

**!WARNING!**

Relieve all pressure from system before removing valve for service, and before any disassembly or repair.

Read and understand all instructions included with this repair kit, prior to starting any repairs.



**WARNING:** These products contain a chemical known to the state of California to cause cancer and birth defects or reproductive harm

**NOTE**

Numbers in brackets [ ] refer to the number in the valve component list. Numbers in Parentheses ( ) refer to the Quantity of associated parts.

**!!IMPORTANT!**

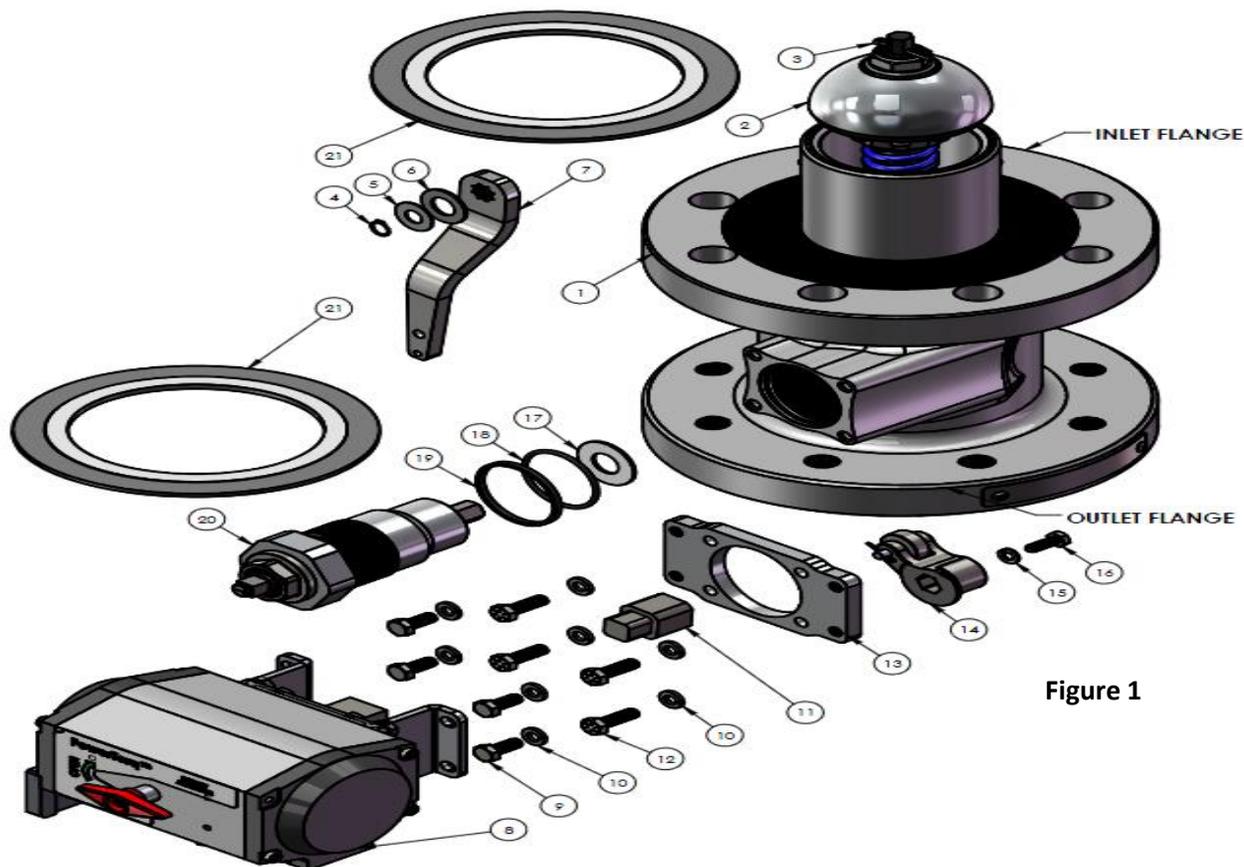
**FOR ALL O-RING INSTALLATIONS BELOW, ENSURE THAT APPROPRIATE LUBRICATION IS APPLIED TO O-RING TO AID IN PROPER ASSEMBLY. MASK ANY THREADS THE O-RING WILL CONTACT PRIOR TO INSTALLATION, AND REMOVE MASKING AFTER O-RING IS INSTALLED.**

