

Gas with ethanol can make small engines fail

The Environmental Protection Agency has approved gasoline with 15 percent ethanol for use in cars year 2001 or newer, yet it prohibits its use in mowers and other power equipment, stating it may cause damage. A Department of Energy study found that E15 caused hotter operating temperatures, erratic running, and engine-part failure. But even gas with the usual 10 percent ethanol (E10) could help destroy small engines.

"Ethanol has inherent properties that can cause corrosion of metal parts, including carburetors, degradation of plastic and rubber components, harder starting, and reduced engine life," says Marv Klowak, global vice president of research and development for Briggs & Stratton, the largest manufacturer of small engines. "The higher the ethanol content, the more acute the effects." Servicing dealers are reporting similar problems, even with E10, according to the Outdoor Power Equipment Institute, the industry's trade group.

The OPEI also claims that proposed warnings at pumps are insufficient and that customers will blame equipment makers should mowers and other outdoor gear fail from being accidentally fueled with E15 gasoline. Using gasoline with more than the usual 10-percent ethanol has long voided most small-engine warranties but, until recently, the chance of doing so has been minimal.

Fuel additives such as Sta-Bil are now claimed to protect engines from ethanol by preventing it from settling out of the gasoline, attracting moisture, and concentrating its corrosive effects; we have not yet tested those additives. Here are other ways to protect your equipment:

- For smaller string trimmer and leaf blower engines, consider using ethanol-free fuel. Sears, home centers, marinas, and some equipment dealers sell it, though at a premium over what you'd pay on the street. The quart cans sold at retail cost about \$5 to \$8—still cheaper than a new carburetor or engine.
- Use mowers and riders often during the mowing season to help burn the fuel before the ethanol can attract water and draw it into the fuel system. Also be sure to treat fuel with a stabilizer and run mowers and other larger equipment dry before storing it for the season.

