



advanced FLOW engineering

Instruction Manual

P/N: 77-82013

SCORCHER HD POWER MODULE

Make: RAM
Make: RAM
Make: RAM
Make: RAM

Model: 2500
Model: 3500
Model: 4500
Model: 5500

Year: 2019-2021
Year: 2019-2021
Year: 2019-2021
Year: 2019-2021

Engine: L6-6.7L (td) Cummins
Engine: L6-6.7L (td) Cummins
Engine: L6-6.7L (td) Cummins
Engine: L6-6.7L (td) Cummins



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.



Label	Qty.	Description	Part Number
A	1	Module	R77-82013
B	1	LED Switch	05-70005
C	1	Bypass Plug	05-780017
D	1	Harness	AFE-10-251
E	2	Velcro (2" Inches)	05-01244
F	5	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.



DO NOT OPEN VEHICLE DOORS WHILE SENSORS ARE DISCONNECTED OR BEFORE CONNECTING THE SCORCHER BLUE MODULE. DOING SO WILL TRIGGER A CHECK ENGINE LIGHT.



Refer to Figure B for Steps 2-3

Step 2: Locate the MAP Sensor. The MAP sensor is on the firewall side of the intake manifold and the connector is gray.

Step 3: Locate the injector plug connectors. These are the 2 connectors that are next to the engine valve covers, and have long light blue connectors.

