



Clutch Pump Troubleshooting Guide

CONDITION	LIKELY CAUSE	CORRECTION
<p>No oil flow from pump.</p> <p>Pump will not build/hold pressure.</p> <p>Pump is noisy- whines.</p> <p>Pump is noisy- squeals.</p> <p>Pump "throws" belts.</p>	<p>No oil in reservoir.</p> <p>Closed shut-off valve.</p> <p>Pump not "primed".</p> <p>Clutch not engaging.</p> <p>Relief valve improperly set.</p> <p>Relief valve stuck open.</p> <p>Aeration (air in system).</p> <p>Cavitation (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.)</p> <p>Belts are worn/loose.</p> <p>System horsepower demand exceeds belt capacity.</p> <p>Electro-magnetic clutch is slipping. Clutch is not receiving 12V or is not properly grounded.</p> <p>Engine and pump pulleys not aligned.</p> <p>System horsepower demand exceeds belt capacity.</p> <p>High-speed engagement.</p>	<p>Fill reservoir.</p> <p>Open valve.</p> <p>Fill inlet hose from pump end.</p> <p>Check wiring/fuse.</p> <p>Adjust relief valve to manufacturers specification.</p> <p>Remove, clean, and re-set.</p> <p>See "Oil foaming".</p> <p>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.</p> <p>Check belt condition/adjust.</p> <p>Review application to determine HP requirement.</p> <p>Test with volt meter. Ground only to truck frame. Do not ground to pump body or mounting bracket.</p> <p>Check installation.</p> <p>Review application to determine HP demand. Reduce start-up RPM.</p>

CONDITION	LIKELY CAUSE	CORRECTION
<p>Pump leaks: At shaft seal.</p> <p>At body section.</p> <p>At pump port. DO NOT USE TEFLON TAPE ON PIPE THREAD FITTINGS</p> <p>Pump is hot. (Oil temperature should not exceed 140° F {60° C})</p> <p>Oil foaming</p>	<p>Dirt under seal.</p> <p>Damaged seal or pump body.</p> <p>Improperly fitted seal.</p> <p>Damaged o'ring or body.</p> <p>Body section bolts not torqued</p> <p>Loose fitting.</p> <p>Damaged fitting.</p> <p>Damaged pump body.</p> <p>Low oil level.</p> <p>Reservoir too small.</p> <p>Dirty oil.</p> <p>Relief valve stuck open.</p> <p>Relief valve improperly set.</p> <p>Pump too large for application.</p> <p>Undersized system component.</p> <p>Improper weight oil.</p> <p>Low oil level.</p> <p>Loose inlet fitting.</p> <p>Damaged shaft seal.</p> <p>Leak in inlet hose.</p> <p>Improper tank baffle.</p>	<p>Replace seal. Examine pump shaft for scoring.</p> <p>Replace seal or body section.</p> <p>Replace seal.</p> <p>Replace o'ring or body section.</p> <p>Torque to specification.</p> <p>Tighten fitting.</p> <p>Replace fitting.</p> <p>Replace body section.</p> <p>Fill reservoir.</p> <p>Increase reservoir size.</p> <p>Replace oil and filter.</p> <p>Remove, clean, and re-set.</p> <p>Adjust relief valve to manufacturer's specification.</p> <p>Review application. Replace with correct model.</p> <p>Review application. Replace with correct model.</p> <p>Replace with correct oil.</p> <p>Fill reservoir.</p> <p>Tighten fitting.</p> <p>Replace seal.</p> <p>Replace hose.</p> <p>Install baffle or diffuser.</p>