



SonicFlo™ Servovalve and Orifice Plate Replacement Procedure

for 2" and 3" GFCVs

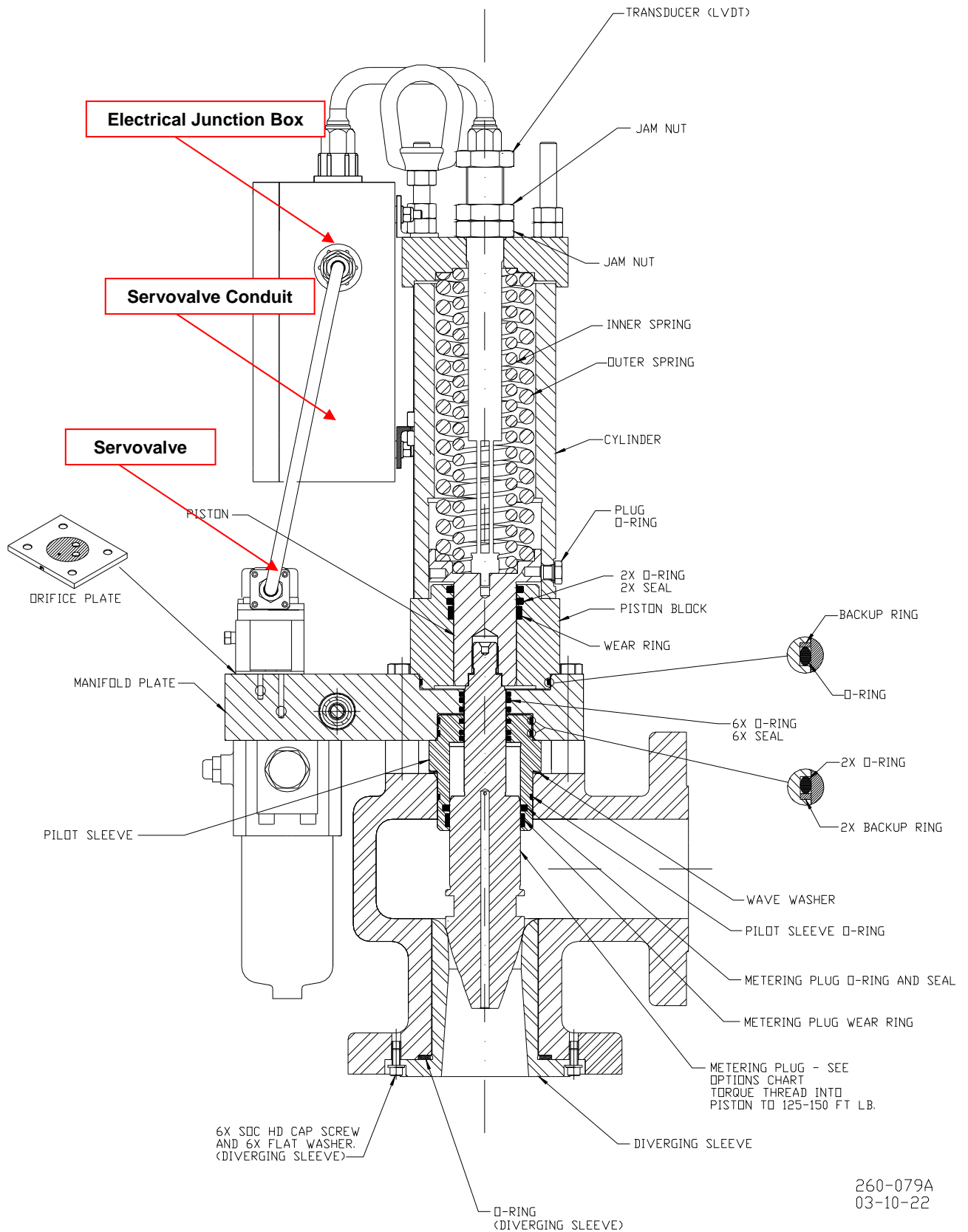
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Servovalve and Orifice Plate Replacement Procedure

The servovalve is located on the hydraulic manifold directly above the filter assembly. The orifice plate is located between the servovalve and the hydraulic manifold. See the outline drawing (Figure 1).