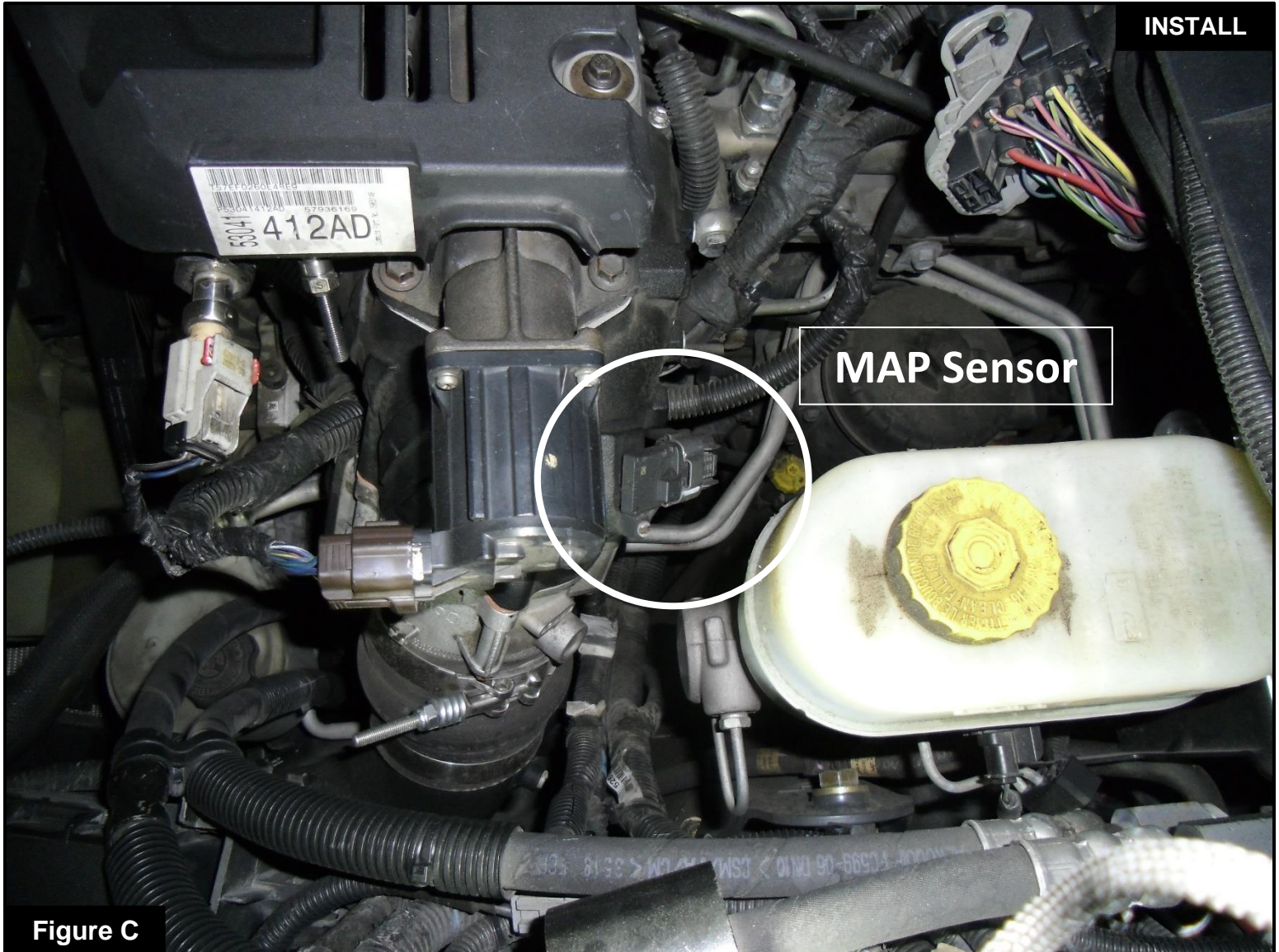


Figure C

Refer to Figure C for Steps 4-5

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

Step 5: Locate the MAP sensor jumper harness on the aFe POWER harness. This is the longer jumper harness with gray connectors. Plug the female connector of the aFe POWER harness to the MAP sensor, then take the male connector of the aFe POWER harness and connect it to the female connector of the engine harness.

