



advanced FLOW engineering

DFS 780

Instruction Manual P/N: 42-13051

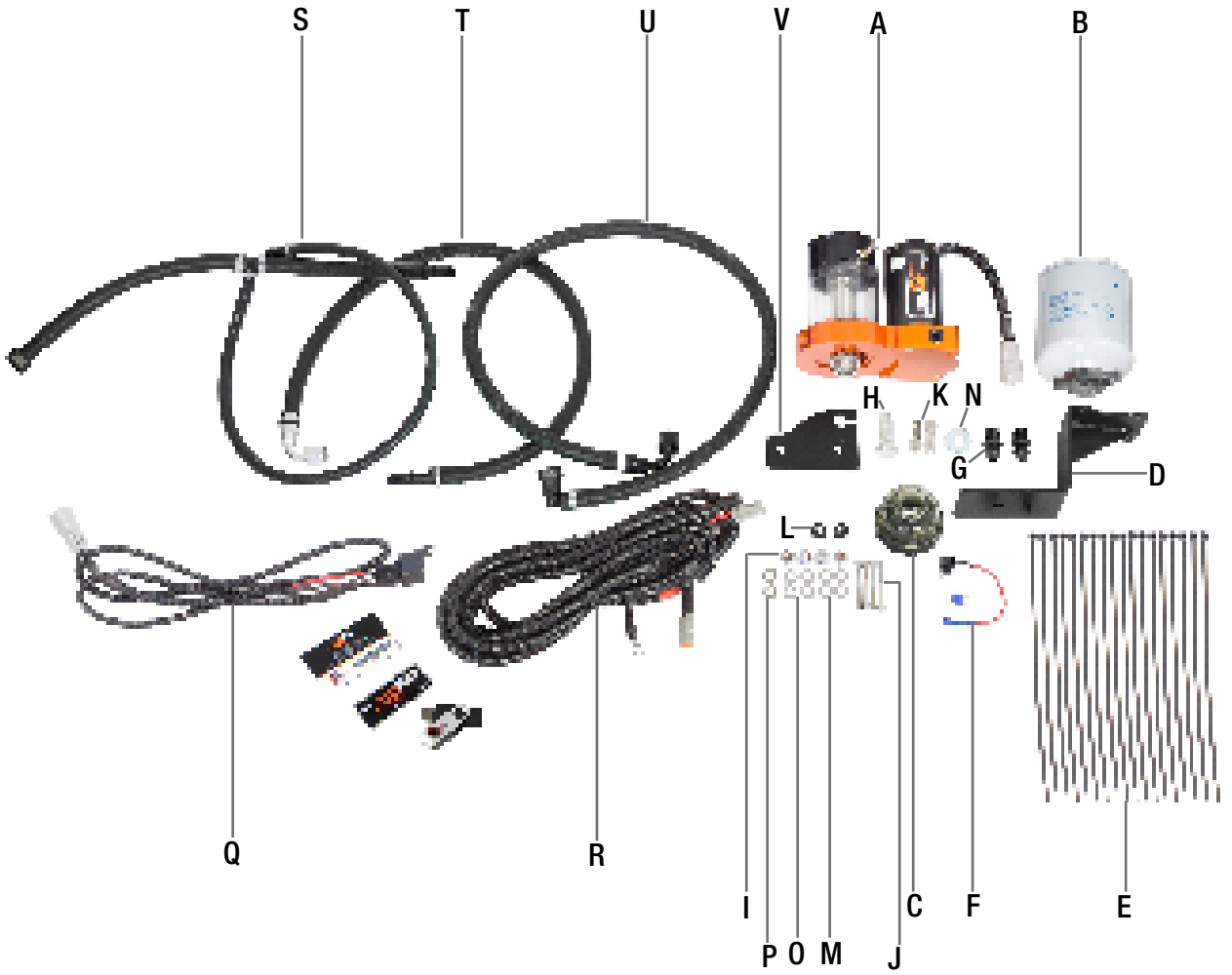
Make: **Ford** Model: **F-250/F-350** Year: **2017-2018** Engine: **V8-6.7L (td) Power Stroke**
Fuel Pressure: **8-10 psi (relay controlled)**



