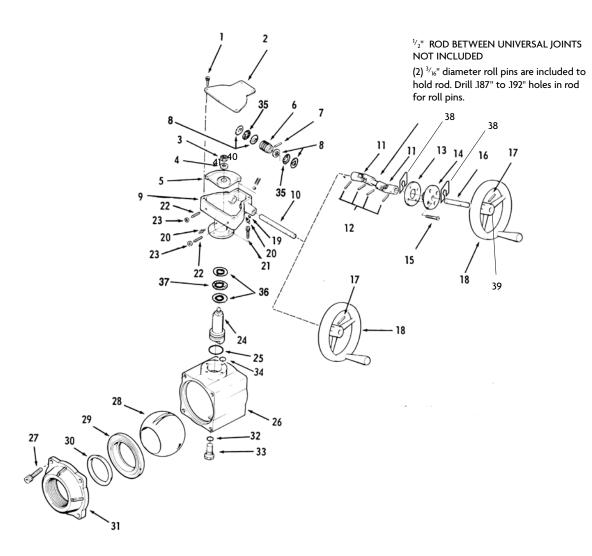


# STYLE 9165 FIELD SERVICE KIT FOR 7840 4" SWING-OUT" VALVE



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	763038	4
2	Gear Housing Cover	707195	1
3	Jam Hex Nut	734059	1
4	Washer	784083	1
5	Gear Sector	109048	1
6	Worm Gear	106611	1
7	Roll Pin	744068	1
8	Thrust Washer	784111	4
9	Gear Housing	106616	1
10	Handwheel Shaft (7.5" long)	110003	1
11	Universal Joint	106721†	2
12*	Roll Pin	744084	4
13	Back Plate	106612	1
14	Handwheel Bracket	110003	1
15	Screw	763063	4
16	Handwheel Shaft (4" long)	769478	1
17	Roll Pin	744107	1
18	Handwheel	721228	1
19	Set Screw	765112	1
20	Grease Fitting	713034	2
21	Screw	763028	4

Item No.	Description	Part Number	Quantity
22	Set Screw	765136	2
2B	Hex Nut	734061	2
24	Ball Trunnion	773237	1
25*	O-Ring	757006	1
26	Valve Body	106617	1
27	Screw	765140	8
28*	Valve Ball	704456	1
29*	Valve Seat	769569	2
30	Seat Ring	106613	2
31	Adapter**	_	2
32*	O-Ring	757002	1
33	Threaded Trunnion	773180	1
34*	O-Ring	757005	1
35	Needle Bearing	703453	2
36	Thrust Washer	784115	2
37	Thrust Bearing	703466	1
38	Spacer	768259	2
39	Open Tag	773185	1
40	Allen Screw	765008	1
41	Nylon Ball	704031	1

<sup>\*</sup>Indicated parts included in Field Service Kit #9165

<sup>\*\*</sup>Please see catalog for options.

<sup>†</sup> Universal Joint Kit - P/N 109322 contains 2 Universal Joints

# **INSTRUCTIONS FOR REPAIRING THE 7840 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**

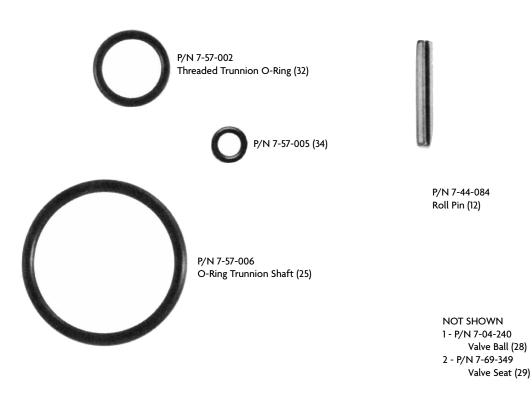
Under certain conditions, pressurized air may become trapped inside a valve assembly when the ball is in the closed position.

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 9165**USE THESE ILLUSTRATIONS TO IDENTIFY THE VARIOUS PARTS IN THIS KIT



PHONE: 330.264.5678 or 800.228.1161 | FAX: 330.264.2944 or 800.531.7335 | akronbrass.com REVISED: 7/11

WARRANTY AND DISCLAIMER: We warrant Akron Brass products for a period of five (5) years after purchase against defects in materials or workmanship. Akron Brass will repair or replace product which fails to satisfy this warranty. Repair or replacement shall be at the discretion of Akron Brass. Products must be promptly returned to Akron Brass for warranty service.

We will not be responsible for: wear and tear; any improper installation, use, maintenance or storage; negligence of the owner or user; repair or modification after delivery; damage; failure to follow our instructions or recommendations; or anything else beyond our control. WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, OTHER THAN THOSE INCLUDED IN THIS WARRANTY STATEMENT, AND WE DISCLAIM ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Further, we will not be responsible for any consequential, incidental or indirect damages (including, but not limited to, any loss of profits) from any cause whatsoever. No person has authority to change this warranty.

© Akron Brass Company.2011 All rights reserved. No portion of this can be reproduced without the express written consent of Akron Brass Company.



Tested.-Proven.-Trusted.

ISO 9001 REGISTERED COMPANY