

Tools

- Misc Metric Spanners/Ratchet Set
- AN Spanners
- Cutting knife
- Deutsch DTM and DT crimp tools
- Electrical Crimpers
- Fuel Line Crimper Tool
- Heat Gun
- "fishing" wire – 1/8" welding rod 500mm/20"
- Pass through rubber grommet 7/8"

Bill of Materials

- Zeitronics ECA-2 Flex Can Bus
- Small Type Flex Fuel Sensor (inc with Zeitronics kit if ordered)
- Radium or Proflow Flex Fuel Bypass Bracket
- 6AN Male to -10AN ORB x2
- 6AN Female to 5/16" Barb 90deg
- MINI2 type Fuse Tap
- Deutsch DT 2 pin M+F Kit with Contacts
- Deutsch DTM 4 pin M kit with contacts
- ODB Sandwich Plate to DTM 4 pin
- 6mm/1/4" ring terminal "blue"
- 300mm/12" 20-22AWG Black wire
- 5/16" EFI Rubber Fuel Hose – Alcohol Rated – Approx 2x 300mm Lengths
- 2A MINI2 Fuse
- 5/16" Hose Clamps Fuel Line – Rolled Edge, Crimp Style preferred

Overview:**Sensor Installation:**

Sensor can be installed on the LH strut tower beneath the cabin noise enhancement diaphragm.

There is existing bolt holes that can be utilized in the mounting of the sensor

The OE fuel hose is dismantled, and the quick release ends are kept.

Two new hoses, consisting of an -6AN end and the recovered OE quick release are made and crimped.

The sensor wire is run from the sensor through the engine bay and behind the battery.

There is a grommet which can be removed and the cable can be fished through to the passenger kick panel without any additional modifications.

Wiring and Converter Installation:

Sensor wire harness may need to be extended in both LH and RH installations.

Sensor wire runs underneath glovebox (zip tie to blower) and underneath HVAC unit to kick panel at drivers knees.

Zeitronics unit needs to be terminated:

Red = 12V Supply = Pin 2 of the DT Connector

Black = Ground = Pin 1 of the DT Connect

Green = Unused = Cut/Insulate

Blue = Unused = Cut/Insulate

White/Blue = Unused = Cut/Insulate

Grey = Metric/Imperial = US = Unused, Rest of World = Co-terminate with Black Pin 1 DT

White/Red = CAN High = DTM Pin 3

White/Black = CAN Low = DTM Pin 4

Power Supply Lead:

Pin 2 of DT Connector connect to MINI2 Fuse Tap

Pin 1 of DT connector connect to 300mm black wire and 6mm – ¼" ring terminal

General Connections:

Connect sensor harness connector to sensor.

Connect sensor Harness to zietronics unit.

Connect Zeitronics harness to zeitornics unit.

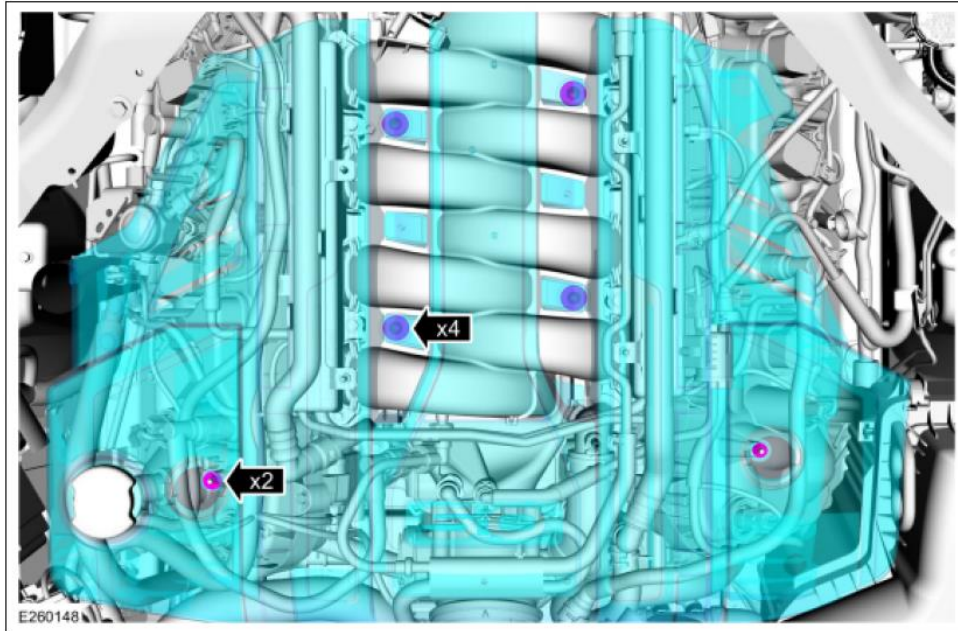
Plug zeitronics harness to OBD Sandwich plate (DTM4).

