

advanced FLOW engineering

Instruction Manual P/N: 77-82012

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.

DISCLAIMER OF WARRANTY AND LIMITATION OF LIABILITY: Advanced FLOW Engineering, Inc. (also known as aFe or aFe POWER) and its successors, distributors, jobbers, and dealers (hereafter “SELLER”) shall in no way be responsible for the product’s improper use and service. It is the installer’s responsibility to check for proper installation and if in doubt, contact the manufacturer. The SELLER assumes no liability regarding the improper installation or misapplication of its products. BUYER acknowledges it has had the opportunity to fully inspect the product. Accordingly, BUYER acknowledges that the product is being sold in “AS IS/WHERE IS” condition. SELLER shall not be held liable for special, indirect, incidental or consequential damages of any nature with respect to the products (including, without limitation, lost profits, lost sales, loss of production, property damage, personal injury or loss or damage resulting from interruption or failure in operation of the products) and BUYER hereby expressly waives and disclaims all such liability claims. The BUYER acknowledges and agrees that the disclaimer of liability contained herein is a material term of the sale of the product and, to the fullest extent permitted by law, BUYER shall defend, indemnify and hold SELLER harmless from any and all claims, demands, causes of action, controversies, liabilities, fines, losses, costs and expenses (including, but not limited to attorneys’ fees, expert witness expenses and litigation expenses) arising from or related to SELLER’s products.

Before proceeding with the installation:

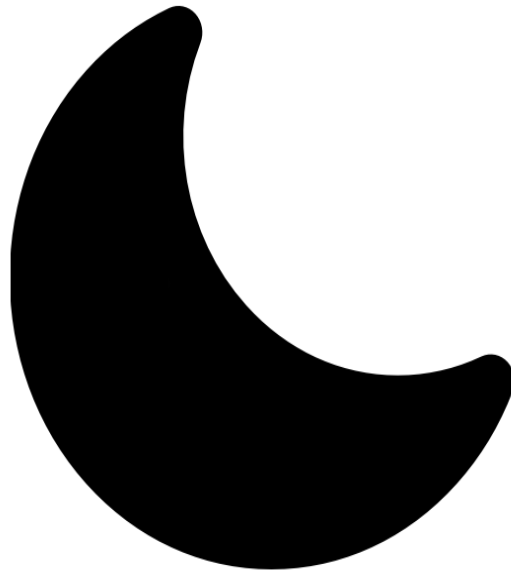
- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7185.
- Ensure you have all necessary tools before proceeding. Do not attempt to work on your vehicle when the engine 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	R77-82012
B	1	LED Switch	05-70029
C	1	Bypass Plug	05-70017
D	1	Harness (Including Gas Pedal Harness)	AFE-10-122
E	2	Velcro (2" Inches)	05-01244
F	4	Cable Ties	05-60167
G	2	Double Sided Tape	07-90001





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:

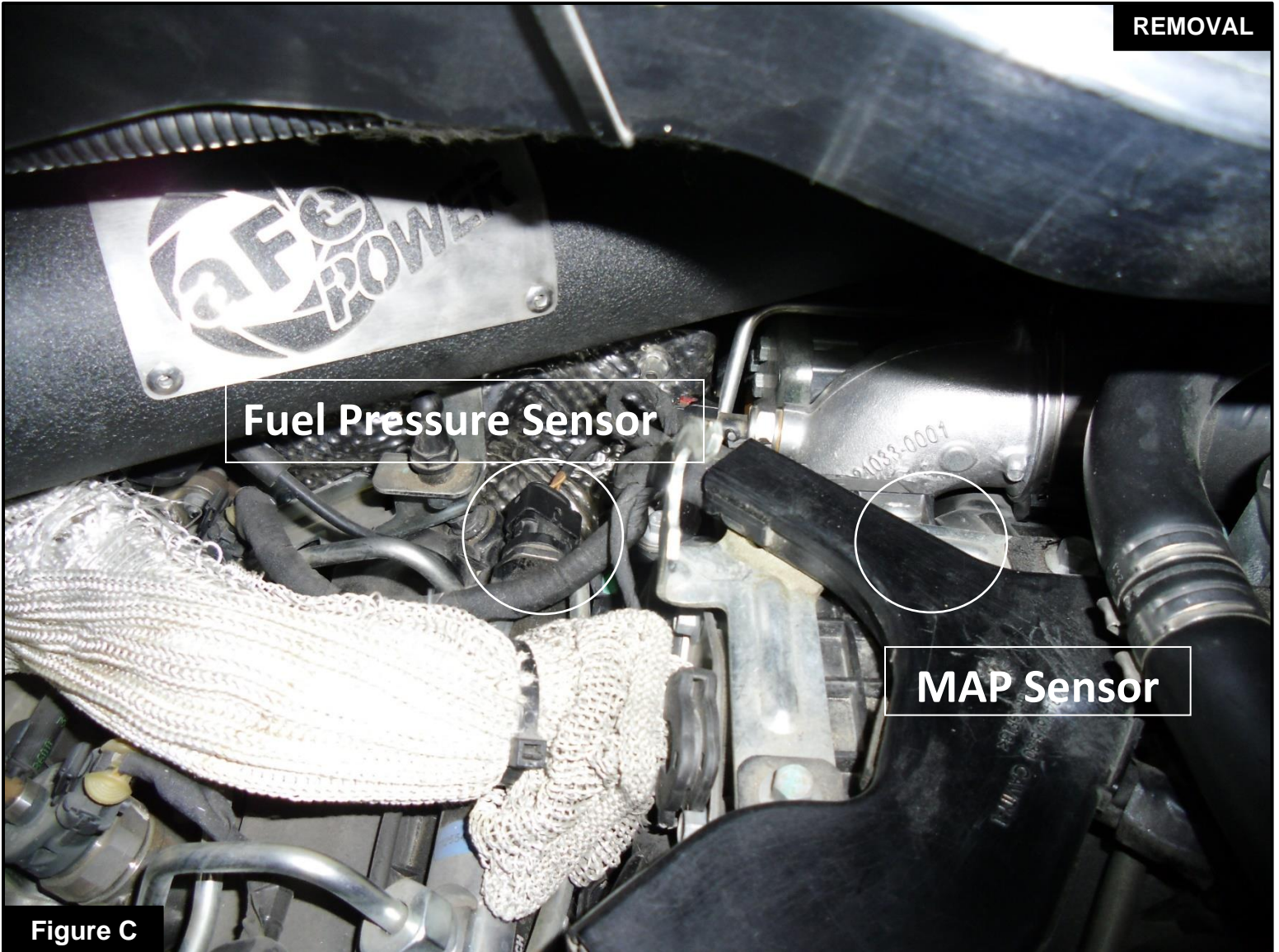
- If the engine is cold: open the hood, close the doors, lock the car and wait 30 seconds.
- If the engine is warm: open the hood, close the doors, lock the car and wait 20 minutes.
- If the engine is warm and you can't wait 20 minutes: disconnect the battery.

