

## INSTALLATION INSTRUCTIONS

### SUBJECT: CHARGING CIRCUIT HARNESS FOR 2019 FORD 6.7L POWERSTROKE

FPE-2025-136  
March, 2025  
Page 1 of 7

**FITMENT:** 2019 Ford F-250-550 with 6.7L Power Stroke

**KIT P/N:** FPE-HAR-FMC-CCH-19

**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 caused 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 2019 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 battery terminals.

**STEP 2:** Carefully lift the Degas line out of the clip on the top of the intake tube in front of the intake manifold.



**STEP 3:** Loosen the two hose clamps retaining the intake tube to the intake manifold and the upper airbox assembly. Remove the tube from the vehicle and set aside.



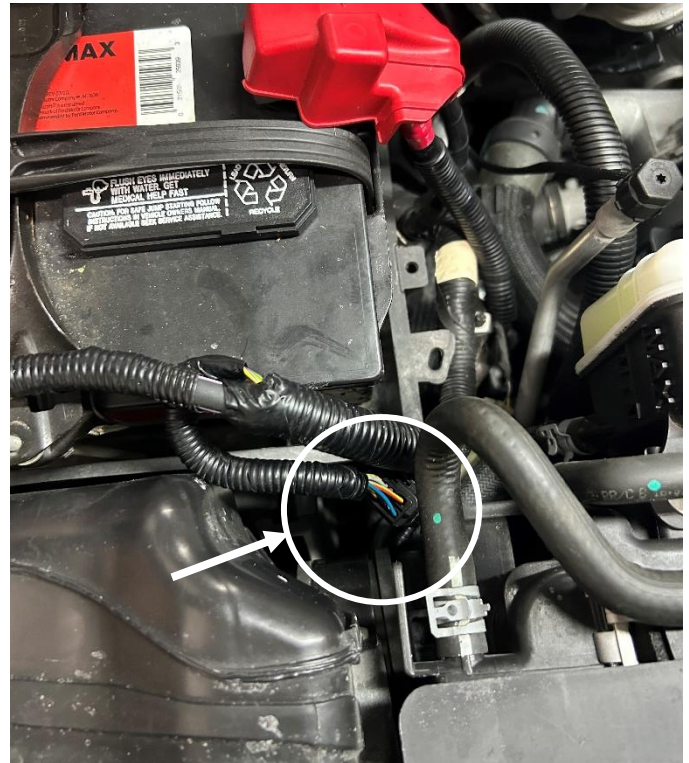


**STEP 4:** Disconnect the alternator charging signal wire connector from the rear-facing side of the alternator.

*NOTE: If your vehicle is equipped with dual alternators, you will only be disconnecting the connector from the driver's side alternator (primary alternator).*



**STEP 5:** Locate the 12-pin PCM harness connector between the radiator and the air inlet tube, just forward of the passenger side battery. The connector may be tucked down into the space shown at right. Lift the connector from the space.



**STEP 6:** Disengage the red locking tab on the PCM harness connector as shown at right. Squeeze on the black release tab and pull the connector apart.

