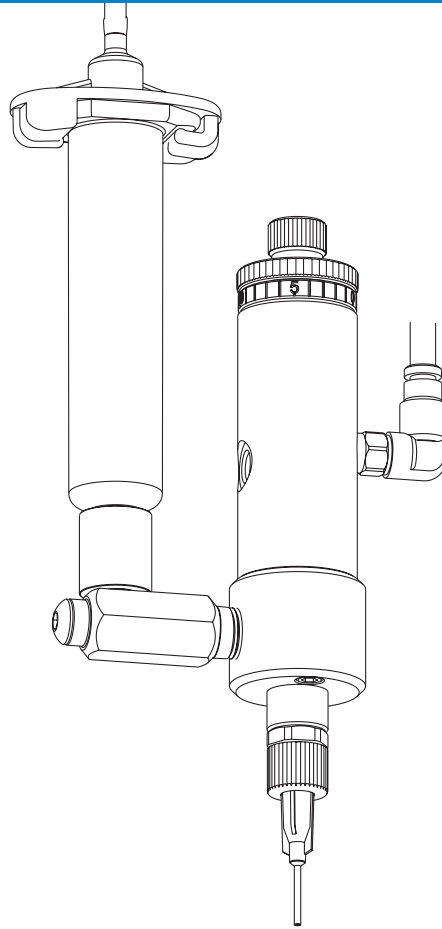


741V Series Needle Valve

Maintenance & Parts Guide



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Nordson
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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.

Valve Maintenance

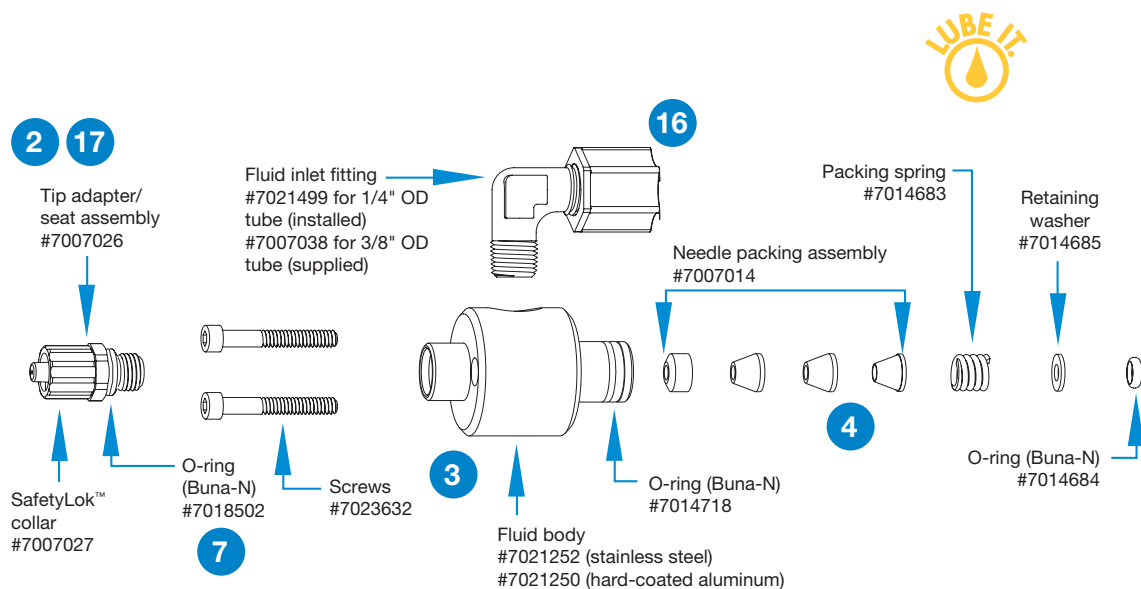
To thoroughly clean the fluid body and replace needle packings:

1. Remove the needle stroke control knob and spring.
2. Remove the inlet fitting and tip adapter/seat assembly.
3. Remove the fluid body from the air cylinder body, then remove the O-ring.
4. Use extraction tool #7021552 to remove the needle packings from fluid body.
5. Remove any remaining packings and remove the spring from the needle.
6. Clean the needle with a cloth dampened in solvent, and lubricate the needle with Nye Lubricant #865, included in the Maintenance Kit.
7. Replace the O-ring and reassemble the valve in the reverse order of disassembly.

