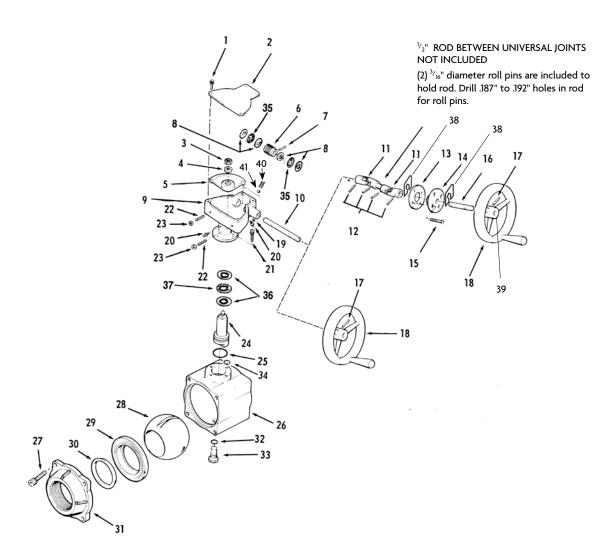


STYLE 8908 FIELD SERVICE KIT FOR 8940 4" SWING-OUT™ VALVE



For assistance or further information, please contact the Technical Service Dept.: Akron Brass Co., P.O. Box 86, Wooster, Ohio 44691, 330-264-5678
Akron Manufacturing Co., P.O. Box 280, Aylmer, Ontario, N5H 2R9, 519-773-8431



| Item No. | Description | Part Number | Quantity |
|----------|-----------------------------|-------------|----------|
| 1 | Screw | 7-63-038 | 4 |
| 2 | Gear Housing Cover | 7-07-195 | 1 |
| 3 | Jam Hex Nut | 7-34-059 | 1 |
| 4 | Washer | 7-84-083 | 1 |
| 5 | Gear Sector | 109048 | 1 |
| 6 | Worm Gear | 106611 | 1 |
| 7 | Roll Pin | 7-44-068 | 1 |
| 8 | Thrust Washer | 7-84-111 | 4 |
| 9 | Gear Housing | 106616 | 1 |
| 10 | Handwheel Shaft (7.5" long) | 110003 | 1 |
| 11 | Universal Joint | 106721† | 2 |
| 12* | Roll Pin | 7-44-084 | 4 |
| 13 | Back Plate | 106612 | 1 |
| 14 | Handwheel Bracket | 110003 | 1 |
| 15 | Screw | 7-63-063 | 4 |
| 16 | Handwheel Shaft (4" long) | 7-69-478 | 1 |
| 17 | Roll Pin | 7-44-107 | 1 |
| 18 | Handwheel | 7-21-228 | 1 |
| 19 | Set Screw | 7-65-112 | 1 |
| 20 | Grease Fitting | 7-13-034 | 2 |
| 21 | Screw | 7-63-028 | 4 |

| Item No. | Description | Part Number | Quantity |
|----------|-------------------|-------------|----------|
| 22 | Set Screw | 7-65-136 | 2 |
| 2B | Hex Nut | 7-34-061 | 2 |
| 24 | Ball Trunnion | 7-73-237 | 1 |
| 25* | O-Ring | 7-57-006 | 1 |
| 26 | Valve Body | 106617 | 1 |
| 27 | Screw | 7-65-140 | 8 |
| 28* | Valve Ball | 703979 | 1 |
| 29* | Valve Seat | 7-69-569 | 2 |
| 30 | Seat Ring | 106613 | 2 |
| 31 | Adapter** | _ | 2 |
| 32* | O-Ring | 7-57-002 | 1 |
| 33 | Threaded Trunnion | 7-73-180 | 1 |
| 34* | O-Ring | 7-57-005 | 1 |
| 35 | Needle Bearing | 7-03-453 | 2 |
| 36 | Thrust Washer | 7-84-115 | 2 |
| 37 | Thrust Bearing | 7-03-466 | 1 |
| 38 | Spacer | 7-68-259 | 2 |
| 39 | Open Tag | 7-73-185 | 1 |
| 40 | Allen Screw | 7-65-008 | 1 |
| 41 | Nylon Ball | 7-04-031 | 1 |

^{*}Indicated parts included in Field Service Kit #8908

^{**}Please see catalog for options.
† Universal Joint Kit - P/N 109322 contains 2 Universal Joints

INSTRUCTIONS FOR REPAIRING THE 8940 SWING-OUT VALVE

NOTE: A local mount is where the handwheel is connected directly to the valve. A remote mount is where the handwheel is connected to the valve through a series of universal joints.

