



advanced FLOW engineering

Instruction Manual P/N: 77-63002

Make: **Ford** Model: **F-250** Year: **2011-2016** Engine: **V8-6.7L (td) Power Stroke**

Make: **Ford** Model: **F-350** Year: **2011-2016** Engine: **V8-6.7L (td) Power Stroke**

Make: **Ford** Model: **F-450** Year: **2011-2016** Engine: **V8-6.7L (td) Power Stroke**

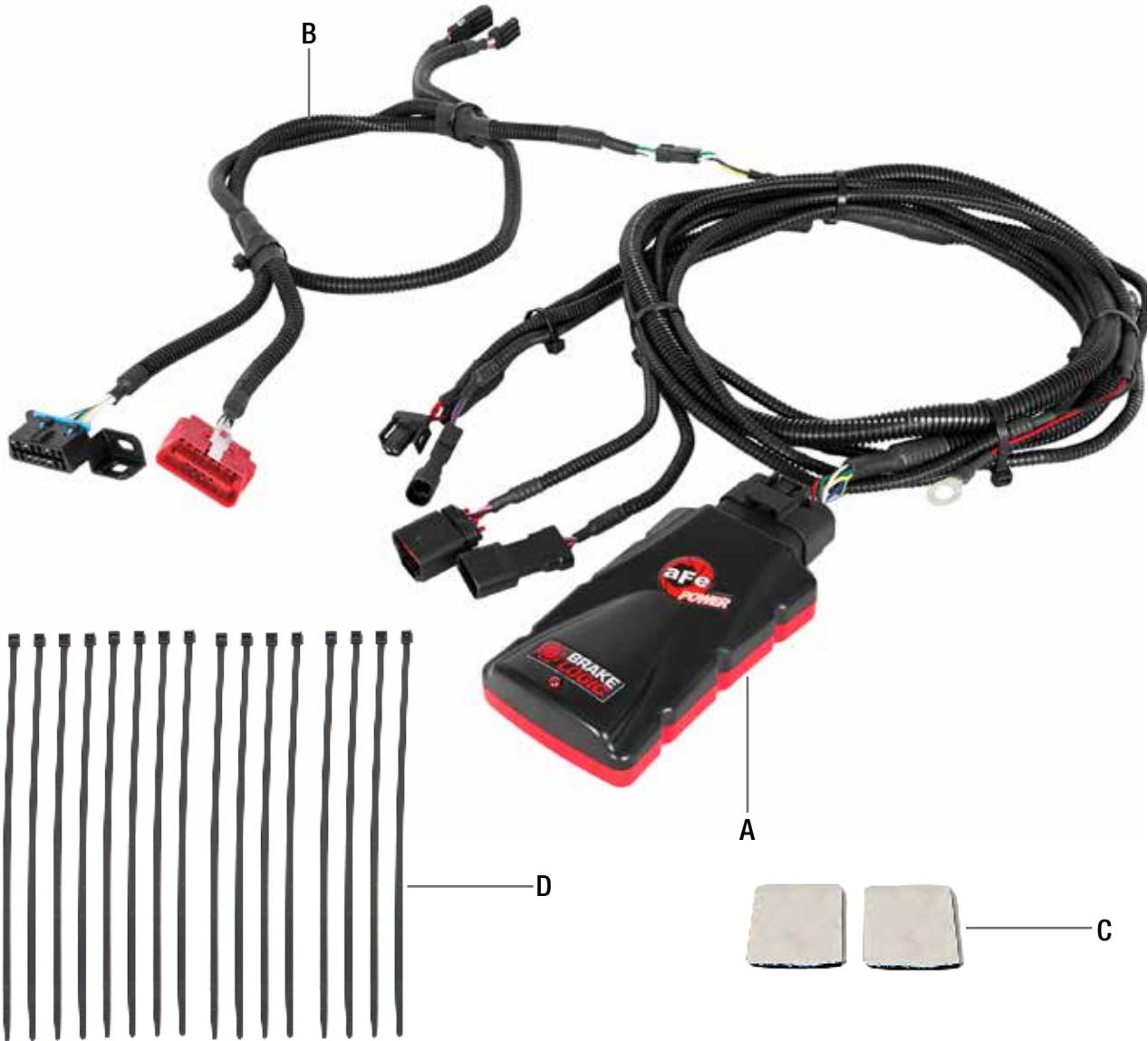
Make: **Ford** Model: **F-550** Year: **2011-2016** Engine: **V8-6.7L (td) Power Stroke**



- 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	R77-63002
B	1	Harness	AFE-10-107
C	2	Velcro (2 inches)	05-01244
D	16	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 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 batter



Note: Do NOT open the doors or start the vehicle while one of the sensors is disconnected. This could cause a check engine light.



