

Have you been having problems with your small motors ...Outboards, chainsaws, leaf blowers, generators? Because of the increase in repairs I am facing on a daily basis in our small motor shop, I have prepared a paper for those that have been plagued with problems with their motors. First and foremost, the gasoline you buy today is not the same as it was. Some gasoline's today contain Ethanol which allows any moisture in the fuel system to enter the carburetor. Fuel systems usually contain a fine screen that allows fuel to pass through but not water...here in lies the problem...got your attention! In the USA gasoline manufacturer's have been put up to 10% ethanol and now cranking it up to 15%. Although the industry and federal government don't release figures on the national average ethanol content of gasoline in Canada, observers say it is likely around 6.5 per cent. Any % of ethanol will allow water into the carburettor bypassing the filters and sediment bowls that usually had water in the bottom you could drain out.

Small-engine repairmen tell Popular Mechanics that ethanol mixed with gasoline allowing water corroding and damaging outboard motors, chain saws, string trimmers, generators and other outdoor equipment at an alarming clip. To stretch out the volume of petroleum - based gasoline, manufacturers are substituting alcohol derived by growing plants to produce a mash and distill alcohol from millions of acres of food bearing land...as you know the petroleum that is coming from the ground is coming to an end. "End-of-Oil Apocalypse Looms" can be found online. Most of the problems I see is where the motor is used less than once every two or three weeks. The alcohol/ethanol as well as diluting the gasoline and removing its kick, it allows water to be absorbed in the fuel and that allows it to go by the fine screens in the fuel system that would normally keep out the water. So now as well as having a chemical that is eating you older natural rubber seals and gaskets...water is now laying in the fine brass jets corroding them to the blockage point and won't let the engine rev up to top speed or the goop plugs up the idle jets and it won't idle properly so out comes the screw driver and speed up the engine so the next time you go to engage gear at a way to high idle speed , the bottom end gears are blown out...I have fixed two motors recently because of the problem.

Here are a few tips, buy as little gasoline as possible, so that you run through your gas supply more quickly rather than letting the gasoline sit around and chemically decompose—a process that can start in as little as **two weeks**.

Also when oil is added to ethanol contained fuel the cetane rating drops very quickly so if you are racing that mixed fuel Enduro motor bike don't use last week's fuel mix if you want the maximum kick out of the fuel.

In the midst of all this a new product has hit the market... because of all that ethanol-based wear and tear, now you can buy Boutique fuel for you little motors in 1 quart cans...ethanol free.



Like it or not, ethanol in gas is here to stay. Although it does reduce pollution in our atmosphere, it can cause problems for many collector cars, boats, and older outdoor power equipment because of some of the side effects related to its use. When people talk about ethanol in today's pump gas, they're referring to E5/10, which is a formulation that contains 95 percent gasoline and 5 percent ethanol. Car manufacturers are now building engines that can run on 51 to 83 percent ethanol, which is often called E85 or flex fuel. Ethanol is refined from grain alcohol; most specifically, corn, in North America; but it can also be made from switch grass, manure, willow trees, and even sugar cane in some countries.