NOTE: Ensure that the lower cylinder needle O-ring is back in place before reinstalling the packing spring.

Replacing the Piston and Needle Assembly or Piston O-Ring

8. Remove the needle stroke control knob.
9. Remove the piston return spring and thrust washers.
10. Remove the snap ring.
11. With small pliers on the spring pilot, pull the piston and needle assembly out of the air cylinder. The piston and needle assembly are one unit and cannot be disassembled.
12. Clean the air cylinder body wall and replace the piston O-ring. Lubricate the O-ring with Nye Lubricant #865, included in the Maintenance Kit.
13. Reassemble the valve in the reverse order of disassembly.
14. Leak test the valve (see "Leak Testing").



Valve Disassembly and Reassembly Procedures (continued)

Leak Testing

15. Set the needle stroke control at two turns open.
16. Shut off the actuating air. Install an air hose in the fluid inlet and connect it to a 7.0 bar (100 psi) air supply.
17. Submerge the tip adapter/seat assembly in water. If air bubbles appear, reseal the parts (see next steps).

Reseating the Needle and Tip Adapter Assembly

18. Disconnect all air to the valve.
19. Rotate the stroke adjustment knob to the closed position.
20. To compress the needle into the tip adapter, further rotate the stroke adjustment clockwise one additional reference mark.
21. Return the stroke adjustment to the normal setting and cycle the valve. If a slight leak remains, repeat steps 1 and 2.
22. If the leak persists, replace the tip adapter.

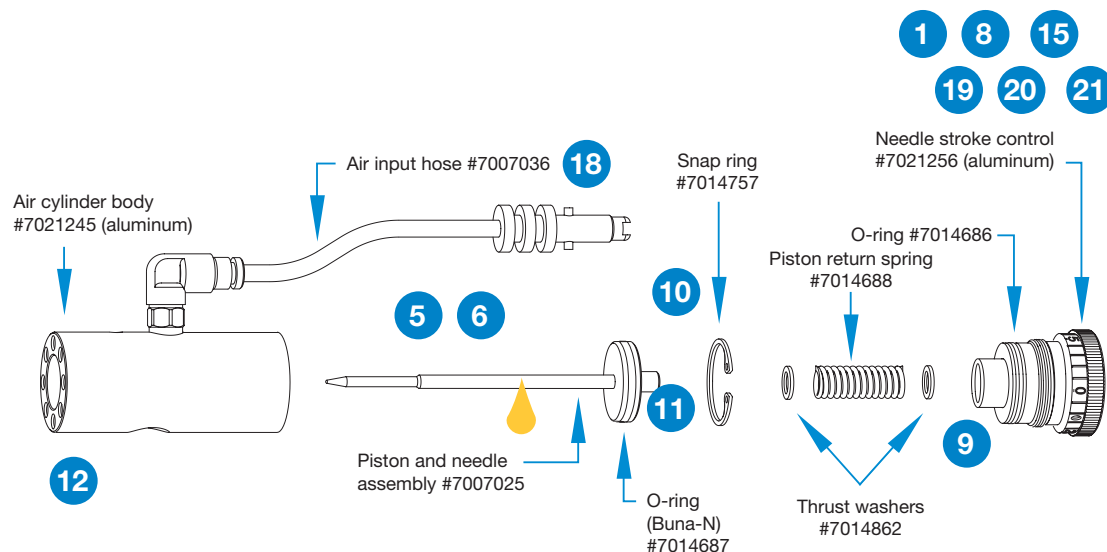
General Maintenance Kit #7007030

Includes all O-rings, needle packing assembly, and lubricant

Maintenance Tools

6" adjustable wrench
Snap-ring pliers
Packing extraction tool #7021552

Part #	Description
7007029	741V-SS valve
7021239	741V-SS-TR valve
7015584	741V-SS-BP valve



Troubleshooting Guide

No fluid flow

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

Steady Drip

- A steady drip can be caused by a worn needle and seat, or a particle holding the needle off the seat. Clean and inspect the needle and seat for wear. Replace worn or damaged parts.

Fluid leaks out the drain hole

- Fluid leaking out the drain hole on the side of the valve indicates the needle packings are worn. Replace the needle packings.

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 that the valve operating pressure is 4.8 bar (70 psi).
- The time the valve is open must be constant. Check to be sure that the valve controller is providing a consistent output.



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