



Q: Where does the Ventech LHG get the heat from?

A: Other systems generate heat from electricity (plugin heaters and PTC heaters), or by taking fuel directly from the truck's diesel supply and burning it (Fuel-Fired Heaters FFH). The LHG, however, is driven by the engine's belt system (like the alternator). As the engine pumps fluid through the water jacket (and a heat exchanger in the LHG) the LHG spins an internal rotor which, in combination with a stator, create a special turbulence in the LHGs reservoir that generates liquid heat. Lots of heat and fast!

For this reason the LHG is cleaner and easier to install than an FFH, requires no external wires or plugs, and needs no maintenance (only 1 moving component).

Q: How much heat does the Ventech LHG provide?

A: The amount of heat generated by the LHG varies with the RPM of the engine. It ranges between 8 to 16kW or 27,000 to 50,000 BTU/hr. This is, far-and-away, the most heat generated by any supplemental heater. Plugin heaters max out at around 1.5kW. PTC heaters are usually the same, 1.5kW max. Smaller (pickup sized) FFH heaters max out at around 5kW or 17,000 BTU.

As you may have calculated, all the other heaters mentioned above max out while making less than the very minimum amount of heat generated by an LHG.

Q: Why do I need so much heat?

A: Three reasons: Fast defrost (safety/productivity), to heat the cab fast (comfort), to protect your engine and after-treatment system (savings).

Q: How does the LHG protect my truck's engine?

A: Diesel engines are designed to run within a very specific temperature range. Doing so burns the fuel as thoroughly as possible. Running your engine colder than its proper temperature - for instance during long warm-up periods, or when low ambient temperatures cause the engine temperature to drop or stay below the ideal - results in unburnt fuel, engine deposits, and more and longer periods of regen. The LHG solves these problems by bringing the coolant rapidly up to the proper temperature and maintaining the temperature as you drive. Proper heat means better fuel efficiency with less buildup on engine parts and after-treatment components as well as reduced regen frequency and length. The end result is less maintenance and lower potential for system failures.



Q: Does the LHG run whenever the engine is running?

A: No. The LHG runs only when necessary; only when the engine requires additional heat to maintain proper operating temperature. How? Because it is controlled by our Gen-3 ECU which gets continuous input from dedicated temperature, RPM and voltage sensors. The LHG ECU knows when the truck is cold, when it is warm, when it is idling and when it is pulling hard.

Q: Does the LHG hurt engine performance?

A: Nope. At low RPMs, the LHG takes 5 to 8 HP and at over 2000 RPM the LHG takes 10 to 15 HP. The 2017+ Power Stroke 6.7L diesel engine for example, produces over 400 horsepower. You honestly won't even notice the small HP percentage that the LHG is using. Also, the LHG does not run when not required or during heavy engine load.

Q: Do I need a plugin pre-heater with the LHG?

A: You don't. Newer diesels start quite well in cold temperatures and the LHG will have the coolant hot in minutes. Only in the most extreme cold climates might you need to pre-warm a modern diesel engine.

Q: Is the LHG eco-friendly?

A: Yes, in the sense that it doesn't directly burn diesel fuel and release untreated exhaust like some heaters. Also, by quickly reaching and maintaining proper engine operating temperatures the LHG makes sure that your engine is burning as cleanly and efficiently as possible and your after-treatment system is properly treating the exhaust. Let's put it this way - running with an LHG is more eco-friendly than running without one.

Q: Will the LHG void my warranty?

A: No. In the United States, the Magnuson-Moss Warranty Act of 1975 prevents manufacturers from automatically voiding a warranty because an after-market or non-OEM part has been used. In Canada, "The Consumer Protection Acts in each province are the Canadian equivalent to the Magnuson-Moss Warranty Act. The law in Canada also states that a manufacturer cannot require a consumer to use OEM parts under the threat of voiding warranty." (<https://blog.tdotperformance.ca/guides/warranty-battles-oem-vs-aftermarket/>)



Q: Can I install the Ventech LHG myself?

A: While it is not possible for us to know your personal level of mechanical prowess, we can offer the following guidance: No specialty tools are required, and you need not be a professional mechanic or have a professional shop to install a Ventech LHG light to medium-duty truck kit. A “weekend mechanic” who is comfortable and familiar with automotive repair and maintenance should have no problem installing the Ventech LHG Kit.

Q: Who is Ventech, and what is our history?

A: Ventech is a Michigan-based engine after-market equipment and manufacturing automation company. We have been in the business of protecting and enhancing diesel engine functionality since 2003. Creating heat-generating APUs for arctic equipment and truckers, providing innovative wet-stacking prevention systems to diesel generator OEMs like Doosan, Generac, Atlas Copco and Wacker Neuson, and supplying supplemental heat for diesel school buses (Daimler/Thomas Built, Freightliner, Blue Bird, Detroit Diesel, IC, Cummins) – warming and protecting children all over the northern States and Canada.

**For more information
please visit our website: www.ventechlhg.com
and/or contact us directly.
We'd be happy to answer your questions.**