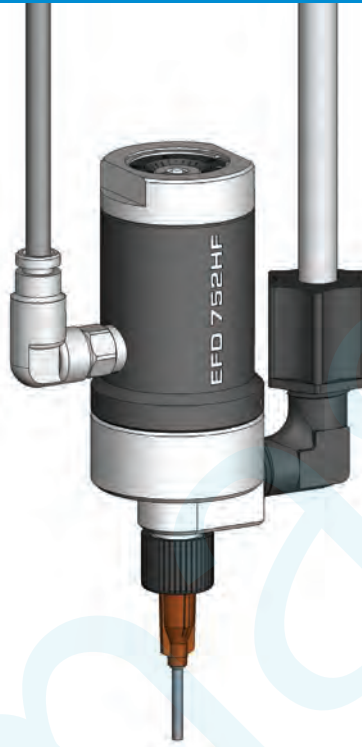


752HF Series Diaphragm Valve

Maintenance & Parts Guide



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Valve Disassembly and Reassembly Procedures

⚠ CAUTION

To prevent damage, the valve must be disassembled starting at the fluid outlet end of the valve.

Fluid Body

1. Remove the two retainer screws.
2. To reinstall the fluid body, align the fluid body holes with the diaphragm and cylinder body holes and reinsert the retainer screws. Tighten in accordance with the following torque specifications:

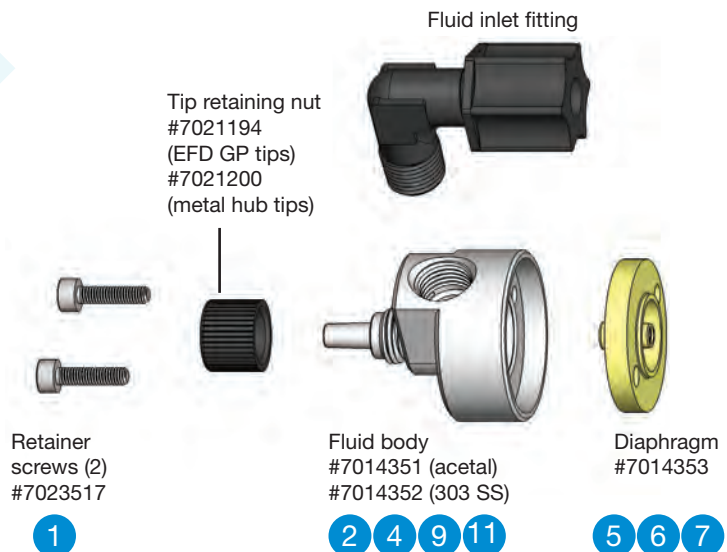
Fluid body
1.58 N•m (14 in.-lb)

Diaphragm

3. Back out the stroke control knob two turns counterclockwise from the closed position.
4. Remove the fluid body.
5. Unscrew the diaphragm (counterclockwise) and remove it from the piston rod.

Replacement Parts for Specific Valve Models

Model	Acetal Fluid Body	Stainless Fluid Body	Fluid Inlet Fitting
752HF-A	•		7021499 (1/4" OD tube)
752HF-SS		•	7021499 (1/4" OD tube)



Valve Disassembly and Reassembly Procedures (continued)

Diaphragm (continued)

