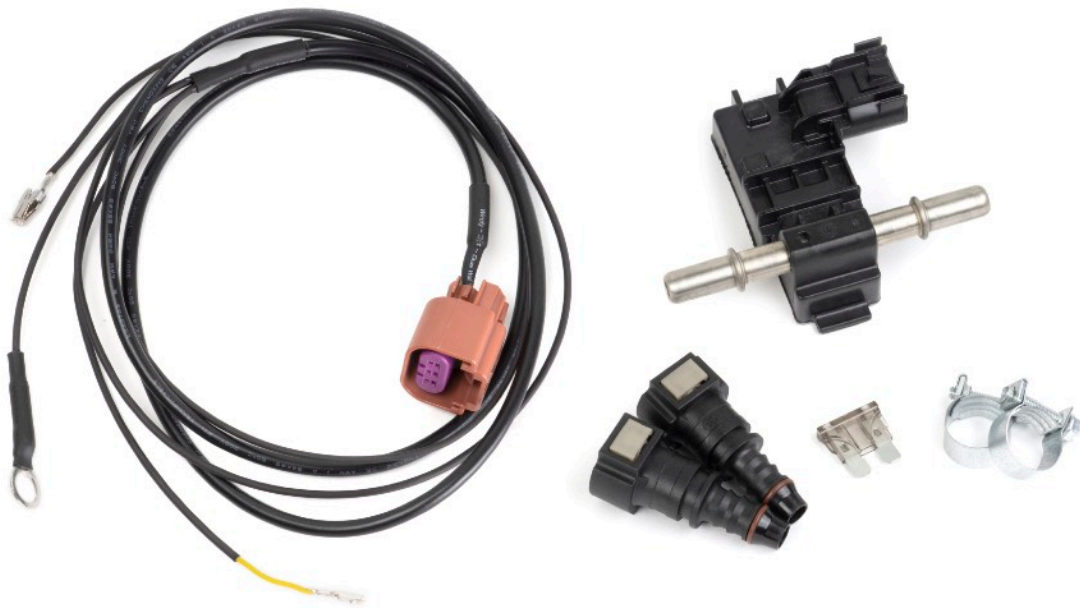




PERFORMANCE BY  
**INTEGRATED  
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**IE TrueFlex Sensor Harness Kit For MQB Engines Install Guide**  
**IE Part Numbers: IEELC12**

Thank you for purchasing another high quality Integrated Engineering product! This instruction guide is used for installation of Integrated Engineering's TrueFlex ethanol harness and sensor kit. This kit requires modification to fuel lines and requires great care or professional installation by an experienced technician. Integrated Engineering is not responsible for any damage caused by incorrect installation.



Before you begin, *open your IE TrueFlex Kit, inspect all components, and verify quantities.*

**TrueFlex Flex Fuel Harness Kit Contents:**

- IE TrueFlex Wiring Harness
- 2 amp Fuse
- Ethanol Sensor
- 2x Ethanol Sensor Quick Connect Fittings
- 2x Hose Clamps

**Required Tools:**

- Flathead screwdriver
- De-pinning Tool
- Socket Wrench
- 13mm Socket
- 10mm Socket
- 4" or longer Socket Extension
- Flat Razor or hose cutters
- Pick

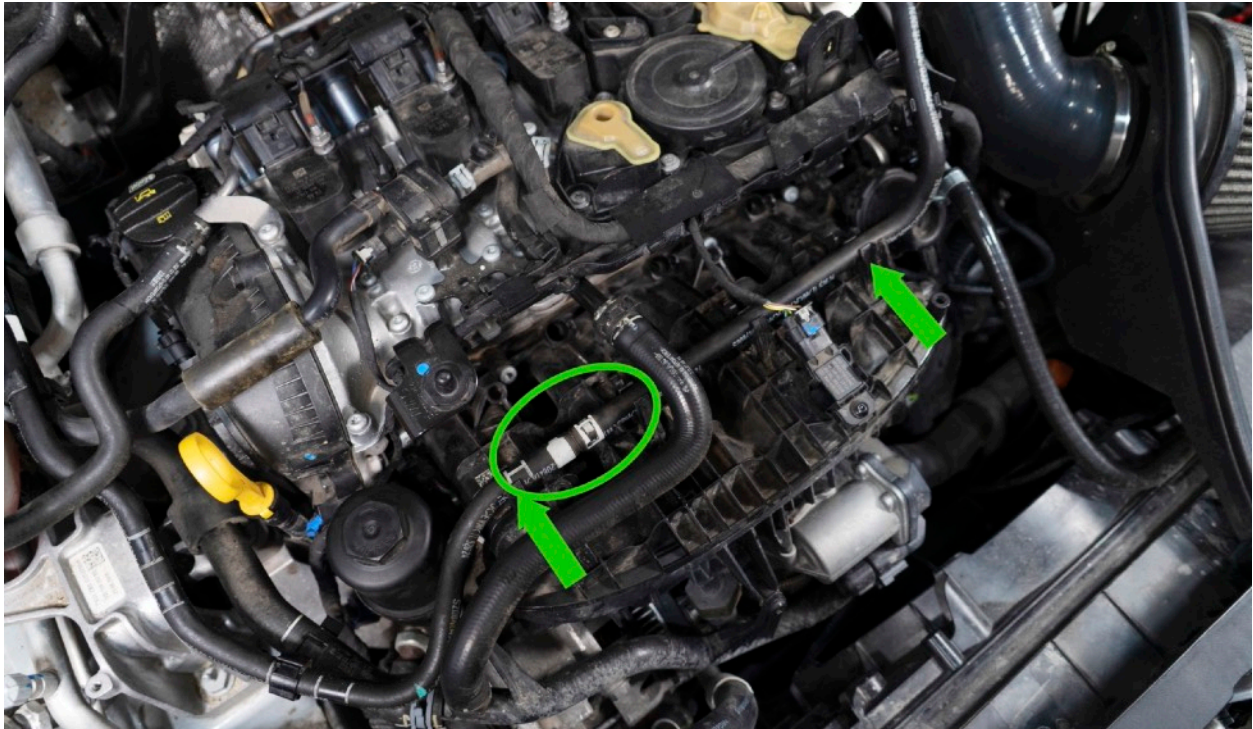
Remove fuse box cover and remove the Fuel Pump Control Module Fuse (Top left 15amp fuse) Once the fuse is removed, start the vehicle and allow it to run until engine stalls. This allows you to drain the supply fuel pressure to the HPFP to prevent excess fuel spray during disconnecting lines.