 **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(Optional)

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.

Note: Installing the LED switch is optional. Scorcher Blue is fully functional when using the app

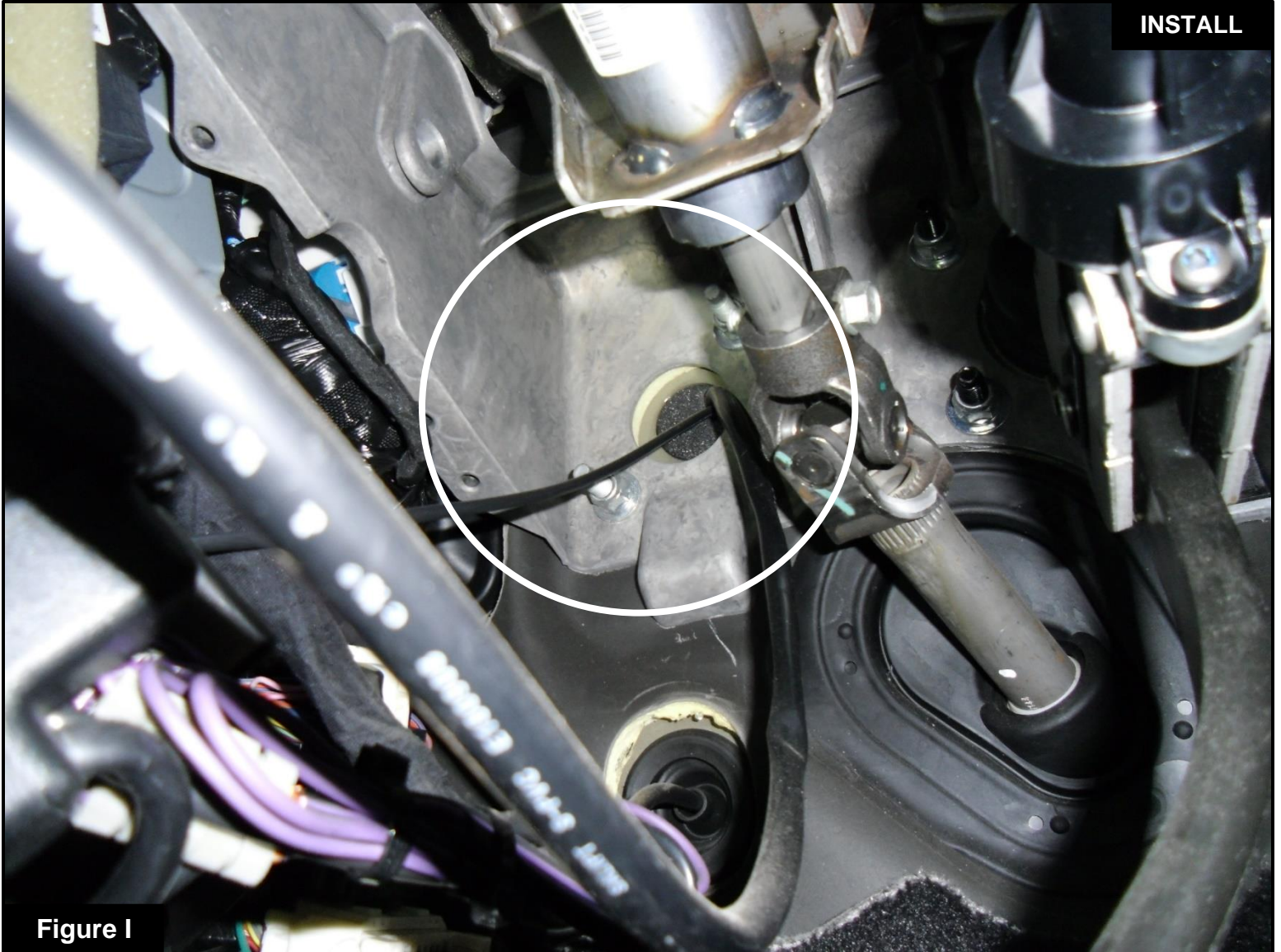


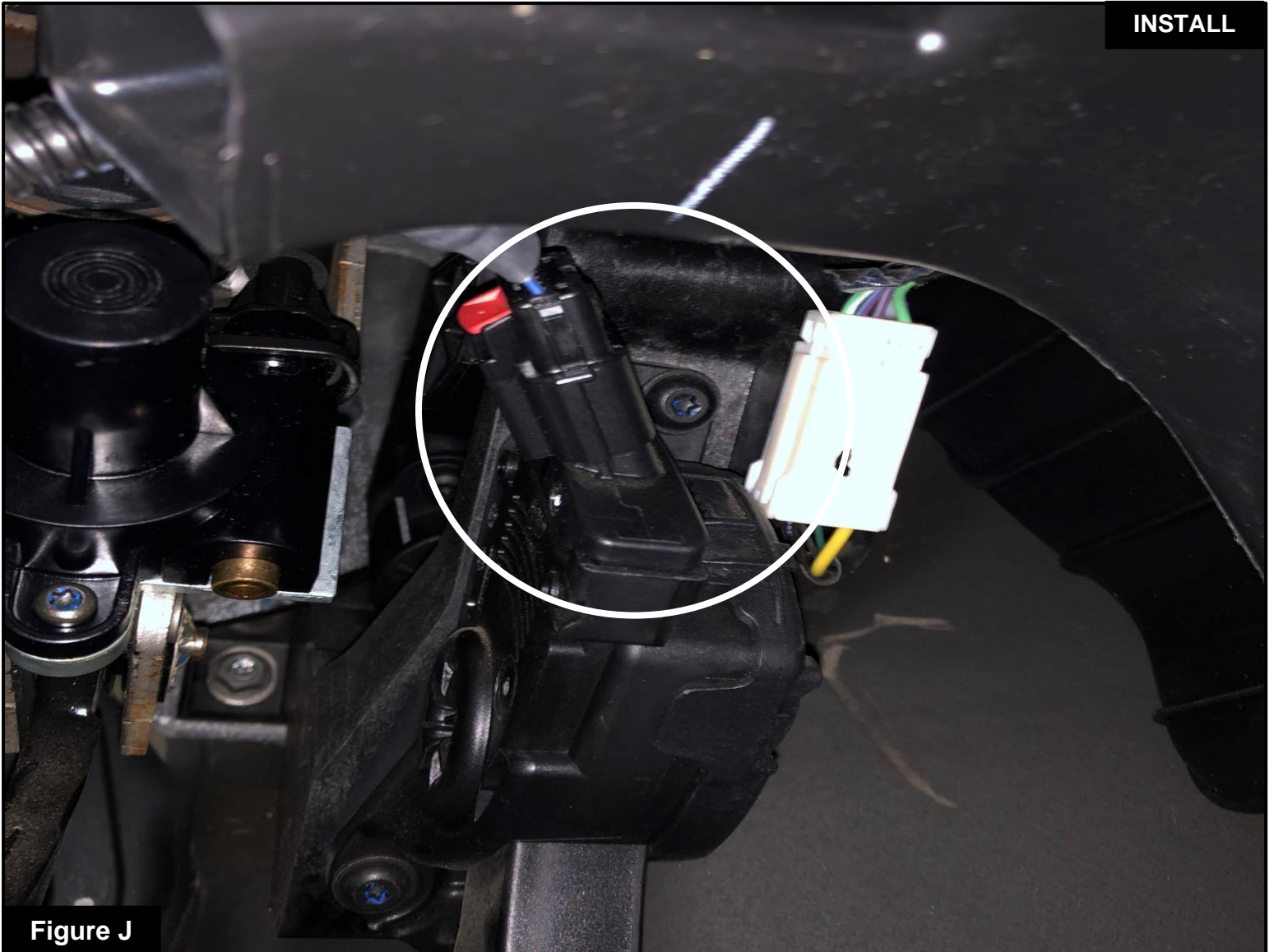
Figure I

Refer to Figure I for Steps 12-14

