

Beyond nuts and bolts

Modern equipment maintenance means you watch for use patterns, trust mechanic intuition and have an inventory system that works.

By LUKE FRANK

Equipment care runs far deeper than changing fluids and checking parts.

When dealing with a significant amount of your company's budget—which maintenance and personnel represent—organization, education, communication and respect for each other and the equipment will place a company in a preventive posture, rather than demanding crisis management in peak season.

If there's an unsung hero in the landscape industry, it's probably your mechanic. Of all the people in your operation, "knuckle busters" are arguably the most responsible for the day-to-day success of a landscape company or golf course maintenance shop. But they can't do it alone.

Good equipment maintenance depends on training, organization and communication. Profitable landscape management practices require efficient technology, communication and record-keeping.

Not your customer's problem

"A good mechanic is essential for your business," says Eric Spalsbury, general manager of Albuquerque Grounds Maintenance (AGM), Inc. in Albuquerque, NM.

"Clients don't understand or want to hear about your equipment problems," he adds. "They'll find someone else who can service them." Downtime is costly. Equip-

ment sitting idle in the shop means less productivity in the field.

Ken Graves, with Desert Princess Country Club and Resort in Cathedral City, Calif., points out that part of management's responsibility is to continually strive to complete more work in less time.

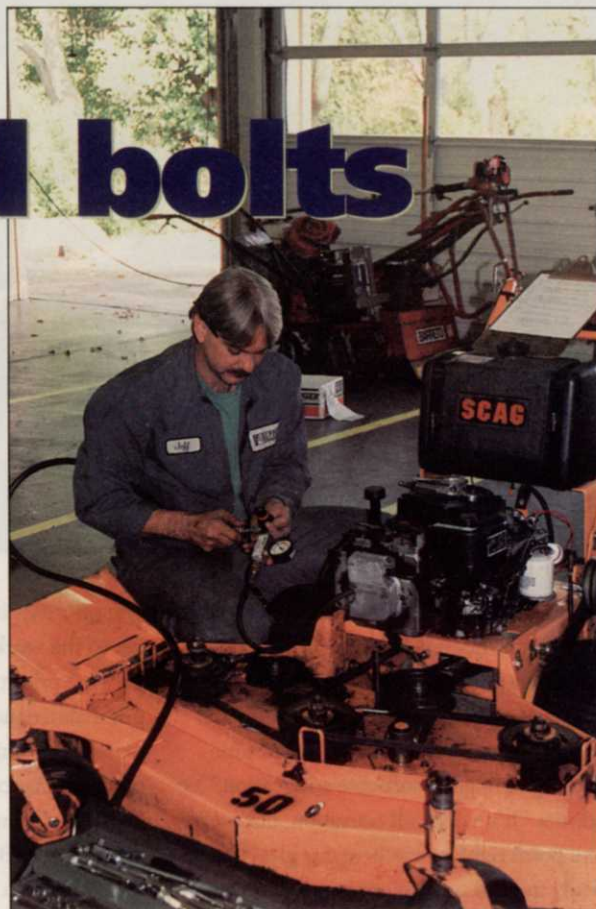
"And to a point, technology enables that to happen," he adds. "But with that philosophy, maintenance becomes increasingly important." His operation cultivates 400 acres of landscape and golf courses that sport consistent year-round traffic.

Ken Railey, who oversees \$3.5 million in equipment for Ruppert Landscape Co. Inc. in Maryland, offers that, although productivity is clearly important, safety is first in the proper maintenance of equipment. Of the 1,500-plus pieces of equipment under his domain, Railey reminds his seven shop managers that "safety is most important, then productivity, then image."

Take inventory now!

A stringent and current inventory system serves the mechanic, the crew and the company at every level. You must keep consistent and effective maintenance schedules. This keeps equipment performing the way manufacturers intended, which equates to properly performing, safe equipment.

Unfortunately, in the crush of a punishing season, common sense can elude us.



Maintenance schedules change because of what the crew learns about equipment.

The key? Having enough equipment to serve an expanding clientele without sitting on equipment that's not being used. It's an oscillating balance, but an inventory system, *any* system, will help.

