advanced FLOW engineering

Instruction Manual P/N: 42-13012

Make: **Ford** Model: **Diesel Trucks** Year: **1999-2003** Engine: **V8-7.3L (td) (8-10 PSI)**

- **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	Fuel Manifold Assembly	05-60565
B	1	Filter, Fuel	44-FF019
C	1	Bowl, Water Separator	05-60487
D	1	Bracket, Frame; Carbon Steel	05-60554
E	1	Bolt, 1/2”-13 x 1.50”	03-50464
F	2	Washer, 1/2”	03-50494
G	1	Nut, Hex Nylon Lock: 1/2”	03-50495
H	4	Screw, Socket Head Cap M6x1.0x50mm	03-50443
I	4	Washer, M6 (Fiber)	03-50457
J	4	Washer, M6	03-50444
K	4	Nut, Flanged Nyloc: M6	03-50445
L	2	Fitting: 3/8" NPT to AN -6 (Blk Straight)	05-60634B
M	1	Harness, Pressure Switch	05-60701
N	1	Switch, Pressure	05-60542
O	1	Hose, Fuel Return	05-60696
P	12	Ties, Nylon Cable, 12"	05-60167
Q	1	Harness, Power	05-60523
R	1	Hose, Fuel Inlet	05-60697
S	1	Hose, Fuel Outlet	05-60698

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.


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Figure 1

Step 1: You will need to loosen the bed or drop the fuel tank to begin installation of the DFS780 Fuel pump.

Step 2: On the driver's side of the truck, under the driver's rear door, you will see three different sized holes. One is an oval, one is a triangle, and the other is a circle. The oval hole is the hole you will use to mount the bracket to the frame (as shown above).

Figure 2

Step 3: Mount the supplied bracket to the frame using the supplied ½”-13 x 1.50” bolt, two (2) ½” washers & ½”-13 locknut.

Figure 3

Step 4: Connect the manifold to the bracket using the four (4) supplied M6x1.0 x 50mm bolts, M6 washers, fiber washers and M6 flange nuts. The fiber washers go between the manifold and the bracket.

Step 5: Tighten the manifold to the bracket.

Figure 4

Step 6: Turn the sight glass to the desired angle and using a 1-1/4” wrench, tighten the center nut under the DFS780 manifold.

NOTE: The pump should look like the picture above.

Figure 5

Step 7: Using a light oil, lube the gasket on the fuel filter and install on the manifold. Thread the supplied water separator bowl onto the supplied fuel filter.

