advanced FLOW engineering

Instruction Manual P/N: 77-83020   SCORCHER BLUE Bluetooth Power Module

Make: **Ford** Model: **Super Duty F-250/F-350/F-450/F-550** Year: **2017-2019** Engine: **V8-6.7L (td) Power Stroke**

- **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 951-493-7100.**
- **Ensure you have all necessary tools before proceeding.**
- **Do not attempt to work on your vehicle when the engine is hot.**
- **Disconnect the negative battery terminal before proceeding.**
- **Retain factory parts for future use.**

Label	Qty.	Description	Part Number
A	1	Module	R77-83020
B	1	LED Switch	05-70013
C	1	Bypass Plug	05-70017
D	1	Harness	AFE-10-107
E	2	Velcro (2 Inches)	05-01244
F	5	Cable Ties	05-60167
G	2	Double Sided Tape	07-90001

Warranty Information available at: https://afepower.com/contact#warranty

B

A

D

F

E

G

C

SLEEP MODE

Figure A

Refer to Figure A for Step 1.

Step 1: Before installing the aFe POWER Module you must place your vehicle's ECU in sleep mode. In order to place your vehicles ECU in sleep mode 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 the doors or start the vehicle when one of the sensor is disconnected. This could create a check engine light.

REMOVAL

MAP

FUEL PRESSURE

Figure B

Refer to Figure B for Steps 2-3.

Step 2: Locate the MAP sensor. The MAP sensor is on the top of the intake manifold near the windshield cowl.

Step 3: Locate the fuel pressure sensor. It is below the blue coupling on the intercooler tube, at the end of the common fuel rail. The common fuel rail runs alongside the valve cover on the driver side.

Figure C

Refer to Figures C for Steps 4-5.

Step 4: Locate and disconnect the MAP sensor by pressing down 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 a small rectangular connector. 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 to the female connector of the engine harness.

Figure D

Refer to Figure D for Step 6.

Step 6: Check with the pictures to make sure the connectors are correctly connected.

⚠️ **Make sure connections are fully engaged and not reversed. Usually, connectors make a snapping sound when fully engaged.**

INSTALL

Figure E

Refer to Figure E for Steps 7-8.

Step 7: Locate and disconnect the fuel pressure sensor by pressing down the locking tab and sliding the connector out of the sensor.

Step 8: Locate the fuel pressure sensor jumper harness on the aFe module. This is the shorter harness with an orange seal on the female connector. Plug the female connector of the module to the stock fuel pressure sensor, then take the male connector of the module and connect to the female connector of the engine harness.

Figure F

<u>Refer to Figure F for Step 9.</u>

Step 9: Check with the pictures to make sure the connectors are correctly connected.

⚠ **Make sure connections are fully engaged and not reversed. Usually, connectors make a snapping sound when fully engaged.**

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Figure G

Refer to Figure G for Steps 10-11.

Step 10: Connect the black ground terminal cable on the aFe module to the negative battery post by removing the 8mm nut and placing the terminal and reconnect the nut.

Step 11: Connect the red power terminal cable on the aFe module to the positive battery post by removing the 8mm nut and placing the terminal and reconnect the nut.

Figure H

Refer to Figure H for Steps 12-13.

Step 12: Secure the SCORCHER BLUE module on top of the fuse box near the master cylinder, or any other desired location using the Velcro provided. The module must be located within reach of the LED switch harness if being used.

Step 13: Connect the SCORCHER BLUE module to the harness. Make sure the connector is fully engaged.

NOTE: The doors of the vehicle can now be opened to proceed with the installation of the switch.

Figure I

Refer to Figure I for Steps 14-15.

NOTE: The installation of the LED switch in the cabin is optional.

Step 14: Select the desire location of the LED switch. Route the cable on the back of the switch to exit toward the top or bottom.

Step 15: Use the provided double sided tape to secure the LED switch in the desired location.

Figure J

Refer to Figure J for Steps 16-17.

