

**advanced FLOW engineering**

**Instruction Manual** P/N: 46-70280 / 46-70282 / 46-70286

Make: **RAM** Model: **1500 EcoDiesel** Year: **2014** Engine: **V6-3.0L (td)**



- 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	Oil Pan (Black Machined Fins)	05-60444B
A2	1	Oil Pan (Unpainted Machined Fins)	05-60444A
A3	1	Oil Pan (Red Machined Fins)	05-60444R
B	1	Plug, 3/4" - 14 NPTF w/Magnet	03-50222
C	1	RTV Silicone	05-60096

Installation will require the following tools:

18mm socket, 10mm deep socket, 8mm socket, Socket driver, 13mm wrench, 18mm wrench, 1/2" drive ratchet, 6" socket extension, Teflon tape, Gasket scraper, Oil drain pan

Attention:

The aFe differential cover is designed to fit the factory axle supplied as original equipment. For some applications or due to the use of certain factory options and/or aftermarket products, there may be clearance issues with the aFe differential cover and other vehicle systems.

It is the responsibility of the installer/vehicle owner to ensure that no other vehicle component come in contact with the aFe differential cover. Contact with any other vehicle component, or any modifications made to the aFe differential cover will automatically void the warranty. aFe assumes no liability, express or implied, for damage or injury to persons or property.



A1

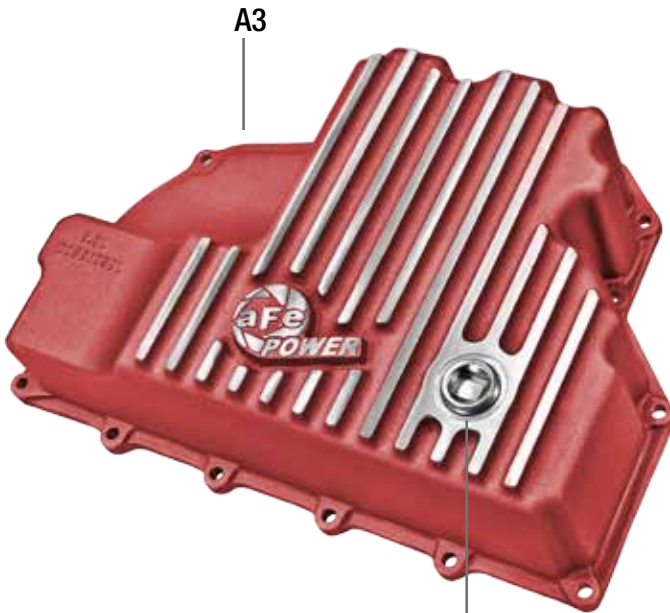
B



A2

B

C



A3

B





Figure A

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

Step 1: Park your vehicle on a flat dry surface. You will need to block the tires to prevent the vehicle from rolling.

**Note:** You will need to get under the truck to do this installation. Please use every precaution when lifting the vehicle.

Step 2: Using an 18mm socket and wrench, remove the 4 bolts from the crossmember. Remove the crossmember from the vehicle.

Step 3: Place a drain pan under the oil pan. Remove the drain plug using a 13mm wrench and allow the oil pan to drain (about 10 quarts).





Figure B

**Refer to Figure B for steps 4-6**

Step 4: Using a 10mm deep socket, remove the nut that retains the transmission cooler lines to the oil pan. Pull the transmission cooler lines down carefully off the stud and remove the studded bolt from the oil pan.

Step 5: Using an 8mm socket with a 6" extension, remove the 15 bolts from the oil pan.

Step 6: Using a gasket scraper, carefully insert the scraper between the engine block and the oil pan. Pry the oil pan off. Do not gouge the oil pan sealing surface.



Figure C

**Refer to Figure C for step 7**

Step 7: Clean the oil pan seal surface with a gasket scraper. Be Careful not to gouge the surface while cleaning.

