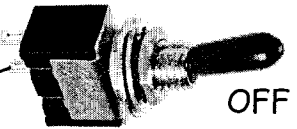


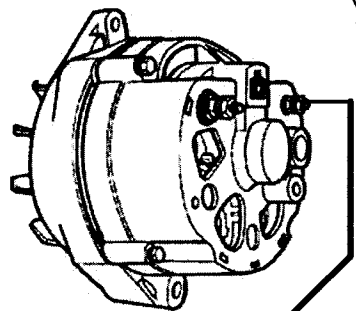
AC + 12 V
GROUND
IGNITION

1 AMP SWITCH
WILL WORK OK

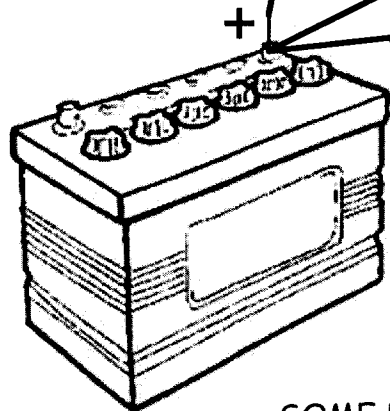


SEE OUR WEB PAGE
FOR THE TROUBLE
SHOOTING MATRIX
IF NEEDED.

The DC battery +
should be between
+13.8 to +14.5 volts
with the motor
running.