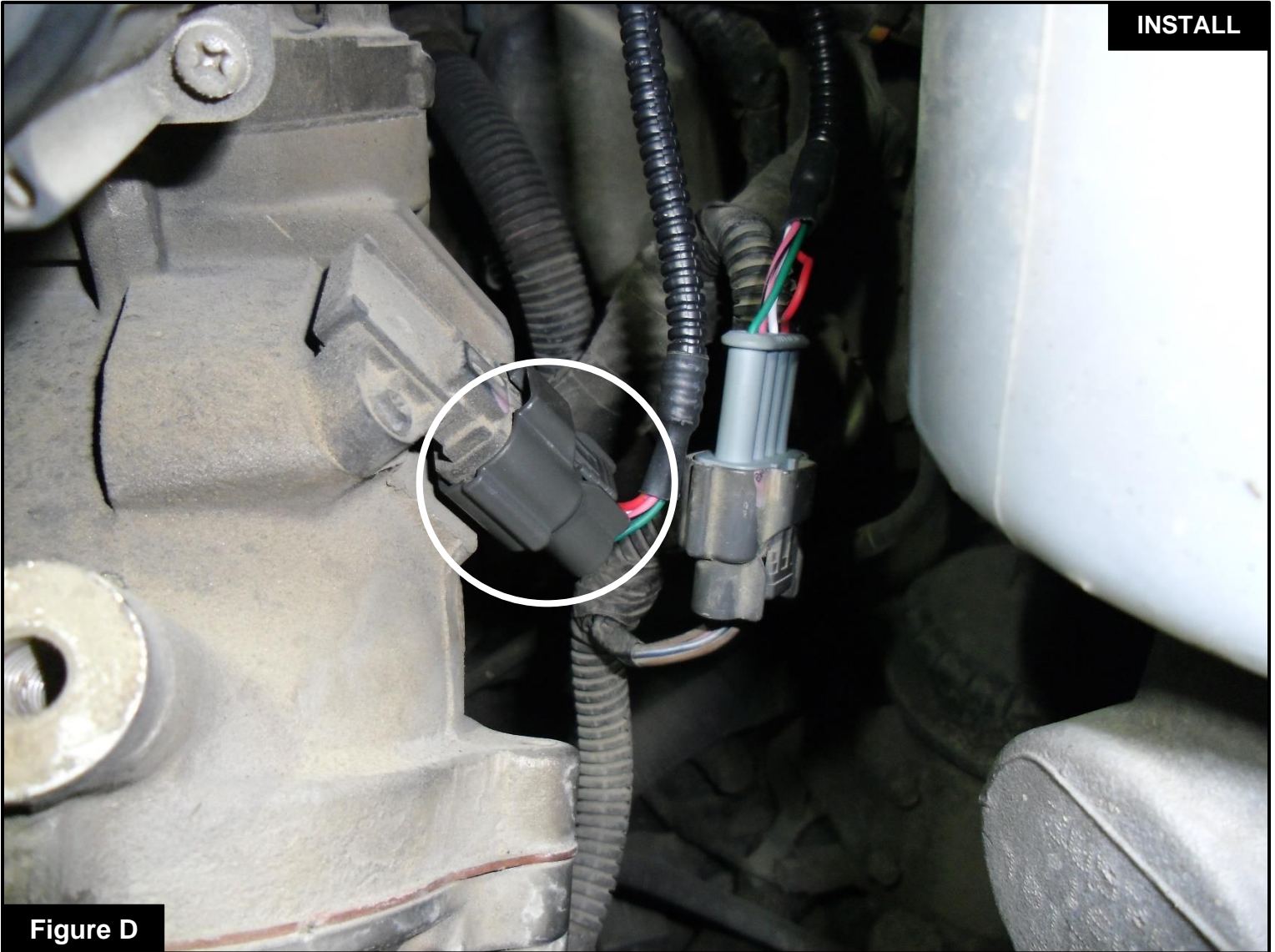
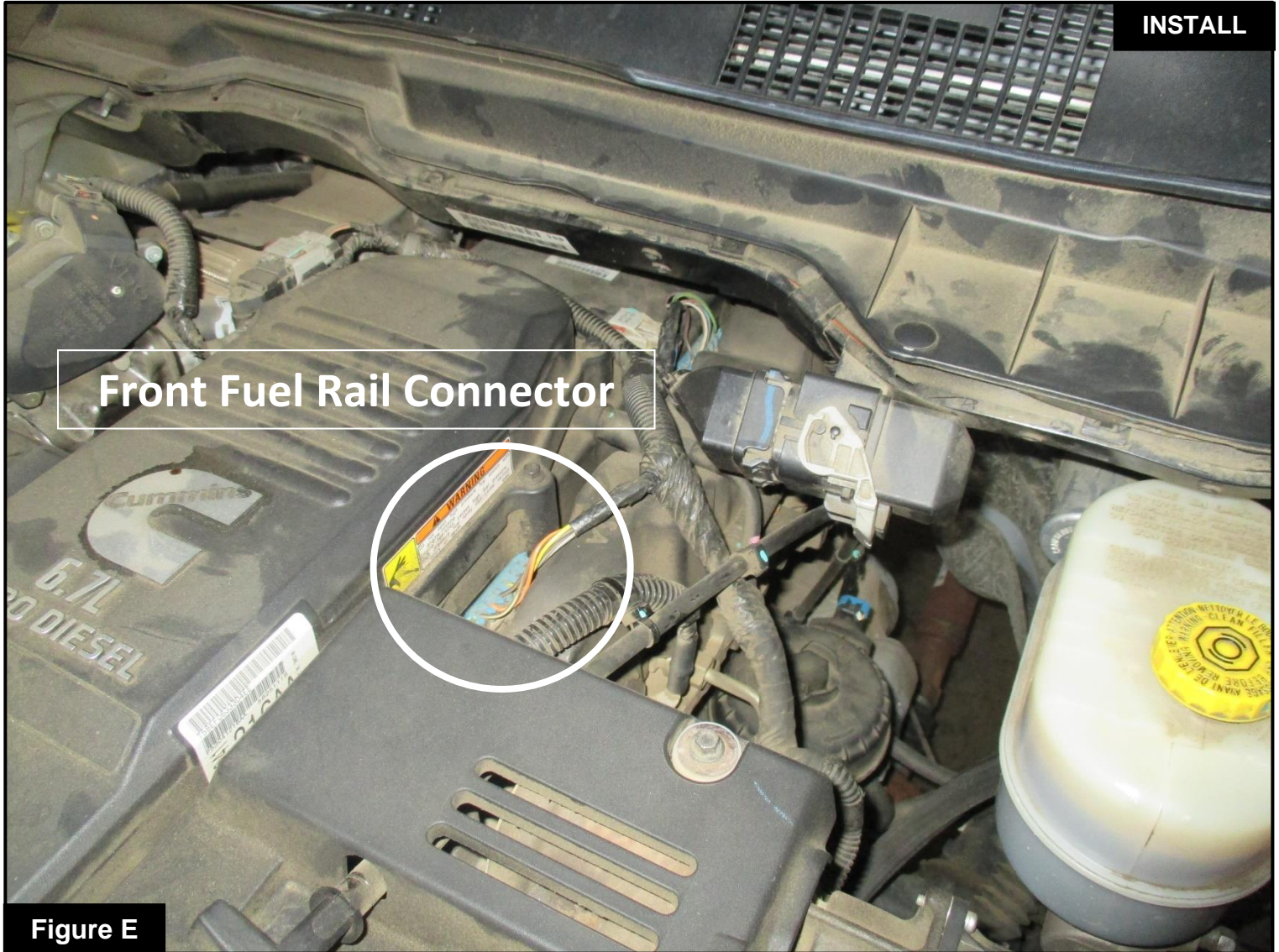


Figure D

Refer to Figure D for Step 6

Step 6: Check with the picture and make sure that both the male and female sides of the aFe POWER harness are fully plugged in.