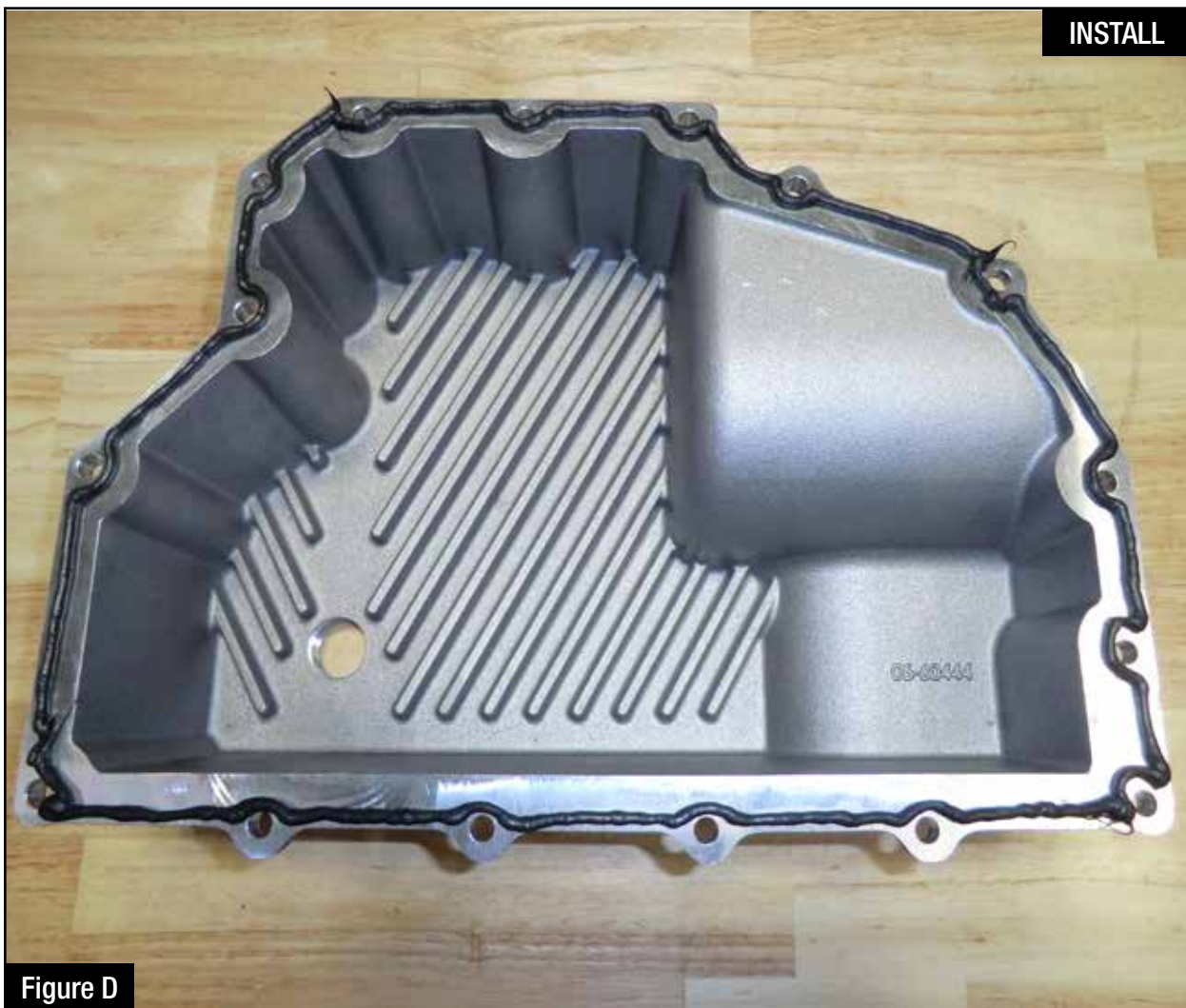


Figure D

**Refer to Figure D for step 8**

Step 8: Using the silicone provided, apply to the new aFe Oil Pan (as shown in picture above).

**Note:** Follow the instructions on the supplied silicone package for a proper seal.



**Figure E****Refer to Figure E for steps 9-13**

Step 9: Using an 8mm socket with a 6" extension, reinstall the 15 factory bolts in their original location. Snug the bolts up but do not tighten.

Step 10: Using a 10mm socket, Install the studded bolt for the transmission cooler lines and tighten.

Step 11: Tighten all of the oil pan bolts. Torque to 7-10 lbs.-ft.

Step 12: Install the transmission coolers lines onto the studded bolt and reinstall the nut and tighten.

Step 13: Apply teflon tape to the new drain plug. Using a ½" drive ratchet, install and tighten.





Figure F

**Refer to Figure F for steps 14-16**

Step 14: Using an 18mm socket and wrench, reinstall the crossmember and the factory hardware and tighten.

**Note:** aFe recommends changing the oil and the oil filter at this time.

Step 15: Install new oil into the oil fill on the truck (approximately 12-13 quarts). Make sure you have the proper level of oil on the oil dip stick. Check the pan for any leaks.

Step 16: Your installation is now complete. Drive at least 25 miles and check oil level using factory oil dip stick and fill if necessary.



Intercooler



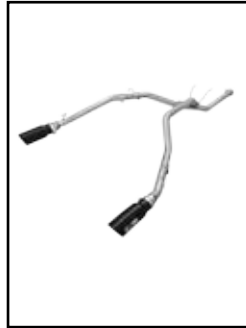
P/N: 46-20170A

Intercooler



P/N: 46-20174-R

Exhaust System



P/N: 49-42041-B

Exhaust System



P/N: 49-42044-B

Exhaust System



P/N : 49-42045-B

Differential Cover



P/N: 46-70272

Air Intake System



P/N: 50-72006

Air Intake System



P/N: 54-32572

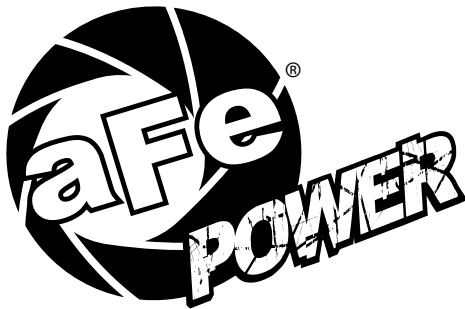
# Warranty

## 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/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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