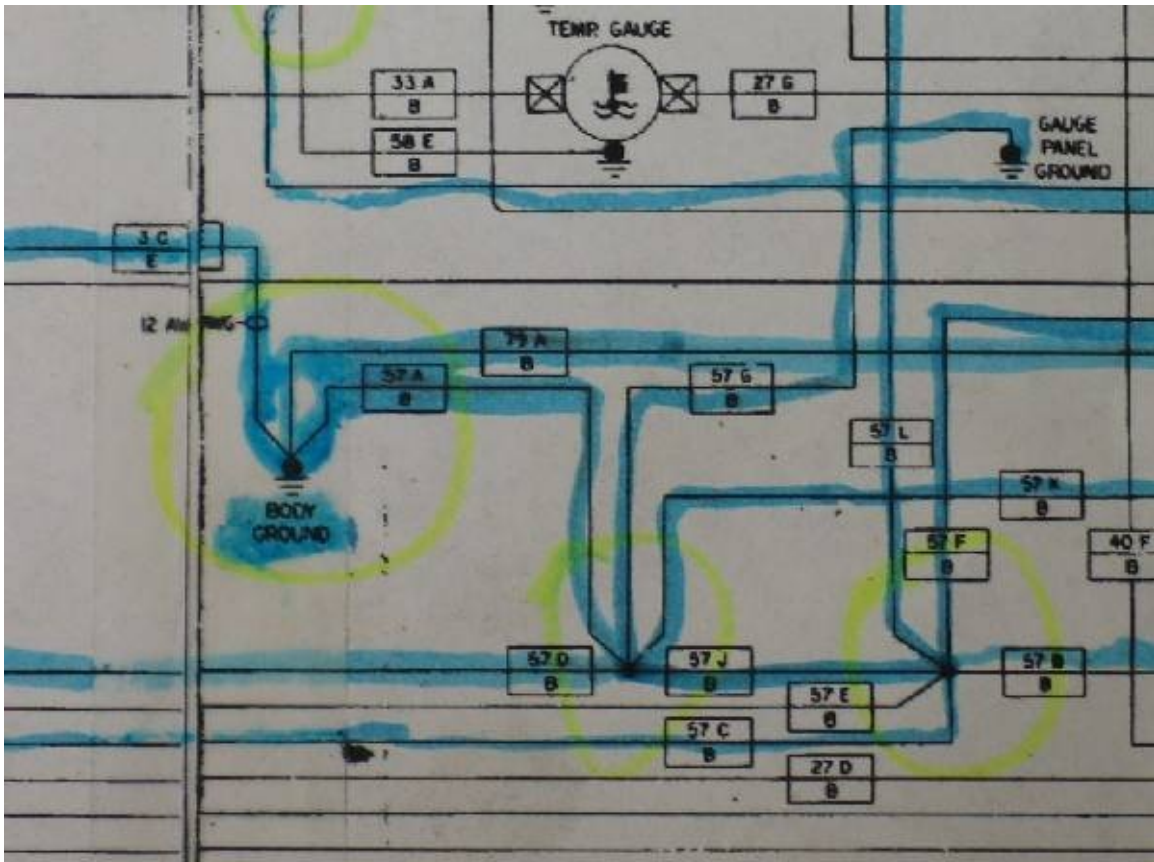


Humvee Ground Harness Installation

By Scott Pouls

I decided to write this up since I had a ground in the main body wire harness burn up in my truck. The grounds on the early Humvee's were not thought out very well, and this article should help you improve what is currently there. This harness is run in parallel with the existing harness, so there will always be a backup if one were to fail. On my truck the "3C / E" wire fried along with "79A/B" which are the main grounds for the body wire harness.



This diagram shows the main body ground harness and what it connects to.

The connectors that go into the main body ground had me baffled until I looked at the schematic. They look very odd and are completely covered in rubber, probably for fording capabilities. The above harness shows the main grounds for all of the body mounted electrical components.



