



**FULL PORT VALVE ASSEMBLY
SEAL REPAIR KIT
FOR: ME825-3F-SRK AND ME825-4F-SRK**

!!!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 Handwheel Nut [9], Handwheel Washer [8], and Handwheel [7] from Stem [4aa] and retain.
3. Remove (4) Bonnet Bolts [6] from Bonnet Assembly [4] and retain.
4. Remove Nameplate [5] and retain.
5. Remove Bonnet Assembly [4] from Body [1].
6. Remove Garlock Gasket [3] and Bonnet O-Ring [2] and discard.
7. Remove Valve Shaft Gland [4d] from Bonnet [4b] and retain.
8. Remove Valve Shaft Gland O-Ring [4c] from Valve Shaft Gland [4d] and discard Valve Shaft Gland O-Ring [4c].
9. Remove (2) V-Packs [4e], Male Adapter [4h], Inner O-Ring [4f], Outer O-Ring [4g], Compression Spring [4i], and Valve Shaft Gland Seal [4j] from Bonnet [4b]. Discard (2) V-Packs [4e], Male Adapter [4h], Inner O-Ring [4f], Outer O-Ring [4g], and Valve Shaft Gland Seal [4j]. Retain Compression Spring [4i].
10. Remove Hinge Pin [4k] from Bonnet [4b] and retain.
11. Remove Stem Assembly [4a] from Bonnet [4b].
12. Remove E-Clip [4ah] from one side of Cam Pin [4aj] and retain.
13. Remove (4) Nylon Clevis Washers [4ag], Clevis Bushing [4ai], Cam Pin [4aj], and Stem Clevis [4af] from Clapper Assembly [4ak]. Discard Clevis Bushing [4ai] and (4) Nylon Clevis Washers [4ag].
 - a. Discard Nylon Clevis Washers and Clevis Bushing. Retain other components from this step.
14. Remove Cotter Pin [4ak3] from Valve Stem [4ak4] and retain.
15. Remove Lock Nut [4ak2] from Valve Stem [4ak4] and retain.
16. Remove Valve Stem [4ak4] from Hinge [4ak1]. Remove (10) Ball Bearings [4ak5] from Valve [4ak7] and retain.
17. Remove Valve Stem [4ak4] from Valve [4ak7] and retain.
18. Remove Valve O-Ring [4ak6] from Valve [4ak7] and discard.
19. Remove Clevis Retainer [4ac] from Stem Clevis [4af] and retain.
20. Remove (2) Clevis Bearings [4ad] from Stem [4aa] and retain.
21. Remove Clevis Retainer [4ac] from Stem [4aa] and retain.
22. Remove Nylon Stem Washer [4ab] from Stem [4aa] and discard.
23. Remove Ball [4ae] from Stem Clevis [4af]. Clean and retain both.
24. Remove Valve Seat [10] and Valve Seat O-Ring [11] from Body [1] and discard.
25. Inspect Body [1] and clean if necessary, be sure interior is free of dirt, residue, and foreign particles.

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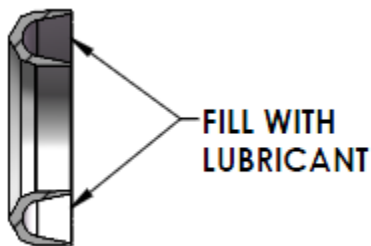
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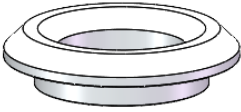
ME825-3F-SRK AND ME825-4F-SRK

