



advanced FLOW engineering

Instruction Manual P/N: 77-42010

Make: **RAM** Model: **1500**

Year: **2014-2018** Engine: **V6-3.0L (td) EcoDiesel**

Make: **RAM** Model: **1500 Classic** Year: **2019**

Engine: **V6-3.0L (td) EcoDiesel**



- 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.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description	Part Number
A	1	Module	R77-42010
B	1	LED Switch	05-70029
C	2	Velcro (2 Inches)	05-01244
D	4	Cable Ties	05-60167

Note: Legal in California for use on race vehicles only. The use of this device on vehicles used on public streets or highways is strictly prohibited in California and others states that have adopted California emission regulations.





SLEEP MODE

Figure A

Refer to Figure A for Step 1.

Step 1: Before installing your aFe module, you will have to place your vehicles 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.



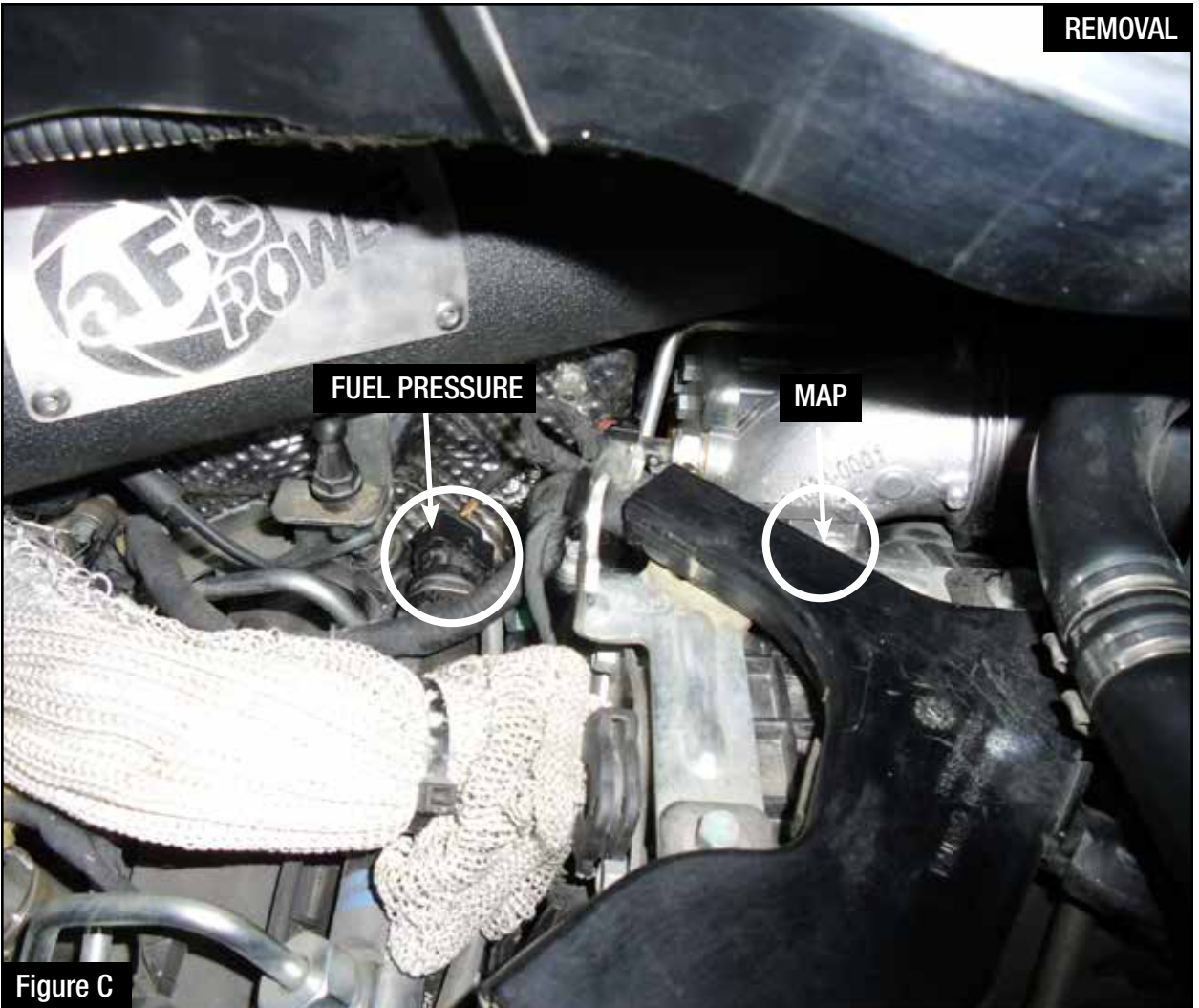
Figure B

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 Figures 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. 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.