Look for use, wear 'patterns'

Railey started with Ruppert about 15 years ago, tracking equipment with a binder and loose leaf paper. "I graduated to an index card system, then as the company continued to grow, I recognized the opportunity to log, analyze and compare maintenance procedures to find common denominators," he relates.

With the help of a computer software program, Railey compares shop activities for maintenance techniques, parts demands, equipment turnover and more. Patterns in equipment wear and failure begin to emerge.

PHOTO COURTESY RUPPERT LANDSCAPE CO.



◀ The Desert Princess crew keeps an eye on mower blades, in use 80 hours a week.

Interstate or inner city, your equipment needs to be documented. Spalsbury is looking for a turnkey software program to document equipment acquisition and maintenance. "We've spent a lot of time looking for a good software application," he admits. "It's a difficult transition, but we're at a point right now where our growth can really use the convenience and accuracy of computerized equipment maintenance."

"We track individual pieces of equipment by year, make and model," explains AGM's Fleet Manager George Cortez. "We log all maintenance and repairs for each machine, then we can see the history, which helps determine whether to repair or replace, and what to replace when we start tearing into a piece of equipment." New equipment is immediately added to the master list. Anything sold or retired is labeled accordingly, but records are kept to compare with similar pieces of equipment acquired down the road.

Train to maintain, retain

The link between inventory and maintenance is evident. Having the history of equipment quickly accessible will help you to repeat the positive, while preparing for past problems. Most agree that fleet vehicles are the most important equipment to the organization. "We have to have our trucks running or we can't do business," says Cortez. "Fleet trucks are our number-

one priority," insists Railey. "We have to get to the work site."

That priority manifests itself in the rigorous maintenance schedules assigned to Rupert's sales vehicles. "Our work trucks are on maintenance time schedules 'A,' 'B' and 'C,'" he explains. Twice during the landscape season 'B' and 'C' schedules are performed, which include washing the engine compartment, minor tune-up, oil change, lubrication, and a check of lights, tire pressure, belts, hoses, cables and cooling system. 'A' maintenance, performed once a season, includes washing the engine, frame and underbody, replacing all filters and fluids, a major tune-up, tightening all wheel lugs and axle flanges, and paint the vehicle's body, boards and wheels. In addition, each fleet vehicle gets a total reconditioning every year. "We're very thorough, and as a result, our work trucks usually perform to about 300,000 miles or around 20 years," he asserts.

How do you keep 1,543 pieces of small equipment running? Besides the basics, fluid and filter changes, it takes constant training and education, and a true team effort. Involve the crew, Railey asserts.

"Crew leaders and assistants perform the regular maintenance, and the mechanics handle all major repairs," he points out. "Our crews leaders clean and inspect all their equipment, change the oil, clean the filters, lubricate and sharpen blades twice weekly." Railey says that each crew spends about six hours a week on maintenance.

Graves bases his maintenance schedules strictly on manufacturer recommendations. "In the desert," he begins, "we really have to keep up, due to the heat and the stress placed on mowers churning through bermudagrass in the summer and ryegrass in the winter. We really have to watch the quality of the cut we get from our mowers. We go nonstop about 80 hours a week for maintenance on our golf turf equipment. Most of that is sharpening blades." His personal tip — use compressed air for daily cleaning. "When you use water everyday on a machine, it gets into the bearings and the fittings," he advises. "Water every day is just not good for equipment."

Railey begins with manufacturer recommendations, but then maintenance schedules are adjusted according to experience. "If there's a trick," he suggests, "it's

having an open mind. Every year our maintenance schedules change because of the input from crew members working with the equipment daily."

"That's the whole key," agrees Graves. "The operators have to communicate with the mechanics. There's no problem too small, because ultimately, small problems unaddressed lead to big problems."

Getting the crews to care seems to be a matter of generating respect among all members. Involve the entire crew in regular maintenance. Send them to distributor demonstrations and promotions, trade shows and association meetings. Encourage them to read trade journals. Get them involved. "You have to take care



PHOTO COURTESY RUPPERT LANDSCAPE CO.

Railey: repair logs went from index cards to computer programs.

of your people. A 'hire-for-life' philosophy, training, benefits," insists Railey.

"If we do our job well in the winter," Railey concludes, "then maintenance is slow in the summer."