Plug zeitronics harness to Power Supply Harness (DT2).

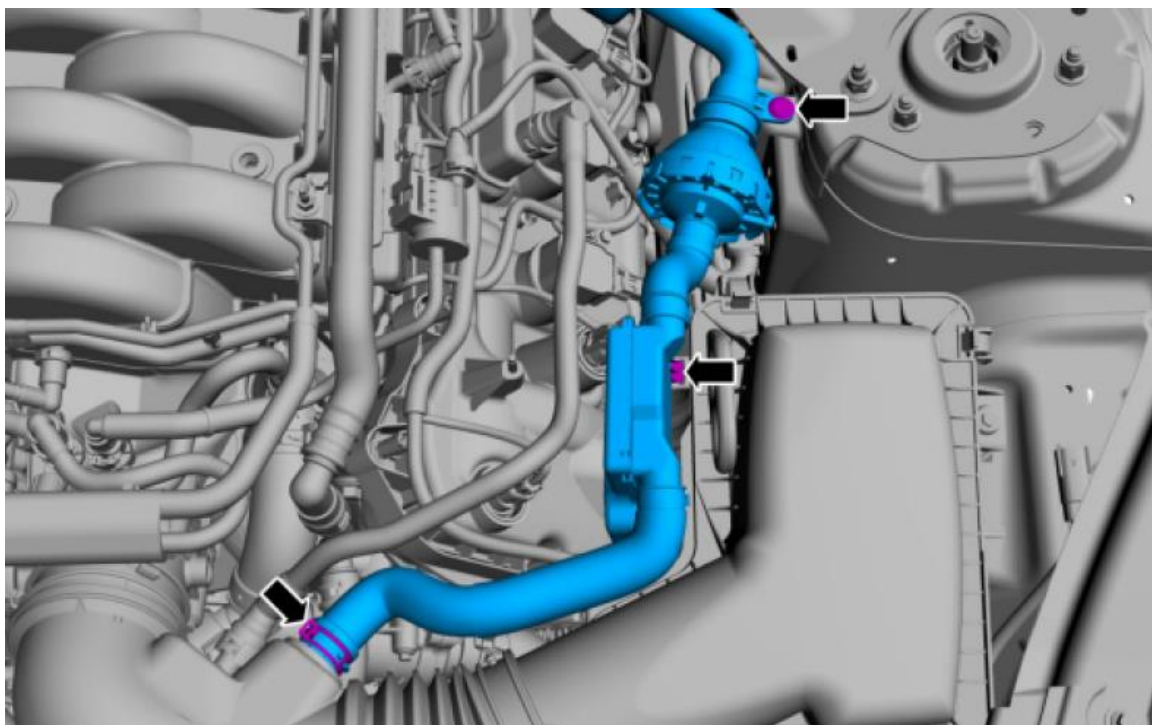
Connect Fuse Tap to Fuse 23 in driver kick panel (Switch Circuit)

Detailed Instructions:

