

advanced FLOW engineering

**Instruction Manual** P/N: 77-46309

Make: **MINI** Model: **Cooper/S (F55/56/57)** Year: **2015-2019** Engine: **L4-2.0L (t) B46/B48**

Make: **MINI** Model: **Clubman/S (F54)** Year: **2015-2019** Engine: **L4-2.0L (t) B46/B48**

Make: **MINI** Model: **Countryman S (F60)** Year: **2015-2019** Engine: **L4-2.0L (t) B46/B48**

Make: **BMW** Model: **X1 18i/28i/ix (F48)** Year: **2016-2019** Engine: **L4-2.0L (t) B46/B48**

Note: **Includes MINI Convertible & JCW Editions.**



- 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	R77-46309
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 Step 2.**

Step 2: Locate the MAP and TMAP sensors. The MAP sensor is located on top of the intake manifold towards the radiator. The TMAP sensor is located on the charge pipe just before the throttle body, underneath the air scoop.

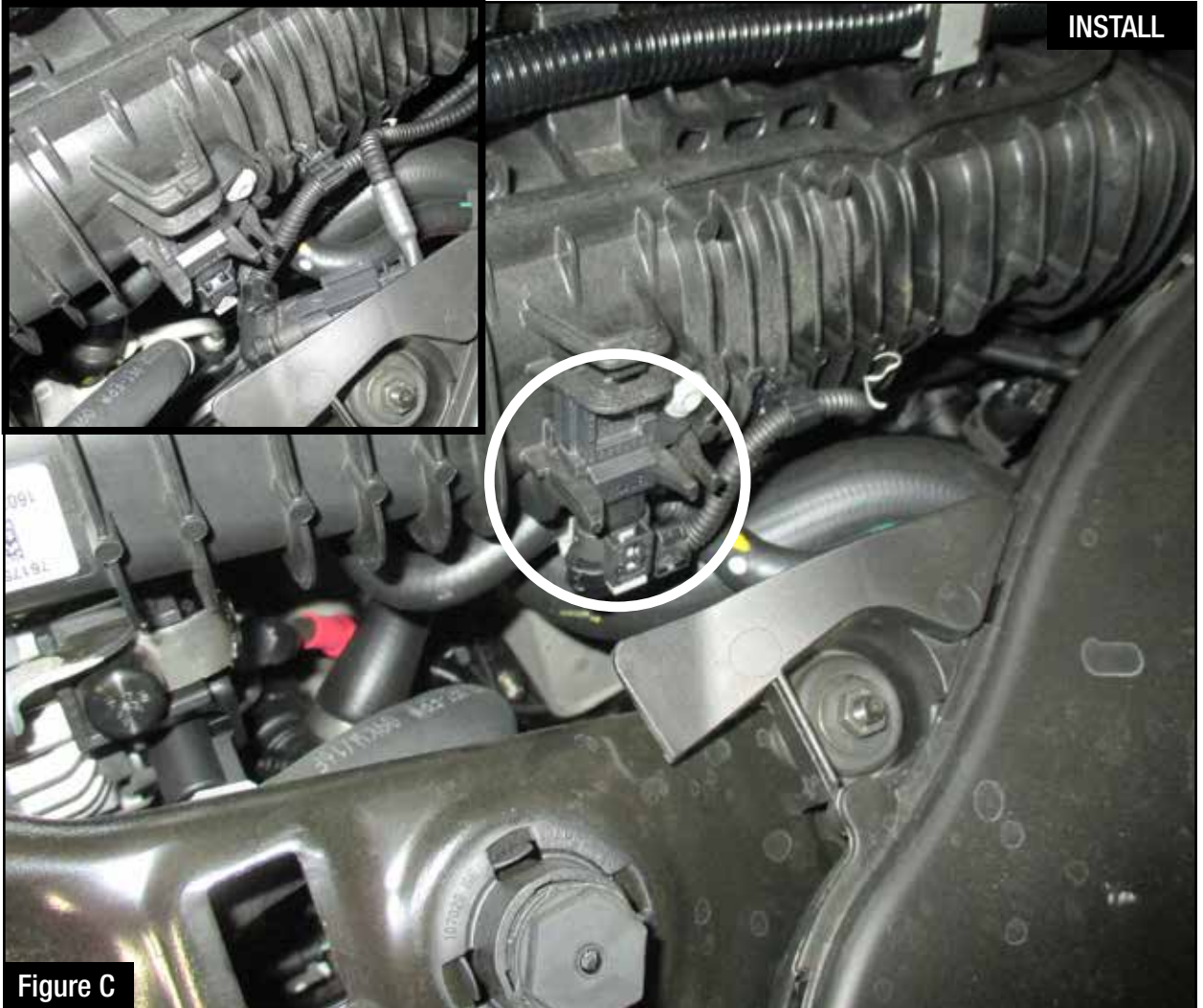


Figure C

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

Step 3: Locate and disconnect the MAP sensor, by sliding back and then pressing down on the gray locking clip.

Step 4: Locate the MAP sensor jumper harness on the aFe module. The MAP harness will have three wires on the connectors. Plug the female connector of the module into the MAP sensor, then take the male connector of the module and connect to the female connector of the engine harness.



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



**Refer to Figures D for Step 5.**

Step 5: Remove the air scoop from the airbox by removing the two 10mm bolts, this will allow you to access the TMAP sensor.

**Figure E****Refer to Figure E for Steps 6-7.**

Step 6: Locate and disconnect the TMAP sensor by sliding back, then pressing down on gray locking clip.

Step 7: Locate the TMAP sensor jumper harness on the aFe module. The TMAP harness will have four wires on the connectors. Plug the female connector of the module into the TMAP sensor, then take the male connector of the module and connect to the female connector of the engine harness.



