

advanced FLOW engineering

Instruction Manual P/N: 42-12032

Diesel Fuel System

Make: **Dodge** Model: **Diesel Trucks** Year: **2005-2010** Engine: **L6-5.9L / 6.7L**



- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- 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	05-60504
E	1	Spacer, Bracket	05-60577
F	2	Washer, 5/8"	03-50458
G	1	Nut, Hex: 5/8"-11	03-50450
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 (Installed)	05-60509
M	1	Harness, Pressure Switch	05-60540
O	1	Hose, Fuel Return	05-60570
P	1	Screw, Cap: 5/8"-11 x 8"	03-50449
Q	12	Ties, Nylon Cable, 12"	05-60167
R	1	Harness, Power	05-60523
S	1	Hose, Fuel Inlet	05-60568
T	1	Hose, Fuel Outlet	05-60569
U	1	Switch, Pressure	05-60542

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

Note: The bed will need to be removed or the fuel tank needs to be removed prior to step number 1.

Step 1: Connect the bracket to the manifold using the four (4) supplied M6x1.0 x 50mm bolts, M6 washers and M6 flange nuts.



Figure 2

Step 2: Remove the rear differential vent hose from the shock tower.



Step 3: Remove the factory wire harness from the two mounting holes. (As circled above)

INSTALL

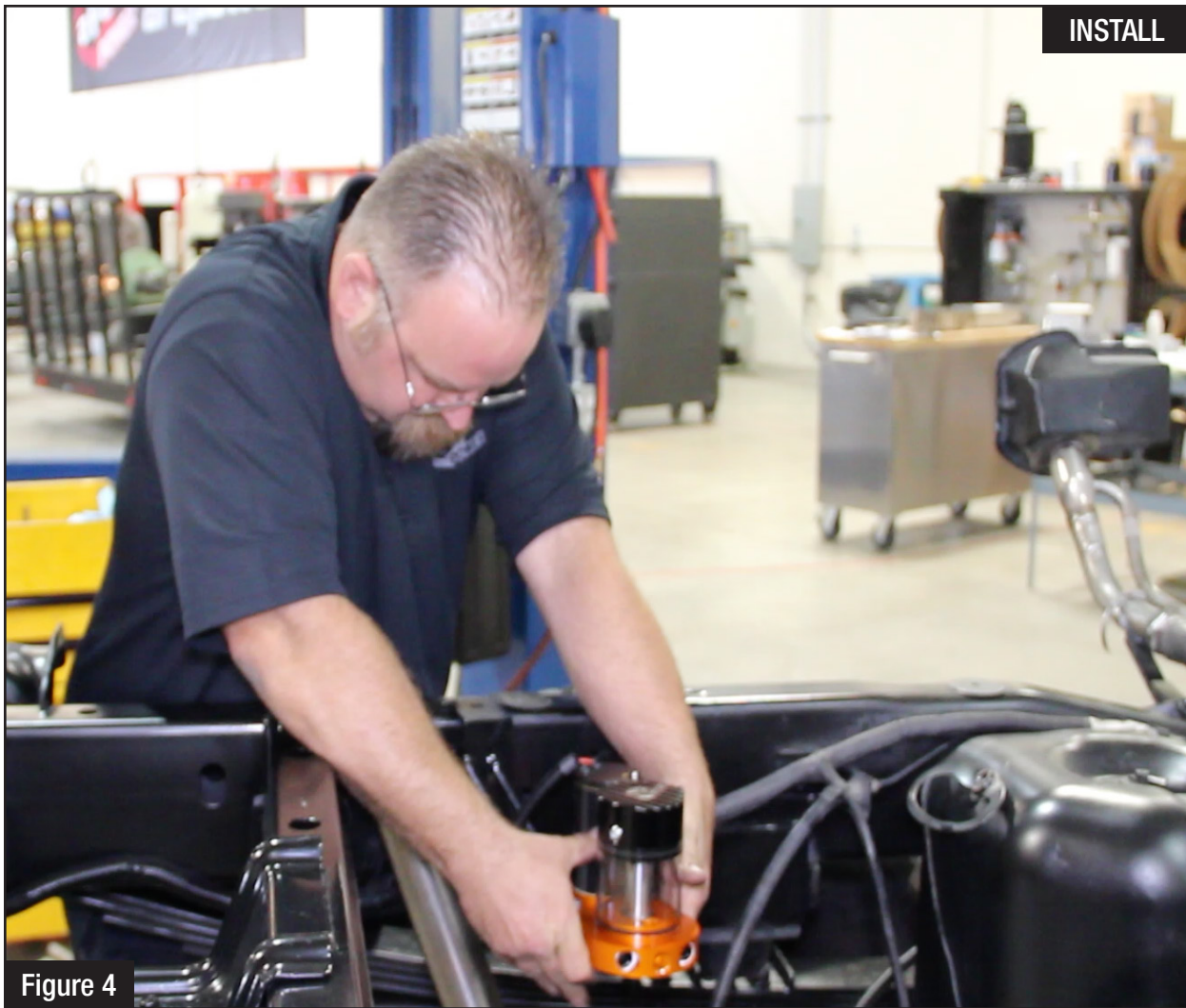


Figure 4

Step 4: Install the bracket onto the frame.