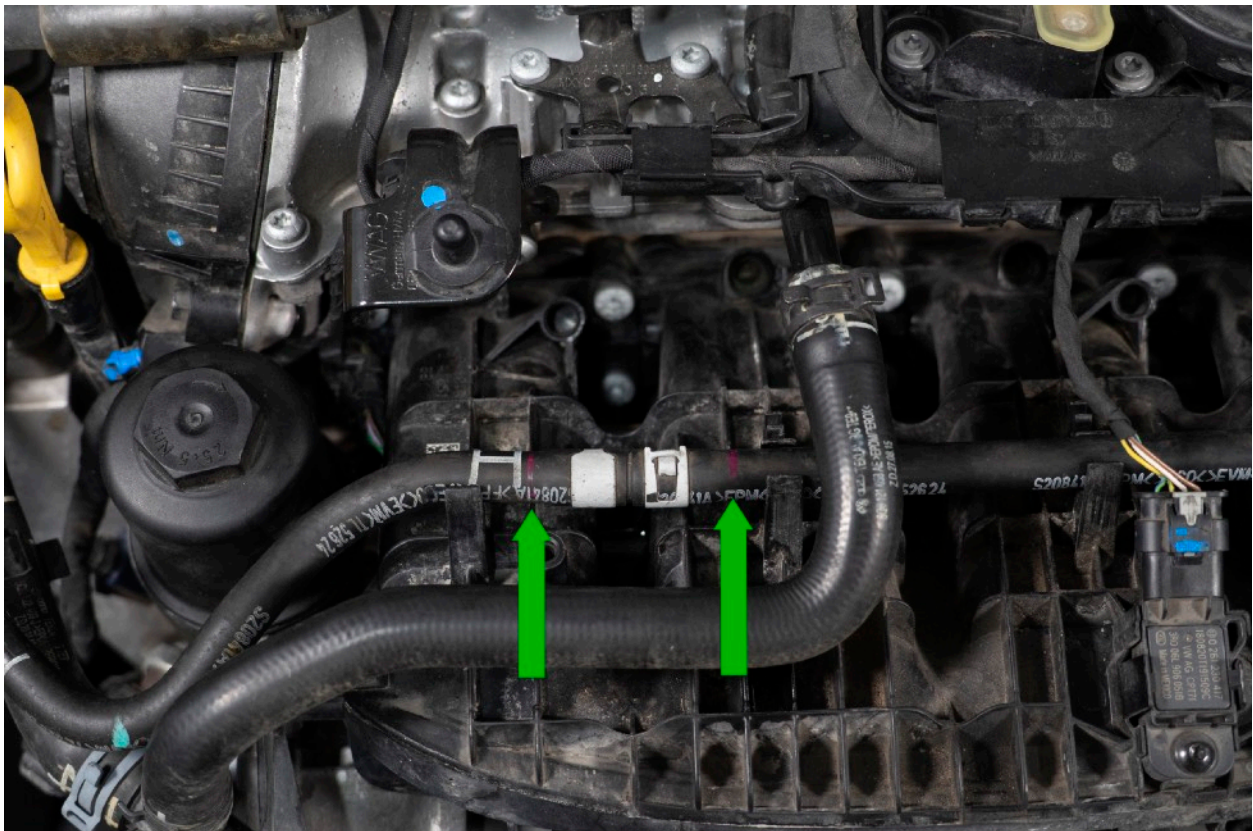
Remove engine vanity cover by pulling straight up and disconnecting from the four mount grommets.



Locate the fuel line in which you will be mounting the sensor. You can mount the sensor anywhere in the area between the arrows, but we recommend the circled location. You may need to mount it in another location if you have Multi Port Injection.



