

## INSTALLATION INSTRUCTIONS

### SUBJECT: CHARGING CIRCUIT HARNESS FOR 2017-2018 FORD 6.7L POWERSTROKE

FPE-2025-135  
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**FITMENT:** 2017-2018 Ford F-250-550 with 6.7L Power Stroke

**KIT P/N:** FPE-HAR-FMC-CCH-1718

**ESTIMATED INSTALL TIME:** 30 Minutes

**TOOLS REQUIRED:** Flathead screwdriver, Diagonal cutters

#### KIT CONTENTS:

Item #	Description	QTY
1	Charging circuit harness	1
2	Zip ties (not shown)	8



#### WARNINGS:

- Use of this product may void or nullify the vehicle's factory warranty.
- User assumes sole responsibility for the safe & proper use of the vehicle at all times.
- The purchaser and end user releases, indemnifies, discharges, and holds harmless Fleece Performance Engineering, Inc. from any and all claims, damages, causes of action, injuries, or expenses resulting from or relating to the use or installation of this product that is in violation of the terms and conditions on this page, the product disclaimer, and/or the product installation instructions. Fleece Performance Engineering, Inc. will not be liable for any direct, indirect, consequential, exemplary, punitive, statutory, or incidental damages or fines cause by the use or installation of this product.

## **OVERVIEW**

**COMPLAINT:** Charging circuit MIL illuminated intermittently or continuously on the truck dash.

**CAUSE:** Damaged, stressed, chaffed, or broken charging circuit sense wires in the OEM harness that are routed from the Powertrain Control Module (PCM) to the alternator resulting in an intermittent or continuously low voltage reading to the PCM.

**DESCRIPTION:** Due to the routing, exposure, and general lack of protection on the small charging circuit sense wires that are routed from Powertrain Control Module (PCM) to the alternator it is common for wire damage to be experienced. The routing of the OE harness is cumbersome and extremely difficult to replace and diagnose.

**FIX/SOLUTION:** The Fleece Performance Charging Circuit Harness for the 2017-2018 Ford F250-550 with 6.7L Power Stroke is a drop-in replacement to replace a failed factory harness causing an intermittent or illuminated charging circuit MIL on the dash. The harness installs directly in line with the factory connections with no cutting or splicing and allows you to reroute the alternator connection along the top side of the engine.

# INSTALLATION INSTRUCTIONS

## HARNESS CONNECTIONS:



## PROCEDURE:

**STEP 1:** Disconnect the batteries

**STEP 2:** Disconnect the MAF sensor connector on the top of the airbox.



**STEP 3:** Carefully lift the coolant de-gas line to remove it from the clip on the top of the intake tube.



**STEP 4:** Loosen the hose clamp retaining the intake tube to the intake manifold. Unclip the upper airbox from the lower airbox. Remove the intake tube and upper airbox assembly from the vehicle and set aside.

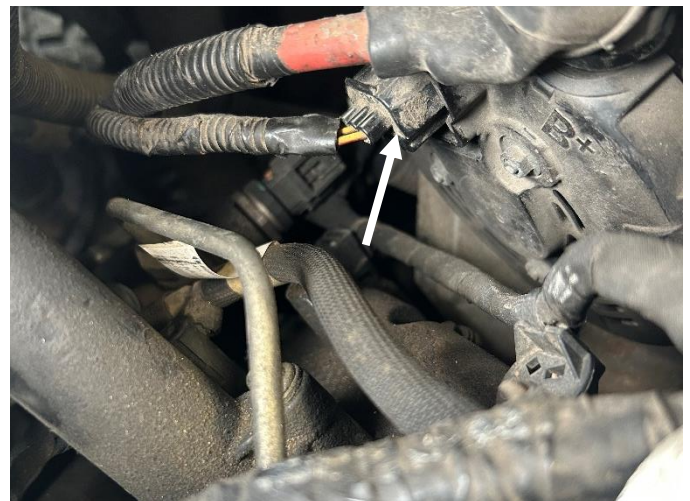


**STEP 5:** Locate the two bolts retaining the lower airbox to the mounting bracket. Remove the two bolts using an 8mm socket or wrench. Unclip the MAF sensor harness from the rear of the lower airbox. Remove the lower airbox housing from the vehicle.

