

The LHG is an innovative application, a new approach, a different and better heating technology.

For this reason, when we post information about the LHG on social media, someone will inevitably add their comment about the old stand-by. That is, there will eventually appear a comment that says, "Just get a *(fill in the blank brand)* Fuel Fired Heater."

While we appreciate that this decades old technology has been helpful in the past, here are the 9 top reasons you may want to move beyond the "why try something new, just buy a fuel-fired heater," approach and embrace the new Liquid Heat Generator technology.

1. A diesel Fuel-Fired Heater (hydronic heater, etc.) is old technology, very useful for mitigating one specific problem for older diesel engines.

A Fuel-fired heater (FFH) is very good at pre-heating the water jacket of a diesel engine to help it start in severely cold conditions like -40° C/F.

BUT...

Newer diesel engines (from this century) are designed to start easily in extreme cold (just search YouTube or the web for "cold start diesel," and you will see plenty of real-world examples of newer trucks starting in extreme cold).

Most truck owners don't live where it gets -40° C/F, and their trucks will start just fine. (And even if you do, there are good reasons to install an LHG along with a plug-in block heater, or even along with your FFH.)

2. The LHG creates heat <u>AND</u> protects your engine and after-treatment system.

Because the LHG gets its energy from the engine's belt drive system, it has the ability to apply a slight load to the engine. Newer diesels are much more efficient than older ones, so they produce much less heat. When the LHG detects low heat, it will engage, both adding heat to the water jacket and – perhaps more importantly – putting a slight load on the engine (5 to 10 HP at idle, depending upon RPM).

This additional load improves combustion and increases the exhaust gas temperature, helping/ protecting the engine, the turbo, the EGR system, and the after-treatment system.

This is the exact reason that the LHG can be found installed at the factory by major generator manufacturers to protect their generator's diesel engines from cold-running, wet-stacking and early failure.

You will not find a single FFH used to protect a diesel generator from cold-running and wet-stacking – **because they can't.**



28389 Beck Rd., Ste J2 Wixom, MI 48393 sales@ventechlhg.com www.ventechlhg.com



3. The LHG produces up to 5 times more heat, many times faster than an FFH.

You don't need to pre-heat your truck for 30 minutes or more with an LHG. Start it up and drive. In a matter of minutes, hot air is flooding the cabin, and in a few minutes more, the coolant will have reached its proper operating temperature. You can't do this with an FFH.

4. The LHG doesn't drain or strain your battery.

An FFH uses battery power to run its electric fuel pump, electric coolant pump, and electric blower fan. If you pre-heat with an FFH, you are putting a drain on your battery when it is already dealing with severe cold conditions – degrading the battery.

The LHG only operates when the engine is running and the amperage is sufficient, so the small amount of power it uses for its ECU and clutch comes from the alternator and will never compromise the battery.

5. THE LHG doesn't produce any exhaust.

An FFH produces hot, raw exhaust gases, which must be routed away from any hoses or cables or other parts of your truck that may be damaged, or catch fire. This can involve cutting holes in your truck and/or removing panels to mount the FFH, hoses or exhaust in a "safe" location.

The LHG mounts easily to the front of the engine and does not produce exhaust.

6. The LHG is easy to install and non-invasive.

As mentioned above, FFH installations often require cutting holes in your truck and removing panels. Also, all FFH installs require tapping the fuel line, installing an additional fuel pump, installing an additional coolant pump, and properly routing the FFH hot exhaust pipe.

The LHG comes with a custom bracket and mounts directly to the engine. It doesn't require any of that other stuff. Period.

7. The LHG is easier and less expensive to maintain.

An FFH requires regular maintenance, like cleaning its fuel injectors and performing maintenance burns. More importantly, not performing the required maintenance can result in undesirable performance and outright failure. Search YouTube for "smoking Wabasto," "thermo top smoking," "failed hydronic heater," or "smoking hydronic heater." It's not pretty.

The LHG does not require regular maintenance. Period.



28389 Beck Rd., Ste J2 Wixom, MI 48393 sales@ventechlhg.com www.ventechlhg.com



8. The LHG has one moving component.

That's right; the LHG has only one moving component with two bearings and a clutch.

An FFH has multiple points of failure: the burner, the dedicated fuel pump, the dedicated coolant pump... Each containing multiple moving and fallible components.

When it comes to opportunities for failure, less is more, and the LHG has FAR less.

9. The LHG is completely automated.

The LHG monitors coolant temperature, outside temperature, system voltage, and engine RPM. It will turn on when you need it and turn off when you don't.

An FFH doesn't and won't. Period.

Yes, there's more... cost of operation, environmental impact, safety, dependability, etc. But in the interest of brevity, and in order to avoid "piling on," we'll stop here.



28389 Beck Rd., Ste J2 Wixom, MI 48393 sales@ventechlhg.com www.ventechlhg.com