

## **2014-2019 FIESTA ST ETHANOL CONTENT GAUGE INSTALLATION INSTRUCTIONS**



Thank you for purchasing the Dizzy Tuning Ethanol Content Gauge! Please read this guide carefully before beginning the installation process. This kit utilizes a GM “Flex Fuel” ethanol sensor that will be placed in the fuel line. The sensor will read both fuel temperature and ethanol content before it enters the engine. **The engine’s fuel lines are under high pressure and disconnecting them can be very dangerous. If you are not comfortable doing this installation yourself, please contact a licensed mechanic.**

There are (2) parts to the installation process:

**Part 1:** Installation of the ethanol sensor and fuel line onto the engine

**Part 2:** Installation of the gauge pod and wiring

### **Caution:**

- **Before making any hardware changes, always disconnect the negative battery cable**
- **Before disconnecting the fuel line, it is very important to relieve fuel pressure. Pressure remains in the fuel lines long after a vehicle has been turned off, so it is very important to follow the below steps of relieving the pressure, regardless of how long the vehicle has been stationary**
- **Do not smoke or have any open sparks or flames when working on any fuel related components**
- **Always make sure to clean up any spilled fuel during the installation process, as it could ignite unintentionally**
- **Wash hands thoroughly after installation is complete**

### **Parts Included**

1x – 2014-2019 Fiesta-specific Gauge Pod

1x – 2014-2019 Fiesta-specific Fuel Line

1x – OEM Ford ECU Cover with Custom Printed 3D Bracket Holding GM Ethanol Sensor

1x – Wire Harness with Power/Ground Terminal

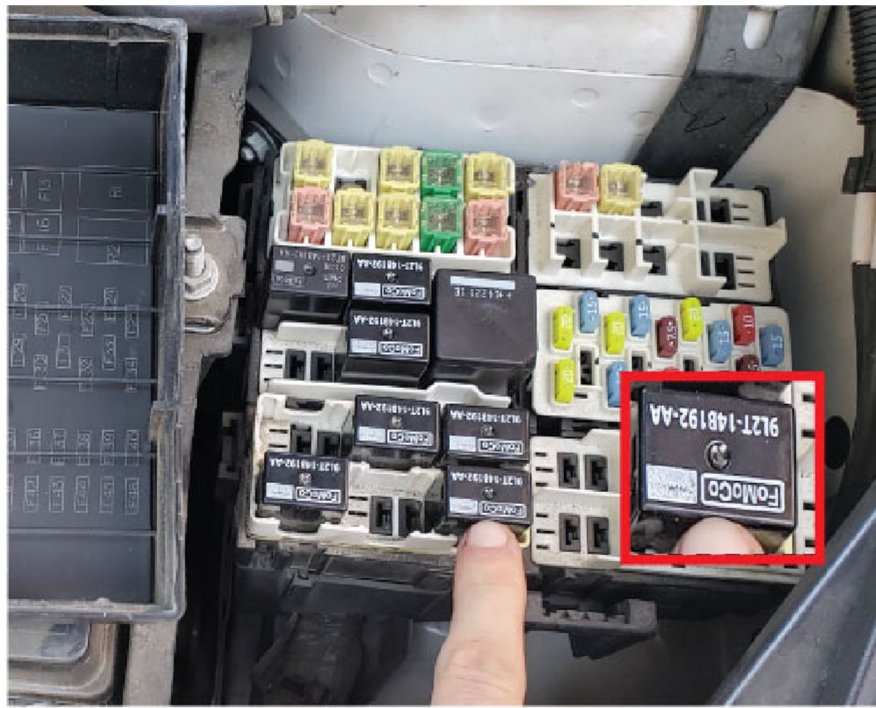
## Introduction

The Dizzy Tuning Ethanol Content Gauge is designed to provide a real-time, accurate reading of ethanol content and the fuel temperature entering your engine. This can be extremely helpful as the quantity and quality of ethanol in your fuel can vary from station to station. This gauge will assure you that your ethanol content is consistent every fill up.

## Installation Instructions

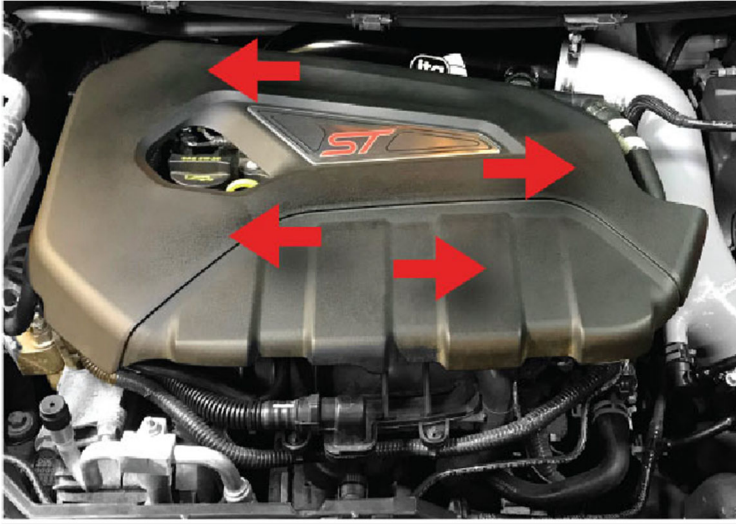
### **Part 1 - Ethanol Sensor and Fuel Line Installation:**