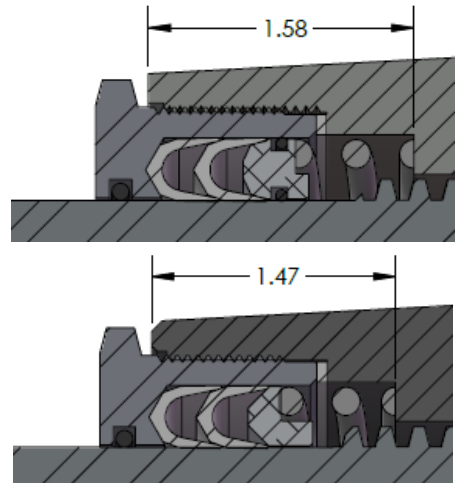
B. Reassembly

1. Ensure Valve Seat O-Ring [11] is installed in Valve Seat [10]. Apply suitable lubricant to O-ring and Loctite #271 to threads of Valve Seat. Install Valve Seat into Body [1], tighten securely.
2. Apply suitable lubricant to Valve O-Ring [4ak6] and install into Valve [4ak7].
3. Install Valve Stem [4ak4] into Valve [4ak7]. Install (10) Ball Bearings [4ak5] through hole in side of Valve [4ak7].
4. Install Valve Stem [4ak4] into Hinge [4ak1]. Install Lock Nut [4ak2] onto Valve Stem [4qak4] and tighten securely. Install Cotter Pin [4ak3] into Valve Stem [4ak4].
5. Install Nylon Stem Washer [4ab], Clevis Retainer [4ac], and (2) Clevis Bearings [4ad] onto Stem [4aa].
6. Apply Loctite #271 to threads of Clevis Retainer [4ac] and install Stem Clevis [4af], tighten securely.
7. Install Clevis Bushing [4ai] into Stem Clevis [4af].
8. Install (2) Nylon Clevis Washers [4ag] onto Stem Clevis [4af] one on each side to retain Clevis Bushing [4ai].
9. Install (1) E-Clip [4ah] and (1) Nylon Clevis Washer [4ag] onto Cam Pin [4aj].
10. Align hole in Stem Clevis [4af] with Slot of Clapper Assembly [4ak] and install Cam Pin [4aj].
11. Install (1) Nylon Clevis Washer [4ag] and (1) E-Clip [4ah] onto Cam Pin [4aj].
12. Install Stem Assembly [4a] into Bonnet [4b].
13. Align Hinge [4ak1] with hole in Bonnet [4b] and install Hinge Pin [4k].
14. Install Compression Spring [4i] into Bonnet [4b].
15. Install Valve Shaft Gland Seal [4j] into Bonnet [4b].
16. Apply suitable lubricant to Valve Shaft Gland O-Ring [4c] and install into Valve Shaft Gland [4d].
17. Apply Lubriplate or equivalent grease to outside of (2) V-Packs [4e] and inside of Valve Shaft Gland [4d]. Fill inside of (2) V-packs [4e] with lubricant as shown.



18. Determine which Male Adapter [4h] is required for this valve, based on which Male Adapter was in Bonnet [4b] previously, or depth of spring pocket as noted below. Discard other Male Adapter from kit, it will not be used.

Pocket Depth	4h Male Adapter	
1.58"	Thicker with O-rings [4f+4g]	
1.47"	Thinner, L-shape	



19. Install (2) V-Packs [4e] and correct Male Adapter [4h] into Valve Shaft Gland [4d].
20. Apply Loctite #565 or equivalent thread seal to threads of Valve Shaft Gland [4d] and install into Bonnet [4b], tighten securely.
21. Apply suitable lubricant to Bonnet O-Ring [2]. Install Bonnet O-Ring [2] and Garlock Gasket [3] into Body [1].
22. Install Bonnet Assembly [4] into Body [1].
23. Place Nameplate [5] onto Bonnet [4b].
24. Apply Anti-Seize to threads of (4) Bonnet Bolts [6] and install into Body [1], retaining Nameplate [5] and Bonnet Assembly [4], tighten securely.
25. Install Handwheel [7], Handwheel Washer [8], and Handwheel Nut [9] onto Stem [4aa], tighten securely.
26. Connect the valve assembly outlet to a pressure source of at least 150 PSI. Check for leaks at all joints 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.