1. Remove the cover to the electrical junction box.
2. Disconnect the servovalve wires from the connector blocks labeled 1–6.
3. Loosen the conduit fittings from the electrical box and the servovalve.
4. Carefully remove the conduit from the servovalve and pull the wiring out of the conduit.
5. Remove the four 0.312-18 UNF socket head cap screws holding the servovalve and the orifice plate to the manifold.
6. Verify that the three O-rings are removed from the interface between the manifold and the orifice plate. Verify that the four O-rings between the servovalve and orifice plate are removed.
7. Obtain a replacement servovalve and orifice plate from kit 8928-7153.
8. Remove the protective plate from the replacement servovalve and verify that O-rings are on all four counter bores of the servovalve.
9. Place the replacement servovalve and orifice plate onto the hydraulic manifold. Be sure to orient the servovalve to match the original orientation. Be sure that all four O-rings remain in their proper location during assembly. Verify that the three O-rings on the underside of the orifice plate are in their grooves. Verify that the plate is in the proper location by aligning the “P” and “T” on the side of the servovalve with the “P” and “T” etched into the orifice plate. Be sure to orient the servovalve/orifice plate to match the original orientation. Be sure that all seven O-rings remain in their proper location during assembly.
10. Install four new 0.312-18 UNF socket head cap screws and torque to 55–57 lb-in (6.2–6.4 N·m).
11. Carefully install wiring through the conduit and into the electrical box.
12. Connect the conduit to the servovalve and torque to 270–300 lb-in (31–34 N·m).
13. Torque the conduit to the electrical box to 270–300 lb-in (31–34 N·m).
14. Install wires into the servovalve connector blocks labeled 1–6 as shown in the wiring diagram (Figure 2). If it is necessary to cut wires for installation, be sure to retain at least one service loop of wiring.
15. Replace the cover onto the junction box and tighten the screws.
16. Check for external leakage upon pressurizing the hydraulic system.



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Figure 1. SonicFlo™ Cutaway

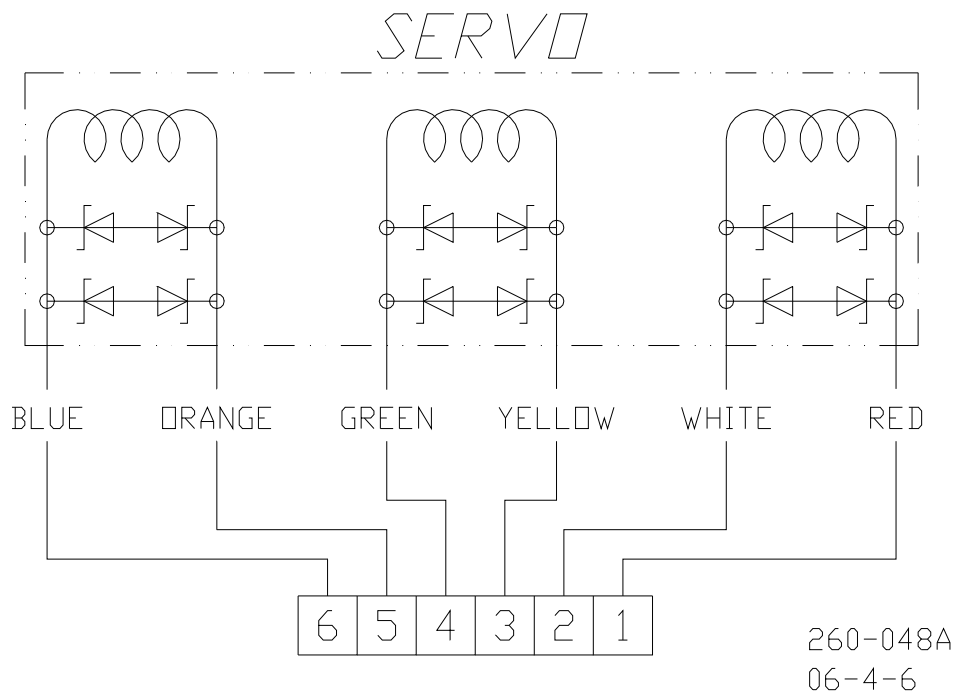


Figure 2. Triple Coil Solenoid Wiring Diagram

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