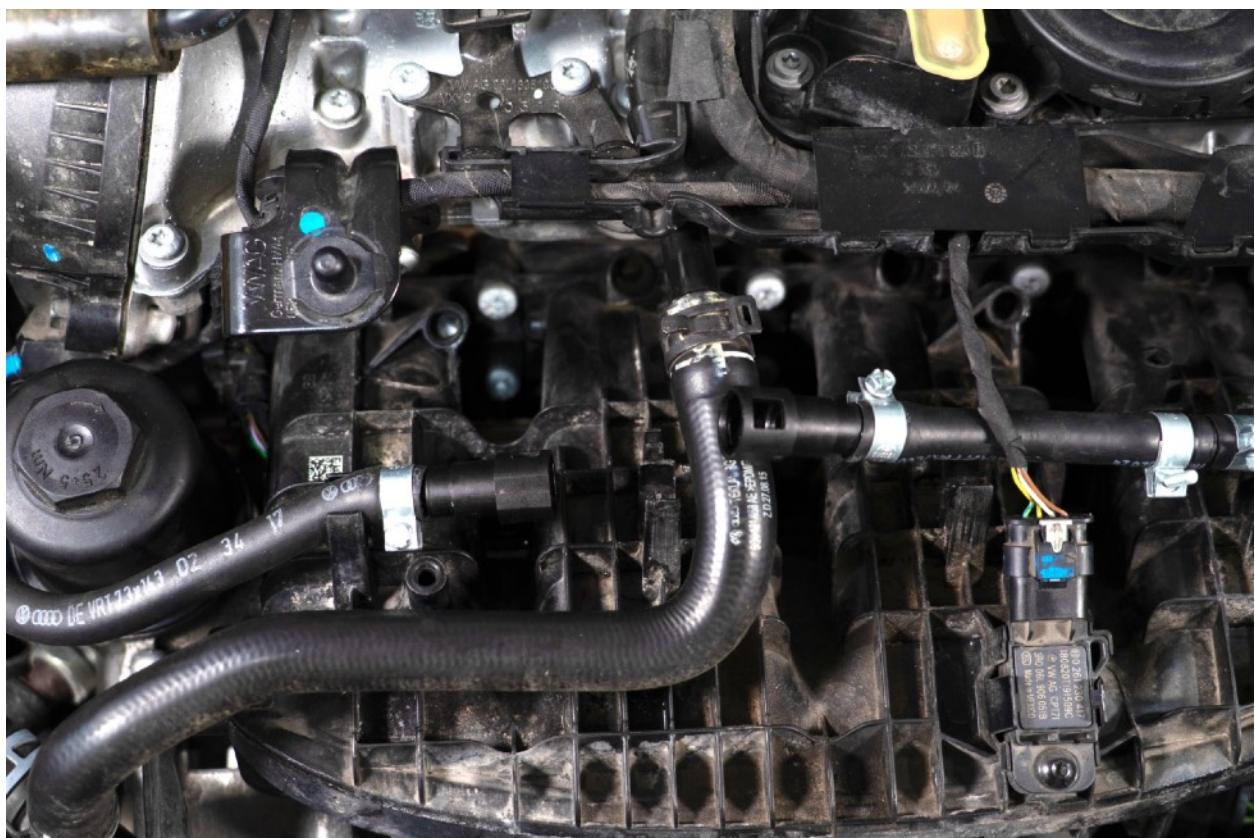
Mark the fuel supply line a quarter inch away from the outside edge of both clamps, then cut the hose on both marks using flat razor or hose cutters. Keep the removed piece for if you decide to ever remove the flex fuel sensor.



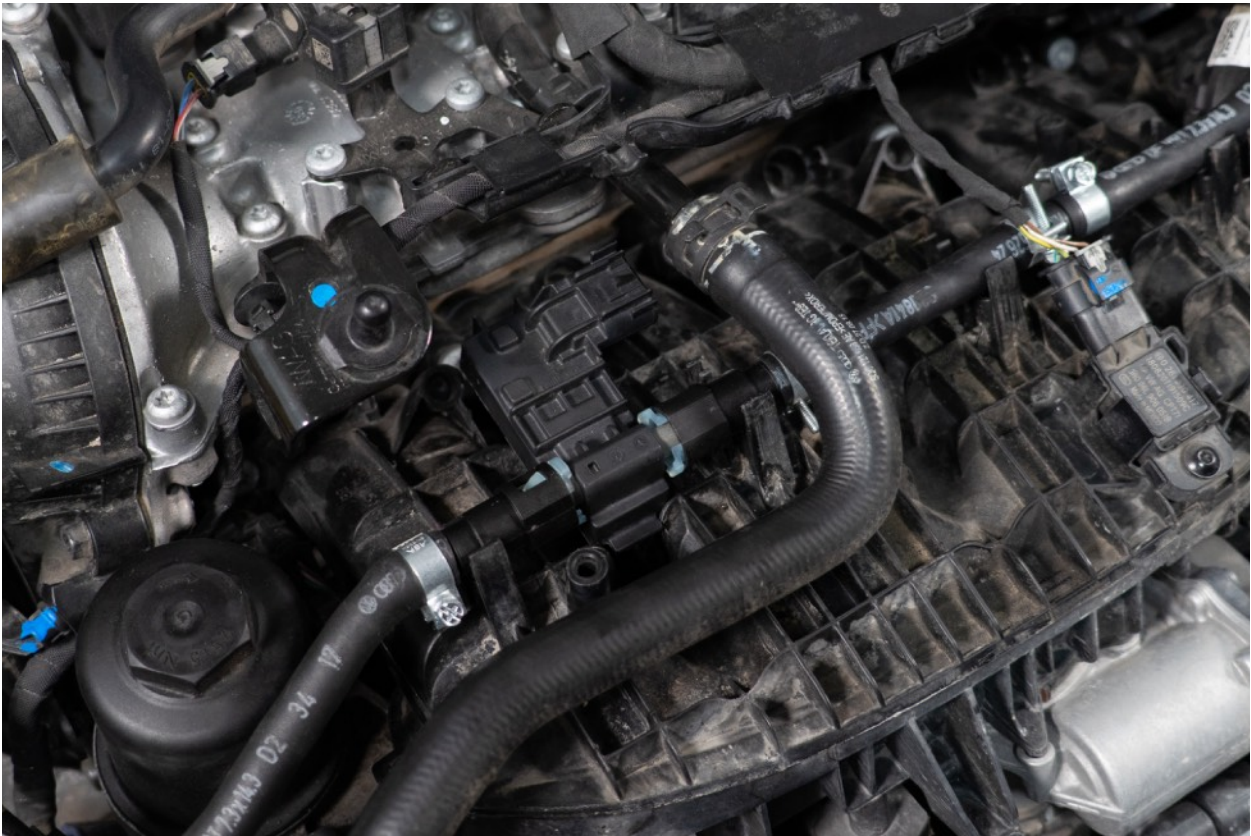
Slide a hose clamp on each side of the cut fuel line. Do not tighten yet.



Insert quick connect fittings into each side of the fuel line and tighten hose clamps. Adding small amount of lubrication on the barbs will allow easier install. Be sure to fully seat the fuel hose on each coupler.



