

advanced FLOW engineering

Instruction Manual P/N: 77-42009

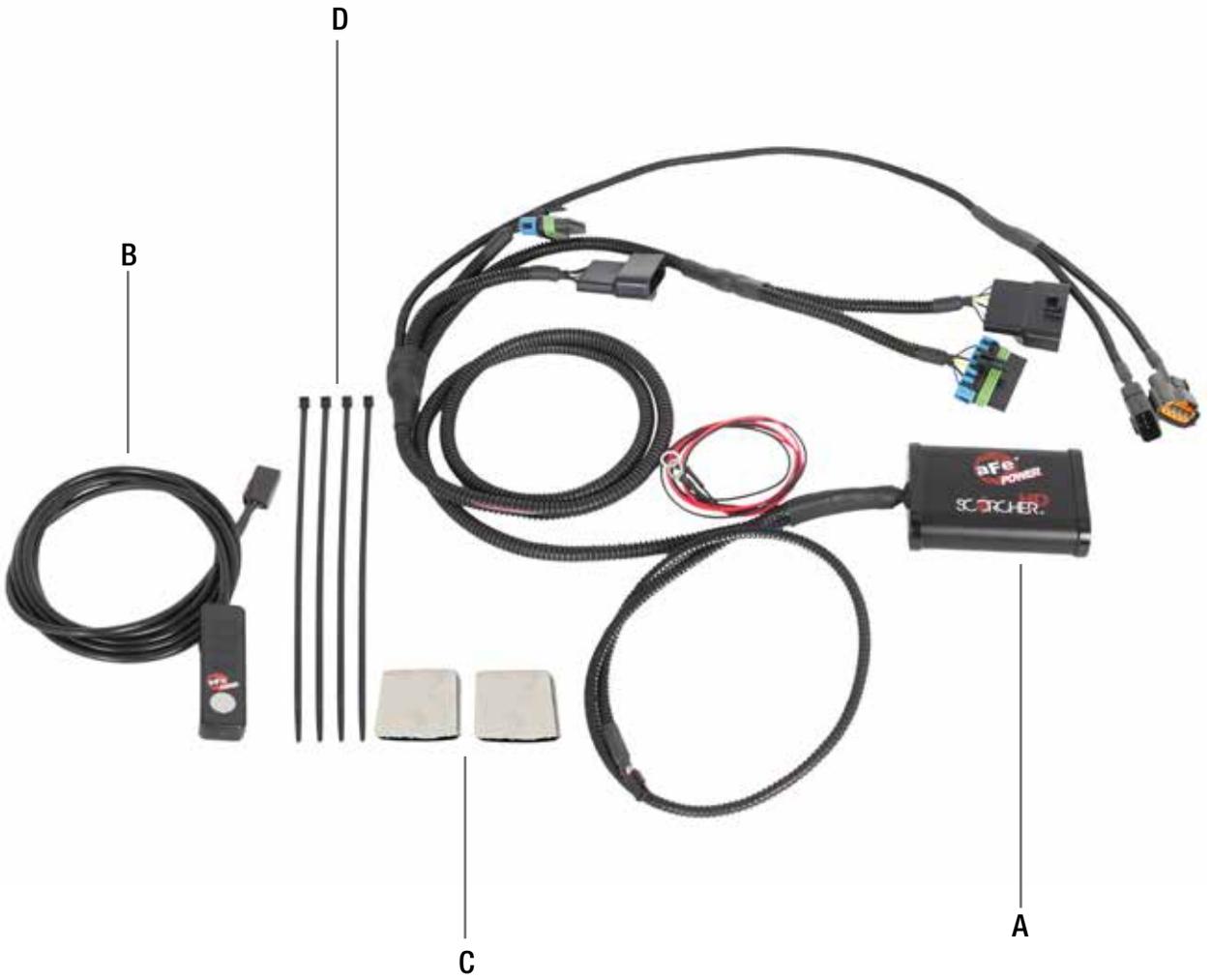
Make: **RAM** Model: **2500/3500 HD** Year: **2013-2017** Engine: **L6-6.7L (td) Cummins**



- 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	R77-42009
B	1	LED Switch	05-70005
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.



