advanced FLOW engineering

Instruction Manual P/N: 77-42012

Make: **Ram** Model: **1500 EcoDiesel** Year: **2014-2018** Engine: **V6-3.0L (td)**
Make: **Ram** Model: **1500 Classic EcoDiesel** Year: **2019** Engine: **V6-3.0L (td)**

THIS IS A HIGH-PERFORMANCE PRODUCT: Do not use this product until you have carefully read the following agreement and installation instruction. This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts its terms and conditions.

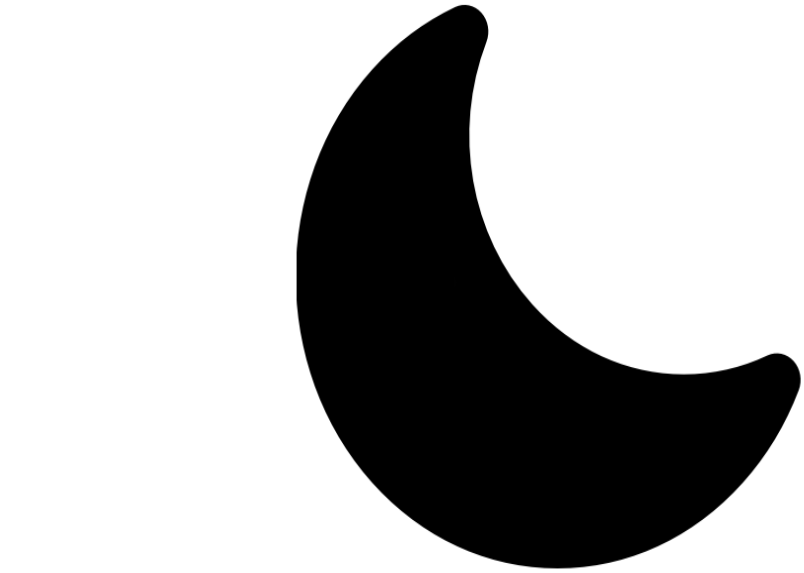
Before proceeding with the installation:

- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support.
- Ensure you have all necessary tools before proceeding. Do not attempt to work on your vehicle when the engine is hot.

Emission Disclaimer: This product is not currently CARB exempt and is not available for purchase in California or for use on any vehicle registered with the California Department of Motor Vehicles.

Label	Qty.	Description	Part Number
A	1	Module	R77-42012
B	1	LED Switch	05-70029
C	2	Velcro (2” Inches)	05-01244
D	4	Cable Ties	05-60167

REMOVAL



SLEEP MODE

Figure A

Refer to Figure A for Step 1

Step 1: Before installing your aFe POWER module, you will have to place your vehicle's ECU in sleep mode. In order to do this, you will need to do the following:

- If the engine is cold: open the hood, close the doors, lock the car and wait 30 seconds.
- If the engine is warm: open the hood, close the doors, lock the car and wait 20 minutes.
- If the engine is warm and you can't wait 20 minutes: disconnect the battery.

Note: Do NOT open doors or start vehicle while one of the sensors is disconnected. This could create a check engine light

Figure B

Refer to Figure B for Step 2

Step 2: Remove your engine cover and the foam insulation on the passenger side to gain access to the MAP and Fuel Pressure Sensors

Note: Removal of the intake tube is not necessary, but can give you more clearance while working with the connectors if needed.

