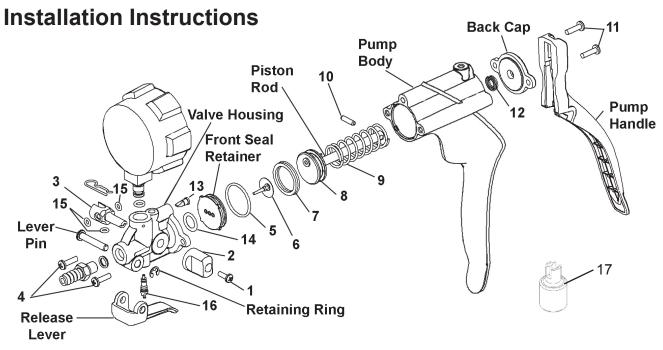


### MVM8900 Pump Rebuild Kit



#### For replacement of parts 1 through 15

- 1. Remove Dual Converter Knob Screw (1) using small Phillips head screwdriver
- 2. Pull off the Dual Converter Knob (2)
- 3. Remove the Dual Converter Valve (3) by pushing the stem through the Valve Housing
- 4. Remove the two Valve Housing Screws (4)
- 5. Remove the Valve Housing from the Pump Body
- 6. Remove the Front Seal Retainer assembly from the cylinder of the Pump Body
- With your thumb, push the Piston Assembly (8) into the Pump Body cylinder. This will compress the Piston Spring (9) and cause the Piston Rod to extend from the back of the Pump Body assembly.
- 8. With the Piston Rod extended, remove the Piston Rod Pin (10) and Pump Handle.
- 9. Remove the Piston Assembly (18) from the Pump Body cylinder.
- 10. Remove the two Back Cap Screws (11).
- 11. Remove the Back Cap
- 12. Note the direction of the Piston Rod Seal (12). The new seal must be installed in the same direction (cup side inward) for the pump to function properly.
- 13. Remove the Piston Rod Seal (12).

- \* Lubricate with Silicone Oil
- 14. Lightly lubricate\* the new Piston Rod Seal (12) and install into Pump Body.
- 15. Replace the Back Cap, and secure it with the Back Cap Screws (11).
- 16. Clean and lightly lubricate\* the inside of the Pump Body cylinder.
- © 17. Lightly lubricate and install the new Piston Seal (7) onto the new Piston Assembly (8)
  - Assemble new Piston Spring (9) onto Piston Assembly (8) and install into Pump Body cylinder.
  - 19. With your thumb, push the Piston Assembly (8) into the Pump Body cylinder. This will compress the Piston Spring (9) and cause the Piston Rod to extend from the back of the Pump Body assembly.
  - 20. Assemble the pump handle onto the Piston Rod end and install the Piston Rod Pin (10).
  - 21. Remove the old O-ring (5) and Umbrella Valve(6) from the Front Seal Retainer.
  - 22. Install the new O-ring (5) onto the Front Seal Retainer.

PATENT PENDING

© Indicates change

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## MVM8900 Pump Rebuild Kit

# mityvac\_

- 23. Install the new Umbrella Valve (6) onto the Front Seal Retainer by inserting the stem through the center hole of the Front Seal Retainer. Be sure the stem extends forward.
- 24. Trim approximately 1/4 inch off of the umbrella valve stem.
- 25. Install the Front Seal Retainer assembly into the front of the Pump Body cylinder.
- 26. Remove the Duckbill Valve (13) from the Valve Housing and install new.
- 27. Remove the Valve Housing O-ring (14) from the Valve Housing and install new.
- 28. Install the Valve Housing onto the Pump Body.
- 29. Lightly lubricate the three new Dual Converter Valve O-rings (15), and install them onto the new Dual Converter Valve (3).
- 30. Carefully slide the Dual Converter Valve Assembly into the Valve Housing with the stem extending through the valve housing.
- 31. Properly align the Dual Converter Knob (2) with the notch on the end of the Dual Converter Valve stem, and install the knob. Secure it with the Dual Converter Knob Screw (1)

#### For replacement of Schrader Valve (16)

- 1. Remove the Lever Pin Retaining Ring, Lever Pin, and Release Lever
- 2. Use the Schrader Valve Tool (17) to unthread and remove the Schrader Valve (16)
- 3. Install the new Schrader Valve (16) using the Schrader Valve Tool (17).
- 4. Reinstall Release Lever, Lever Pin and Lever Pin Retaining Ring.