

HYDRAULICS

TROUBLE SHOOTING

HYDRAULIC SYSTEM

PROBLEM

PROBABLE CAUSES AND SOLUTIONS

Noisy pump cavitation (pump starving)

1. Check inlet hose for damage. Replace hose.
2. Fluid viscosity too high. Replace oil.
3. Operating temperature too low. Allow system to warm up.
4. Excessive drive speed. Do not exceed 1800 RPM's.

Overheating of system

1. Continuous operation at relief setting:
 - A. Stalling under load, etc.
 - B. Fluid viscosity too high.
2. Excessive slippage or internal leakage.
 - A. Check stall leakage past motors.
 - B. Fluid viscosity too low.

Pump picking up air

1. Low oil level. Refill to 3/4 full.
2. Loose or damaged inlet hose. Replace hose.
3. Aeration of fluid in reservoir. Check oil return pipes in reservoir.
4. Worn or damaged pump shaft or seal. Replace.

Other Noises

1. Worn or damaged gears and housings. Replace pump.
2. Shaft misalignment. Realign shaft.
3. Worn or faulty bearing. Replace bearing.

No Pressure

1. Low oil level. Refill to 3/4 full.
2. Pump cartridge turning wrong direction. Reverse cartridge.
3. Pump shaft broken. Replace.
4. Relief valve sticking. Clean or replace.
5. Oil bypassing through solenoid valve. Replace solenoid valve.

Erratic Pressure

1. Contaminates in fluid. Replace fluid.
2. Worn or sticking relief valve. Clean or replace.
3. Pressure setting too low. Check and reset pressure at relief.

Solenoid valve not working

1. Faulty pump. (Refer to Hydraulic Information)
2. Directional control shifting. Check voltage to solenoid coils.
3. Spool not shifting. Check internal pilot pressure for sticking.
4. Spool binding. Remove and clean.

Slow or erratic operation

1. Air in fluid.
2. Low fluid level. Fill to 3/4 full.
3. Viscosity of fluid too high. Use recommended hydraulic oil.
4. Internal leakage through solenoid or manual valves. Replace with new valves.
5. Worn pump. Replace pump.
6. Pump R.P.M. too slow. (Refer to Hydraulic Information)
7. Pump belts too loose. Tighten or replace.