

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 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 951-493-7100.
- 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	R77-46309
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.

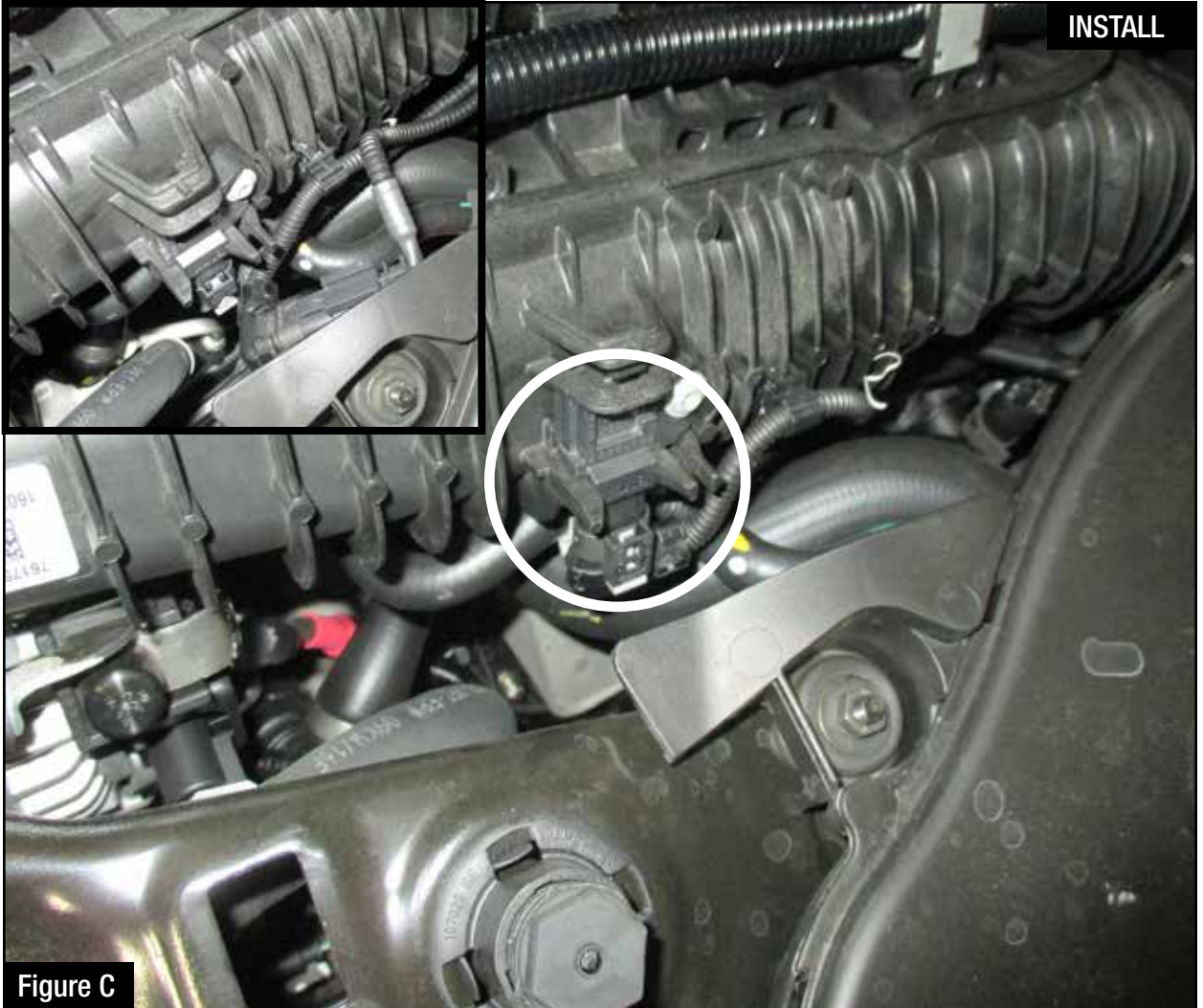


Figure C

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.



Figure D

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.