- 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	05-60478
B	1	Filter, Fuel	44-FF018
C	1	Bowl, Water Separator	05-60786
D	1	Bracket, Frame; Carbon Steel	05-60801
E	18	Ties, Nylon Cable: 12"	05-60167
F	1	Adapter, Fuse; Add a Harness	05-60691
G	2	Fitting. 3/8" NPT to -8 AN (Straight)	05-60685
H	1	Screw, Cap: 1/2"-13 - 1-1/2" Zinc	03-50464
I	4	Nut, Flanged Nyloc: M6 Zinc	03-50445
J	4	Screw, Socket Hd Cap: M6	03-50443
K	2	Screw, Socket Hd Cap: 3/8"-16 x 1.00"	03-50229
L	2	Nut, Flanged Serrated: 3/8"-16 GR 8	05-40103
M	4	Washer, AN 1/4"	03-50444
N	1	Washer: 1/2"	03-50494
O	4	Washer, Fiber: 1/4"	03-50457
P	2	Washer, Flat: 3/8" AN	03-50230
Q	1	Harness, Stand Alone Relay	05-60551
R	1	Harness, Power	05-60523
S	1	Hose, Fuel Return	05-60843
T	1	Hose, Fuel Inlet	05-60844
U	1	Hose, Fuel Outlet	05-60845
V	1	Bracket, E-Brake	05-60823

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.





Picture (1 of 2)

Step 1: Locate the transmission crossmember below the driver's door.



Step 2: Mount the supplied carbon steel frame bracket to the frame using the supplied 1/2"-13 x 1.50" bolt & 1/2" washer and tighten.



Step 3: Remove the parking brake cable from its forward mount on the frame (under the drivers door).



Step 4: Mount the supplied E-Brake bracket to the frame mount for the factory parking brake cable with the supplied hardware and tighten (as shown above).

- (2) 3/8" x 16" x 1" Bolt
- (4) 3/8" Washers
- (2) 3/8" Flanged Nut



Step 5: Mount the supplied fuel manifold assembly to the carbon steel frame bracket using the supplied hardware and tighten.

- (4) M6x1.0 x 50mm bolts
- (4) M6 washers
- (4) M6 fiber washers
- (4) M6 flanged locknuts

Note: The fiber washers go between the fuel manifold assembly and the carbon steel bracket.



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

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



Step 7: Install the 2 x 3/8" NPT to -8 AN fitting into the DFS 780 (as shown above).



Step 8: Turn the sight glass to the desired angle and using a 1-1/4" wrench, tighten the center nut under the fuel manifold assembly.

Note: The pump should look like the picture above.



Step 9: Using a light oil, lube the gasket on the supplied fuel filter and install on the fuel manifold assembly. Thread the supplied water separator bowl onto the fuel filter.



Step 10: Clean the area around the stock fuel lines (located on the driver's side, in front of the tank) to prevent dirt and debris from going into the lines.



Step 11: Disconnect the (yellow) fuel supply hose.

Step 12: Install the straight male quick disconnect fitting on the supplied fuel inlet hose (silver 90° -8 AN fitting - shown below) into the female side of the stock fuel feed line.





Step 13: Install the 90° female quick disconnect fitting on the supplied fuel outlet hose (black 90° -8 AN fitting - shown below) onto the male side of the stock fuel feed line.





Step 14: Disconnect the (red) fuel return line.



Step 15: Install the straight female quick disconnect fitting on the supplied fuel return line (as shown below) onto the male side of the stock return fuel line.





Step 16: Install the male quick disconnect fitting in the supplied fuel return line (as shown below) into the female connection of the stock fuel return line.





Step 17: Install the fuel inlet hose (90° silver -8 AN fitting) onto the male -8 AN fitting on the fuel inlet port of the fuel manifold assembly.