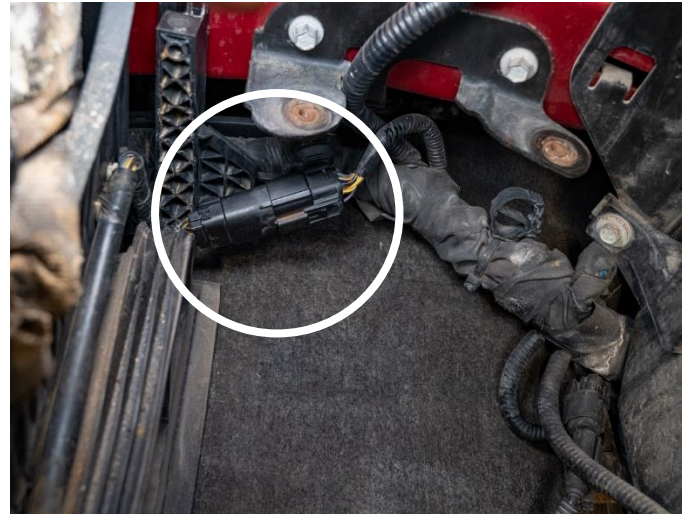


**STEP 6:** Locate the alternator. Disconnect the OE charging circuit harness connector from the rear of the alternator.

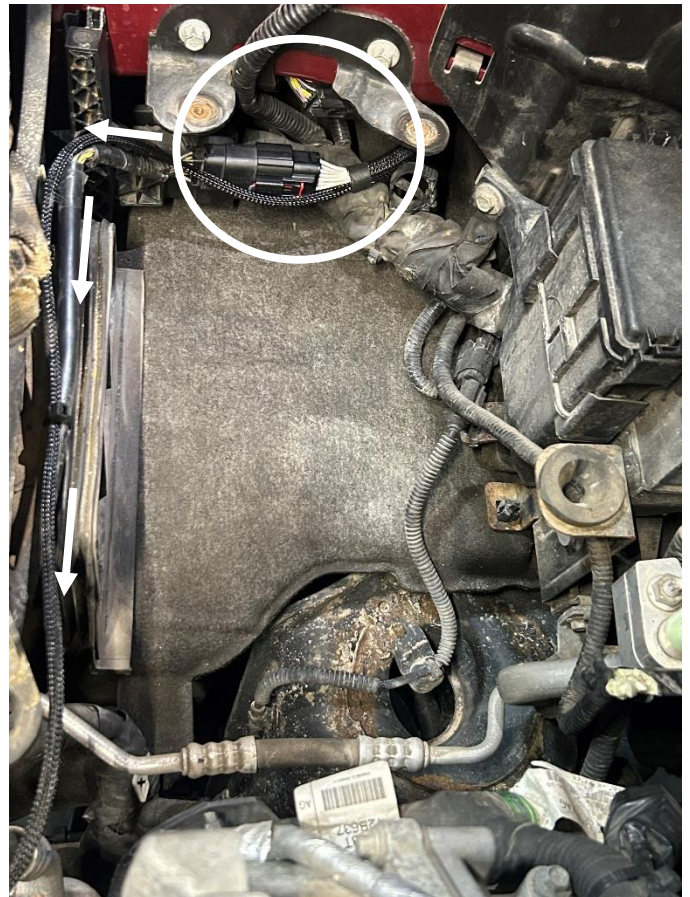
*NOTE: For vehicles equipped with dual alternators, you will only disconnect the charging circuit harness from the driver's side alternator (primary alternator).*



**STEP 7:** Locate the 12-pin PCM harness connector underneath the airbox mounting bracket (circled at right). Disconnect the harness connector.