1. Before beginning any work on fuel system components, it is highly recommended to relieve the fuel pressure first. You can do this by pulling the fuel pump relay (while the engine is running) and let the engine run out of fuel. This may take up to 90 seconds, but it will eventually shut off. This relay may vary from year to year, so please refer to your owner's manual.

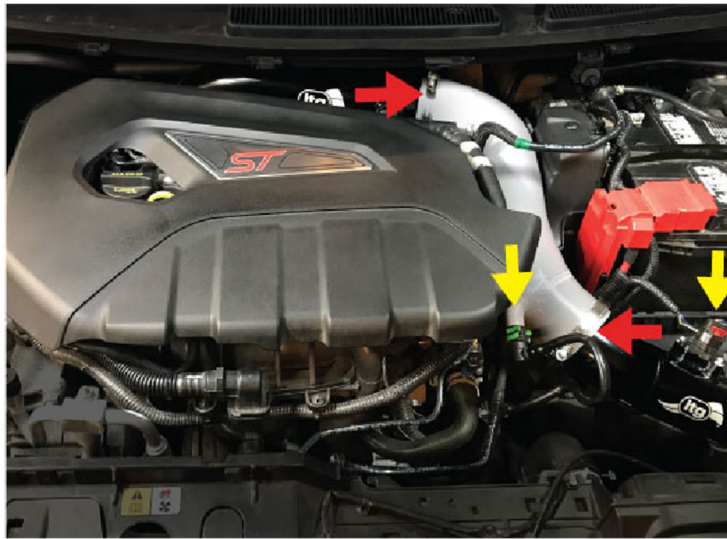


2. Turn the ignition off, then disconnect the negative battery terminal. You can now replace the fuel pump relay.

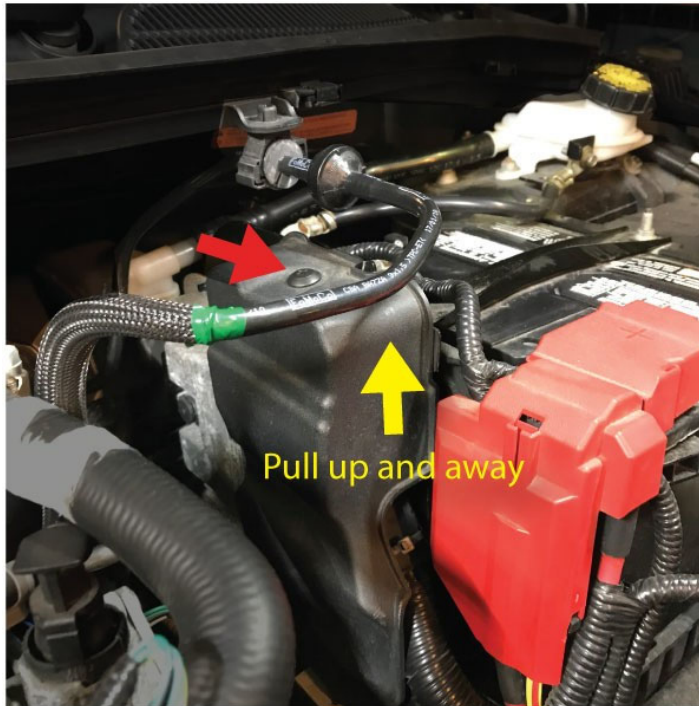
3. Remove the engine cover by pulling up evenly and releasing all (4) pop clips, as shown below.



4. Remove the air box (or aftermarket intake) and induction hose. This can vary depending on your intake system. Typically, this should consist of two band clamps (red arrows) and unplugging a vacuum line and the airflow sensor (yellow arrows).



5. Remove the clip on the top of the plastic cover (next to the battery) and lift the cover up and away from the engine compartment.



6. Using fuel line disconnect tool (Lisle Part Number 39410, or similar), separate the fuel line from the engine.



7. Install the OEM fuel line onto the 90° fitting coming off the ethanol sensor. As you lower the cover back in place, make sure the 90° fitting is pointing down and slightly towards the battery, away from the shifter assembly. You can then re-install the clip you had removed in the top of the cover.



8. Secure the fuel line to the engine harness, using a tie wrap as shown below.



9. Carefully bend the new fuel line with your hands, to form it better for its new location.



10. Install the new fuel line assembly with the straight fitting side connected to the ethanol sensor. Make sure to hear a "click" when re-installing both ends of the line.



