

#### ME980-10SRK, ME980-16SRK, AND ME980-24SRK SEAL REPAIR KIT FOR: ME980 1 1/4''-3'' EMERGENCY SHUT-OFF 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.

## A. Disassembly

- 1. EVACUATE ALL PRESSURE FROM SYSTEM BEFORE ANY DISASSEMBLY OR REPAIR.
- For ME980-10 and ME980-16: Remove
   (8) Flange Bolts [7] and (2) Flanges [2] and retain.

**For ME980-24:** Remove (16) Flange Bolts [7] and (2) Flanges [2] and retain.

- 3. Remove O-Rings [9] and Graphite Flange Seal [4] and discard.
- 4. Remove arm of Handle Spring [13] from Latch Assembly [17].
- 5. Remove Handle Screw [15] and Handle Washer [14] from Stem [20A] and retain.
- 6. Remove Spring Retainer [12], Handle Spring [13], Handle Assembly [21] and Thermal Link [16] and retain.
- Remove Valve Seat Holder Assembly [19]. Remove Valve Seal [19A] and Valve Graphite Seal [19B] from Valve Holder [19C] and discard Valve Seal [19A] and Valve Graphite Seal [19B].
- 8. Remove Stem Assembly [20], Gland Spring [11], and Thick Washer [10] and retain.
- Remove Link Bearing [20B], Gland [20D], Wiper[20C], Gland Bushing [20E], Nylon Washer [20F], Graphite Packing [20G], (2) V-Pack [20H], and Male Adapter [20J] from Stem [20A]. Discard Wiper [20C], Gland Bushing [20E], Nylon Washer [20F], Graphite Packing [20G], (2) V-Pack [20H], and Male Adapter [20J].

- Loosen Arm Holding Screw [8] and remove Pivot Stem [3], Clapper Assembly [18], Pivot Bearing [5], and Stem Bearing [6] from Body [1]. Discard only Pivot Bearing [5] and Stem Bearing [6].
- 11. For ME980-10: Remove Cotter Pin [18B], Valve Nut [18C], Valve [18D], and Pilot Seal [18F] from Valve Stem [18A]. Discard only Pilot Seal [18F].
  For ME980-16 and ME980-24: Remove

Cotter Pin [18B], Valve Nut [18C], Valve [18D], Pilot Seal [18F], and Pilot Seal Holder [18E] from Valve Stem [18A]. Discard only Pilot Seal [18F].

12. Inspect Valve Body [1] and clean if necessary, be sure interior is free of dirt, residue and foreign particles.

### **B.** Reassembly

- For ME980-10: Install Pilot Seal [18F] onto Valve [18D]. Install Valve [18D] onto Valve Stem [18A].
   For ME980-16 and ME980-24: Install Pilot Seal [18F] onto Valve [18D]. Install Pilot Seal Holder [18E] onto Pilot Seal [18F]. Install Valve [18D] onto Valve Stem [18A].
- 2. Install Valve Nut [18C] onto Valve Stem [18A] until Cotter Pin [18B] can just be installed. Install Cotter Pin [18B] and bend around Valve Stem [18A]. Install Arm Holding Screw [8] until end of screw is flush.
- Install Pivot Bearing [5] and Stem Bearing
   [6] into Body [1].

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- 4. Install Clapper Assembly [18] into Body [1]. Install Pilot Stem [3] into Body [1], retaining Clapper Assembly [18].
- 5. Tighten Arm Holding Screw [8] securely.
- 6. Install Thick Washer [10] into Body [1].
- 7. Apply Lubriplate to packing bore in Body [1].
- 8. Install Gland Spring [11] into Body [1].
- 9. Apply lubriplate to Male Adapter [20J] and inside of "V" of (2) V-Packs [20H] and install onto Stem [20A]. Install Graphite Packing [20G] onto Stem [20A]. Install Nylon Washer [20F] onto Stem [20A].
- 10. Install Gland Bushing [20E] and Wiper [20C] into Gland[20D]. Install Gland [20D] onto Stem[20A].
- 11. Apply loctite #271 to threads of Gland and install Stem Assembly [20] into Body [1], tighten securely. Confirm that Clapper Assembly [18] moves freely.
- 12. Install Valve Graphite Seal [19B] and Valve Seal [19A] onto Valve Seat Holder[19C].
- 13. Apply lubriplate around Valve Seal [19A] and install Valve Seat Holder Assembly [19] into Body [1].
- 14. Install Graphite Flange Seal [4] into Body [1].
- 15. **For ME980-10 and ME980-16 only:** Apply lubriplate to O-Ring [9] and install on Body [1].
- 16. For ME980-10 and ME980-16: Apply loctite #271 to threads of Body [1], place Flange [2] on Body [1], and install (4) Flange Bolts [7] into Body and tighten in "star" pattern and confirm that all screws are tightened.

