Keep your vehicle team in top shape

our utility vehicles take on a lot of responsibility. Whether you have one UV that does it all, or you have a fleet taking care of your towing, hauling, and transport needs, chances are you depend on UVs more than you realize. With that in mind, think about where their upkeep falls on your list of priorities. Is it an afterthought? A once-a-season effort? A regular, proactive maintenance program for your utility vehicle can not only keep your operation running more smoothly, but also save money in the long run-in both maintenance costs and lost work time.

Regularly maintaining your utility vehicle begins with the one component most often ignored-the operator's manual. Each manufacturer and model of vehicle needs specialized care that is detailed in the manual, ranging from the recommended fuel type to the air filter replacement schedule. Most importantly, the manuals contain safety information that is essential to keeping your team of operators safe and productive.

After becoming familiar with the operator's manual, set up a regular maintenance log to record your efforts for each specific vehicle. By doing so, you can keep track of the maintenance schedules as well as log any problems that may occur during the season.

While performing maintenance, pay attention to several key areas. First on that list should be the engine. It needs to be clean and free of debris to operate at maximum efficiency. Also, it is the one part of the vehicle that all other systems depend on.

The next few items--oil, coolant, and the air filter--should be placed on a schedule and monitored according to the operator's recommendations.. Be sure not to overfill or underfill, which can reduce power and cause fuel pump and breather problems. Look for warning signs like contami-

nants or a burnt smell that could indicate overheating.

If your UV has a liquid-cooled engine, check the manual to be sure that you are using the correct antifreeze and flushing the radiator at proper intervals. If you have an air-cooled engine, check the prescreen and cooling fins to make sure they are free of debris and dirt.

Try to check the air filter only as often as your operator's manual recommends. When it is time to open the system, wipe down the area around the intake hose and filter canister to prevent contaminants from entering the system. If the filter appears dirty, replace the filter rather than cleaning it.

Check Daily

There are a few things that can be done every day. Checking for leaks below the parked equipment and inspecting the electrical system are things that should become a habit each day before the machine is turned on. Make sure the wiring is neither worn nor frayed. Check the spark plugs to make sure that the electrodes have brown or gray/tan deposits on them. Darker deposits indicate that the engine is using more oil than necessary, and lighter deposits show an air fuel mixture that is too lean.

It seems obvious to check the fuel, but keep in mind that new, clean fuel keeps the vehicle running smoothly. Fuel breaks down in about 30 days, so be sure to drain any fuel that is left sitting over time. In addition, check the lubricants in the drive train because they act as cleaners within the machine.

Every so often, check the belts in the vehicles for wear and fraying. If they are not in excellent condition, change them and inspect further for rubbing or pulleys that are out of



than 80 percent discharged.

Finally, have your dealer service your utility vehicle once a year for a good bill of health. It's the last step in the process that keeps your most versatile piece of equipment in top shape for the season.

the utility vehicle has not been used

that day. Also, be sure the batteries

are fully charged before using the

vehicle each day. The typical charge

time is 10 to 12 hours, but as much as

four additional hours of charging

may be required when they are more

This article was contributed by Bob Laveau, marketing manager, John Deere Vehicle Group.



Yamaha's G21A

This utility vehicle sports a 357 cc engine with increased hp of 11.4, which allows you to haul up to 800 lbs. in its cargo box. Users benefit ergonomically from a redesigned seat, 6-ply tires, and a heavy-duty rear suspension that smooths out the ride.

The G21-A also features a low gear ratio transmission for hill-climbing as well as front and rear mechanical brakes.

Yamaha Golf-Car Co.

1-866-747-4027

www.yamahagolfcar.com

For more information, circle 142



E-Z-GO's Workhorse 1200 LX

The Workhorse 1200 LX is a multi-purpose utility vehicle designed to handle a wide variety of grounds maintenance tasks reliably. A gasoline-powered unit, the Workhorse LX features a 13-cubic-ft. cargo bed, a 1,200-lb. payload capacity and an 11-hp, 350-cc overhead cam engine. Other features include a cargo bed liner, a truck-like cowl made of unbreakable RIM plastic with steel rear body panels, differential scuff guards, tubular front bumpers, and Halogen headlights.