Refer to Figure B for Step 2.

Step 2: Separate the two halves of the harness at the small 4 wire connector. The harness attached to the module will be installed in the engine bay. The harness with the OBD2 connector will be installed inside the vehicle. Start with the engine bay harness first.

REMOVAL

**Figure C****Refer to Figure C for Steps 3-4.**

Step 3: Locate the MAF sensor on the intake tube. Disconnect the connector from the sensor by sliding back the red locking tab, then pressing down on the black tab and sliding the connector out of the sensor.

Step 4: Locate the MAF connectors on the aFe harness, these are the only connectors on the aFe harness that also have the red locking tab. Plug the female connector of the module to the MAF sensor, and then connect the male connector of the module to the female connector of the OE harness. Make sure the red locking tabs are secured.

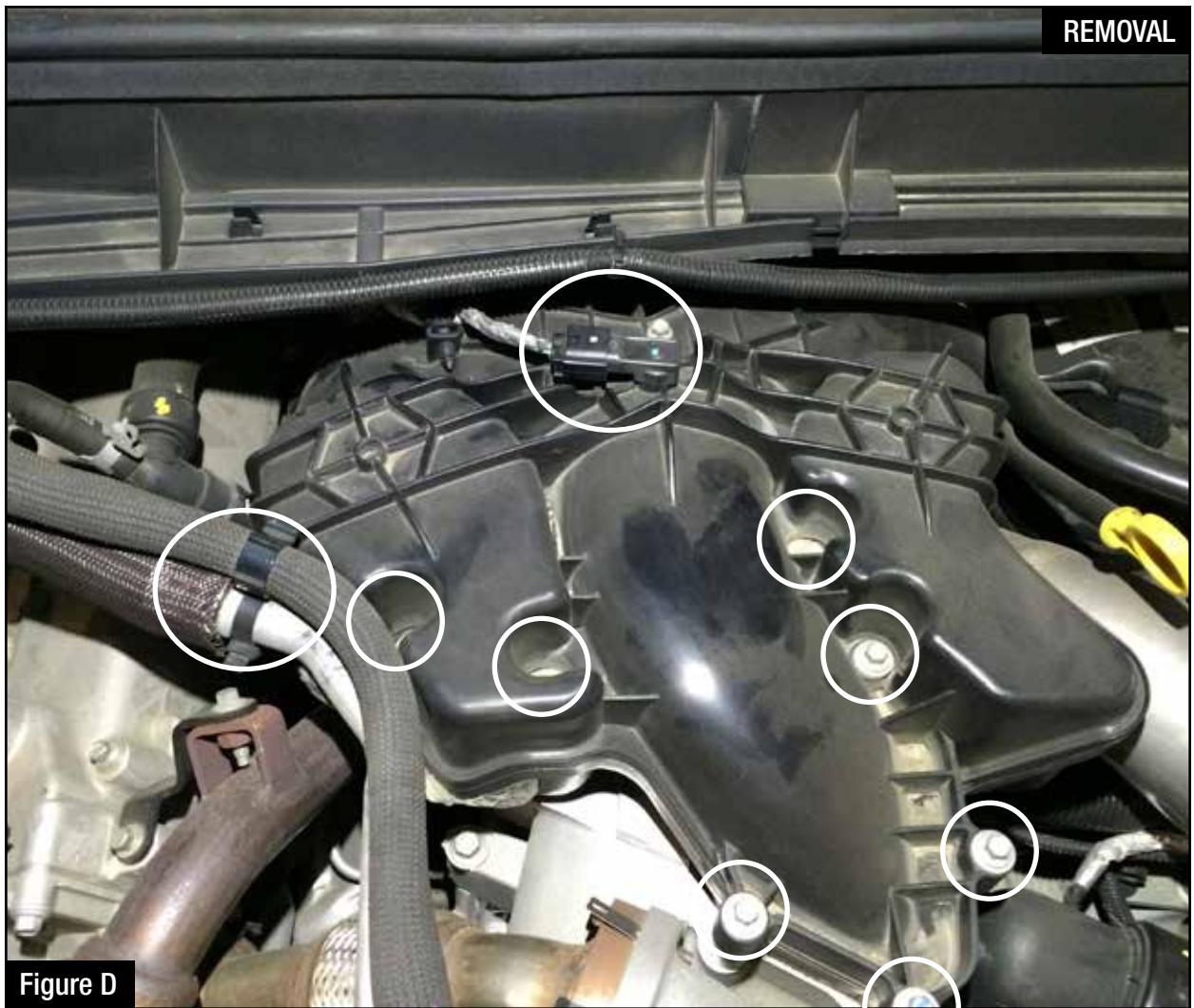


Figure D

Refer to Figure D for Steps 5-9.