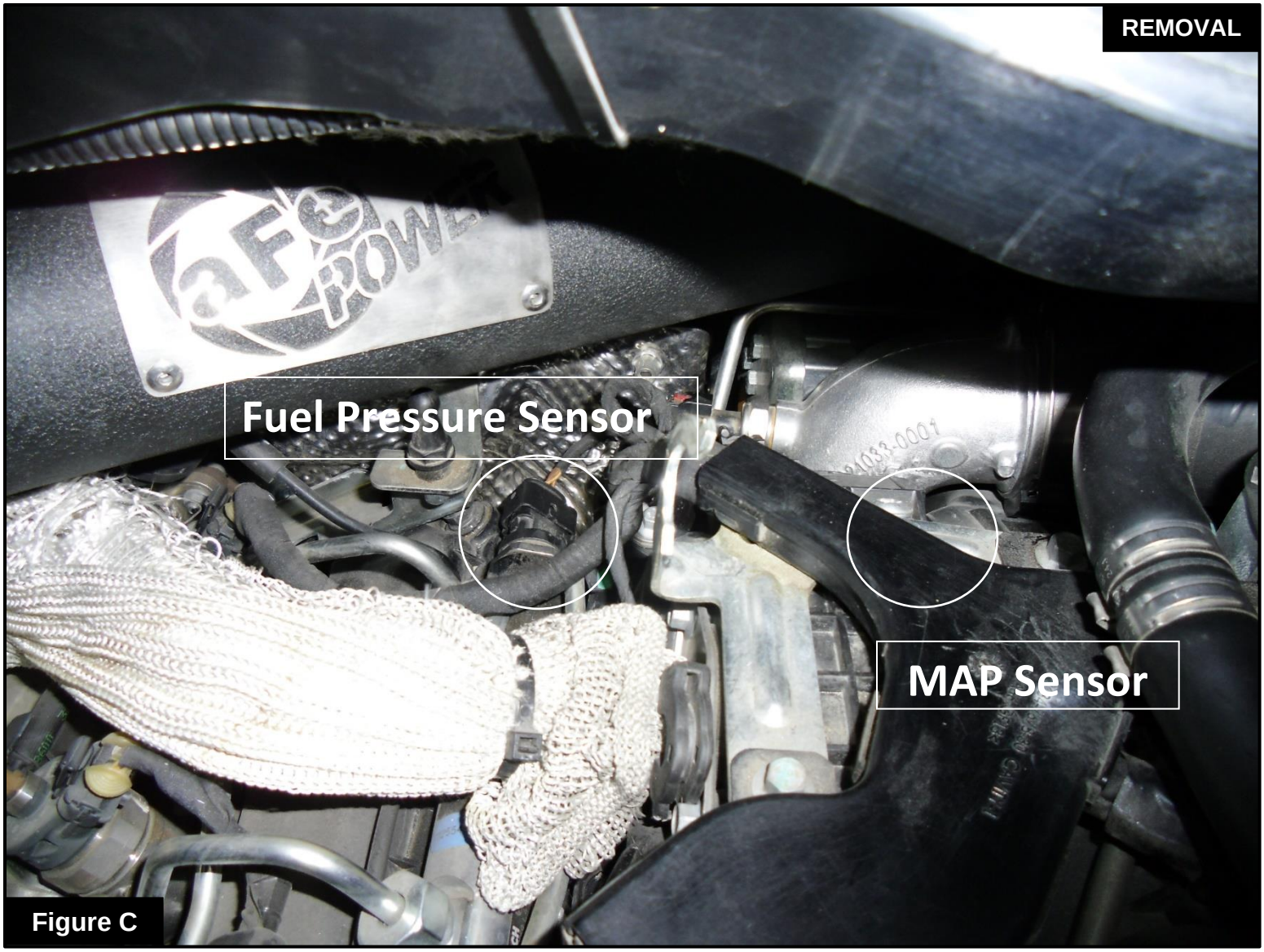


Figure C

Refer to Figure C for Step 3

Step 3: Locate the MAP and Fuel Pressure sensors. The MAP sensor is located on the back of the intake manifold, just in front of the turbo. The fuel pressure sensor is located at the end of the fuel rail, near the firewall, and just to the left of the MAP sensor.

Figure D

Refer to Figure D for Steps 4-5

Step 4: Locate, and then disconnect the MAP sensor connector, by pressing down on the locking tab of the connector and sliding it out of the sensor.

