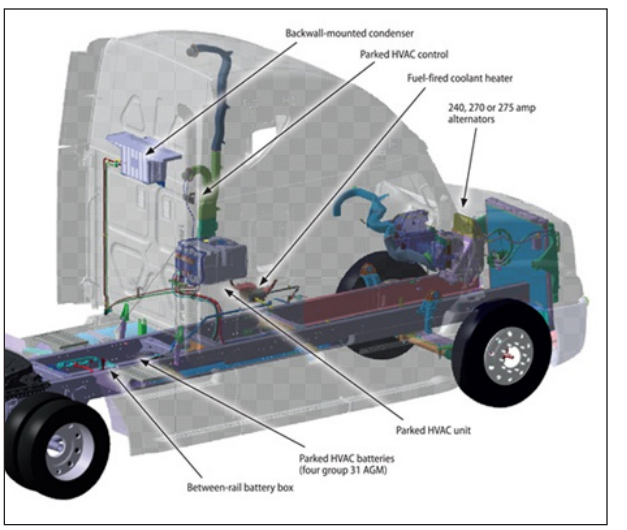
# Hill International Trucks

## No-Idle HVAC Systems: Cost Vs. Reward

Heating, ventilation, and air conditioning (HVAC) systems are designed to help drivers and fleets control cab climate. No Idle HVAC systems specifically provide cab climate control when the vehicle is parked, and users benefit from these because they are quiet and produce no emissions. HVAC systems can be powered by an external set of batteries on the truck (battery or APU), or can come with the capability of using an electrical power source plug-in for charging. The greatest benefit of these systems is the idle-reduction cost savings you and your fleet will incur over the long run. Leaving your truck idle for extended periods of time can greatly affect not only your financial resources, but the overall health of your truck. With this being said, there are plenty of implications that go along with these idle reduction systems.




### Costs associated with HVAC systems:

The most common costs incurred for HVAC systems vary depending on what the driver or the specific fleet is looking for. The first cost associated is the upfront cost for the system itself. HVAC systems are among the most expensive idle-reduction solutions and can cost on average around $1,800 including installation costs. Another cost is batteries themselves, if you wanted to go that route as opposed to electrical plug-in source or APU source. The costs of the batteries aren't expensive, but aren't a valid option if you are looking for something long term. Also, properly insulating your truck and using heavy-duty window curtains can maintain the cab's current temperature for a longer period of time. Insulation costs usually vary depending on where you are buying from, but on average, a sheet of 4' by 6' sheet of insulation costs anywhere from $30-$50.

Idle Free Systems Calculator to effectively price your desired unit:
https://idlefreesystems.com/tco-calculator.html - **TYPE THIS LINK INTO YOUR SEARCH BAR**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**Costs to leaving HVAC System on for extended periods of time?**

The most commonly asked question when deciding on an HVAC system is the operating costs to leave the unit on for extended periods of time. The good news is operation costs are relatively low for these idle-reduction systems; unlike the costs for leaving your truck idle. The primary costs you will have to deal with are battery costs and/or engine-based auxiliary power unit (APU) maintenance costs, which are generally no more than $100 a year. These two options are primarily what truck drivers look for in their cabs. It is sometimes impractical for drivers or fleets to find a power source to charge the battery-powered HVAC system itself. (Commonly called shore power) The difference between APU and battery-powered is relatively simple. An APU-based system is a compact unit that includes a small engine that drives a power source and a HVAC compressor that is mounted on your truck, usually on a frame rail or in some cases mounted in the cab under the sleeper berth; while battery-based is an external element that must be charged. There are both pros and cons to both power supplies. The right choice depends on your individual preferences and the size of your sleeper cab.

**Why invest in a "No- Idle" HVAC system?**

With these costs come many advantages and benefits of owning your own "No-Idle" HVAC system. The first benefit is fuel economy. Some HVAC systems don't need diesel fuel, instead using a separate set of deep cycle batteries so drivers can simply turn off their truck engine and enjoy a warm or a cold environment. The limits to a battery system are generally a run time without recharging of 8 to 10 hours. Batteries recharge when the truck is again running down the road and recharges off of the truck's charging system. This is a great way to save on diesel prices and not leave your rig on for extended periods of time.

For example, the average cost to keep your truck idle for one hour equates to the cost for one gallon of diesel fuel, or roughly $2.60 per hour (U.S Average as of January 2017). Below is a graphic displaying the wasted idling costs from leaving your rig on for extended periods (hours) per day, month, and year **POTENTIAL SAVINGS NEXT PAGE!**

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*Monthly and Yearly costs are based off of working 20 days per month and 240 days per year*

| Idling Costs | | | | |
|---|---|---|---|---|
| | | Costs | | |
| Avg. Diesel Price (Gal) | Hours Idle | Per Day | Per Month | Per Year |
| $2.60 | 1 | $2.60 | $52.00 | $624.00 |
| $2.60 | 2 | $5.20 | $104.00 | $1248.00 |
| $2.60 | 4 | $10.40 | $208.00 | $2496.00 |
| $2.60 | 6 | $15.60 | $312.00 | $3744.00 |
| $2.60 | 8 | $20.80 | $416.00 | $4992.00 |

Just leaving your big rig idle for 2 hours per day can cost you over $1,200 of diesel per truck per year. This almost covers your cost of your "No-Idle" HVAC unit and your installation cost. Imagine if you have a fleet of 50 trucks. The total costs incurred by wasted idling for 2 hours per day will reach up to $62,400; $124,800 for 4 hours; 187,200 for 6 hours; $249,600 for 8 hours. The lifespan of a common HVAC unit is set at a decade if not longer. The only costs that are incurred on a yearly basis is common maintenance costs for the APU battery that is discussed above.

Benefits of installing a APU system over a battery-driven system includes not only a no-idle solution to your HVAC needs, but also most models include a generator providing you with 120 volt power to operate most any driver comfort needs. These systems tap into the truck's main fuel tank for its source of fuel but run on only a few tenths of a gallon per hour of use saving wear and tear on your truck engine and allowing for continuous run time limited only by the amount of fuel in the tank.

Other benefits are the simplicity of the system with few moving parts and the minimal sound the system makes. This is great for peaceful overnight stays in your cab. The low operating costs also make it beneficial for drivers on the road when the last thing on their mind is maintenance on their alternate HVAC system. After the upfront costs, fleets and drivers will benefit from cost savings in the long run.

## Is it time for you to get your No-Idle HVAC System?

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