Step 16: Carefully route the switch cable behind steering wheel cover or cabin trim cover.
Step 17: Route the switch cable through firewall and into the engine bay. Follow the main harness
through the grommet into the firewall.

Figure K

Refer to Figure K for Steps 18-19.

Step 18: Plug the end of the switch cable to the harness inside the engine compartment.

Step 19: Secure the wires away from any extreme heat and moving parts with the provided ties. Make sure all connections are secured and fully engaged.

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

Figure L

Refer to Figure L.

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

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 moment while the unit is on. The LED switch can be used at the same time of the Bluetooth app.
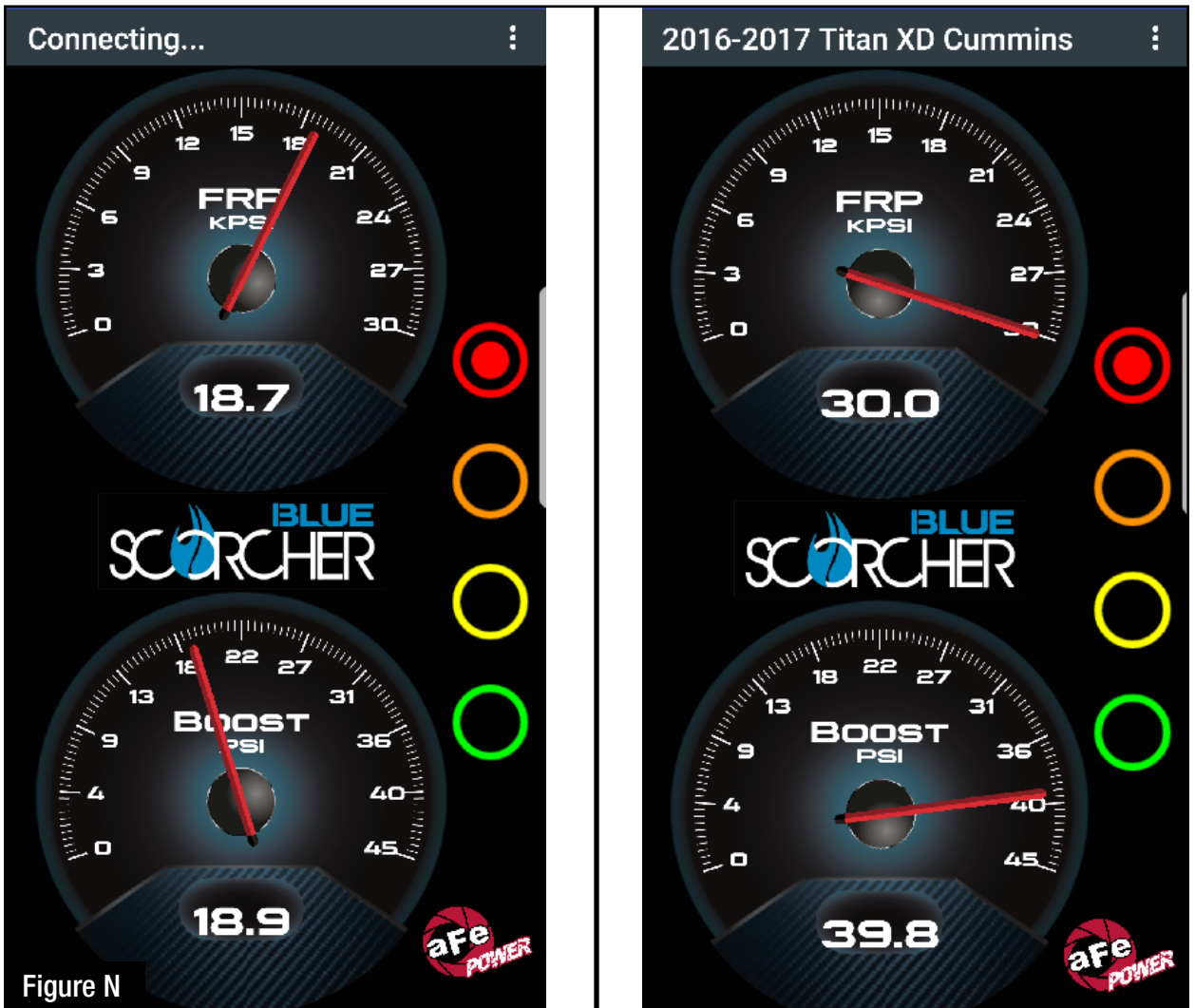
Figure N

Refer to Figure N (app connection - iOS).