DISASSEMBLY - Universal Joints - Remote Mounting

- 1. Remove roll pin (12) closest to actuator shaft (10) in order to remove universal joint from the actuator shaft.
- 2. Remove the four screws (15) from the panel to allow you to remove the drive shaft assembly from the actuator shaft.

DISASSEMBLY - Handwheel - Local Mounting

NOTE: This step may not be needed if you have clearance to swing the valve body out.

1. Remove roll pin (17) to remove handwheel (18).

DISASSEMBLY

- 1. Loosen the four mounting screws (21) to loosen the gear box from the body, but do not remove at this time.
- 2. Remove three sets of screws (27) and loosen the fourth set to allow the valve body to swing out.
- 3. Remove the seat (29) and seat ring (30), discard (29) and save the brass seat ring (30).
- 4. Remove mounting screws (21) and note the position of the gear box. Remove gear box (9) and discard O-ring (25) located on trunnion shaft (24) and O-Ring (34) on valve neck.
- 5. Unscrew threaded trunnion (33) and discard O-ring (32).
- 6. Now remove valve ball (28) from body and discard.

REASSEMBLY

Note: Use Parker O-ring lube or equivalent petroleum-based lubricant on all O-rings.

1. With a 10" or larger flat file remove any paint, corrosion or raised lip around bolt holes, from the ends of the body (26) and adapters (31).

CAUTION: Always file diagonally and keep the file touching both sides of the valve body. The surfaces must remain flat.

- 2. Install the new valve ball (28).
- 3. Replace O-ring (32) on trunnion (33).
- 4. Screw in threaded trunnion (33) into the valve body.
- 5. Replace O-ring (25) located on shaft (24) and O-ring (34) on valve neck.
- 6. Install the gear box as originally positioned. Aligning the trunnion and ball slot, tighten down screws (21).
- 7. Remove the gear housing cover (2) by removing the four screws (1). Check to make sure the sector (5) and worm gear (6) are well greased with low-temp lubriplate or equivalent.
- 8. Install gear housing cover (2) and screws (1).
- 9. Insert the seat rings (30) into the seats (29) and insert the seats into the valve body.
- 10. Swing the valve body back into line and loosely install the adapter bolts (27).
- 11. Tighten the adapter bolts in an x-pattern and torque to 60-70 ft. lb.

REASSEMBLY - Handwheel - Local Mounting

1. Reassemble handwheel (18) with roll pin (17).

REASSEMBLY - Universal Joints - Remote Mounting

- 1. Slide universal joint (11) over actuator shaft (10) and insert roll pin (12).
- 2. Insert the four screws (15) in the panel and tighten.

MAINTENANCE INSTRUCTIONS

Do not lubricate the ball or seats. Lubricants can collect dirt and grit which may cause excessive wear. Occasionally, flow water through all valves to clear dirt and debris.

OPERATING INSTRUCTIONS

Do not exceed 300 psi of operating pressure.

MWARNING

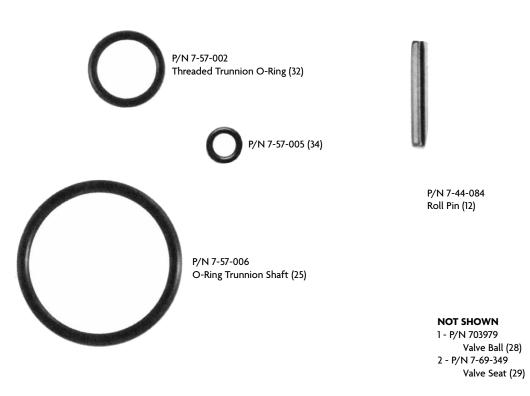
Under certain conditions, pressurized air may become trapped inside a valve assembly when the ball is in the closed position.

To avoid bodily injury:

- 1) Ensure that the attached piping is not pressurized
- 2) Open the valve before disassembling. This will release any pressurized air that may be trapped in the valve

If for some reason the valve cannot be opened, or if you are unsure of the ball position, begin the disassembly by removing the valve adapters (item 31).

STYLE 8908 USE THESE ILLUSTRATIONS TO IDENTIFY THE VARIOUS PARTS IN THIS KIT





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