

ME990-4F-VRK COMPLETE VALVE REPAIR KIT FOR: ME990-4F 4" SINGLE FLANGE INTERNAL VALVE

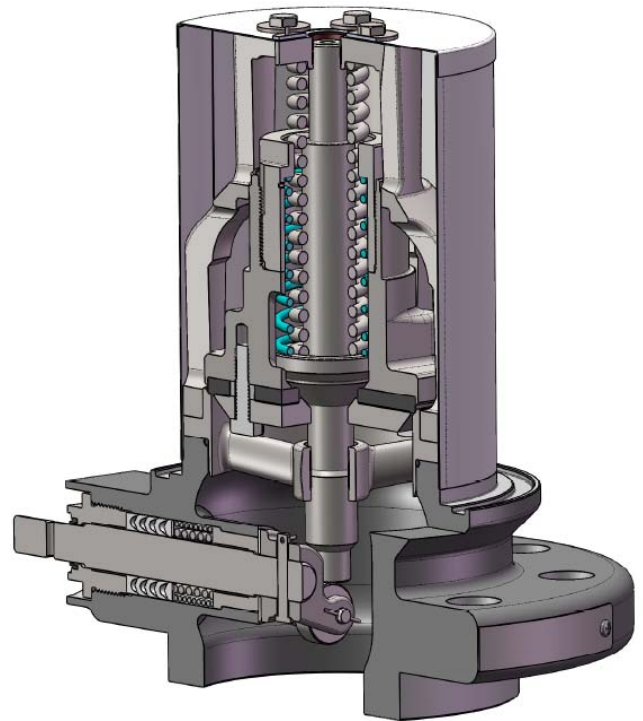
!!!WARNING!!!

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.

A. Disassembly

1. **EVACUATE ALL PRESSURE FROM SYSTEM BEFORE ANY DISASSEMBLY OR REPAIR.**
2. Remove (10) Bushings [20] from Valve Body [1] and discard
3. Remove (4) Screws [2] and (4) Washers [3] (if applicable) from Screen [4] and retain.
4. Remove Screen [4] and retain.
5. Remove (8) Cap Screws [5] from Valve Cage [6] and discard.
6. Remove Valve Cage [6] and Closing Spring [7] and discard.
7. Remove Valve Holder Assembly [12] from Valve Body [1].
8. Remove Spring Pin [8] and Retainer [9] from Valve Holder Assembly [12] and discard.
9. Remove Excess Flow Spring [10] from Valve Holder Assembly [12] and either:
 - a. Discard if you have purchased a new Excess Flow Spring [10]; or
 - b. Retain if you did not purchase a new Excess Flow Spring [10].
10. Discard Valve holder Assembly [12] and Stem [11].
11. Discard Seat Ring [13] and O-Ring [14].
12. Remove Cotter Pin [15] from Cam Pin [16] and discard.
13. Remove Cam Pin [16], Cam Assembly [17] and Stub Washer [18] and discard.
14. Remove Rod Wiper [19A], Bonnet [19B], Female Adapter [19C], (3) V-Packs [19D], Male Adapter [19E], Packing Washer [19F], Packing Spring [19G], Ejection Spring [19H], Stub [19J], and Bushing [19K] from Valve Body [1] and discard.
15. Inspect Valve Body [1] and clean if necessary, be sure interior is free of dirt, residue and foreign particles.



Marshall Excelsior Company

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

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B. Reassembly

1. Apply Loctite #242 to Bonnet [19B] and install Stub Assembly [19] into Valve Body [1]. Remove zipties after Stub Assembly [19] is installed.
2. Install Stub Washer [18] onto Stub [19J].
3. Install Cam Assembly [17] onto Stub [19J].
4. Install Cam Pin [16] through Cam Assembly [17] and Stub [19J]. Retain with Cotter Pin [15].
5. Install Stem [11] and Excess Flow Spring [10] into Valve Holder Assembly [12].
6. Apply anti-seize to threads of Retainer [9] and install into Valve Holder Assembly [12].
7. Drill $\phi 3/32$ hole through one wall of Retainer [9] using hole in Valve Holder Assembly [12] as a guide.
8. Install Spring Pin [8] into Valve Holder Assembly [12] until flush.
9. Apply lubriplate to O-Ring [14] and install on Seat Ring [13].
10. Align holes in Seat Ring [13] with holes in Valve Body [1] and install Seat Ring [13] into Valve Body [1].
11. Install Valve Holder Assembly [12] into Valve Body [1].
12. Install Closing Spring [7] into Valve Holder Assembly [12].
13. Install Valve Cage [6] onto Valve Body [1], aligning holes in Valve Cage [6] with holes in Valve Body [1].
14. Apply Loctite #242 to threaded holes in Valve Body [1] and install (8) Cap Screws [5] and tighten securely.
15. Install Screen [4] onto Valve Body [1].
16. Apply Loctite #242 to threads of (4) Screws [2] and install (4) Washers [3] (if Applicable) and (4) Screws [2] through Screen [4] into Valve cage [6].

17. 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

1. Valve Body
2. Screw, 4 required
3. Washer, 4 required (if applicable)
4. Screen
5. Cap Screw, 8 required
6. Valve Cage
7. Closing Spring
8. Spring Pin
9. Retainer
10. Excess Flow Spring
11. Stem
12. Valve Holder Assembly
13. Seat Ring
14. O-Ring
15. Cotter Pin
16. Cam Pin
17. Cam Assembly
18. Stub Washer
19. Stub Assembly
- 19A. Rod Wiper
- 19B. Bonnet
- 19C. Female Adapter
- 19D. V-Pack
- 19E. Male Adapter
- 19F. Packing Washer
- 19G. Packing Spring
- 19H. Ejection Spring
- 19J. Stub
- 19K. Stem Bushing
20. Bushing, 10 required (not shown)

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