

“Easy To Make” Hydrogen Generator Boosts Mileage

Add hydrogen to gas and you can improve your gas mileage. The more you add, the more mileage you gain. Make the hydrogen safely and inexpensively, and you have a way to save money on expensive fuel.

For more than two decades, 74-year-old Robert Ferreira has been working on his on-the-go hydrogen generator. He says he has proven the idea in his 1990 Chevy van. The unit wires to the 12-volt system and the hydrogen gas line simply ties into the fuel injection system.

Ferreira thinks his system could be manufactured far less expensively than other supplementary hydrogen gas systems on the market. He also says he's making hydrogen so efficiently in his unit that he thinks it might be possible to run on 100 percent hydrogen if the unit were refined.

Ferreira's prototype is made of PVC pipes, plexiglass and rubber seals made from the rubber bladders found in water tanks. The system is self-sustaining with a relay.

“When the water in the generator gets down to a certain point, the relay (wired into the van's electrical system) starts, and feeds water into the generator automatically,” Ferreira says. “It's so simple anybody can build it.

“I'm trying to find someone to develop this,” Ferreira notes. “Someone younger with the means to manufacture it could make something simple with this and make it cheap.”



Robert Ferreira says his on-the-go generator is less expensive than other hydrogen generator kits on the market.

He invites anyone interested in his hydrogen generator to send him a stamped envelope or to call or email him.

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He Doubles MPG With H₂O Processor

The idea of making hydrogen gas with an on-board electrolysis unit to boost mileage isn't new. But George Wiseman thinks his HyZor Kit has solved the problem of getting consistent results. He doesn't try to replace fuel with the gas, but rather uses it to improve fuel combustion. He claims customers have reported doubling their fuel mileage with his kit.

“My kit feeds a mix of hydrogen and oxygen - also known as Brown's gas - into the air filter, which serves as a back fire arrester,” he explains. “It also carefully regulates the amount of gas produced and added to the fuel. A lot of systems produce too much. There's a certain amount that is optimum.”

Wiseman suggests that a rule of thumb is one amp of current to the electrolyzer for each liter of engine size. More than that and mileage per gallon is lost, not gained, he says.

“It takes seven watts of (energy) fuel to make one watt of gas,” he says. “To make the process pay, you have to get more than seven watts of gain.”

To get that extra gain, he uses an interface with the vehicle's electronic control and sensor system. Normally when you feed hydrogen into the carburetor most of the hydrogen is burned, and oxygen and water vapor are exhausted. However, exhaust system sensors read the extra oxygen and tell the fuel system to increase fuel flow. So that sensor has to be reset so fuel isn't wasted.

“With more reliance on computer sensors in vehicles, we have to continue to develop a more sophisticated interface,” says Wiseman.

In addition to the interface, Wiseman has tried to make his system easy to use and maintain. An LED light on a circuit board that attaches to the dash indicates when water/catalyst needs to be added. A syringe of about 20 ml is approximately enough for a tank of fuel.

“If you can't add the water, it's not a problem,” says Wiseman. “The system automatically shuts down, and you simply stop getting the mileage gain and other benefits.”

These other benefits, he claims, include removal of carbon deposits in the engine, in-



Kit feeds a mix of hydrogen and oxygen into air filter.

creased engine life and reduced pollution. His kit also operates independently of all pollution equipment, so no warranties or regulations are affected.

“My interface is invisible to pollution equipment,” says Wiseman. “Hydrocarbons drop to almost nothing. CO₂ goes to almost nothing. Nitrous oxides drop so thoroughly there is little for the catalytic converter to do, which should extend its life.”

Wiseman originally developed his system for his own car and then wrote a book about it with how-to plans. People without the time or skills to make their own asked for a kit, and the HyZor was the result.

The book is available for \$22. A complete HyZor kit sells for \$388.

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Photo shows all components needed for new mileage booster. Water reservoir, left, feeds water automatically to hydrogen-generating unit, right.



Hydrogen Booster Fits Any Gas Engine

With gas prices approaching record levels, Stan McDonald, Foxboro, Ontario, decided he had to find a way to get better mileage without a lot of hassle.

The long-time inventor, who's been featured several times in FARM SHOW, wanted a device that he could bolt on and forget.

“I developed an all stainless steel unit that generates hydrogen on demand as you drive. No gas is stored and it's not under pressure. It simply splits water into hydrogen which is then sucked into the intake,” says McDonald.

Key to success of his unit is that he was able to design electronics that decrease the amount of amps needed to make the gas yet increase hydrogen output up to 50 percent as compared to other systems on the market.

The unit simply bolts in place under the hood and hooks up to a vacuum line that goes to the engine intake. You also wire up two relays. The unit automatically fills itself with distilled water from a reservoir.

McDonald installed a unit on a 1978 Chevy half-ton truck and on a 1986 Toyota Tercel, as well as other vehicles. He says it works successfully on both carbureted and fuel-injected engines. Average mileage gain is 31 percent.

“What happens is that when you inject hydrogen into the air intake, the engine sees an increase in rpm's and corrects the problem by controlling the amount of time the injectors are on or open, if you will. The beauty of my system is that it works on all engines. It doesn't take much hydrogen to make a vast increase in fuel economy,” says McDonald.

Two sizes are available. One is 4 by 4 by 8 in. and the other is 4 by 4 by 12 in. The water reservoir is 1 qt. and lasts for about 600 miles of driving. No adjustments are needed to the engine and a standard size alternator (35 amps) has enough power to run it. McDonald says besides boosting mileage the unit also noticeably increases power.

The unit works on any gas engine, including tractors, and McDonald is working on a diesel unit as well.

The smaller unit sells for \$655 plus S&H.

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Wisconsin Man Designs Efficient Vertical Windmill

Adam Fuller believes there's great potential in vertical windmills as an inexpensive, efficient energy source. His 12-ft. dia., 36-ft. tall prototype has been quietly spinning since October, surviving strong winds and turning briskly in light breezes while a nearby 120-ft. tall conventional wind turbine remains still.

“I've tested this in over 150 mph winds, with no vibrations, no noise, no damage,” Fuller says.

The Racine, Wis., inventor has personally invested to disprove the wind power industry's claims that vertical windmills are ineffective.

Fuller's patent-pending design stacks boxes of four structural steel wind scoops on top of each other. The pinwheel-like design has multiple points of impact for the wind to hit, so that any slight breeze turns the blades. His prototype is 12 ft. in diameter and three boxes tall, including a generator housing area at the bottom. He plans to stack nine 12-ft. dia. boxes over generators on 120-ft. towers.

“Nobody's ever made an ultra-large scale vertical design,” Fuller says. “Increasing the diameter exponentially increases the output,” he says. He recorded almost three times as much energy produced when he doubled the diameter of early prototypes from 4 ft. to 8 ft.

“My goal is to create a generic windmill that a number of manufacturers can build,” Fuller says.

Owning a single windmill may also be a



Vertical windmill stacks boxes of four structural steel wind scoops on top of each other.

good option for large farm operations or businesses with electric bills of more than \$1,000 per month.

Fuller added that another benefit of his design is that no birds are killed because they can see the windmill.

Fuller has recorded data and information for people interested in his windmill design. See it in action on video at <http://www.theweekextra.com/blogs/news/2007/12/future-of-wind-power.html>.

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