

**advanced FLOW engineering** Magnum FORCE Stage-2 Air Intake System

**Instruction Manual** P/N: 54-13019D/R

Make: **Ford** Model: **F-150** Year: **2018-2020** Engine: **V6-3.3L**

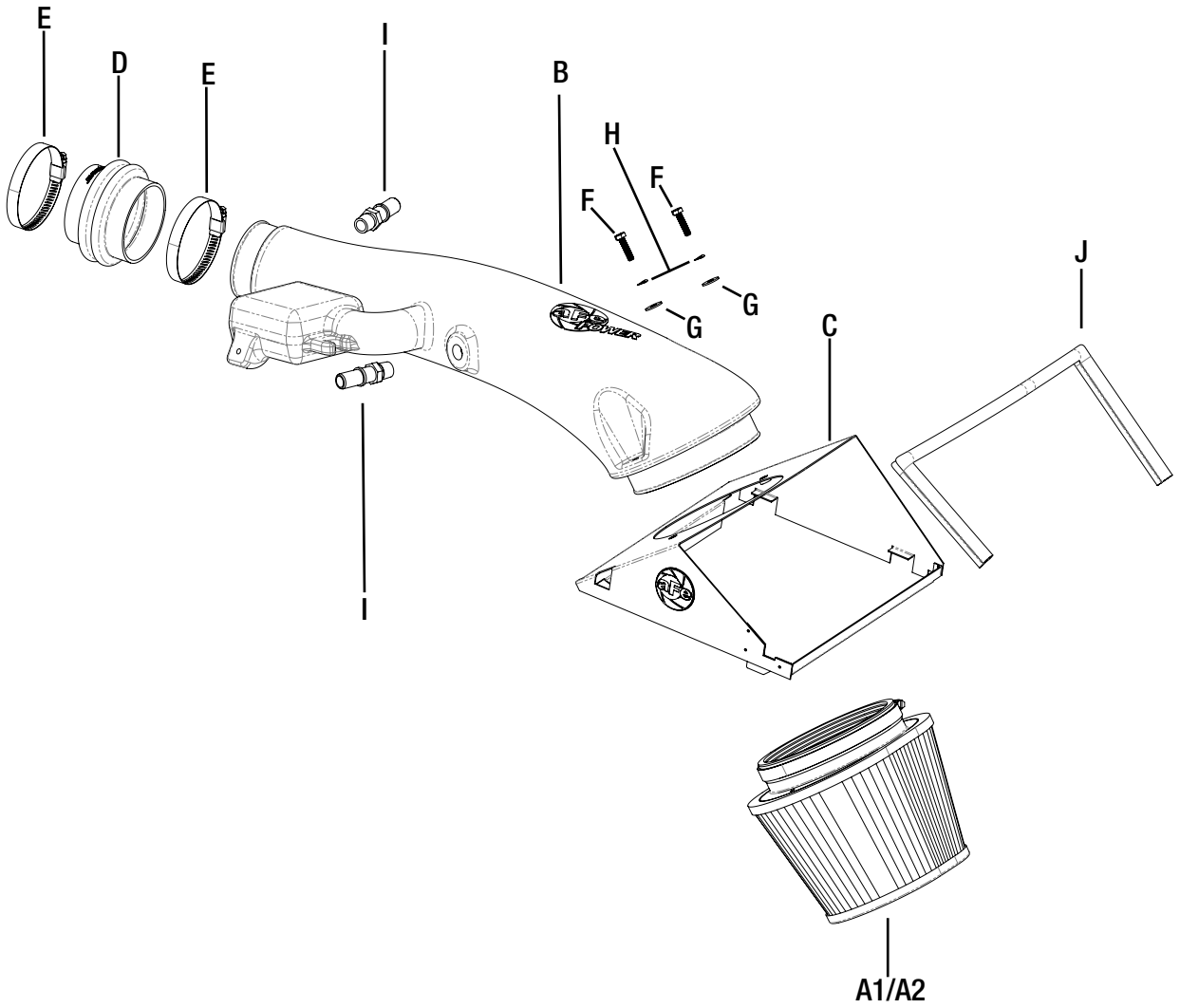


- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine 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 DRY S)	21-91040
A2	1	Air Filter (Pro 5R)	24-91040
B	1	Tube	05-5413019B1
C	1	Housing	05-32642B2
D	1	Coupler, Silicone: 3-1/4"ID x 3"L	05-01480
E	2	Clamp, 2-5/16" - 3-1/4"	03-50019
F	2	Screw: M6	03-50114
G	2	Washer, Flat: M6	03-50070
H	2	Lock Washer: M6	03-50071
I	2	Fitting, Vent Tube (large)	05-01339
J	1	Seal, Trim (23")	05-00072

Tools needed: 7mm nut driver, 8mm nut driver, 10mm nut driver or deep socket, and adjustable wrench.