Step 18: Install the fuel outlet hose (90° black AN fitting) onto the male -8 AN fitting on the fuel outlet port of the fuel manifold assembly.



Step 19: Install the supplied fuel return line (-4 AN fitting) onto the top of the sight glass cover.



Step 20: Using the supplied nylon cable ties, secure the new hoses (as shown above).



Step 21: From the inside of the frame, plug the Deutsch connector on the supplied power harness into the mating connector on the fuel manifold assembly.

Step 22: Route the power harness along the inside of the frame towards the front of the vehicle.

Step 23: Organize the wire harness and fuel lines and secure with the supplied nylon cable ties.



Step 24: Run the other end of the power harness along the inside of the frame into the engine compartment.



Step 25: Run the power harness across the front of the engine compartment using the supplied nylon cable ties to secure the harness.



Step 26: Connect the red wire ring terminal on the power harness to the positive side of the battery.

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



Step 27: Connect the black wire ring terminal on the power harness to the ground strap bolt located on the fender wall near the passenger side battery.



Step 28: Plug the supplied relay harness into the Deutsch connector on the power harness.



Step 29: Secure the relay harness using a supplied nylon cable tie.



Step 30: Run the power wire down the fender well to the bottom of the body. Locate the rubber isolator in the floor pan on the passenger side. This is where the wire will enter the cab.



Step 31: Remove the door sill cover by pulling it straight up (shown above).

Step 32: Remove the kick panel cover by pulling straight back.



Step 33: Pull the carpet up and locate the rubber isolator plug.

Note: You may need to cut a small hole in the isolator to allow for the wire to come through.



Step 34: Locate the passenger side fuse box (located on the passenger side behind the kick panel removed in Step 32).



Step 35: Attach the power wire from the relay harness to the supplied add a harness fuse adapter



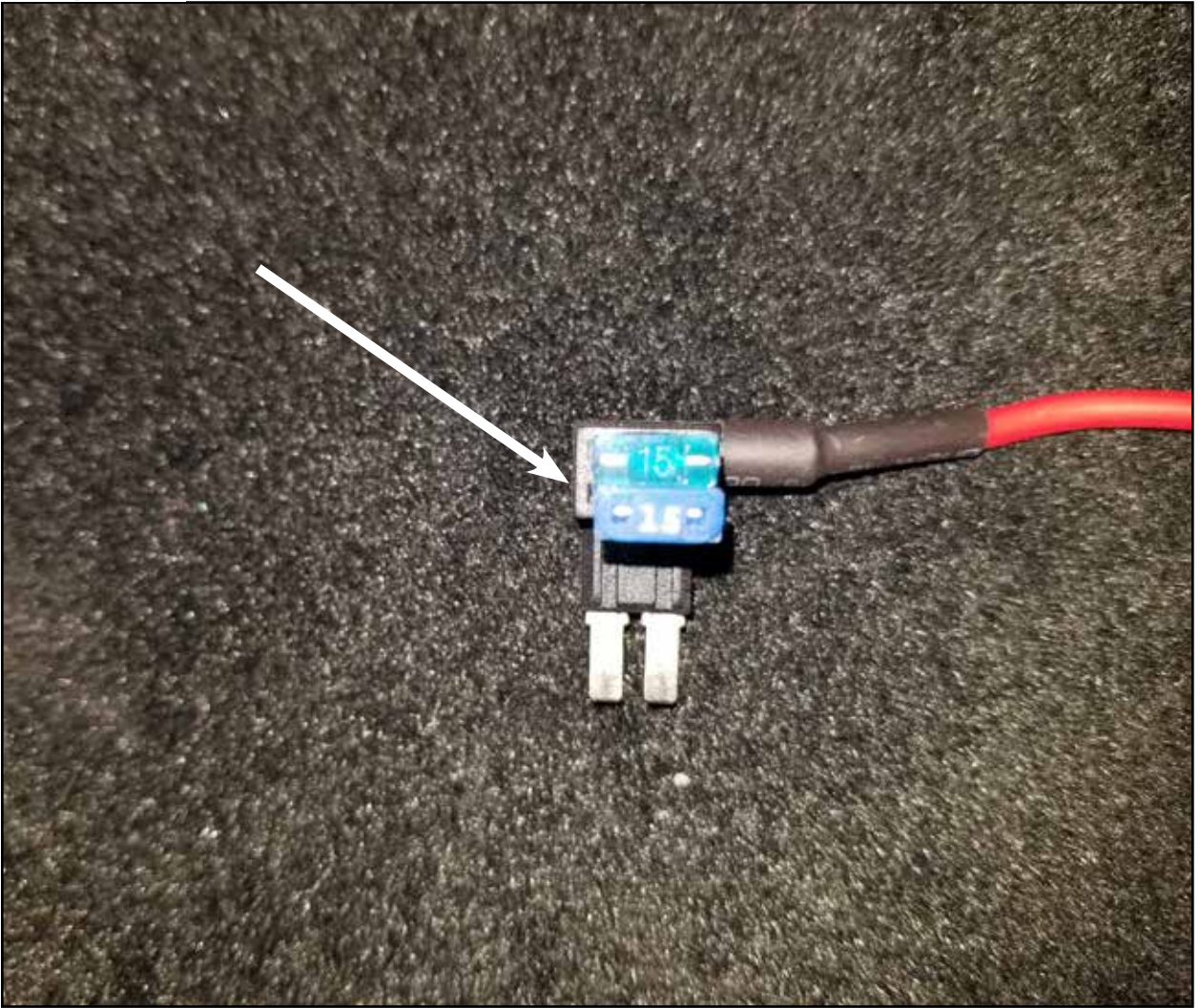
Step 36: Locate a 12-volt ignition source inside the fuse box that only comes on with the key in the “run” position. Once a 12-volt source is located, pull the fuse from the fuse box.

