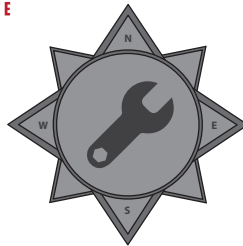


TWO-CYCLE FUEL MIXING

The worst thing that can happen to you with a gas engine is to have that engine lock up and die. That's pretty much the end of that item, whether it's a leaf blower or a motorcycle. The end result is a very expensive repair job or often a whole new engine. And all this can be avoided with a little bit of knowledge about fuel.

FLIP OVER FOR YOUR NEXT CHALLENGE



EARN THIS NUGGET

- Identify the type of engines that your household has, whether they are four-cycle or two-cycle.
- Determine if the two cycle engines are pre-mix or whether they have an auto-oil feed.
- Pre-mix fuel for the engines to the correct ratio, if possible, using a ratio jug.

So, there are two types of engines that are commonly used: a four-cycle engine and a two-cycle engine. A four-cycle is a heavier, more complex engine that you will get in cars, trucks, and larger motorcycles. Whereas the two-cycle is smaller, lighter, puts out great power at higher revolutions, but is not as robust. The chief difference is that the two-cycle does not have valves as such, but uses the center of the piston as its valve. The downside of this is oil does not get to the areas that need it. So oil needs to be in the fuel or the engine will seize up. Some engines will have a separate oil tank that feeds oil into the fuel. For many small engines, pre-mixing the fuel with the right quantity of two-cycle oil is essential.

- Perhaps the easiest, but certainly not the cheapest option is to buy the small single-portion bottles of two-cycle oil that you can add to a gallon of fuel. This makes the task super easy.
- A cheaper way is to buy a much larger container of oil and use a ratio cup. This will allow you to tailor the exact ratio of oil and fuel needed for your specific engine.

To use a ratio measuring cup, simply decide how much fuel you are going to mix, one gallon, two gallons, etc. Next, find the reference on the side of the cup for the gallons you intend to mix. Then look down the side for the ratio that is recommended by the engine you intend to mix for. For a chainsaw, for instance, the ratio might be 50:1, so for every fluid ounce of oil there would be fifty ounces of gasoline. Fill the cup to the 50:1 level for the number of gallons of fuel you have in a gas can, pour that measure of oil into the can and mix well, and you have safe fuel for your engine.

Two last things: Avoid fuel that contains ethanol in it like the plague. This will gum up small engine carburetors if they are left to stand more than a couple of weeks and create an expensive repair bill or many frustrating hours. And never put pre-mix fuel into a four-cycle engine.