Refer to Figure E for Steps 7-8

Step 7: Locate and disconnect the front fuel rail connector. Release the connector by sliding a small flat head screwdriver to press and hold down the locking tab, then wiggle the blue connector up and away from the black connector.

Step 8: Locate the front injector plug jumper harness on the aFe POWER harness. This is the harness labeled "Fan". Plug the female connector of the module to the stock injector plug connector, then take the male connector of the module and connect it to the female connector of the engine harness.



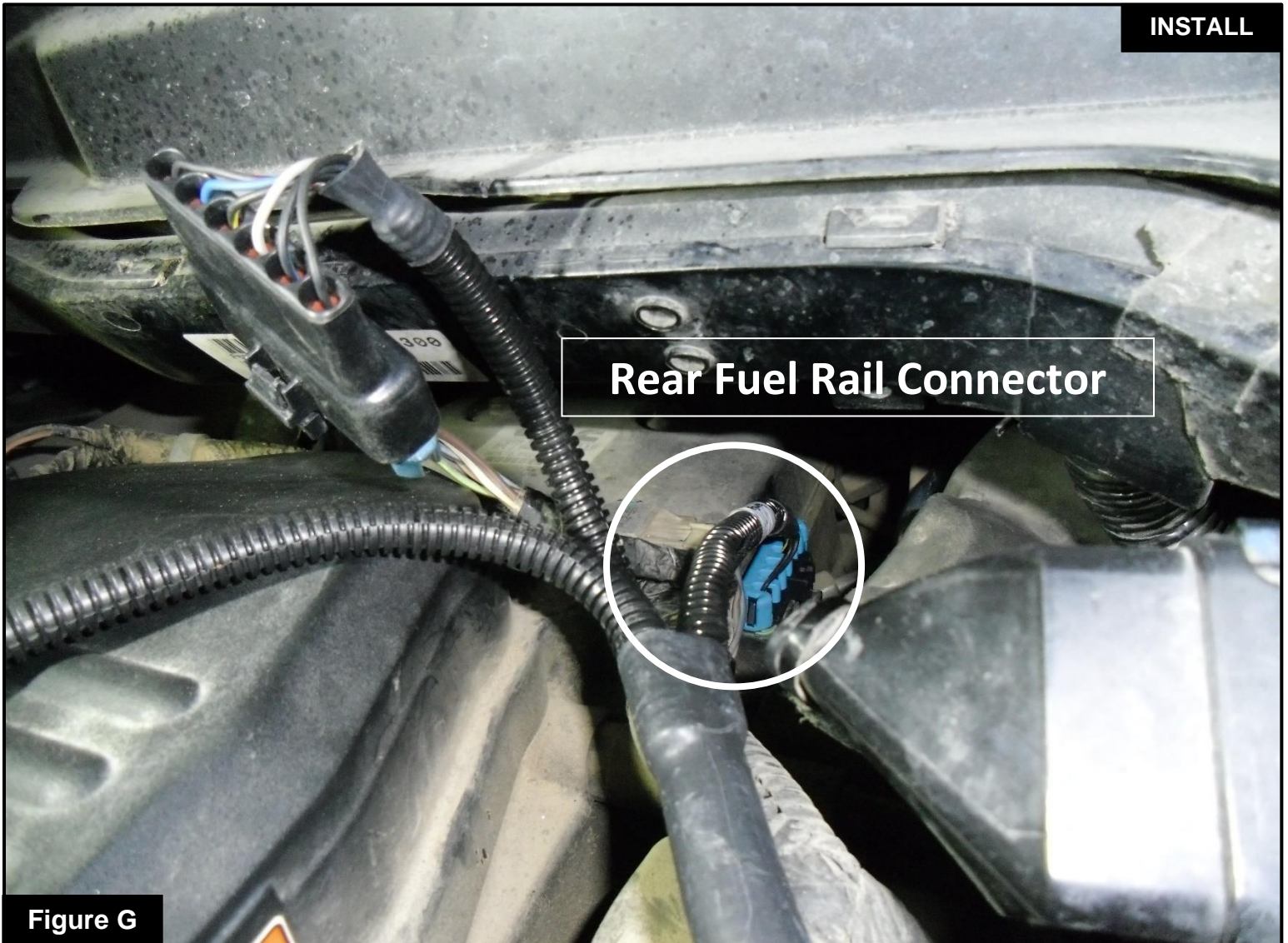
Figure F

Refer to Figure F for Step 9

Step 9: Check with the picture to make sure that the connectors are fully engaged.