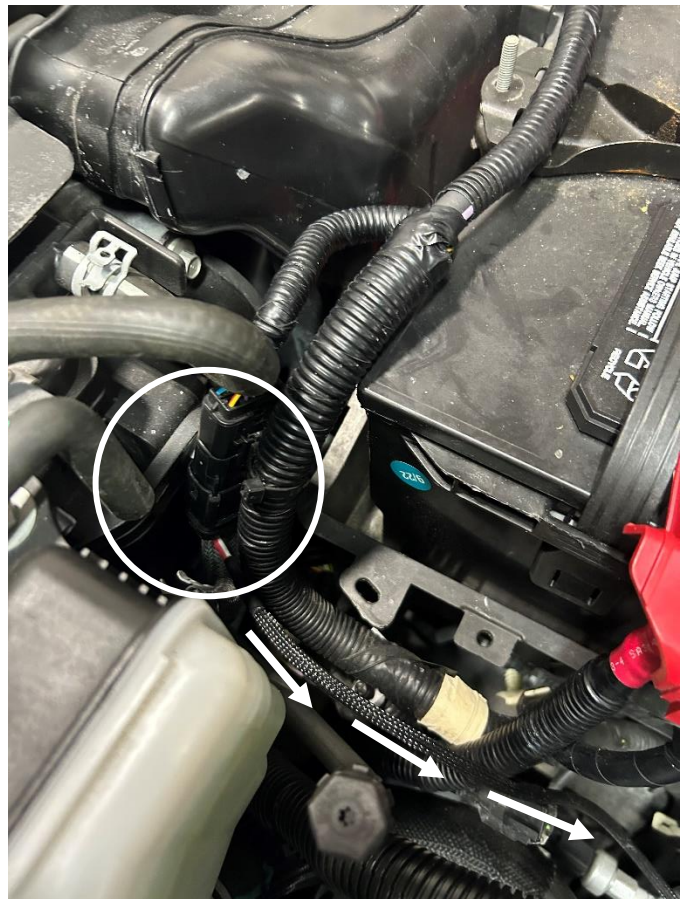


**STEP 7:** Connect the ends of the harness disconnected in the previous step to the passthrough connector on the Fleece Performance charging circuit harness. When both ends are connected, push the two red locking tabs into place.



**STEP 8:** Tuck the passthrough connector into the space where the original connector was located.

Route the alternator charging signal wire from the connector towards the front of the engine block as shown at right



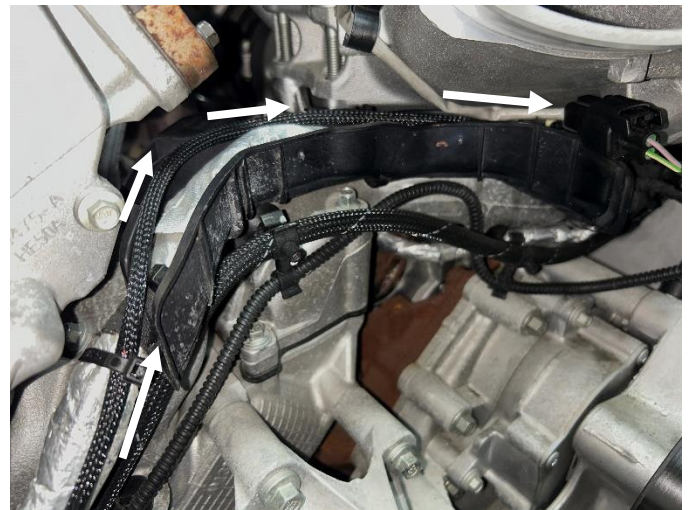


## Routing Instructions:

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

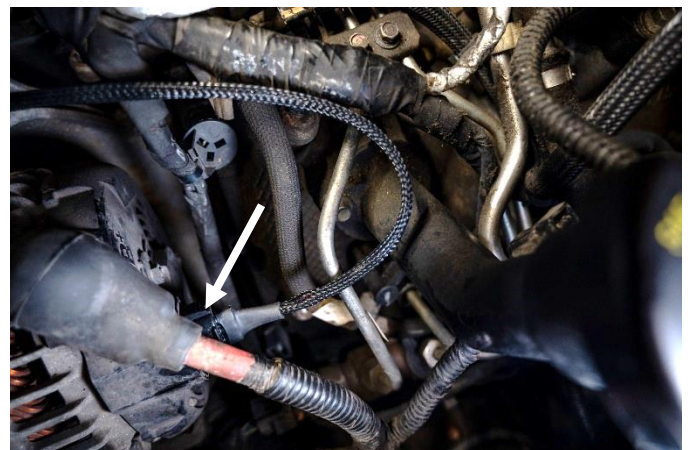


Continue routing the alternator signal harness across the front of the engine bay and along the plastic channel underneath the intake manifold.



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 12:** Install the intake tube and tighten the two hose clamps. Place the degas line into the clip on the top of the intake tube.

**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.

