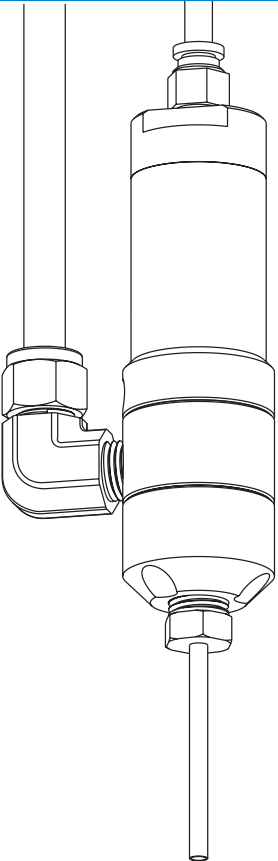


736HPA-NV High Pressure Valve

Service & Replacement Parts Manual



IMPORTANT!
Save this Sheet.

Forward to
Maintenance or
Tool Crib Supervisors

Electronic pdf files of Nordson EFD manuals are also available at www.nordsonefd.com



Tools and Supplies

- 1/8" hex wrench
- 5/32" hex wrench
- 5/16-24 UNF threaded rod
- (2) 8" adjustable wrenches
- Nye gel lubricant



Valve Disassembly and Reassembly Procedures

Follow these procedures to properly disassemble and reassemble the valve. Inspect, clean, and replace components as needed. Refer to "Replacement Parts" on page 7 for part numbers and for an exploded diagram of the valve components.

Valve Disassembly

- Insert the 5/16-24 UNF threaded rod into the fluid body mounting hole.
 - Holding the rod, use an 8" adjustable wrench to loosen the air cylinder cap.



- Un-thread the air cylinder cap and separate it from the air cylinder body.



- Use the 5/32" hex wrench to remove the three (3) bolts from the outlet cap, then remove the outlet cap from the fluid chamber.



Continued on next page

Valve Disassembly and Reassembly Procedures (continued)

Valve Disassembly (continued)

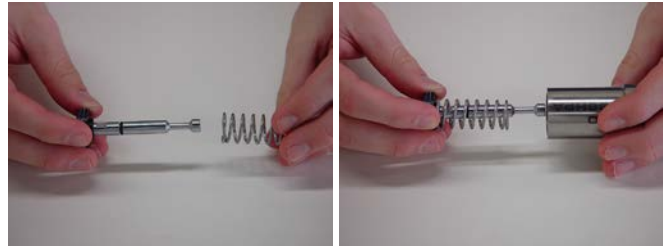
4. • Remove the fluid chamber from the air cylinder body.



5. • Un-thread the air cylinder cap and separate it from the air cylinder body.



6. • Remove the piston, shaft, and spring from the air cylinder body.
• Remove the spring from the shaft.



Inspection and Cleaning

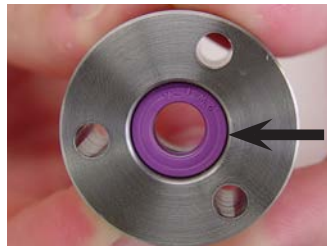
- Inspect all threads. Replace any worn or damaged parts. Refer to “Replacement Parts” on page 7 for part numbers.
- Clean all parts with a solvent compatible with the fluid being dispensed.

Valve Disassembly and Reassembly Procedures (continued)

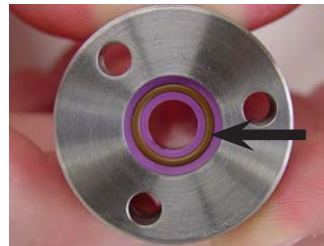
Valve Reassembly

- Replace the seals / O-rings with new seals / O-rings.

NOTE: Be careful not to damage the seal cavities when removing the seals from the outlet cap and the fluid chamber.



*Fluid body seal
(O-ring NOT visible)*



*Outlet cap seal
(O-ring VISIBLE)*

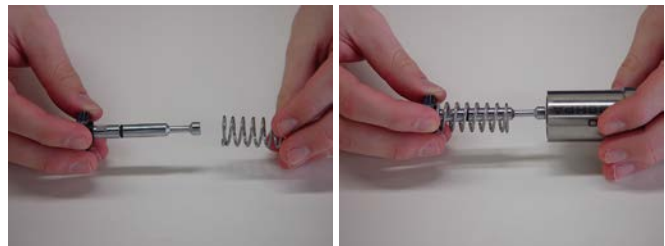
- Apply a film of lubricant to the following:

- Piston O-ring
- Piston shaft O-ring
- Air cylinder wall

NOTE: Do not lubricate the outlet cap seal.