For iOS device, 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 the vehicle and module are on. When connected, the vehicle description will show up 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.

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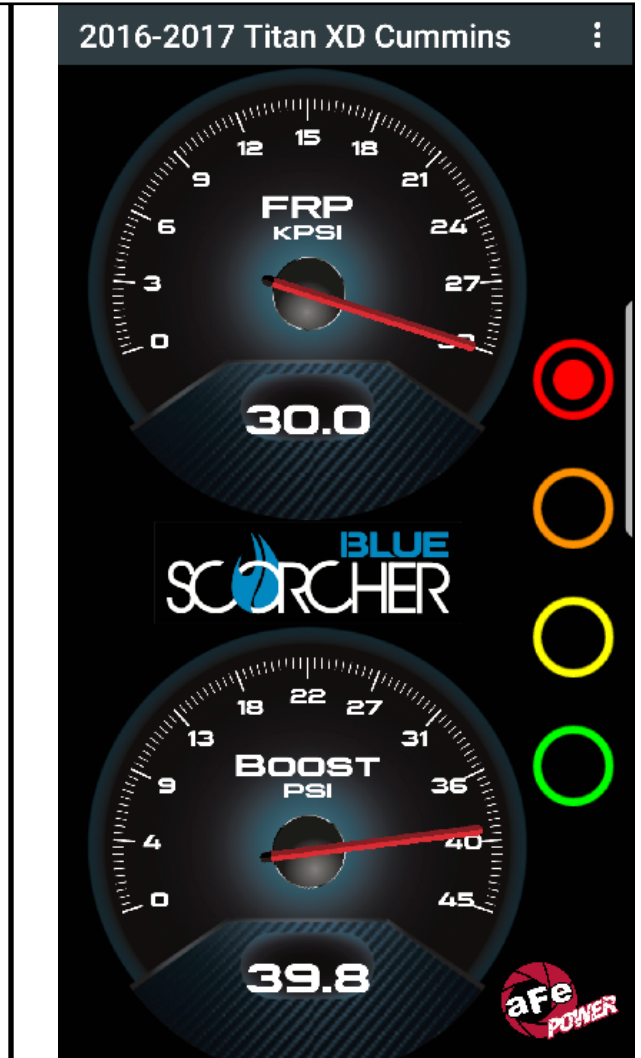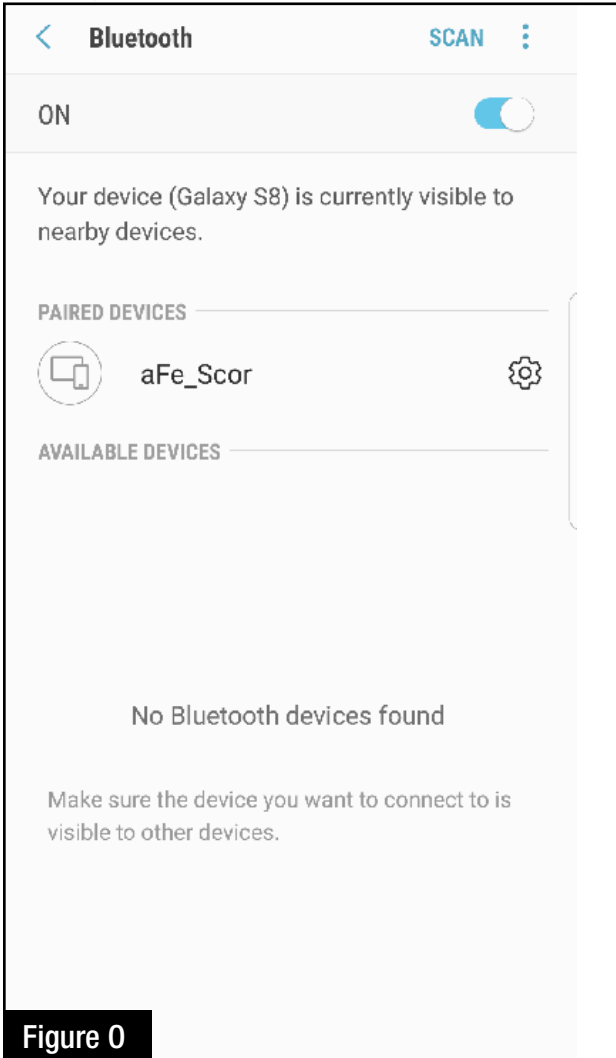
Figure O