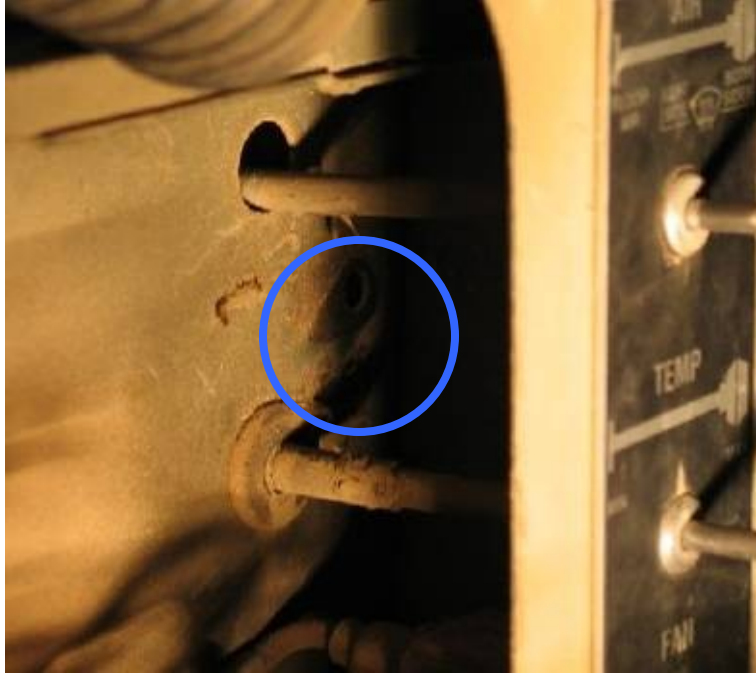
Picture of the electrical junction in the Humvee wire harness

Pictured above is one of the junctions that are found throughout the Humvee wire harness. If you were to chop away all of the rubber, you would find something similar to a band-tie around the wires going in / out of the junction. These are primarily used for grounds, but can also be used for common “hot” wires.

There are 3 main components to the Humvee grounding system, Body ground, Chassis / Engine ground and the source ground. The body ground is located directly behind the heater controls in the dash panel. The main engine ground is on the drivers-side rear cylinder head and the main source ground is the battery of course. If you look at the schematic above, you will notice that all of the grounds tie into the one body ground (which is poor at best).



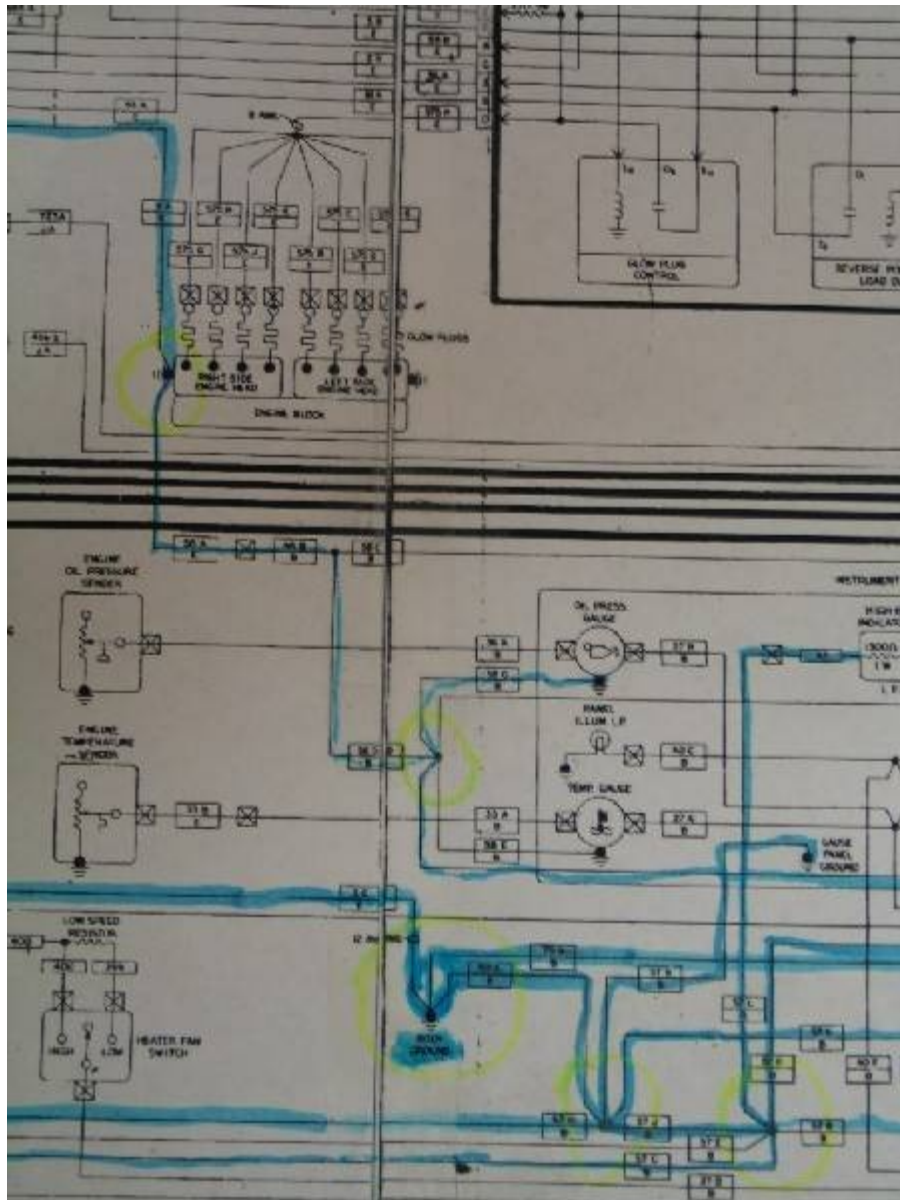
Engine side, Main Body Ground – Located above fuel filter