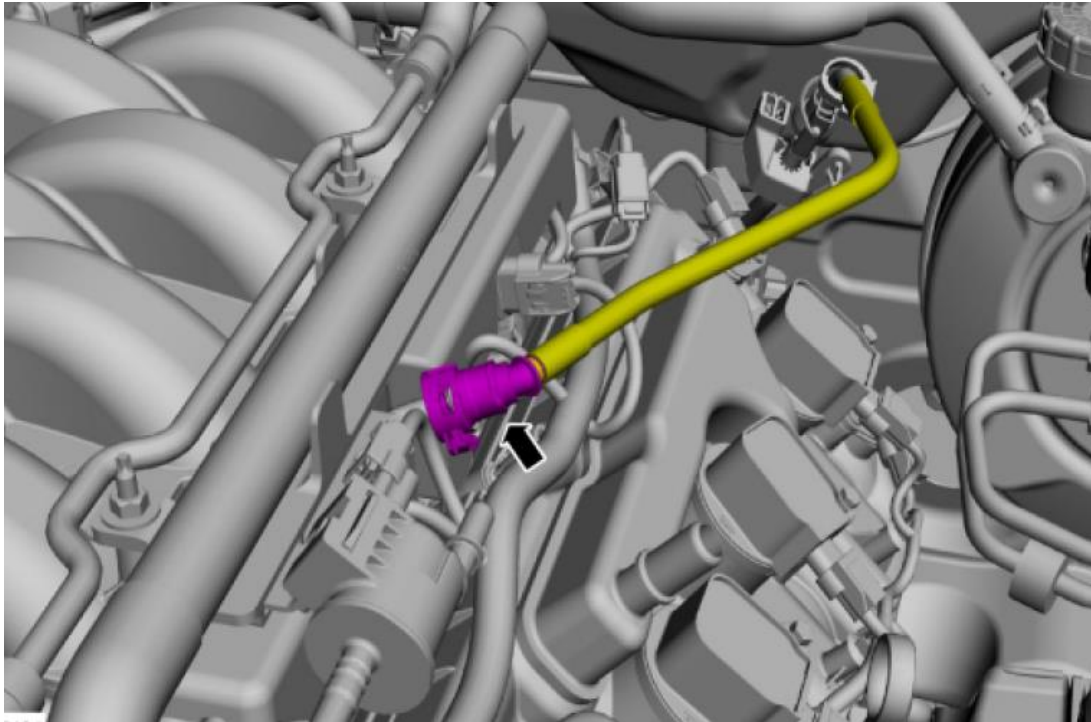
1. Disconnect and remove car battery.
2. Remove engine cover.



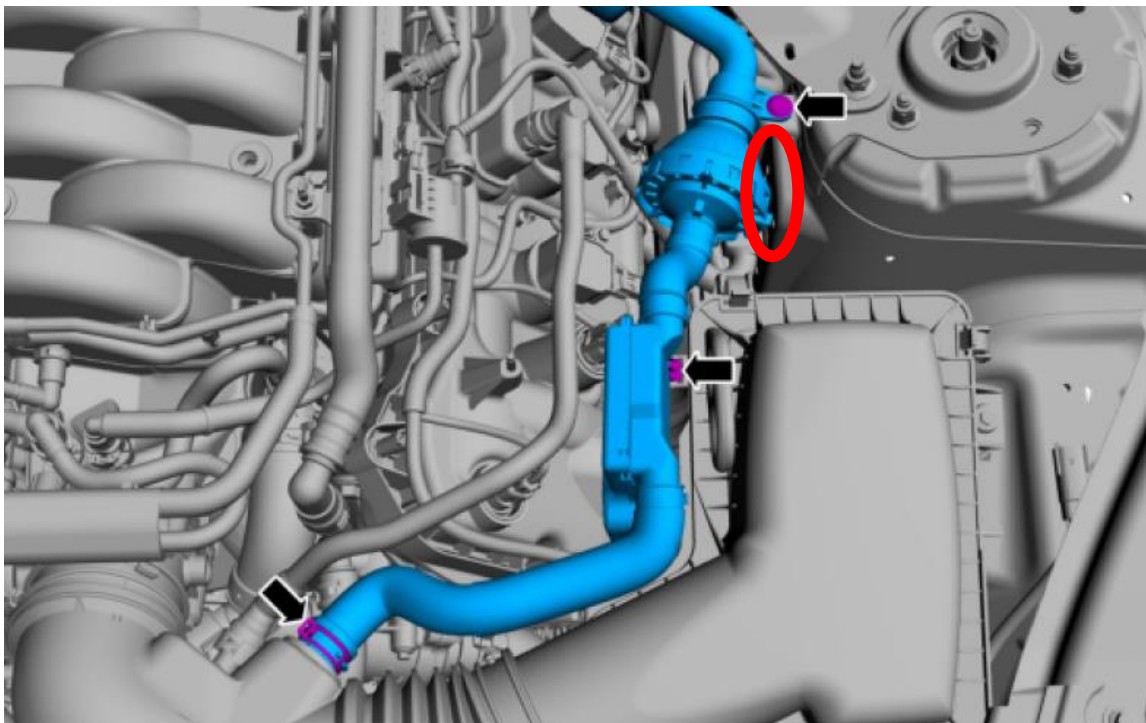
3. Remove noise enhancement diaphragm and move out of the way.



