

Tech Tips

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Idle Free eAPU Heat Explained

In this edition of Tech Tips, the heating portion of the Idle Free eAPU is explained. There are two functions of the coolant heater. The first is to keep the driver comfortable and the second to heat the engine. Here's how it works: First, the Idle Free thermostat is placed in the HEAT position. This makes two things happen:

First, the triple relay is triggered, and goes to the normally open position. The blower motor and other circuits required to provide heat to the bunk receive 12-volt power from the eAPU battery bank.

A 12-volt signal is sent to the heater from the UBB via the blue wire starting at the red circled terminal on the triple relay shown below (*image 1*). The blue wire leaves the UBB through the wiring harness, connecting to the FRU via a single wire weather-pack connector, also shown below (*image 2*). It terminates at the connector on top of the Webasto heater (*image 3*). Anytime the thermostat is in the HEAT position, the blue wire will have 12 volts on it.





Image 2



Image 3

Image 1

Remember, make sure ignition key is in "OFF" position and the Idle Free thermostat is in the "HEAT" mode. From there adjust OEM controls in the bunk to achieve a desired comfort level.

Please contact us with any questions.

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