TSB-1004: PROPORTIONAL VALVE REPLACEMENT

The Proportional Valve is the device used to control the output pressure of the hydraulic pump. When a pressure setting is input at the operator input screen, a signal is sent to the proportional valve. The proportional valve then controls the hydraulic pump output and pressure. Follow this procedure for replacing the proportional valve. Part number 606048-1 includes both the proportional valve and coil. With part number 606048-2, only the proportional valve is included.

PROCEDURE:

1. Unscrew the Phillips head screw holding the electrical plug to the coil. Remove the plug.
2. Remove the hex nut located on top of the proportional valve. Slide the coil off of the proportional valve shaft. Note the orientation of the coil.
3. Remove the proportional valve from the hydraulic manifold. Hydraulic oil will leak out.
4. Press the E-Stop button to shut off the pump. Turn the main disconnect off. Follow your companies Lock-Out Tag-Out procedure.
5. Locate the proportional valve and coil. It is located on the hydraulic manifold near the main hydraulic pump.
6. Inspect the O-Rings on the new proportional valve for any nicks or cracks. Replace as necessary.
7. Apply a light coat of new hydraulic oil to the O-Rings.
8. Thread the proportional valve into the hydraulic manifold. Torque to 18-20 ft-lbs [24.5-27.1 Nm].

   Caution: Do not exceed this torque value as this will cause the valve to bind.

9. Slide the coil back onto the proportional valve shaft with the step washer facing down.
10. Thread the hex nut onto the proportional valve. Torque to 7-10 ft-lbs [9.5-13.6 Nm].
11. Re-Install the electrical plug into the coil. Tighten the Phillips head screw.
12. Turn the main disconnect on.
13. The pump can now be used for normal operation.