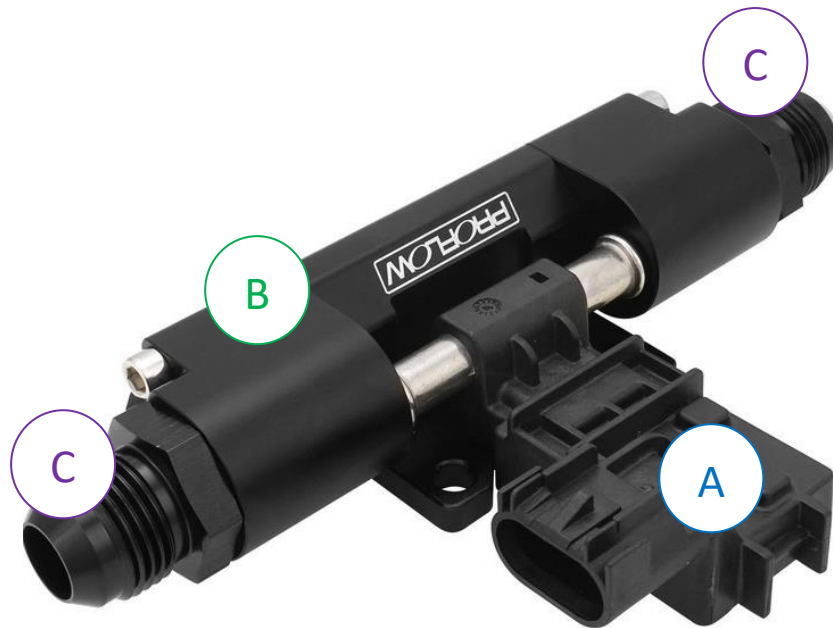
4. Release the quick release from the fuel rail and bleed any fuel pressure. Disconnect other end from firewall barb



5. Carefully split the hose at the barbed ends of the quick release connectors, discard the hose portion, retain the quick release connectors.
6. Identify the mounting position and bolt holes of the flex sensor.
Bolt holes are on the inside strut tower underneath the noise enhancement diaphragm



7. Assemble the flex fuel sensor(A) into the bypass mount(B), inset the -6AN Male ORB fittings (C) into each end of the Flex sensor bypass bracket.



8. An adapter bracket must be made (red) to offset the mounting holes in the sensor bracket (green) to the existing holes in the chassis strut tower. ¼" Aluminium with ¼" CSK bolts through to the chassis side, with two tapped holes matching the sensor is appropriate.



- Construct two new hoses, approximately 300mm each (exact length to match fitment).
Use 5/16" EFI Alcohol rated rubber hose.

Hose 1:

OE Quick release end from Firewall side <> 300mm hose <> -6AN Female 45° 5/16" Barb

Hose 2:

