



advanced FLOW engineering

Instruction Manual P/N: 51-20442 & 54-20442

Make: **BMW** Model: **3-Series** Year: **99-06** Engine: **L6-2.5L/2.8L/3.0L**



- 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
A1	1	Pro DRY S Air Filter	21-45505 (Gray Media)
A2	1	Pro 5R Air Filter	24-45505 (Blue Media)
B	1	Tube	05-20442B1
C	1	Housing	05-20442B3
D	1	Coupling	05-20442B2 (Used only on 2.5/2.8L)
E	2	M6 Screw	03-50057
F	2	Washer	03-50070
G	21.3	Seal Trim 7/16"	05-00072
H	8.5	Seal Trim 1/16"	05-00149
I	10.5	Seal Trim 1/16"	05-00149
J	1	Clamp #060	03-50002

Installation will require the following tools:
6mm & 8mm Nut Driver, 10mm Socket & Ratchet.

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.





Refer to Figure A for step 1-4

Step 1. Complete stock intake

Step 2. Unclip the 4 clips on the intake cover.

Step 3. Using a 6mm nut driver or a flat-head screwdriver, loosen the clamp on the Mass Air Flow (MAF) sensor. Unplug the MAF sensor wire harness.

Step 4. Remove the intake cover and MAF sensor from vehicle.



Refer to Figure B for step 5-8

Step 5. Unbolt the two bolts on the right side of the housing using a 10mm socket and driver.

Step 6. Remove the OE air filter.

Step 7. There is an electrical cable fastened to the back side of the housing. To remove it, pull up on the rubber clip.

Step 8. To remove the lower half of the intake housing, lift the housing up and tilt up towards the front of the vehicle so that you can remove the intake scoop at the same time.



Refer to Figure C for step 9

Step 9. With everything removed you are now ready to install the aFe intake.



Refer to Figure D for step 10-12

- Step 10. To begin assembly, install the tube into the housing by putting it in sideways and rotating it into position. Fasten the intake tube to the housing using the provided M6 bolts and washers.
- Step 11. Place the filter onto the end of the intake tube and tighten the clamp using a 8mm nut driver.
- Step 12. Install the trim seal. Make sure to note the location of the notch on the trim seal. The notch goes in the 90deg corner of the housing for easier install.

Figure E-1



INSTALL



Figure E

Refer to Figure E for step13-16

Step 13. Insert the MAF coupling for the 2.5L/2.8L engines (Refer to figure E-1).

For 3.0L engines clamp directly over the MAF sensor.

Step 14. Install the clamp to the tube as shown but do not tighten yet.

Step 15. Place the small edge seal on the side of the housing wall.

Step 16. Install MAF sensor onto the assembly before installing into the vehicle. Do not tighten clamp at this time.

**Figure F****Refer to Figure F for step 17-21**

Step 17. Drop the housing assembly straight down and make sure the clip on the bottom of the housing lines up with the vehicle properly.

Step 18. Line up the air duct from the front of the car with the opening on the housing.

Note: The clip should capture the plastic air duct and secure it in place.

Step 19. Use one of the OE 6mm bolts to fasten the housing to the inner fender of the car.

Step 20. Line up intake tube to the MAF Sensor and tighten all clamps.

Step 21. Plug in MAF wire harness. Your installation is now complete.



Pro DRY S Air Filter



P/N: 21-45505

Pro 5R Air Filter



P/N: 24-45505

Pro DRY S Restore Kit



P/N: 90-59999

Blue Aerosol Restore Kit



P/N: 90-50001

Blue Squeeze Restore Kit



P/N: 90-50501

aFe Key Chain



P/N: 40-10149

aFe Power Hat



P/N: 40-10083

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"). 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	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

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.