Step 5: Locate the MAP sensor jumper harness on the aFe POWER harness. This is the shorter jumper harness with the larger connectors. It will be labeled MAP. Plug the female connector of the aFe POWER harness into the MAP sensor, then take the male connector of the aFe POWER harness and connect to the female connector of the engine harness.

Refer to Figure E for Step 6

Step 6: Check with the pictures to make sure the connectors are fully seated in the right orientation.

Make sure that the connections are fully engaged. Usually, connectors make a snapping sound when fully engaged

Figure F

Refer to Figure F for Steps 7-8

Step 7: Disconnect the Fuel Pressure Sensor connector by pressing down on the locking tab of the connector and sliding it out of the sensor.

Step 8: Locate the Fuel Pressure sensor jumper harness on the aFe POWER harness. This is the longer harness with the smaller connectors. It is labeled FUEL. Plug the female connector of the aFe POWER harness into the fuel pressure sensor, then the male connector of the aFe POWER harness to the female connector of the engine harness.

Note: The locking tab of this connector may not be visible. It is connected the same way as the MAP sensor.

Figure G

Refer to Figure G for Step 9

Step 9: Check with the pictures to make sure the connectors are fully seated in the right orientation.

Make sure that the connections are fully engaged. Usually, connectors make a snapping sound when fully engaged.

Figure H

Refer to Figure H for Steps 10-11

Step 10: Select the desired location for the LED switch. Route the cable on the back of the switch to exit towards the top or the bottom.

Step 11: Use the provided double sided tape to secure the LED switch in the desired location.

