

TROUBLESHOOTING		
Pump		
Problem	Possible causes	Possible solutions
No liquid delivered	Pump is not primed	Check the priming system
	Speed too low	Check the engine is running at the required power/speed
	Sum of suction and discharge head greater than rated head of pump	Check the total head requirements against pump performance curve
	Impeller completely plugged	Clean any debris out of the impeller
	Suction piping or strainer plugged and/or leaking air	Clean any debris out of the suction hose and strainer. Repair any leaks in suction hose
	Worn impeller and/or wear rings	Inspect and replace as necessary
	Worn mechanical seal	Inspect and replace as necessary
Not enough liquid delivered or not enough pressure	Air leaks in suction or stuffing boxes.	Inspect and repair any leaks
	Speed too low	Check the engine is running at the required power/speed
	Sum of suction and discharge head greater than rated head of pump	Check the total head requirements against pump performance curve
	Impeller, suction hose and/or strainer partially plugged.	Clean any debris out of the impeller and suction hose
	Mechanical defects	Inspect and if necessary replace the following: Shaft Bearings Wear rings Impeller Coupling
	End of suction hose not immersed deep enough.	Add more hose to the suction line
Not enough liquid delivered or not enough pressure continued	Air entering suction pipe	Make sure the end of the suction hose is deep enough in the water to avoid a vortex forming

Pump works for a while then quits	Leak in the suction hose	Repair any leaks in suction hose
	Sum of suction and discharge head greater than rated head of pump	Check the total head requirements against pump performance curve
	Air or gases in liquid	Check that the priming system is functioning and that pump is not cavitating
Pump takes too much power:	Speed too high	Reduce engine speed/power
	Head lower than rating; pumps too much liquid	Throttle the discharge of pump with a butterfly valve of similar
	Rotating element binds	Inspect and replace the following as necessary: Shaft Bearings Wear rings Impeller Coupling
	Wearing rings worn	Inspect and replace wear rings as necessary
Pump noise and vibration:	Misalignment between the engine and pump end	Check coupling
	Engine and/or pump end are loose	Check engine and pump end mountings, tighten mounting bolts if necessary
	Impeller partially plugged	Clean any debris out of the impeller
	Mechanical defects	Inspect and if necessary replace the following: Shaft Bearings Wear rings Impeller Coupling
	Suction or discharge pipe not anchored.	Secure the suction and discharge piping as necessary
	Pump is cavitating	Suction lift is too great for pump