Refer to Figure O (app connection- Android).

For Android device, download the app from the play store. For the first 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.
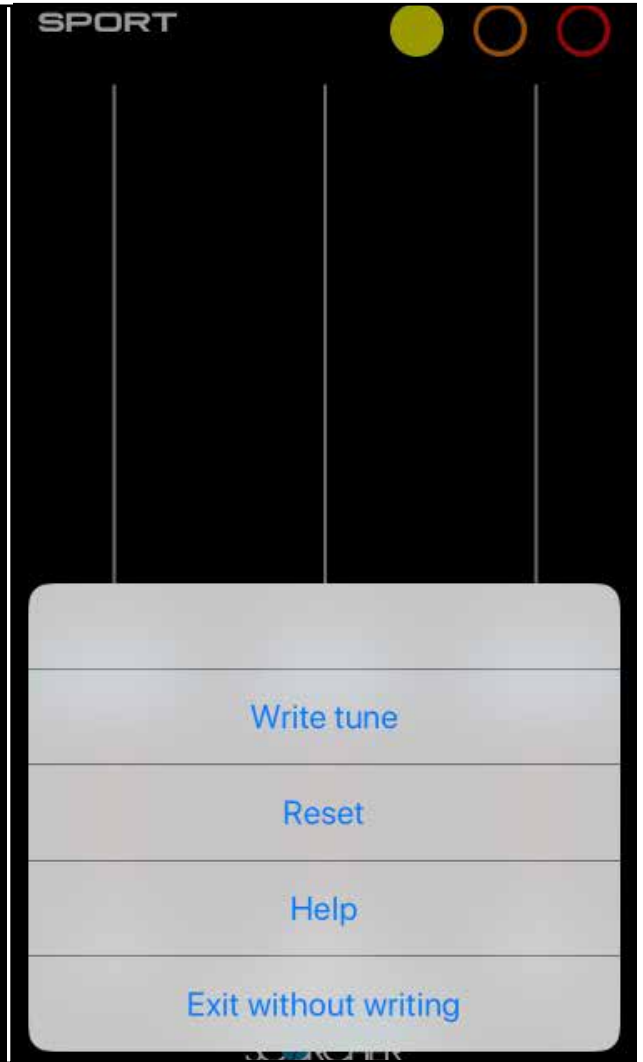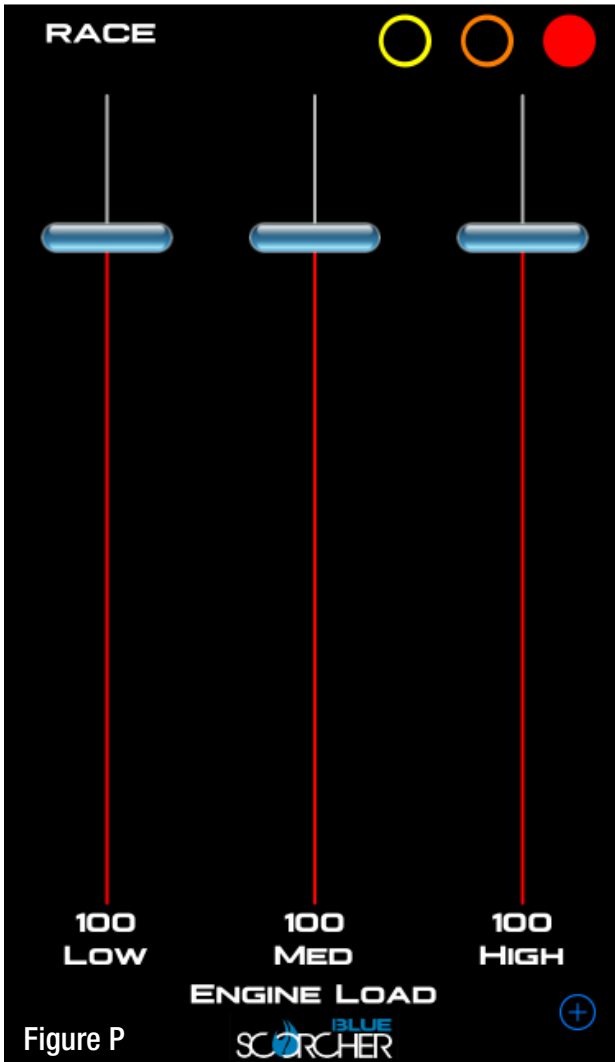
Figure P