**A. Disassembly**

1. If you purchased a valve with an actuator attachment: remove (4) ¾" length Hex Head Bolts [9], Actuator Assembly [8], Drive Coupler [11], (4) 1" length Hex Head Cap Screws [12], (8) Actuator Split Washers [10], and Flat Actuator Bracket [13] from Valve Body [1] and retain.
2. If you purchased a valve with a lever attachment: remove Snap Ring [4], Lever Washers [5 and 6], and Lever [7] from Gland Assembly [20] and retain.
3. Remove Spiral Gasket [21] from Valve body [1] and discard.
4. Remove Cap Screw [16], Cam Split Washer [15] and Stub Washer [17] from Cam Assembly [14] and discard.
5. Remove Gland O-Ring [18], Graphite Gland Seal [19] and Gland Assembly [20] and discard.
6. Inspect the Valve Body [1] and clean if necessary, be sure interior is free of dirt, residue and foreign particles

**B. Assembly**

1. Install Graphite Gland Seal [19] onto Gland Assembly [20].
2. Apply Lubriplate to Gland O-Ring [18] and install onto Gland Assembly [20].
3. Apply Loctite #242 to external threads of Gland Assembly [20] and install into Valve Body [1]. Ensure that Graphite Gland Seal [19] and Gland O-Ring [18] are present and installed properly.
4. Install Stub Washer [17], Cam Assembly [14], Cam Split Washer [15] and Cap Screw [16] onto the Gland Assembly [20] and **tighten** Cap Screw [16], **securely**.
5. If you removed a lever attachment: install Lever [7], Lever Washers [6 and 5], and Snap Ring [4] onto Gland Assembly [20].
6. If you removed an Actuator attachment:
  - 6.1 Install (4) Actuator Split Washers [10] onto (4) 1" length Hex Head Cap Screws [12] and apply Loctite #242 to threads.
  - 6.2 Install Flat Actuator Bracket [13] onto Valve Body [1] with (4) 1" length Hex Head Cap Screws [12] and tighten.
  - 6.3 Rotate Drive Coupler [11] so that the "ARROW" is pointing toward the inlet flange.
  - 6.4 Attach Drive Coupler [11] to Gland Assembly [20].
  - 6.5 Position Actuator Assembly [8] with air inlet connection facing toward OUTLET FLANGE and install over Drive Coupler [11]. Install (4) Actuator Split Washers [10] onto (4) ¾" length Hex Head Bolts [9]. Apply Loctite #242 to threads of (4) ¾" length Hex Head Bolts [9] and install through bent bracket holes on Actuator Assembly [8] and thread into Flat Actuator Bracket [13], **tighten**.
7. If valve was removed from tank connection, reinstall valve using new Spiral Gasket [21].



**Figure 1**

8. Connect the valve assembly OUTLET FLANGE to a pressure source of at least 150 PSI. Check for leaks at flange connection and gland seals using a suitable leak detector solution such as "Marshall Excelsior" leak detector.
9. If all seals and connections are leak free, connect valve OUTLET FLANGE to piping system using new Spiral Gasket [21].
10. Connect the valve assembly outlet to a pressure source of at least 150 PSI. Check for leaks at all joints and stem seals using a suitable leak detector solution such as "Marshall Excelsior" leak detector.

**!CAUTION!**

**DO NOT USE THE VALVE IF ANY JOINT CONTINUES TO LEAK UNDER PRESSURE.**

**C. Valve Assembly List**

1. Valve Body

2. Valve Poppet Assembly
3. Cotter Pin (Poppet)
4. Snap Ring
5. Closing Spring Washer
6. Washer
7. Lever
8. Actuator
9. Hex Head Bolt- 3/4" length (4)
10. Split Washer (8)
11. Drive Coupler
12. Hex Head Cap Screw -1" length (4)
13. Flat Bracket
14. Cam Assembly
15. Split Washer
16. Cap Screw
17. Stub Washer
18. Gland O-Ring
19. Graphite Gland Seal
20. Gland Assembly
21. Spiral Gasket (2)