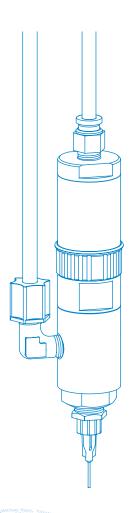
725D / 725DA Dispense Valve

Tech Support Guide





Tools required

1/8" hex wrench

1/4" flat-tip screwdriver

3/8" open-end wrench

8" adjustable wrench (2 required)

1/8 NPT threaded rod



Valve Disassembly

1. Turn the stroke adjustment collar to the maximum position.



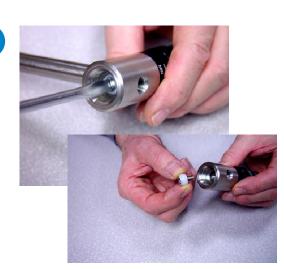
2. Install the 1/8 NPT rod in the fluid body mounting hole or fluid inlet.



3. Holding the rod, use an 8" adjustable wrench to remove the fluid body cap.



4. Using the flat tip screwdriver, remove the sealing head and screw.



5. Holding the rod, use one of the 8" adjustable wrenches to loosen the fluid body.





6. Remove the fluid body from the air cylinder.

NOTE

At this point, the fluid end of the valve can be thoroughly cleaned without further disassembly.

For diaphragm replacement or complete valve rebuild, proceed to Step 7.



7. Insert the 1/8" hex wrench through the air inlet fitting, loosen the shaft locking screw, and turn it out two full turns.





8. Using the 3/8" open-end wrench, loosen the shaft.



9. Remove the shaft and diaphragm.



10. Place one 8" adjustable wrench on the air cylinder flats and the other 8" adjustable wrench on the cylinder cap flats, and loosen the cylinder cap.



11. Remove the cylinder cap, piston and spring from the air cylinder.

The valve is now completely disassembled, and is ready for cleaning, inspection and reassembly.



CAUTION

The adjustable air cylinder on the 725DA valve is not serviceable in the field. Do not attempt further disassembly. Do not turn the stroke adjustment collar.



Valve Maintenance and Reassembly

For best results, install all replacement parts included in the repair kit.

1. Clean and inspect all parts

- Clean all parts with a solvent that is compatible with the fluid being dispensed.
- Inspect all threads.
- Inspect piston pins for straightness.
- Inspect fluid body seat area for pitting.
- Replace all worn or damaged parts.
- Complete parts lists appear on the last page of these instructions.



2. Using the lubricant supplied in the repair kit, apply a film of lubricant to the points indicated.









3. Assemble the air cylinder cap, piston and spring.



4. Install the air cylinder cap, piston and spring by pushing to compress the spring while turning to engage the threads.





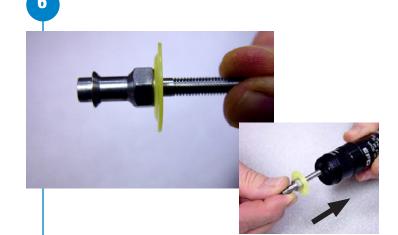
5. Using the two 8" adjustable wrenches, tighten the air cylinder cap. If a torque wrench is available, torque to 10.8 Nm (8 ft lbs).





6. Install the shaft and diaphragm.

• The convex ring of the diaphragm should face away from the air cylinder.



7. Using the 3/8" open-end wrench, tighten the shaft. If a torque wrench is available, torque to 1.69 Nm (15 in lbs).



8. Insert the 1/8" hex wrench through the air inlet fitting and tighten the shaft locking screw. If a torque wrench is available, torque to 2.82 Nm (25 in lbs).



9. Install the fluid body and tighten using the 1/8 NPT rod and 8" adjustable wrench. If a torque wrench is available, torque to 6.78 Nm (5 ft lbs).



10. Install the sealing head and screw using the 1/4" flat tip screwdriver. If a torque screwdriver is available, proper torque is 1.69 nm (15 in lbs).



11. Install and tighten the fluid body cap using the 1/8 NPT rod and 8" adjustable wrench. Remove the 1/8 NPT rod.

The valve is now fully assembled and ready for testing.

12. Pressure test the valve.

- Pressure test the valve by applying 100 psi (7.0 bar) air pressure to the fluid inlet.
- Apply soapy water and check for leaks at the fluid outlet and the small vent hole above the diaphragm.





If you have followed all of the above steps and the valve has passed the leak test: Congratulations on a job well done! You have successfully reconditioned your EFD 725 or 725DA dispense valve and can look forward to many millions of consistent dispensing cycles.

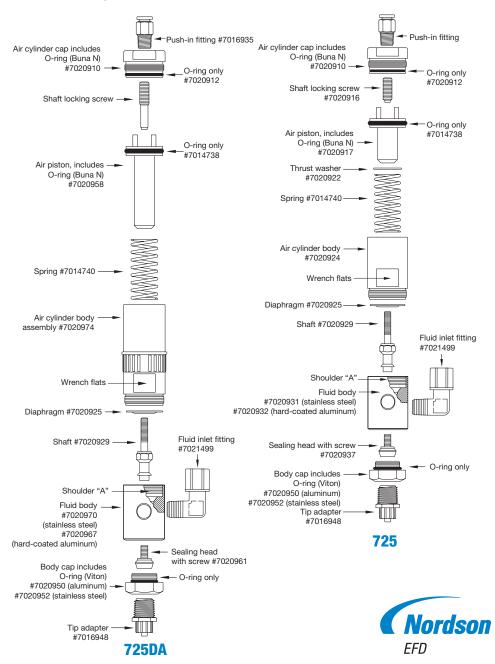
If the valve leaks after reassembly, proceed as follows:

Leaking at fluid outlet: Check the tightness of the sealing head screw. If the screw is tight, remove and check the surface of the fluid chamber seat for pitting. If pitted, replace the fluid body.

Leaking at vent hole: Disassemble the valve and review Steps 7-9 to make sure the shaft and fluid body are tight.



Maintenance and Replacement Parts





Repair Kits

725D repair kit – part #7021008 725DA repair kit – part #7021013 (Repair kits include O-rings, diaphragm, sealing head with screw, and lubricant)

725DA-RK (shown) contains white 200 sealing head 725D-RK (not shown) contains yellow 450 sealing head

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