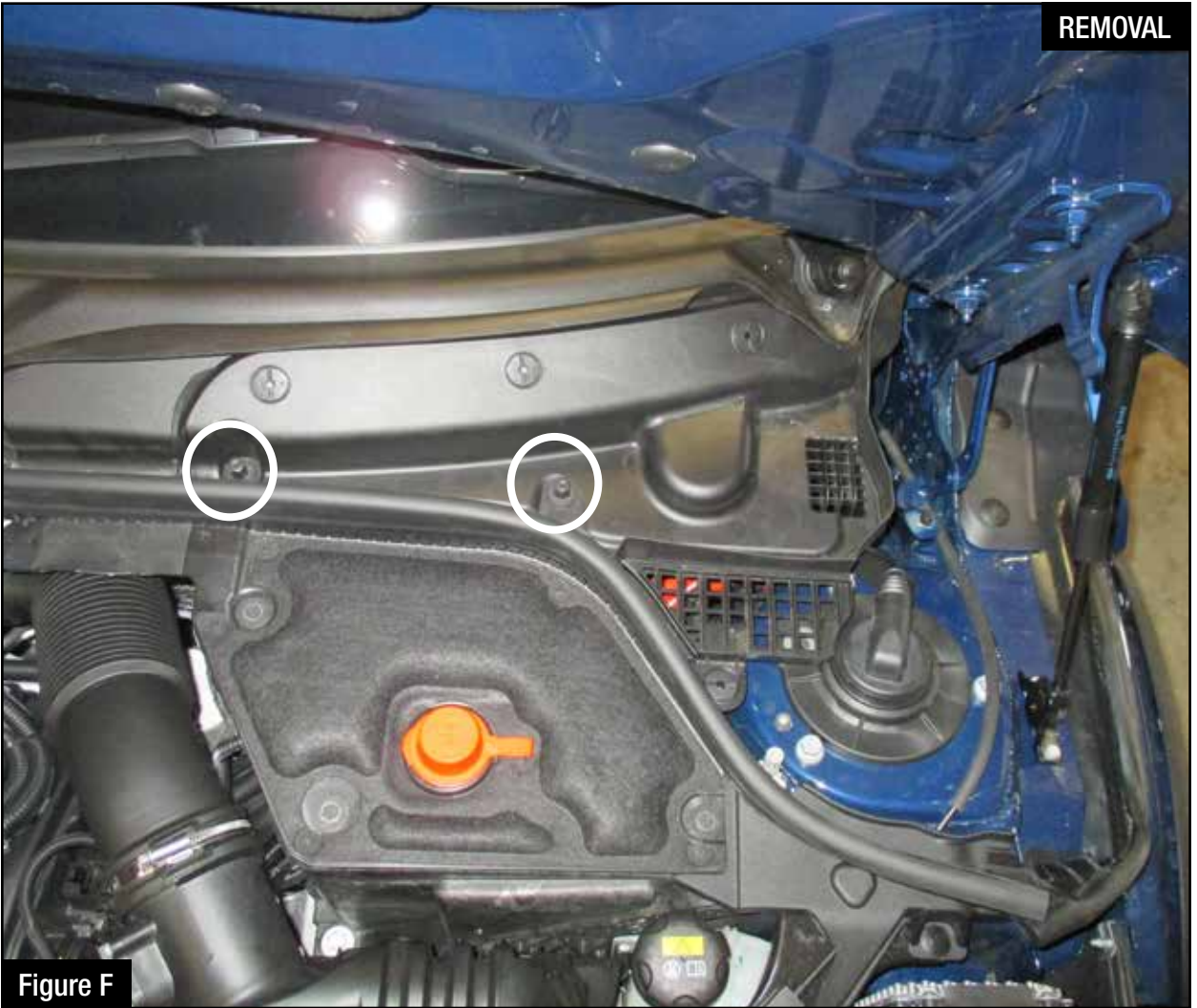


Figure F

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.



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 firewal 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.

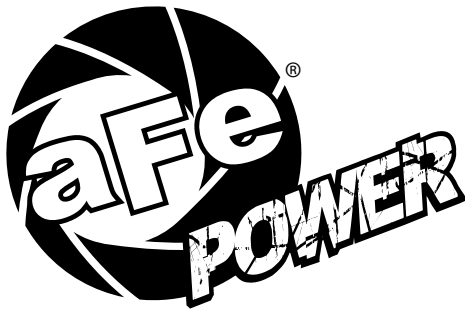
Warranty

General Terms:

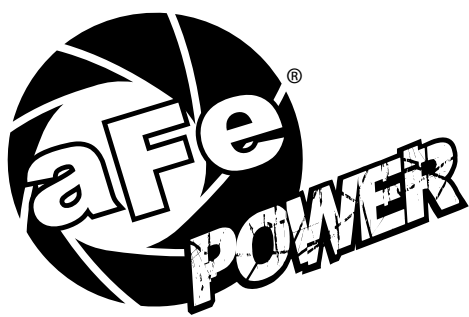
- aFe warrants their products to be free from manufacturer's defects due to workmanship and material.
- This warranty applies only to the original purchaser of the product and is non-transferrable.
- Proof of purchase of the aFe product is required for all warranty claims.
- Warranty is valid provided 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, 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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E-Mail: Tech@aFepower.com



advanced FLOW engineering

Instruction Manual P/N: 54-12862 / 51-12862

Make: **MINI** Model: **Cooper S/Cabrio S (F55/56/57)** Year: **2015-2019** Engine: **L4-2.0L (t) B46/B48**
Make: **MINI** Model: **Clubman S/Countryman S (F54/60)** Year: **2015-2019** Engine: **L4-2.0L (t) B48**
Make: **BMW** Model: **220i/225i Active/Gran Tourer (F25/26)** Year: **2014-2017** Engine: **L4-2.0L (t) B48**
Make: **BMW** Model: **X1 20is/Lis/ix/Lix/X1 25ix/Lix (F48)** Year: **2014-2017** Engine: **L4-2.0L (t) B48**



- 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
A1	1	Air Filter (Pro 5R)	24-30506
A2	1	Air Filter (Pro DRY S)	21-30506
B	1	Tube	05-12862B1
C	1	Housing	05-12862B2
D	1	Seal, Trim: 7/16" Bulb (30" inches)	05-00072
E	2	Screw, Torx: M4	03-50491

Installation will require the following tools:
Torx 25 and Flat Head Screwdriver.