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

**Figure G****Refer to Figure G for Steps 10-12**

Step 10: Locate and disconnect the rear fuel rail connector. To gain easier access to this connector, the foam insulation will have to be removed. The process is the same to disconnect as the front fuel rail connector.

Step 11: Locate the rear injector plug jumper harness on the aFe POWER module. This is the harness labeled "Fly Wheel". Plug the female connector of the module to the stock injector plug connector, then take the male connector of the module and connect to the female connector of the engine harness.

Step 12: Check with the picture to make sure the connectors are fully engaged.



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 13-14**

Step 13: Connect the black ground terminal cable on the aFe POWER module to the negative battery post by removing the 13mm nut, installing the terminal, and then reinstalling the nut

Step 14: Connect the red power terminal cable on the aFe POWER module to the positive battery post by removing the 10mm nut and placing the terminal and reinstalling the nut.

**Figure 1**

Refer to Figure I for Steps 15-16

Step 15: Secure the Scorch Blue module on top of the fuse box near the battery, or any other desired location using the Velcro provided. The module must be located within reach of the LED switch harness if the switch will be used.

Step 16: Connect the harness to the Scorch Blue module. Make sure the connector is fully engaged and locked into place.

Note: The doors of the vehicle can now be opened to proceed with the installation of the LED switch. (Optional if using the Bluetooth App)



Figure J

Refer to Figure J for Steps 17-18 (Optional)

Step 17: Select the desired location of the LED switch. Route the cable on the back of the switch to exit towards the top or the bottom.

Step 18: Use the provided double sided tape to secure the LED switch in the desired location.