Step 5: Unclip the coolant tubes from the plastic upper intake manifold.

Step 6: Unclip the harness and vacuum hose that are secured to the back of the intake manifold.

Step 7: Remove the 8mm bolt holding the engine and transmission dipsticks to the intake manifold.

Step 8: Disconnect the MAP sensor connector by pressing down the locking tab sliding it out of the sensor, and then remove the clip securing the MAP sensor harness to the manifold.

Step 9: Remove the (15) 8mm bolts securing the plastic upper intake manifold, then remove the upper manifold from the truck.



Note: There are 2 different lengths bolts holding down the manifold, take note of their location upon removal to make sure they are installed correctly.

**Figure E****Refer to Figures E for Step 10.**

Step 10: Locate the turbocharger VGT solenoid connector. It is on the top passenger side of the turbo. The harness will be covered in silver heat reflective wrap, and the connector is covered with a heat sleeve. Disconnect the VGT connector by gently pulling the locking tabs outward, and then sliding the connector out of the solenoid.



Note: Use caution when dealing with this connection, the plastic on the factory connector can be very brittle.



INSTALL

Figure F

Refer to Figure F for Step 11.

Step 11: Plug the female connector of the module to the VGT solenoid and then connect the male connector of the module to the female connector of the OE harness.



Note: It is recommended to transfer the heat sleeve from the factory female connector onto the aFe female connector.