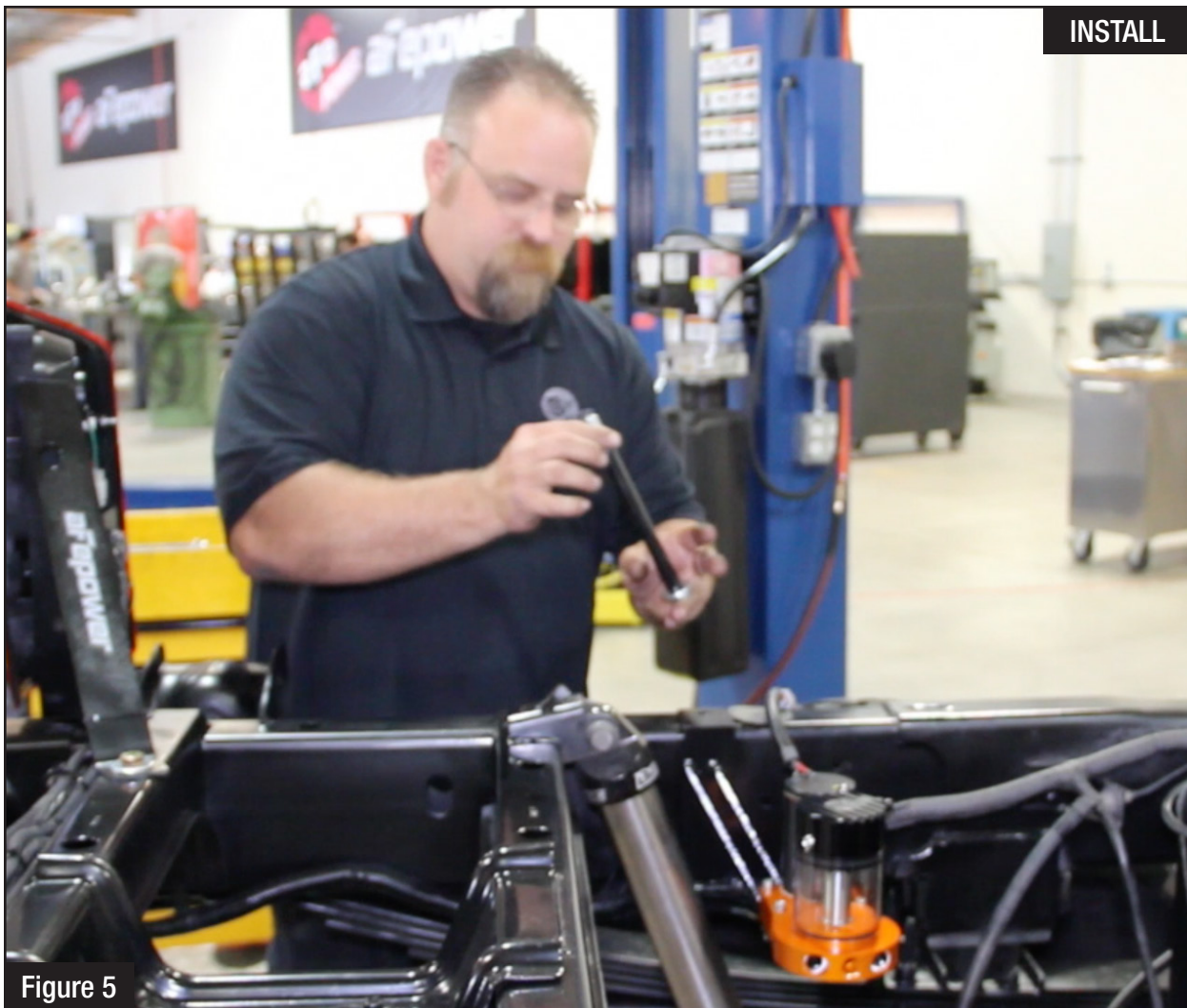


Figure 5

Step 5: Install the supplied 5/8"-11 x 8" bolt, and 5/8" washer through the bottom of the bracket into the factory hole in the frame.



Figure 6

Step 6: Install the other supplied 5/8" washer and 5/8" nut onto the bolt and tighten using a 15/16" wrench and socket.