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

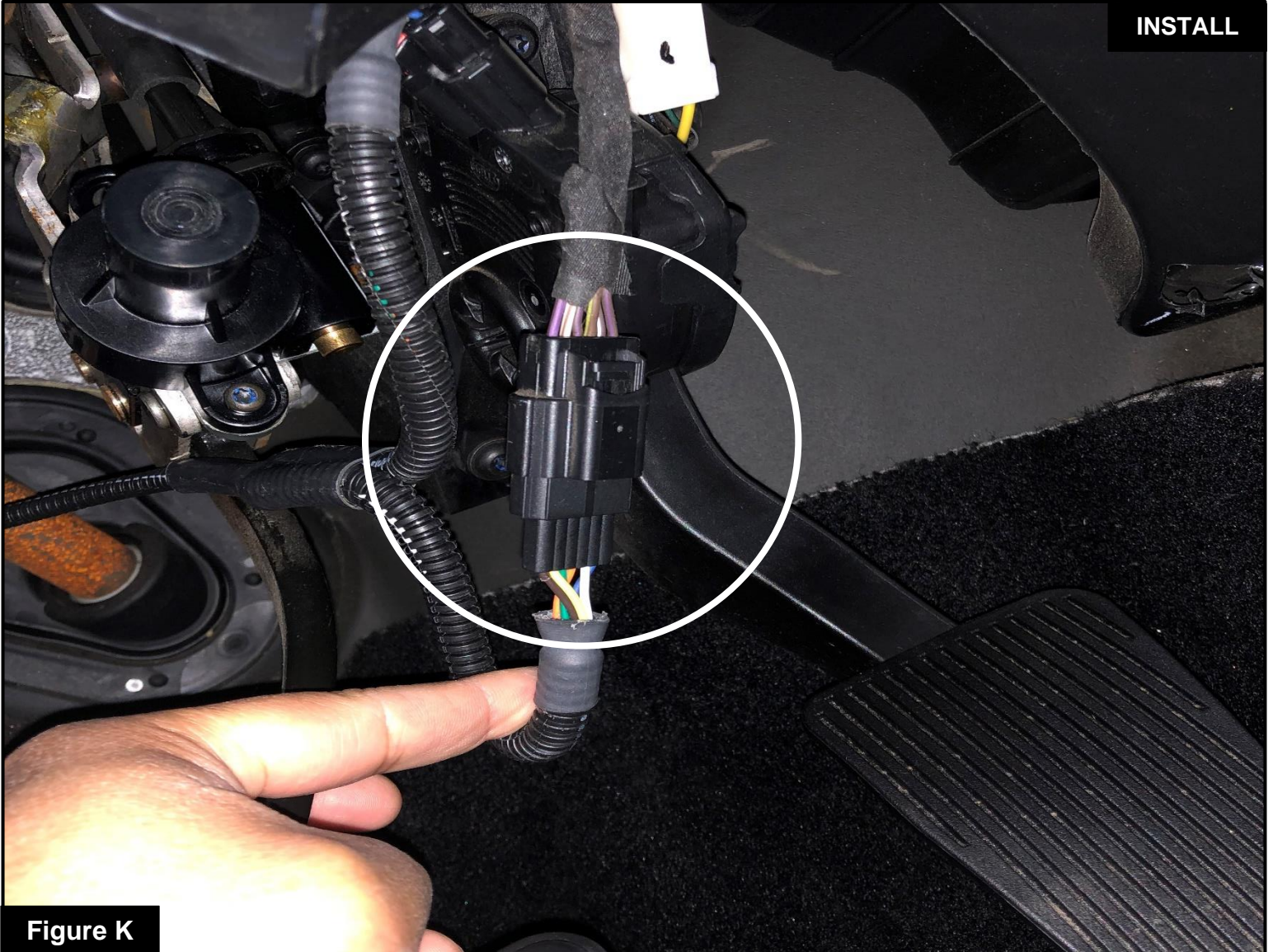
Step 13: Route the switch cable through the firewall and into the engine bay. Follow the main harness through the grommet into the firewall. Alternatively, there is an opening above the harness that can be poked through by using a screwdriver.