E-Z-GO

1-800-241-5855

www.ezgo.com

For more information, circle 143





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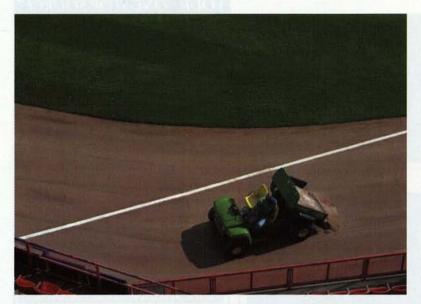
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John Deere's Turf Gator

The John Deere Turf Gator is designed for quiet operation, a larger cargo bed and faster speeds (maximum speed 18 mph). It is equipped with a 44- x 49- x 9-in. cargo bed with a 500-lb. payload capacity. Noise levels on the Turf Gator have been reduced through: an engine and exhaust system that are isolated from the frame and chassis; a new large volume muffler designed to reduce noise; new barriers and sound absorbers; and the ground speed governor and starter generator. And marks on turf are minimized due to the vehicle's low ground pressure and a low center of gravity.

John Deere 1-800-537-8233 www.johndeere.com For more information, circle 144

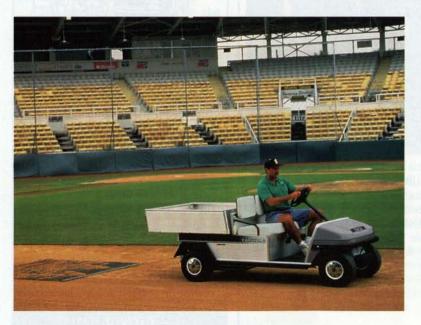


Toro's Workman® 1100

The Toro Co.'s new Workman 1100 (12 hp) offers improved traction and ride provided by a unique Active In-Frame™ suspension, which allows all vehicle tires to remain on the ground and to twist easier over rough terrain. The Workman 1100 is the second of Toro's mid-duty vehicles and combined with the Workman 2100 (16 hp) the duo are the most powerful mid-duty vehicles in their class, says Toro.

Additional features include corrosion and dent resistant hood and bed, multiple integrated storage areas, and a 12-hp pedal start Kohler® Command ProTM engine. Floatation tires come standard on the Workman and it offers the highest payload capacity of its class.

The Toro Company 1-952-888-8801 www.toro.com For more information, circle 146



Club Car's Carryall 2 Plus

This unit sports a 351cc, 11-hp gasoline, key-start engine that can do 18 mph and hauls up to 1.200 lbs. total vehicle load. Durability. Versatility. Power. Club Car vehicles make a wide range of chores easier to perform in less time because of their durability, versatility, and power, says the manufacturer. They can haul practically anything, from lumber and piping to plants and shrubs. The lightweight aluminum construction enables users to work in rugged sites while not damaging turf.

Club Car, Inc. 1-800-258-2227 www.clubcar.com For more information, circle 145



Smithco's Red Rider

The Smithco Red Rider is ideal for transporting mowers, equipment, and people, says the manufacturer. It can accommodate up to six workers, and that space is low to the ground and accessible via an "easy load" tailgate design, says Smithco. The Red Rider can hit 10 mph with its 8-hp Kohler electric start engine, offers a choice of hitch options, and has a 1,000-lb. load capacity.

Smithco 1-610-688-4009 www.smithco.com For more information, circle 147



Kawasaki's Mule 520

The Mule™ 520 utility vehicle is larger than a full-sized ATV but smaller than a compact pickup truck; it has a bench seat for two and a tilting rear cargo bed. The vehicle is powered by an air-cooled 286cc OHV four-stroke single-cylinder engine and features a dual-mode differential. Kawasaki's continuously variable belt-drive automatic transmission transmits power to the rear wheels, which simplifies driver operation and increases both engine and powertrain life, says the manufacturer.

With a cargo capacity of 350 lbs. and a towing capacity of 900 lbs., the Mule 520 rides on broad, smooth-tread tires to minimize damage to delicate surfaces.

Kawasaki 1-877-529-6853 www.kawasaki.com For more information, circle 148

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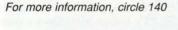
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Circle 115 on Inquiry Card



KY bluegrass in OR

Seed Research of Oregon has intro-Showcase duced its Kentucky Bluegrass as a new grass seed variety. Showcase is an advance in the development of Kentucky bluegrass for golf course superintendents, sod growers, and sports field managers, says the company because Showcase, unlike other bluegrasses, tolerates fairwaymowing heights (1/2 in. or 25 mm) and performs well in the shade. It also has early spring green-up and excellent fall color, says the company.





