

### ME990-3F-VRK COMPLETE VALVE REPAIR KIT FOR: ME990-3F 3'' SINGLE FLANGE INTERNAL VALVE

#### **!!!WARNING!!!**

READ AND UNDERSTAND ALL INSTRUCTIONS INCLUDED WITH THIS REPAIR KIT RELIEVE ALL PRESSURE FROM SYSTEM BEFORE REMOVING VALVE FOR SERVICE

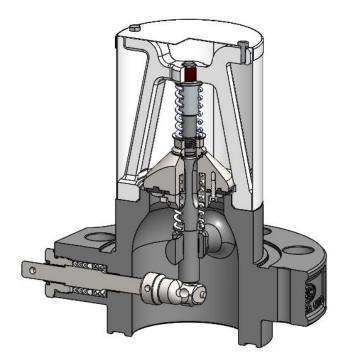
**NOTE:** Numbers in brackets [] refer to the number in the valve component list.



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

### A. Disassembly

- 1. EVACUATE ALL PRESSURE FROM SYSTEM BEFORE ANY DISASSEMBLY OR REPAIR.
- 2. Remove (8) Bushings [19] from Valve Body [1] and discard (not shown).
- 3. Remove (2) Cap Screws [2] from Screen Cap [3] and discard.
- 4. Remove Screen Cap [3] and Screen [4]; retain components.
- 5. Remove (4) Cage Screws [5] from Valve Cage [6] and discard.
- 6. Remove Valve Cage [6] and Cage Bushing [7] and discard.
- 7. Remove Spring Guide [8], Closing Spring [9] and Spring Washer [10] and discard.
- 8. Remove Lock Nut [11] and Bleed Disc [12] and discard.
- 9. Remove Valve Poppet [13] and discard.
- 10. Remove Excess Flow Spring [14] and retain.
- 11. Remove Spring Seat [15] and Stem [16] and discard.
- 12. Remove Guide Bearing [17] and discard.
- 13. Remove Cam Pin [19] and Cam [20] from Gland Assembly [18] and discard.
- 14. Remove Gland Assembly [18] and discard.
- 15. Inspect Valve Body [1] and clean if necessary, be sure interior is free of dirt, residue and foreign particles.



# **B.** Reassembly

- 1. Apply Loctite #242 or equivalent thread locker to gland threads of Body [1]; install new Gland Assembly [18]; see recommended orientation below.
- 2. Install new Cam [20] and new Cam Pin [19] onto Gland Assembly [18].
- 3. Install new Guide Bushing [17] into Body [1]
- 4. Install new Spring Seat [15], retained Ex-Flow Spring [14], and new Valve Poppet [13] onto new Stem [16] in order and orientation shown.
- 5. Install new Bleed Disc [12] and new Lock Nut [11] onto Stem [16].
- 6. Install Stem Assembly [11-16] into Body [1].

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- 7. Install new Spring Washer [10] and new Closing Spring [9] onto Stem [16]
- 8. Install new Spring Guide [8] onto Stem [16] in orientation shown.
- 9. Install new Cage Bearing [7] into new Valve Cage [6]
- 10. Apply Loctite #242 or equivalent thread locker to (4) cage-screw threads of Body [1]; install new Valve Cage [6] onto Body, install (4) new Cage Screws [5] to retain.
- 11. Install Screen [4] and Screen Cap [3] onto Valve Cage [6]; install (2) new Cage Screws[2] to retain.
- 12. 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. Component List

| Item | Description          | Qty | Included |
|------|----------------------|-----|----------|
| no.  |                      |     | in Kit   |
| 1    | Body                 | 1   | N        |
| 2    | Cap Screw            | 2   | Y        |
| 3    | Screen Cap           | 1   | N        |
| 4    | Screen               | 1   | N        |
| 5    | Cage Screw           | 4   | Y        |
| 6    | Valve Cage           | 1   | Y        |
| 7    | Cage Bushing         | 1   | Y        |
| 8    | Spring Guide         | 1   | Y        |
| 9    | Closing Spring       | 1   | Y        |
| 10   | Spring Washer        | 1   | Y        |
| 11   | Lock Nut             | 1   | Y        |
| 12   | Bleed Disc           | 1   | Y        |
| 13   | Valve Poppet         | 1   | Y        |
| 14   | Excess Flow Spring   | 1   | N        |
| 15   | Spring Seat          | 1   | Y        |
| 16   | Valve Stem           | 1   | Y        |
| 17   | Guide Bearing        | 1   | Y        |
| 18   | Gland Assembly       | 1   | Y        |
| 19   | Cam Pin              | 1   | Y        |
| 20   | Cam                  | 1   | Y        |
| 21   | Bushings (Not shown) | 8   | Y        |