**Figure A****Refer to Figure A for Steps 1-2.**

- Step 1: Locate the MAP sensor (1). The MAP sensor is on the intake manifold on the driver's side of the truck at the firewall side of the manifold. It has a unique style plug so look for that.
- Step 2: Locate the Injector plug harness connectors (2). The two injector harness plugs are located on the driver's side of the engine next to and just below the valve cover; there are two connectors like shown in Figure A.



Figure B

Refer to Figure B for Steps 3-4.

Step 3: Disconnect the MAP sensor.

Step 4: Locate the MAP sensor splice harness on the aFe wiring harness. Plug the male connector of the module to the female connector of the trucks factory MAP sensor, then the female connector of the module to the trucks male factory engine harness.

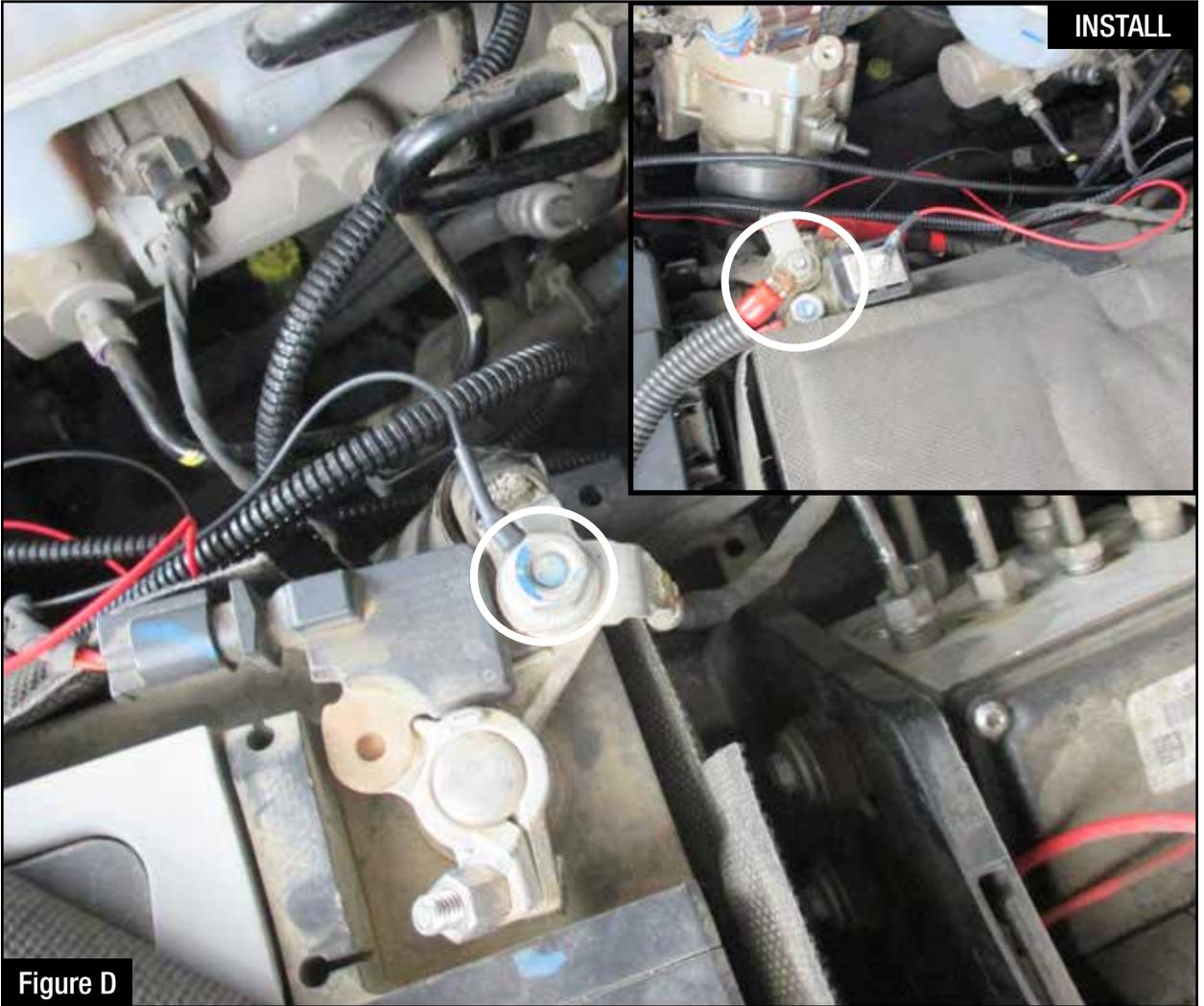
Note: Make sure connections are fully engaged. Usually, connectors make a snapping sound when fully engaged.