11. Using the supplied wire harness, plug the connector into the ethanol sensor, and route the other end of the harness cleanly toward the firewall. Make sure the harness is secure and zip tied where needed.
12. Next, route the harness through the firewall, toward the driver-side foot well area. There is a large rubber grommet where the main OEM wire harness passes through. You can easily poke a hole in this grommet and pass your harness through here. But if you have another easier option, please feel free to use that. The included wire harness is 10' long, which accommodates for some extra cable, if needed.

**\*\*wrap the end of the harness in tape, as this will prevent the wires from being pulled out from the back of the connector, as you pass it through the firewall.\*\***

13. Re-install intake assembly and engine cover.



## Part 2 - Gauge and Power Harness Installation:

1. Remove the shift knob by turning it counter-clockwise.
2. Remove the shifter trim by pulling up at the back (behind the shifter), and then popping the front section outward toward the rear of the car.

**\*\*Be careful not to break any of the clips, and you may need to unplug one or two harness connectors from the back to completely remove it from the vehicle.\*\***





3. Remove the glove box by first opening the door, squeezing the sides inward, allowing it to flip outward, and it can then be removed.



- Carefully remove each trim piece located on each side of the console.



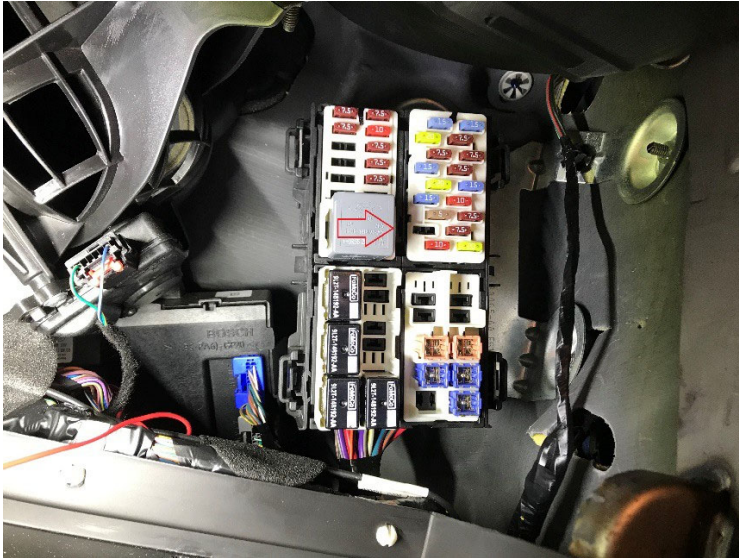
L to R: Drivers and Passenger side trim

- Route the new harness cleanly under the dash, toward the shifter area.

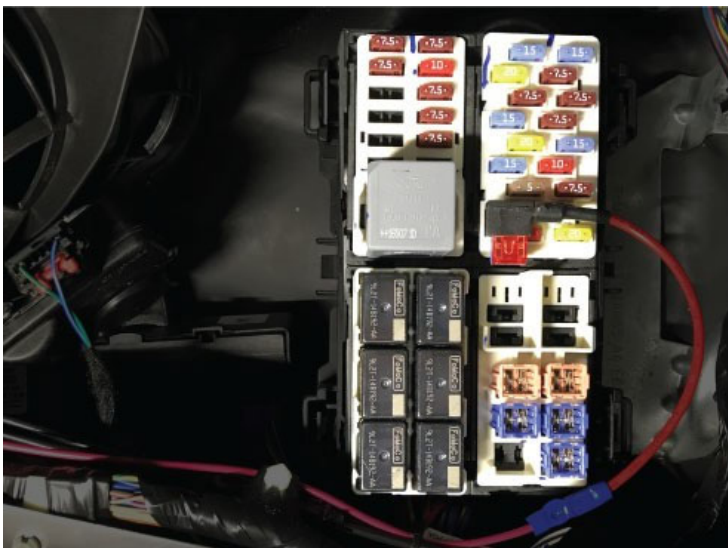
**\*\*Use zip ties where necessary to keep the harness away from the pedals and driver's feet.\*\***



6. Install the included add-a-circuit in the fuse location shown below. If you have a fuse in this space, make sure to re-install it in the open space in the add-a-circuit.



7. With the 4-pin display connector near the shifter, route the power pigtail toward the add-a-circuit and crimp your connection.



8. Crimp the supplied ground lug to the end of the black wire in the power pigtail. Secure your ground lug in the location show below.



9. Drill an 1/8" hole in the back of the OEM cubby. Use the photo below as a guide. You want to center the hole directly in the "o" of the word "Ford" stamped on the back.



10. Drill a larger 1/2" hole on top of the cubby (near the smaller hole you drilled).



11. You can now feed the 4-pin connector through the larger hole you drilled and plug it into the back of the display. Then place the display into the cubby and secure using the provided screw in the back.
12. Plug in the Ethanol Content Gauge to the power harness and re-install the cubby. Don't forget to plug in the OEM connectors.
13. Re-install all panels and glove box.

