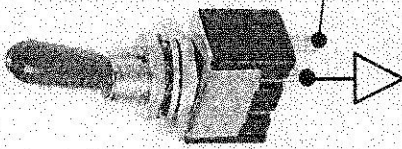


INSTALL INSTRUCTIONS AUTO COOL HF-125 CONTROLLER

2 TWISTED WIRE

2 TWISTED WIRE

FAIL SAFE SWITCH

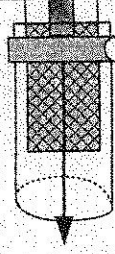


1 AMP SWITCH WILL WORK OK

2 TWISTED WIRE

SLIP THE BRASS SENSOR UNDER THE RUBBER HOSE USE RTV IF YOU HAVE ANY LEAKS AND CLAMP DOWN. DOES NOT APPLY TO THE COPPER INLINE SENSORS.

OUTFLOW PORT



RADIATOR

ELECTRIC DC FAN

SHORT & HEAVY WIRE TO GND

GND

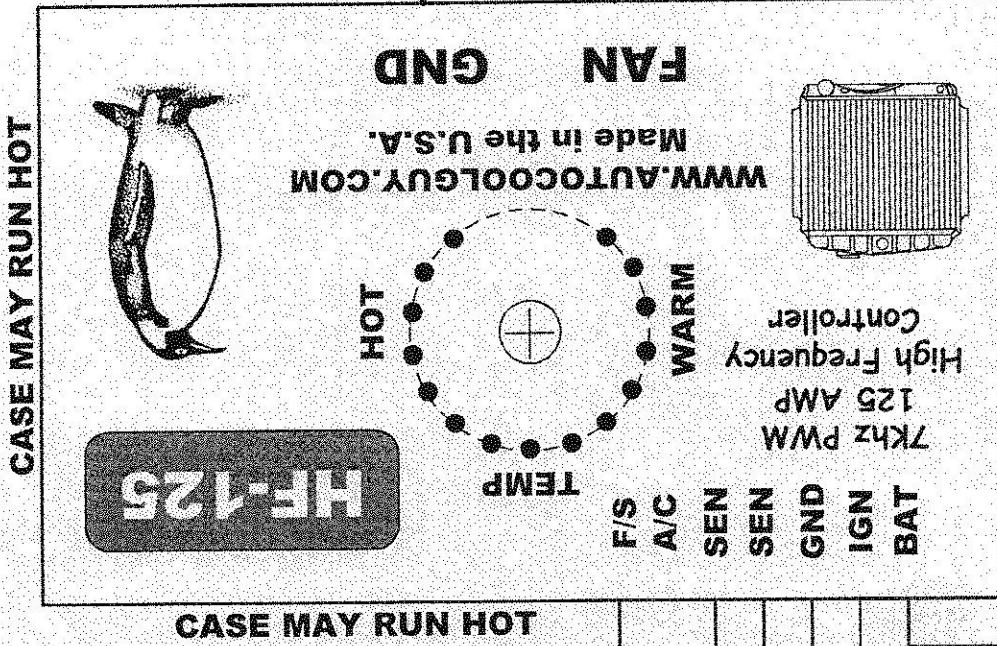
8 - # 10

8 - # 10

BATTERY

GND

1 AMP FUSE



CASE MAY RUN HOT

CASE MAY RUN HOT

CASE MAY RUN HOT

THE FUSE WILL PREVENT THIS WIRE FROM BURNING IF SHORTED TO GROUND!!!

USE #20 AWG WIRE FOR THIS 7 PIN CONNECTOR

IGNITION SWITCH

GND

DETAILS ON HOW TO INSTALL YOUR AUTO COOL HF-125 CONTROLLER

HOW TO WIRE UP THE SEVEN (7) PIN BLACK TERMINAL:

PIN 1. WIRE THIS PIN TO THE BATTERY POSITIVE. YOU SHOULD PUT A 1 AMP FUSE IN THE LINE FOR PROTECTION.

PIN 2. WIRE THIS PIN TO THE IGNITION SWITCH SO + 12 VOLTS TURNS ON THE CONTROLLER.

PIN 3. TIE THIS PIN TO GROUND WITH A SMALL LUG TO CAR CHASSIS METAL.

