

ME990-3F-SRK SEAL REPAIR KIT FOR: ME990 3" SINGLE FLANGED INTERNAL VALVES

!!!WARNING!!!
READ AND UNDERSTAND ALL INSTRUCTIONS INCLUDED WITH THIS REPAIR KIT
RELIEVE ALL PRESSURE FROM SYSTEM BEFORE REMOVING VALVE FOR SERVICE

!WARNING!

Failure to follow these instructions or to properly install and maintain this equipment could result in an explosion and/or fire causing property damage and personal injury or death.

Install, operate and maintain Marshall Excelsior Co. equipment in accordance with federal, state, and local codes and these instructions. The installation in most states must also comply with NFPA No. 58, and ANSI Standard K61.1.

Only personnel trained in the proper procedures, codes, standards and regulations of the LP-Gas should install, maintain and service this equipment. Be sure all instructions are read and understood before installation, operation and maintenance. These instructions must be passed along to the end user of the product.



WARNING: These products contain a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

A. Disassembly

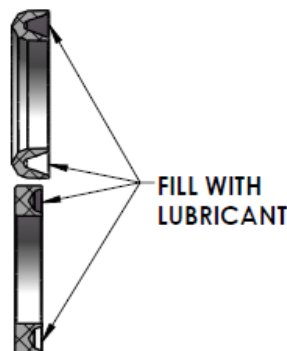
NOTE: Numbers in brackets [] refer to the number in the valve component list, See part C – Component List.

- EVACUATE ALL PRESSURE FROM SYSTEM BEFORE ANY DISASSEMBLY OR REPAIR.**
- Remove and retain Screen Screw [18], Screen Cap [19], and Screen [20].
- Carefully remove (4) Cage Screws [21] from Valve Cage [5]; remove Valve Cage from Body [1].
- Remove and discard Cage Bushing [13] from Valve Cage [5]
- Remove and retain Handle Pin [15] and Lever [14].
- Remove Closing Spring Guide [8], Closing Spring [7] and Lower Washer [6] from Stem [3]
- Remove Lock Nut [12], Bleed Disc [11] and Poppet Assembly [4] from Stem [3]; discard Bleed Disc.
- Remove Excess Flow Spring [10], Spring Seat [9], and Stem [3] from Body [1]
- Remove Stem O-ring [17] from Stem [3] and discard.
- Remove Guide Bushing [16] from Body [1] and discard.
- Remove Gland Assembly [2] from Body [1].
- Remove Spring Pin [2M] from Cam Assembly [2N] and remove both components from Stub [2A]; discard Spring Pin
- Remove Bonnet [2C] from Stub [2A] and Retain.

- Remove Wiper [2B], Nylon Washer [2E] and (1) Gland Bushing [2D] from Bonnet [2C] and discard.
- Remove Female Packing [2F], (3) V-Pack [2G], and Male Packing [2H] from Stub [2A] and discard.
- Remove Thick Washer [2J], Gland Spring [2K], and Thin Washer [2L] from Stub [2A] and retain.
- Remove (6) Poppet Screws [4E], (6) Lock Washers [4D], and Seal Retainer [4C] from Valve Poppet [4A]
- Remove and discard Main Valve seal [4B]
- Inspect Valve Body [1] and clean if necessary, be sure interior is free of dirt, residue and foreign particles.

B. Reassembly

- Apply Lubriplate; or equivalent grease to large-diameter section of Stub [2A]
- Install (1) new Gland Bushing [2D] and Nylon Washer [2E] into Bonnet [2C]; install Bonnet onto Stub [2A]
- Install new Rod Wiper [2B] into Bonnet [2C].
- Fill new Female Packing [2F] and (3) V-packs [2G] with Lubriplate or equivalent grease as shown.



- Install Thin Washer [2L], Gland Spring [2K], Thick Washer [2J], new Male Packing [2H], (3) V-Pack [2G], and Female Packing [2F] onto Stub [2A].
- Install (1) new Gland Bushing [2D] onto Stub against Thin Washer [2L].
- Install Cam Assembly [2N] on end of Stub [2A] and install Spring Pin [2M] through Cam Assembly and Stub [2A].
- Apply Loctite #242 or equivalent thread locker to threads of Gland Assembly [2] and install into Body [1].
- Install new Valve Seal [4B] into Valve Poppet [4A].

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10. Install Seal Retainer [4C] onto Valve Seal [4B].
11. Apply Loctite #242 or equivalent thread locker to threads of Valve Poppet [4A]; install (6) Lock Washers [4D] and (6) Poppet Screws [4E] to retain Valve Seal [4B].
12. Install new Guide Bushing [16] into Body [1].
13. Apply Lubriplate or equivalent grease to new Stem O-Ring [17] and install on Stem [3].
14. Install Spring Seat [9], Excess Flow Spring [10], and Valve Poppet Assembly [4] on Stem [3].
15. Apply Lubriplate or equivalent grease to Bore of Bleed Disc [11] and install onto Stem [3].
16. Install Locknut [12] onto Stem [3] to retain components.
17. Install Stem [3] into Body [1].
18. Install Lower Washer [6], Closing Spring [7], and Closing Spring Guide [8] on Stem [3].
19. Install Cage Bushing [13] into Valve Cage [5].
20. Install Valve Cage [5] onto Body [1] over Stem [3]; install (4) Cage Screws [21] to retain.
21. 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
22. Install Lever [14] and Valve Link Cotter Pin [15] on Gland Assembly [2].
23. Install Screen [20] and Screen Cap [19] onto Body; install (2) Screen Screws [18] thru Cap into Valve Cage [5] to retain