Cortez agrees. "The real maintenance

occurs in the winter," he adds. "We go through every machine from top to bottom. We check the history of each piece of equipment, and how it performed during the summer, then move into checking engine compression to determine whether to

short-block or rebuild. We change all of the belts, tires, fittings, nuts, bearings and so forth."

—Luke Frank is a freelance writer for the landscape industry, based in Albuquerque, NM.

11 tips for winterizing outdoor power equipment

By PETE FERNALD

Anybody who uses power equipment and has changing seasons to deal with worries about the effects of winter layoffs, and with good reason. If your approach is just to throw your saw or trimmer on a shelf and figure you'll deal with it later, you can be pretty sure it'll be cranky, if not dead, when you pick it up again. And you'll face substantial service bills.

If you don't want the hassle (or cost) of rehabilitating your power equipment next spring, there are some quick and simple steps you can take now to make sure your equipment starts easy and performs well the next time you need it. Here are some useful winterizing tips:

1 PAY ATTENTION TO THE FUEL. You have two choices: drain it or stabilize it. The problem is that today's unleaded fuel has a shelf life of about 30 days. After that it starts to break down, build up varnishes and do all sorts of engine-choking things.

If you drain the fuel, make sure you get it out of all the carburetors and lines so they're dry. Taking the little extra time to do a complete job will pay off.

An even simpler approach is to add gas stabilizer to the fuel in the tank before you store the tool. That easy step goes a long way toward eliminating problems with fuel. You can buy stabilizer anywhere, and it's the single most important thing you can do to winterize power equipment.

2 IS AIR CLEANER CLEAN? The filter element in the equipment's air cleaner should be clean and free from dust buildup. More important, it should be intact. If neither is

the case, either blow it out with compressed air or go get a new one.

3 REGREASE GEAR CASE. Even people who remember engines sometimes forget about gear cases. Any trimmer, brushcutter or PowerBroom needs its gear case serviced periodically, and now is a good time. It's a simple process. Remove the collar underneath the blade holder(s), then remove the plug on the case to pump new, clean grease in and push the old out. Then turn the head a couple of times to distribute it.

4 EXAMINE FUEL PICKUP TUBE. It's important to give the fuel pickup tube a hard look because it relates directly to engine performance. For the external tube, look for signs of weather checking and cracking. For the internal tube, look for deterioration. Even tiny holes allow air to get in, disturbing fuel flow. If you see anything suspicious, replace it.

5 CLEAN CYLINDER FINS. Most outdoor power equipment engines are air-cooled, and the fins around the cylinders do the cooling. If they're loaded with debris, they can't do their job. Take a minute to scrape off the fins with a piece of scrap wood.

6 UNCLOG MUFFLER/SPARK ARRESTER. Pull the cover/heat shield off the muffler assembly and make sure it's clear of grass, dirt and dust. If that stuff builds up too much in there, poor engine performance will be the least of your worries. Left untended, dirty muffler temperatures can get hot enough to light anything flammable. And dry grass burns.

7 REPLACE SPARK PLUG. Replacing a

spark plug is easy, so why wait? Do it now, not later.

8 CHECK WEAR, DAMAGE. It makes good sense, depending on how hard you use your gear, to inspect all the cables, gear cases, switches, etc. for signs of wear or damage. If you find a problem that will affect performance, control or safety—fix it. And do that every year at this time.

9 PROTECT EXPOSED SURFACES. If you store equipment where it's exposed to moisture, it's a good idea to coat exposed areas—especially wear surfaces—with a film of grease or oil. If it's a complicated piece, spray it with WD-40 at least. Do this and rust won't be a problem.

10 STORE PROPERLY. Now that you've gone through your gear and performed all the winterizing necessities, take a minute to think about how you're going to store it. Even carefully serviced equipment is going to suffer if it's dumped in a pile on the end of the bench, or kicked around the shop floor for a month or two. Our advice: shelves and hangers. Hang shafted tools up. You can get the heavy prongs at any hardware store. Store saws and hedge trimmers on high shelves, on plastic trays in case any oil or grease drops off. If it's a dusty space, cover the engines.

11 NEXT SPRING'S TASK. There's only one thing left, and you should wait until next spring to do it. That's checking, and possibly replacing, the fuel filter. If it's hard or dirty, get a new one.

—The author is technical services manager, Shindaiwa, Inc.