PIN 4 & 5. THE SENSOR WIRES ARE CONNECTED TO THESE 2 PINS - NO POLARITY.

PIN 6. CONNECT THIS PIN TO THE AIR CONDITIONING SYSTEM - TURNS ON FANS AND PRESET FAN RPM WITH POT ON THE BACK SIDE OF THE CONTROLLER.

PIN 7. CONNECT THIS PIN TO THE FAIL SAFE SWITCH MOUNTED ON THE DASH. SEE PAGE ONE.

HOW TO INSTALL THE TEMPERATURE SENSOR:

PULL THE OUTFLOW RUBBER HOSE BACK AN INCH OR TWO TO EXPOSE THE OUTFLOW PORT OF YOUR RADIATOR. THEN, PLACE THE SENSOR ON TOP OF THE OUTFLOW PORT AND THEN SLIDE THE HOSE BACK ON TOP OF THE OUTFLOW PORT. BE SURE THAT THE SENSOR BRASS TO THE OUT FLOW PORT IS CLEAN FOR GOOD HEAT TRANSFER TO THE SENSOR. YOU MAY USE SOME RTV TO HELP SEAL ON TOP OF THE SENSOR AND HOSE TO PREVENT LEAKS.

IF YOUR RADIATOR OUTFLOW PORT IS PLASTIC, YOU WILL NEED A BRASS PLUG OR COPPER INLINE SENSOR.

HOW TO WIRE UP THE FAN OR FANS:

CONNECT THE PLUS (+) OF THE FAN TO THE BATTERY PLUS. USE AT LEAST # 10 - # 12 AWG WIRE FOR THIS LINE. INSTALL AN OPTIONAL FUSE TO PROTECT INTERNAL FUSES IN CASE THE FAN OR WIRES SHORT OUT.

TESTING THE FAN AND AIR FLOW DIRECTION: (BEFORE YOU START THE ENGINE) SHORT THE **BRASS FAN** TERMINAL TO GROUND TO TEST THE FAN AIR FLOW DIRECTION. IF THE FAN OR FANS FAIL TO SPIN - YOU HAVE AN OPEN CIRCUIT.

CONTROLLER NOT WORKING WITH HOT MOTOR: (AFTER YOU HAVE ALL WIRES INSTALLED)

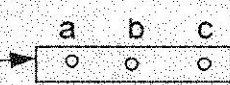
START THE ENGINE AND VERIFY +13.8 TO +14 VOLTS FROM PIN 1 TO PIN 3 (BLACK TERMINAL) WITH VOLT METER. NEXT, VERIFY +13.8 TO +14 VOLTS FROM PIN 2 TO PIN 3 GROUND. NEXT, SHORT OUT SENSOR PINS 4 & 5: THIS SHOULD PUT THE FANS INTO HIGH RPM. TURN ON THE IGNITION AND GROUND PIN (7) SEVEN: THIS SHOULD PUT THE FANS INTO HIGH RPM.

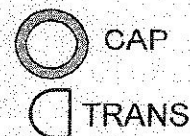
TIME TO START THE ENGINE:

WHEN YOU START THE ENGINE AND *ITS COLD*, THE FAN OR FANS WILL NOT START TO SPIN UNTIL THE RADIATOR GETS WARM TO HOT. AS THE RADIATOR WARMS UP, THE FANS WILL START TO SPIN SLOWLY AND SPEED UP AS THE ENGINE WARMS UP. AT FREEWAY SPEEDS, THE FANS WILL BE CLOSE TO OR AT ZERO RPM. WHEN YOU STOP WITH THE ENGINE RUNNING, THE FANS WILL SPIN TO CONTROL THE TEMPERATURE AT THE SET POINT.

COOL DOWN TIMER SELECT- ON OR OFF: (WITH THE SYSTEM TURNED OFF)

You may want to use a needle nose pliers to move this jumper.

