

Changing Oil

Steps to Better Engine Maintenance

For optimum performance, you should change the oil in your engine at least once per season, or every 25 hours of use.

Changing Oil Guide

Step 1: Getting Started

Start the engine and run it until it is warm. Stop the engine. **WARNING:** Be sure to disconnect the spark plug wire, and secure it away from the spark plug to prevent accidental starting. Clean around the oil fill and drain plug area to prevent dirt and debris from falling into the crankcase (see photo at right). Remove the dipstick, if equipped.



Step 2: Draining the Oil

Tilt the mower deck with the air filter or spark plug side up, and position some newspaper and an oil pan or jug beneath the mower. Use a 3/8" drive socket wrench and extension (no socket) to turn the plug counter clockwise (see photo at right), allowing the old oil to drain. If the plug also serves as a fill cap (normally yellow or white in colour), it may have two prongs so you can loosen it by hand or with a screwdriver or hex key for additional torque.



Replace the drain plug by twisting clockwise and tightening with a box wrench or adjustable wrench. If your engine does not have an oil filter, skip this step.

Step 3: Engines with Oil Filters

If your engine has an oil filter, replace it at least once per season.

- Replace the oil filter by twisting counter clockwise on the body, using a filter wrench or pipe wrench.
- Examine the sealing surface on the oil filter adapter for debris or gasket material. Clean if necessary.
- Lightly oil the filter gasket with clean engine oil. Install a new filter, screwing in by hand until the gasket contacts the filter adapter (see photo at right). Tighten the filter an additional 1/2 to 3/4 turn.



Step 4: Fill With New Oil

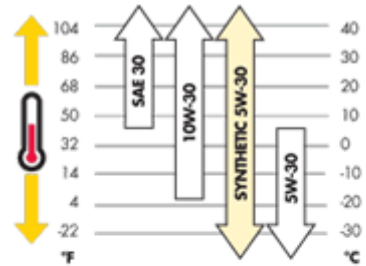
Pour in the correct amount and approved type of oil for your engine, as listed in your operator's manual. If you have two oil fill plugs (normally yellow or white in colour) on each side of the engine, either one can be used to fill the engine with oil to the correct level. Please **DO NOT** fill the engine with oil without using the correct measuring device as illustrated in your operator's manual

Oil Recommendations

To optimize engine performance, use high quality small engine Oil. Most suppliers offer Synthetic 5W-30 oil that provides the best protection at all temperatures as well as improved starting with less oil consumption.

For optimum performance, you should change the oil in your small engine after the first five hours of use and then, every 50 hours of use:

- Use quality SAE 30W Oil above 40°F (4°C) for all of our engines.
- Check oil level regularly.
- Air-cooled engines burn about an ounce of oil per cylinder, per hour.
- Fill to mark on dipstick. **DO NOT OVERFILL.**



SAE 30: 40°F and higher (5°C and higher)
is good for all purpose use above 40°F, use below 40°F will cause hard starting.

10W-30: 0°F to 100°F (-18°C to 38°C)
is better for varying temperature conditions. This grade of oil improves cold weather starting, but may increase oil consumption at 80°F (27°C) or higher. Check oil level frequently at higher temperatures.

Synthetic 5W-30: -20°F to 120°F (-30°C to 40°C)
provides the best protection at all temperatures as well as improved starting with less oil consumption.

5W-30: 40°F and below (5°C and below)
is recommended for winter use, and works best in cold conditions.