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.**

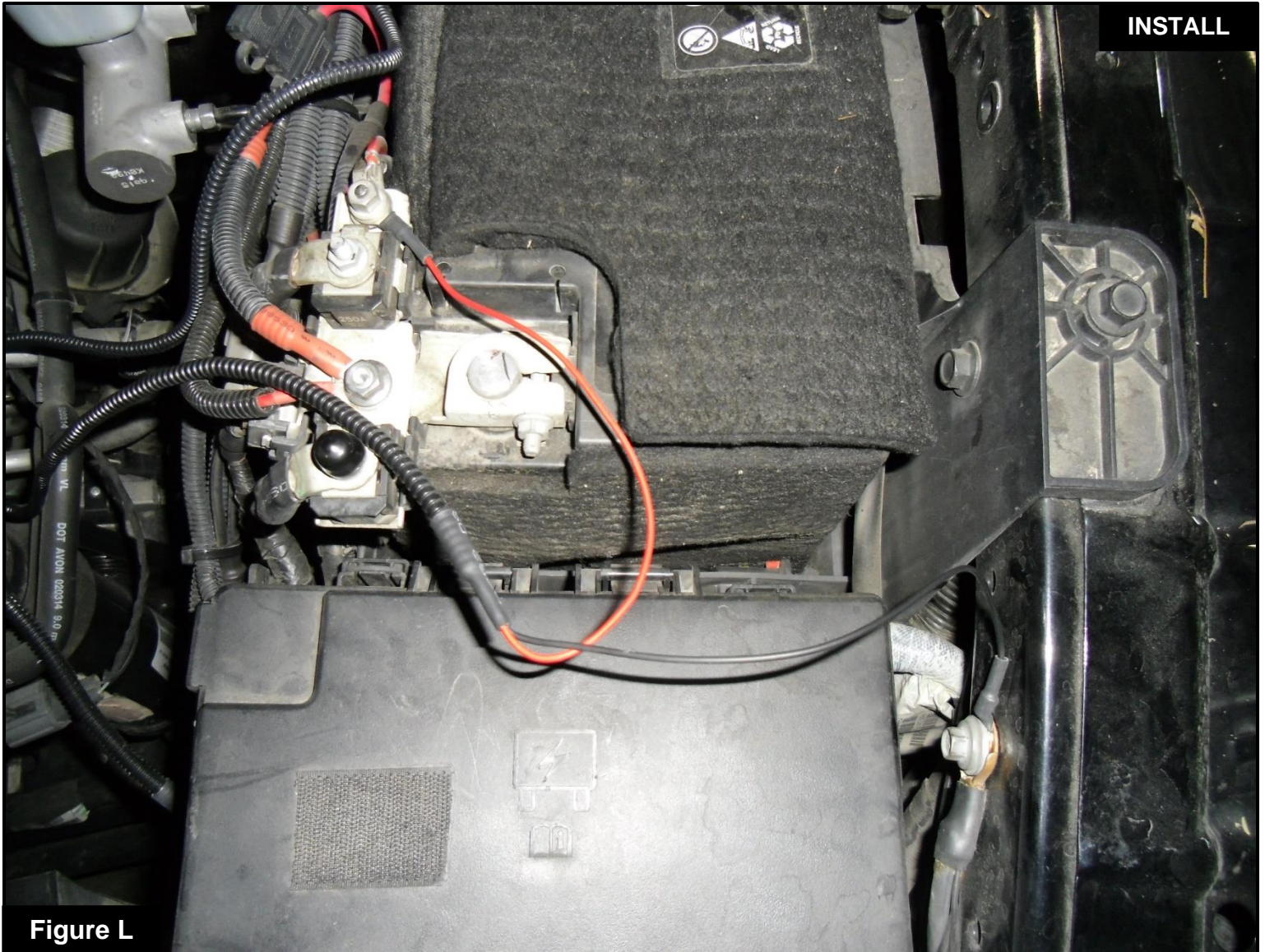


Figure L

Refer to Figure L for Steps 19-20

Step 19: Connect the black ground terminal cable of the aFe POWER module to the negative battery post. Alternatively, connect it to a ground on the fender by removing the 10mm nut and placing the terminal, then reinstall the nut.

Step 20: Connect the red power terminal cable of the aFe POWER module to the positive battery post by removing the 10mm nut, placing the terminal then reinstall the nut.

**Figure M**

Refer to Figure M for Steps 21-23

Step 21: Secure the SCORCHER BLUE module to the fuse box cover on the driver side or any other desired location using the Velcro provided. The module must be located within reach of the LED switch harness if it is being used.

Step 22: Connect the SCORCHER BLUE module to the harness. Make sure the connector is fully engaged.

Step 23: Reinstall the insulation foam and engine cover.

Note: The installation of the module itself is now completed. Keep reading the install instruction to learn how to use all of its features.



Figure N

Refer to Figure N (Picture is for reference)

The blue LED light will start flashing once the module is connected to the truck and the ECU is on. The blue LED will become solid if the module gets connected through Bluetooth to a device.



Figure O

Refer to Figure O (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. The LED switch can be used at the same time as the Bluetooth app.

