

## VALVE INSTALLATION GUIDE

### Warning: Before Removal and Installation



Take all necessary safety precautions and comply with the safety manuals for your equipment.



Please wear your PPE (personal protective equipment), i.e. safety glasses, gloves and hard hat if necessary.



Confirm that your equipment is immobilized (chock tires).



Lay out a safety perimeter.



Do not perform work on a hydraulic system that is hot and/ or under pressure. Hot oil can cause serious burns and infection. **NEVER** touch a pressurized hose with your hand and if you suspect a hydraulic injection injury has occurred, get to an emergency room right away!



Disconnect the remote pendant (yellow push button remote), to minimize accidental activation of the Hydraulic Power Unit (HPU).

Proper valve installation is important to insure that your valve and the equipment that the valve will be installed will function correctly. Before installation of any valve assemblies into a manifold, please visual check the cavities for burrs and/ or metal shavings. All O-Rings must be lubricated on valve cartridge to insure that the O-Rings can be installed into the manifold cavity without being damaged.

1. Insure there are no foreign objects or contaminates in valve cavities.
  2. Lubricate all O-Rings and Back-Up Rings on the valve body. Insert the valve into the cavity, and then **hand tight**. Use a 7/8 deep socket with a ratchet for the Directional Valve (**LSV2-08-4CO**) and a 15/16 deep socket with a ratchet for the Load Holding Valve (**LSPC-080-4-00**).
  3. Once the valve is installed, use torque wrench to torque the valve cartridge to **18 FT/LBS Maximum**.
- Failure to lubricate the O-Rings prior to installation may cause damage to the O-Rings; caused by extrusion and/ or shearing of the O-Ring. Please insure to use **Hydraulic Fluid** to lubricate all **O-Rings** and **Back-Up Rings**.
  - **Be sure to use the proper hydraulic fluid. Do not use grease, motor oil or WD-40.** Mixing of hydraulic fluid with other lubricants will cause valve failure, due to contamination. Some lubricants are incompatible because of differences in additive chemistry that lead to undesirable chemical reactions. If these oils are mixed, insoluble material may form and then deposit onto sensitive machine surfaces. For a hydraulic fluid, this could lead to lubricant starvation, valve failure or increased wear. Mechanical problems leading to shorter equipment life can occur, sometimes catastrophically. **Please review KTI Hydraulics, Inc. Fluid Recommendations**
  - Do not over torque the valve(s) during installation. Over torquing will cause damage to the valve assembly.