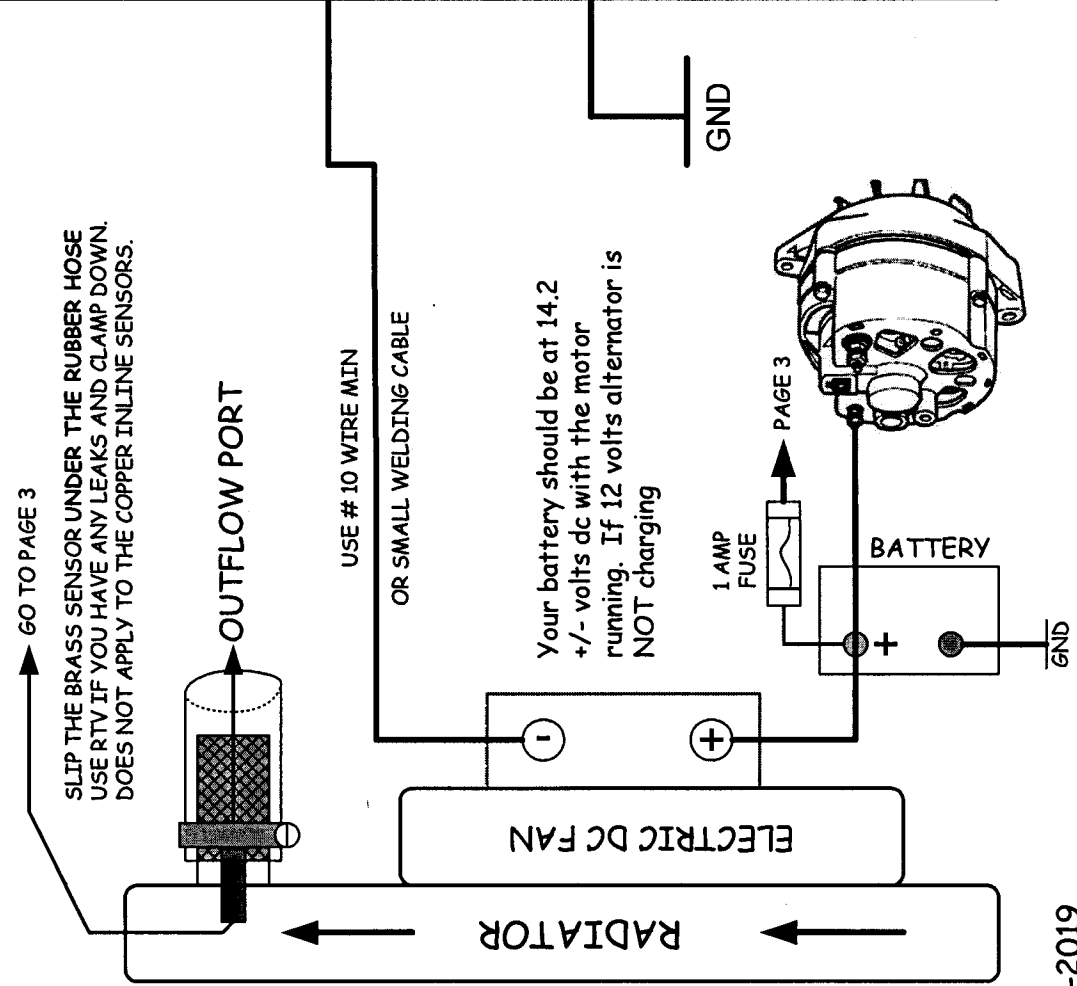
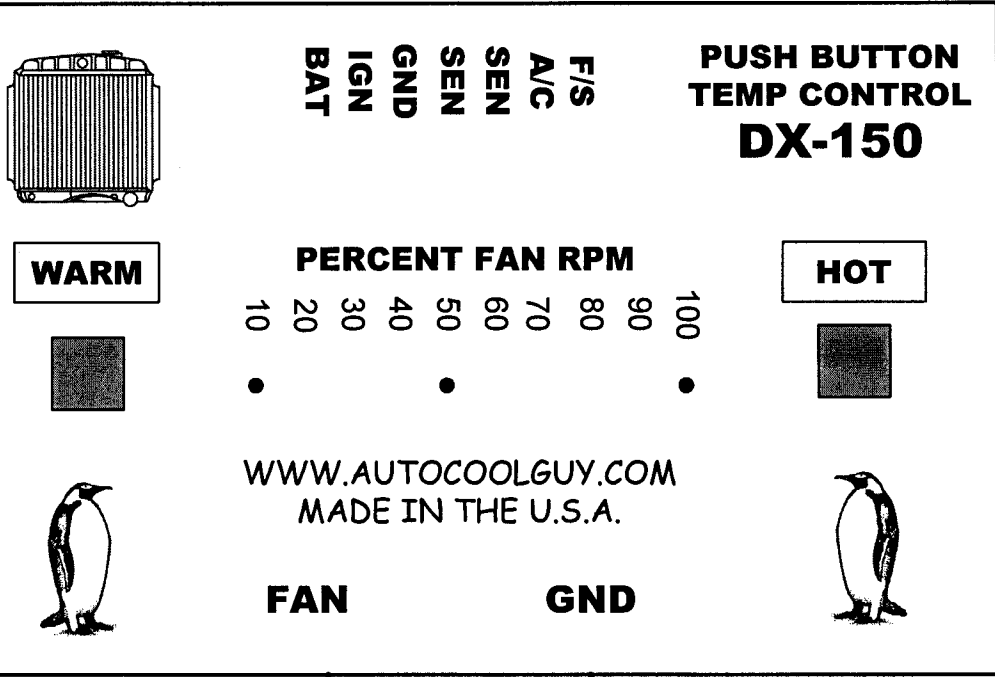