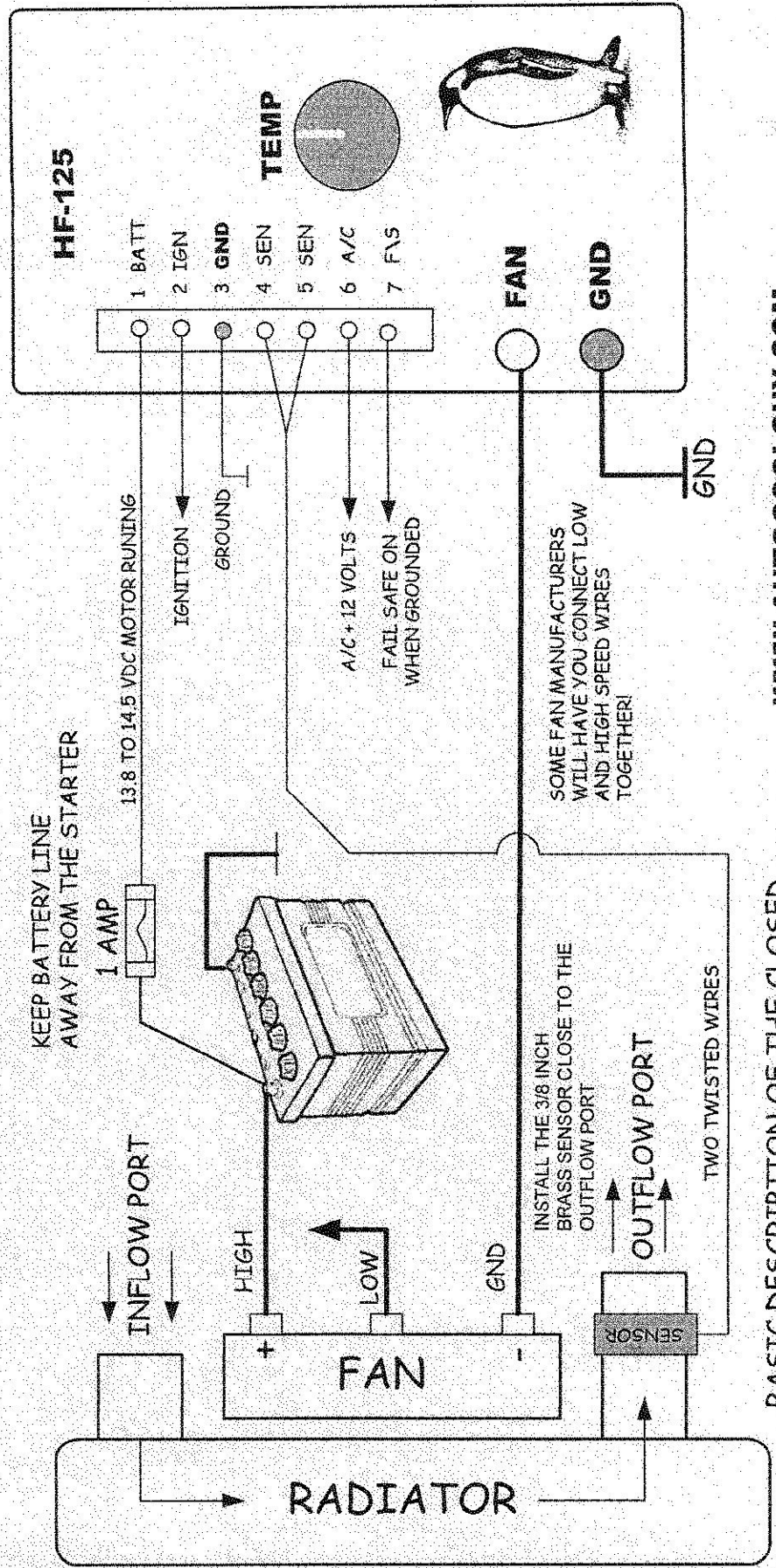
1. Remove the cover - do not remove the knob, no need.
2. Find shorting pins then move as shown 
3. Move JUMPER to a-b to turn off the cool down timer.
4. Factory set: shorted b-c for cool down timer normal operation.



- * RADIATOR TEMPERATURE CONTROL WITH THE FAN RPM & ITS FULLY AUTOMATIC
- * AUTO COOL CONTROLLERS USE SOLID STATE DEVICES TO SWITCH FANS - NOT RELAYS
- * NO RELAYS TO ARC, BURN AND FAIL OVER TIME AND MILES
- * NO MORE OVER HEATING IN SLOW OR STALLED TRAFFIC
- * NO MORE BOIL OVER TOWING UP MOUNTAIN ROADS
- * AVOID TEMPERATURE & PRESSURE PEAKS IN HOT WEATHER.
- * MORE HORSE POWER WHEN THE TRAFFIC LIGHT TURNS GREEN
- * SELECT THE CONSTANT TEMPERATURE OF YOUR RADIATOR
- * NO PROGRAM TO SET UP OR WORRY ABOUT.
- * ONE YEAR WARRANTY ON ALL AUTO COOL CONTROLLERS.