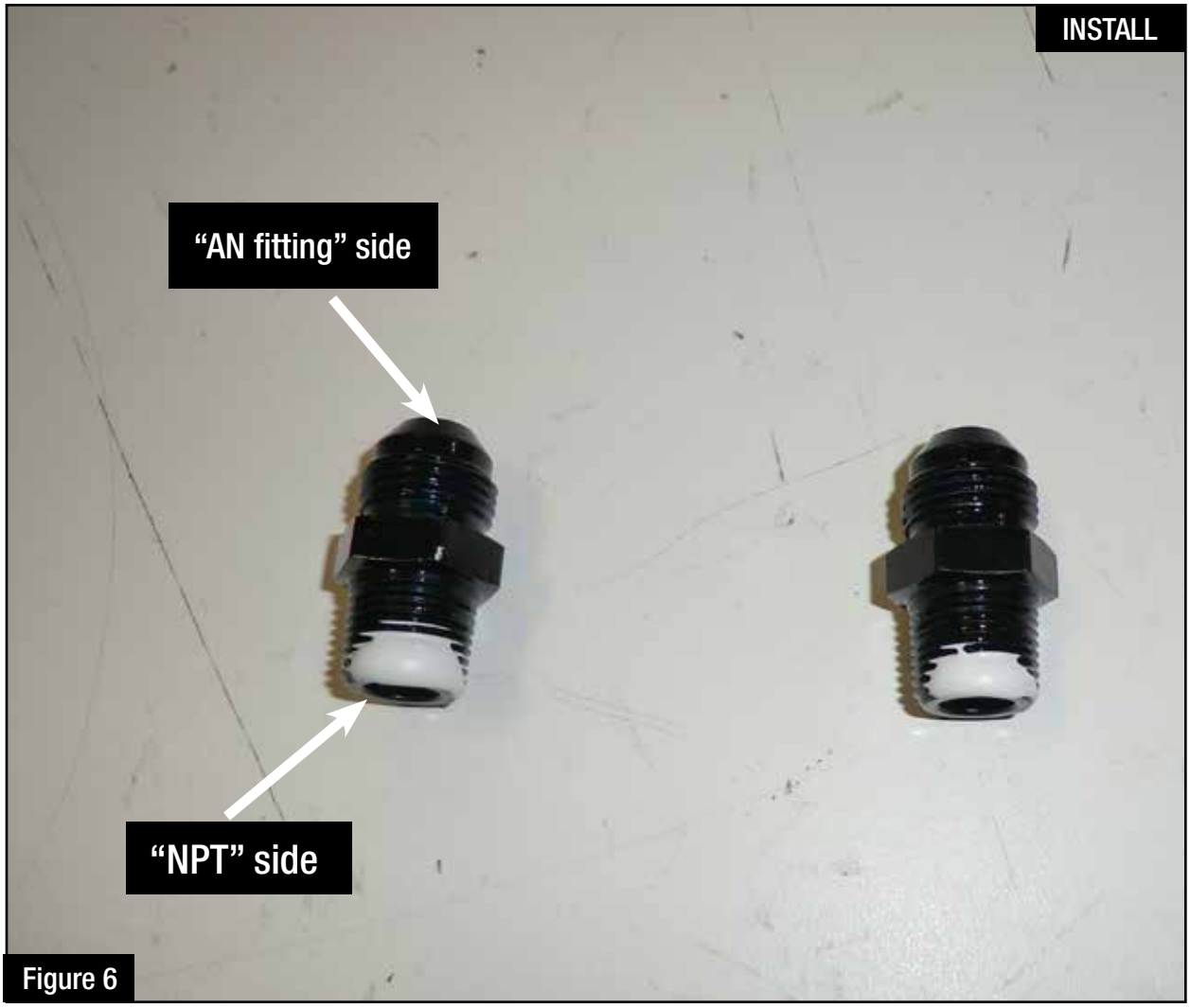

Figure 6

Step 8: Apply Teflon tape (PTFE) or Teflon paste (PTFE) to the 2 x 3/8” NPT to -6 AN fittings.

NOTE: Only apply Teflon to the NPT side of the fitting.

Figure 7

Step 9: Install the 2 x 3/8” NPT to -6 AN fittings into the DFS 780 (as shown above)