Connect the flex-fuel sensor between the quick connect fittings, then reinstall the fuel line back into fuel line brackets on the manifold.



*Next steps MAY require removal of intake system depending on your set up. Pictured vehicle is equipped with IE cold air intake.*

Disconnect battery plug by pulling the gray clip back, then disconnecting plug.



Disconnect negative terminal of the battery by using a 10mm socket and socket wrench. We recommend tucking the negative terminal between the ECU and the battery during installation.



Remove battery tie down bolt using 13mm socket and extension, then remove battery tie down





Once tie down plate is removed, slide battery forward towards front of the car as much as possible.

Using 10mm socket to remove the brown engine ground junction cable behind the battery.





Lay harness on the cowl and install the ground connector onto the ground junction post.



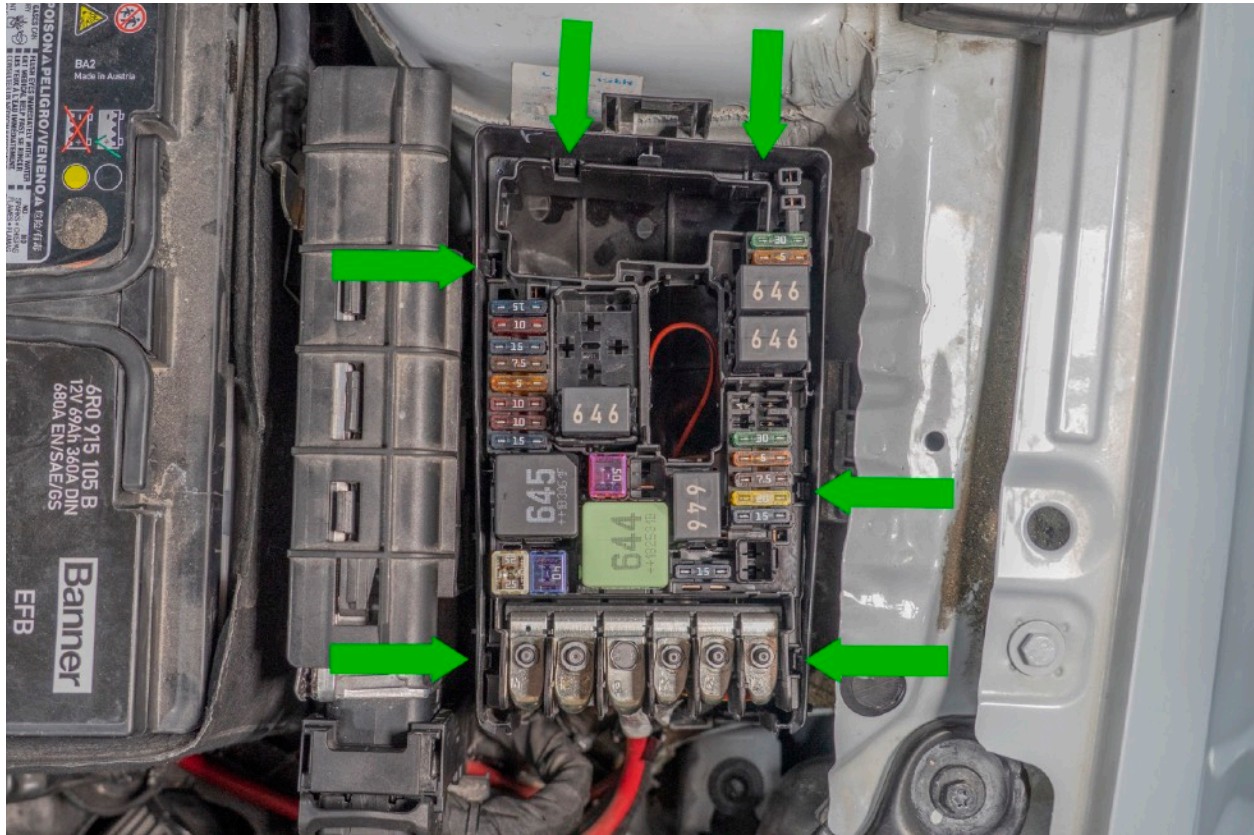
Reinstall ground junction cable on top of harness ground cable connector.



Remove fuse box front cover by inserting a flat head screwdriver where pictured, then pull fuse box front cover straight up to remove.



Very carefully push in all 6 tabs using flat head screwdriver, while maintaining constant straight upward pressure to remove top fuse box plate.

