

How to Totally Trash an Onboard Vehicle Hydrogen Electrolyzer

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Here, revealed in print for the very first time, are many of the super secret insider techniques to absolutely and totally ruin the performance of an onboard auto or truck hydrogen **electrolysis** generator.

Please note that while any one of these by themselves is clearly a fatal flaw, using them in combination is strongly recommended to be absolutely sure your device ends up utterly and truly worthless...

1. Completely ignore the inescapable fact that increasing the electrical load on an alternator disproportionately increases its mechanical input load on the engine.
2. Completely ignore the inescapable fact that the primary product of an onboard electrolyzer is useless low grade heat. Which can create a DYNAMIC BRAKE that is the equivalent of leaving your emergency brake partially set at all times.
3. Use an ordinary fan belt whose maximum additional mechanical load capability is a few hundred watts at most.
4. Use an ordinary alternator whose efficiency will be lucky to approach 45 percent near full loading.
5. Leave off the crucial computer controlled switchmode voltage to current converter so that most of the electrical energy gets burned up in the alternator source rather than being sent to its electrolysis load.
6. Make the electrolyzer way too small so it has to operate in its lossy exothermic region, rather than being thermoneutral or endothermic.
7. Be sure to use stainless steel electrodes with their low energy passivated surfaces and their hydrogen overvoltage of iron instead of platinum.
8. Always make "not even wrong" pulse measurements by failing to use **true rms** techniques of acceptable **crest factors**.

9. Studiously avoid any and all labwork. Especially any that is objectively and competently done with sophisticated enough instruments.
10. Ignore the "**Carnot Squared**" ludicrousity of sending the SAME energy through a highly inefficient heat engine TWICE.
11. Ignore the fact that cascading system losses will make the stored hydrogen energy a joke compared to the input. Perhaps a recoverable 70 watts mechanical energy for every 1000 watts of mechanical input.
12. Fail to provide the 31.25 liters per minute required for the 5% hydrogen injection needed at 50 horsepower.
13. Charge more than the \$13 total per percent mpg improvement that is demanded for a reasonable return on your investment.
14. Ignore the EPA law that makes it a felony to tamper with any emission control device. Such as is inevitable with hydrogen injection.

Some expansion on the math involved in **(12)** and **(13)**. A 5% hydrogen injection is the basis of legitimate published papers on potential ICE improvements. Taking 50 horsepower as a normal running load on a vehicle means that 2.5 horsepower of hydrogen energy will be needed for a 5% injection. Because the engine will end up less than 33 percent efficient, the stored hydrogen energy would have to approach something like a deliverable 7.5 horsepower, or 5625 watts.

5625 watts for an hour would be 5625 watthours. The stored hydrogen energy is around 3 watthours per STP liter, so 1875 liters per hour would be required. Or 31.25 liters per minute.

As to **amortizaion**, Assume you have a 20 MPG vehicle you drive 10,000 miles per year with gas at \$4 per gallon. You use 500 gallons per year worth \$2000. A one percent improvement would reduce your annual costs by \$20.

At \$20 per percent, the system is clearly pointless because you would just break even. A more realistic installation price should be about \$5 per percent per year. Or 41 cents per month. Assuming a three year life and 10 percent financing, an investment \$12.79 would consume about 41 cents per month.

Thus \$13 per percent improvement total cost (including installation and maint) is the absolute maximum you should ever consider paying for such a device.

For More Help

Additional tutorials are found [here](#), [here](#), [Here](#), and [here](#). With ongoing discussions [here](#). And a new energy efficiency breakthrough can be found [here](#).

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