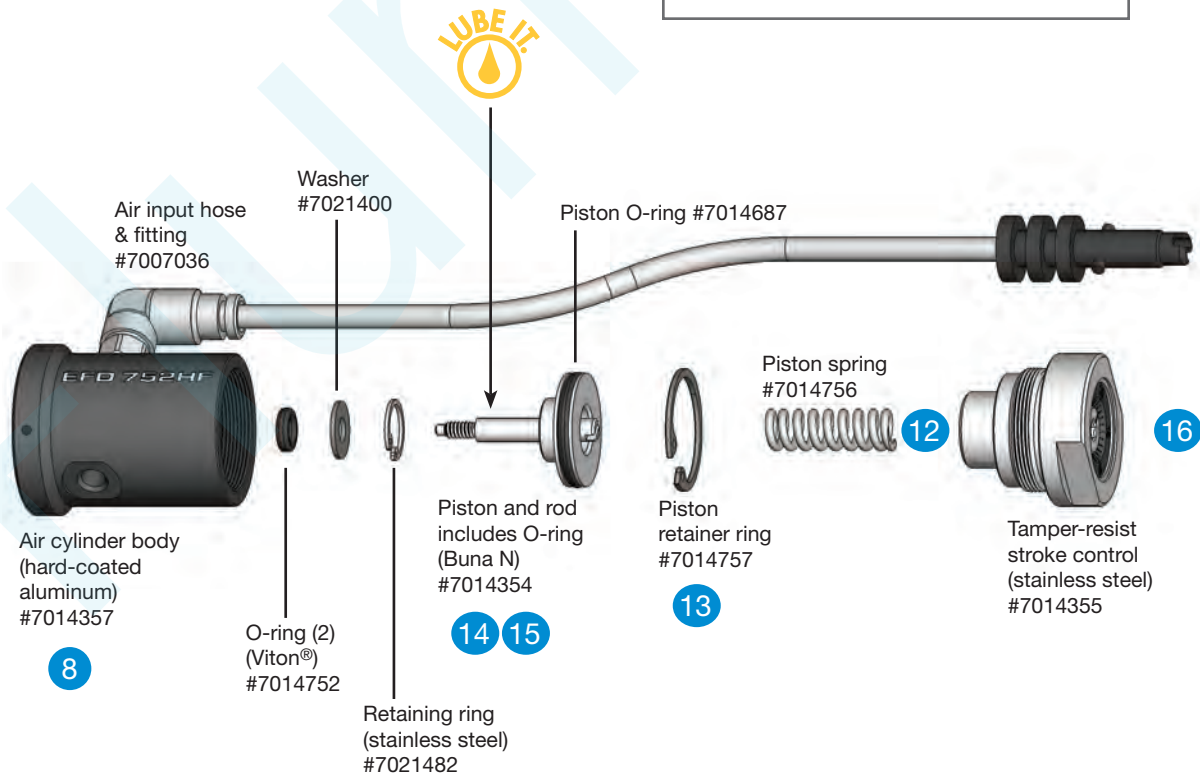
6. Thread on the new diaphragm and tighten with medium pressure.
7. Align the holes of the diaphragm with the appropriate holes in the air cylinder body by inserting a flat tip screwdriver through the hole in the stroke control knob and engaging the piston rod slot.
8. Rotate the rod, piston, and diaphragm assembly clockwise until the holes are aligned.
9. Reinstall the fluid body.
10. Turn the stroke control knob clockwise until closed, and then reopen to the desired stroke.

Piston O-ring

11. Remove the fluid body and diaphragm.
12. Remove the stroke control knob and spring by turning counterclockwise.
13. Remove the piston retainer ring and anti-torque washer.
14. Remove the piston.
15. Lubricate the O-ring, piston shaft, and air cylinder wall with Nye Lubricant #865.
16. Reinstall the components in reverse order of disassembly.

Tools Required:

2.5 mm and 3 mm hex wrench
 1/8" flat-tip screwdriver
 6" adjustable wrench
 6" needle-nose pliers
 Snap-ring pliers



Troubleshooting Guide

No fluid flow

- If valve operating air pressure is too low, the valve will not open. Increase air pressure to 4.8 bar (70 psi) minimum.
- The reservoir air pressure may not be high enough. Increase pressure.
- The dispensing tip may be clogged. Replace the tip.
- The stroke adjustment may be closed. Open the stroke adjustment.
- Fluid may have solidified in the valve. Clean the fluid body.

Fluid drools after the valve closes, eventually stopping

- This is caused when air is trapped in the outlet section of the fluid chamber or the fluid has entrapped air. The air will expand after the valve closes, causing extrusion until the air reaches atmospheric pressure.
Purge the valve by dispensing at a steady flow until clear. If a small tip is used, it may be necessary to remove the tip while purging to obtain sufficient flow to carry the air down through the tip adapter.
- If the fluid has entrapped air, the material must be degassed before dispensing.

Fluid drips at a steady rate after the valve closes

- A steady drip can be caused by excessive reservoir pressure. Check to be sure the reservoir pressure is not above 4.8 bar (70 psi).
- If the stroke adjustment knob is turned more than two full turns, the resulting reservoir pressure will force the diaphragm open. Check the stroke adjustment knob to be sure it is less than two turns out.
- A steady drip also indicates failure of the diaphragm to close fully due to particle build-up or wear. In either case, replace the sealing head in accordance with the maintenance instructions.

Fluid leaks out between fluid body and diaphragm

- Fluid leakage between the fluid body and diaphragm indicates the annular sealing ridge on the fluid body is damaged or the fluid body is distorted due to excessive torque on the retaining screws. In either case, replace the fluid body.

Fluid flows out of the drain hole

- Fluid flowing out of the drain hole indicates a ruptured diaphragm. Replace in accordance with the maintenance instructions.

Valve responds slowly when opening and closing

- Valve response is related to control air hose length and size. The valve is supplied with 5 feet of 3/32" ID tubing attached. Any additional length or size change will affect response time. Check to be sure the length and size have not been changed.

Inconsistent deposits

- Inconsistent deposits can result if the air pressure controlling the valve and / or supplying the reservoir is fluctuating or if the valve operating pressure is less than 4.8 bar (70 psi). Check to be sure air pressures are constant and the valve operating pressure is 4.8 bar (70 psi).
- The time the valve is open must be constant. Check to be sure the valve controller is providing a consistent output.

