

Spool Valve Maintenance



DISASSEMBLY

- Remove the two coil screws.
- Remove the two rear plate screws.
- Pop out the white and black bumpers, springs, and O-rings.
- Remove the spool and sleeve assembly from the valve body with a plastic or wooden rod approximately the same size as the outside diameter of the sleeve.
- Once the sleeve is removed from the body, very carefully remove the O-rings from the sleeve and safely store them for reassembly.

CLEANING

- Clean the spool and sleeve by soaking them in a non-abrasive cleaner (eg: Varsol).
- After soaking them clean, use a lint-free cloth to remove any remaining cleaning solution.
- Inspect the spool and sleeve for any damage.
- The spool should move freely within the sleeve.

REASSEMBLY

- Reinstall the O-rings (that you carefully set aside) onto the sleeve, lubricating slightly with a small amount of Numatics lubricant or lightweight air-tool oil.
- Reinstall the rear plate, O-ring, and black bumper onto the body.
- Gently slide the sleeve into the body cavity by pushing and turning at the same time.
- Drop the spring into the sleeve.
- Apply a small amount of Numatics lubricant or lightweight air-tool oil to the spool and gently insert it into the sleeve with a slow, turning action.
- Check to ensure that there is very little resistance felt when it's inserted. NOTE: If any resistance or binding is noted, remove the spool and try again.
- Once the spool is inserted and moving freely, reattach the coil, white bumper, and O-ring.

TESTING

- After reassembly is completed, push and release the manual override button. The spool should move and return freely.
- If you have an air compressor, blow low-pressure (20-30 psi) air into Port #1, then push the override button. There should be a transfer of flow from Port #2 to Port #4.
- Re-install the valve on the engine, hook up the disconnected vacuum lines and wiring, then check for correct operation of Brake, PressureLoc, etc.

BD Engine Brake Inc.

Plant Address: Unit A10, 33733 King Rd, Abbotsford, BC, Canada V2S 7M9

U.S. Shipping Address: 34-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 Fax: 604-853-8749 Internet: www.bd-power.com

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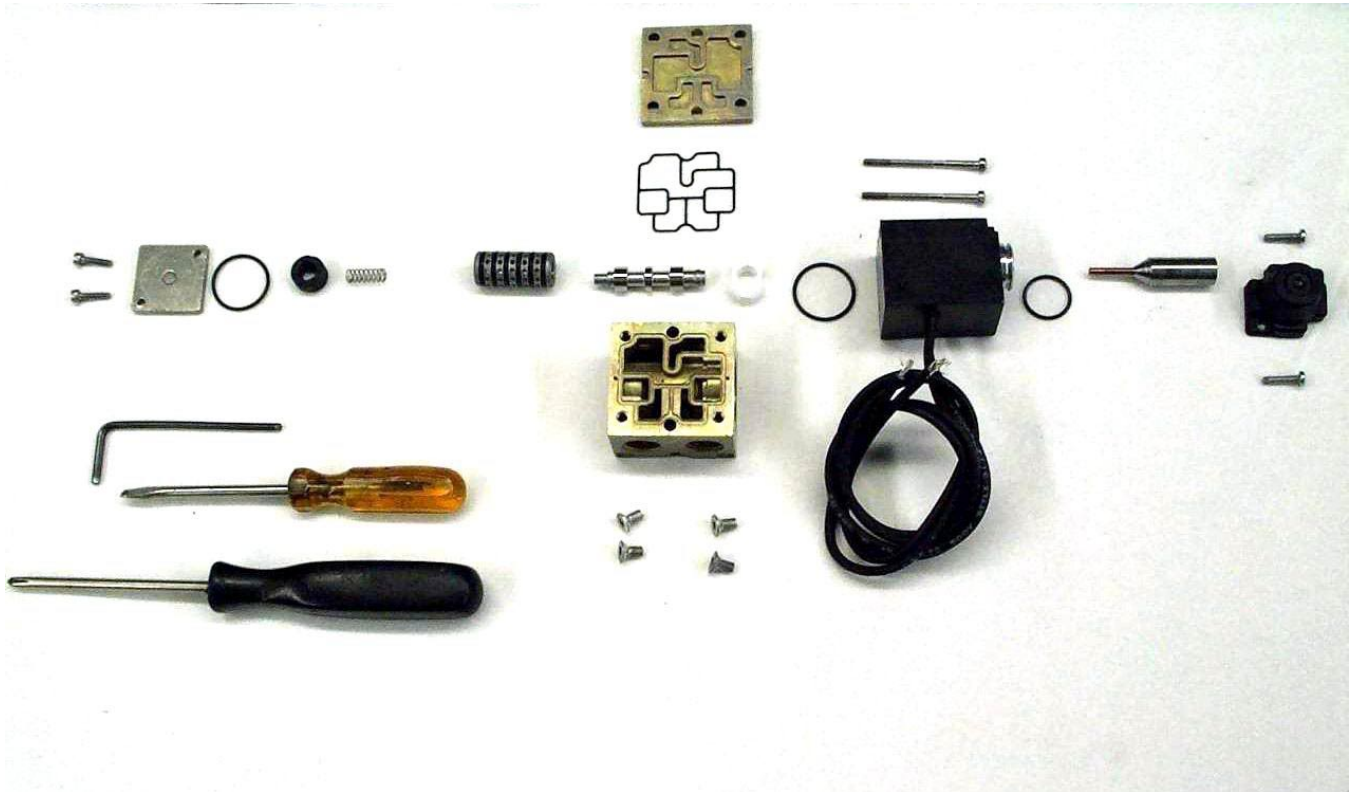
HELPFUL HINTS

Make sure all parts are spread out on a clean, lint-free surface while servicing valve.

Do not use heavy grease or oils on the spool or sleeve (Oil based lubricants will swell and distort rubber O-rings).

Do not use any abrasive compounds on the spool or the sleeve.

Make sure all of the O-rings are re-installed and are in good condition by checking for nicks, scoring, or other damage.



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