



**advanced FLOW engineering**

**Instruction Manual** P/N: 46-70170 & 46-70172

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Make: **Ford** Model: **F-150** Year: **2009-2015** Transmission: **6R80**



- 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.

## Retain factory parts for future use.

Label	Qty.	Description	Part Number
A1	1	Trans Pan - Raw, Machined Fins (46-70170)	05-60342A
A2	1	Trans Pan - Black, Machined Fins (46-70172)	05-60342
B	1	Filter Extension	05-60330
C	1	O-ring	03-50413
D	21	Screw M6 x 1.0 x 30mm bolts	03-50382
E	21	M6 washers	03-50177
F	1	Plug, Square Socket Head, 3/4"-14 NPTF Magnet	03-50222
G	1	Plug, Hex Head Socket, 1/8"-27 NPT (Zn Plt)	03-50029
H	1	Screw M6 x 8 x 1.0mm	03-50407
I	1	Fender washer	03-50412

Installation will require the following tools:

8mm Socket, Socket Driver(Ratchet), 1/2" Extension, 1/2" Ratchet, 5/32" allen wrench, 5mm Allen wrench  
4mm Allen wrench, Thread locker, Teflon tape, Transfer pump for oil, Lint free rags.

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.

A1



A2



D



E



F



I



G



H



B



C



Figure A

**Refer to Figure A for steps 1-3**

Step 1: Park vehicle on flat dry surface and engage the parking brake.

Step 2: Remove the belly cover on the truck by twisting the factory retainers counter clockwise.  
(If applicable)

Step 3: Using an 8mm socket, remove the 21 bolts holding the transmission pan. As you remove the transmission pan bolts, the fluid will start to drain. Drain the fluid and remove the pan.



Figure B

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

Step 4: Remove the stock filter from the transmission.

Step 5: Wipe any residual transmission fluid from the transmission with a lint free rag.

\*aFe recommends replacing filter at this time.\*





**Figure C**

**Refer to Figure C for steps 6-8**

Step 6: Install the supplied O-ring to the filter extension.

Step 7: Install the filter extension to the pick up on the filter.

Step 8: Install the filter back into the transmission.

**\*Some of the newer filters will not use the extension.**



Figure D

**Refer to Figure D for steps 9-10**

Step 9: Remove the magnet from the stock pan.

Step 10: Install the magnet on the aFe transmission pan and retain using the supplied M6x1.0x8 bolt and fender washer. Make sure to use a drop of thread locker on the bolt and carefully tighten.



**Figure E**

**Refer to Figure E for steps 11-13**

Step 11: Install teflon tape on the 3/4" NPT plug, and on the 1/8" NPT plug.

Step 12: Use a 5/32" allen wrench, install the 1/8" NPT into the transmission pan.

Step 13: Using a 1/2" extension and a 1/2" ratchet , install the 3/4" NPT plug into the transmission.





**Figure F**

**Refer to Figure F for steps 14-15**

Step 14: Using the factory gasket, install the aFe transmission pan using a 5mm allen wrench and 21 - M6 x 1 x 30mm bolts and 21 - M6 washers.

Step 15: Tighten the bolts in a crisscross pattern to 8 lb-ft.

\* Over torque of the pan bolts may cause damage to the gasket sealing bead



Figure G

**Refer to Figure G for steps 16-18**

Step 16: The transmission dipstick is located under the truck at the transmission. Fill the transmission to the factory specifications using the recommended oil. Pump the oil in the transmission through the dipstick hole. Reinstall dipstick.

**\*Note: The pan holds about 6 quarts more than stock.**

Step 17: Reinstall the belly cover on the truck using factory clips (If applicable).

Step 18: Your installation is now complete.

**\*Transmission fluid expands. Always check oil level per factory recommendations when the truck is hot.**

**\* Caution\*: A running truck will be hot. Take every precaution necessary to prevent being burned.**

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Intercooler



P/N: 46-20121

Intercooler



P/N: 46-20129-1

Throttle Body Spacer



P/N: 46-33011

Throttle Body Spacer



P/N: 46-33017

Stage-2 Air Intake System



P/N: 54-11622-B

Air Intake System



P/N: 54-12061-1

Stage-2 Air Intake System



P/N: 54-12192-P

Module



P/N: 77-43007

To purchase any of the items above, view airflow charts, dyno graphs, photos, and video; please go to [aFepower.com](http://aFepower.com).

# Warranty

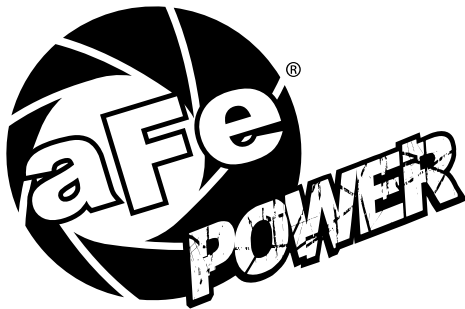
## General Terms:

- 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, TF	2 years
Air Intake Systems	50, 51, 54, 55, 75, TR, TA, TL	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
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

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.

\*See turbocharger warranty for more info



**advanced FLOW engineering, inc.**  
252 Granite Street Corona, CA 92879  
TEL: 951.493.7100