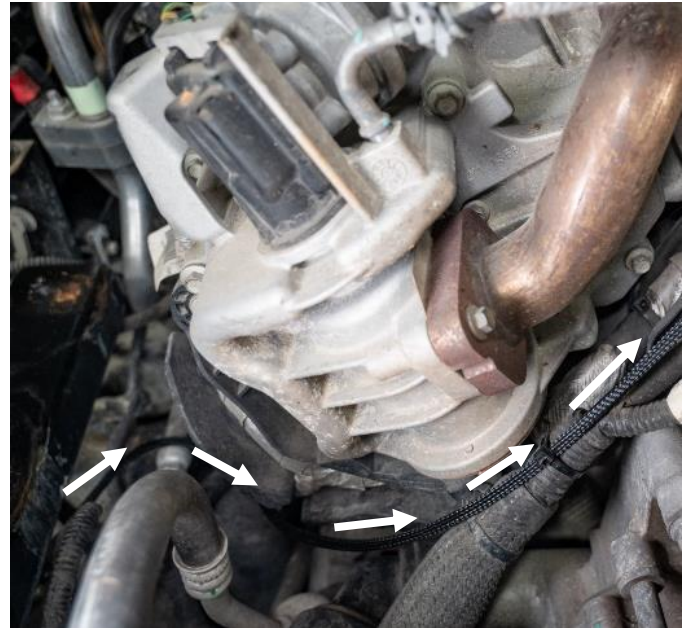


**STEP 8:** Connect the passthrough connector onto both ends of the PCM harness as shown at right. You will have to tuck one end of the harness out of the way in order to allow the airbox to fit properly. Route the alternator signal wire harness along the OE harness and over the airbox inlet.



## Routing Instructions:

**STEP 9:** Route the alternator signal wire harness towards the front of the engine and along the OE wiring harness.

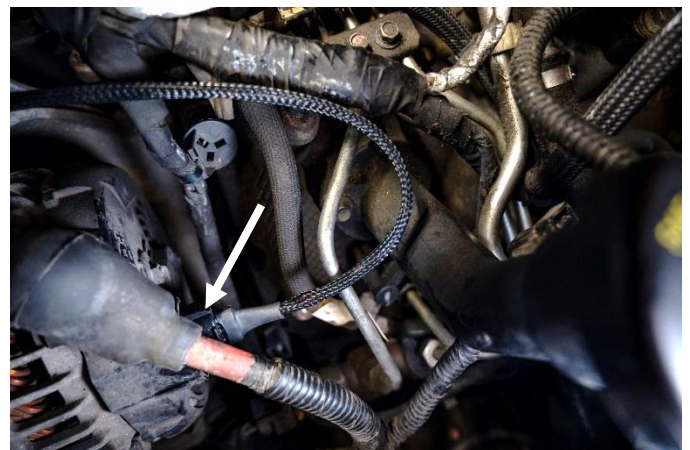


Continue routing the alternator signal harness across the front of the engine bay and along the plastic channel underneath the intake manifold.

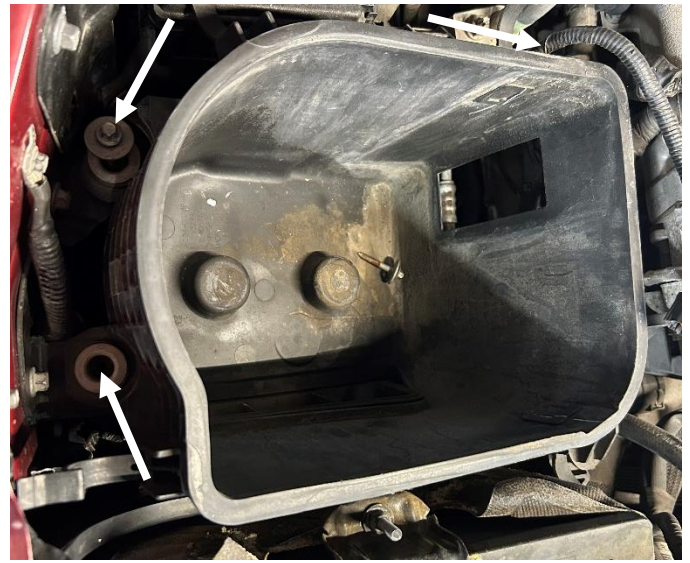


Connect the end of the alternator signal wire harness to the rear of the primary alternator.

**STEP 10:** Use the included zip ties at even intervals to retain the alternator signal wire harness.



**STEP 11:** Install the lower airbox housing. Using an 8mm socket or wrench, torque the two mounting bolts to 53 in-lb. Press the fir tree retainer into the rear of the housing to retain the MAF sensor harness.



**STEP 12:** Install the intake tube. Connect the tube to the intake manifold first, then tighten the hose clamp. Fasten the retaining clips onto the upper airbox housing. Place the degas line into the clip on the top of the intake tube. Reconnect the MAF sensor connector

**STEP 13:** Reconnect the battery terminals.

**STEP 13:** Start the vehicle and check that the alternator signal is reading correctly, and that the charging MIL is no longer illuminated. The use of a scan tool may assist in this step.

