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Add Life to Your Lawnmower

With a few inexpensive tools and by referring to the instruction manual, you can give your lawnmower the regular and systematic care and service it needs for safe, trouble-free service during the coming summer months.

by W. Forrest Bear

It's Time to ready your lawnmower for another season. You can do many servicing and maintenance chores that will increase the life of your mower and its engine.

Major repair, engine overhaul and cleaning and adjusting the engine's contact points may best be left to a trained serviceman. But you can do other important jobs such as cleaning your mower, sharpening and balancing the cutter bar, cleaning and regapping spark plugs, changing oil, servicing the air cleaner, adjusting engine speed and cleaning the fuel tank and lines.

Proper tools for doing the work require only a small investment. You will need a spark plug wrench, a round wire spark plug gap gauge, a screwdriver, a small brush and some cleaning solvent.

The operating instructions that came with the lawnmower when new are your best guides for adjusting or replacing parts on the mower or the engine. The following kinds of regular and systematic service and maintenance will increase the life and usefulness of your mower and engine.

Mower Care ... .

Always remove the spark plug wire, as shown in photo 1, before servicing your mower or its engine. Gasoline engines can start with only a short pull on the starter rope or by rotation of the cutter bar.

Most gasoline lawnmower engines are air cooled. If the engine isn't kept clean, clogged cooling fins may cause operating temperatures to rise. This reduces both life and efficiency of the engine.

Remove old grease with a brush dipped in a safe, nonvolatile cleaning solvent (photo 2). Removing accumulation of dirt, grease, grass and leaves from the mower reduces the fire hazard. After this initial cleaning, the mower will be easier to keep clean. Let the engine cool after use, then wash it down with a garden hose. Wipe off daily oil accumulation with a cloth.

For safety and efficient cutting, be sure that the cutter bar is sharp and well balanced. An unbalanced cutter bar can ruin the engine or injure the operator. Check the balance of the sharpened bar by placing it on a narrow straight-edge clamped in a vise (photo 3).
Since rough lawns and engine vibration loosen the machine’s bolts, you may avoid some repair bills by periodically tightening all nuts and bolts.

**Engine Servicing . . .**

**Regap Plugs:** Clean and regap spark plugs once each season or after the mower has operated 100 hours under normal conditions. To do this, remove the plug with a spark plug wrench (*photo 4*). Removing plugs with other tools may result in a broken plug. Use care to keep foreign matter from entering the cylinder when the plug is out or when you’re removing or replacing it.

Find the correct spark plug gap setting as given in the operating instructions. Measure the correct spacing with a round wire spark plug gap gauge. Adjust the gap by bending the *side* electrode until it touches the gauge (*photo 5*). Don’t try to bend the center electrode. Doing so may crack the insulator. Slip a new gasket over the plug before you replace it. The gasket acts as a sealer to prevent escape of the highly compressed fuel mixture from the cylinder head. Tighten the plug to the crushing point of the new gasket. All spark plugs aren’t alike, so be sure to get the correct one if you buy a new plug.

**Change Oil:** Check the oil level in the crankcase of 4-cycle engines each time before using the engine. Change oil every 25 hours under normal operating conditions; more often under dusty conditions. Use the weight of oil specified in the instruction manual by the mower manufacturer.

**Service Air Cleaner:** Service the air cleaner after about every 25 hours of operation under normal conditions — more often under dusty conditions. Use a brush and cleaning solvent to remove dirt and sludge from the bottom of the cleaner (*photo 6*). Use air pressure or shake the top unit to remove any excess cleaning solvent.
If the cleaner is of the oil-bath type shown in the photo, add the recommended grade of oil to the "oil level" mark. Replace the gasket that holds the air cleaner cup, and re-assemble the air cleaner.

**Adjust Engine:** Carburetor and governor adjustments control the engine's speed. Use a screwdriver to adjust the carburetor and governor (*photo 7*), according to settings recommended in your instruction book. Incorrect idle speed adjustment of the governor causes the engine to die or to run fast. The engine will miss if the carburetor load adjustment is set for a too lean air-to-fuel mixture; it will race or run unevenly if the load is adjusted for a too rich air-to-fuel mixture.

**Clean Fuel Tank:** Drain the fuel tank, fuel line and carburetor bowl each season to flush out dirt or other foreign matter. Fill the tank with the exact fuel or fuel and oil mixture specified in the operating instructions. This is important because engines vary in the type of fuel they use. All 4-cycle engines use straight gasoline. Generally the 2-cycle engines use nondetergent oil mixed with gas. When filling the fuel tank use a container with a flexible nozzle and safety-button vent to prevent spillage (*photo 8*).

**Remember These Points . . .**

1. Always remove the spark plug wire before servicing your lawnmower.

2. Check oil level before using the engine.

3. Wipe off oil and grease after each use.

4. Change oil and service the air cleaner after 25 hours of normal operation.

5. Clean and regap plugs after 100 hours of normal operation.

6. Drain and flush fuel tank, fuel line and carburetor bowl each season.