Figure C

Refer to Figures C for Steps 5-6.

- Step 5: Locate and disconnect one of the injector harness plugs, on the driver's side of the engine.
- Step 6: The aFe module has two jumper harnesses that are identical and can be connected to either of the injector harness plugs on the truck. Do one of the trucks injector harness connectors at time and be SURE to only use the aFe splice harness connectors (one male and one female that are bundled together) that are paired together. You could accidentally use the male end of the aFe harness from one pair and the female end from the second pair and not transmit any signal to the injectors. 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. Repeat this operation for the other injector harness.



Refer to Figure D for Steps 7-8.

Step 7: Connect the black ground terminal cable on the aFe module to the negative battery post by removing the 13mm nut and placing the terminal and reconnect the nut.

Step 8: Connect the red power terminal cable on the aFe module to the positive battery post by removing the 10mm nut and placing the terminal and reconnect the nut.



Figure E

Refer to Figure E for Step 9.

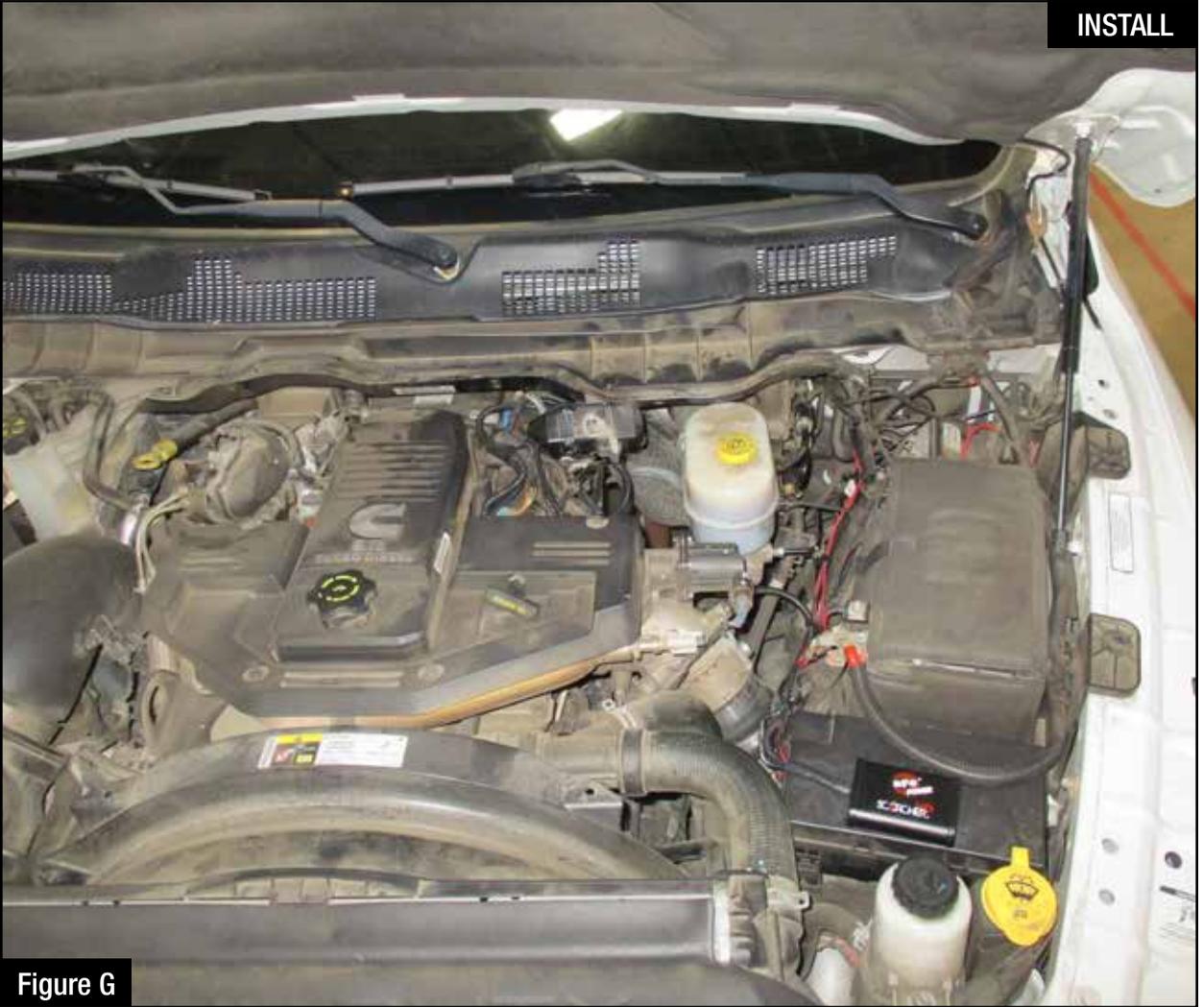
Step 9: Remove the double-sided tape on the switch, secure it on the dash where desired and route it under the steering wheel.



Figure F

Refer to Figure F for Step 10.