- Place the piston return spring on the piston-and-shaft assembly and install the assembly in the air cylinder body.



Continued on next page

Valve Disassembly and Reassembly Procedures (continued)

Valve Reassembly (continued)

4. • Install the fluid body on the air cylinder body.



5. • Install the outlet cap on the fluid body, making sure the black O-ring is present inside the fluid body cavity.
• Tighten the three bolts to 3.4–1.0 N•m (30–35 in.-lb).



6. • Install the air cap on the air cylinder body by pushing on the cap to compress the spring and simultaneously turning the cap to engage the threads.



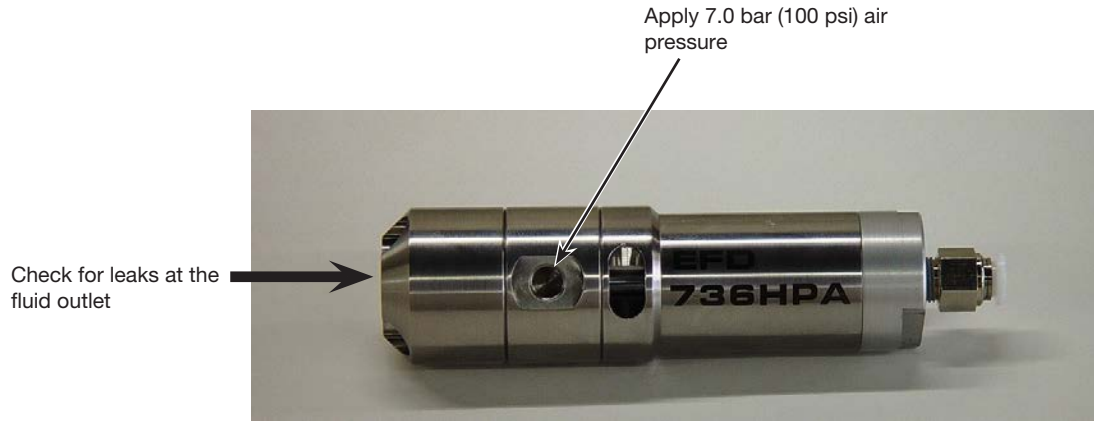
7. • Insert the 5/16-24 UNF threaded rod into the fluid body mounting hole.
• Holding the rod, use an 8" adjustable wrench to tighten the air cylinder cap to 10.8–13.6 N•m (8–10 ft-lb).
• Continue to "Pressure Testing" on page 6.



Valve Disassembly and Reassembly Procedures (continued)

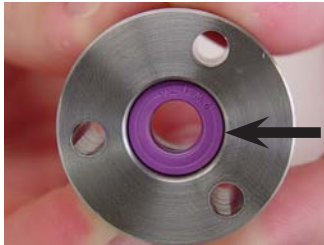
Pressure Testing

1. When reassembly is complete, pressure-test the valve by applying 7.0 bar (100 psi) air pressure to the fluid inlet.
2. Apply soapy water and check for leaks at the fluid outlet.



If the valve leaks at the fluid outlet after reassembly:

3. Remove the outlet cap and fluid body.
4. Verify that the seals on the outlet cap and fluid chamber are properly installed, as shown below. If not, install them correctly and reassemble the valve.