Refer to Figure P (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 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.

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Figure Q

Refer to Figure Q (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 R

Refer to Figure R (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 truck is in sleep mode.**

NOTE: Place enclosed CARB EO sticker on or near the device.
EO identification label is required to pass the smog test inspection.

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Advanced Gauge Display Monitor
Instruction Manual P/N: 77-91001

DISTRACTED DRIVING AWARENESS:

DISTRACTED DRIVING IS UNLAWFUL. ALWAYS DRIVE IN ACCORDANCE WITH TRAFFIC LAWS AND IN A MANNER THAT IS APPROPRIATE AND SAFE FOR ROAD AND TRAFFIC CONDITIONS. ANY INTERACTION WITH THIS DEVICE SHOULD ONLY BE DONE WHILE YOUR MOTOR VEHICLE IS NOT IN MOTION AND IN A LOCATION PERMITTED BY LAW.

AFEPOWER IS NOT RESPONSIBLE FOR ANY INJURIES OR PROPERTY DAMAGE THAT MAY OCCUR AS A RESULT OF THE IMPROPER USE OF THIS DEVICE.

Display Monitor

Magnetic Base

OBDII Plug

Windshield Mount

(2x) Cable Ties

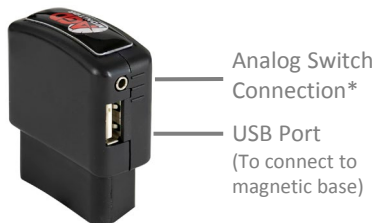2m USB Cable
(To connect magnetic base to OBDII Plug)

1m USB Cable
(To connect screen to computer for updates)

8-Pin Connection

Headphone Jack*

SD Card Slot*

Audio/Video Port*

Mini USB Port
(To connect to computer)

Aux Power Port*

Mini USB Port
(To connect to OBDII Plug)

8-Pin Connection

Analog Switch
Connection*

USB Port
(To connect to
magnetic base)

* All ports may not be used depending on vehicle application and accessories.

⚠️ We recommend to perform the installation while the vehicle is turned off.

1. Install the windshield mount in your desired location. Make sure it will not block or hinder your view in any way while driving.

2. Attach the magnetic base on the windshield mount. Connect the 2m USB cable to the magnetic base's Mini USB port.

3. Place the display monitor on the magnetic base.

4. Locate the OBDII data port under the dash and connect the OBDII plug.

5. Route the 2m USB cable from the magnetic base down to the OBDII plug.

6. Connect the 2m USB cable to the OBDII Plug. If necessary, use the supplied cable ties to secure the cable and to get it out of the way of any possible interference.

