

D550 Paver
Trouble Shooting High Pressure System
S/N: D-8363-K8 Thru D-9999-K7

Low or No High Pressure Function

1. Install a 3000 PSI gauge into the test port beneath the electric High Pressure Switch (ref.#, parts page #36). Start either engine. Using a small screw driver, push in the manual override pin (in the center of the solenoid end) on the “dump valve”. (See parts Page #39)

If you can get pressure manually:

- A. Check Fuses
- B. Using a test light, check to see if there is power to the High Pressure Switch, if not, check for a broken wire or loose connection.
- C. Using a test light, check to see if there is power to the Dump Valve. If not, by turning the “star wheel” inside the High Pressure Switch, adjust to a higher pressure setting.
- D. If there is no power to the Dump Valve, either the valve spool is hanging up, or the Solenoid is bad.
- E. Loosen the socket cap screws, which hold the Valve Body to the Base Plate, and retorque them (evenly), to 45-50 inch lbs (per instructions on parts page #39).
- F. If it still doesn't work, remove the Solenoid from the Valve Body and pull out the Valve Spool. Check for any nicks or burns on the Spool, or contamination which could cause the Spool to bind up. Use Crocus Cloth to polish the Spool, wash with clean solvent, blow dry and reassemble, making sure the Spool faces the correct direction (per instructions on parts page #39)
- G. If it still doesn't work, replace the Solenoid.

If you can not get pressure manually:

Start the engines and run them until the Hydraulic Oil is good and warm, shut the engines off. See parts page #25 (This is the right side power unit, however all these references are the same as on the left.)

- A. Disconnect return hose from fitting, ref #8, and plug the hose. Remove fitting, ref #8 and install a pipe plug in the bottom of Relief Valve, ref. #9. Disconnect the high pressure hose from fitting ref. #13 and connect a 3000 PSI pressure gauge in its place. Place the ignition selector switch in the “OFF” (Center) position or disconnect the Spark Plug Wire, so the Engine **CAN NOT START**. Crank the Engine with the Electric Starter, pressure should build up to at least 2500 PSI. If it does not, the Pump is worn out and bypassing internally, and needs to be replaced.
- B. If it does build up to 2500 PSI, remove the Pipe Plug from the Relief Valve (ref. #9), place a bucket beneath the Relief Valve, and crank the Engine again. If you cannot get 2500 PSI use an Allen Wrench, inside the Relief Valve, to adjust the pressure. Screwing it further IN, increases the pressure. If it will not adjust up to 2500 PSI replace the Relief Valve. Reinstall fitting (ref. #8) and reconnect the relief return hose. Remove the Pressure gauge and reconnect the high pressure hose.

- C. If you do have 2500 after the relief valve, see parts page #38. Disconnect the Low Pressure Crossover Hose at its opposite end from fitting, ref. #8, and point this hose into a bucket. Momentarily start the left Engine, while overriding the Solenoid Valve (See parts page #39). If a substantial amount of oil comes out the Crossover Hose, the Dump Valve is worn, bypassing oil, and needs to be replaced. Reconnect the Low Pressure Crossover Hose.
- D. See Parts page #47; Disconnect the Hydraulic Tube from and remove the fitting (ref #16) from the port marked "tank". Put a ¼" pipe plug into this port. Start the engine and press the High Pressure Override Switch. If you get 2500 PSI on the Gauge, the Valve Seats (ref# 14 & 15) are leaking and bypassing pressure. Disassemble each of the Rotary Valves (ref.#5 , 11, & 13). Check the Spring Washer between the Brass Seats and the Manifold Block (ref. #2). With your finger, push in on each Brass Seat to be sure they are all free floating, and not binding up. Check each Brass Seat and Rotor face for nicks or scratches. Replace asneeded.