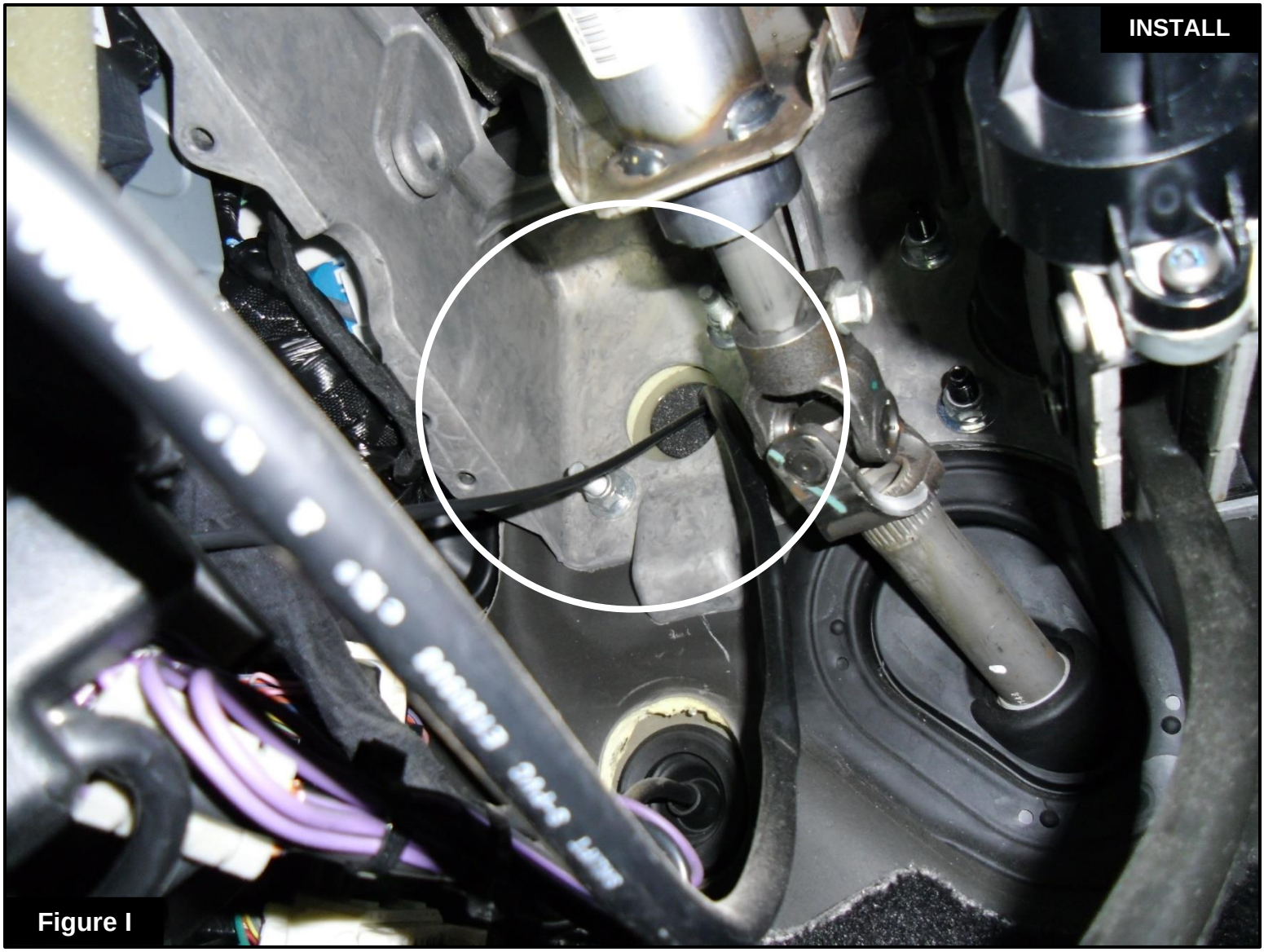


Figure I

Refer to Figure I for Steps 12-14

Step 12: Carefully route the switch cable behind steering wheel cover or cabin trim cover

Step 13: Route the switch cable through the firewall and into the engine bay. Follow the main harness through the grommet into the firewall. Alternatively, there is an opening above the harness that can be poked through by using a screwdriver.

Step 14: Plug the end of the switch cable to the harness inside the engine compartment.

