

# 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

- **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.
- Remove arm of Handle Spring [13] from Latch Assembly [17].
- Remove Handle Screw [15] and Handle 5. Washer [14] from Stem [20A] and retain.
- 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].
- 10. 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].
- 4. Install Clapper Assembly [18] into Body [1]. Install Pilot Stem [3] into Body [1], retaining Clapper Assembly [18].
- Tighten Arm Holding Screw [8] securely. 5.
- Install Thick Washer [10] into Body [1]. 6.

## **Marshall Excelsior Company**

1506 George Brown Drive Marshall, MI 49068 Phone (269) 789-6700 Fax (269) 781-8340 www.marshallexcelsior.com

The contents of this publication are for informational purposes only. While every effort has been made to ensure accuracy, these contents are not to be construed as warranties or guarantees, expressed or implied, regarding the products or services described herein or for their use or applicability. Marshall Excelsior Co. reserves the right to modify or improve the designs or specifications of such products at any time without notice. The MEC<sup>TM</sup> logo is the trademark of Marshall Excelsior Co.

#### ME980-10SRK, ME980-16SRK, AND ME980-24SRK

- 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. Apply lubriplate to O-Ring [9] and install on Body [1].
  - \*\*NOTE: If the ME980-24 is dated prior to C2317, use ME980-24-108 O-Ring. If dated after C2317, use ME980-24-113 O-Ring.
- 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 step 16 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

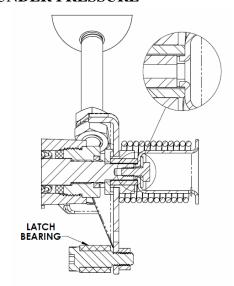


FIGURE 1: INSTALLATION OF SPRING RETAINER

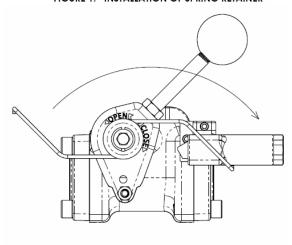
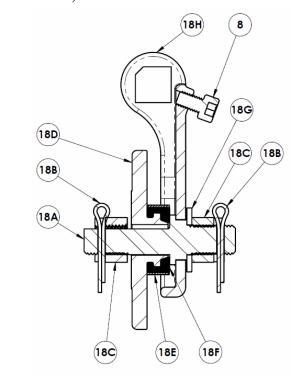


FIGURE 2: INSTALLATION OF HANDLE SPRING

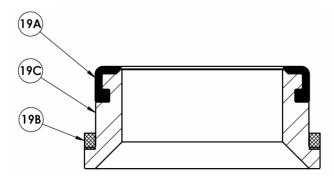
### ME980-10SRK, ME980-16SRK, AND ME980-24SRK

# C. Component List

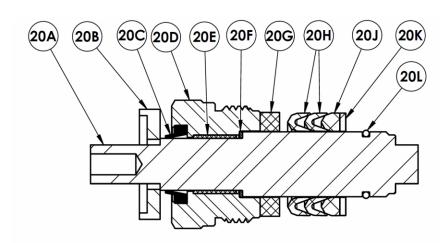
- 1. Valve Body
- 2. Flange
- 3. Pivot Stem
- 4. Graphite Flange Seal
- 5. Pivot Bearing
- 6. Stem Bearing
- 7. Flange Bolt
- 8. Arm Holder Screw
- 9. O-Ring
- 10. Thick Washer
- 11. Gland Spring
- 12. Spring Retainer
- 13. Handle Spring
- 14. Handle Washer
- 15. Handle Screw
- 16. Thermal Link
- 17.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



CLAPPER ASSEMBLY



# **VALVE SEAT HOLDER ASSEMBLY**



STEM ASSEMBLY

# ${\bf ME980\text{-}10SRK, ME980\text{-}16SRK, AND\ ME980\text{-}24SRK}$