OE Quick release end from rail side <> 300mm hose <> -6AN Female 90° 5/16" Barb

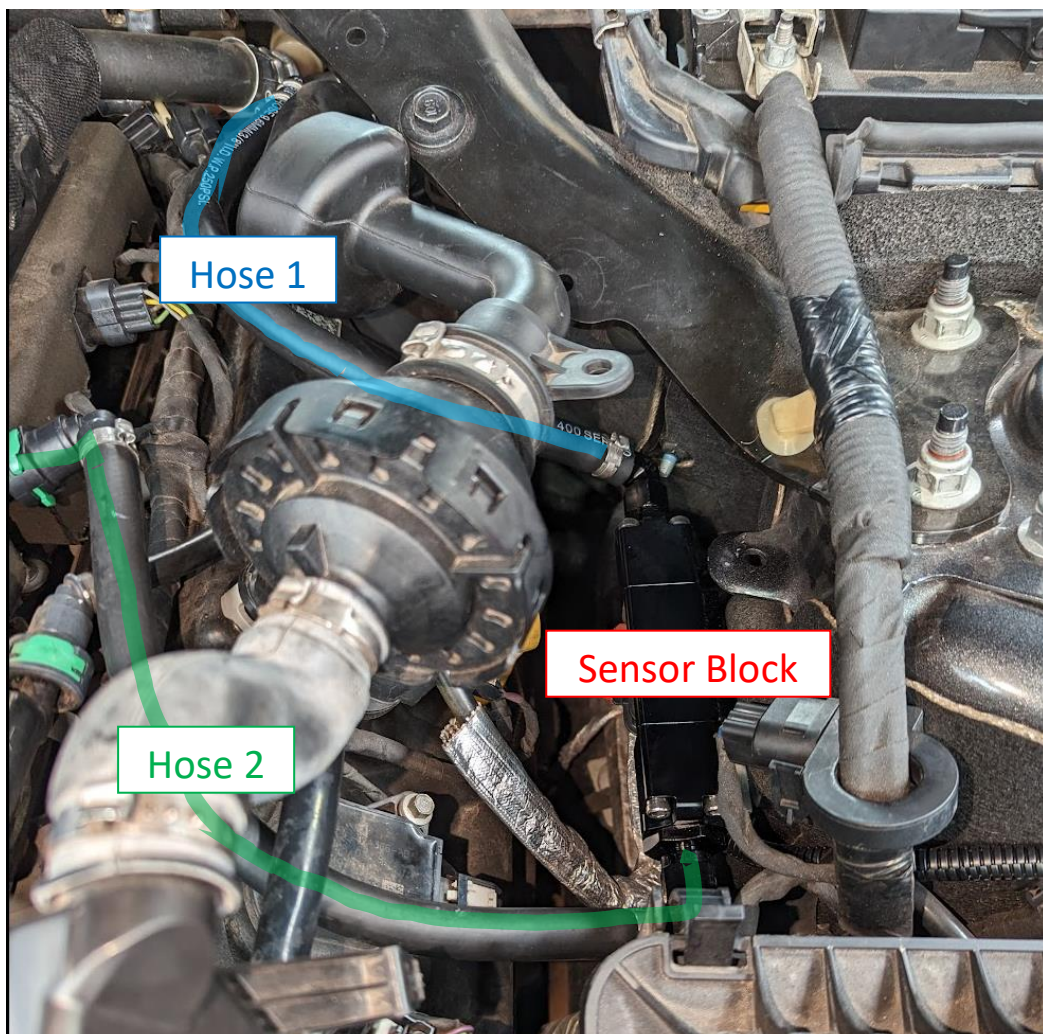
Crimp Hoses with rolled edge, crimp style EFI Fittings.

- Install the new hoses:

Hose 1 from the firewall barb to the rearmost port of the sensor

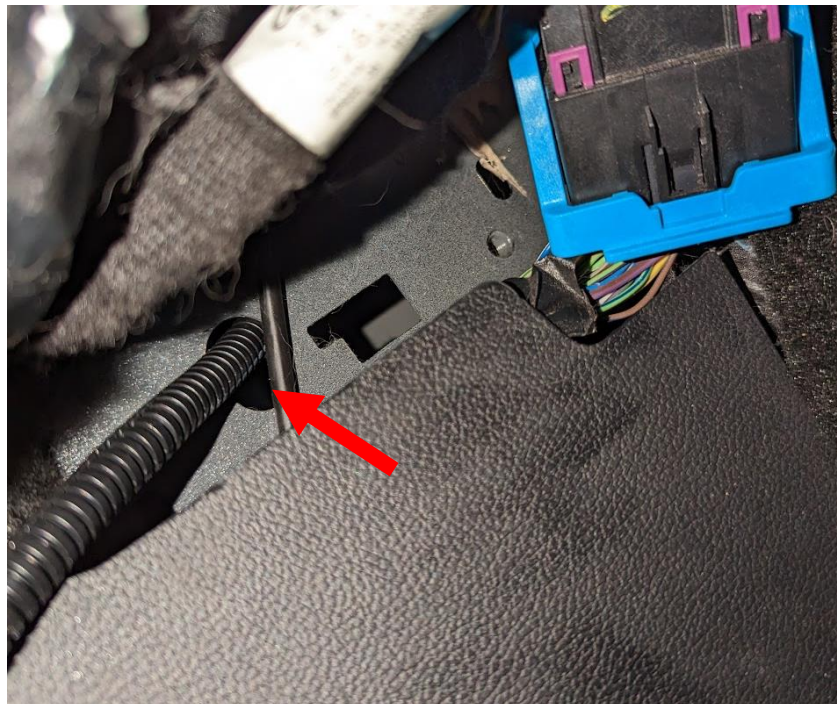
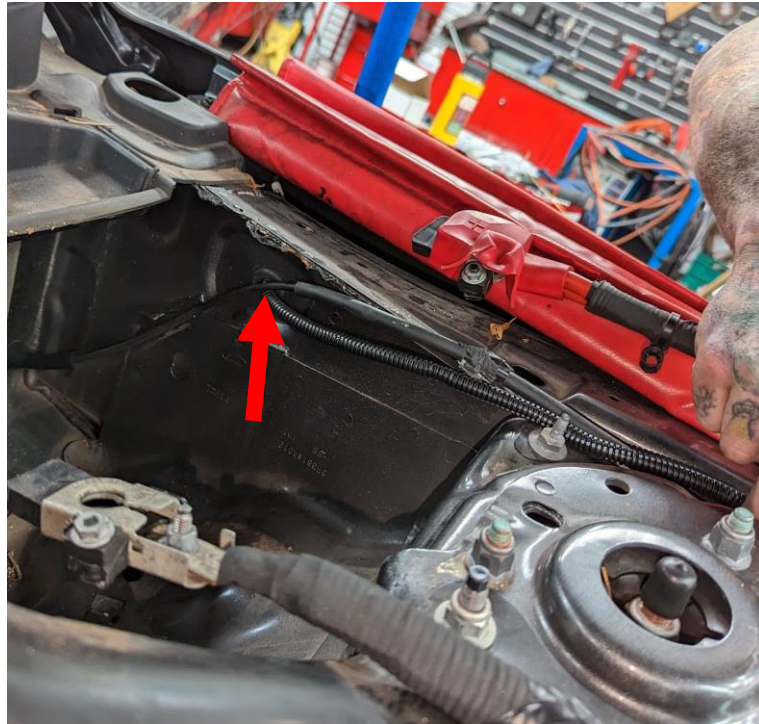
Hose 2 from the front port of the sensor to the fuel rail

