



advanced FLOW engineering

Instruction Manual

P/N: 77-42013

SCORCHER HD POWER MODULE

Make: **RAM**

Model: **2500**

Year: **2019-2023**

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

Make: **RAM**

Model: **3500**

Year: **2019-2023**

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

Make: **RAM**

Model: **4500**

Year: **2019-2022**

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

Make: **RAM**

Model: **5500**

Year: **2019-2022**

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	R77-42013
B	1	LED Switch	05-70005
C	2	Velcro (2" Inches)	05-01244
D	4	Cable Ties	05-60167





SLEEP MODE

Figure A

Refer to Figure A for Step 1

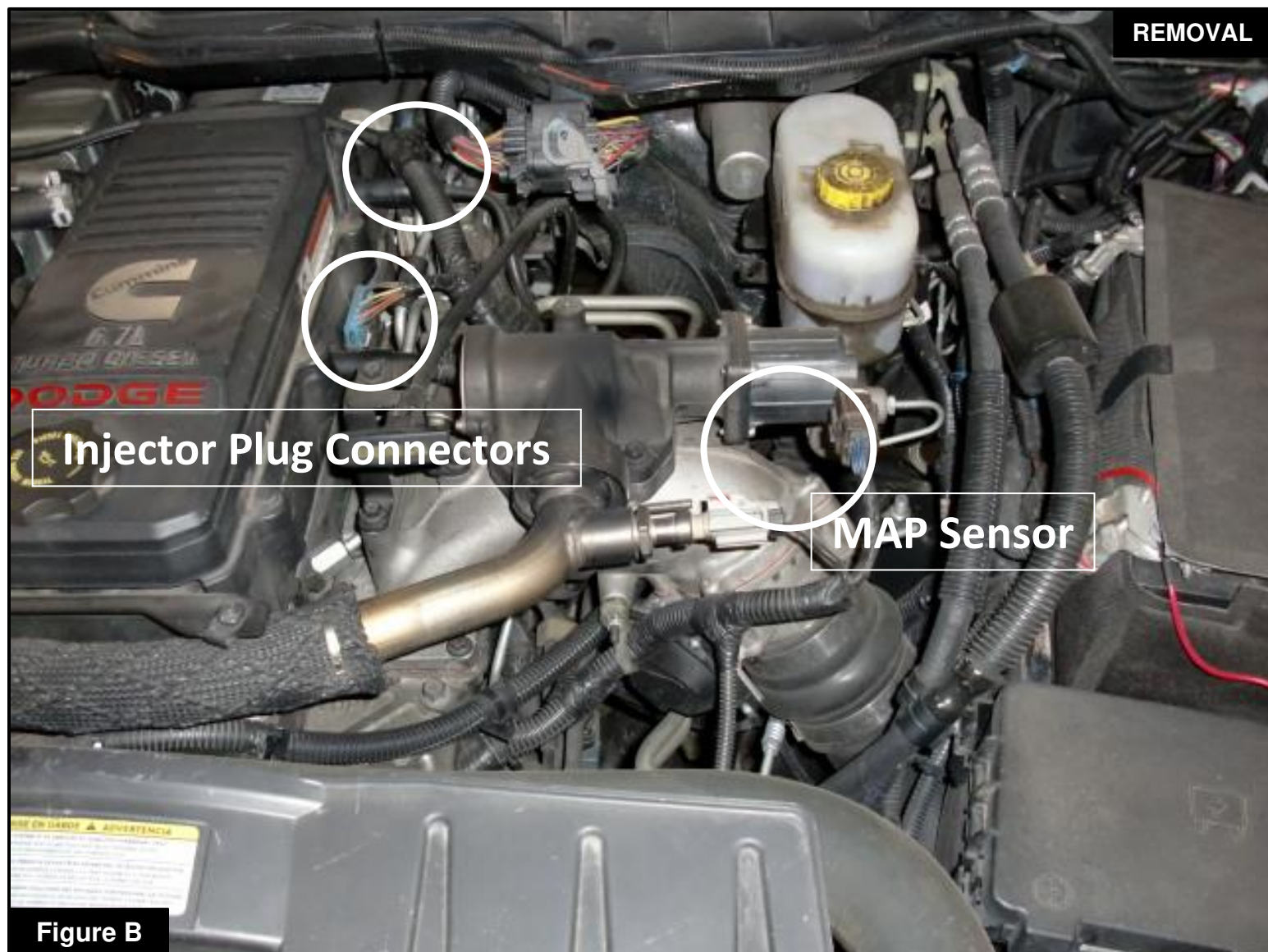
Step 1: Before installing your aFe POWER module, you will have to place your vehicle's ECU in sleep mode.

