## Mower Maintenance:

# An Ounce of Prevention





Routine maintenance of mower engines and blades will enhance mower longevity. Photos courtesy: Ransomes America Corporation.

By Matthew Trulio

ven the most reliable machines are, by nature, destined to eventually fail. They're mechanical devices, full of moving parts under stress, powered by explosive fossil fuels or unpredictable electricity. A pickup truck that goes 200,000 miles without a hitch may call it quits at

200,001. A good old, reliable water heater may be anything but on a bitter winter morning. A never-fail refrigerator can unexpectedly become a hot box, particularly after it's just been filled with groceries. An "always starts" athletic field mower may die the day before a big game.

Still, there are some machines that seem to last longer than others and mowers are no exception. The question is why.

Starting out with a high-quality product, which often comes at a higher price than less reliable models, is a part of the answer, but not all of it. Even a top-end machine can break down. All things being equal in terms of product quality, the real common denominator in the longevity of any machine isn't design or construction. It isn't the power plant, and it isn't the electrical system. It's the owner or operator and what he's willing

to do to keep that machine running. It's not magic that keeps a machine going year after year — it's consistent ongoing maintenance.

#### The Little Things

Ongoing mower maintenance can be broken into daily, weekly, monthly and yearly categories. While "major service" intervals may come monthly or even yearly and will probably be handled by your dealer, it is the little daily things that make a tremendous difference in mower performance and longevity. Here are a few of the most crucial:

• Visual Inspection. Begin the day's operations with a visual inspection of the mowers — and all machines — you intend to use. Visual inspections can pick up oil and fuel leaks, worn or broken belts, and other elements that often inhibit performance.

· Oil. Oil is the lifeblood of all internal combustion engines. Check it daily. However, ensuring the proper oil level at all times is only half the job. The oil has to be clean. Dirty, worn oil lubricates inadequately, which causes excessive engine part wear and substandard performance and reduces engine longevity. Oil should be changed religiously at intervals specified in your owner's manual; however, if it isn't "time" for an oil change but you find the oil is dirty, change it immediately, before operating the machine. Dirty oil may be the sign of dirty oil filter. Make checking the oil filter, and changing it as needed, part of your daily routine.

The bottom line is that dirty oil and oil filters cause engines to work harder, which reduces longevity. Mower engines work hard enough already.

- Fuel. In the case of gasoline-powered mowers, high-octane fuel is often recommended. Don't cut corners for a few pennies lower octane fuels will decrease power and performance. That reduces productivity, which means the machine will have to work longer to do a job it could do in less time if it were operating efficiently. Reduced efficiency translates to reduced longevity. Also, if you store fuel on site or have fuel trucked in, check it regularly for contamination. Water in fuel can kill an engine. Inexpensive fuel contamination test kits are available.
- Water and Coolant. Water cools engines efficiently, provided there is enough of it to do the job. It's easy to forget checking radiator water and coolant levels, but on a hot day nothing will stop a machine faster than overheating.

The stress of overheating on an engine can significantly reduce its life — it simply should be allowed to happen. If your mower employs a cooling system, check fluids daily.

• Air Filter. Mowers operate under stress in a hostile environment. They kick up dust and grass as they cut. Whether your machine employs fuel injection or carburetion, clean air is essential for proper operation of all internal combustion engines. That's the job of the air filter, but a filthy filter can't do the job. A clogged air filter will hamper engine

performance and, perhaps worse, permit some foreign object to enter the engine. Daily cleaning and checking of the air filter is a wise move. Again, an engine that is forced to work harder than it has to will have a much shorter life.

• Cleaning. "A clean machine is a fast machine" — so goes the hot rod enthusiast's aesthetic axiom. And yet, there's more than a grain of truth to it, particularly in the case of mowers. Excessive external dirt and grime on a mower engine increases the likelihood that

continued on page 20



#### **Mower Maintenance**

continued from page 19

some of the dirt and grime will find its way into the engine. Regular engine cleaning, through a manufacturer-recommended method, is good preventative maintenance. In addition, your mechanic will thank you when it comes time for major service.

Keeping the exterior of your mower clean, particularly the underside of cutting decks, is also crucial. Freshly cut grass is loaded with moisture. Clumps of it left on metal surfaces could lead to rust and corrosion. There's also an element of professionalism to consider, particularly if you're in the public eye. While you can't be expected to keep your mower looking sharp throughout the day's cutting, starting with a clean machine enhances the perception of professionalism.

• Blades. Reel or rotary, mower blades need to be kept sharp for two equally important reasons. First, dull blades force a mower's engine to work harder to cut the grass - much harder than it has to. That means increased engine wear. Second, dull blades do not cut grass cleanly, and rough cuts are not healthy for turf.

Manufacturers' service manuals offer rotary and reel mower sharpening intervals, based on estimated use and wear averages. Those recommendations are well-considered; however, they are also general. A manufacturer can't possibly know all the variables in your specific situation. Therefore, while it's important to heed manufacturers' guidelines, it's equally important not to ignore obvious blade wear, simply because it isn't "time to sharpen." That doesn't mean oversharpen, which can reduce blade life, but there are things in your cutting day the manufacturer can't take into account - like mowing over hidden obstacles that dull blades. Take a minute or two to check blades daily, and in the case of rotary mowers, keep an extra set handy.

### **Build Routine**

A conscientious operator is unlikely to miss getting his mower to the dealer or in-house mechanic for a major service interval. Those intervals are clearly spelled out in all owner's manuals, and for some reason, call it being human, most of us seem to remember "big things." Yet it's easy to forget, put off, or otherwise ignore the ongoing maintenance basics. We're in a rush at the beginning of the day, and burned out at the end of it. We just checked the oil, filters and blades yesterday morning, and everything was fine - we just cleaned the mower last week. Nothing could have changed that much.

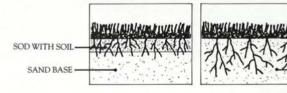
Too often, that assumption is followed by a "What happened?" when the machine breaks down the next day.

The key to religious ongoing maintenance is establishing a routine for you and your crew. What appears to be "a hassle" the first few times eventually becomes automatic. Crewmembers should be required to perform basic checks before any piece of equipment leaves the storage area. If a crewmember spots a problem during the morning's equipment inspection, make sure to compliment him on stopping a potential breakdown before it starts. You'll reinforce the diligence required to make daily maintenance a routine. And in the long run, the headaches you save may well be your own.



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