Locations for inline fuse adapter plug in:

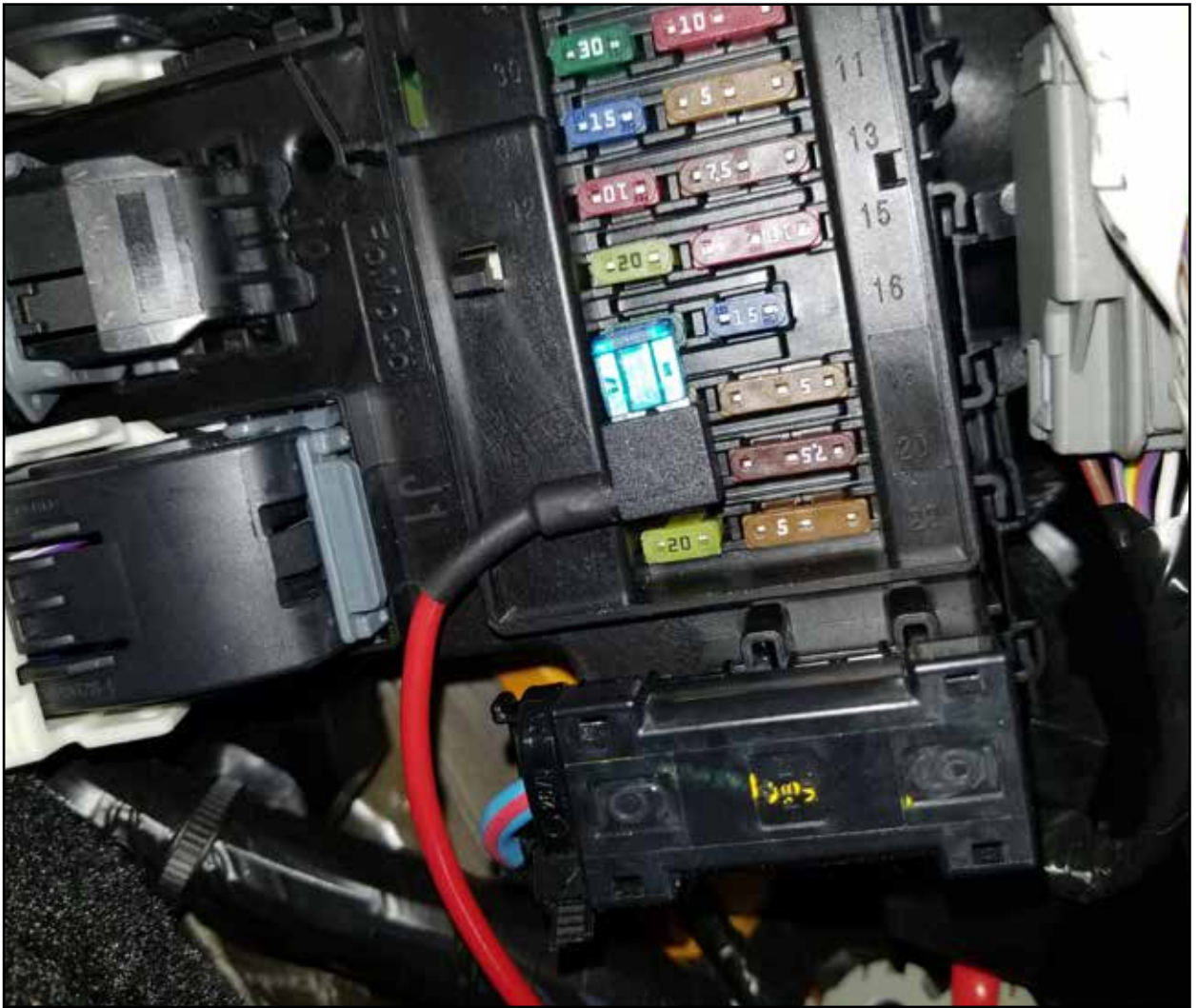
2017-

36

Lane Keeping system etc....



Step 37: Install the fuse removed in Step 36 and insert it into the open location on the add a harness fuse adapter (not in line with the wire).



Step 38: Install the add a harness fuse adapter (with installed fuses) into the 12-volt ignition source location chosen in Step 36.



Step 39: Lay the carpet back down.

Step 40: Reinstall the Kick panel.

Step 41: Reinstall the door sill.



Step 42: 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 sight glass) to release trapped air which will allow the DFS780 sight glass to fill. If the DFS780 sight glass still does not fill, try starting the engine.

Step 43: 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.

NOTE: Place enclosed CARB EO sticker on or near the device on a smooth, clean surface. EO identification label is required to pass the smog test inspection.



Page left blank intentionally

Page left blank intentionally

SCORCHER HD Module



P/N: 77-43020

Cold Air Intake



P/N: 50-73006 (P10R)
51-73006 (PDS)

Dynamic Air Scoop



P/N: 54-73006-S

Sprint Booster V3



P/N: 77-13001

DPF-Back Exhaust



P/N: 49-43092-P (Pol. Tips)
49-43092-B (Blk. Tips)

DP-Back Exhaust



P/N: 49-43093 (No Tip)
49-43093-B (Blk. Tip)
49-43093-P (Pol. Tip)

Transmission Pan



P/N: 46-70182 (Black)
46-70180 (RAW)

Engine Oil Pan



P/N: 46-70322 (Black)
46-70320 (RAW)

Rear Differential Cover



P/N: 46-70022-WL (w/ Oil)
46-70020 (RAW)

4" Race Pipe



P/N: 49-43099NM

OE Replacement Filter



P/N: 10-10139 (P5R)
11-10139 (PDS)

Intercooler Tubes



P/N: 46-20314-B

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.



advanced FLOW engineering, inc.
252 Granite Street Corona, CA 92879
TEL: 951.493.7100 • TECH: 951.493.7100 x23
E-Mail: Tech@aFepower.com