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Installation Instructions

This guide covers the following Item Numbers:

18905 and 18907

Congratulations, you have made a wise decision. Thank you for purchasing our product.

Electric Fan Wiring System (with electronic thermal control sensor)

IMPORTANT! READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

Locate a convenient place to mount the electronic fan control module. Keep in mind the length of the probe wire when selecting a location. Possible mounting locations are the radiator core support, frame, and inner body or fender panel. Attach using the screws provided. Be sure to mount the unit away from heat sources and position it for easy access. When the fan control module is securely mounted, proceed with the sensor installation.

P/N 18905. Probe Systems - The probe reads the engine coolant temperature and sends this information to the fan control module. Install the temperature sensor probe into the radiator core (fins). The ideal location is 3 - 5 inches (76 - 130mm) below the top of the core. If the radiator has a narrow core, use the foam pad as a spacer to ensure accurate temperature reading. Push probe through the hole in the foam pad square. Place pad on probe so that the adhesive side faces the radiator core. Remove adhesive backing and push probe into place on the radiator. Avoid contact with fan blades, fan belts, pulleys and other sharp bends or edges. Use nylon loom clamps to keep the probe wire safe and secure.

P/N 18907. Thread-In Systems - Install the threaded temperature sensor into a threaded port in the water passage of the intake manifold or cylinder head. The switch has 3/8"-18 NPT male threads. If the port you wish to use is larger, use appropriate bushing. Take care not to damage the wire leads on the sensor, use a wrench to install, not a socket! After sensor is installed, mount module. Be careful not to twist probe wire during installation, damage could result!

BLUE WIRE: Attach the BLUE wire in the loom to the air conditioning (A/C) pressure switch on dryer line side or A/C clutch supply wire. Do NOT cut the A/C wire on the vehicle. Use the wiretap provided. If the vehicle does not have A/C or you do not wish to integrate the A/C override feature, cut the blue wire and install a wire terminator.

Fuse Link: Attach the fuse link to the vehicle battery for power. Connect the other end of the fuse link to the RED thick wire of the wire loom.

The fan control unit has a working temperature range of 180° to 210° F (71° to 99° C). To adjust the temperature setting, use a very small screwdriver. Use extreme care, or a "light touch". Turn screw clockwise to adjust to a higher temperature fan turn on setting and counter-clockwise for a lower fan turn on setting.

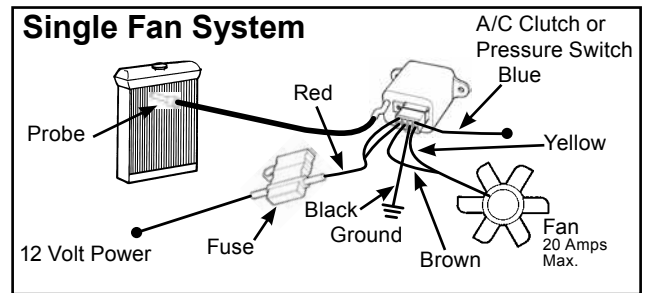
When installation is complete, start engine and allow warming to operating temperature. Confirm that the fan(s) turn on at the desired temperature. If unit is wired to the A/C, turn on the A/C to verify that the fan(s) turn on when the A/C is switched on. Verify that the fan(s) are moving the airflow in the correct direction. If not, reverse the supply and ground wires to change the direction of fan rotation.

Operate vehicle in a normal manner for a few days. Re-verify that the electronic module, probe, and wiring are securely in place. Make sure that wiring is free, and not pinched, kinked, bent, hanging, or scraped.

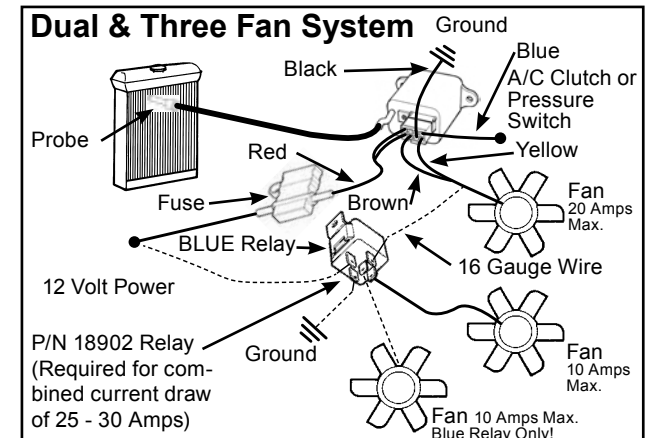
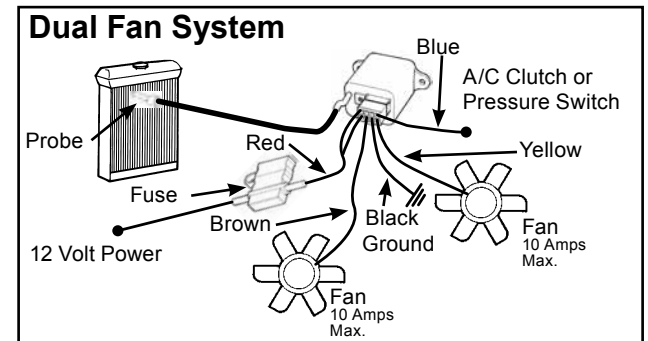
Note: Most electric fans come from the factory as a "puller", that is intended to mount on the back (engine side) of the radiator. If you intend to use your fan as a "pusher"- in front (grill side) of radiator, be sure to refer to your electric fan specific instructions.

Three Fan Systems: BLUE RELAY ONLY! Combine **Brown and Yellow Wire**, connect to fan motor. This circuit will handle a fan drawing up to 25 Amps. Perma-Cool® P/N 18902 is required for 3 Fan System. The second and third fans total combined draw is up to 25 -30 Amps maximum. Finish wiring system per the illustration. **Please note:** the **BLACK RELAY** will not handle a three fan system!

Single Fan Systems: Combine **Brown and Yellow Wire**, connect to fan motor. This system will handle a fan drawing up to 20 Amps. Finish wiring system per the illustration.



Dual Fan Systems: Attach **Brown Wire** to one fan and **Yellow Wire** to other fan motor. This System will handle 2 fans drawing up to 10 Amps each for a total load of 20 Amps. Finish wiring system per the illustration.



Fan Systems Over 20 Amps Total Require Relay