

LUBRICATION AND MAINTENANCE

⚠ CAUTION

Always wear safety glasses and ear protection when performing any maintenance function that could cause injury to eyes or ears.

Read all safety information on pages 6 through 11.

⚠ WARNING

Lower attachment to ground, shut off tractor engine, remove key and wires to fuel solenoid before performing any maintenance.

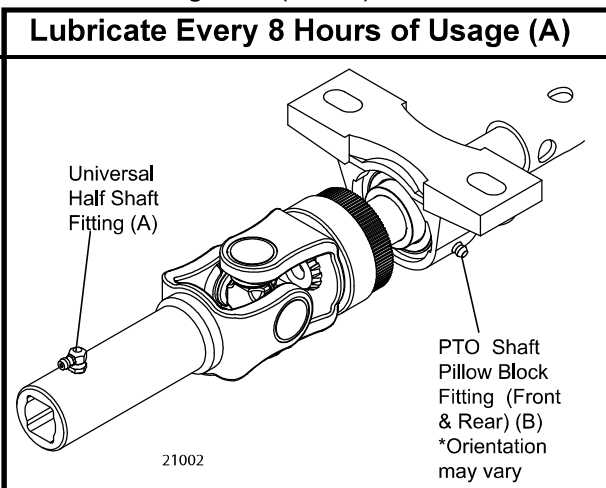
LUBRICATION

Do not let excess grease collect on or around parts, particularly when operating in sandy areas.

The chart gives the frequency of lubrication in operating hours based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication.

Use an SAE multipurpose type grease for all locations shown. Be sure to clean fitting thoroughly before using grease gun.

For Drive System and Optional Hydraulic Lift, use CoolTemp Hydro-Max™ Extended-Life Hydrostatic Fluid (Grasshopper part no. 345044 for 1 quart [.94 l] container or part no. 345046 for 2 gallon (7.52 l) container.



CAPACITIES

Fuel Tank	8 U.S. gal. (30.2 l)
Drive System	2.7 U.S. qt. (2.6 l)
Drive System Fluid Change approx.....	2.2 U.S. qt. (2.08 l)
Optional Hydraulic Lift Capacity and Fluid Change	0.9 U.S. qt (.85 l)

TIRE AIR PRESSURE

Drive Tires	
Standard 22 x 11 x 10	8 psi (55 kPa)
Optional 22 x 11 x 10	8 psi (55 kPa) (refer to decal on wheel for correct tire air pressure)
Rear Tires 13 x 6.50 x 6	12 to 15 psi (83 to 103 kPa)

DRIVE SYSTEM

Fluid Change	1000 hours
Filter Change	1000 hours

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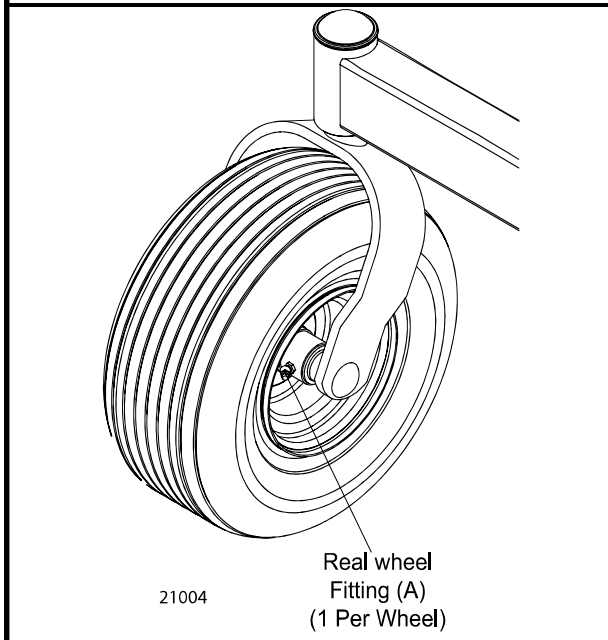
Refer to the "Engine Manual" for the time table for changing or service.

COOLING SYSTEM

Check engine coolant daily when the engine is cool, before starting engine. Coolant in the expansion tank does NOT mean the radiator is full. Remove the radiator cap, with caution. **DO NOT REMOVE THE RADIATOR CAP ON A HOT ENGINE!** Make sure you see coolant just below the neck of the radiator. Also visually check to make sure the hose, fittings and the radiator are in good condition and there are no leaks. If coolant is required, fill the radiator to just below the neck and then fill the expansion tank to proper level. Use a solution of 50% antifreeze and 50% water (freezing point about -34° F [-36° C]). Do not use 100% antifreeze or severe damage will occur.

Remove and clean radiator screen regularly. A dirty screen will cause the engine to over-heat.