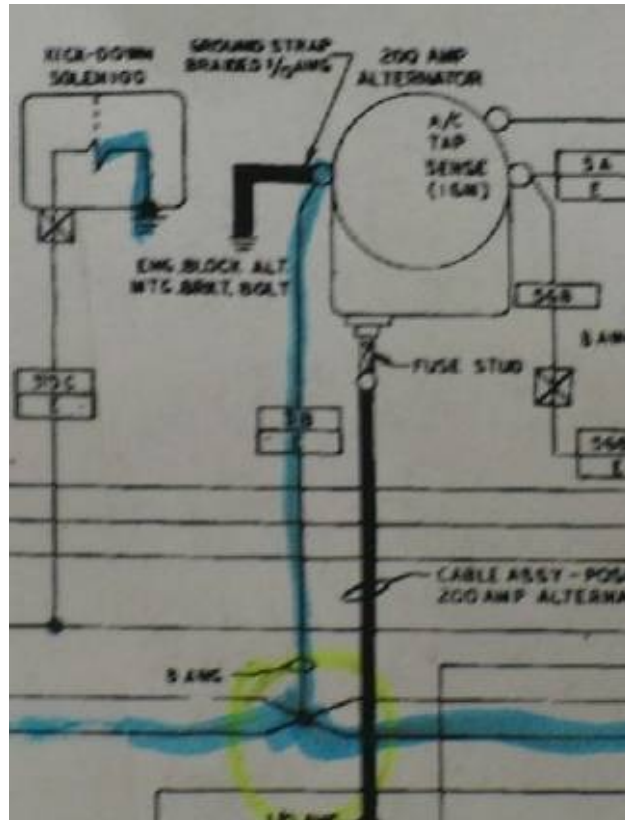
Cab Side, Main Body Ground (hole with bolt to engine wire harness)



Main Engine ground – Left rear cylinder head (might be right side depending on model)



Engine Ground schematic



Alternator Ground – Source

I went to my local hardware store and bought 20 ft of 10ga black wire and some ring terminals. With this, I then made a wire to go from the main body ground, to the back of the left cylinder head to assist in the body harness grounding. I also placed a wire from the alternator ground to the same engine ground on the back of the left cylinder head. Lastly, I hooked up a wire from the PCB mounting screw to the main body ground (early PCBs used their box as the ground). If you want to be sure that the whole harness is now grounded, feel free to take another wire from the engine ground to the battery ground, this will not harm anything and will make a sure ground connection.