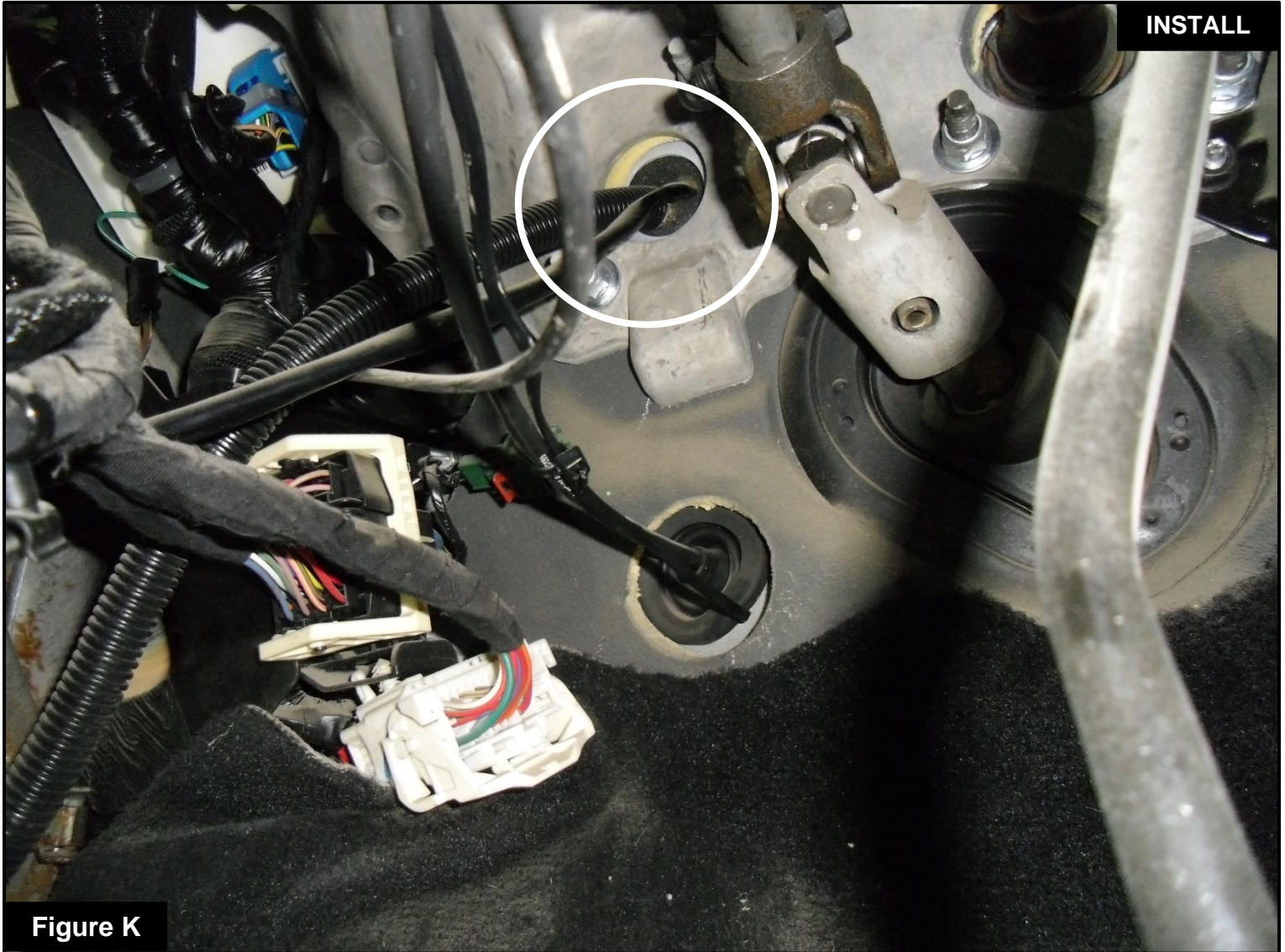


Figure K

Refer to Figure K for Steps 19-20 (Optional)

Step 19: Carefully route the switch cable behind the steering wheel cover or cabin trim cover.

Step 20: Route the switch cable through the firewall and into the engine bay. Follow the main harness through the grommet into the firewall.

**Figure L****Refer to Figure L for Step 21-22 (Optional)**

Step 21: Connect the LED switch to the aFe Power harness.

Step 22: Secure the wires away from any extreme heat and moving parts with the provided zip ties. Make sure all connections are secured and fully engaged.

The installation of the module itself is now complete. Keep reading the installation instruction to learn how to use all of its features.



Figure M

Refer to Figure M (Picture is for reference)

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



Figure N

Refer to Figure N (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 levels 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.