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

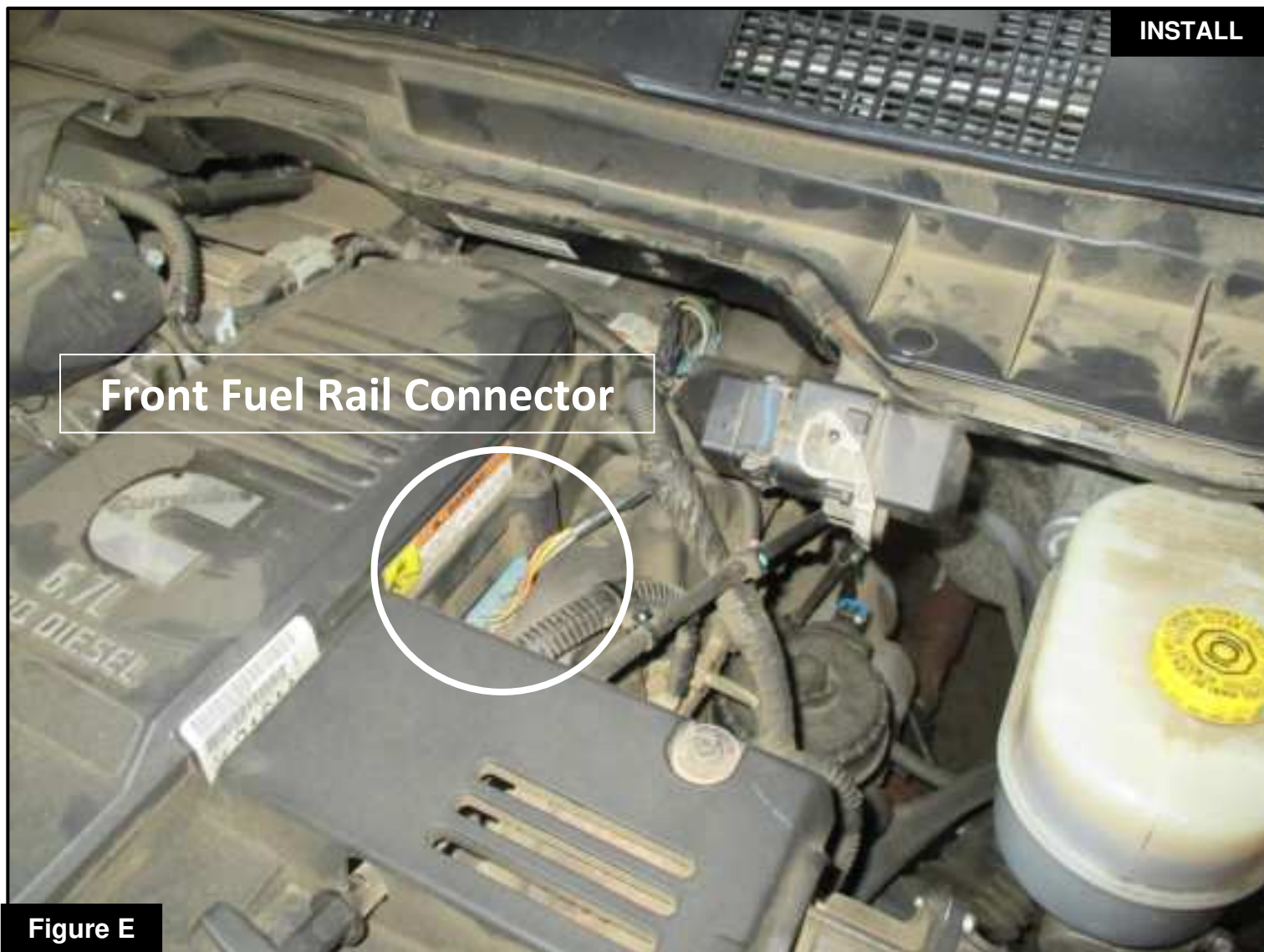
Refer to Figure C for Steps 4-5

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.



INSTALL

Figure E

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.



INSTALL

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.

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

**Figure I****Refer to Figure I for Steps 15-16**

Step 15: Select the desired location of the LED switch.

Step 16: Use the provided double sided tape to secure the LED switch to the desired location.



Figure J

Refer to Figure J for Steps 17-18

Step 17: Carefully route the switch cable behind the steering wheel cover or cabin trim cover.

Step 18: Route the switch cable through the firewall and into the engine bay. Follow the main harness through the grommet into the firewall.



Figure K

Refer to Figure K for Step 19-20

Step 19: Connect the LED switch wire to the aFe Power harness.

Step 20: Secure the Scorch HD module on top of the fuse box near the battery, or any other desired location using the provided Velcro. Use the included zip ties to secure wires away from extreme heat and moving parts.

NOTE: Place enclosed CARB EO sticker on or near the device on a smooth, clean surface. EO identification label is required to pass smog test inspections.

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



Refer to Figure L (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.



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Stainless DPF-Back Exhaust



P/N 49-42078-B

Aluminized DPF-Back Exhaust



P/N: 49-02078-B

Momentum HD Intake System



P/N: 50-70051T

Magnum Intake System



P/N: 54-13064R

Transmission Pan



P/N: 46-71160-B

Sprint Booster



P/N: 77-12007

Pro Guard HD Oil Filter



P/N: 44-LF002

Pro 5R Air Filter



P/N: 30-10102

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



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