Tighten AN fittings with AN spanner and inspect.



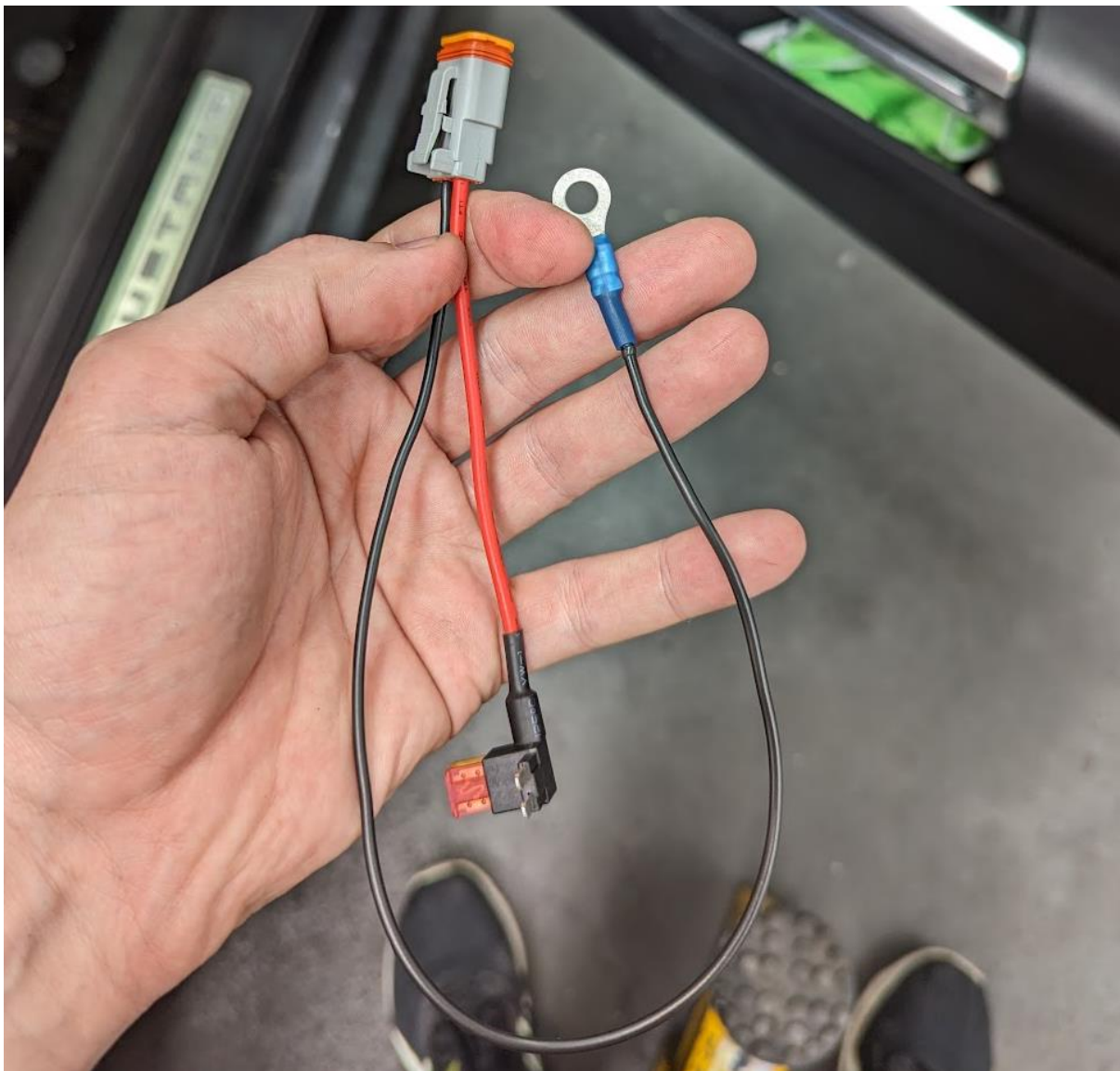
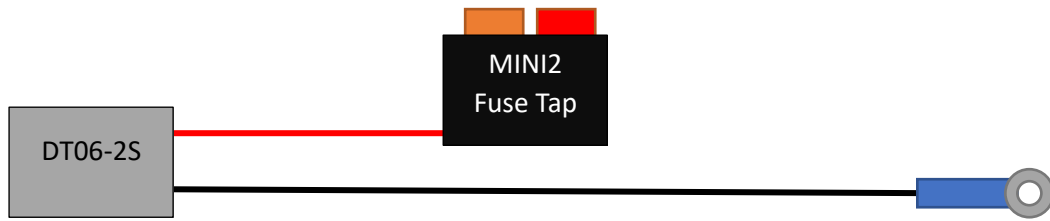
11. Connect the sensor plug to the sensor, and route the cable to the battery compartment. The grommet in the battery compartment can be removed and replaced with the through grommet.