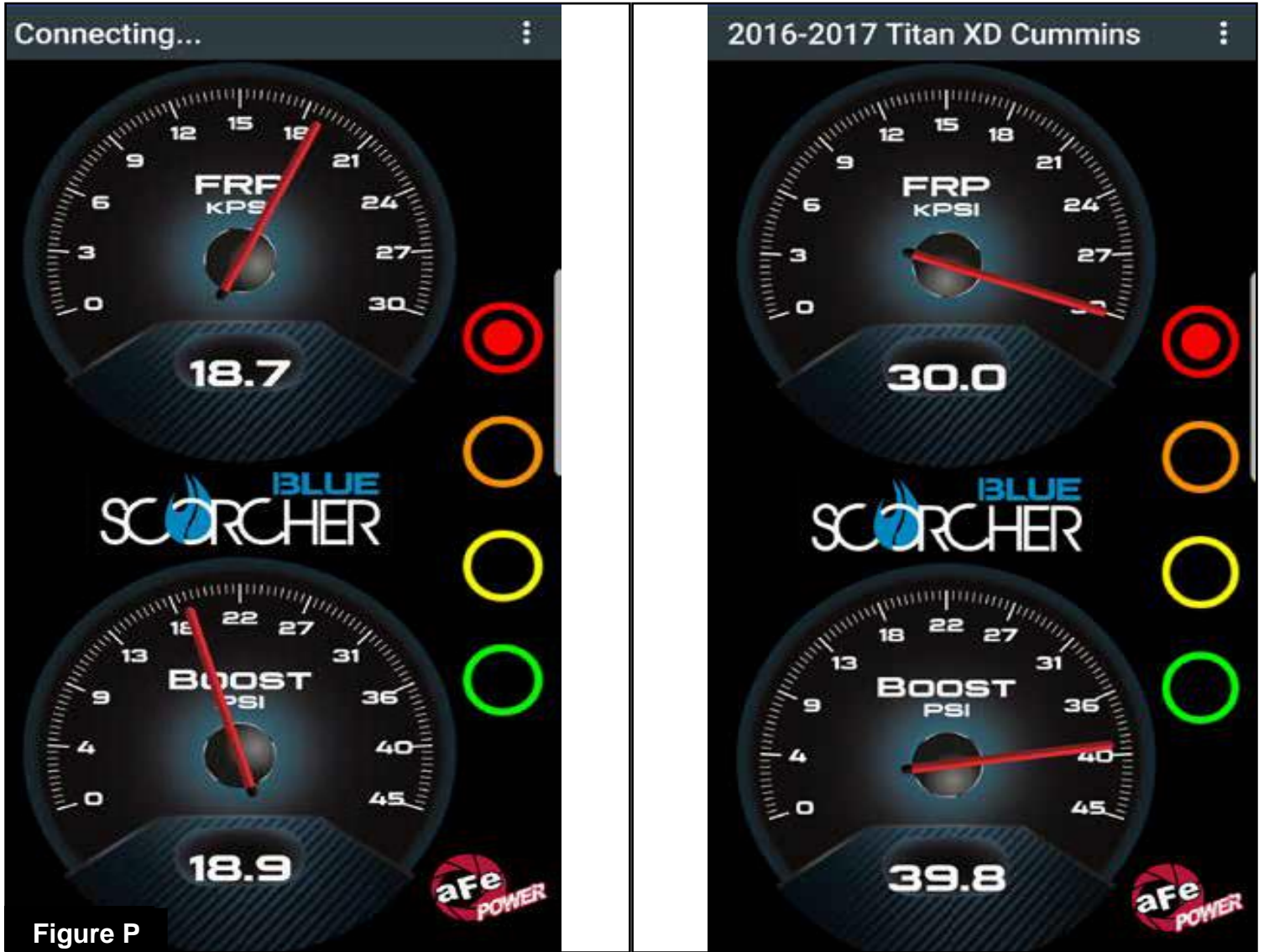


Figure P

Refer to Figure P* (app connection-iOS)

For iOS devices, download the app from the apps store. Make sure the Bluetooth is activated on your device. Open the app and it will automatically connect through Bluetooth to the SCORCHER BLUE module when both the vehicle and module are on. When connected, the vehicle description will appear on top of the screen and the gauges will show current data.

