## JL PWM-CAN FAN CONTROLLER (POSITIVE)

- (30) SW12 volts ( PINK )
- (31) Ground (BLACK)
- (C) Positive Fan Input (VIOLET) optional
- (87) PWM Signal Output (GREY)
- (H) CAN High (BROWN)
- (L) CAN Low (YELLOW)

Pink Wire to switched 12volts

Black Wire to ground

GREY Wire to PWM fan signal wire

VIOLET INPUT 2 (optional)

BROWN Wire to CAN High

Wire to CAN Low

## **Operation:**

When the engine is running the PWM fan will run at a *low Idle* speed (15%).

When the module reads the engine temp it will command the fan to the desired %.

## Fahrenheit

199 degrees = 30%

205 degrees = 50%

212 degrees = 75%

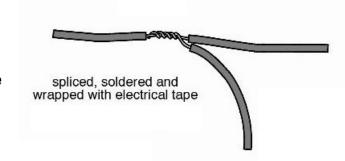
218 + degrees = 100%

Override inputs: These are optional inputs depending on if you ordered them. These inputs will run the fan as long as the unit is powered up, the engine does **not** have to be running for these to work. You can use these in various ways. Example:

: When the ( VIOLET ) wire has 12 volts applied the fan will run at **MAX** speed.



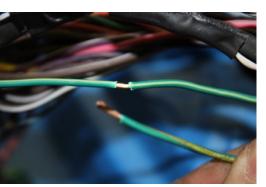
You will be splicing into the CAN wires: Find the wire you want to splice into and peel back a little insulation. Take the new wire and strip off a little insulation and wrap it around the exposed wire. Solder and tape up as seen in the picture below.



The JEEP ECU has two connectors. C1 is closest to the front of the Jeep.

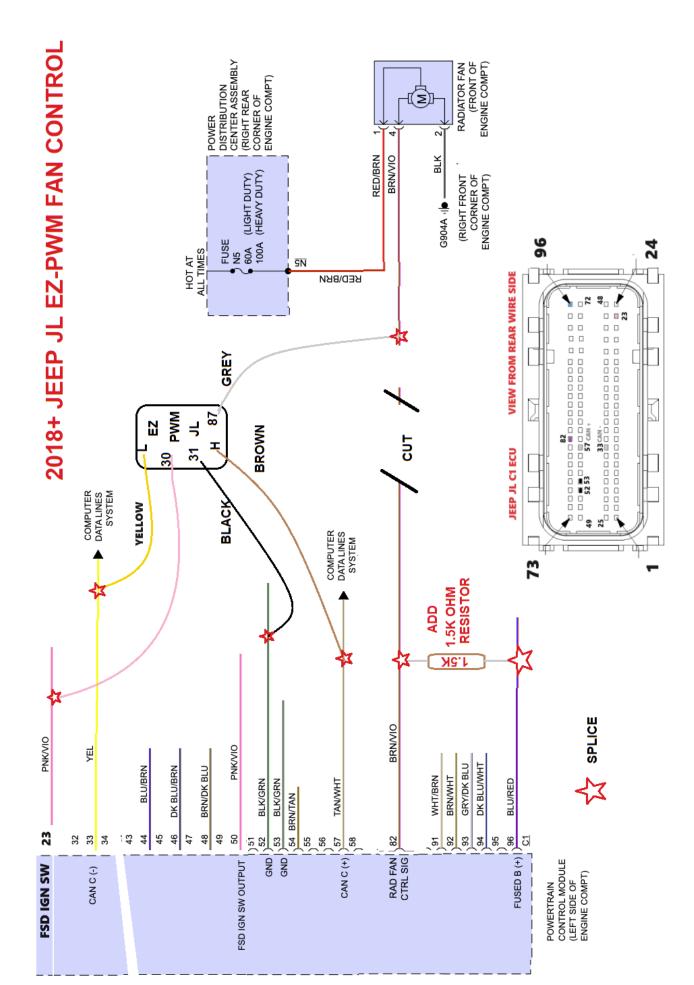
C1-57 TAN/WHITE. CAN + HIGH. (BROWN)
C1-33 YELLOW. CAN - LOW. (YELLOW)
C1-23 PINK/VIOLET. IGN 12Volts. (PINK)
C1-52 BLACK/GREEN. GROUND. (BLACK)

C1-82 BROWN/VIOLET. PWM FAN. / CUT- ATTACH / as diagram below









## PWM CONNECTION AND RESISTOR ADD ON:

Find the original signal wire at ECU C1-82. It will be a Brown/Violet wire. Go about 4" from the ECU connector and cut this wire.

Attach the (GREY) signal wire from the PWM module to the wire that goes towards the main harness. This is our PWM feed.

For the wire that goes back into the ECU you will need to the 1.5k ohm resistor between the old signal wire (Brown/Violet) and C1-96 BLUE/RED.

This will help keep the check engine light off and the ECU from setting a fan code.

It doesn't matter which direction you attach the resistor, but we normally put the red wire to C1-96 (BLUE/RED) and the BLUE wire to C1-82 (BROWN/VIOLET)