



Clean idle and cheap trucks

Q *I recently bought a 2012 Freightliner Cascadia with a 500 horsepower Detroit and their auto transmission. It is marked “Certified Clean Idle.” The driver I bought it from says he used to idle all night for heat or air conditioning, even in California. He said he got a better night’s sleep because the steady noise of his engine masked other sounds.*

I had a generator in my old truck and I used to turn off my motor. It saved on fuel, but the maintenance costs seemed awful high. With my new truck, do you think I should get an auxiliary power unit or idle all night like the last owner did?

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A I had a few ideas on the subject, but to make sure of my facts and figures, I visited Linda Gaines, Ph.D., a researcher at the Department of Energy’s Argonne National Labs. They are the leading authorities on idling and idle reduction. Dr. Gaines has been involved in idle reduction for many years. She has volumes of statistics and research projects that Argonne has conducted. The reasons favoring alternatives to idling boil down to:

- **There are still laws against idling in many areas.**
- **Idling wastes fuel and money.**
- **Idling pollutes the environment.**
- **Alternatives pay for themselves in a surprisingly short time.**

Even with Certified Clean Idle, you may be fined heavily for idling in most states with idle-restriction laws.

Idling, even with the newest, most fuel-efficient engines, still uses from half a gallon to a gallon an hour. That’s between \$1.25 and \$2.50 burning without getting you one inch down the road. As one retired industry executive said, “Idling yields negative mpg. It subtracts from the mpg you already get.”

Although certified engines emit far less NOx,

according to Dr. Gaines, there is still a great deal of carbon dioxide in the exhaust – about 22 pounds per gallon burned.

I’ve observed that idling with little or no load on the engine lowers its temperature. That means parts are not fully expanded, which opens tolerances in pistons, rings and cylinders, allowing “blow by” of combustion gasses into the crankcase. That, in turn, affects maintenance intervals. Cold-running engines load oil with wear metals and soot, requiring more frequent oil drains, often with poor oil analysis results.

To estimate your savings from using an idle-reduction device, use Argonne’s worksheet. (You can find it online at LandLineMag.com at the bottom of our home page.)

I believe, and Dr. Gaines agrees, that using idle-reduction devices makes sense. **I personally feel that ultracapacitors for starting coupled with AGM battery-powered air conditioners and fuel-fired heaters are often the most economical idle-reduction devices in the long run, but auxiliary power units, even though they also require periodic maintenance, are better than idling even a Certified Clean Idle engine.**

Q *I’ve been looking for a new truck for a few months, and I found a bargain I can’t pass up. It’s a 2014 Peterbilt for about the same price as 2011s are going for. I was ready to buy it and then remembered what they say: “If it sounds too good to be true, it probably is.” What should I look for before I buy it?*

A You are wise to be skeptical, especially after the flooding that followed Hurricane Matthew. There are vehicles of all kinds, including Class 8 trucks, that were underwater and written off by insurance companies. It should be noted on the vehicle’s registration if it is a salvaged truck, to be used for parts or sold as scrap. Unfortunately, there are dealers and individuals who sell these trucks, usually into states that have less restrictive laws. They do a superficial cleanup and sell the truck with a clean title.

A truck deal that seems too good may be one of these. It will be costly to maintain at best and downright