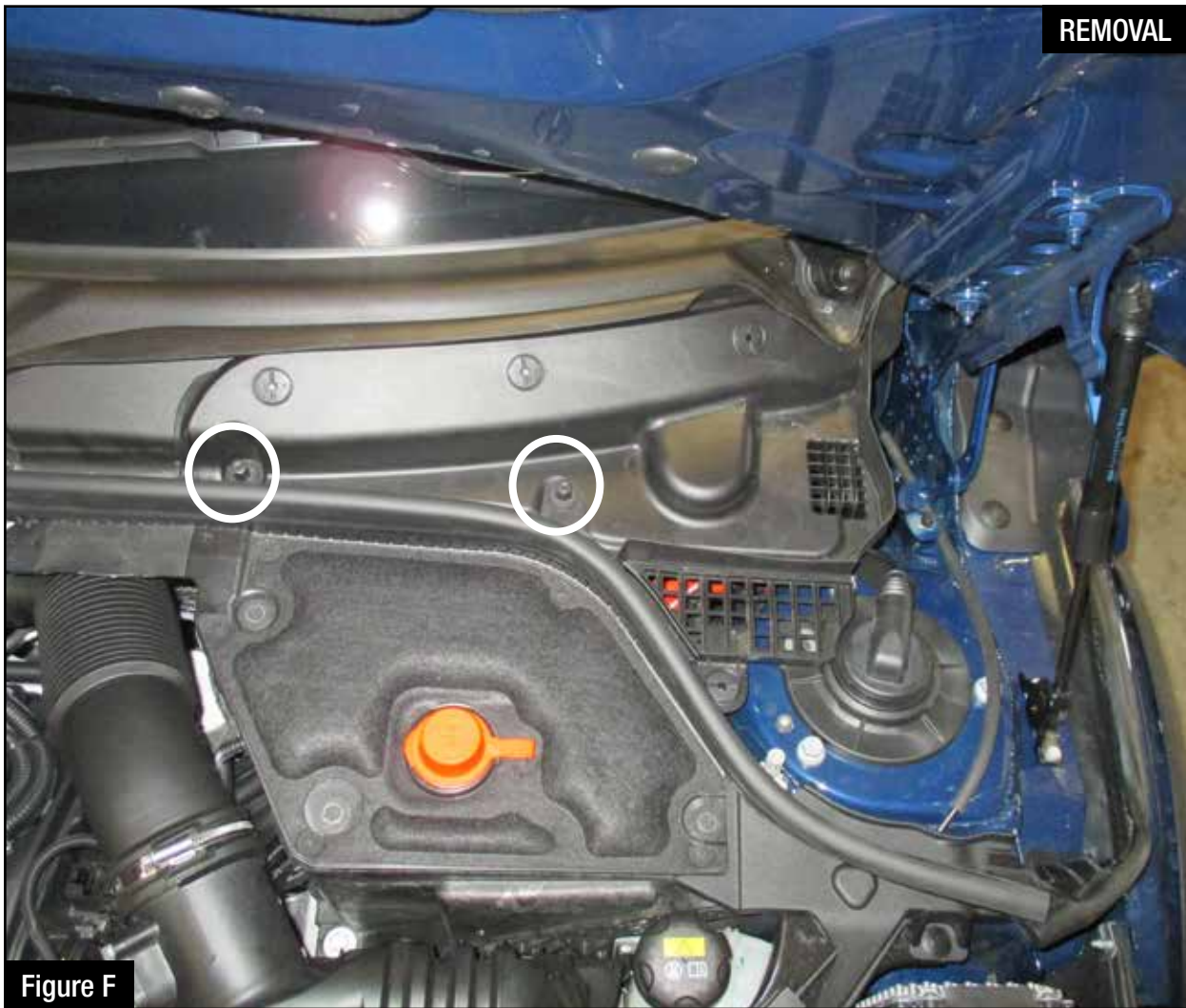


Figure F

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

Step 8: Remove the windshield trim cover by rotating the two 10mm locking clips, and the other four clips can be rotated with a flathead screwdriver. This will give you access to the firewall to route the cable for the switch.



Figure G

**Refer to Figure G for Steps 9-10.**

Step 9: Carefully route the switch cable behind steering wheel cover.

Step 10: Mount the Switch on an open, flat surface.



Figure H

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

Step 11: Route the switch cable through the grommet on the firewall and into the engine bay. Plug the end of the cable to the module.

**Figure 1****Refer to Figure 1 for Step 12.**

Step 12: Mount the module in a safe location, using the supplied Velcro strip. We suggest to mount it on top of the battery. Then, secure the wires and module away from any extreme heat and moving parts, with the provided cable ties.



Figure J

**Refer to Figure J for Step 13.**

Step 13: Reinstall the air scoop and windshield trim cover.