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 Steps 1-2**

Step 1: Loosen the clamp at the throttle body with a 7mm nut driver.

Step 2: Unclip the two latches on the air box.

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

Step 3: Disconnect the two hose connectors on the intake tube. ①

One hose connector can be removed by lifting the yellow tabs up, pushing the retainer clip out, and then pulling back on the hose. The other hose connector has a spiral tab which must be lifted up and then twisted slightly while removing the connector.

Step 4: Carefully remove the hose-clip from the front of the intake tube. ②

Step 5: Pull the coolant hose out of the clip on the front of the intake tube.



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

Step 6: Remove the intake tube from the vehicle and store it in a safe place.

Step 7: Remove the paper air filter from the airbox and store it in a safe place.

**Figure D****Refer to Figure D for Steps 8-9**

Step 8: Wrap the threads of the billet aluminum fittings with Teflon tape prior to install.

Step 9: Use an adjustable wrench to tighten the two fittings, but do not over tighten.

There will be a gap between the hex and the intake tube even after the fitting is fully tightened.



Figure E

**Refer to Figure E for Steps 10-11**

Step 10: Place the tube into the housing as shown.

Step 11: Use a flat washer, lock washer, and bolt in each of the two holes to secure the tube to the housing. Tighten the screws with a 10mm nut driver or a socket.





Figure F

**Refer to Figure F for Steps 12-13**

Step 12: Install the trim seal onto the housing as shown. It may help to notch the lower half of the trim seal to route it around the 90-degree corners. This can be easily done with a pair of tin snips or wire cutters.

Step 13: Install the aFe air filter onto the end of the tube and align it so that the flat part of the filter is parallel to the thin bar on the front of the aFe housing. Tighten the clamp on the filter with an 8mm nut driver.



**Figure G**

**Refer to Figure G for Steps 14-15**

Step 14: Place the two clamps over the ends of the new aFe coupler and install it onto the end of the intake tube.

Step 15: Install the intake into the vehicle by placing the coupler over the throttle body as shown and then aligning the aFe housing with the lower half of the stock air box.



Figure H

**Refer to Figure H for Steps 16-17**

Step 16: After the housing is aligned with the air box, fasten the two latches on the front of the intake housing.

Step 17: It may be necessary to lift the trim seal up to fasten the latch closest to the fender, so after the latch is in place, reinstall the trim seal.

**Figure I****Refer to Figure I for Steps 18-20**

- Step 18: Reconnect the two hose connectors to the new billet aluminum fittings. The grey connector will push straight on and secure itself in place. The yellow connector will need to be pressed on to the fitting and then press in the yellow connector to lock it into place.
- Step 19: The plastic clip can be pushed into the hole on the front of the intake tube similar to the stock configuration.
- Step 20: Push the coolant hose into the clip on the front of the intake tube to secure it in place.

INSTALL



Figure J

**Refer to Figure J for Step 21**

Step 21: Tighten all hose clamps at this time and double check all of the connectors on the intake tube.

Your installation is now complete!

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



Pro DRY S Air Filter



P/N: 21-91040

Pro 5R Air Filter



P/N: 24-91040

Pro GUARD 7 Air Filter



P/N: 72-91040

Air Filter Restore Kit



P/N: 90-50001

Blue Squeeze Restore Kit



P/N: 90-50501

Gold Squeeze Restore Kit



P/N: 90-50500

SCORCHER PRO  
Performance Programmer



P/N: 77-33010

Rear Differential Cover  
W/ Gear Oil



P/N: 46-70152-WL

Rear Differential Cover



P/N: 46-70152

Rear Differential Cover



P/N: 46-70150

Intake System Cover



P/N: 54-32648-B

Pre-Filter



P/N: 28-10133

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, 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.



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