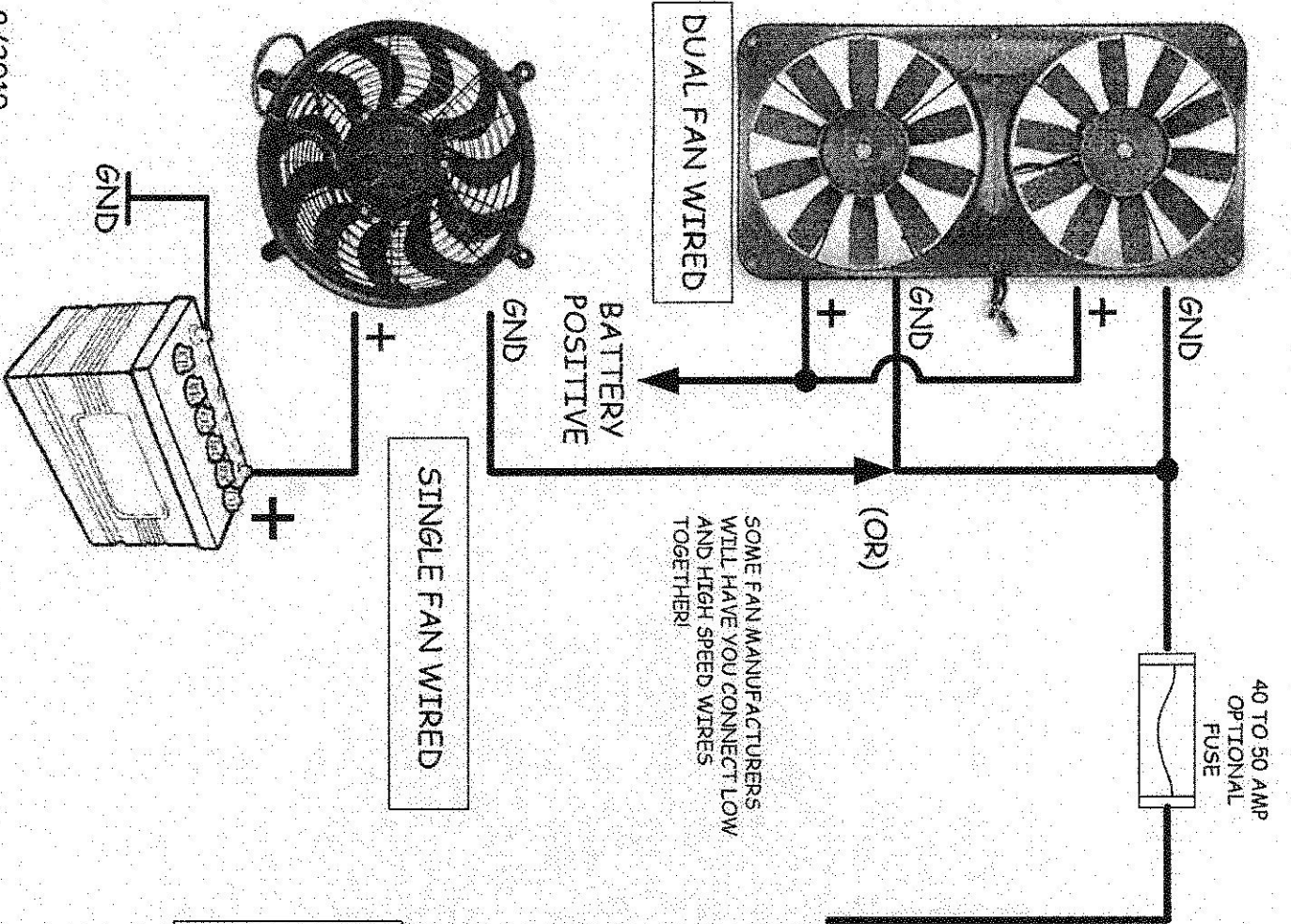
ADJUST THE A/C FAN
SPEED CONTROL WITH A
SMALL FLAT BLADE
SCREW DRIVER

The case of the controller may run hot

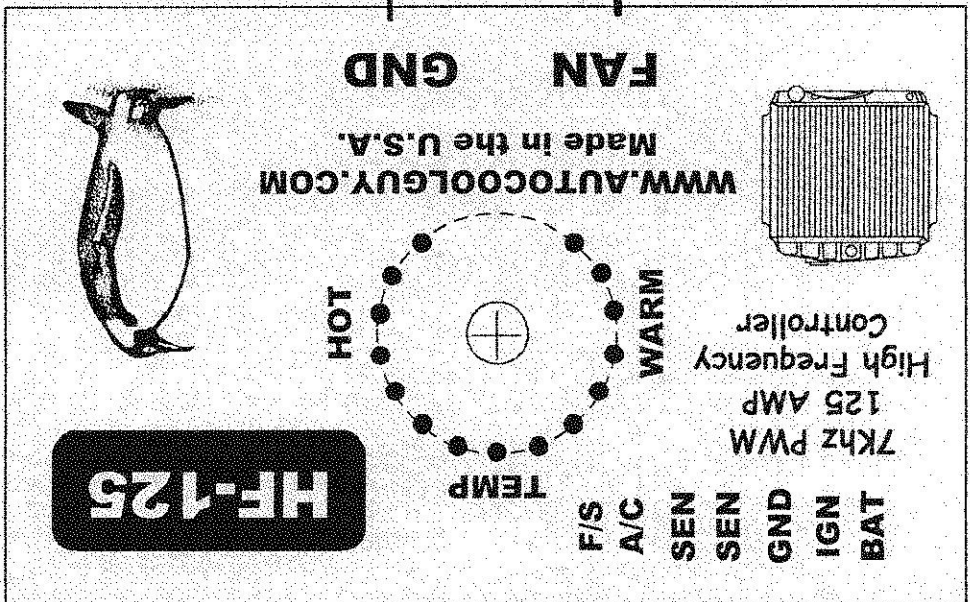


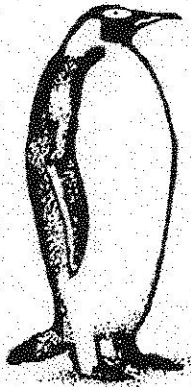
BASIC DESCRIPTION OF THE CLOSED
LOOP SYSTEM OF TEMPERATURE CONTROL
WITH THE AUTO COOL HF-125 CONTROLLER

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562-367-3225

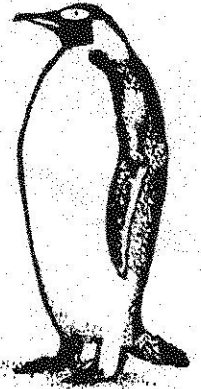


The case of the controller may run hot





HOW YOUR AUTO COOL CONTROLLER WORKS



From the Auto Cool Guy
autocoolguy@yahoo.com
562-367-3225
Darryl The Auto Cool Guy

This paper will explain how your Auto Cool controller works.

You have installed your Auto Cool controller and sensor in the **OUTFLOW** port of the radiator and you have no leaks. You tested the Battery, Ignition and sensor wires and are installed correctly. If you put the sensor on the radiator **INFLOW** port, the fans will be running at high RPM all the time.

The Auto Cool sensor sends temperature information to the controller and then the controller sets the pulse width the the fan or fans. If you have more than one fan, connect them in parallel.

You just switched on the ignition and started the engine and its cold. Notice that the fan or fans did not come on, or "**kick on.**" That is normal, they will only start to spin very slowly as the radiator temperature gets warm to hot. Now, as your radiator's temperature is getting hotter, the RPM of your fans will spin faster. The controller will reach the pulse width and fan RPM when it is controlling the temperature of your radiator.

Your vehicle is parked and running at an idle. This is the time to test the regulation of temperature control. No need for a road test, that will come later.

Once your vehicle is up to temperature, now you want to get that laser temperature gun and point the red dot on the bottom of the radiator. Point the red dot on a **dull black surface**, not a shiny chrome. In slow steps, adjust the black control knob so that radiator temperature is about 10 to 15 degrees, below your thermostat's engine temperature.