INSTRUCTIONS FOR INSTALLING AUTO COOL DX-150

Darryl The Auto Cool Guy
Radio Research, Ltd.
autocoolguy@yahoo.com
562-367-3225



DETAILS ON HOW TO INSTALL YOUR AUTO COOL DX-150 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.

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 INCASE 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:

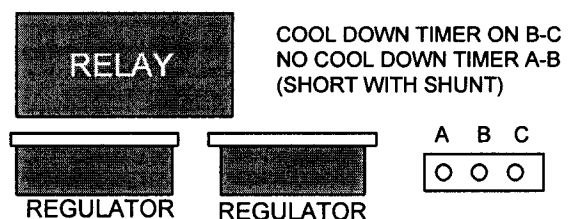
WHEN YOU START THE ENGINE AND ITS COLD, THE FAN OR FANS WILL NOT START TO SPIN UNTIL THE RADIATOR GETS WARM TO HOT. AS THE RADIATOR WARMS UP, THE FANS WILL START TO SPIN SLOWLY AND SPEED UP AS THE ENGINE WARMS UP. AT FREEWAY SPEEDS, THE FANS WILL BE CLOSE TO OR AT ZERO RPM. WHEN YOU STOP WITH THE ENGINE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

GO TO PAGE 5 FOR YOUR FIRST TEST

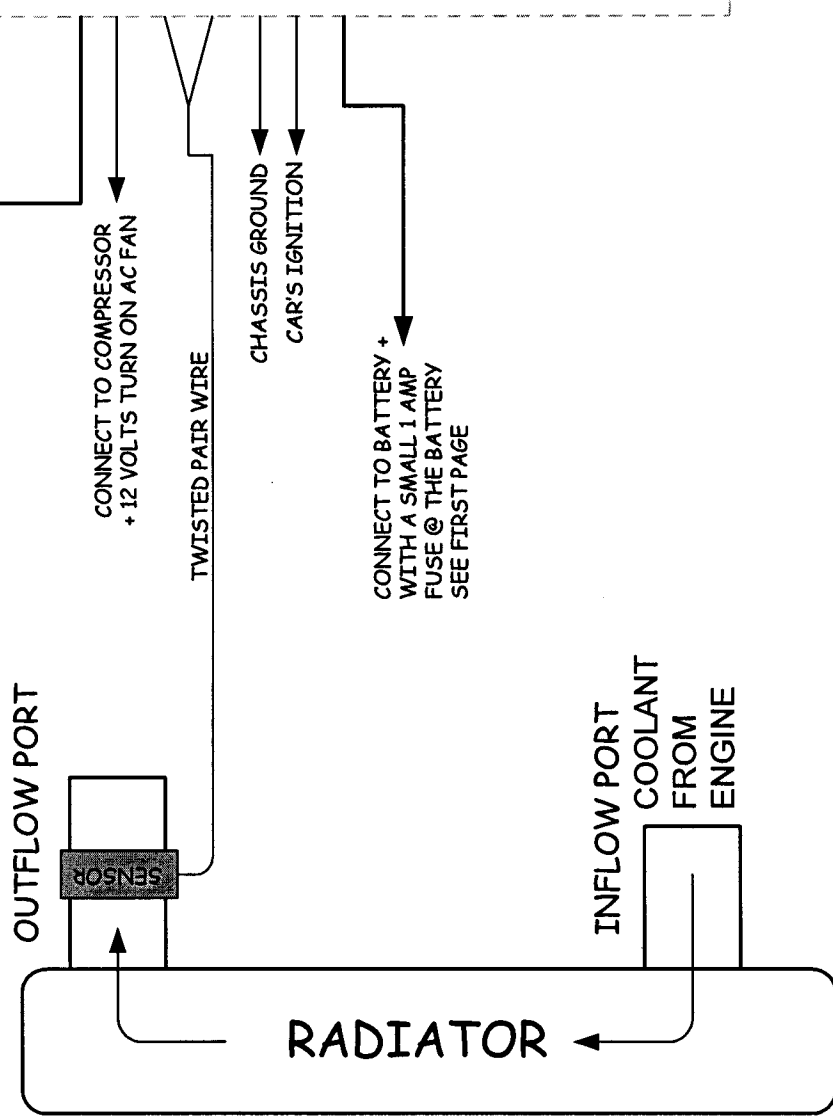
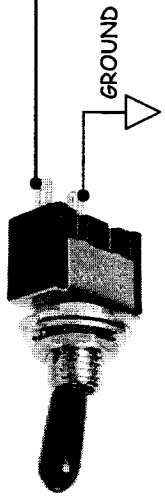
COOL DOWN TIMER SELECT- ON OR OFF: (WITH THE SYSTEM TURNED OFF)

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

1. Remove the cover - and move the shunt or short to the other two pins.



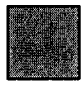
YOU CAN USE A VERY SMALL SWITCH
THE F/S USES VOLTAGE CHANGE TO
SWITCH FS ON OR OFF.




DX-150
TEMP CONTROL

PUSH BUTTON

HOT



