



# advanced FLOW engineering

## Instruction Manual P/N: 77-43020

---

Make: Ford Model: F-250/F-350/F-450/F-550 Year: 2017-2018 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	R77-43020
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.

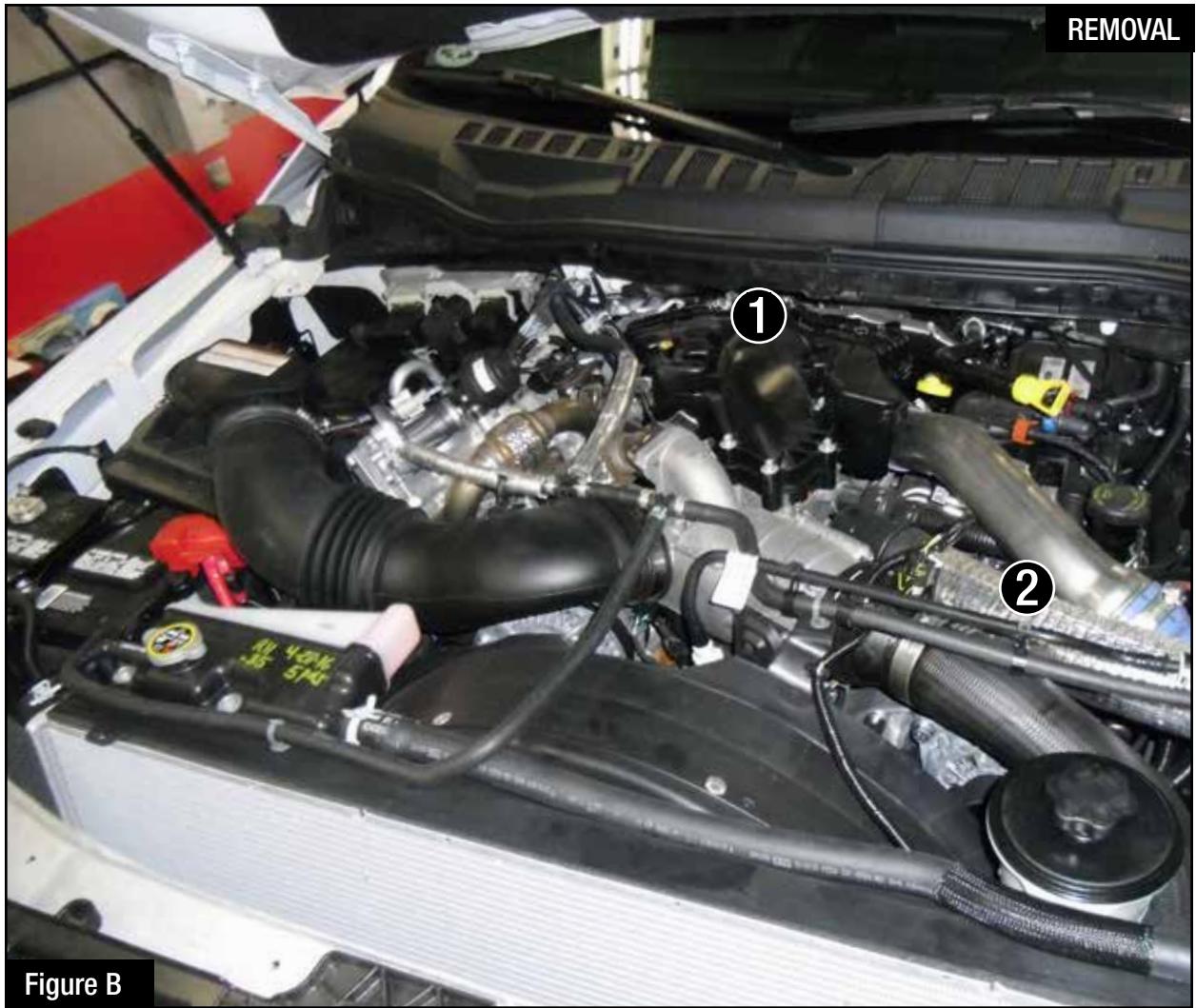


Figure B

**Refer to Figure B for Steps 2-3.**

Step 2: Locate the MAP sensor ①. The MAP sensor is on the top of the intake manifold next to a set of wires.

