Delta Current Control module

Installation

Setting the Jumpers

Temperature

The Delta controller is factory set to operate with a 180° thermostat, the unit temperature can be adjusted byway of jumpers. Jumpers (5,7) and (6,8) raise the temperature by 22° and 7° respectively. Jumpers (7,9) and (8,10) lower the temperature by 22° and 7° respectively. The chart in figure 2 shows jumper settings for various temperatures.

Underdrive

If underdrive pulleys are installed and the vehicle is prone to overheating at idle, a jumper is provided (13,14) to render a 10 % minimum current to the fan whenever the ignition is on in order to aid in convection flow. The ignition input wire must be connected to use this feature.

Mounting the control unit

Find a flat surface in the engine compartment, the preferred area being the radiator support sheet metal near the battery. Drill four 1/8" holes either by the dimensions shown in figure 2 or by using the control unit as a template. Drill two more 1/8" holes at about 8" centers as shown in figure 2. If installed in a detailed engine compartment, insert the four grommets in the mounting holes of the control unit to protect painted surfaces. Mount the control unit using four self tapping screws and flat washers.

Delta fast response temperature sensor

Mounting the temperature sensor

Figure 1a shows the Delta temperature probe. Its low mass, high friction housing and high flex multi strand wiring loom provide a fast response time and convenient mounting, requiring no retaining mechanism. Simply insert the probe between the radiator fins and the mounting is complete. Unlike other control systems, the DCC fan control operates most accurately when the temperature is indicated downstream from the cooling fan.

Down flow radiator positioning

Figure 1b shows the correct mounting position on a conventional radiator. Mounting is below the fan, and near the outlet hose.

Cross flow radiator positioning

Figure 1c shows the correct mounting position on a cross flow radiator. Mounting is to the side of the fan, and near the outlet hose.

Figure 1a

Delta Temp Probe

Figure 1b

Down Flow Radiator

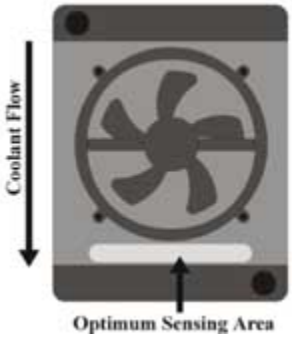
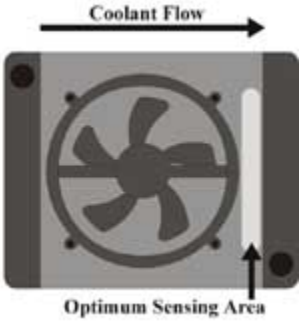


Figure 1c

Cross Flow Radiator

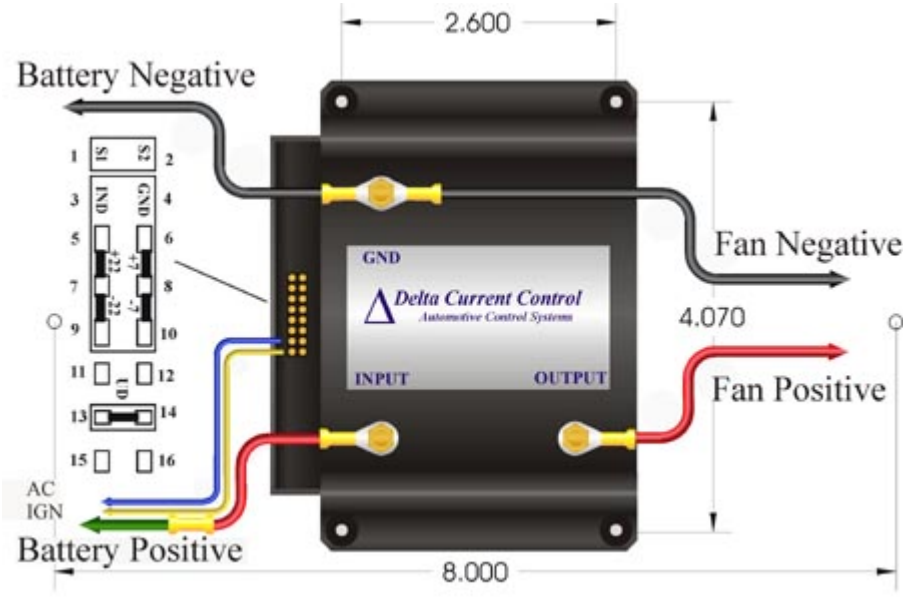


Control unit wiring

High current wiring

1. Plug the mounted sensor into pins 1, 2 of the control unit.
2. Using the supplied wiring loom, secure one connectored end of the red wire on the output terminal of the controller using one star washer and brass 6-32 hex nut. A snug fit is all that is needed (5-in-lb), Be careful not to overtighten. Route the wire to the positive fan terminal, cut and trim the wire and install the female fastconnect. If needed, install the male fastconnects to the fan input wires.
3. Place one connectored end of the black wire on the GND terminal of the controller. Route the wire to the negative fan terminal, cut and trim the wire and install the female fastconnect. Connect the fan.
4. Place the connectored end of the remaining black wire on the GND terminal of the controller and secure both wires with one star washer and 6-32 brass hex nut. Route the wire to the negative battery terminal or a nearby ground. Attach the 5/16 ring terminal and connect, preferably to the negative battery terminal.
5. Place the connectored end of the remaining red wire on the input terminal of the controller and secure the wire with one star washer and brass 6-32 hex nut. Route the wire to the positive battery terminal or a nearby junction box. Attach the fusible link and connect, preferably to the positive battery terminal. Do not connect to the starter end of the battery cable. Use the supplied wire hold downs, along with two self tapping screws and flat washers to secure the wires.

Figure 2



Auxiliary wiring

Ignition input

The control unit will shut itself off automatically soon after the engine is turned off. If an Immediate shut off is required, connect the yellow ignition input wire of the harness to the unit and to any source that is higher than 6 V whenever the ignition is on.

AC input

If the vehicle has air conditioning and a factory installed electric fan, connect the blue AC input wire of the harness to the unit and to the positive terminal of the OEM fan wiring harness. If the vehicle has air conditioning and originally came with a mechanical fan, connect the blue AC input wire of the harness to the air conditioning compressor input.

	151	158	165	173	180	187	195	202	209
(5,7)							•	•	•
(6,8)			•			•			•
(8,10)	•			•			•		
(7,9)	•	•	•						

Parts List

1 control unit
1 radiator temperature probe
1 high current wiring harness
1 low current wiring harness
1 fusible link
2 female fastconnects
2 male fastconnects
1 5/16 ring terminal
2 wire hold downs
3 internal star washers
3 6-32 brass nuts
6 # 6 self tapping screws
6 flat washers
3 zero ohm jumpers
4 3/16 rubber grommets

Testing the unit

Start the car. If equipped with air conditioning, turn on the AC, the fan should run at 50 % power without the underdrive jumper and 100% with the jumper. Check the direction of airflow and reverse the fan input wires if necessary. Turn off the AC and let the engine warm up. The fan should run at the necessary speed to stabilize engine temperature.