Using the welding rod “fish” the connector of the sensor harness through the hole. It can be routed through existing holes in the passenger kick panel.



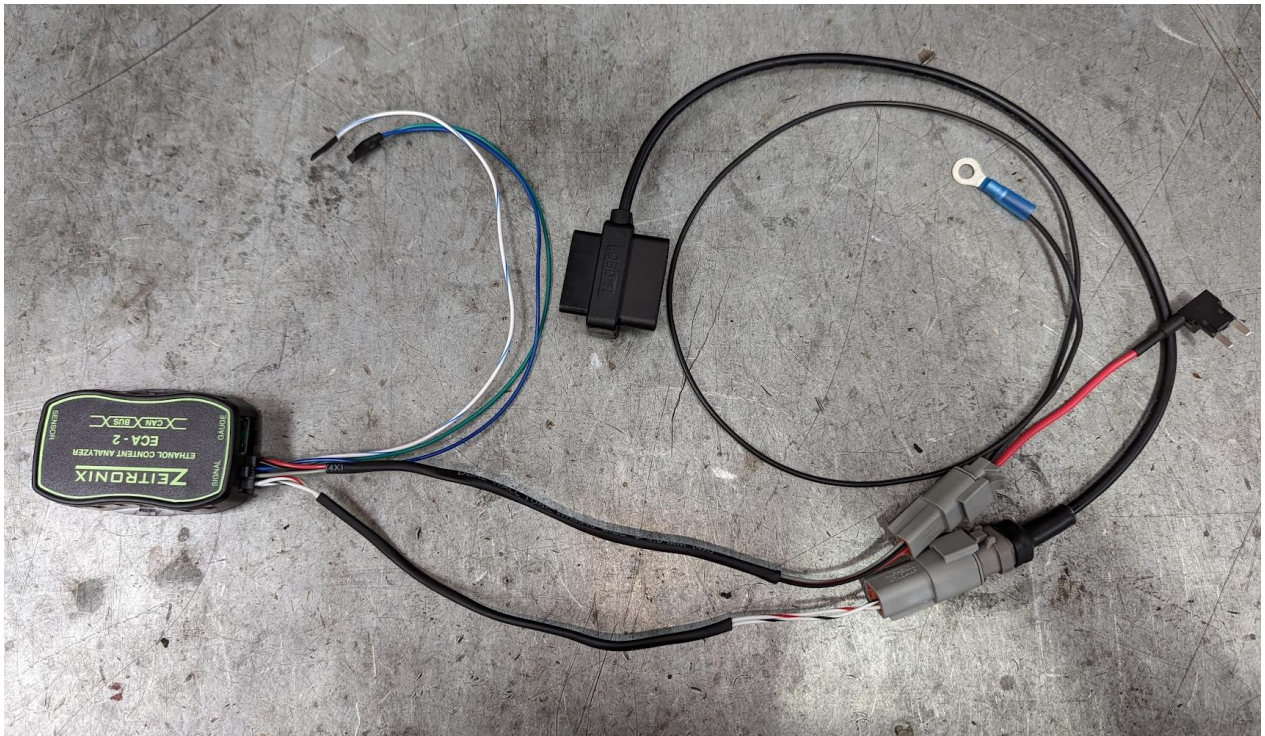
12. Route and zip tie down the sensor harness in the engine bay.