Summary

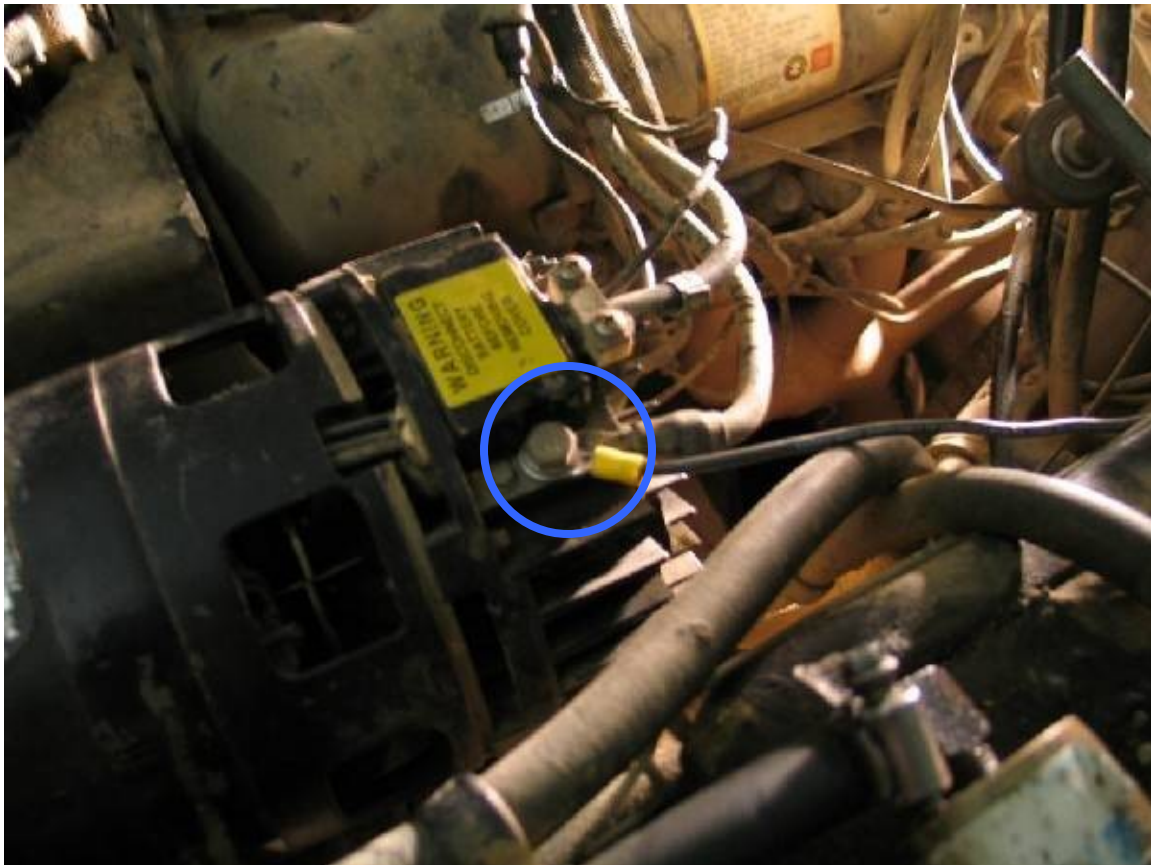
New Connections Made

- **Main Body Ground to Bolt on Cylinder Head**
- **Alternator Ground to Bolt on Cylinder Head**
- **PCB Mounting Screw to Main Body Ground or Bolt on Cylinder Head**
- **Optional – Engine Ground to Battery**

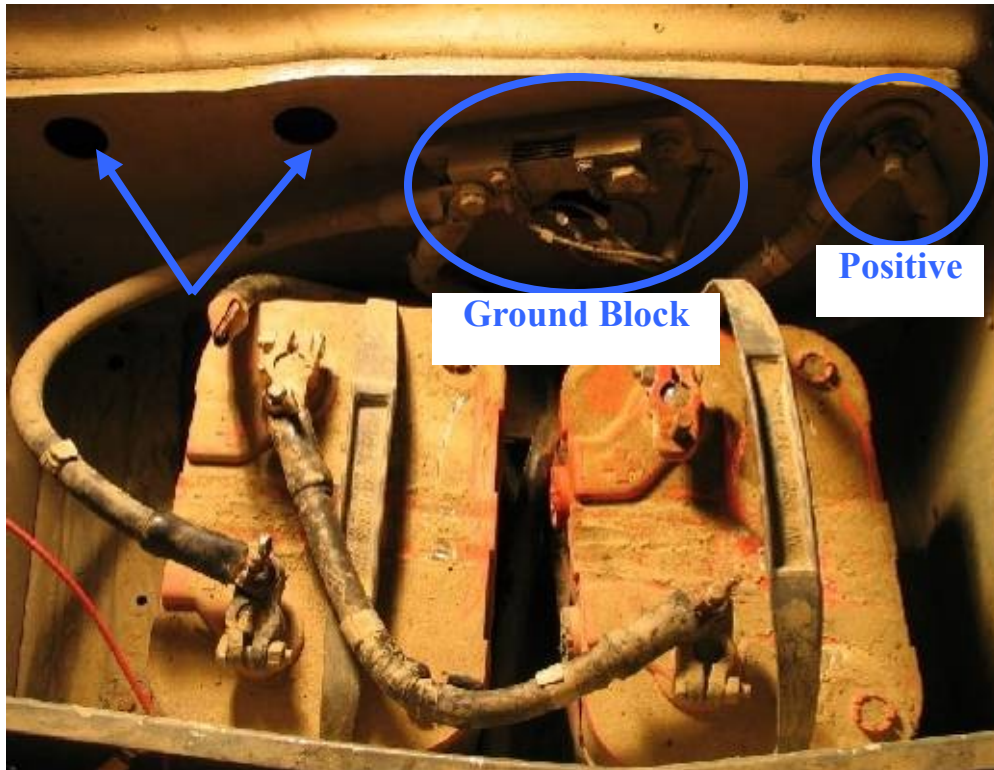
BE SURE TO CLEAN EVERY CONNECTION BEFORE YOU INSTALL THE WIRES!!! Save yourself some time!



New Connections at the Engine Ground



New Connection at the alternator ground (going to the engine ground)



Ground block, Positive Terminal and access holes you could use to route the ground harness through **(be sure to stay away from exhaust when routing wires)**

A really good basic schematic is located on Kascar's website (the most legible one I have seen).

<http://www.real4wd.com>

Click "Technical"

Then under "Tech Specs"

You will see "[Electrical System Wiring Diagram \(M997\)](#)"