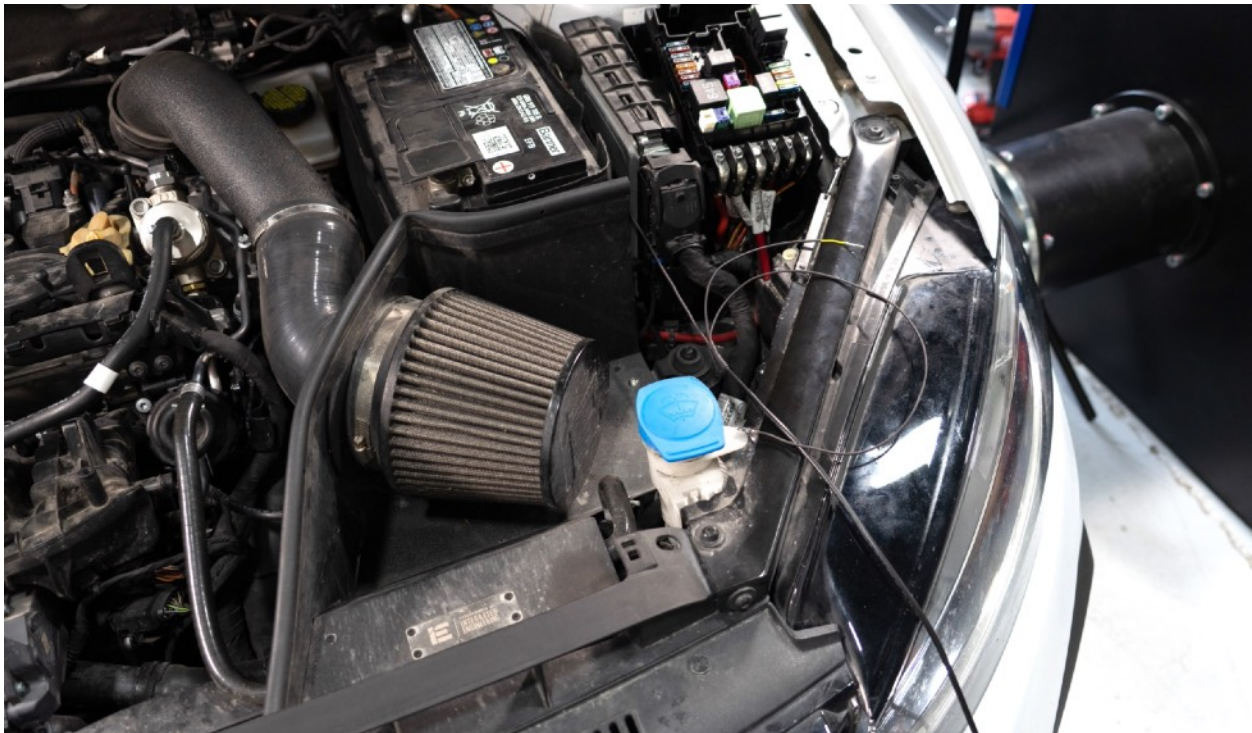


Lift straight up on fuse box top plate. Once it is free of all 6 clips, apply forward tilting pressure to get it out of the way.





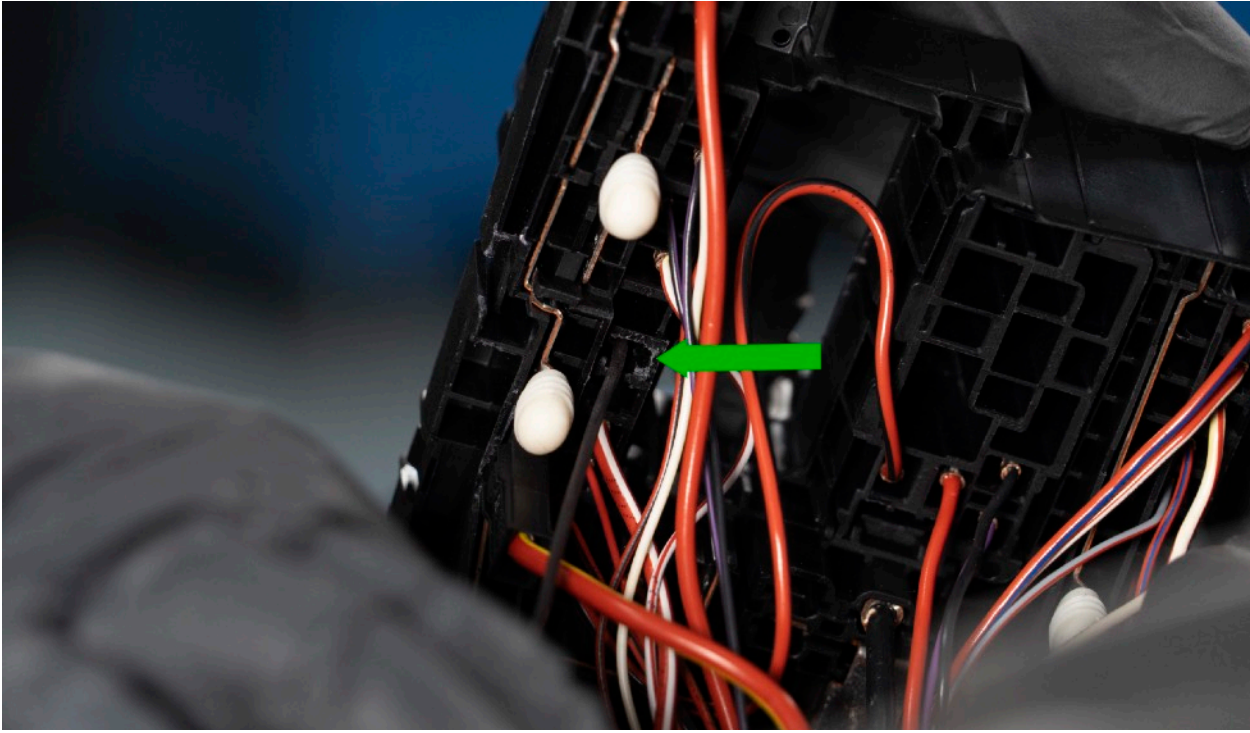
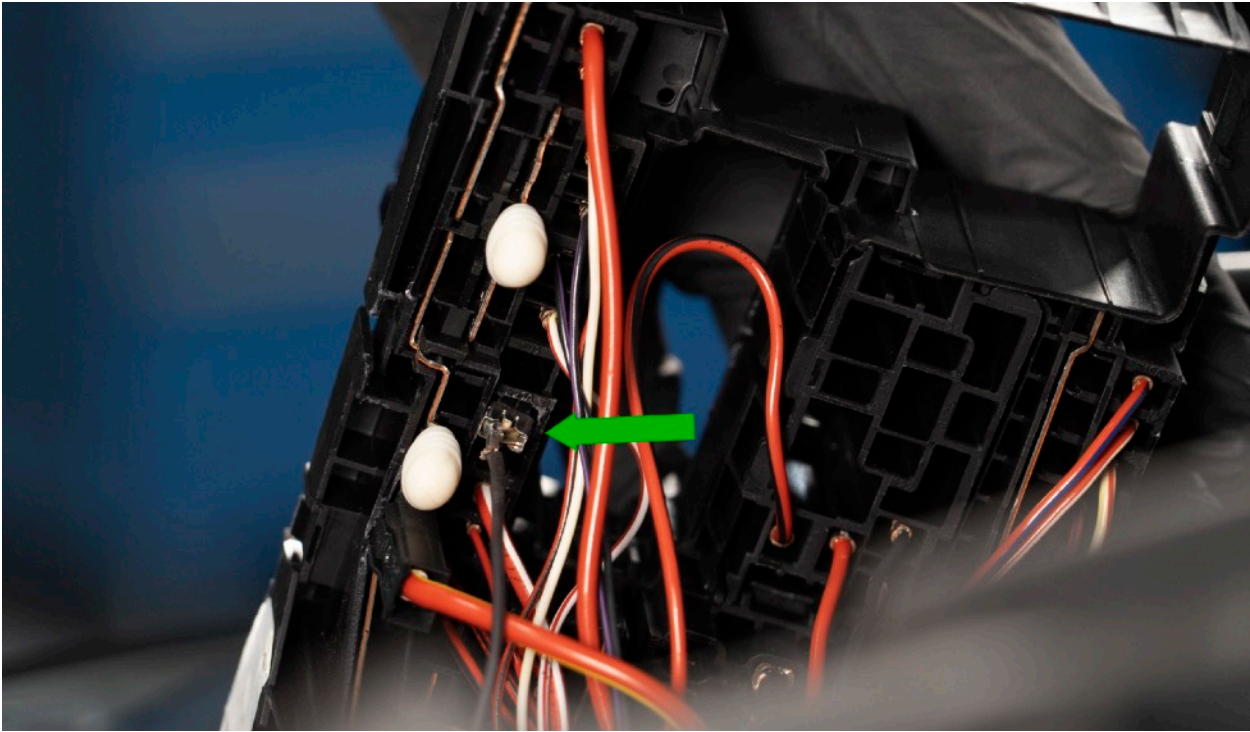
Straighten out harness and allow it to drape over the front of the vehicle. Route the installed ground wire either between battery and ECU, or the ECU and fusebox depending on if you have the metal ECU cover.



