

ETHANOL 101:

TIPS FOR GOOD ENGINE HEALTH

MORE THAN 90% of the fuel pumped in the US is now an ethanol blend, so there's a good chance that your outdoor power equipment might be suffering from the negative effects of ethanol-blended gas. Fuel with more than 10% ethanol, such as E15 is dangerous and in fact, illegal to use in small gasoline engines.

OPE users must equip themselves with a better understanding of how ethanol impacts the engine in order to take steps toward prevention. And then, owners need to understand the best products on the market to help them maintain good engine, and equipment, health.

Ethanol-blended fuel begins degrading 30 days after its

pumped. This means, if fuel sits in a portable gas can for a few months, or even an entire season, the gas should be replaced with fresh fuel. If not, equipment owners can face real challenges, especially inside the engine, where the real issues unfold:

- Ethanol-based fuels attract moisture, which eventually separates from the fuel
- A layer of ethanol-enriched water forms at the bottom of the tank, which is highly corrosive for engine parts
- Gum and varnish forms as the fuel breaks down, resulting in stuck intake valves, clogged fuel lines and carburetor jets

The engine can experience issues such as poor starting, rough running, rust and corrosion, and in many cases, failure. And for equipment owners, repairs can be costly, especially since many warranties do not cover damage from fuel that isn't considered fresh.

Outdoor power equipment dealers are certainly on the frontlines in understanding the engine damage

caused by ethanol-blended fuel. Over the past 3 years, we have heard our own Briggs & Stratton dealers speak more and more about the negative effects of ethanol-blended gasoline. In fact, according to an independent power equipment dealer survey, 93% of dealers said ethanol was a primary cause of engine problems in 2012.

If using fresh fuel is the first step to good engine health, the second is using a fuel stabilizer and treatment that combats the negative effects of ethanol.

Fuel treatments and stabilizers are a cost-effective, successful means for extending the life of equipment, and the equipment's engine.

However, equipment owners need to be careful when choosing the right fuel treatment and stabilizer. It's critical to look for products developed by companies that truly know engines, and that have the engineering expertise to understand how best to protect them. Additionally, owners should feel confident that the product they choose has been thoroughly tested, offers maximum protection, and stabilizes fuel for more than a year after opening.

The best options include several ingredients, including triple antioxidant formulas that protect the entire fuel system. Additional ingredients to look for include:

- Corrosion inhibitors that form a protective barrier on metal parts, to help prevent rust and corrosion
- Metal de-activators, to stop aggressive chemical reactions caused by dissolved metal ions in the fuel
- Detergent ingredients that help prevent gum and varnish build-up
- Water inhibitors, to protect against the harmful effects of water in fuel due to ethanol

And for equipment owners who want complete confidence that ethanol will not cause damage to their engines, they can use 100% ethanol-free canned fuel, now available at many outdoor power equipment dealers and repair centers, as well as major home improvement retailers.

Making proactive choices to protect your equipment from ethanol will protect the life of your equipment and save you time and money by eliminating the need for repair, returns and replacements-by Carissa Gingras, marketing director, consumer engine & service with Briggs & Stratton. ■



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TempLine removable synthetic turf paint

TempLine water-based paints are easy to apply and remove, with outstanding brightness, opacity, play durability and weather resistance in between. TempLine paint is available in three grades, depending on your needs for extended durability versus short-term utility and ease of removal. All three grades come ready to use in a broad range of colors formulated to dry fast and stay flexible without binding together turf fibers or infill granules. TempLine paints are also valued for the brightness and durability they provide without creating heavy build-up.

TempLine Turf Paints and Removers are formulated to work together as a highly efficient marking and removal system, especially when used with the TempLine Mantis Extractor.

Eco Chemical



John Deere Dense Turf rotary turf brush & 14 blade reel

John Deere Golf has launched the Dense Turf (DT) Rotary Brush and 14 Blade Reel. The new 14 Blade Reel lowers the frequency of clip by reducing the distance traveled between consecutive cuts of reel blades. The 14 Blade Reel is available now for Quick Adjust 5 (QA5) cutting units, and the 180SL and 220SL Walk Greens Mowers. The DT Rotary Turf Brush has an exclusive helix design for mounting the bristles that is similar to the blades of a reel. This design assures more consistent turf engagement and enables the brush to more effectively stand up more grass—without having to increase brush depth. The DT brush is ideal for dense-turf varieties of warm season turf grasses, and can also be used with cool-season varieties.

