



Hydraulics Sales & Service

TYPICAL SYSTEM START UP PROCEDURE FOR A HYDROSTATIC TRANSMISSION

1. **KEEP IT CLEAN.** Check your filling equipment i.e.: buckets, hoses, transfer pump etc.
2. Check all connecting lines for dirt deterioration of rubber hose inside and out. **ANY DOUBTS REPLACE IT.**
3. After the transmission has been installed, remove the threaded plug from the side of the main pump housing next to stroke control. For reading charge pressure at this port, install a 42 Bar (600 Psi.) gauge, with a short section of hose. The threaded port is a 7/16 x 20 straight thread O-ring. Also, install at the charge pump inlet a vacuum gauge for reading inlet vacuum. (if available)
4. Check all fittings to be sure they are tight.
5. Fill the pump and motor cases through the upper case drain openings with a recommended fluid. It is recommended that all fluid be passed through a 10 (ten)-micron filter. Re-install and tighten case drain lines.
6. Loosen the charge pump line, coming from the filter/reservoir, at the inlet to the charge pump.
7. Fill the reservoir with fluid. When fluid appears at the loosened hose at the charge pump inlet, install and tighten the hose and continue filling the reservoir. Leave reservoir cap loose so air will escape.
8. It is recommended that the control linkage to the pump control valve be left disconnected until after the initial start-up. This will allow the pump to remain in positive neutral.
9. Engine: (diesel, gasoline or LPG) - Remove the coil wire, close the injector rack or leave the gas turned off, turn the engine over until the charge pressure reaches 2 Bar (30 Psi.) or more.
10. Start the engine and if possible, maintain a 750-RPM pump shaft speed for five (5) minutes. This will allow the system to fill properly. During this phase, pressure surges may be seen on 42 Bar (600 Psi.) Gauge. **THIS IS NORMAL.**
11. Increase pump speed to approximately 1000 RPM; charge pressure on the 42 Bar (600 Psi.) Gauge should be 14.5 - 16.5 Bar (210 - 240 Psi.)
12. Shut down prime mover and connect linkage to the displacement control valve handle. **CAUTION-if the motor shaft is connected to the drive mechanism, the necessary safety precautions must be considered.**
13. Check fluid level in reservoir and add if necessary
14. Start prime mover and run the pump at 1500 to 1800 RPM; charge pressure should be 14.5 - 16.5 Bar (210 - 240 Psi.)
15. Move the pump control handle slowly to the forward and then the reverse position. Charge pressure will drop to 12.5 - 14.5 Bar (180 - 210 Psi.) Repeat or continue to cycle for approximately five (5) minutes.
16. Should the charge pressure fall below 8.2 Bar (120 Psi.). Discontinue start-up until trouble has been found.
17. Run the prime mover at maximum RPM with the pump in neutral. Observe the reading at the vacuum gauge connected to the charge pump inlet. This reading should not exceed -3 Bar (ten (10) inches Hg.) at normal operating conditions.
18. Shut down prime mover, remove all gauges and replace all plugs or lines. Check reservoir fluid levels and tighten oil fill cap. The machine is now ready for operation.
19. **IF IN DOUBT ASK:**