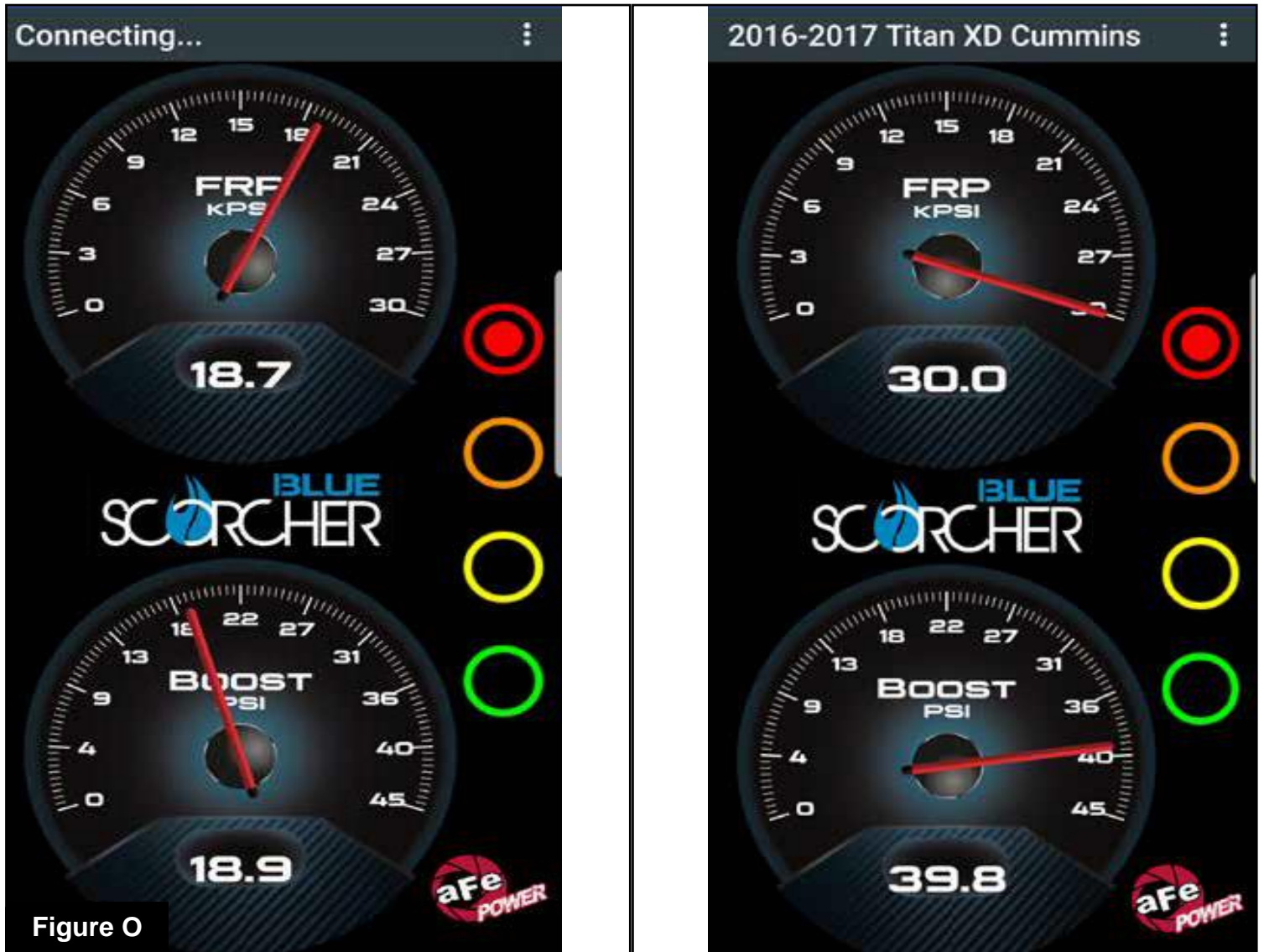


Figure O

Refer to Figure O* (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.*

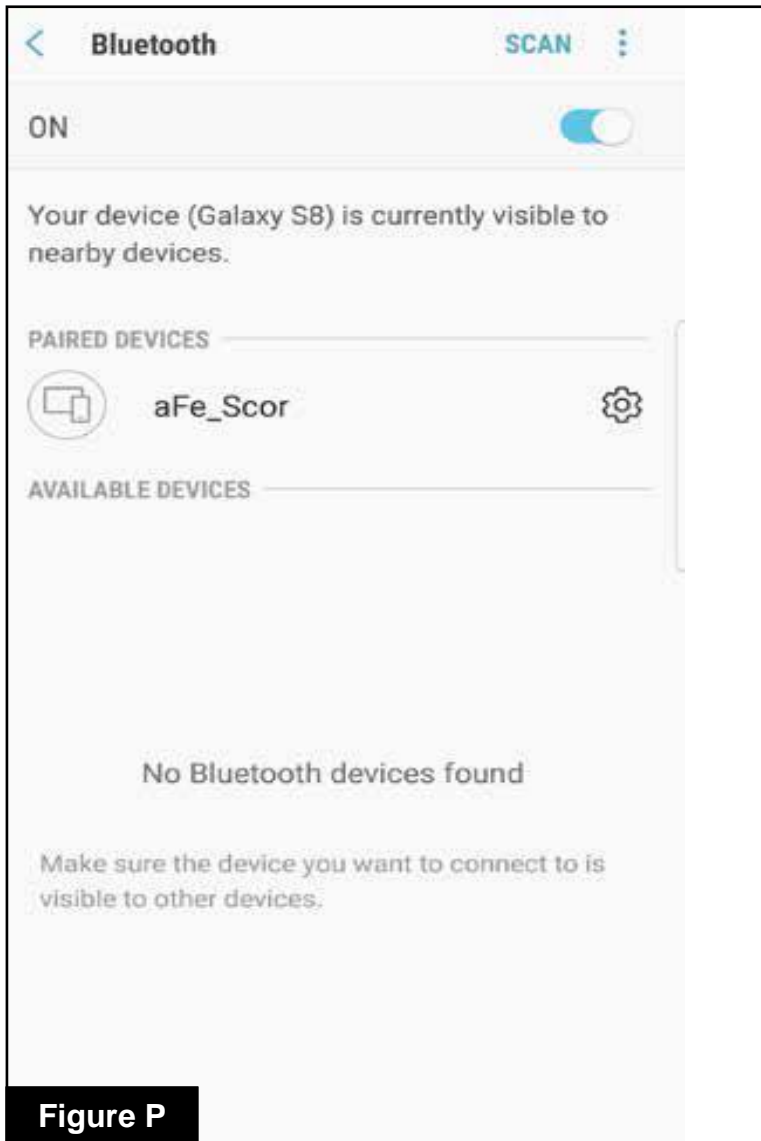


Figure P

Refer to Figure P* (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.*

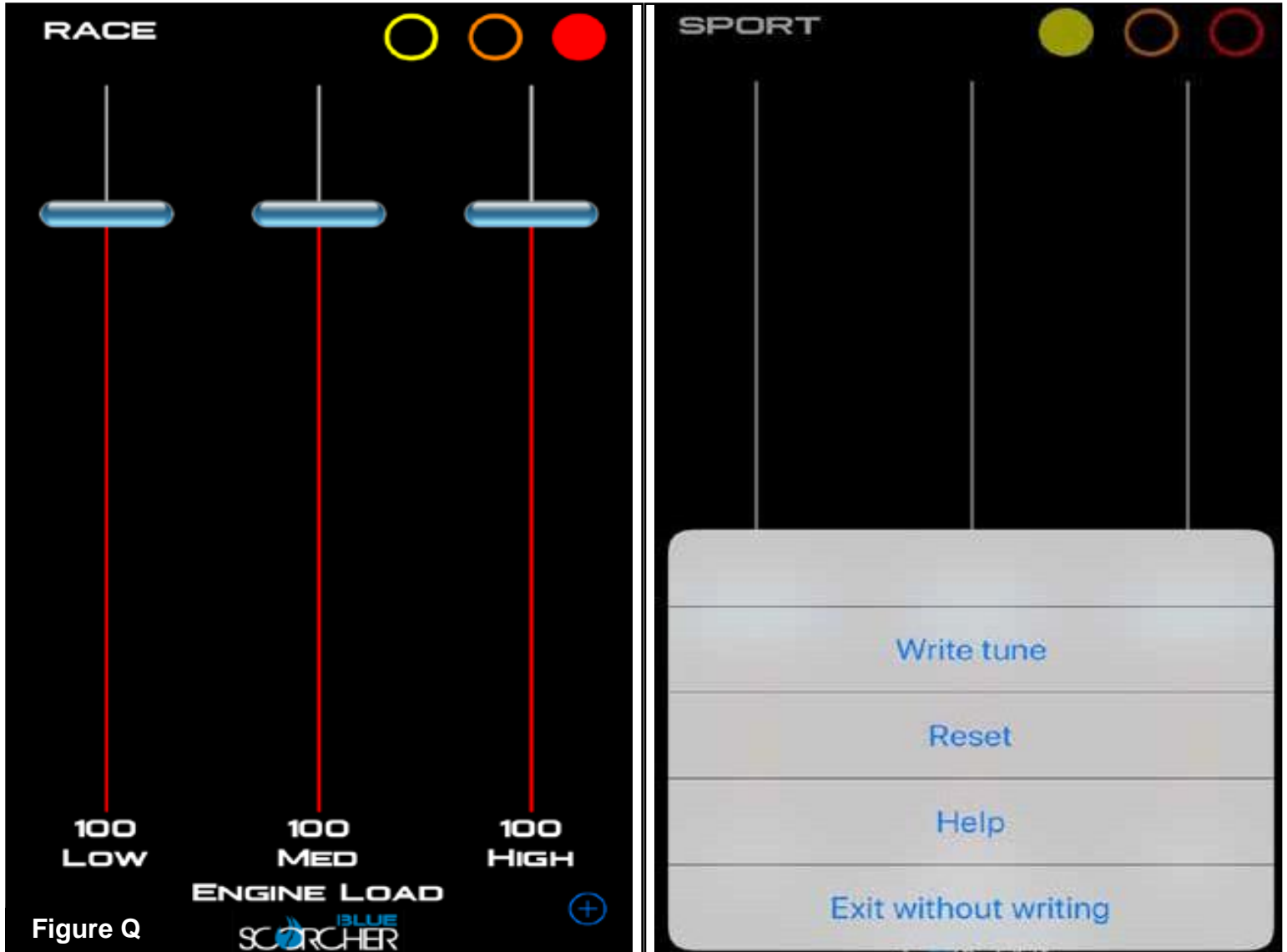


Figure Q

Refer to Figure Q (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.



Refer to Figure R (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 S

Refer to Figure S (Bypass Plug)

A bypass plug is included in the kit. The plug can be connected to the harness instead of the module. This bypass plug will need to be used when the vehicle needs to be jump-started, or when there is an issue with the drivability of the vehicle. 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.