The blue LED light on the module will become solid once connected to a Bluetooth device. Simply tap on the green, yellow, orange and red button to switch between the modes.

**Screen shots shown here are for example only. Actual screen display will vary depending on your vehicle.*

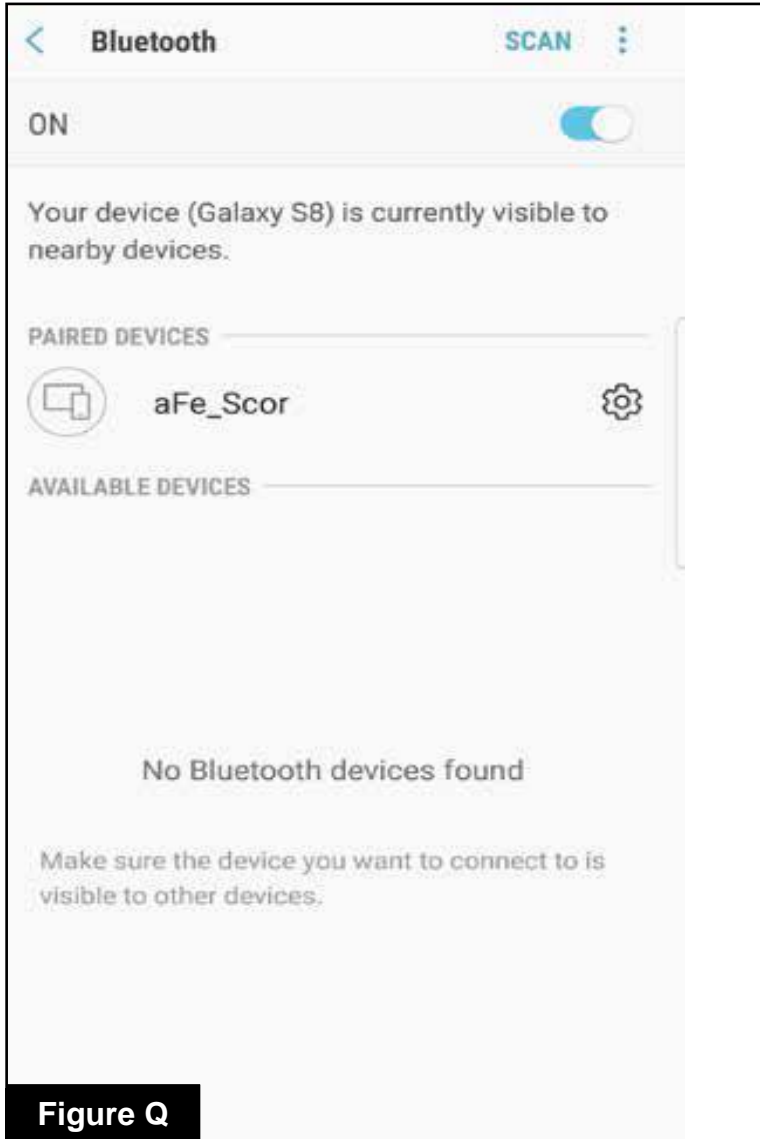


Figure Q

Refer to Figure Q* (app connection-Android)