13. Construct the Power Supply Harness.



14. Terminate Zeitronics Harness

- Red = 12V Supply = Pin 2 of the DT Connector
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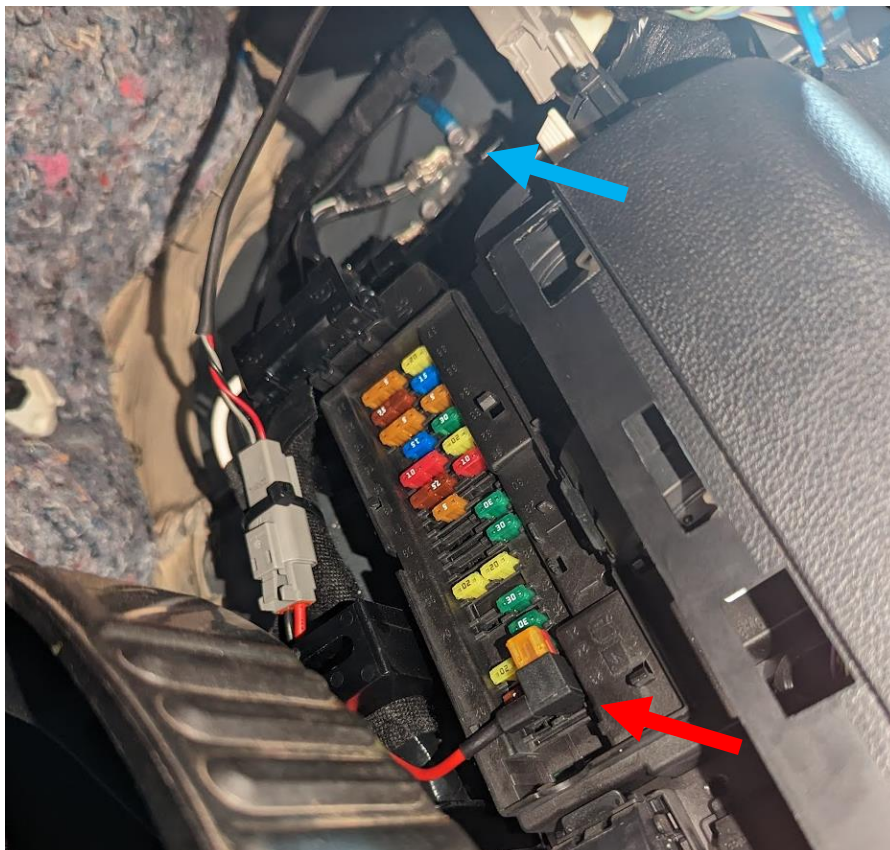
15. Determine Mounting Location for Zeitronics unit (based on power harness length and OBD harness length). (e.g. zip tied under knee panel)



16. Connect OBD Sandwich



17. Connect Power to Fuse 23 in Kick Panel (replace 10A into Tap holder) (Red)
Attach ring to ground (Blue)



18. If required – extend the sensor wires (3) so they can reach the Zeitronics Mounting Location.
19. Connect sensor to Zietronics unit.
20. Check all cable routing, secure with zipties.
21. Reinstall and secure battery
22. Turn car to “ON” ensure fuel primes, inspect hosing for leaks
23. Reinstall engine cover