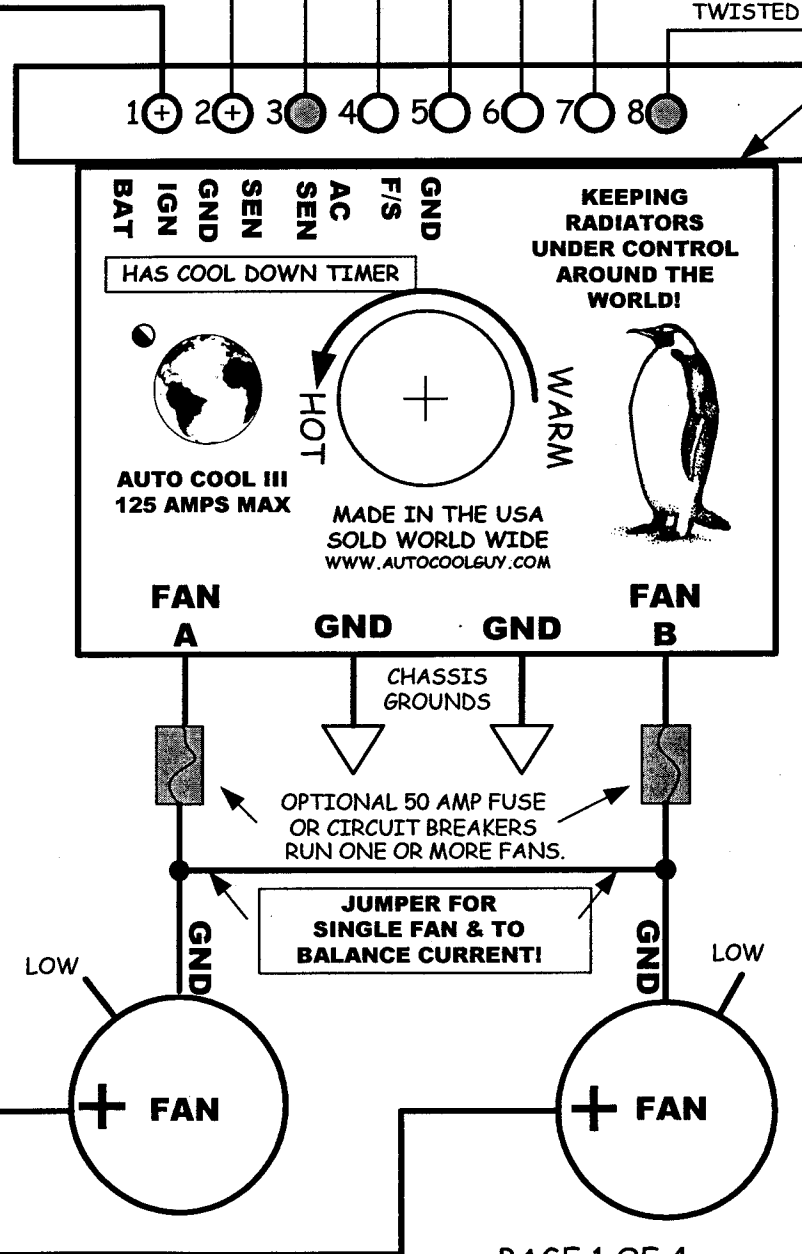


1 AMP
FUSE



SOME FANS TIE LOW & HIGH TOGETHER

KEEP AWAY FROM STARTER
CONNECT TO BATTERY POST



TWISTED PAIR

TWISTED PAIR

GND

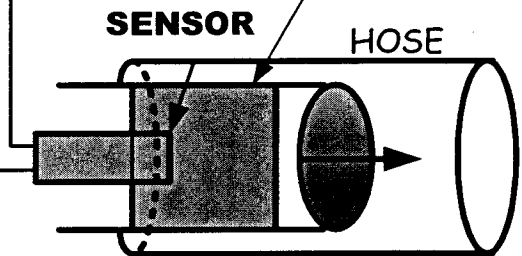
OFF

THE FAIL SAFE SWITCH
WHEN CLOSED TURNS THE
FANS ON FULL RPM FOR ANY
EMERGENCIES.

THE TRIM POT NEXT TO PIN
8 WILL ADJUST THE A/C
FAN SPEED.

YOU CAN ADJUST THE
TEMPERATURE AS REQUIRED
WITH THE BLACK KNOB TO
KEEP THE RADIATOR 25
DEGREES BELOW THE
ENGINE TEMPERATURE.

IF YOU USE THE INLINE
COPPER SENSOR, THIS
DRAWING BELOW DOES
NOT APPLY.



INSTALL **BRASS** SENSOR
UNDER RADIATOR
OUTFLOW PORT & CLAMP
DOWN

PAGE 1 OF 4

WWW.AUTOCOOLGUY.COM
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HOW TO WIRE UP THE EIGHT (8) PIN BLACK TERMINAL:

PIN 1. WIRE THIS PIN TO THE BATTERY PLUS. YOU MAY WANT TO PUT A SMALL FUSE (1 AMP) IN LINE FOR PROTECTION AT THE BATTERY END. USE AT LEAST 22 TO 20 AWG WIRE FOR THIS LINE. I WOULD USE RED WIRE FOR CLARITY.

PIN 2. WIRE THIS PIN TO THE IGNITION SYSTEM SO THAT WHEN YOU START THE ENGINE, THE VOLTAGE WILL GO TO 12 VOLTS. USE 20 TO 22 AWG WIRE.

PIN 3. WIRE THIS PIN TO THE CHASSIS (GROUND) OF THE CAR AND KEEP IT SHORT. I WOULD USE BLACK WIRE FOR THIS ONE. USE 20 TO 22 WIRE.

PIN 4 & PIN 5. INSTALL THE TWO WIRES FROM THE SENSOR TO THESE TERMINALS. THERE IS NO POLARITY TO WORRY ABOUT AND YOU CAN AD OR SHORTEN THE LEADS. IF YOU AD WIRE. MAKE SURE YOU HAVE A SOLID SPLICE. I WOULD EVEN SOLDER THESE TO BE SURE. IF A SPICE OPENS, THE CONTROLLER WILL STOP WORKING.

PIN 6. CONNECT THIS PIN TO THE AIR CONDITIONING SYSTEM WERE +12 VOLTS WILL PUT THE FANS INTO THE HIGH RPM MODE. YOU CAN ADJUST THE FAN RPM FROM LOW RPM TO 100 PERCENT WITH AN INTERNAL POT NEXT TO PIN 8. ALSO NOTE, THE TEMPERATURE CONTROL MODE WILL OVER-RIDE THE A/C MODE.

PIN 7 & PIN 8. THIS IS THE FAIL SAFE SYSTEM ON. YOU CAN INSTALL A SMALL TOGGLE SWITCH THAT SHORTS PINS 7 & 8, ON THE DASH THAT WILL PUT THE FAN OR FANS INTO HIGH RPM. THIS CAN BE TURNED ON AND OFF AT WILL IF YOU THINK YOU HAVE A COOLING PROBLEM IN HOT WEATHER. NOTE: PIN 8 IS A **SECOND GROUND CONNECTION.**

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.

HOW TO WIRE UP THE FAN OR FANS:

CONNECT THE PLUS FAN'S + PLUS TO THE BATTERY PLUS+!
CONNECT THE FAN'S GROUND TO THE BRASS FAN A & FAN B!

YOU MAY WANT TO USE 50 AMP FUSES FOR EXTRA PROTECTION TO THE CONTROLLER. AUTO COOL III IS FUSED AT 150 AMPS. USE AT LEAST # 10 TO #12 AWG WIRE FOR THIS LINE. IF THIS LINE GET WARM DURING OPERATION, YOU MAY WANT TO USE A LARGER GAUGE WIRE. SMALL WELDING CABLE WORKS GREAT AND EASY TO FIND AT WELDING SHOPS.

