



Hydraulic Pump

TROUBLESHOOTING GUIDE

Condition	Likely Cause	Correction	
No oil flow from pump.	No oil in reservoir.	Fill reservoir with approved fluid.	
	Closed shut-off valve.	Open valve.	
	Air lock in pump inlet hose.	Use compressed air to pressurize reservoir while running pump or fill inlet hose with oil from the pump end.	
	Pump is wrong rotation for application.	Replace or re-configure pump to correct rotation.	
	Hoses are reversed.	Change inlet and pressure hose locations.	
	PTO not engaged.	See "PTO Troubleshooting"	
	Pump worn or damaged.	Repair or replace pump.	
Pump will not build/hold pressure.	Relief valve improperly set.	Adjust relief valve to manufacturers specification.	
	Relief valve stuck open.	Remove, clean, and re-set to specification.	
	Pump worn or damaged.	Repair or replace pump.	
Pump is noisy.	Aeration (<i>air in system</i>).	See "Oil foaming".	
	Cavitation (<i>Cavitation is caused by excessive vacuum at the pump inlet. Test with a vacuum gauge at the inlet port. Gauge should register under 5 Hg/in. at normal operating speed and temperature.</i>)	Increase inlet hose size. Re-route inlet hose. Check for kinked or collapsed inlet hose. Check for clogged reservoir breather or strainer. Inlet hose should be S.A.E. type 100R4 hose only.	
PUMP LEAKS: At shaft seal.	Dirt under seal.	Replace seal. Examine pump shaft for scoring.	
	Damaged seal or pump body.	Replace seal or body section.	
	Improperly fitted seal.	Replace seal.	
	At body section.	Damaged o'ring or body.	Replace o'ring or body section.
		Improper torquing of bolts.	Torque to specification.
	At pump port. (<i>DO NOT use Teflon tape on pipe thread fittings!</i>)	Loose fitting.	Tighten fitting.
		Damaged fitting.	Replace fitting.
Damaged pump body.		Replace body section.	
Pump is hot. (<i>Oil temperature should not exceed 140° F (60° C)</i>)	Low oil level.	Fill reservoir.	
	Reservoir too small.	Increase reservoir size.	
	Dirty oil.	Replace oil and filter.	
	Relief valve stuck open.	Remove, clean, and re-set.	



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Condition	Likely Cause	Correction
Pump is hot <i>(continued)</i>	Relief valve improperly set.	Adjust relief valve to manufacturer's specification.
	Pump too large for application.	Review application. Replace with correct model.
	Undersized system component.	Review application. Replace with correct model.
	Improper weight oil.	Replace with correct oil.
	Low oil level.	Fill reservoir.
Oil foaming	Loose inlet fitting.	Tighten fitting.
	Damaged shaft seal.	Replace seal.
	Leak in inlet hose.	Replace hose.
	Improper tank baffle.	Install baffle or diffuser.