**For ME980-24:** Apply loctite #271 to threads of Body [1], place Flange [2] on Body [1], and install (8) Flange Bolts [7] into Body [1] and tighten in "star" pattern and confirm that all screws are tightened.

- 17. Repeat steps 10 and 11 for remaining Flange [2].
- 18. Install Link Bearing [20B] onto Stem [20A].

- 19. With Clapper closed, Install Handle Assembly [21] onto Stem [20A] with Latch Bearing facing down (Figure 1).
- 20. Apply loctite #271 to stem threads.
- 21. Install Thermal Link [16] into Handle Assembly [21].
- 22. Install Spring Retainer [12] into Thermal Link [16] as shown (Figure 1) with Handle Spring [13] arm oriented as shown (Figure 2).
- 23. Install Handle Washer [14] and Handle Screw [15], tighten securely.
- 24. Wind Handle Spring [13] arm clockwise and attach to Latch Body (Figure 2).
- 25. 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

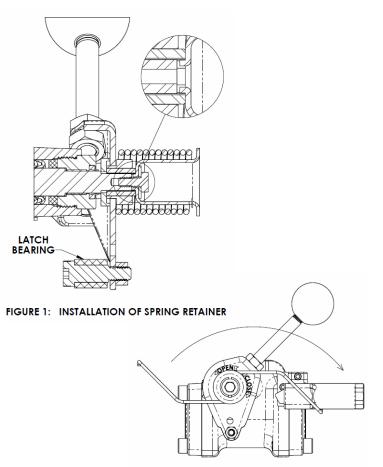
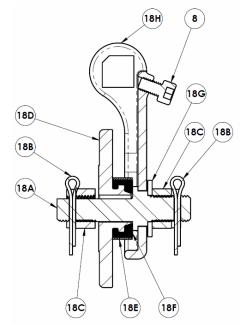


FIGURE 2: INSTALLATION OF HANDLE SPRING

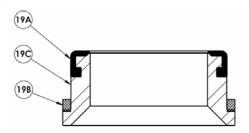
# C. Component List

- Valve Body 1.
- Flange 2.
- Pivot Stem 3.
- 4. Graphite Flange Seal
- 5. Pivot Bearing
- Stem Bearing 6.
- 7. Flange Bolt
- Arm Holder Screw 8.
- 9. O-Ring
- 10. Thick Washer
- 11. Gland Spring
- 12. Spring Retainer
- 13. Handle Spring
- 14. Handle Washer
- 15. Handle Screw
- 16. Thermal Link
- 17. Latch Assembly
- 18. Clapper Assembly
  - Valve Stem 18A.
  - 18B. Cotter Pin
  - 18C. Valve Nut
  - 18D. Valve
  - Pilot Seal Holder 18E.
  - 18F. Pilot Seal
  - 18G. Valve Washer
  - 18H. Pivot Arm
- 19. Valve Seat Holder Assembly
  - Valve Seal 19A.
  - Valve Graphite Seal 19B.
  - Valve Seat Holder 19C.
- 20. Stem Assembly
  - 20A. Stem
  - Link Bearing 20B.
  - Wiper 20C.
  - 20D. Gland
  - **Gland Bushing** 20E.
  - Nylon washer 20F.
  - **Graphite Packing** 20G.

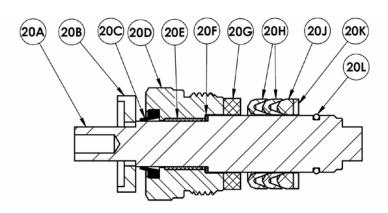
- 20H. V-Pack
- 20J. Male Adapter
- 20K. Thick Washer
- 20L. Wire Ring
- 21. Handle Assembly



#### **CLAPPER ASSEMBLY**



#### VALVE SEAT HOLDER ASSEMBLY



STEM ASSEMBLY