For Android devices, download the app from the play store. For the initial connection, go to the Bluetooth settings of your device, turn on Bluetooth and scan for available devices. Select “aFe SCOR” and pair with device. The vehicle needs to be on and the module connected. Once shown as paired device, open the app on your device and it will automatically connect to the vehicle. The vehicle description will appear on top of the screen and the gauges will show current data.

The blue LED light on the module will become solid once connected to a Bluetooth device. Simply tap on the green, yellow, orange and red button to switch between the modes.

**Screen shots shown here are for example only. Actual screen display will vary depending on your vehicle.*

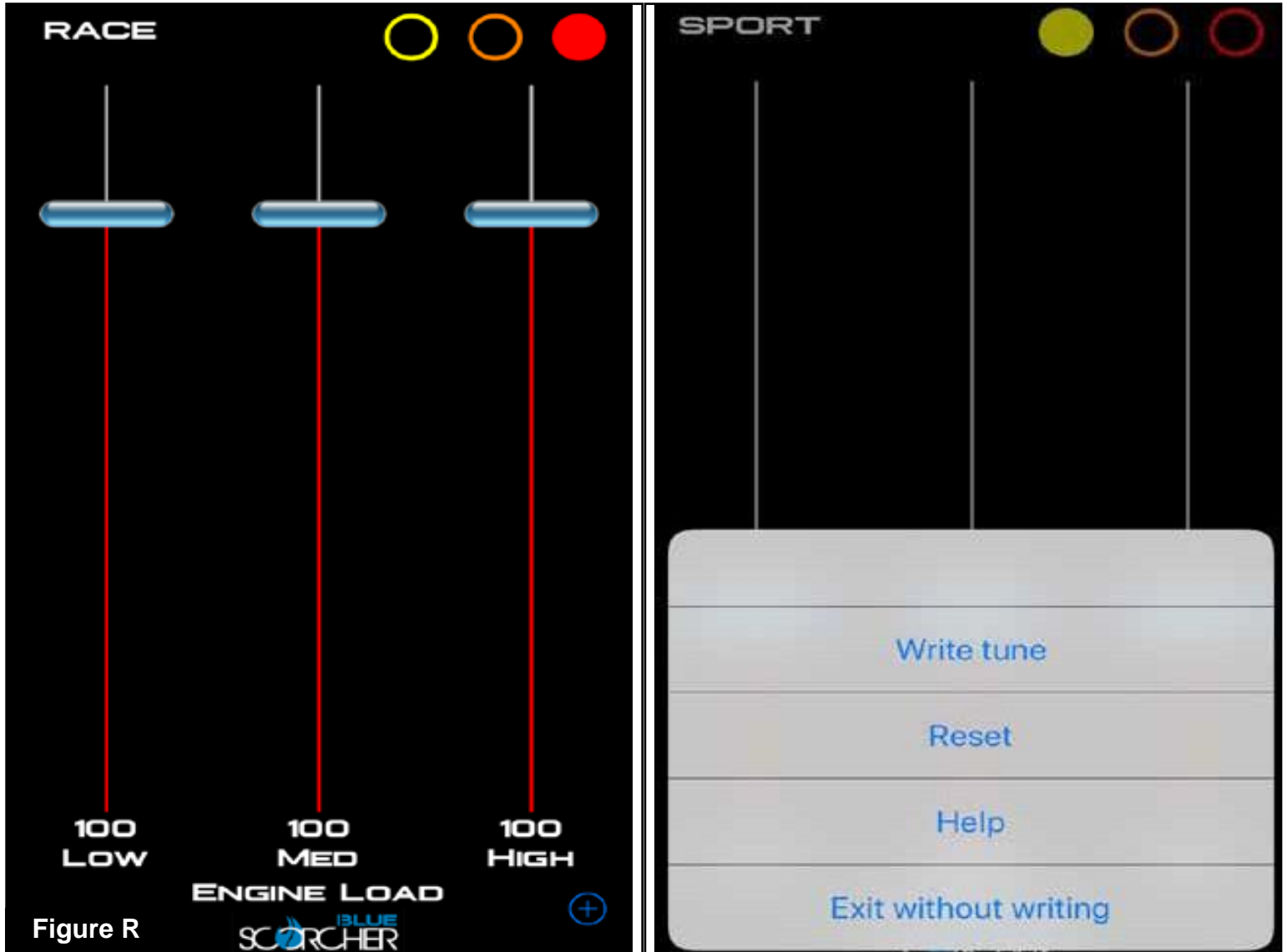


Figure R

Refer to Figure R (Custom Tuning)

The aFe POWER SCORCHER BLUE app offers the capability to custom tune the different modes. Go to the menu on the top right corner and select “Tune”. Select the mode you would like to custom tune and adjust the sliders at low, medium, and high load. You can either write the tune, reset, or exit without writing.



