

Using proper weight oil in mowers prevents excessive oil consumption, a symptom of which is blue smoke blowing from the exhaust during mowing.

# REDUCING MOWER DOWNTIME

Proper maintenance, combined with the ability to recognize danger signals early, will help you keep your mowers out of the shop and out on the grass.

by Robert L. Tracinski

hile most lawn care specialists probably don't think of themselves as mechanics, even the best in the business are only as good as their equipment. Engine trouble, poor performance and equipment that's just not doing the job can mean frustration and lost profits.

Some of the most common mower problems involve basic operational systems like the engine or transmission; others may affect the end result, such as an uneven cutting job. Whatever the situation, you don't have to be an expert mechanic to deal with it. By learning to recognize and correct routine mower problems quickly and efficiently, you can devote more time to the productive

work-lawn care.

With a big mowing job ahead, the last thing you need is a temperamental engine. A variety of factors, from weather changes to worn parts, can contribute to hard starting.

Your first task is to 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. Turnover the engine and look for a blue spark. If you don't have a good spark, the problem may be in the ignition or electrical system.

First try replacing a worn or corroded spark plug with a fresh one. Next, take a look at the battery condition. Check the 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.

If you do get a good spark after testing the spark plug, the problem may be in the fuel.

# 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. Often, engines that start just fine in winter won't budge in summer, and vice versa. That's because summergrade fuel can be less volatile in winter, while winter blends can cause vapor lock in warmer weather. If you're not sure what blend of fuel you're using, check with your filling station.

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 can form; keep the tank full in winter to prevent moisture condensation.

If the fuel system checks out, try the carburetor. Make sure it's clean, and compare the adjustments on your carburetor to the settings recommended in the operator's manual. If you routinely store your mower for the winter or extended periods of time, be aware of possible problems caused by leaving fuel in the tank.

Fuel that remains in a vehicle during long-term storage can deteriorate, turn to varnish and cause engine difficulty or damage.

#### Remove fuel

Before storing a vehicle for more than three months (or less in warmer environments), it's best to remove all fuel from the system. If you don't drain the fuel, be sure to add a stabilizer. Use one ounce of stabilizer per gallon of fuel, then run the engine for at least five minutes to insure that the stabilized fuel is distributed to all parts of the system.

If you must store a vehicle with fuel and without adding stabilizer, replace the fuel and filter and remove and clean the carburetor before use.

## Heavy oil consumption

If the mower consumes too much oil, the engine isn't operating as efficiently as it could be. One symptom of this problem is blue smoke blowing from the exhaust during mowing.

Overconsumption of oil usually indicates an engine problem. If you suspect this is the case with your mower, use the following checklist to identify the specific engine problem:

Oil level is too high. Drain off the excess and keep an eye on the level in the future.

Improper weight oil being used. Review the operator's manual for recommended weights for summer and winter operation.

Operation of engine above recommended speeds causes oil to foam. Follow guidelines for engine operation in the operator's manual.

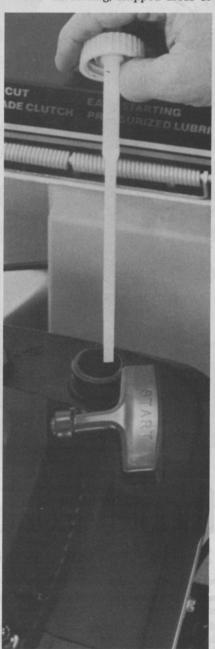
Overheating engine thins the oil

and causes it to break down. Refer to the operator's manual for instructions on cleaning the cooling fins.

Slow response from a hydrostatic transmission, steering difficulty or a slow deck lift speed can also mean reduced productivity. To get back up to speed, check the oil level according to the procedure outlined in the operator's manual. Check for moisture in the oil. Change the oil filter if you have problems with contamination or if it has not been changed in the past season.

If a hydraulic filter is plugged with debris, it will restrict oil flow. Fill the filter with the proper oil before installing it in the mower.

Uneven cutting, skipped areas or



Maintain the mower's proper oil level. Drain excess before operation.

poor performance indicates a problem with the mower deck or cutting blade. In some cases, striping may depend on the cutting conditions. For example, wet grass may be more prone to uneven cutting than drier turf. If possible, wait until the grass is dry before cutting, and this particular problem may solve itself.

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—1½ inches at most.

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

If the problem is the mower, there are several possible culprits. First and most likely is a dull blade. Keep the blade sharp; corners should not be rounded. You can sharpen the blade yourself or take it to a dealer to be sharpened and balanced.

### Cleaning underneath

Keep the underside of the mowing deck clean, and inspect it to make sure that it isn't warped or distorted. If the deck has a toe guard at the discharge chute, check that the guard is not bent or damaged.

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

Safety features are designed to reduce problems during mowing. While they do not cause problems in and of themselves, they can lead to trouble if an operator decides to tamper with or remove them for any reason.

Don't invite additional problems. Before mowing, always make sure that safety mechanisms are in place and working.

What if, despite your best efforts, you can't seem to locate or correct a mower problem? The next step may be to go to your dealer for help. It's a good idea to use dealers who service what they sell.

Some manufacturers have established a "hotline" service which allows a dealer to call the manufacturer, describe a problem and get an answer in one phone call. In any case, your dealer should be able to assist you in solving the problem.

It doesn't take an expert mechanic to keep equipment up and running and business at its best. Learn to identify common mower problems, correct the trouble at its source, and get back to business.

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