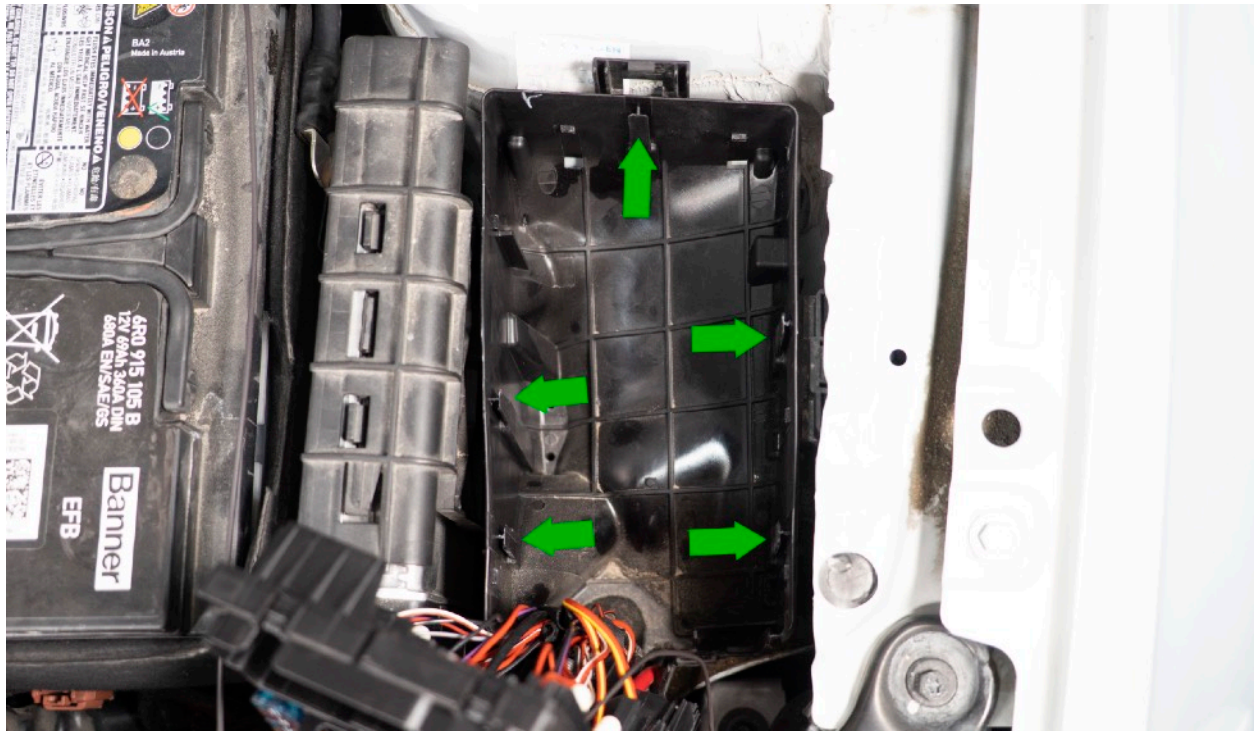
Route the pictured fuse wire underneath the top fuse plate and through gap in fuse box.



