



BRX3

Pneumatically Operated Chemical Injection Pump

MAINTENANCE

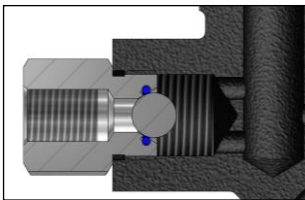


Disconnect power source and ensure pressure is removed from pump head prior to performing any maintenance. Hazardous pressures can result in serious injury or property damage.

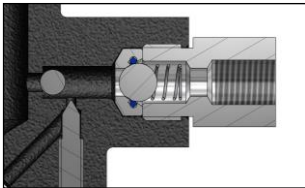
Pump Head Maintenance

Pump Head Assembly

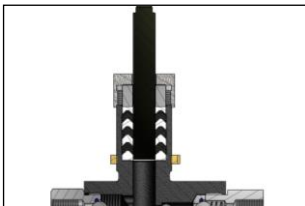
Step 1: Ensure all parts are clean and free from damage (see Inspection section). Lubricate all O-rings with petroleum based lubricant; lubricate packing and plunger with a suitable packing lubricant grease (Teflon or Graphite based packing lubricant is recommended, but an equivalent suitable lubricant like a Molybdenum disulfide based lubricant can be substituted).



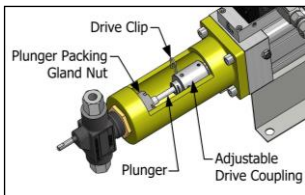
Step 2: Install O-ring into bottom seat. Install 3/8" ball into bottom seat, (install metal gasket on seat for 3/16" plunger size) and thread bottom seat into suction end of body utilizing thread sealant. Tighten bottom seat.



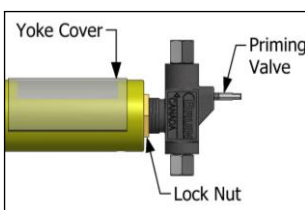
Step 3: Install the 1/4" ball into the body, for plunger sizes 1/4" to 1/2". Install O-ring into top seat and insert top seat into body. Place 3/8" ball and ball check spring into top bushing. Thread top bushing into body utilizing a thread sealant. Tighten the top bushing.



Step 4: Install packing into body, ensuring it is installed in correct order and orientation. *Note: The "V-Ring" point should be pointing outward.* Place plunger packing gland on the packing, and install the plunger into the packing. Thread lock nut onto the body.



Step 5: Thread body into yoke housing, ensuring the plunger fits through the plunger packing gland nut and into the adjustable drive coupling. *Note: Adjustable drive coupling can be adjusted by threading or unthreading coupling on piston rod allowing coupling to extend.* Install drive clip.



Step 6: Orientate head assembly in upright position with suction port down and tighten lock nut. Snugly thread the plunger packing gland nut onto the body, do **not** over tighten. Install yoke cover. Install and tighten priming valve into body. *Note: 3/16" plunger size head needs a 1/4" ball inserted into priming valve hole before installing priming valve.*

Pump Head Disassembly

- Step 1:** Disconnect operating air supply and ensure all pressure is removed from pump head assembly and isolate fluid discharge and suction lines. Open and remove priming valve. Disconnect fluid discharge and suction lines.
- Step 2:** Remove yoke cover.
- Step 3:** Remove drive clip and unthread plunger packing gland nut.
- Step 4:** Loosen lock nut and remove body from yoke housing.
- Step 5:** Remove plunger, plunger packing gland, and plunger packing.
- Step 6:** Loosen and remove top bushing, ball check spring, ball(s), and top seat. Remove O-ring from top seat.
- Step 7:** Loosen and remove bottom bushing, (gasket) and ball. Remove O-ring from bottom seat.

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INSPECTION

Inspect all components for damage. Replace or repair parts as necessary. The following is a guideline of what to inspect:

- Inspect all threads for damage.
- Inspect all seals, packing and cylinder for damage.
- Inspect body seal areas for corrosion, pitting or damage. Seal areas on the body include the packing area and the area below the top seat and ball cage.
- Inspect balls, top seat and bottom seat and ball check spring for corrosion or damage.
- Inspect plunger and thrust rod for wear, scarring or damage.
- Inspect the plunger and cylinder rod for wear, scarring or damage.