**Figure K****Refer to Figure K for Step 14.**

Step 14: 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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**OE Replacement Air Filter**



P/N: 30-10256 (P5R)  
31-10256 (PDS)

**Cat-Back Exhaust System**



P/N: 49-36331-B (Blk Tip)  
49-36331-P (Pol Tip)

**Cold Air Intake System**



P/N: 51-12862 (PDS)  
54-12862 (P5R)

**Air Intake System Cover**



P/N: 54-12868-B (Blk)  
54-12868-C (C/F)

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

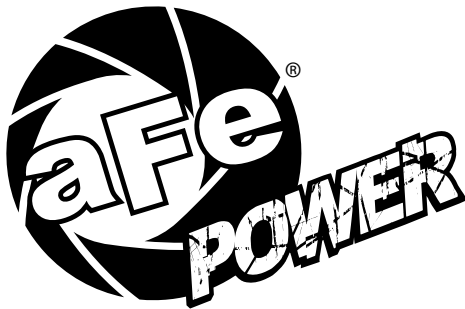
# Warranty

## 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](mailto: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.

<b>Product Category</b>	<b>P/N Prefix</b>	<b>Warranty duration</b>
Direct OE Replacement Filters	10, 11, 30, 31, 71, 73	Life of the vehicle
Racing Filters	18	1 year
Universal	21, 23, 24, 72,TF	2 years
Air Intake Systems	50, 51, 53, 54, 55, 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
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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