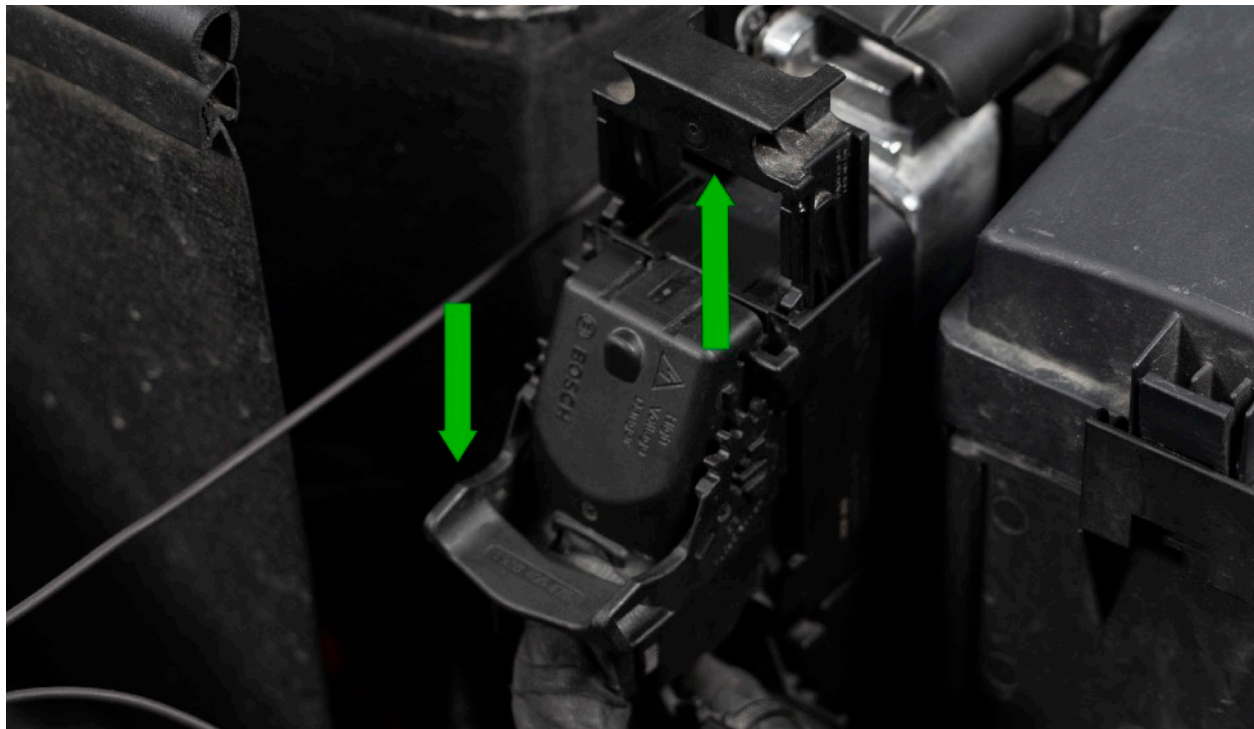
Insert terminal into either of the two blank slots. Assure that you hear a click and give a slight tug to ensure that it is fully seated.



Reinstall top fuse box plate taking care to line up the guides on the sides of the bottom portion of the fuse box.



Remove main ECU connector by pulling down on lever located on the front of the connector, which will raise the retaining clip. Once you hear a click, you can pull the connector straight away from the ECU.





Using flat head screwdriver pick, remove purple retainer clip from ECU harness by pulling straight up.







Using flat head screwdriver, split ECU harness and separate the cover from the mounting clip portion of the harness by gently prying upward on the clip.



Separate the front portion of the harness, then pull out the top black retaining clip and set aside.



Locate pin #71 and insert de-pinning tool to remove gray dummy pin from connector.



Install ECU pin from Flex Fuel Harness into pin #71 from the back side of the connector until seated. A pick is helpful to help push the pin into its slot completely.



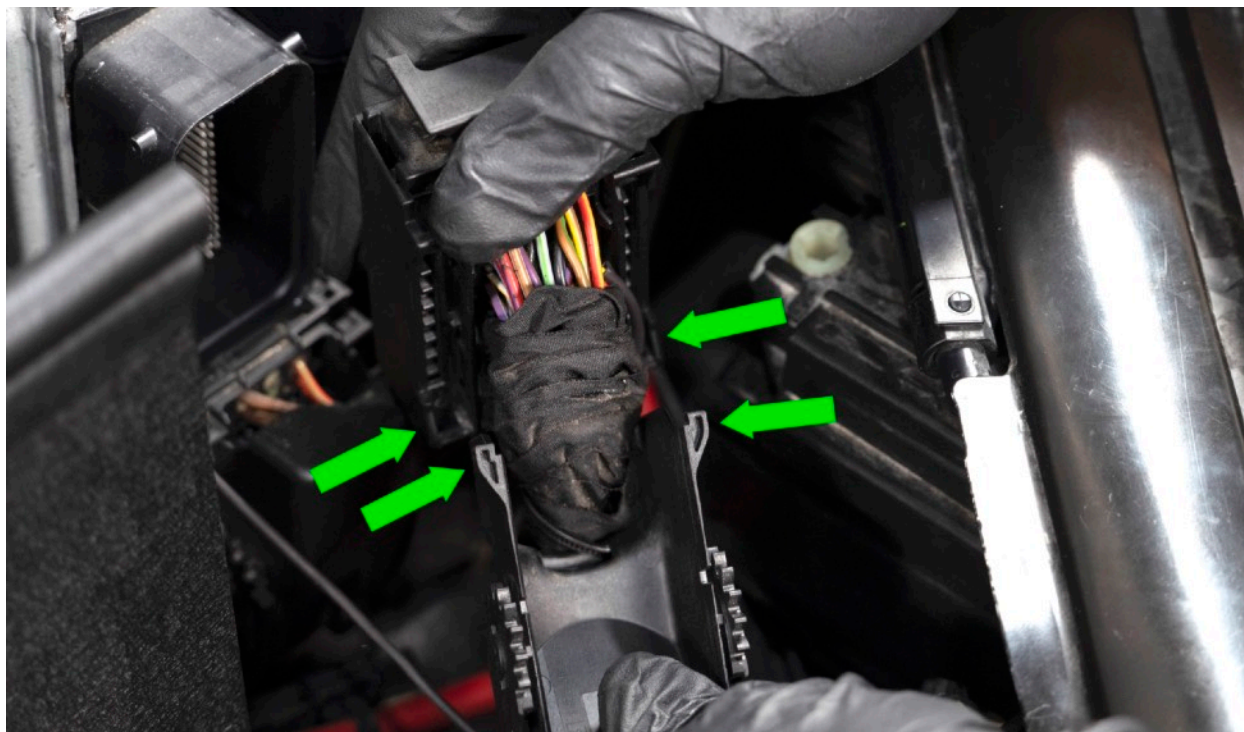
Reinstall purple retaining clip into ECU Connector and seat completely