Disclaimer: Custom tuning should only be performed with the ignition in the “run” position and engine off. Configuring the tunes outside the default values may cause drivability issues and /or check engine lights to occur.



Figure S

Refer to Figure S (Vehicle Performance Screen)

On the gauges screen, swipe to the left to get to the vehicle performance screen. When the vehicle is not moving, select the test you are wanting to attempt (0-60mph, ¼ mile or mile). The app will automatically detect the movement of the vehicle and the timer will start. Once you reach the speed or distance, the timer will stop. If you select a new mode, it will reset, and you can start again. If you need to stop the test at any point, hit the cancel button and leave the screen.


 Use the aFe POWER SCORCHER BLUE app responsibly. Always drive safely and obey traffic laws. aFe POWER is not responsible for any accidents, injuries, or property damage that may occur during its use.



Figure T

Refer to Figure T (Bypass Plug)

A bypass plug is included in the kit. The plug can be connected to the harness instead of the module. Once the bypass plug is connected, the vehicle will run in factory settings. Make sure the plug is fully engaged when connected to the harness. Thank you for choosing aFe POWER!



The vehicle needs to be in sleep mode when the module gets disconnected and the bypass plug connected. Wait for the blue LED on the module to stop flashing to make sure the vehicle is in sleep mode.



Page left blank intentionally.



Page left blank intentionally.

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



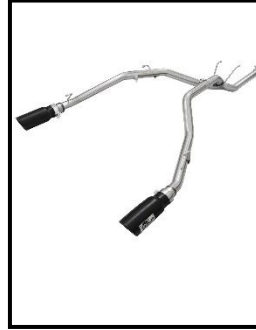
P/N: 54-72006 (P5R)
51-72006 (PDS)

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)

To purchase any of the items above, view airflow charts, dyno graphs, photos, and video; please go to aFepower.com.



Warranty

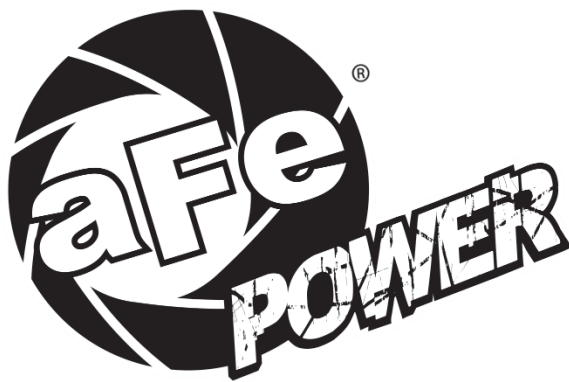
General Terms:

- aFe warrants their products to be free from manufacturer's defects due to workmanship and material.
- This warranty applies only to the original purchaser of the product and is non-transferrable.
- Proof of purchase of the aFe product is required for all warranty claims.
- Warranty is valid provided aFe instructions for installation and/or cleaning were properly followed.
- Proper maintenance with regular inspections of product is required to insure warranty coverage.
- Damage due to improper installation, abuse, unauthorized repair or alteration is not warranted.
- Incidental or consequential damages or cost, including installation and removal of part, incurred due to failure of aFe product is not covered under this warranty.
- All warranty is limited to the repair and/or replacement of the aFe part. To request Return Goods Authorization ("RGA"), email RGA@afepower.com or call (951)493-7100. Upon receipt of the RGA, you must return the product to the address provided in the RGA, freight prepaid and accompanied with a dated proof of purchase and the RGA. Upon receipt of the defective product and upon verification of proof of purchase, aFe will either repair or replace the defective product within a reasonable time, not to exceed thirty days.

Product Category	P/N Prefix	Warranty duration
Direct OE Replacement Filters	10, 11, 30, 31, 71, 73	Life of the vehicle
Racing Filters	18	1 year
Universal	20, 21, 23, 24, 72, TF	2 years
Air Intake Systems	50, 51, 53, 54, 55, 56, 57, 58, 75, TR, TA, TL, TM	2 years
Exhaust Systems	49	2 years
Intercoolers & Intercooler Tubes	46-2	2 years
Intake Manifolds	46-1	2 years
Differential Cover	46-7	Life of the vehicle
Exhaust Manifolds	46	2 years
Throttle Body Spacers	46-3	2 years
Turbochargers	46-6	2 years*
Fluid Filters	44	90 days
Pre-Filters	28	2 years
Heavy Duty OE Replacement	70	2 years
PowerSports OE Replacement	81, 87	2 years
Tuners	77	1 year

No other warranty expressed or implied applies nor is any person or advanced FLOW engineering authorized to assume any other warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

*See turbocharger warranty for more info



advanced FLOW engineering, inc.

252 Granite Street Corona, CA 92879
TEL: 951.493.7100 • TECH: 951.493.7185
E-Mail: Tech@aFepower.com

P/N: 06-81349