*Fluid body seal
(O-ring NOT visible)*



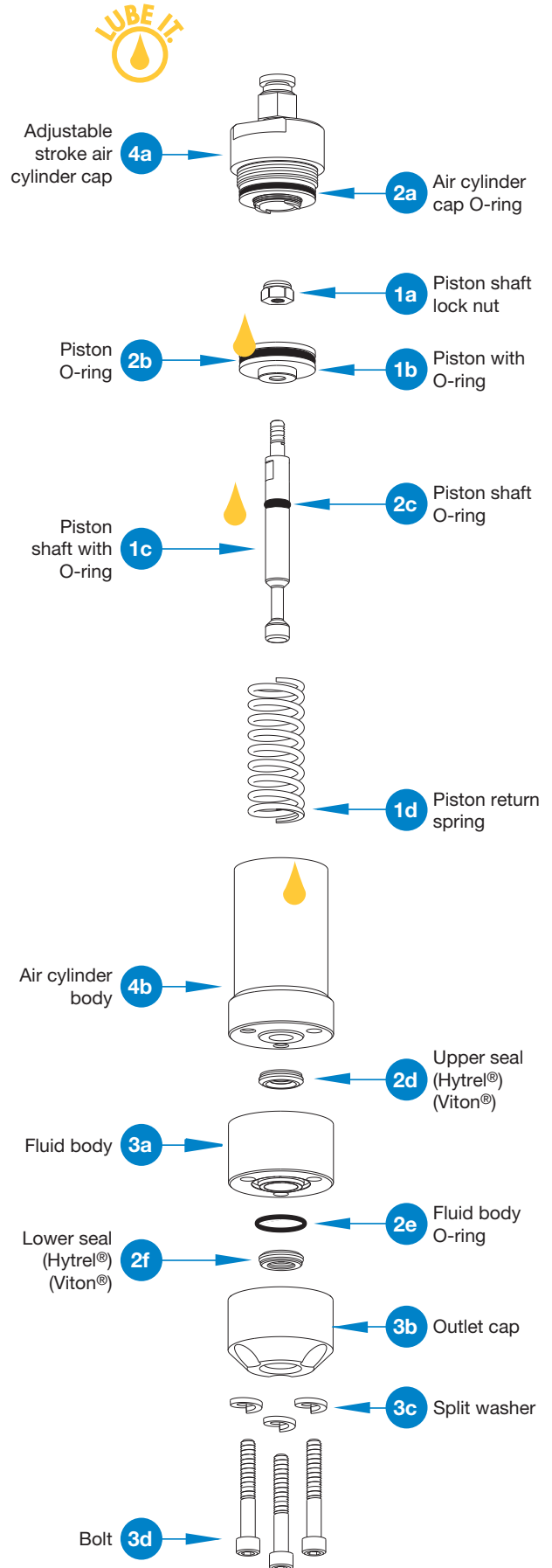
*Outlet cap seal
(O-ring VISIBLE)*

Valve Part Numbers

Part #	Description
7013449	736HPA-NV valve, chromium-plated shaft
7028951	736HPA-NV valve, titanium nitride-coated shaft

Replacement Parts

Kit #	Part #	Kit Contents (Qty.)
1	7365889	Kit, shafts a. Piston shaft lock nut (2) b. Piston with O-ring (2) c. Piston shaft with O-ring (1) d. Piston return spring
2	7365890	Kit, seals a. Air cylinder cap O-ring (2) b. Piston O-ring c. Piston shaft O-ring (2) d. Upper seal, Hytrel or Viton (2) e. Fluid body O-ring (2) f. Lower seal, Hytrel or Viton (2)
3	7365891	Kit, fluid assembly a. Fluid body (1) b. Outlet cap (1) c. Outlet cap split washers (3) d. Outlet cap bolts (3) NOTE: Also includes upper / lower seals and fluid body O-ring.
4	7365892	Kit, air body / stroke a. Adjustable stroke air cylinder cap (1) b. Air cylinder body (1) NOTE: Also includes air cylinder cap O-ring.
Not shown	7365893	Kit, tubing, fittings • 5/32" urethane tubing assembly (1) • Screw, 5/16-24 x 3/4, stainless steel (1)



NORDSON EFD ONE YEAR LIMITED WARRANTY

This Nordson EFD product is warranted for one year from the date of purchase to be free from defects in material and workmanship (but not against damage caused by misuse, abrasion, corrosion, negligence, accident, faulty installation, or by dispensing material incompatible with equipment) when the equipment is installed and operated in accordance with factory recommendations and instructions.

Nordson EFD will repair or replace free of charge any defective part upon authorized return of the part prepaid to our factory during the warranty period. The only exceptions are those parts which normally wear and must be replaced routinely, such as, but not limited to, valve diaphragms, seals, valve heads, needles, and nozzles.

In no event shall any liability or obligation of Nordson EFD arising from this warranty exceed the purchase price of the equipment.

Before operation, the user shall determine the suitability of this product for its intended use, and the user assumes all risk and liability whatsoever in connection therewith. Nordson EFD makes no warranty of merchantability or fitness for a particular purpose. In no event shall Nordson EFD be liable for incidental or consequential damages.

This warranty is valid only when oil-free, clean, dry, filtered air is used, where applicable.



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