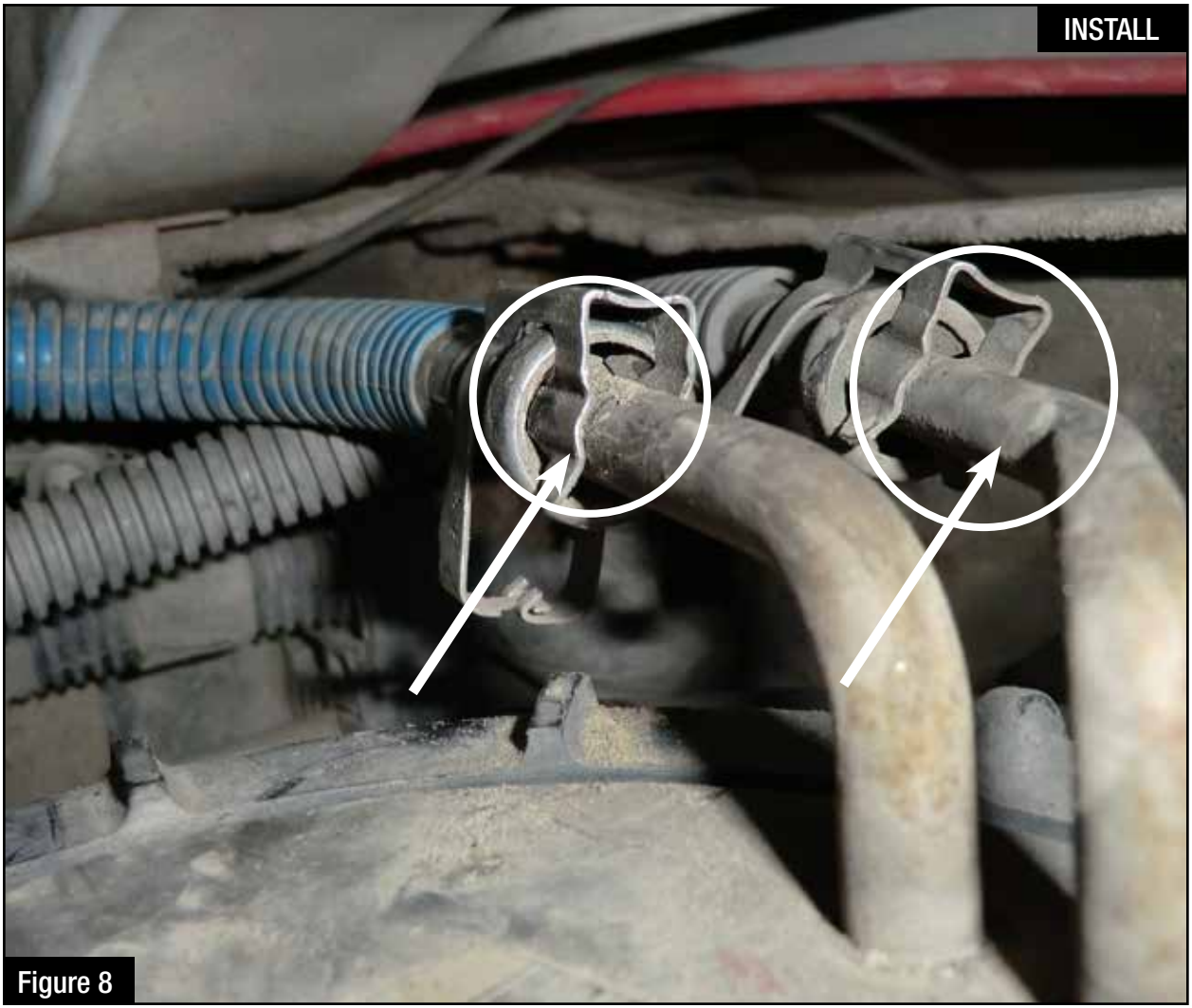

Figure 8

NOTE: If you have a 1999-2000 truck and the fittings look like the above picture, you will need a special tool to release the fuel line from the connectors.

You can get this tool at your local parts store.

Figure 9

NOTE: This is what the connections look like on the 2001 – 2003 truck.

Figure 10

Step 10: Clean the area around the fuel lines to prevent dirt and debris from going into the lines.

NOTE: 2001 model shown in the picture.

Figure 11

Step 11: Disconnect the fuel supply and the fuel return line.

NOTE: 2001 model shown in the picture.

Figure 12

Step 12: Install the supplied fuel return line to the male side of the stock return fuel line on the tank and lock the fitting.

NOTE: 2001 model shown in the picture.

Figure 13

Step 13: Install the supplied fuel outlet hose (Shown below with black 90° “AN” fitting) onto the female side of the stock fuel line.

NOTE: 2001 model shown in the picture.

Figure 14

Step 14: Install the supplied fuel inlet hose (Shown below with silver 90° “AN” fitting) onto the male side of the stock fuel line.

NOTE: 2001 model shown in the picture.

Figure 15

Step 15: Install the supply fuel line (90° silver “AN” fitting) onto the fuel inlet port of the DFS780.

Figure 16

Step 16: Install the feed fuel line (90° black “AN” fitting) onto the fuel outlet port of the DFS780.