CONNECT THE (-) RETURN SIDE OF THE FAN OR FANS TO THE **FAN A** OR **FAN B** TERMINALS. YOU CAN CONNECT **FAN A** AND **FAN B** BRASS BOLTS TOGETHER FOR A SINGLE FAN. YOU CAN SHORT THE **FAN A** OR **FAN B** TERMINALS TO GROUND TO TEST THE FANS AIR FLOW DIRECTION. NEXT, CONNECT THE 2 **GND BRASS** TERMINALS TO CHASSIS GROUND.

TIME TO START THE ENGINE:

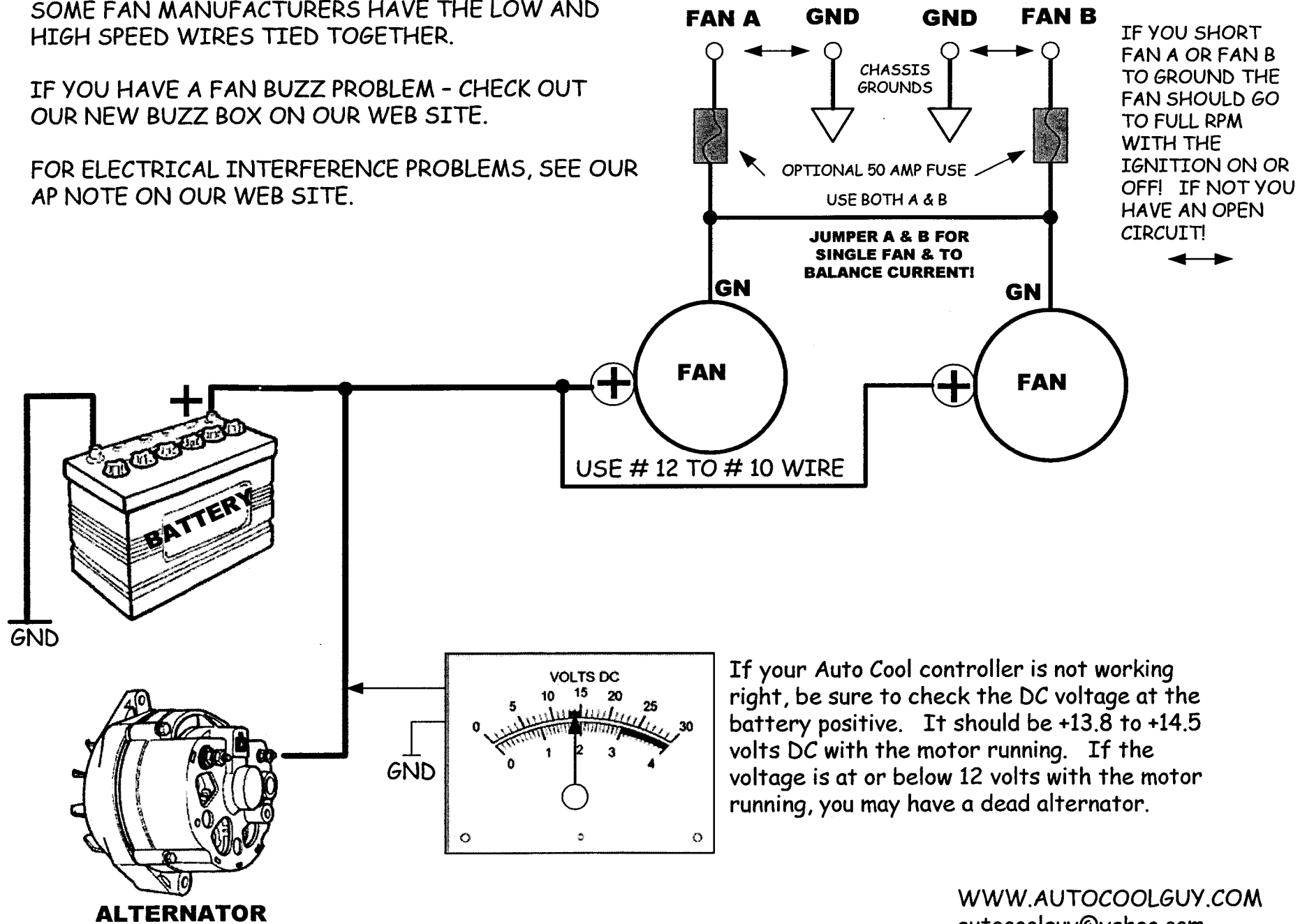
WHEN YOU START THE ENGINE AND ITS COLD, THE FAN OR FANS WILL NOT START TO SPIN UNTIL THE RADIATOR GETS WARM TO HOT. AS THE ENGINE WARMS UP, THE FANS WILL START TO SPIN SLOWLY AND SPEED UP AS THE ENGINE WARMS UP. AT FREEWAY SPEEDS, THE FANS WILL BE CLOSE TO OR AT ZERO RPM. WHEN YOU STOP WITH THE MOTOR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