7. Verify all connections are secure. The installation of your AGD Monitor is now complete.

Your new AGD Monitor will turn on once you start your vehicle. The AGD Monitor will check and verify your VIN and then main screen will be displayed.

Tap the top right corner of the screen to access the Options menu.
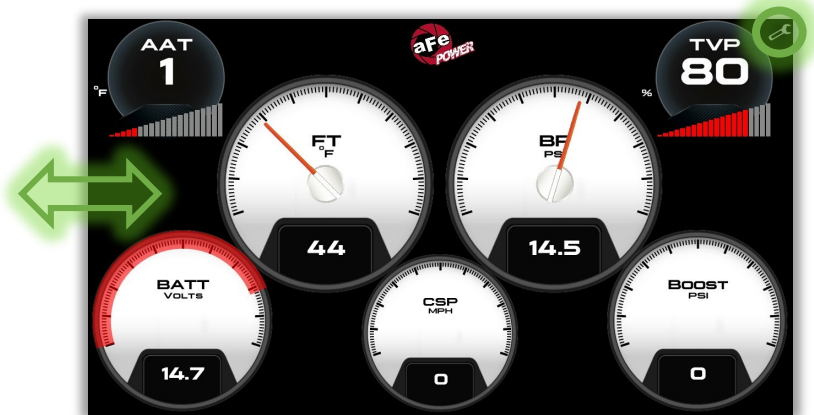
Swipe left or right anywhere on the screen to change the screen layout.

Touch and hold the gauge you would like to change until the menu pops up, then select either the style or parameter you would like to adjust.
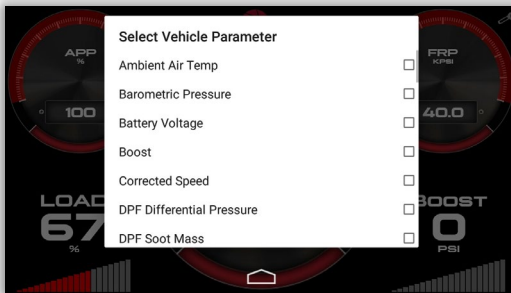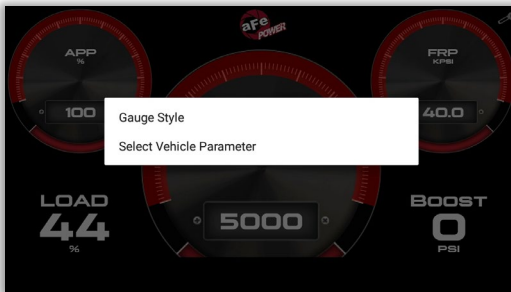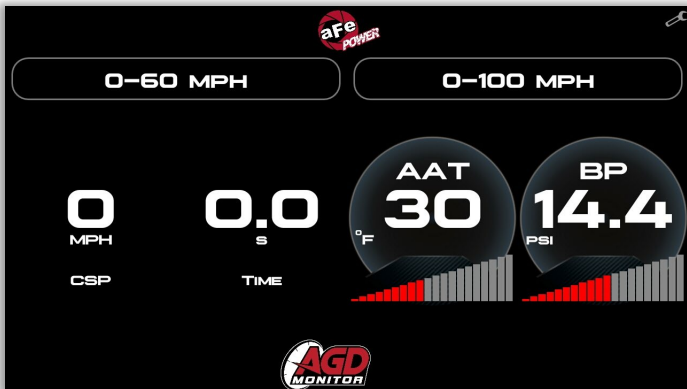
Swipe the screen left or right until you get to the Performance Screen layout.

With the vehicle at a complete stop, select the desired performance test (0 - 60 MPH / 0 - 100 MPH) located at the top of the screen

Once the vehicle starts moving, the test will start automatically and will stop once the target speed is reached.

(The two gauges on the right of the screen may be changed to show the desired vehicle parameters.)

Swipe the screen left or right until you get to the Driving Coach Screen layout.

The Driving Coach Screen will display your instantaneous fuel mileage so you can monitor your driving style to help maximize your fuel mileage.

