the grooves. Lubricate the replacement O-rings with an appropriate grease to ease installation. Be sure the O-rings are installed without "rolling" them.
- Check to see that cam lever is free to move. If not, flush out the cavity or check that cam lever pin (#35) is not bent.
- Carefully inspect the tapered valve seat and cylindrical surface of the valve orifice. Any nicks, scratches or product deposits are potential leak paths.
- Reassemble the valve and leak test.



ITEM NO.	PART NAME
1	TOP GUIDE
2	SHAFT
3	GASKET RETAINER
4	BODY
5	SPRING
6	RETAINER COVER
7	HANDLE
8	PACKING FLANGE
9	PACKING WASHER
10	SEAT "O" RING
11	BORE "O" RING
12	SHAFT "O" RING
13	BUSHING "O" RING
14	WIPER RING
15	CAM LEVER
16	CAM
17	CAM BOLT
18	RETAINER RING
19	SHAFT BUSHING

ITEM NO.	PART NAME
20	PACKING BUSHING
21	PACKING
22	PACKING SPRING
23	GUIDE STEM
24	RETAINER RING
25	PACKING BOLT
26	RETAINER BOLT
27	CAM STEM NUT
28	CAM STEM PIN
29	CAM PIN
30	HANDLE PIN
31	BASE
32	BASE BOLT, LKW.
33	BASE "O" RING
34	BODY "O" RING
35	PIN
36	CAP ASM.
37	EYEBOLT, NUT, LKW.
38	BODY BOLT, LKW.