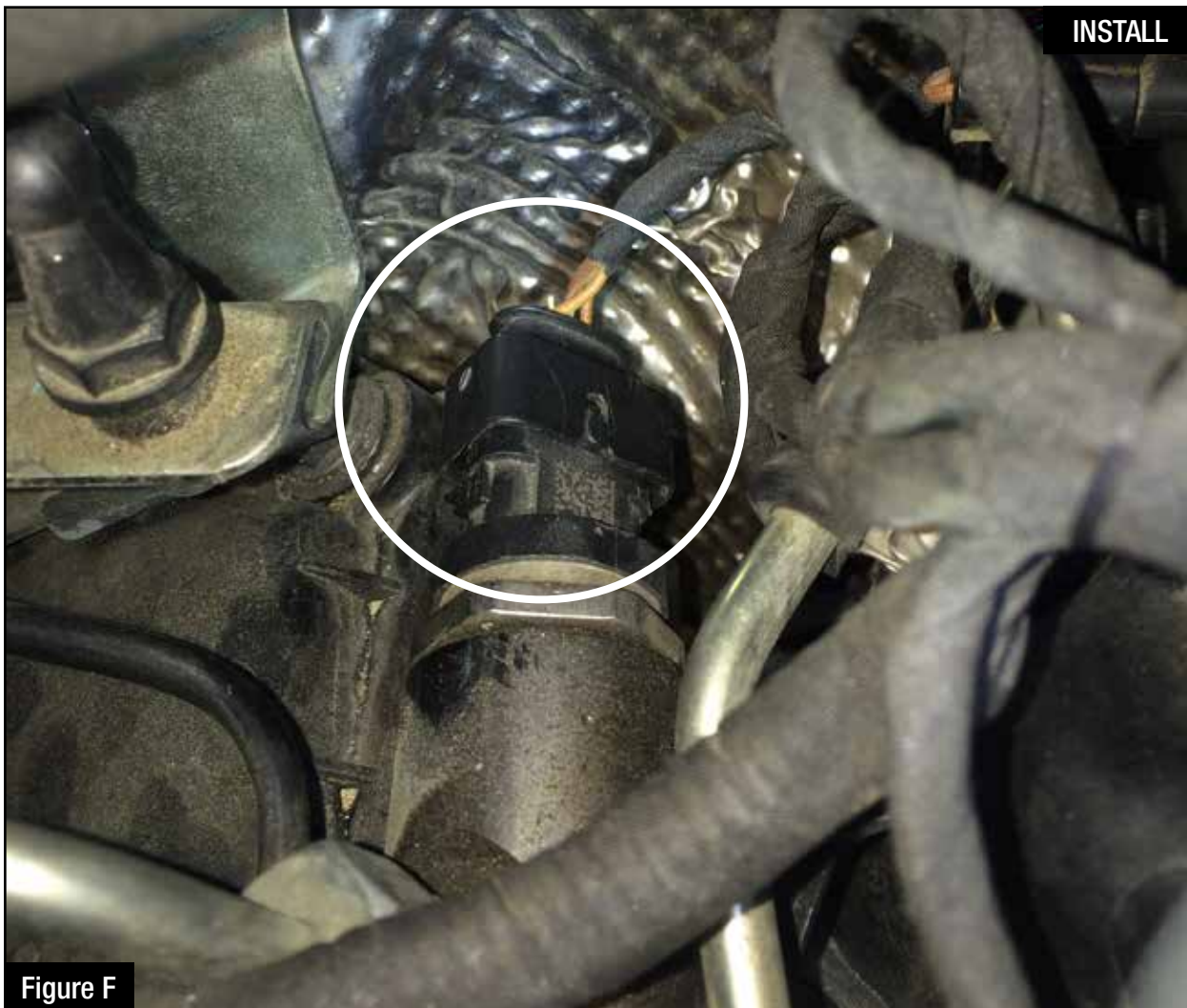
Figure E

Refer to Figure E for Step 6.

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



Note: Make sure connections are fully engaged and not reversed. 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. 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 disconnected 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 correctly connected.



Note: Make sure connections are fully engaged and not reversed. 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 of the LED switch. Route the cable on the back of the switch to exit toward the top or 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 firewall and into the engine bay. Follow the main harness through the grommet into the firewall.

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



Refer to Figure J for Steps 15-17.

Step 15: Secure the Scorch HD module to the fuse box cover on the driver side or any other desired location using the Velcro provided.

Step 16: Secure the wires away from any extreme heat and moving parts with the provided ties.

Step 17: Reinstall the insulation foam and the engine cover.

**Figure K****Refer to Figure K for Step 18.**

Step 18: When turning on the vehicle, each LED will flash. 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.

Thank you for choosing aFe POWER!

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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



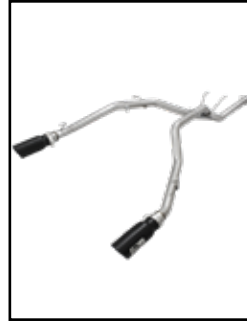
P/N: 54-72006 (P5R)
51-72006 (PDS)

**Momentum HD
Intake Air Scoop**



P/N: 54-72006-S

DPF-Back Exhaust System



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

TB-Back Exhaust System



P/N: 49-42054-B (Blk Tip)
49-42054-P (Pol Tip)

Intercooler Tubes



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

Fuel Filter



P/N: 44-LF035

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.

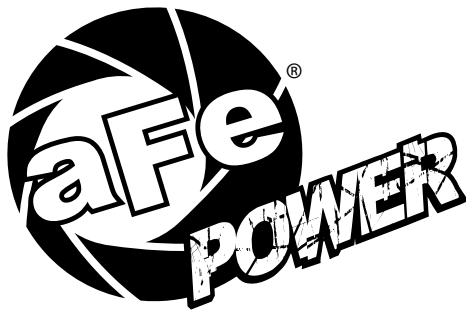
Warranty

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	21, 24, 72, TF	2 years
Air Intake Systems	50, 51, 54, 55, 75, TR, TA, TL	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
Fluid Filters	44	90 days
Pre-Filters	28	2 years
Heavy Duty OE Replacement	70	2 years
PowerSports OE Replacement	81, 87	2 years
PowerSports Intake Systems	85	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.



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