Step 3: Locate the fuel pressure sensor ②. It is accessible between the intercooler tube and radiator hose; at the end of the common fuel rail. The common fuel rail runs alongside the valve cover.



Figure C

**Refer to Figure C for Steps 4-5.**

Step 4: Disconnect the MAP sensor.

Step 5: Locate the MAP sensor jumper harness on the aFe module. This is the longer harness with a white cable on both connectors. Plug the male connector of the module to the female connector of engine harness, then the female connector of the module to the stock map sensor of the engine.

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



INSTALL

Figure D

**Refer to Figures D for Steps 6-7.**

Step 6: Locate and disconnect the fuel pressure sensor, on the driver's side of the engine (3).

Step 7: Locate the fuel pressure sensor jumper harness on the aFe module. This is the shorter harness with a red cable on both connectors. Plug the male connector of the module to the female connector of engine harness, then the female connector of the module to the stock fuel pressure sensor of the engine.

**Note: If there is a white plastic insert (4) on the OE harness connector, you will need to remove it.**



Figure E

**Refer to Figure E for Step 8.**

Step 8: Carefully detach the cover below the steering wheel to allow the switch and cable through (5). Mount the Switch on an open, flat surface (6). Route the switch harness and re-attach cover below steering wheel.



Figure F

**Refer to Figure F for Step 9.**

Step 9: Route the switch cable through firewall and into the engine bay **⑦**. 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 10.**

Step 10: 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 ties. Make sure all connections are secured and fully engaged.



Figure H

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

Step 11: 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!



Page left blank intentionally

Page left blank intentionally

Cold Air Intake System



P/N: 50-73006 (P10R)  
51-73006 (PDS)

Air Intake System Scoop



P/N: 54-73006-S

Rear Differential Cover



P/N: 46-70352-WL (w/ Oil)  
46-70352 (Blk)  
46-70350 (RAW)

OER Air Filter



P/N: 10-10139 (P5R)  
11-10139 (PDS)  
71-10139 (PG7)

DPF-Back Exhaust System



P/N: 49-43102-B (Blk. Tips)  
49-43102-P (Pol. Tips)

DFS780 PRO Fuel System



P/N: 42-23041

Fuel Filter



P/N: 44-FF014

DP-Back Exhaust System



P/N: 49-43096-B (Blk. Tips)  
49-43096-P (Pol. Tips)

DP-Back Exhaust System



P/N: 49-43093-B (Blk. Tips)  
49-43093-P (Pol. Tips)

Intercooler Tubes



P/N: 46-20314-B

Engine Oil Pan



P/N: 46-70322

Transmission Pan



P/N: 46-70182

To purchase any of the items above, view airflow charts, dyno graphs, photos, and video please go to [aFepower.com](http://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

Direct OE Replacement Filters

Racing Filters

Universal

Air Intake Systems

Exhaust Systems

Intercoolers & Intercooler Tubes

Intake Manifolds

Differential Cover

Exhaust Manifolds

Throttle Body Spacers

Fluid Filters

Pre-Filters

Heavy Duty OE Replacement

PowerSports OE Replacement

PowerSports Intake Systems

Tuners

## P/N Prefix

10, 11, 30, 31, 71, 73

18

21, 24, 72, TF

50, 51, 54, 55, 75, TR.TA, TL

49

46-2

46-1

46-7

46

46-3

44

28

70

81, 87

85

77

## Warranty duration

Life of the vehicle

1 year

2 years

2 years

2 years

2 years

2 years

Life of the vehicle

2 years

2 years

90 days

2 years

2 years

2 years

2 years

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.



**advanced FLOW engineering, inc.**  
252 Granite Street Corona, CA 92879  
TEL: 951.493.7100 TECH: 951.493.7134  
E-Mail:Tech@aFepower.com

P/N: 06-80901