THIS IS HOW YOUR AUTO COOL CONTROLLER WORKS

You just installed your Auto Cool Controller and your engine is cold. You double checked all the wiring and everything checks out OK. You did install the sensor on the OUTFLOW, right? If you installed it on the radiator INFLOW, that is wrong!

You start the engine and notice that your fans didn't "KICK ON." That is normal with Auto Cool Controllers. The term "KICK ON" does not apply to the Auto Cool Controllers. Only to controllers with relays.

Now, as the engine and radiator is starting to warm up, you noticed that your fan starting to turn very slowly, this is normal. As the radiator is getting hotter, you notice that the RPM of your fan is getting higher. The RPM of the fan will reach the point of were its regulating the radiator temperature.

This set point is determined by the black knob on the top of the controller. If your fan is not going to full RPM, don't be alarmed, this is normal. Now your going to use a laser temperature gun to measure the OUTFLOW, or in most case at the bottom of the radiator. If you have an aluminum four core radiator, the fan may have lower RPM as a rule.

Use this laser temperature gun on a black dull surface, not on shinny chrome due to errors. Now, adjust the controllers BLACK knob so that the OUTFLOW temperature is about 15 +/- degrees below the thermostat temperature. This way, the engine thermostat has cooler coolant to regulate engine temperature. This should give you rock solid engine temperature. Do this temperature test with your vehicle parked and running at an idle.

If you drive at high speeds, the fans should be at a lower RPM due to high air flow. If you have lower outside temperature, the fan should be lower. At higher outside temperature fan should be higher.

Driving up mountains with heavy loads will generate more engine heat that will increase the fan RPM to regulate radiator temperature.

Turn on the Fail Safe switch - your fan or fans should go to high RPM. You can turn on the Fail safe at any time. Fail Safe was designed in case you have a coolant problem.

The Air Conditioning input will put the fans into a low or medium RPM with the small controller pot on the side of the controller. The radiator temperature control will override the A/C fan speed. The A/C fan speed will start when you turn on the ignition after the controller is installed.

If the DC from your vehicle's A/C control is not a stead +12 to +14 volts but a DC that varies up and down, this is a factory A/C temperature control with a valve. The fix for this is our ICE BOX. It will provide a constant +12 volt output from the valve control.

Darryl The Auto Cool Guy autocoolguy.com autocoolguy@yahoo.com

FILE: HOW AUTO COOL WORKS 7-17-2019