NOTES:

SOME FAN MANUFACTURERS HAVE THE LOW AND HIGH SPEED WIRES TIED TOGETHER.

IF YOU HAVE A FAN BUZZ PROBLEM - CHECK OUT OUR NEW BUZZ BOX ON OUR WEB SITE.

FOR ELECTRICAL INTERFERENCE PROBLEMS, SEE OUR AP NOTE ON OUR WEB SITE.



If your Auto Cool controller is not working right, be sure to check the DC voltage at the battery positive. It should be +13.8 to +14.5 volts DC with the motor running. If the voltage is at or below 12 volts with the motor running, you may have a dead alternator.

ALTERNATOR

FIRST TEST PROCEDURE FOR AUTO COOL III RADIATOR FAN CONTROLLER AFTER ITS BEEN INSTALLED IN YOUR CAR OR TRUCK

After you have wired up the Auto Cool III controller you will be ready to test the system. Do these checks on the eight (8) pin terminal first. Also check alternator for proper DC output voltage if in doubt.

1. Measure 12 to 14 volts DC from the BATTERY PIN 1 to GROUND PIN 3.
2. Verify that PIN 3 of the black terminal is grounded. Might use a volt meter for this test.
3. Verify that the sensor wires are connected to PIN 4 and PIN 5 of the black terminal.
4. Verify the the air conditioning +12 volt power is connected to PIN 6 of the black terminal – if used.
5. Verify that the PIN 7 and PIN 8 has been wired to the FAIL SAFE switch on the dash board.
6. Turn on the IGNITION but DO NOT start the engine for the next step.
7. Measure 12 to 14 volts from the IGNITION PIN 2 to PIN 3 GROUND.
8. Turn off the IGNITION SWITCH and go to the next step if the above is correct.

Do these check on the BRASS FAN A & B AND GROUND TERMINALS on the controller.

1. Verify the FAN'S POSITIVE WIRES have been wired to the BATTERY POSITIVE.
2. Verify the FAN'S RTN or GROUND WIRES are tied to FAN A and or FAN B BRASS TERMINALS.
3. Note: You can install the OPTIONAL fuses on either side of the FAN WIRES.
4. You can JUMPER between FAN A and FAN B BRASS terminals to balance the current. (or single fan)

THE NEXT TEST WILL VERIFY THAT THE HEAVY FAN WIRES ARE WIRED CORRECTLY:

1. Verify that the IGNITION switch is OFF and locate a short heavy wire or a tool for the next step.
2. Short FAN A (BRASS) and or (BRASS) FAN B to the (BRASS) GROUND TERMINALS.
3. At this point, the fan or fans should go to HIGH RPM.
4. If the fans did not spin, go back and check the heavy fan wires.
5. If the fans did spin to high RPM, you have passed this test and remove the short.
6. Fan wires correctly wire – you can continue.

CONTINUE IF YOU HAVE CHECKED THE ABOVE WITH THE PROPER RESULTS:

1. Switch on the IGNITION, start the engine and let it idle and parked for this test.
2. Turn the black control knob on the Auto Cool III to the FULL CW WARM position.
3. As the engine thermostat opens and the sensor warms up, the fans or fans will start spinning slowly.
4. As the radiator and engine warms up, turn the black control knob CCW one step at a time.
5. You can set the black control knob to the center position or other.

USE A LASER TEMPERATURE GAUGE TO MEASURE RADIATOR AND ENGINE TEMPERATURE:

1. You can now measure the radiator and engine temperature with a laser indicator.
2. Its time to take your car or truck out for a test drive & watch for a constant engine temperature.
You can find a laser temperature gauge from Harbor Freight Tools or Home Depot.

NOTE:

The Auto Cool III controllers have a cool down timer as of 12-15-2015. Its factory preset at 15 seconds. If you want a one minute cool down time, pull the knob, remove the cover and pull out the small black jumper.

Do not ARC WELD any part of the car with the controller installed. Remove it to be sure no damage can be done to the solid state devices.

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