Field protection

COVERMASTER® field cover protection system reduces necessary labor for handling, the company says. From lightweight, heat-reflective covers to the storage roller (TARPMATETM) to TARP MACHINE™, a tarp rolling machine that attaches to the PTO of a 14-hp tractor, the system requires fewer people, even in heavy rain.

As for covers themselves, COVER-MASTER has many models available, including silver/white, orange/white, green/white, or blue/white, all of which are less than half the weight of conventional tarps and can be installed or removed in minimum time.

For more information, circle 135



Help for injuries, bad hops

The Kromer Co. has developed a new attachment for its Athletic Field Maintenance Machine (AFMM) called the Ridge Remover. Previously there's been no specific equipment to get rid of the dangerous ridge of infield material hidden by the grass around the skinned area of ball diamonds; now the Ridge Remover eliminates this ridge using a rotary hydraulic-driven, nylon-bristled broom that spreads the ridge to the infield, where it is leveled by the AFMM's broom attachment.

For more information, circle 136

Landscape fabric

Typar Premium Landscape Fabric defends against weeds without backbreaking work or using chemicals. A one-time installation prevents weed growth for years and the manufacturer provides a performance guarantee if the fabric is installed and covered properly.

Continuous polypropylene fibers bonded by heat and pressure create a uniform and porous nonwoven fabric that's resistant to punctures, rotting, mildew, microorganisms, and chemicals. The fabric is lightweight.

Typar Premium fabric sizes range

from 3 x 25 ft. to 151 x 300 ft. and can be used for a variety of different purposes, including soil retention and walkway support.

For more information, circle 130



Floating surface aerator

AquaMaster **Fountains** Aerators has introduced its latest product, capable of creating a random boil or bubble effect on the water's surface. This low profile aerator is easily installed and works efficiently with any depth, says the company, and maintains a natural aquatic landscape. The aerator is available from 1 to 5 HP with a 3-year motor warranty, and is also UL Listed.

For more information, circle 141

Engine parts

Prime Line has added 328 part numbers to its line of engine parts. According to Prime Line, this initiative is part of its overall strategy to increase coverage and offer customers a high quality one-stop source for the engine parts you need. Currently the line includes replacement parts coverage for the top engine makers including Briggs & Stratton, Tecumseh, Honda, Kawasaki, Kohler, Lawn Boy, Onan, and Wisconsin.

Prime Line says they've made it a priority to continue adding to their engine parts program and that they've beefed up their distribution so that "We can always deliver the parts our customers need on time wherever they are."

For more information, circle 131

New perennial ryegrass

Amazing Perennial Ryegrass debuts this fall from Ampac Seed Co.

as part of their Turf Perfect® turf line. This variety is notably darker than many ryegrasses available. Bred from Rutgers University, Amazing has disease resistance and golf-course quality performance. In the most recent NTEP reports, Amazing scored statistically equal to the highest rating in more than 18 categories including genetic color, winter color, athletic field quality, home lawn quality, leaf texture, traffic tolerance, leaf spot, dollar spot, and melting out, according to Ampac.

For more information, circle 132



Trenchers

Caterpillar® trenchers were developed for cutting narrow, straight trenches in a variety of soil types, and operate with the skid steer loader traveling in reverse with the boom angled down between 45 and 65 degrees from horizontal.

The model T9 operates to a maximum depth of 48 in. and maximum width of 10 in., while the T15 uses auxiliary hydraulics to reach 60 in. deep and up to 12 in. wide. Both units feature a direct drive system with a variable-speed, bi-directional, gerotorstyle hydraulic motor.

For more information, circle 133



Mid-mount mower

Bush Hog's mid-mount Zero Turn mowers feature maneuverability in a compact size. The ZT's have a pivoting front axle that follows ground contours, large caster wheels to reduce soil compaction, and a 18,500 fpm blade tip speed for clean cutting and even clipping distribution.

A "quick foot" height adjustment system quickly goes from 1 1/2 in. to 5 in. in 1/4-in. increments, while the dual caliper parking brake locks both drive wheels for secure transportation. These machines are available in your choice of four different engines and three decks (54, 60 & 72 in.) and cover ground speeds up to 10 mph. All models have a 2-year limited warranty. For more information, circle 134



Weed control

Chipco Professional Products Group of Aventis Environmental Science has introduced a line of herbicides and plant growth regulators (PGRs) for professionals. Acclaim® Extra systemic herbicide is a postemergent that can control crabgrass in a single application without harming desirable turf. Finale® is a non-selec-



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Circle 116 on Inquiry Card.

tive postemergent that can control many annual and perennial grasses and broadleaf weeds, including poison ivy, dandelion, thistle, and white clover, with visible results in 1-4 days.