C. Component List

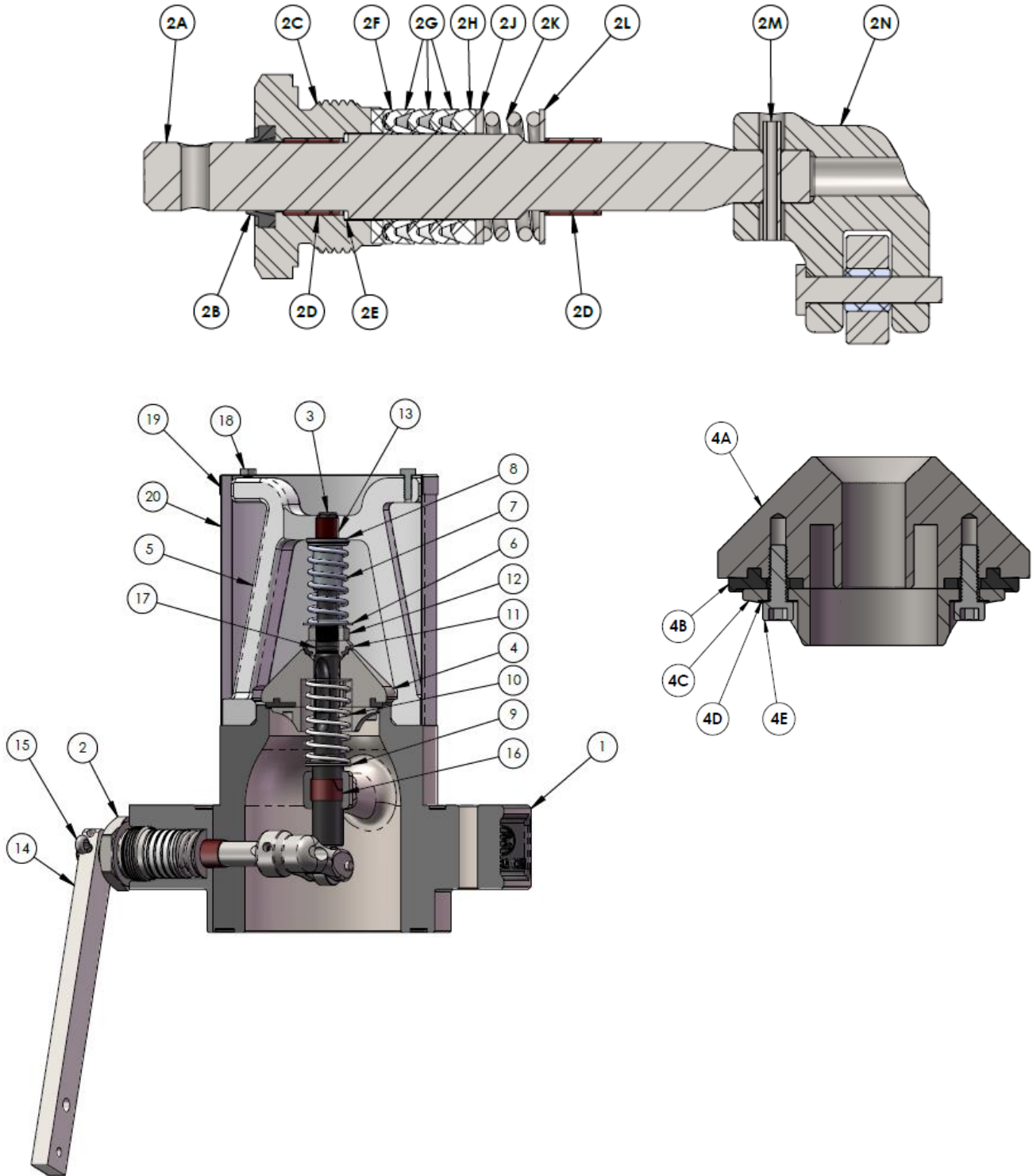
Item No.	Description	Qty	ME990-3F-SRK
1	Body	1	
2	Gland Assembly	1	
2A	Stub	1	
2B	Wiper	1	✓
2C	Bonnet	1	
2D	Gland Bushing	2	✓
2E	Nylon Washer	1	✓
2F	Female Packing	1	✓
2G	V-pack	3	✓
2H	Male Packing	1	✓
2J	Thick Washer	1	
2K	Gland Spring	1	
2L	Thin Washer	1	
2M	Spring Pin	1	✓
2N	Cam Assembly	1	
3	Stem	1	
4	Valve Poppet Assembly	1	
4A	Valve Poppet	1	
4B	Main Valve Seal	1	✓
4C	Seal Retainer	1	
4D	Lock Washer	6	
4E	Poppet Screw	6	
5	Valve Cage	1	
6	Lower Washer	1	
7	Closing Spring	1	
8	Closing Spring Guide	1	
9	Spring Seat	1	
10	Excess Flow Spring	1	
11	Bleed Disc	1	✓
12	Lock Nut	1	
13	Stem Cage Bushing	1	✓
14	Lever	1	
15	Lever Cotter Pin	1	
16	Guide Bushing	1	✓
17	Stem O-ring	1	✓
18	Screen Screw	2	
19	Screen Cap	1	
20	Valve Screen	1	
21	Cage Screw (not shown)	4	

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