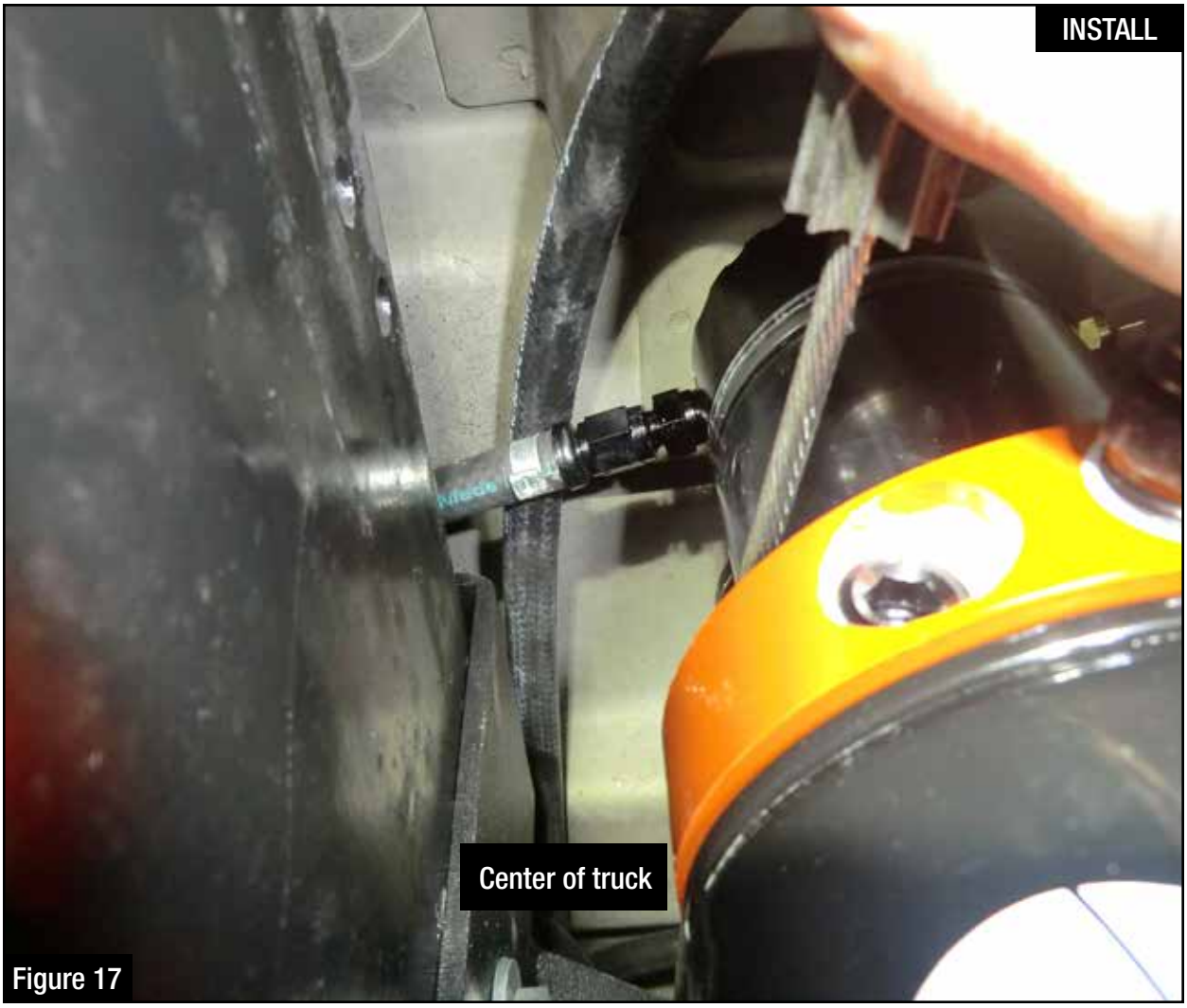

Figure 17

Step 17: Install the supplied return line (-4 AN fitting) onto the top of the DFS780.

Figure 18

Step 18: Using the supplied nylon cable ties, secure the new hoses (as shown above).

NOTE: 2001 model shown in the picture.