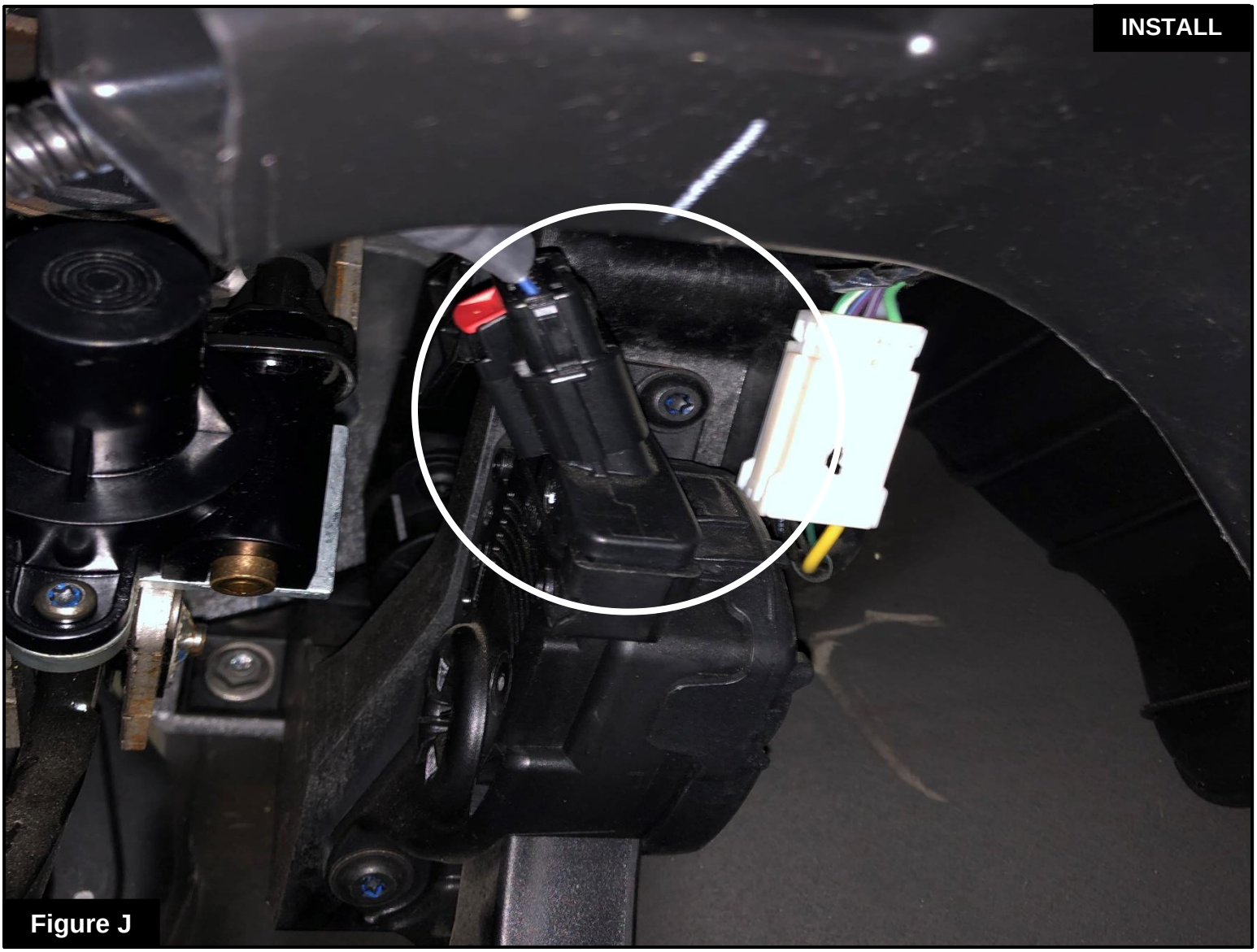


Figure J

Refer to Figure J for Steps 15-16

Step 15: Locate the connector for the gas pedal. It is located towards the top of the gas pedal assembly.

Step 16: Disconnect the gas pedal harness by pressing in on the locking tab and sliding the connector out of the gas pedal assembly.