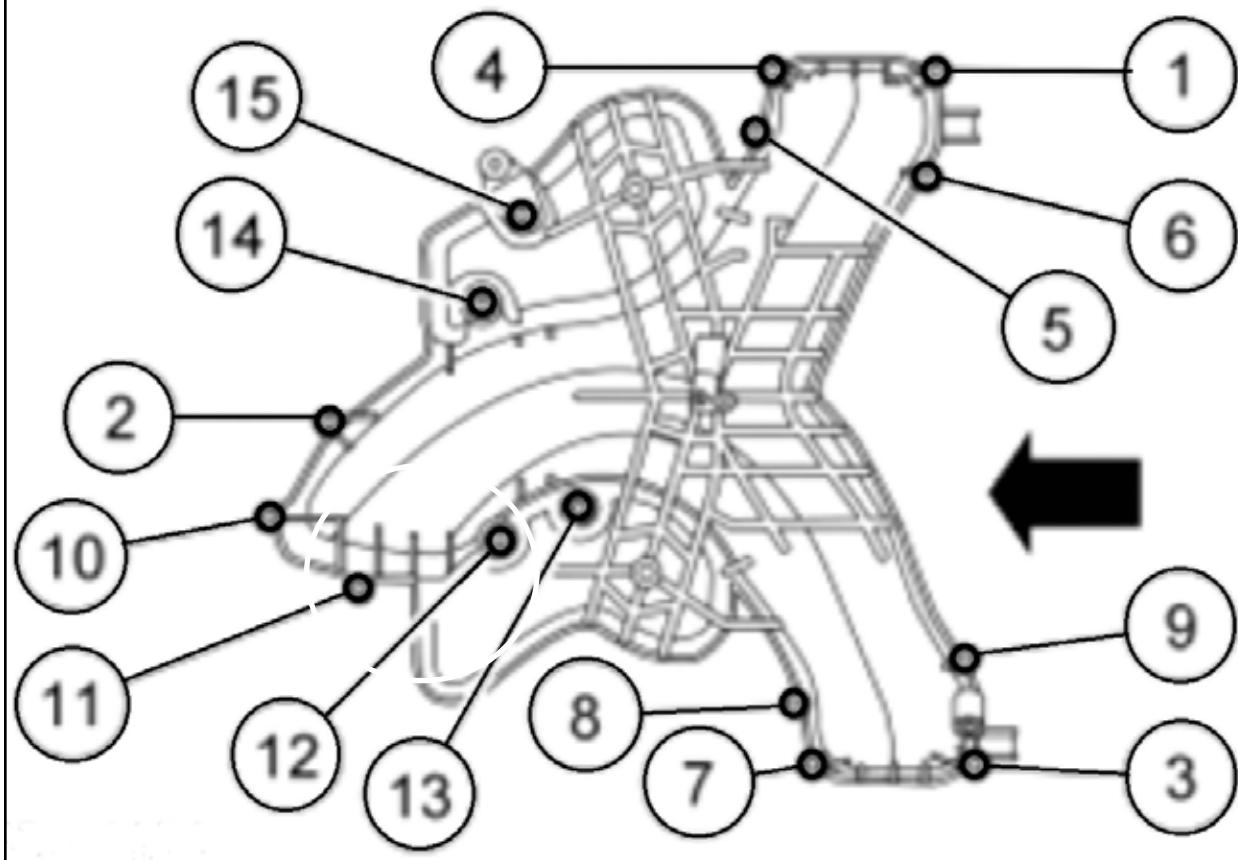


Figure G

Refer to Figure G for Steps 12-13.

Step 10: Re-install the intake manifold. Follow the torque sequence above and tighten bolts to 89 lb.-in.
(10 Nm)

Step 13: Re-install the vacuum hose, coolant lines, harnesses, and MAP sensor on the manifold.

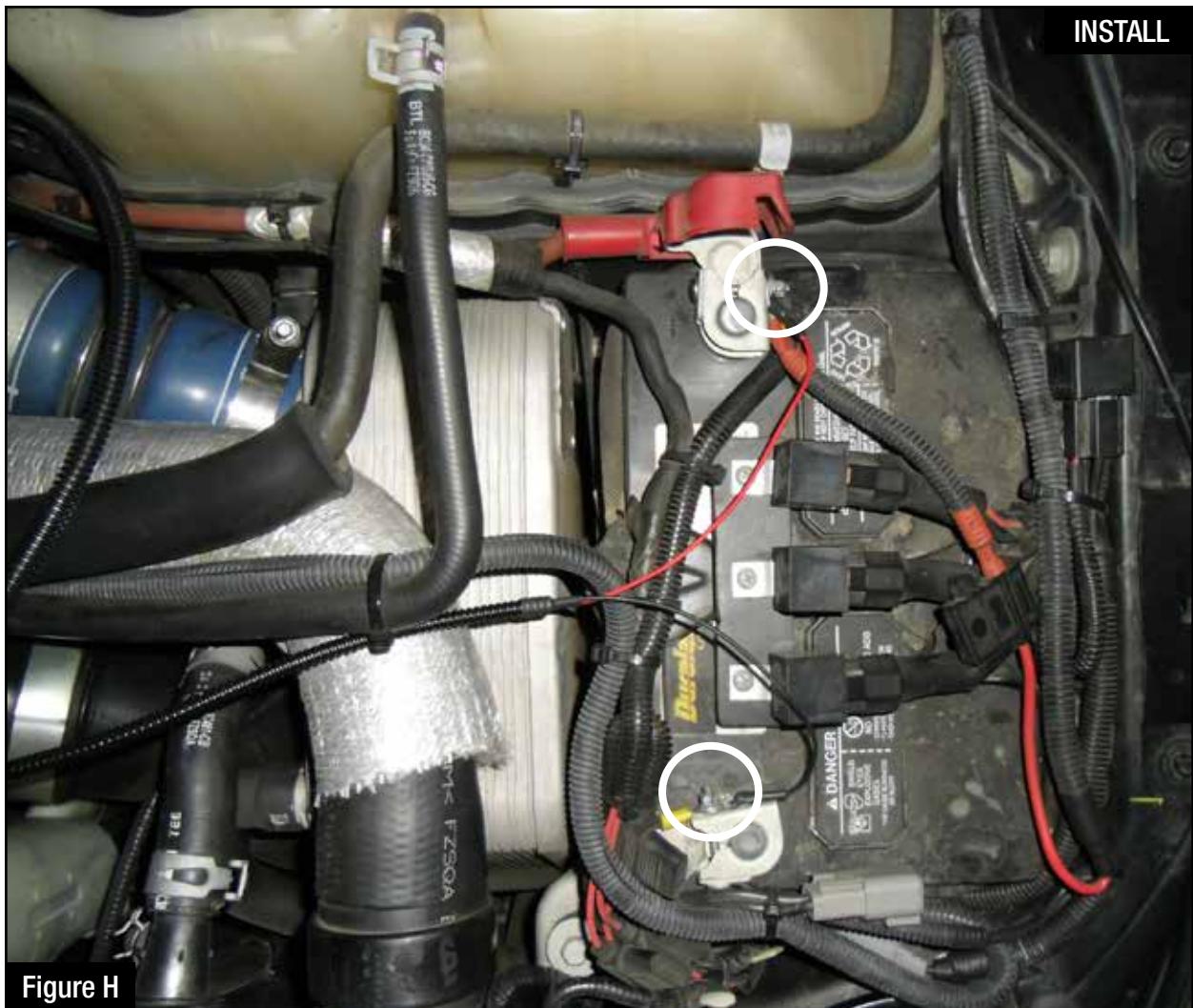


Figure H

Refer to Figure H for Steps 14-15.