ME825-3F-SRK AND ME825-4F-SRK

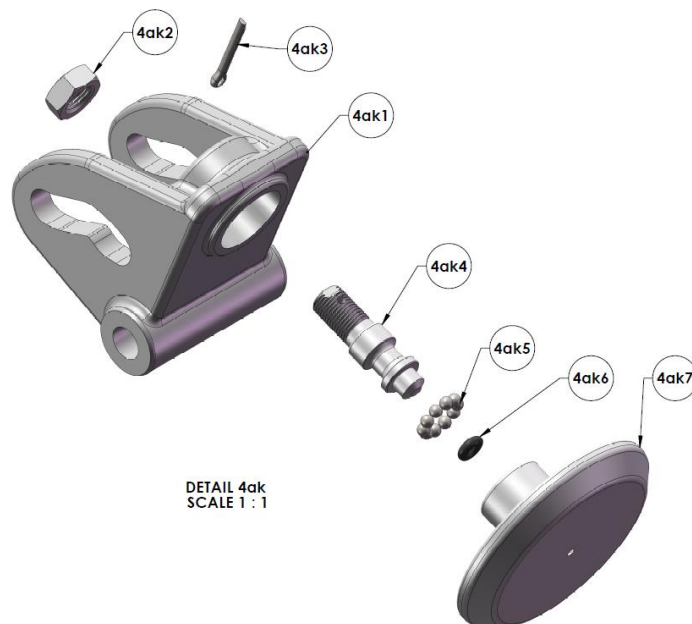
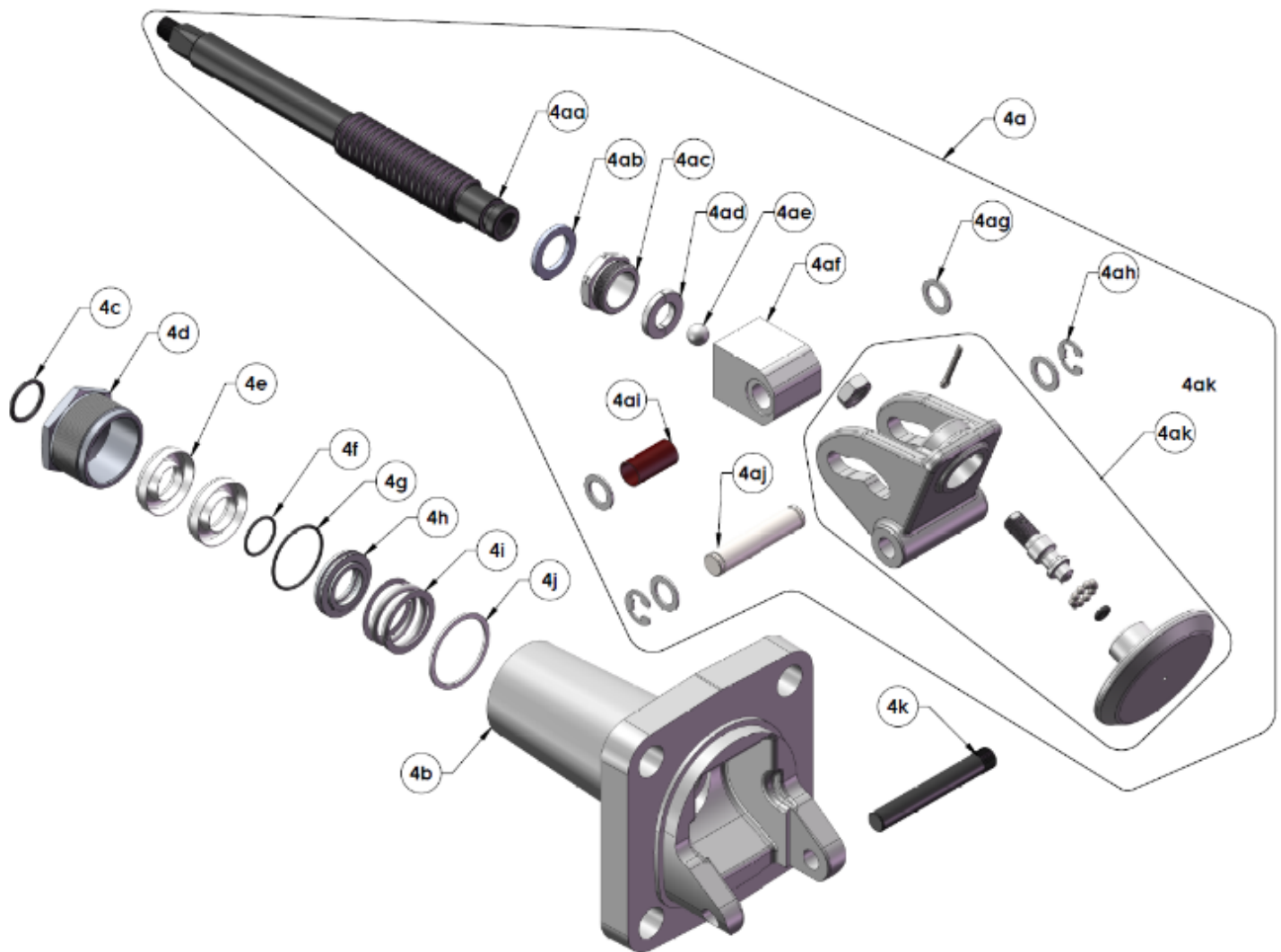
C. Component List

(Parts in *italics* included in kit)

1. Body
2. *Bonnet O-Ring*
3. *Garlock Gasket*
4. Bonnet Assembly
 - 4a. Stem Assembly
 - 4aa. Stem
 - 4ab. *Nylon Stem Washer*
 - 4ac. Clevis Retainer
 - 4ad. Clevis Bearing, Qty: 2
 - 4ae. Ball
 - 4af. Stem Clevis
 - 4ag. *Nylon Clevis Washer, Qty: 4*
 - 4ah. E-Clip, Qty: 2
 - 4ai. *Clevis Bushing*
 - 4aj. Cam Pin
 - 4ak. Clapper Assembly
 - 4ak1. Hinge
 - 4ak2. Lock Nut
 - 4ak3. Cotter Pin
 - 4ak4. Valve Stem
 - 4ak5. Ball Bearing, Qty: 10
 - 4ak6. *Valve O-Ring*
 - 4ak7. Valve
 - 4b. Bonnet
 - 4c. *Valve Shaft Gland O-Ring*
 - 4d. Valve Shaft Gland
 - 4e. *V-Pack, Qty: 2*
 - 4f. *Inner O-Ring*
 - 4g. *Outer O-Ring*
 - 4h. *Male Adapter*
 - 4i. Compression Spring
 - 4j. *Valve Shaft Gland Seal*
 - 4k. Hinge Pin
5. Nameplate
6. Bonnet Bolts, Qty: 4
7. Handwheel
8. Handwheel Split Washer
9. Handwheel Nut
10. *Valve Seat*
11. *Valve Seat O-Ring*



ME825-3F-SRK AND ME825-4F-SRK



DETAIL 4ak
SCALE 1 : 1