Figure 19

Step 19: Using the supplied nylon cable ties, secure the new hoses (as shown above).

Figure 20

Step 20: From the inside of the frame, plug the Deutsch connector of the supplied wiring harness into the mating connector on the DFS780.

Step 21: Route the supplied wiring harness along the frame towards the front of the vehicle.

Step 22: Organize the wire harness and fuel lines and secure with the supplied nylon cable ties.

Figure 21

Step 23: Run the other end of the supplied wiring harness along the frame to the engine compartment. Secure using supplied nylon cable ties.

Figure 22

Step 24: Connect the red wire ring terminal to the positive side of the battery.

NOTE: Check the fuse to make sure it is already installed in the connector.

Figure 23

Step 25: Connect the black wire ring terminal to the negative side on the battery.

Figure 24

Step 26: Install the supplied pressure sensor into the intake manifold (1/8" NPT).

NOTE: This step may require you to drill and tap a 1/8" NPT hole.

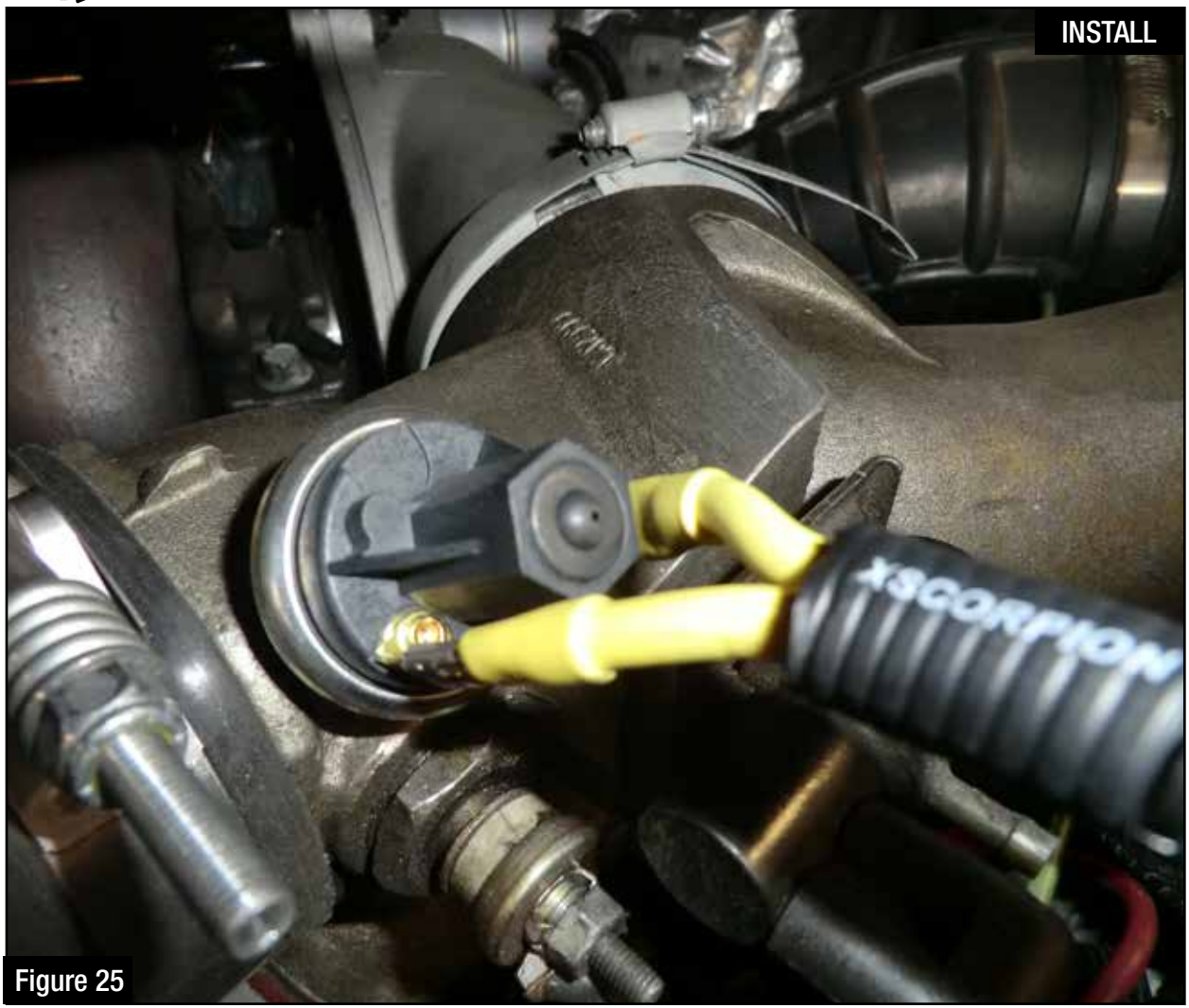

Figure 25

Step 27: Plug the supplied pressure switch harness into the pressure sensor.

Figure 26

Step 28: Plug the supplied pressure switch harness into the Deutsch connector on the power harness.
Step 29: Organize any of the loose wire harness and secure with the remaining nylon cable ties.

Figure 27

Step 30: Turn the key to the “Run” position and watch to see if the DFS780 sight glass fills with fuel. If the DFS780 sight glass does not fill with fuel, use the Schrader valve (on the top of the DFS780) to release trapped air which will allow DFS780 to fill. If DFS780 still does not fill, try starting the engine.

Step 31: Installation is now complete. Make sure that all fittings are tight and that fuel is not leaking from any of the connections made while installing.

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Turbocharger

P/N: 46-60072

Rear Differential Cover

P/N: 46-70022-WL

Transmission Pan

P/N: 46-70122-1 (Black)
46-70120-1 (RAW)

Intake System “Momentum”

P/N: 50-73002 (P10R)
51-73002 (PDS)
75-73002 (PG7)

Intake Manifold

P/N: 46-10061

Torque Converter

P/N: 43-13041

Fuel Filter

P/N: 44-FF007

Oil Filter

P/N: 44-LF004

To purchase any of the items above, view airflow charts, dyno graphs, photos, and video; please go to aFepower.com.

DFS FUEL SYSTEM
"WORRY FREE" WARRANTY POLICY

Please read this warranty policy before proceeding with the installation of this advanced FLOW engineering, Inc. (aFe) product.