Step 14: 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 then reinstall the nut.

Step 15: 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 then reinstall the nut.



Figure I

Refer to Figure I for Steps 16-17.

Step 16: Mount the BrakeLogic module in a safe location such as on top of the fuse box near the master cylinder.

Step 17: Connect the aFe harness to the BrakeLogic Module.

INSTALL



Figure J

Refer to Figure J for Steps 18-20.

Step 18: Grab the other half of the aFe harness that was separated in Step 2 to proceed with installation inside the cabin.

Step 19: Remove the knee bolster by gently pulling away from the dash, starting from the top corners.

Step 20: Remove the (3) 5.5mm screws from the bottom of the steering column cover, then separate the top and bottom halves, and remove the covers.



Figure K

Refer to Figure K for Step 21.

Step 21: Locate the shift lever connector, just behind the hazard light button. Disconnect this by pressing down on the locking tab and sliding the connector out.



Figure L

Refer to Figure L for Steps 22-23.

Step 22: Locate the shift lever connectors on the aFe harness. This is the smaller black connector. Plug the female connector of the module to the stock male connection, then take the male connector of the module and connect to the female connector of the OE harness. Secure the aFe harness using the provided zip ties.

Step 23: Re-install the steering column covers. The knee bolster can be left off for now.



Note: It is recommended to feed the wires up from the bottom of the dash, closely following the OE wire harness.



Figure M

Refer to Figure M for Step 24.

Step 24: Locate the stock OBD2 port. Remove the (2) 7mm screws holding it in place, the screws will be reused.

INSTALL



Figure N

Refer to Figure N for Steps 25-26.

Step 25: Locate the red male OBD2 connector on the aFe harness and plug it into the factory OBD2 port.

Step 26: Secure the aFe OBD2 port in the factory location using the (2) factory 7mm screws.



Figure 0

Refer to Figure O for Steps 27-29.

Step 27: Route the small harness with the square 4 wire connector from the engine bay into the cabin, through the main firewall grommet. Connect it to the other half of the aFe harness that was installed inside the cabin.

Step 28: Reinstall the knee bolster.

Step 29: Secure all wiring harnesses in the engine bay and under the dash with the provided ties, keeping them away from extreme heat or moving parts.

The installation of the BrakeLogic module is complete. Keep reading to learn how to use the module.



Figure P

Refer to Figure P for Steps 30-31.

Step 30: To turn the BrakeLogic module on simply activate Tow/Haul mode with the button at the end of the shift lever.

Step 31: When you want to activate engine braking, such as when driving down a hill while towing, tap the brake pedal, you will notice increased engine braking as well as the transmission downshifting to help maintain a lower speed. To deactivate engine braking, simply hit the gas pedal. Thank you for choosing aFe POWER.



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Intercooler Tubes



P/N: 46-20144-B

Front Differential Cover



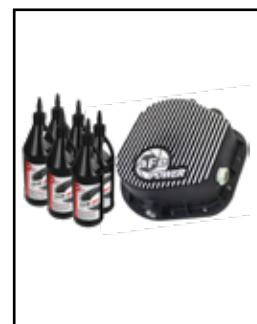
P/N: 46-70082-WL (w/ Oil)
46-70082 (Blk)
46-70080 (RAW)

Transmission Pan Cover



P/N: 46-70182 (Blk)
46-70180 (RAW)

Rear Differential Cover



P/N: 46-70022-WL (w/ Oil)
46-70022 (Blk)
46-70020 (RAW)

Air Intake System



P/N: 50-73005-1 (P10R)
51-73005-1 (PDS)

Oil Filter



P/N: 44-LF034

Sprint Booster



P/N: 77-13001

Oil Cap



P/N: 79-12006

Exhaust System



P/N: 49-03066-P (Pol)
49-03066-B (Blk)

Exhaust Race Pipe



P/N: 49-43036

Fuel Filter



P/N: 44-FF014

OER Air Filter



P/N: 30-80202 (P5R)
31-80202 (PDS)
73-80202 (PG7)

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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