ME990-4DFM-VRK AND ME990-6DFM-VRK
COMPLETE VALVE REPAIR KIT
FOR: ME990 4" AND 6" DOUBLE FLANGE INTERNAL VALVE AND ME980 4" & 6" EMERGENCY SHUTOFF VALVE

!!!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

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 [3], Actuator Assembly [2], Drive Coupler [5], (4) 1" length Hex Head Cap Screws [6], (8) Actuator Split Washers [4], and Flat Actuator Bracket [7] from Body [1] and retain.
2. If you purchased a valve with a lever attachment: remove Snap Ring [8], Lever Washers [9 and 10], and Lever [11] from Gland Assembly [16] and retain.
3. Remove Cap Screw [12], Cam Split Washer [13], Cam Assembly [14], and Stub Washer [15] from end of Gland Assembly [16] and discard.
4. Remove Gland Assembly [16], Graphite Gland Seal [17], and Gland O-Ring [18] from Body [1] and discard.
5. Remove Cotter Pin [19], Locknut [20], Bleed Disc [21], and Valve Poppet Assembly [22] from Stem [29] and discard.
6. Remove Excess Flow Spring [23] from Stem [29] and either:
   a. Discard if you have purchased a new Excess Flow Spring; or
   b. Retain if you did not purchase a new Excess Flow Spring.
7. Remove Spring Seat [24] from Stem [29] and discard.
8. Remove Stem [29], Lower Stem Washer [28], Closing Spring [27], Upper Stem Washer [26], Stem Guide [31], and Stem Guide [25] from Body [1] and discard.
9. Inspect Valve Body [1] and clean if necessary, be sure interior is free of dirt, residue and foreign particles.

B. Reassembly

1. Install Lower Stem Washer [28], Closing Spring [27], Upper Stem Washer [26], and Stem Bushing [31] on Stem [29].
2. Install Stem Guide [25] on Stem [29] and install in Body [1].
3. Install Spring Seat [24], Excess Flow Spring [23], and Valve Poppet Assembly [22] on Stem [29].
4. Apply lubriplate to bore of Bleed Disc [21] and install on Stem [29].
5. Install Locknut [20] on Stem [29].
6. Install Cotter Pin [19] thru hole in Stem [29].
7. Install Graphite Gland Seal [17] onto Gland Body [16].
8. Apply Lubriplate or equivalent lubricant to Gland O-Ring [18] and install onto Gland Body [16].
9. Apply Loctite #242 to external threads of Gland Assembly [16] and install into Body [1]. Ensure

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that Graphite Gland Seal [17] and Gland O-Ring [18] are present and installed properly.

10. Install Stub Washer [15], Cam Assembly [14], Cam Split Washer [13], and Cap Screw [12] onto Gland Assembly [16] and tighten Cap Screw [12] securely.
11. If you removed a lever attachment: install Lever [11], Lever Washers [9 and 10], and Snap Ring [8] onto Gland Assembly [16].
12. If you removed an actuator attachment:
    a) Install (4) Actuator Split Washers [4] onto (4) 1" length Hex Head Cap Screws [6] and apply Loctite #242 to threads of (4) 1" length Hex Head Cap Screws [6].
    b) Install Flat Actuator Bracket [7] onto Body [1] with (4) 1" length Hex Head Cap Screws [6] and tighten.
    c) Attach Drive Coupler [5] to Gland Assembly [16].
    d) Rotate Drive Coupler [5] clockwise by hand until it stops, then back off counterclockwise 1/8 turn (45°).
    e) Position Actuator Assembly [2] with air inlet connection facing toward OUTLET FLANGE and install over Drive Coupler [5]. Install (4) Actuator Split Washers [4] onto (4) ¾" length Hex Head Bolts [3]. Apply Loctite #242 to threads of (4) ¾" length Hex Head Bolts [3], install through bent bracket holes on Actuator Assembly [2] and thread into Flat Actuator Bracket [7], tighten.
13. If valve was removed from tank connection, reinstall valve using new Flange Gasket [30]
14. Connect the valve assembly 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. **CAUTION: DO NOT USE THE VALVE IF ANY JOINT CONTINUES TO LEAK UNDER PRESSURE.**
15. If all seals and connections are leak free, connect valve OUTLET FLANGE to piping system using new Flange Gasket [30].

C. Component List

1. Body
2. Actuator Assembly
3. 3/4" Hex Head Bolts (Qty: 4)
4. Actuator Split Washer (Qty: 8)
5. Drive Coupler
6. 1" Hex Head Cap Screw (Qty: 4)
7. Flat Actuator Bracket
8. Snap Ring
9. Lever Washer (Small)
10. Lever Washer (Large)
11. Lever
12. Cap Screw
13. Cam Split Washer
14. Cam Assembly
15. Stub Washer
16. Gland Assembly
17. Graphite Gland Seal
18. Gland O-Ring
19. Cotter Pin
20. Locknut
21. Bleed Disc
22. Valve Poppet Assembly
23. Excess Flow Spring
24. Spring Seat
25. Stem Guide
26. Upper Stem Washer
27. Closing Spring
28. Lower Stem Washer
29. Stem
30. Flange Gasket (Qty: 2)

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