



Troubleshooting mower engines

Here are some typical mowing problems, and how you can solve them.

by Robert L. Tracinski

■ While most landscape managers probably don't think of themselves as mechanics, even the best in the business are only as good as their equipment.

By learning to recognize and correct routine mower problems quickly and efficiently, you can devote more time to the productive work.

Here are some common problems and how to get to their roots, with the key points in boldface type.

Striping, unevenness—Uneven cutting, skipped areas or poor performance indicates a problem with the mower deck or cutting blade.

Wet grass may be more prone to uneven cutting than drier turf. If possible, wait until the grass is dry before cutting. It's also possible that you're trying to do the job too fast. A **slower ground speed** may solve the problem. Also, cutting too much grass at one time often results in an uneven lawn. Try taking **less of a cut**— $1\frac{1}{2}$ inches at the

most. If the grass you're cutting is exceptionally fine, it might help to go to a **lower lift blade**.

If the problem is in the mower, you most likely have a **dull blade**. Keep the blade sharp; corners should not be rounded.

Keep the underside of the **mowing deck clean**, and inspect it to make sure that it isn't **warped or distorted**. Make sure you don't have a **bent or damaged toe guard** at the discharge chute.

If you're using a belt drive model, be sure that the **belt is properly tensioned** and that the **idler moves freely**.

Engine won't start—A variety of factors, from weather changes to worn parts, can contribute to hard starting.

Determine whether you're **getting a spark**. Using insulated metal pliers, remove the spark plug and touch the threaded area of the plug to a metal surface on the engine. Turn over the engine and look for a blue spark.

Electrical problems—If you don't have a good spark, the problem may be in the ignition or electrical system. First **replace a**

worn or corroded spark plug.

Next, check the **battery's electrolyte levels**, add water if necessary, and **clean the terminals**. Have the battery tested if you're still having problems.

Sometimes a problem elsewhere in the system may cause the battery to run down. Among the possibilities:

- accessories are left on after the vehicle is turned off, draining the battery;
- the vehicle has been idle for three months or more, during which time the battery has deteriorated;
- battery cables or connections are heavily corroded, leading to voltage seepage.

Fuel problems—Be sure you're using fresh fuel with an **alcohol content of less than 10 percent**, and the **right blend** for the season. Summer-grade fuel can be less volatile in winter, while winter blends can cause vapor lock in warmer weather.

Another culprit may be the fuel system. Check fuel flow: **pulse lines should be connected** and the **fuel vent open and clear**. Look for pinched or **blocked fuel lines**, especially in cold weather when moisture or ice

Mulching: does it work?

■ Mark Prinster of TruGreen/ChemLawn believes that there will be a nationwide restriction on disposing of lawn debris in sanitary landfills by the mid-1990s.

Mulching grass clippings, he believes, could be a partial answer to the problem of disposal for landscape managers. But only a partial solution.

"Do mulching mowers work?" he asked, during the Georgia Turfgrass Conference last December. "We found, yes and no, depending on the type of grass."

The newer mowers with a mulching feature work well on common bermudagrass and tall fescue, but "on hybrid bermuda, the differences are not great enough to warrant use of a mulching mower," Prinster believes.

Mulching mowers were developed by Bolens in the 1960s, Prinster notes. They feature a dome-shaped deck, a special cutting blade and a powerful (4 to 5 hp) engine. The advantages of using mulching mowers:

- You return the clippings to the environment.
- You eliminate composting and dumping.
- You reduce mowing time by 38 percent, according to TruGreen/ChemLawn research.
- You reduce fertility requirements by 25 to 30 percent, university research says.
- You can mulch autumn leaves along with grass.

According to university research, grass clippings are composed of 4% nitrogen, 0.5% phosphorus, 2% potassium, 75-85% water and 20-30% protein. According to a study at Washington State University, mulched lawns were healthier than non-mulched lawns (see chart on page 14).

"The agronomic benefits of mulching are real," said Prinster. "The mulching mowers work, but they're not foolproof. We have to watch weeds because if you mulch you're returning the weed source to the turf."

— Jerry Roche