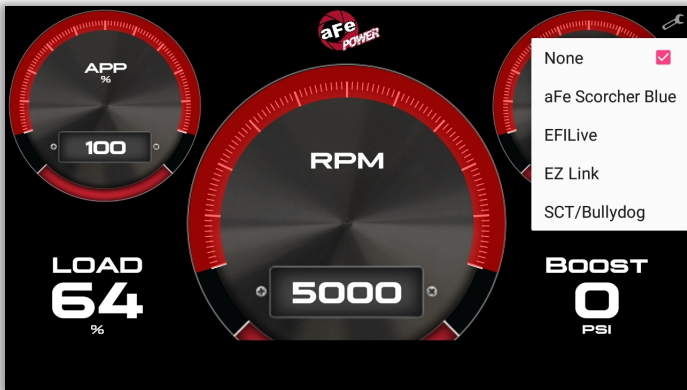(The three gauges at the bottom can be changed to show desired vehicle parameters.)

The Driving Coach Screen is only available on select vehicles.

Go to the Options menu and select Switch Setup. Select the aFe Scorcher Blue or the third-party tuner you have installed on your vehicle.

Note: Any tuner that needs to be wired into the ECM or sensors will still need to be connected with our adjustable switch cable (sold separately).

77-90006: aFe switch cable for EFILive - GM Diesel Truck 07.5-10 LMM

77-90007: aFe switch cable for EFILive - GM Diesel Truck 11-16 LML

Go to Options menu and select the Tire Size Calibrator (this will allow you to adjust your speedometer to read correctly when you are running different tire sizes).

Input the stock tire size that came on your vehicle, then input the new tire size. Once complete, tap the Confirm button.

The vehicle parameter "Corrected Speed" will now display your actual vehicle speed, while "Vehicle Speed" will show the uncorrected speed."

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What should I do if my AGD will not power on?

• Verify all connections, including the connection of the Display Monitor to the Magnetic Base as well as the OBDII Plug to the vehicle.

What should I do if my AGD stops working or if the display goes black?

• Reboot the Display Monitor by pressing and holding the Power Button for three (3) seconds.

What should I do if my AGD powers off all of a sudden?

• Verify all connections then reboot the Display Monitor by pressing and holding the Power Button for three (3) seconds.

What should I do if my AGD is stuck polling for my VIN?

• Pull the Monitor off the magnetic base and reconnect.
• Verify connection to the USB cable.
• Disconnect OBDII Plug and connect again.

What should I do if a gauge becomes frozen?

• Swipe left or right on the screen and go back to the original screen layout. The screen should reconnect.

For Tech Support
Call 812-518-1220 (8am – 5pm CST)
Or Email Tech@afepower.com (if possible, include photos or videos)

aFe POWER warrants the included hardware product and accessories against defects in materials and workmanship for one year from the date of original retail purchase. This warranty applies only to the original purchaser of the product and is non-transferrable. Proof of purchase of the aFe POWER product is required for all warranty claims. Warranty is valid provided aFe POWER 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, failure to provide proper care and maintenance, accident, abuse, misuse, normal wear and tear, unauthorized repair or alteration is not warranted.

Additionally, Incidental or consequential damages or cost, including installation and removal of part, incurred due to failure of aFe POWER product is not covered under this warranty. All warranty is limited to the repair and/or replacement of the aFe POWER product. Incidental or consequential damage means any loss, expense, or other damage that cannot be remedied by either repairing any defect in the aFe POWER product or by replacing the aFe POWER product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Furthermore, no individual or entity other than aFe POWER possesses the authority to alter the obligations, limitations, disclaimers, or exclusions under this warranty.

To request Return Goods Authorization ("RGA"), contact aFe POWER by completing and submitting the online technical support form at https://afepower.com/contact/tech-warranty or call +1(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 POWER will either repair or replace the defective product within a reasonable time, not to exceed thirty days. aFe POWER has the right to deny any warranty believed to be false, altered or purchased through an unauthorized dealer.

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