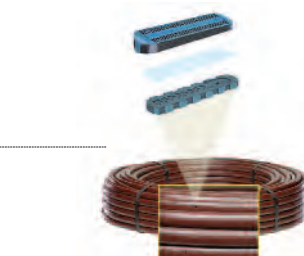
John Deere Golf



Netafim Techline CV dripline for slopes

With built-in check valves in each emitter to prevent low head drainage, Netafim Techline CV dripline offers a water-saving solution for irrigating landscapes with elevation changes, such as slopes and low lying areas. Techline CV check valves hold back up to 4.6' of water, which means water stays in the tubing when the irrigation is turned off and does not flow down to lower elevations. With check valves, Techline CV emitters turn on and off at the same time, balancing the irrigation coverage. Dripline systems without check valves can lose up to 1.3 gallons of water per 100 feet, resulting in plant damage or slippery surfaces. With advanced features that ensure reliable performance, Techline CV includes built-in physical root barriers in each emitter to prevent root intrusion. All emitters also have an anti-siphon design that inhibits dirt and debris from entering the tubing.

Netafim



New Rain Bird valve boxes

In today's price-sensitive marketplace, it can be challenging to provide top-quality irrigation systems that also fit within tight budgets. As a result, irrigation professionals often have to choose system components like valve boxes based upon tight project budgets. Now, Rain Bird has launched a line of durable, versatile valve boxes that fit into almost any budget without sacrificing quality—PVB Professional Series Valve Boxes. Featuring light but durable construction, the PVB Professional Series Valve Boxes and lids come in a wide variety of sizes and configurations to meet any irrigation site's needs. Round, mini, standard and jumbo options are available in green and black, as well as tan for more arid landscapes and purple for reclaimed water applications. Standard and jumbo valve box extensions are also available.

Rain Bird



Four new ETQ fungicides from SipcamAdvan

SipcamAdvan expands its ETQ fungicide portfolio for season-long use with the addition of four new products. Echo Dyad ETQ, E-Scape ETQ, Eclipse ETQ and Sipcam Clearscape ETQ combine proven active ingredients with SipcamAdvan's exclusive ETQ technology. Echo Dyad ETQ contains chlorothalonil, E-Scape ETQ contains chlorothalonil and tebuconazole, Eclipse ETQ contains iprodione and Sipcam Clearscape ETQ contains tebuconazole. All incorporate SipcamAdvan ETQ technology to optimize turfgrass color, strength, density and consistency by protecting turf from UVA and UVB rays, heat and other stress factors.

SipcamAdvan



Technomad's all-inclusive, outdoor audio solution

Houston-area systems design and integration firm Covenant Communications has gradually transformed sports audio for the Alvin School District in southern Texas in recent years, installing Technomad advanced audio loudspeakers across baseball and softball fields, a large football stadium and other athletic venues to improve quality and coverage. Covenant Communications extended those audio benefits to the new batting cages at Manvel High School this spring, injecting fresh energy into the arduous drill of batting practice. The Technomad solution here covers all the bases, bringing together two full-range loudspeakers, an outdoor amplifier and a flexible audio control system. All components are completely weatherproof for protection against the heat, humidity and moisture of the harsh coastal-area climate.

Technomad LLC



AirDrain synthetic turf drainage

AirField Systems AirDrain synthetic turf drainage doubles as a 100% vertical drainage layer and shock pad. The company says it provides a 14.7% reduction in Gmax over a cement/asphalt sub-base, and an 18.9% reduction in GMAX over compacted gravel sub-base. Whether installed on an aggregate sub-base, concrete or asphalt the AirDrain for Synthetic Turf drainage helps provide you with consistent Gmax and shock attenuation properties which are a major contributor to the reduction of concussions and the safety of your players. Some factors that might influence a change in GMAX would be an inconsistency of the infill or wear of the synthetic turf fibers. Unlike traditional shock pads or e-layers the AirDrain is 1" high, has a 92% air void and a vertical and lateral drainage rate which cannot be matched by any other product in the industry.

AirField Systems