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 1-3**

Step 1: Unplug the MAF sensor harness.

Step 2: Loosen the clamp on the OE air intake.

Step 3: Remove the three T25 torx screws out of the OE intake, then remove out of vehicle.

**Figure B****Refer to Figure B for Steps 4-5**

Step 4: Transfer the MAF sensor from the OE air box and into the aFe intake tube using the provided screws.

Step 5: Install seal trim onto aFe housing



Figure C

Refer to Figure C for Steps 6-7

Step 6: Install the aFe housing into the vehicle by sliding the Intake tube into the OE coupling.

Step 7: Re-using the OE T25 screws into the aFe housing



Figure D

Refer to Figure D for Steps 8-9

Step 8: Tighten the OE clamp and assure the T25 screws are tighten.

Step 9: Install the aFe air filter onto the intake, then tighten clamp. Your installation is now complete.

NOTE: Check all bolts, clamps, and connectors after 200 miles.



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Pro DRY S Air Filter



P/N: 21-30506

Pro 5R Air Filter



P/N: 24-30506

Pro DRY S Restore Kit



P/N: 90-59999

Blue Squeeze Restore Kit



P/N: 90-50501

Blue Aerosol Restore Kit



P/N: 90-50001

Intake System Cover



P/N: 54-12868-B (Black)
54-12868-C (Carbon Look)

Cat-Back Exhaust System



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

SCORCHER GT Module



P/N: 77-46309

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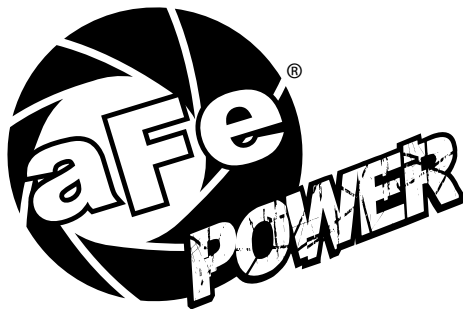
Warranty

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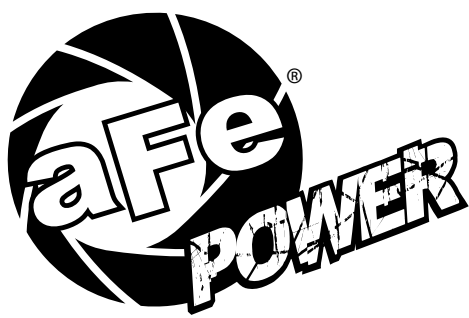
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Direct OE Replacement Filters	10, 11, 30, 31, 71, 73	Life of the vehicle
Racing Filters	18	1 year
Universal	21, 24, 72	2 years
Air Intake Systems	50, 51, 54, 55, 75	2 years
Exhaust Systems	49	2 years
Intercoolers & Intercooler Tubes	46-2	2 years
Intake 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

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advanced FLOW engineering

Instruction Manual P/N: 54-12868-B / 54-12868-C

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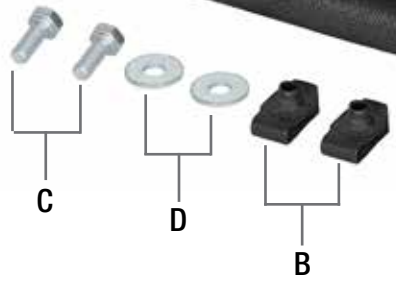


Retain factory parts for future use.

Label	Qty.	Description	Part Number
A1	1	Cover, Vacuum Formed	05-12862B3
A2	1	Cover, Vacuum Formed (C)	05-12862C3
B	2	Clip Nut, M6	03-50414
C	2	Screw, Hex Hd: M6	03-50052
D	2	Washer, Flat: M6	03-50070

Installation will require the following tools:
10mm Wrench

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Refer to Figure A for Step 1

Step 1: Remove trim seal off housing.

INSTALL



Figure B

Refer to Figure B for Step 2

Step 2: Install the two clip nuts onto the housing.

**Figure A****Refer to Figure A for Steps 3-5**

Step 3: Install the housing onto the aFe housing.

Step 4: Secure the cover using the supplied washers and screws.

Step 5: Your installation is now complete! Thank you for choosing aFe POWER!

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Cold Air Intake



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

Pro DRY S Air Filter



P/N: 21-91112

Pro 5R Air Filter



P/N: 24-91112

SCORCHER GT Module



P/N: 77-46309

Cat-Back Exhaust System



P/N: 49-36331-B (Bik. Tips)
49-36331-P (Pol. Tips)

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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
PowerSports Intake Systems	85	2 years

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*See turbocharger warranty for more info.



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