Ronstar® herbicide offers seasonlong control of 25 broadleaf weeds and grasses, including goosegrass and crabgrass, and can provide up to 120 days of control with one preemergent application, the company says, without inhibiting turf or ornamental growth. It is available in granular, water-soluble packet, and a fertilizer mixture. Proxy® is a Type II PGR for use on cool-season turfgrass; by slowing turf growth, it reduces mowing frequency and clipping volume, says Chipco.

For more information, circle 137

Backpack blower

Here's the EB4400 backpack blower from RedMax, a division of Komatsu Zenoah America Inc. The



company says its unit is rugged, quiet, and lightweight (19.4 lbs.), and moves up to 565 cfm of air at speeds up to 160 mph, all the while producing just 69 dB (A) of noise from its 41.5cc twocycle engine.

For more information, circle 138

Digging attachment Ditch Witch manufacturer The Charles Machine Works has added a hydraulically traversing (optional manual) digging attachment for their model 5700 trencher. The model H514



attachment replaces the H412 and features a sealed Eaton motor and new bearings and headshaft to eliminate need to pre-load bearings. The larger lifting cylinder offers more capacity and effectiveness, especially when coupled with the optional 5-foot boom, says the company. This model also uses components common to Ditch Witch H313 and H314 attachments to offer increased parts supply. For more information, circle 139

GET IN THE SWIM

If you know a child with muscular dystrophy who can benefit from a special getaway, tell him or her about MDA summer camps. They're fun and free!

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Muscular Dystrophy Association Jerry Lewis, National Chairman 1-800-572-1717 • www.mdausa.org

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John Secor, left, superintendent of Key Royale Club, Holmes Beach, FL, sits beside his Greens Committee chairman, Tom Burke, in the club's new Cushman Turf-Truckster®. Secor won the unit in a drawing sponsored by BASF Professional Turf & Ornamental Group at this year's Golf Course Superintendents Association of America show.

John Deere expands irrigation services

Deere & Company has acquired Richton International Corp. and plans to combine that company's irrigation equipment business-Century Supply-with the recently purchased McGinnis Farms to form "John Deere Landscapes" and offer a full line of products and services to irrigation and landscape professionals.

"In addition to significantly expanding our ability to serve irrigation customers, Century brings us more than 160 new locations and a strong team of people," said John Jenkins, president of Deere's Worldwide Commercial and Consumer Equipment Div.

Forbes has named Richton as one of the "200 Best Small Companies in the U.S." for 3 consecutive years.

Dow buys Rohm and Haas's ag chemical biz

Dow AgroSciences LLC, a subsidiary of Dow Chemical Co., will integrate Rohm and Haas's Agricultural Chemicals business into its own following the parent company's recent acquisition. Raj Gupta, chairman and CEO of Rohm and Haas, said the ag chemicals business and employees "will flourish more as part of a global firm with a stronger market presence."

Products acquired include the fungicide Dithane, the herbicide Goal, and the MAC family of insecticides, including Confirm, Mimic, and Intrepid (all brand names are trademarks of Dow AgroSciences LLC).

VA Tech's turf goes modular

Lane Stadium, home to the Virginia Tech Hokies, will have the ITM natural grass system installed in time for the 2001 football season, according to GreenTech, Inc., maker of the system. Giants Stadium in The Meadowlands, NJ, currently uses the ITM system.

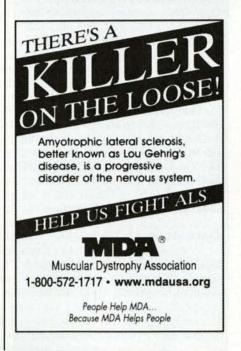
GreenTech CEO Chris Scott said, "The system provides a flat playing surface, excellent drainage, an air vacuum and blower system which may add heat in the future, remote monitoring, and control of field conditions and maintenance procedures. They also will be able to move sections of the field out of the way for next year's planned stadium expansion, and will have the possibility of hosting concerts at Lane Stadium during the fall without damaging the field."

(See related story, page 22.)