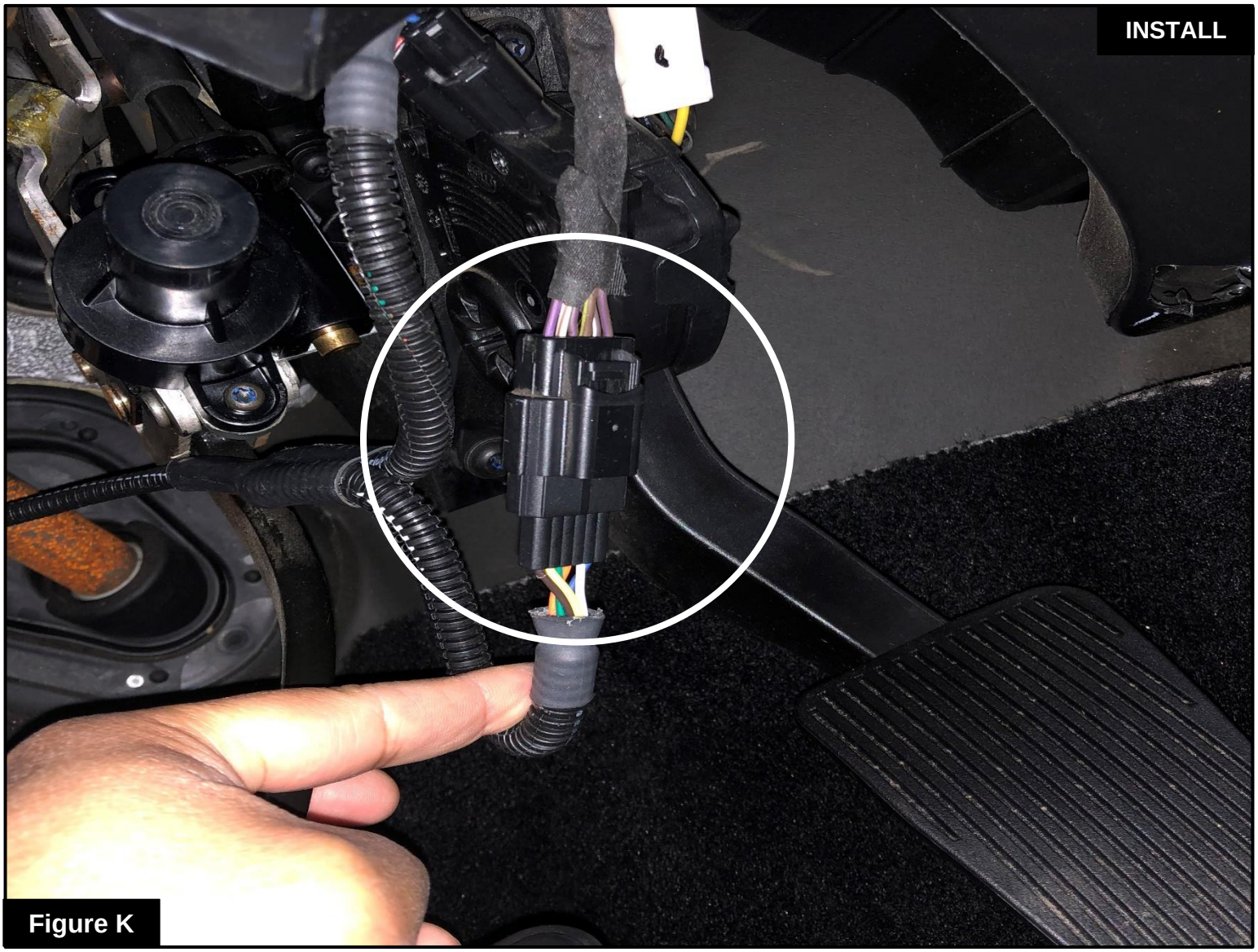


Figure K

Refer to Figure K for StepS 17-18

Step 17: Locate the gas pedal harness. It is labeled pedal. Plug the female connector of the aFe POWER harness into the male connector of the gas pedal assembly. Then plug the male connector of the aFe POWER harness into the female connector of the gas pedal harness.

Step 18: Utilizing either the opening for the engine harness or the opening above it, run the wires for the gas pedal harness back into the engine bay and plug it into the harness on the aFe POWER module. Use the provided cable ties to secure the harness under the steering wheel to make sure it does not interfere with your foot or the accelerator pedal.

Make sure that the connections are fully engaged. Usually, connectors make a snapping sound when fully engaged.

Figure L

Refer to Figure L for Steps 19-21

Step 19: Secure the Scorcher HD module to the fuse box cover on the driver side or any other desired location using the Velcro provided.

Step 20: Secure the wires away from any extreme heat and moving parts with the provided zip ties.

Step 21: Reinstall the insulation foam and engine cover.

Figure M

Refer to Figure M (LED Switch)

When turning on the vehicle, each LED will flash, and it will stop at its last setting. The LED on the switch represents the different level of power.

- Green LED: Stock
- Yellow LED: Sport
- Orange LED: Sport+
- Red LED: Race

Use the grey button to select the desired setting. Power adjustments can be done at any time while the unit is on. Thank you for choosing aFe POWER.

Intercooler w/ Tubes

P/N: 46-20172

Rear Differential Cover

P/N: 46-70272-WL (w/ Oil)
46-70272 (Blk)
46-70272 (RAW)

Engine Oil Pan

P/N: 46-70282 (Blk)
46-70280 (RAW)

Momentum HD Intake

P/N: 54-72006 (P5R)
51-72006 (PDS)

Momentum HD Intake Scoop

P/N: 54-72006-S

DPF-Back Exhaust System

P/N: 49-42041-B (Blk Tips)
49-42041-P (Pol Tips)

Intercooler Tubes

P/N: 46-20174-B (Black)
46-20174-R (Red)

OE Replacement Air Filter

P/N: 30-10071 (P5R)
31-10071 (PDS)

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