

advanced FLOW engineering

Instruction Manual P/N: 77-46324

Make: **BMW** Model: **114i (F20/F21)**

Year: **2012-2015**

Engine: **L4-1.6L (t) N13**

Make: **BMW** Model: **116i (F20/F21)**

Year: **2011-2015**

Engine: **L4-1.6L (t) N13**

Make: **BMW** Model: **118i (F20/F21)**

Year: **2011-2015**

Engine: **L4-1.6L (t) N13**

Make: **BMW** Model: **120i (F20/F21)**

Year: **2012-2015**

Engine: **L4-1.6L (t) N13**

Make: **BMW** Model: **316i (F30/F31/F35)**

Year: **2012-2015**

Engine: **L4-1.6L (t) N13**

Make: **BMW** Model: **320d Efficient Dynamics (F30)** Year: **2012-2015**

Engine: **L4-1.6L (t) N13**



- 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.
- 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	R77-46324
B	1	LED Switch	05-70029
C	2	Hook and loop fastener (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.

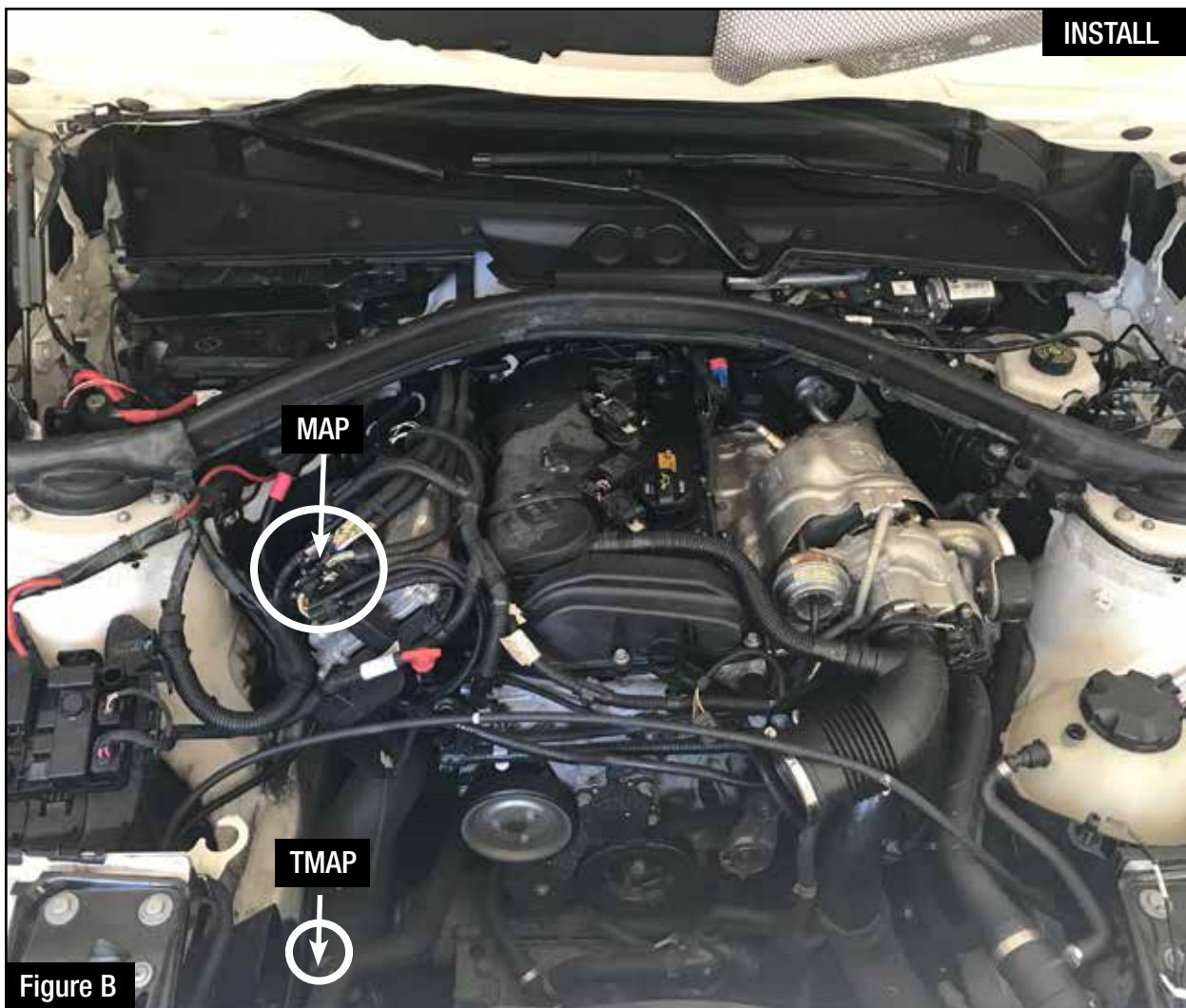


Figure B

Refer to Figure B for Steps 2-3.

Step 2: Remove the intake and the engine cover to gain access to the TMAP and MAP sensors.

Step 3: Remove the plastic cowl panel to assist in wiring the switch.

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

- Step 4: Locate and disconnect the MAP sensor. The MAP sensor is on top of the intake manifold.
- Step 5: Locate the MAP sensor jumper harness on the aFe module. This is the shorter harness with a 3 wire connector. Plug the female connector of the module into the MAP sensor, then take the male connector of the module and connect into 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 Figure D for Steps 6-7.

Step 6: Locate and disconnect the TMAP sensor. The TMAP sensor is on the charge pipe located underneath the stock airbox on the passenger side of the engine.

Step 7: Locate the TMAP sensor jumper harness on the aFe module. This is the longer harness with a 4 wire connector. Plug the female connector of the module into the TMAP sensor, then the male connector of the module to the female connector of the engine harness.



Figure E

Refer to Figure E for Steps 8-9.

Step 8: Carefully route the switch cable behind the dash.

Step 9: Mount the Switch on an open, flat surface.



Figure F

Refer to Figure F for Steps 10-12.

- Step 10: Remove the two 10mm securing the foot trim panel to the dash, and lower the panel to gain access to the firewall.
- Step 11: Route the switch cable through firewall and into the engine bay. Plug the end of the cable to the module.
- Step 12: Reinstall foot trim panel.



Figure G

Refer to Figure G for Steps 13-14.

Step 13: Mount the module in a safe location, using the supplied Hook and loop fastener strip. Then, secure the wires and module away from any extreme heat and moving parts, with the provided ties.

Step 14: Reinstall the plastic cowl panel, engine cover, and intake.



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



Figure H

Refer to Figure H for Step 15.

Step 15: 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!



Air Intake System



P/N: 54-76314 (P5R)
51-76314 (PDS)

Sprint Booster V3



P/N: 77-16302