US technology, German "stihl"

Deere & Company has signed a technology sharing agreement with Andreas Stihl AG & Co., licensing Stihl to design, develop, and manufacture engines using a reduced-emission, 2-stroke engine fuel handling technology developed by John Deere. Stihl produces the #1-selling brand of chain saws and cutoff machines worldwide.

Deere is offering the fuel handling technology to other companies under license agreements, saying it may have applications beyond handheld equipment, such as walk-behind products, utility engines, snowmobiles, and motor scooters.



2001 continued

Nell Cobb, (888) 268-9888 or sod-farm@c-gate.net.

November 10-13

12th annual Green Industry Expo (GIE), Tampa, FL. Contact: Professional Lawn Care Association of America, 1000 Johnson Ferry Rd., NE, Suite C-135, Marietta, GA 30068-2112; (770) 973-2019; fax (770) 578-6071; info@gieonline.com. Web site: http://www.gieonline.com.

November 13-15

New York State Turfgrass Association's (NYSTA) Turf and Grounds Exposition, Oncenter, Syracuse, NY. Contact: NYSTA, PO Box 612, Latham, NY 12110; (518) 783-1229/(800) 873-TURF (8873); fax (518) 783-1258; nysta@nysta.org. Web site: http://www.nysta.org.

December 3-6

35th Ohio Turfgrass Conference & Show, Greater Columbus Convention Center, Columbus, OH. Contact: Kevin Thompson, OTF, PO Box 3388, Zanesville, OH 43702-3388; (888) 683-3445 or (740) 452-4541, ext. 3151; fax (740) 452-2552. Web site: http://www.ohioturfgrass.org.

December 5-7

The Rocky Mountain Regional Turfgrass Association's (RMRTA) 48th annual Conference & Trade Show, Colorado Convention Center, Denver, CO. Contact: RMRTA, 9101 E. Kenyon Ave., Suite 3000, Denver, CO 80237-1805; (303) 770-2220; fax (303) 770-1812; rmrta@gwami.com.

December 11-13

New Jersey Turfgrass Expo 2001, Trump Taj Mahal Resort & Casino, Atlantic City, NJ. Contact: Rutgers University, (732) 932-9375. Watering just at the time of wilting will maximize the time between each watering to give the infrequent part of this general rule of thumb. When wilt occurs nearly all of the available water in the soil is gone and you need to supply enough water to completely fill the root zone again. Think of your root zone as a tank of water. Run the tank near empty and then fill it back up. Filling the tank or thoroughly watering the field is another way of "deep" irrigation. expressing Depending on the soil's water holding capacity, it may take 0.5 to 1.5 inches of water to replenish the moisture between these infrequent waterings.

Sand-based systems store less water so they need to be checked more often (daily), but not necessarily watered more often. Mild wilting on sand-based fields is a mandatory part of proper management to maximize rooting and traffic tolerance. Since water storage is minimal in sand systems, be prepared to water shortly after onset of wilt. A sand field showing mild wilt will usually need watering within 24 hours. If wilt is carried too far then tire tracking from equipment may injure turf. Tire traffic on severely wilted turf will

cause brown grass in the tire tracks a few days after driving on the wilted grass.

Black and gray discoloration of soils often referred to as "black layer," is a clear indication of excessive and improper irrigation. A nasal inspection of the soil will easily detect a stinky odor of methane gas from the anaerobic condition. This is a common problem on sand-based and native soil fields that are sodded and then overwatered in an attempt to make the sod grow-in faster.

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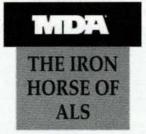
This summer I met some great people at the Tennessee Valley Sports Turf Chapter's workshop in Knoxville. In addition to teaching me the greeting "hi-y'all," our host Bobby Campbell showed us his irrigation system on the Volunteers Stadium Field. As Bobby bent over and grunted to manually turn on one of the six big gun irrigation heads he imparted this bit of wisdom "over watering is not a problem for us since we have to walk across the field each time before we turn on the water." It's not the tool, but how you use it. Bye y'all.



Much

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When Lou Gehrig's widow chose an organization to lead the fight against amyotrophic lateral sclerosis — the muscle-wasting disease that killed her husband — she selected the Muscular Dystrophy Association.

Since the time she served as MDA national campaign chairman, the Association has consistently led the battle against ALS. MDA maintains the world's largest nongovernmental ALS research and patient services program.

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