Step 10: Route the switch cable through firewall into the engine bay. Follow the main harness through the grommet into the firewall. Plug the end of the cable to the module.

**Figure G****Refer to Figure G for Step 11.**

Step 11: Mount the module in a safe location, using the supplied Velcro strip. Then, secure the wires and module away from any extreme heat and moving parts with the provided cable ties. Make sure all connections are secured and fully engaged.



Figure H

Refer to Figure H for Step 12.

Step 12: When turning on the vehicle, the switch will go through the light. 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: 46-20132-B

Rear Differential Cover



P/N: 46-70012-WL (w/ Oil)
46-70012 (Blk)
46-70010 (RAW)

Diesel Fuel System



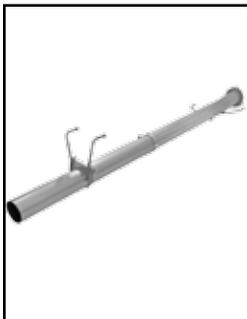
P/N: 42-12035 (Full-time)
42-12036 (Boost Act.)

Air Intake System



P/N: 50-72005 (P10R)
51-72005 (PDS)
75-72005 (PG7)

Exhaust Race Pipe



P/N: 49-42055

Exhaust System



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

Exhaust Manifold



P/N: 46-40054

Fuel Filter



P/N: 44-FF016

Intercooler Tubes



P/N: 46-20134-B (Blk)
46-20134-R (Red)

OER Air Filter



P/N: 30-10102 (P5R)
31-10102 (PDS)
73-10102 (PG7)

aFe T-Shirt



P/N: 40-30382 (M)
40-30383 (L)
40-30384 (XL)

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	Contact aFe

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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