
“Airtronic Heaters: Purpose & Function” Video Transcript

VIDEO DESCRIPTION:

Length 03:25 min

Watch this video to learn more about the Airtronic heater and how they can save you money, while reducing your carbon footprint.

VIDEO TRANSCRIPT:

[Intro music]

Speaker: Idling a truck engine while resting, waiting for a load or overnight, can be a costly venture. An idling heavy-duty truck consumes approximately one gallon a fuel per hour. At idle, the engine emits more pollution into the air and causes more engine wear than when operating under load. And even one fine in a no idling zone can cost hundreds of dollars.

The Airtronic parking heater provides heat to the trucks sleeper while the engine is switched off. The heater will operate for over 24 hours on one gallon of fuel. With regular use, an Airtronic parking heater will save a truck operator thousands of dollars of fuel. Significantly reduced truck emissions and decreased wear and tear on the engine. Payback from fuel savings alone can be in as little as six months.

At Espar safety is top priority. Each heater has several redundant safety systems to ensure the comfort and security of the user. Espar is proud to provide the Airtronic parking heater as a factory option almost on every new truck available today. And for trucks already delivered, an aftermarket installation kit will ensure years of comfort and efficient engine truck operation.

The Airtronic fuel operated parking heater is similar to the forced air furnace in your home. It creates and circulates heat throughout the sleeper, using diesel as a fuel source. Now let us take a look in the internal operation of the heater.

First, the heater performs a safety check including the combi-sensor, fan motor, glow pin, control unit and fuel metering pump. The glow pin heats up, the fan starts running slowly, then ramps up, the fuel metering pump starts, producing a fuel air mixture in the combustion chamber. The glow pin ignites the fuel air mixture; the flame sensor measures the temperature of the heat exchanger; If the programmed increase in temperature is reached within a set time, the glow pin is switched off. The flame then burns independently in the boost level, which is also a regulating level. The processed air is heated. Once the selected temperature is reached, the control unit switches from boost to high, then too medium or low, depending on the required temperature. If the lowest level produces too much heat, as measured by the temperature sensor, the control unit switches the heater to stand-by. The fuel-metering pump switches off and the flame goes out. The fan continues to run at high speed for four minutes to cool the heater. The fan then operates on low speed to ensure circulation of room air around the temperature sensor. Once the room temperature drops below the selected temperature the heater restarts; but now at the medium level. Now that we know why an air parking heater is required, and how it works, let's discuss how it should be installed.