Lubricate Every 80 Hours of Usage (B)

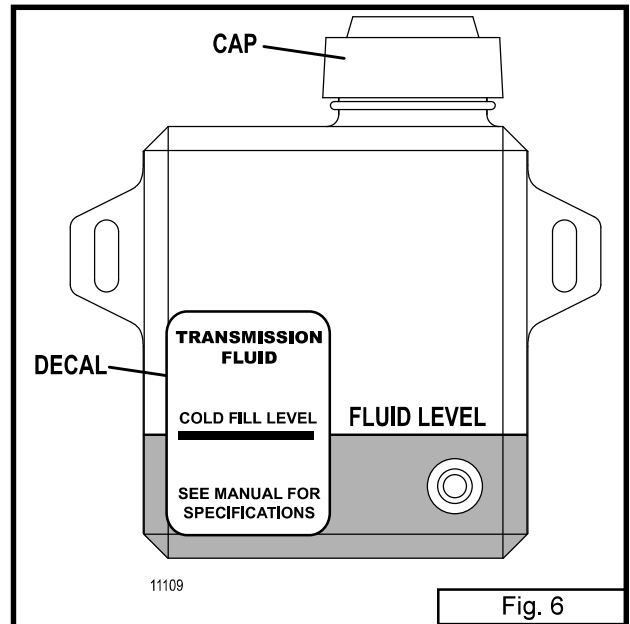


Dex-Cool Extended Life antifreeze is the recommended type.

⚠ CAUTION

Do not use high-pressure water or steam to clean the engine or drive compartment. Water and cleaning detergent may damage electrical components and terminals, possibly leading to component and safety circuit failure.

In very dirty conditions, debris can build up in the radiator fins, which blocks air flow. This can cause the engine to run hot. To clean out, use a vacuum cleaner or air blower to remove foreign material from the engine and drive compartment. Following air cleanout, use the Radiator Cleaning Wand (PN 609015 available from your Grasshopper dealer) with water from a normal pressure garden hose to comb water pressure between radiator fins to dislodge residual packed-in dust and debris. Ensure spray angle is straight into the radiator fins and movement is side-to-side from top to bottom. **DO NOT USE HIGH PRESSURE SPRAY.** High pressure, directed at an angle to the fins, will bend fins, preventing air from flowing through the radiator.



BATTERY MAINTENANCE

Follow the procedure below for battery maintenance.

- Clean battery.
- Inspect cables for loose connection.
- Clean terminals.
- Inspect battery tray and hold-down.
- Inspect battery case for cracks or leaks.

⚠ WARNING

Batteries contain sulfuric acid. Avoid contact with skin, eyes, and clothing. Batteries produce a highly explosive hydrogen gas while being charged. Always keep cigarettes, sparks, open flame, and other sources of ignition away from battery. Always shield eyes and face from battery. In the event of accident, flush with water and call a physician immediately. Keep batteries and acid out of the reach of children.

CHECKING DRIVE SYSTEM FLUID LEVEL

Check fluid level with the engine turned off. The expansion tank is located on the right side under the seat. To check the fluid level, place unit on level surface and look through the side of the expansion tank. The fluid level should be equal to the full mark on the reservoir decal (Refer to Fig. 6). If fluid is required, make certain that expansion tank cap and the area around it is clean and free of any foreign matter before adding fluid. Use CoolTemp Hydro-Max™ Extended-Life Hydrostatic Fluid (Grasshopper part number 345044 for 1 quart [.94 l] container).

CHANGING DRIVE SYSTEM FLUID AND FILTER

(Refer to illustration page 35)

Change fluid and filter every 1000 hours. To drain fluid, remove drain plug from the bottom of tandem hydro pump. Allow fluid to drain completely. Reinstall plug and tighten.

To replace filter (item 3), which is located in the bottom of tandem hydro pump, make certain that the area around filter is clean and free of any foreign matter. Remove the filter and replace with a new filter (Grasshopper part number 130505).

To refill the system with fluid, make certain that the area around the expansion tank adapter (item 70) is clean and free of any foreign matter. Disconnect the hose (item 64) from the adapter and remove adapter from tandem hydro pump. Refill the pump with CoolTemp Hydro-Max™ Extended-Life Hydrostatic Fluid (Grasshopper part number 345044 for 1 quart [.94 l] container). Reinstall adapter in pump and reconnect hose to adapter. Refill expansion tank with CoolTemp Hydro-Max™ Extended-Life Hydrostatic Fluid to the proper level (Refer to Fig. 6). Run engine and check that fluid level in expansion tank is at the proper level.

Note: No air bleeding is necessary since the system is self-bleeding.