Insert top retaining clip into ECU connector clip and push down fully until seated. then take the back side of ECU connector and insert guide feet into slots at the bottom of the connector.



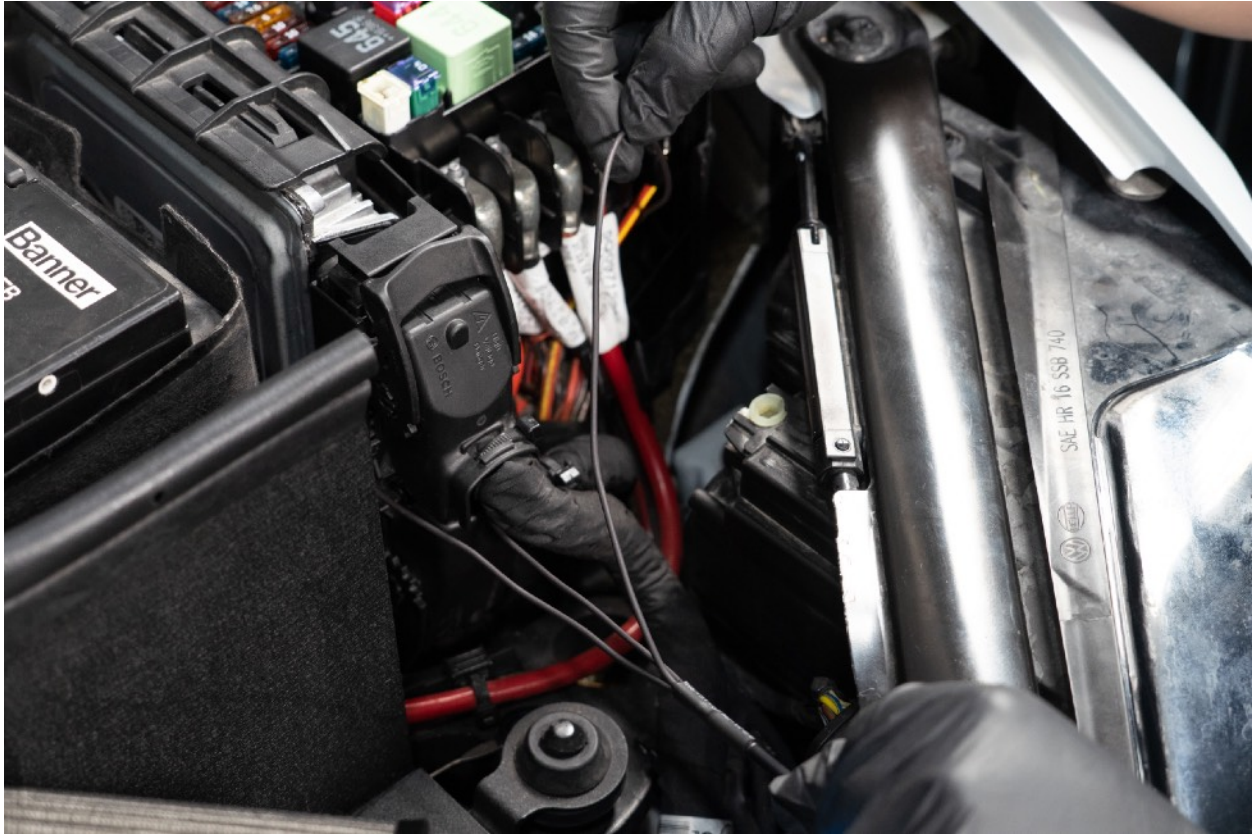
Install back side of ECU connector by inserting guide feet into slots at the bottom of the connector.



Push back portion of ECU connector firmly into front portion until you feel it seat. Reinstall ECU harness back onto ECU.



Now that all three wires have been installed, you can take the slack from the wire coming from the fuse box, and tuck any slack into the lower portion of the fuse box.



Route wire coming from fuse box along the red power wire that is exiting the fuse box, then reinstall fusebox front cover.



Route Brown Flex Fuel harness underneath the intake and over the intake manifold. This is just our recommended routing. You may have to route a different way for your set up.



Plug in flex fuel harness into flex fuel sensor.



Push battery back towards the rear of the vehicle and reinstall the tie down plate/bolt.



Attach negative battery wire to terminal and tighten bolt.





Reinsert negative battery terminal connector



Reinstall engine vanity cover by aligning the 4 posts and pressing straight down.



Install supplied 2 amp fuse and reinstall fuel pump fuse, then reinstall fuse box cover. Your IE TrueFlex harness and sensor kit is now installed. You can now flash your car with the IE TrueFlex ethanol tune for your vehicle and enjoy easy fill-ups with maximized ethanol performance!



Thank you for purchasing another Integrated Engineering product. We are dedicated to serving your VW/Audi engine and performance needs. Please check our website frequently for new product releases. If you have any questions or concerns about this product please do not hesitate to contact us.

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