

Be Your Own Inspector . . .

THE 350-GPM PUMP



One thing for sure about the 350-GPM centrifugal pump—you always get out what you put into it, if you go the full PM route.

This means checking the pump before, during and after you operate it. All parts of the engine, the pump and the trailer get your steady eye. A POL pro knows shortcuts here lead to a dead end.

Map out your inspection plan like this one. The serious faults are in bold type.

If you find one of these on your pump, take care of it fast.

If you can't correct it yourself, yell for help.

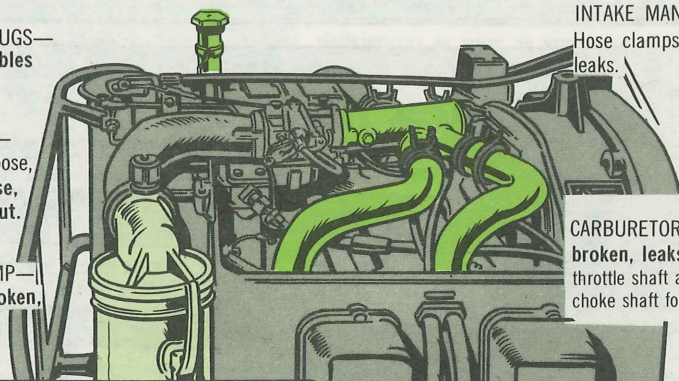
THE ENGINE CHECK

OVERALL APPEARANCE—Leaks; wiring loose, insulation broken, frayed; loose mounting bolts.

SPARK PLUGS—Loose, cables cracked.

MAGNETO—Mounting loose, cables loose, cracked, cut.

FUEL PUMP—Loose, broken, leaks.



OIL LEVEL—Low.

Not within operating range—check every 5 hours during normal operations. After an oil change, run the engine about 5 minutes before level check.

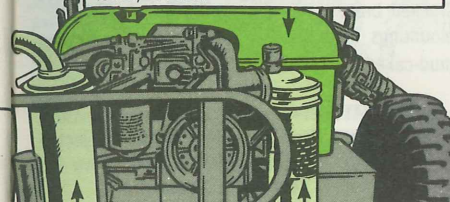
OIL LEVEL GAGE—Bent, cracked, cap doesn't fit or seal.

INTAKE MANIFOLD—Hose clamps loose, leaks.

CARBURETOR—Loose, broken, leaks. Check throttle shaft and choke shaft for wear.

OIL FILTER—Leaks, loose mounting. Dirty, more than 50 hours of operation since last element change.

ENGINE SHROUD—Bent, loose, missing. (Is it cutting the throttle cable?) Catches loose, broken.



AIR CLEANER—Dirty filter; restriction indicator in red; sight window painted over; loose mounting or latches. Oil level low in cup. Hose loose, leaks.

MUFFLER—Holes, rust. Guard broken, bent. Is the condensation drain plug secure?

FUEL TANK—Cap won't seal, leaks; strap and strip loose, strainer missing, holes.



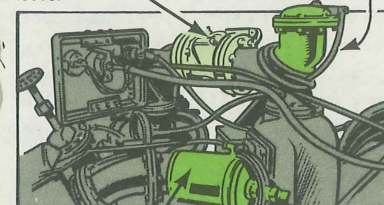
FUEL GAGE—Lens cracked, broken; needle missing.

FUEL STRAINER—Loose mounting, leaks, cracked bowl. Drain water and clean weekly.

THE PUMP INSPECTION

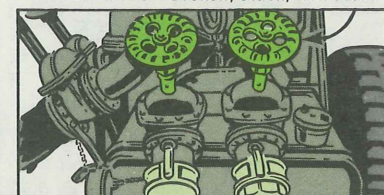
AIR ELIMINATOR—Loose mounting; weight valve won't work; spring sprung; cracked, broken. Drain hose missing.

CHECK VALVE—Broken, sticks, loose.



SUCTION STRAINER—Gaskets leak; cap loose; screen torn, clogged; yoke cracked.

GATE VALVES—Broken, stuck, won't seat.

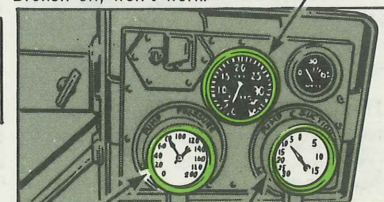


HOSES, DUST CAPS AND PLUGS—Cap missing, hose clamps broken, loose. Dust caps and plugs must be on when hoses are disconnected.

INSTRUMENTS—Loose mountings; wiring worn; connections loose, lens broken.

STARTING SWITCHES—Broken off, won't work.

TACHOMETER, HOURMETER—Lens or needle broken, won't operate.



PRESSURE GAGE—Lens or needle broken.

SUCTION GAGE—Lens or needle broken.

