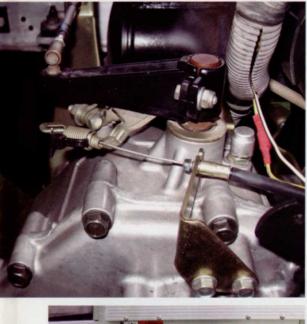
equipment ideas







The need for speed

Patrick S. McHugh, CGCS, director of golf course and community maintenance at the Boca Grove Golf Club in Boca Raton, Fla., wanted to increase the speed of the Club Car Turf 2 utility vehicles he, his supervisors and equipment manager use when touring the club's golf course and grounds. Equipment manager Mike Lukz heard about a new way to increase the speed of the vehicles used by the supervisors – not the regular maintenance staff – from Chet Waddell, equipment manager at The Polo Club of Boca Raton: By increasing the size of the rear wheels and tires, the ground speed of the vehicles could be increased. Originally, Waddell used 8-inch-by-5-inch wheels with 20-inch-by-10.5-inch-by-8-inch turf tires from a Scag zero-turn-radius mower on the rear of the Club Car Turf 2 vehicle.

Club Car uses a speed-control device on the rear axle that acts as a mechanical governor. Sometimes a mechanic or someone on the maintenance staff will use a wire tie (pictured) or bend the brackets to limit the spring travel forcing the cables to pull the carburetor to a wide open position. When operated in a wide-open position, the engine will reach its maximum revolutions-per-minute range quickly, at which point the electronic governor interrupts the ignition system killing the spark to the coil, causing the revolutions per minute to surge up and down while traveling at top speed. This protection is sometimes bypassed to stop the surging and to gain more speed leaving the engine to rev freely beyond its capability, which can result in catastrophic engine failure.

By using a larger rear tire, the drive ratio is changed between the engine and the ground, allowing for a much higher ground speed with a lower engine rpm. This method allows for the vehicle to go as fast as 18 mph using the unmodified speed control spring and as fast as 24 mph when limiting the speed control's spring travel. Modified or unmodified, the larger tires provide a speed increase without tampering with the engine's rpm limiter, keeping the over-rev protection in tact.

Because the aforementioned Scag rims are somewhat expensive, Lukz uses 8-inch-by-4-inch rims with a 4-on-4-inch lug pattern and 22-inch-by-11.5-inchby-8-inch four-ply tires. The narrower rim size compresses the tire width enough to clear the leaf springs and brake cables while allowing the tallest tire (8-inch rim size) available.



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Globetrotting consulting agronomist Terry Buchen visits many golf courses annually with his digital camera in-hand. He will share helpful ideas relating to maintenance equipment from the golf course superintendents he visits - as well as a few ideas of his own – with timely photos and captions that explore the changing world of golf course management.

Paint it white

S ean Duffy, CGCS, at The Club at Twin Eagles in Naples, Fla., hosts The ACE Group Classic on the Champions Tour annually in February. During the event, the top one inch of soil and thatch/organic matter above the hole liners (cups) is painted white so the players and television viewers can see the cups more easily. Hole-in-White Golf Cup Turf Whitener is used. When the Hole-in-White aerosol can is inserted upside down into the metal bracket that fits into the top of the 4 ¹/4-inch-diameter cup, the can is pushed down and turned with a flip of a wrist to spread the white paint around the cup.

Martin Rojas, a member of the Twin Eagle's maintenance staff, wanted to apply the paint better and more evenly. He came up with the idea of attaching the aerosol can to a metal bracket that attaches to an electric, cordless drill.

The two L-shape brackets, which were bought at The Home Depot in the doors and knobs department, were attached together to form a U-shape bracket. Rojas drilled a hole in the middle of the brackets joined together and used nuts and a bolt to attach the brackets to the cordless drill adjustable bit holder. He also attached nuts and bolts in the existing three holes in the brackets to help secure them. The aerosol can slips smoothly into the U-shape bracket. It's secured to the bracket with duct tape.

To prepare applying the whitener, a cotton towel is measured to fit and placed around the cup so the whitener isn't accidentally sprayed onto the turf. The aerosol can is pushed down to release the whitener simultaneously as the variable speed of the cordless drill is adjusted as needed to apply the whitener quickly and evenly. GCN

