

MAINTENANCE SCHEDULE

PUMPS

COMPONENT	SERVICE	INTERVAL
Pump		
Hale Midship	Test relief valve system or governor at 150, 200 and 250 PSIG.	Weekly
	Test transfer valve (if applicable).	Weekly
	Test the priming system and check lubrication level in priming tank.	Weekly
	Lubricate all valves, discharge, suction, hose, drain and multi-drain.	Weekly
	Check pump shift warning indicator lights.	Weekly
	Lubricate threads on PM relief valve panel control and check light.	Monthly
	Lubricate remote valve controls.	Monthly
	Check controlled packing leakage and adjust if necessary (8 to 10 drops per minute).	Monthly
	Perform dry vacuum test (Per NFPA-1911, 22 inches Hg minimum vacuum: loss not to exceed 10 inches Hg vacuum in 5 minutes).	Monthly
	Check drive flange bolts to ensure tightness.	Monthly
	Lubricate suction tube threads.	Monthly
	Clean strainer.	Monthly
	Inspect gaskets.	Monthly
	Check oil level in pump gearbox; add oil if necessary.	Monthly
	If necessary, replace oil with SAE EP 90 oil.	Monthly
	Check gauge calibration.	Annually
	Check oil level in Autolube assembly (SAE-EP 90 or 80W-90).	Annually
	Lubricate power transfer cylinder, power shift cylinder and shift control valve with vacuum cylinder oil, if applicable.	Annually
	Change pump gearbox oil and refill (SAE-EP 90 or 80W-90).	Annually
	Check individual drain lines from pump to multi-drain to ensure proper drainage and protection from freezing.	Annually
	Lubricate transfer valve mechanism on two stage pumps. Dry moly spray is preferred.	Annually
	Run yearly standard pump test (per NFPA-1911) to check pump performance levels.	Annually
NOTE: Repacking of pump is recommended every two to three years		
Waterous CM	Lubricate outboard bearing (except CMH) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief fitting.	Every 100 hours or 6 months (whichever comes first)
	Lubricate inboard bearing (CMD only) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief fitting.	Every 100 hours or 6 months (whichever comes first)
	Lubricate extra pressure stage bearing (CMH only) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief groove.	Every 100 hours or 6 months (whichever comes first)
	Inspect intake screens.	Monthly
	Inspect anodes.	Every 6 months
	Check Overheat Protection Manager by pressing test button located on panel.	Every 100 hours or 6 months (whichever comes first)
	Check packing (normal leakage 10-120 drops per minute).	Monthly
Waterous CP	Lubricate outboard bearing (CP-3, CP-4 only) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief fitting.	Every 100 hours or 6 months (whichever comes first)
	Lubricate transfer valve (CP-3 only) with 1 oz. No. 4 calcium base water pump grease through fitting. Switch transfer valve to other position and grease again.	After each use
	Check packing (normal leakage 10-120 drops per minute).	Monthly
Waterous CR	Check lubricant level in bearing housing. The oil should be level with the bottom of the hole.	Monthly
	Drain and replace bearing housing oil.	Every 100 hours

COMPONENT	SERVICE	INTERVAL
Pump (Continued)		
Waterous CS	Lubricate outboard bearing (except CSH) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief fitting.	Every 100 hours or 6 months (whichever comes first)
	Lubricate inboard bearing (CSD only) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief fitting.	Every 100 hours or 6 months (whichever comes first)
	Lubricate extra pressure stage bearing (CSH only) with medium consistency, ball bearing grease through lubrication fitting until it comes out of the relief groove.	Every 100 hours or 6 months (whichever comes first)
	Inspect intake screens.	Monthly
	Inspect anodes.	Every 6 months
	Check packing (normal leakage 10-120 drops per minute.	Monthly
Waterous Pump Transmission		
K, KC & T Series	Check gear case oil level. The oil should be level with the bottom of the hole.	Monthly
	Drain and replace gear case oil.	Every 100 hours
W & Y Series	Check gear case oil level. The oil should be level with the bottom of the hole.	Monthly
	Drain and replace gear case oil.	Every 100 hours
Foam Systems		
Hot Shot II	Check control panel operation.	Daily
	Check manual override.	Daily
	Check foam tank to pump and tank return valves.	Daily
	Check metering valves.	Daily
	Check piping system.	Daily
	Check foam strainer.	Monthly
	Check expansion vent.	Monthly
FoamPro 1600	Inspect wiring, hoses, flow meters and connections for tightness, corrosion, leaks and/or damage.	Monthly
	Lubricate the cam bearing of the foam pump with a push type grease gun with high quality wheel bearing grease (DO NOT USE AIRPOWERED GUN).	Monthly
	Remove and clean the foam strainer screen.	Monthly
FoamPro 2001 & 2002	Inspect wiring, hoses, flow meters and connections for tightness, corrosion, leaks and/or damage.	Monthly
	Remove and clean the foam strainer screen.	Monthly
	Check foam pump gear case oil level and refill as necessary with SAE 30 weight non-detergent oil.	Monthly
	Drain and refill pump oil with SAE 30 weight non-detergent oil. Check for concentrate or water in the drained oil.	Annually