YOUR HELPING HANDS

Before you start the pump with the Mil Std engine, be sure you have the engine parts on hand. They're TM 5-2805-259-14 with Ch 1 (Jul 71) and TM 5-2805-259-24P with Ch 2 (Apr 71). For the engine lube info, use LO 5-2805-259-12 (Apr 72).

You get the operating details on this pump from TM 5-4320-242-15 with Ch 3 (Jan 70). The repair parts are listed in TM 5-4320-242-20P with Ch 1 (Aug 69).

For the poop on the pump with the Wisconsin engine, see TM 5-4320-218-15 with Ch 6 (Feb 70), TM 5-4320-218-20P with Ch 2 (Mar 71) and LO 5-4320-218-15 (Jan 61).

You get a good coverage on general petroleum supply and management activities in AR 703-1 (Jan 71).

Don't forget to ground your pump before you put it into operation. Drive the rods down about 2 feet and connect the ground wire from the top of rod to the trailer frame.

You can tow the 350-GPM pump a short distance but if you've got to move it a long way or over rough terrain, carry it on a transporter.

THE FILTER/SEPARATOR

Manuals: TM 5-4330-200-15 (Apr 61), TM 5-4330-200-25P (May 61) and TM 5-4330-231-13 (Apr 71)

LIFTING MECHANISM—Bent, broken.

ELEMENTS, CANISTERS—Bends, cracks; screen torn, dirty.

SEPARATOR SHELL—Rusty; paint peeling; loose mounting bolts, leaks.

FRAME—Bent, cracked, bolts missing; drawbar bent; pintle hook bent, broken and parts missing.

REAR STAND—Bent, broken.

LIFTING EYE—Bent, stuck, nuts missing. (Must not strike the air vent valve.)

UNIT MARKINGS—Missing, wrong, not readable.

REFLECTORS—Cracked, broken, mountings loose, mud-caked.

BATTERY—Cracks, leaks; cover missing, loose. Terminals corroded, loose. Electrolyte low (Should be $\frac{3}{8}$ inch above the plates). Vent hole clogged.

FIRE EXTINGUISHER—Missing, not fully charged. Check pressure indicator or weight monthly. For info on dry chemical type, see TB 5-4200-200-10 (May 72).

PRESSURE GAGE—Lens broken; pointer bent. While operating the filter separator, be sure the pressure differential doesn't go over the manufacturer's recommendation. If it does replace the elements.

GATE VALVES—Frozen, leaks, won't close. PRESSURE RELIEF VALVE—Clogged, broken spring, painted over.

DRAIN VALVE—Stuck, leaks.

THE TRAILER

BASIC ISSUE ITEMS—All on hand?

GROUND ROD ASSEMBLY—Missing, not connected when pump is operating.

TOOL BOX—Loose mounting, bent, hinges missing.

PUBLICATIONS—Missing, torn, unreadable, not up-to-date.

LOG BOOK—Missing DA Forms 2408, 2408-1, 2408-5, 2408-7, 2408-8, 2408-10 or 2408-14.

TIRES—Cuts, breaks, blisters, flat spots, valve stem leaks, valve caps missing, low inflation. Inflation should be 45 PSI.

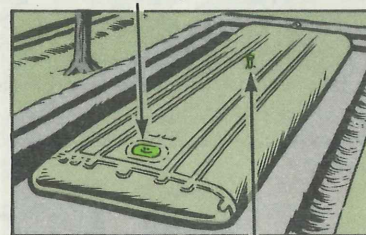
Keep in mind your particular pump might have special problems not mentioned here. Be on the look-out for 'em all the time.

10,000-GAL FABRIC TANK

Manuals: TM 10-1109 (Feb 68), TM 10-1101 (May 72).

GENERAL CONDITION—Worn, punctured, missing parts, leaks, trench filled with debris, holes (Use repair kit, FSN 5430-641-8957).

ACCESS DOOR—Leaks. Check bottom of tank for sludge or sedimentation.



HAND STRAPS—Broken, worn.

OVERFLOW PIPE—Dirty, loose debris.

FUEL LOAD—OVER FULL Tanks within their normal life cycle fill to capacity 10,000-gal. Old tanks beyond their life cycle fill to 70 per cent capacity.

HOSE LINES

Manuals: TM 5-678 (Oct 65), TM 10-1109 (Feb 68).

VALVES—Leaks, don't operate smoothly, rusted, dirty.

COUPLINGS—Gasket leaks, worn.



HOSES—Kinks, chafing, leaks, splits.

FITTINGS—Leaks, broken, loose.

CLAMPS—Loose, missing, broken.

GATE VALVES—Bent, stuck, won't close, leaks.

LIQUID LEVEL GAGE—Glass cracked, unreadable. Guard missing.

LINES, FITTINGS—Leaks. Crimps, breaks.

ADAPTER DUST COVER—Missing, chain broken.

VESSEL AND SKID—Broken, cracked welds, bent skid, dirty.