FAN




PERCENT FAN RPM

100 • 90 80 70 60 50 • 40 30 20 10 •


GND **FAN**

WWW.AUTOCOOLGY.COM
MADE IN THE U.S.A.


F/S




A/C




SEN




SEN




GND




IGN

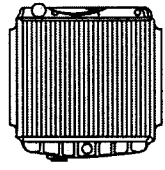


BAT



WARM





WARM



BLUE
PUSH

PERCENT FAN RPM

10
20
30
40
50
60
70
80
90
100



HOT



RED
PUSH

WWW.AUTOCOOLGUY.COM
MADE IN THE U.S.A.

READY TO START THE ENGINE

NOW YOUR FIRST TEST WITH THE ENGINE RUNNING:

BE SURE YOU HAVE +12 TO +14 VOLTS ON PIN 1 AND 2 TO GROUND ON THE BLACK CONNECTOR.
BE SURE YOU HAVE PIN 3 TIED TO THE CARS GROUND.

NOW PUSH THE **BLUE** BUTTON AND HOLD IT DOWN FOR 10 SECONDS. AS THE RADIATOR GETS HOT,
YOU WILL SEE THE PERCENT LEDS LIGHT UP AND THE FAN(S) WILL START TO GAIN RPM.

NOW USE A LASER TEMP GUN AND MEASURE THE BOTTOM OF THE RADIATOR TO SET THE OUTFLOW
AREA TO 10 TO 15 DEGREES BELOW THE ENGINE THERMOSTAT TEMPERATURE. PUT THE LASER DOT ON
A BLACK DULL SURFACE - NOT ON SHINNY CHROME. PUSH THE RED BUTTON IN STEPS TO REACH THE
HIGHER TEMPERATURE YOU WANT.

ONCE YOU HAVE SET THE OPERATING TEMPERATURE, THE DX-150 WILL **REMEMBER** WERE YOU
SET IT. SO THE NEXT TIME YOU START THE ENGINE IT WILL BE WERE IT HAS BEEN SET.

NOW YOU CAN SEE THE LEDS THAT INDICATES THE PERCENT OF FAN RPM.