Ounce of Prevention

Strict maintenance schedules can cure utility vehicle breakdown blues

It would be easy to say that all utility vehicles look alike, but looks can be deceiving. Each brand mandates its own maintenance schedule.
their name begs you to use them. Their versatility tempts you to push them harder than you do other equipment. They can haul sand to that hard-to-reach hazard on No. 16, and then turn around to drag a pesticide sprayer around a fairway. It's a no-brainer to use them at every opportunity, right?

But the versatility of utility vehicles is also their curse. Your maintenance operation can slow to a crawl when they break down. That's why, despite their ruggedness, experts say utility vehicles need rigorous maintenance schedules to keep them running smoothly.

It would be easy to say all utility vehicles look alike, but looks can be deceiving. Each brand mandates its own maintenance schedule, and warranties may be voided if those are not followed. You can find the schedule your utility vehicles should follow in your owner's manual — a book too often found, still in its shrink-wrap, on the shelf above a superintendent's desk, says Rick Farris, manager of technical reliability for Club Car. The Augusta, Ga.-based company attaches an owner's manual to every piece of equipment it sells, and Farris advises his customers to use them.

"So many times, you walk into a facility to service a utility vehicle, and you find a stack of owner's manuals unopened," Farris says. "Some superintendents believe that they've been in the industry so long, they know all they need to about maintenance. That's a dangerous assumption to make, and it can cause headaches down the road."

Once you've cracked a manual and discovered the recommended maintenance schedule, post it prominently in your facility. It's not just the mechanic's responsibility to know it — every employee should understand his or her role in practicing preventative maintenance, says Eric Kulaas, shop foreman at the Renaissance Vinoy Resort & GC in St. Petersburg, Fla., and founder of the online mechanics' community turftech.com. Automate the maintenance schedule whenever possible, says Kulaas, who suggests entering the information into a computer program such as Qquest to remind you what maintenance needs to be done each day.

"The more automated the system is, the better off everyone is," Kulaas says. "You want to take the guesswork out of the situation. If you're not equipped to keep a record on a computer, make a checklist that your employees have to initial before they take a machine out on the course."

Graham Foot, manager of product support, field service and training for Raleigh, N.C.-based John Deere Turf Care, says utility vehicles often break down because they're carrying unreasonable loads. Superintendents should understand what the carrying capacities are for their vehicles and not exceed them.

Once, Foot traveled to a course in Malaysia to troubleshoot a fleet of vehicles. The general manager asked him to wait outside the maintenance facility while he brought a vehicle around for inspection. Foot was floored when he saw the vehicle carrying four times the recommended load — nearly 2,000 pounds of fertilizer and workers. That was all Foot needed to see to diagnose that fleet's problem.

"It's not just a matter of straining the axles or hurting the physical part of the machine," Foot says. "Overloading your machine causes uneven tire wear and extra strain on the engine. You're just asking for trouble unless you know what a vehicle's carrying capacity is."

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**Will Preventative Maintenance Become No Maintenance?**

Cars can now go 100,000 miles with little more than a tune-up. Will utility vehicles eventually go 1,000 hours with the same maintenance-free style? Here are some advances in utility-vehicle construction that will move them in that direction:

- **Lower number of grease points.**
  Graham Foot, manager of product support, field service and training for John Deere Turf Care, says utility vehicle manufacturers are starting to produce vehicles with fewer joints that need lubrication. That means less time greasing them and fewer parts to break.

- **Automatic transmissions.**
  Automatic transmissions will replace five-speeds and save maintenance budgets money in burned-out clutches, says Larry Jones, product manager at Textron Turf Care And Specialty Products.

- **Electric-powered vehicles.**
  Ron Mullen, supervisor of golf and turf product support for John Deere, says electric motors will require less maintenance than traditional combustion engines. Just remember to keep the batteries charged.

- **Steering column simplification.**
  Drive shafts currently have so many joints that it is easy for something to break down, Foot says. There is a movement toward less complex construction, which would reduce maintenance needs.

- **Plastic body construction.**
  Rust always threatens metal-framed machinery, but Jones says not to worry. As more durable plastics come to the market, utility vehicles will use more of them on the internal parts, protecting the inside of the machine as well as the outside.

—Frank H. Andorka Jr.
Create a checklist

Items that should be checked on a daily basis include oil levels, tire pressures and coolant levels, says Ron Mullen, supervisor of golf and turf product support for John Deere. Mullen, who was a superintendent for 20 years before joining John Deere, recommends superintendents buy a tire pressure gauge that measures in single pounds per square inch. Normal car air pressure gauges don’t allow superintendents the precision necessary for tires as small as those on utility vehicles, he says. Over-inflation will cause an uneven distribution of loads and excess tire wear, Mullen says.

Larry Jones, product manager at Textron Turf Care And Specialty Products, says keeping utility vehicles clean will also prolong their life. If grass clippings accumulate around fittings and sand gets inside hoses, they can clog fuel lines and eat away at bolts. “You have to wash your machines daily — that’s critical,” Jones says.

But the cleanest machine on the outside still can be sidelined by dirty fuel. Foot says moisture and mildew invade storage tanks and foul the fuel. In turn, the contaminants can clog a utility vehicle’s fuel injectors, which prevents the engine from running properly. Eventually, a poorly running engine will conk out. “It’s a lot cheaper to pay a little money for a proper storage container than it is to replace a whole engine,” Foot says.

Mullen recommends against using a fuel additive because there’s no standard method of judging what affect it will have on the machine.

Log the hours

Make sure you keep track of the hours your utility vehicles have logged since most maintenance schedules are based on those calculations. To keep an accurate track, superintendents should install hour counters on utility vehicles, Farris says.

“If you’re serious about a preventative maintenance program, an hour meter is a must buy,” Farris says. “If it doesn’t come standard on the equipment you buy, it’s important to install one yourself.”

Kulaas says the key to proper preventative maintenance is establishing a routine. If you do, the rest of the process is a breeze. “If you set up a rigorous maintenance schedule and stick to it religiously, you’re going to get a lot more life out of your vehicles,” Kulaas says. “Most of this equipment is well-made, and it will last you a long time if you just take care of it.”

Whatever you do, make sure your employees understand the importance of not abusing your utility vehicles, Foot says. “While utility vehicles are some of the most useful pieces of equipment your club can own, they’re not indestructible,” Foot says. “You have to take care of these machines the way you would take care of your own cars. A few easy preventative steps will extend the lives of these machines and increase your club’s return on investment.”

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