aFe's obligation under the "Worry Free" Warranty is covered for two years from date of purchase. The "Worry Free" Warranty is limited to replacement of the defective or worn-out product with the same (or comparable) product in accordance with this warranty. Under no circumstances will the obligation or liability of aFe exceed the purchase price of the product as indicated on the original bill of sale. Warranties are non-transferable, contain no cash value and are only extended to the owner of the vehicle provided that the ownership has not changed since the installation of the product. This warranty does not apply to products which have been altered, modified, damaged from neglect, abuse or from an accident, misused, improperly installed, contaminated with dirt or other contaminants, or used in applications other than recommended in our printed or digital media. aFe does not provide reimbursements for delay, shipping fees, labor, mileage, or any other costs involved in installation or re-installation of the products in question.

Registration Process:

Simply register your DFS Fuel System product online at http://www.aFepower.com/reg

Claim Process:

To file a warranty claim, customers are required to submit their information using the warranty claim form online at http://afepower.com/inquiries/tech-warranty.php

All Warranty Claims require: 1) Online registration of the product. 2) If item has not been registered online, then a copy of your original purchase receipt is required. 3) An image of the warrantied part. 4) An image showing the serial number on the warranty card or the barcode label on the box. You may be required to return the part for inspection and you may be required to purchase a new replacement part while the warranty claim is being processed. Once the warranty claim has been reviewed and approved, aFe will provide you with a refund of the replacement purchase price. aFe's obligation under the "Worry Free" Warranty is limited to replacement of the defective or worn-out product (excluding finish) with the same (or comparable) product in accordance with this warranty. In addition this warranty does not cover fuel filters, which need to be replaced when worn. Warranty is valid provided aFe instructions for installation were properly followed.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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