

Hydraulic System Troubleshooting Guide

Follow these steps to make an initial diagnosis of what may be causing a low or no pressure situation with a Hydra-Tech hydraulic power unit system.

- 1) Make sure the hydraulic hoses are **not** connected.
- 2) Start the unit with the oil cold
- 3) Activate the hydraulics by engaging the HYDRAULIC CONTROL VALVE (H.C Valve) by turning it clockwise until it stops
- 4) Read the high pressure gauge.
- 5) If the pressure does not build to at least 2200psi (HT25DD and above or 1100psi for HT20G and below), then...
- 6) Stop the engine, remove the reservoir cover and locate the relief valve
- 7) Look to find the discharge pipe that comes off the relief valve body and dumps into the tank.
- 8) Start the unit (with the oil cold) and engage the HYDRAULIC CONTROL VALVE (H.C Valve) by turning it clockwise until it stops.
- 9) Reach into the tank and feel if any oil is coming out of the discharge pipe off the relief valve.
- 10) If oil flow IS coming out, the relief valve cartridge may have some debris in it and will need to be removed and cleaned. Or, the steel tubing going from the relief valve to the H.C. Valve may be cracked or loose and needs repair. Or, the aluminum block housing the relief valve cartridge may be cracked.
- 11) Check and or correct all of these conditions and return to steps 2-9, then...
- 12) If the proper pressure is not being attained, and/or if no oil is flowing from the discharge pipe the hydraulic pump is probably worn out.

NOTE: Noises in the hydraulic system are usually from cavitation due to a bad hydraulic pump. This is usually caused by dirt or contamination getting into the system. When contamination and cavitation occurs, the pump will get hot and the pressure will usually go up and down with the engine speed. If the hydraulic pump is replaced, the reservoir will have to be drained and thoroughly cleaned, the suction strainer will need to be cleaned, the system will need to be purged of any contaminated hydraulic oil, the return filter must be replaced and the case on the hydraulic pump filled with oil BEFORE re-starting the engine.

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