



advanced FLOW engineering Stage-2 Air Intake

Instruction Manual P/N: F2-03012

Make: **FORD** Model: **RANGER** Year: **2004-2011** Engine: **L4-2.3L DOHC**

Make: **MAZDA** Model: **B2300** Year: **2004-2010** Engine: **L4-2.3L DOHC**



- 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	Air Filter (Pro DRY S)	21-45505 (F2-03012)
B	1	Housing (Wrinkle Black)	05-12042B2
C	1	Tube (Polished)	05-F203012G1
D	1	Adaptor, Injection Molded: 4.5"	05-01037
E	2	Coupling, Reducer	05-00824
F	2	Clamp, 048	03-50007
G	2	Clamp, Mini 010	03-50078
H	3	Screw, Button Head: M6x1x12	03-50102
I	2	Screw, Cheese Head: M4x.7x8	03-50034
J	1	Cap, Polyethylene: 3/8"OD	03-50119
K	1	Hose, Fuel: 5/8"ID (13"L)	05-00069
L	1	Seal, Trim: 7/16" Bulb (25.00"L)	05-00072
M	2	Clamp, 052	03-50008

Installation will require the following tools:
 8mm nut driver, flat head screw driver, 4mm allen hex key




Figure A

Refer to Figure A for steps 1-4

Step 1: Disconnect the MAF sensor plug from the intake by pulling the red safety clip then pull to disconnect. ①

Step 2: Un-clip the valve cover vent tube from the valve cover. ② For automatic transmission models disconnect the 3/8 vent hose. ③

Step 3: Loosen the throttle body clamp using an 8mm nut driver. ④

Step 4: Un-clip the tabs from the top portion of the stock airbox. Then remove the tube and top portion in one piece. It will be necessary to move the A/C hose out of the way. ⑤

**Figure B****Refer to Figure B for step 5**

Step 5: Pre-assemble the aFe housing by installing the filter adaptor. Using the button head screws secure adaptor to aFe housing. Tighten down the screws with a 4mm hex key.

**Figure C****Refer to Figure C for steps 6-7**

Step 6: Pre-assemble the reducer coupling: Using the clamps provided (leave other clamp loose) secure coupling to aFe housing and tighten clamp on housing side only with an 8mm nut driver.

Step 7: Install seal trim and firmly press down on seal trim to secure onto housing.



Figure D

Refer to Figure D for step 8

Step 8: Attach the filter onto the housing assembly and tighten clamp with an 8mm nut driver.

**Figure E****“Manual Transmissions Only”****Refer to Figure E for steps 9-10**

Step 9: Pre-assemble the aFe intake tube. Remove the MAF Sensor from the stock airbox using a T-20 torx bit and re-install onto the aFe intake tube using the cheese head screws. Tighten down the screws with a flat head screw driver.

Step 10: **Reminder for manual transmission applications: Please insert the 3/8” black plastic cap to close the unused vent tube.**



Figure F

Refer to Figure F for steps 11-12

Step 11: Install the pre-assembled aFe housing on top of the lower portion of the stock airbox then use the stock tabs to hold the housing in place. The A/C hose will need slight repositioning.

Step 12: Install the coupling and clamps onto the throttle body. Then tighten clamp on throttle body side with an 8mm nut driver. **Leave the outer clamp loose.**


Figure E

Refer to Figure E for steps 13-16

- Step 13: Insert the pre-assembled aFe intake tube on the housing first, then to the throttle body side. Align and adjust as needed. Tighten clamps with an 8mm nut driver.
- Step 14: Install the valve cover vent hose and clamps. Trim the vent hose if needed.
- Step 15: On automatic transmission applications, connect the 3/8" vacuum hose. On manual transmission applications, confirm the provided vent cap installed in step 10 is in place.
- Step 16: Reconnect the MAF sensor and press in the red clip to secure plug. Be sure to check clearance of the MAF sensor after installation. Be sure harness clears all belts, pulleys, and the fan.



Figure F

Refer to Figure F for step 18

Step 18: Place the included CARB EO sticker on or near the device on a smooth, clean surface. EO identification label is required to pass the Smog Check Inspection.

NOTE: Retighten all connections after approximately 100-200 miles.



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Pro DRY S Air Filter



P/N: 21-45505

Pro 5R Air Filter



P/N: 24-45505

Pre-Filters



P/N: 28-10083 Black

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 Power Hat



P/N: 40-10114 S/M
P/N: 40-10115 L/XL

aFe Key Chain



P/N: 40-10103

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, 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/Transmission Pan	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.



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