Figure 7

Step 7: The mounting tab located on the stock wire harness, needs to be cut off.
(Location shown above)

INSTALL



Figure 8

Step 8: Reattach the differential vent tube back onto the shock tower. Reinsert the stock wire harness back into the stock mounting location.

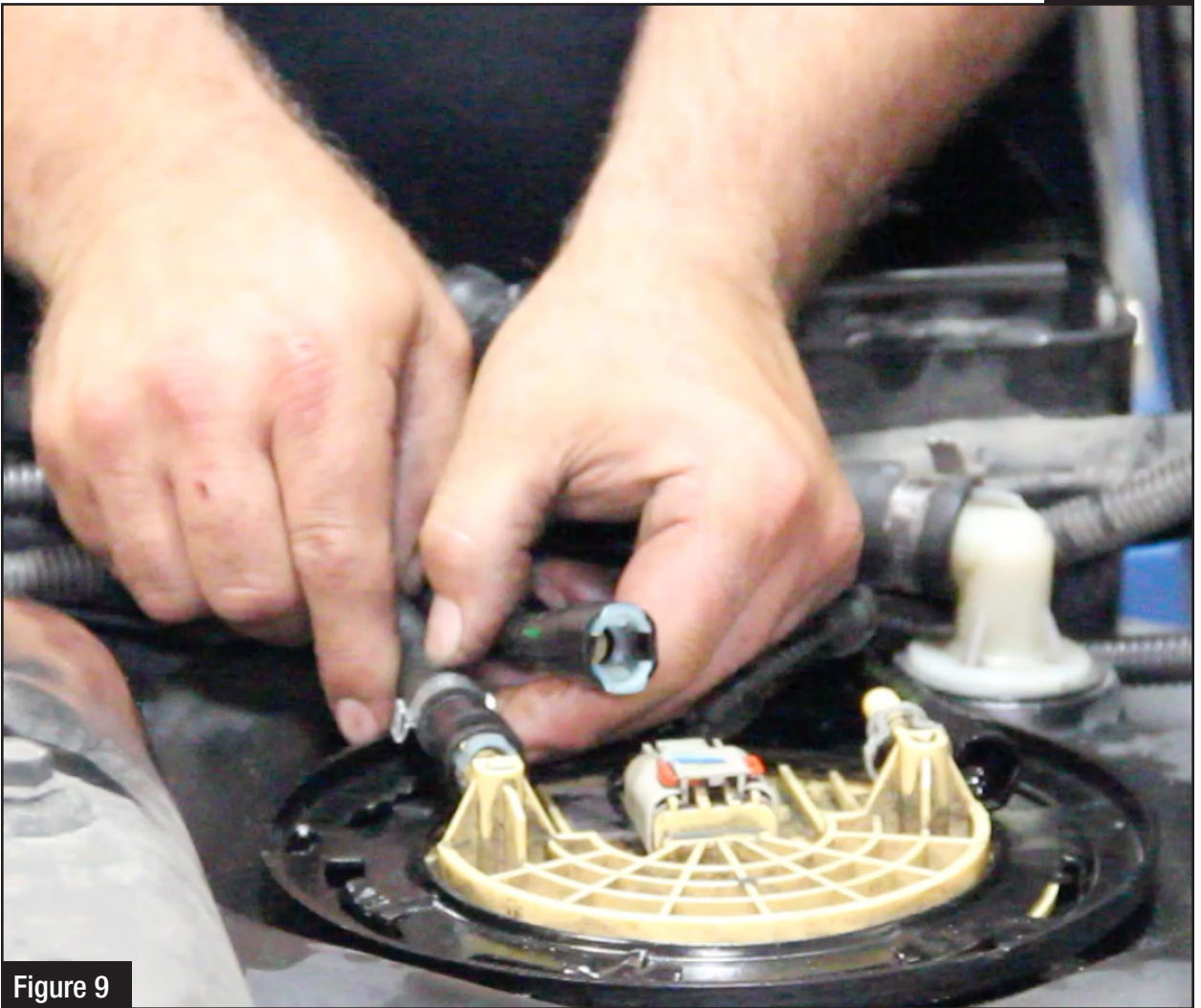


Figure 9

Step 9: Install the supplied fuel line (silver “AN” fitting) onto the larger (outlet) side of the fuel pump sender assembly.



Figure 10

Step 10: Install the 3/8" brass fitting on the other supplied fuel line (black "AN" fitting) into the quick disconnect fitting on the stock fuel feed line.



Figure 11

Step 11: Install the supplied fuel line (silver “AN” fitting) onto the fuel inlet port of the DFS780.



Figure 12

Step 12: Install the supplied fuel line (black “AN” fitting) onto the fuel **outlet** port of the DFS780.



Figure 13

Step 13: Turn sight glass to the desired angle and using a 1-1/4" wrench, tighten the center nut under the DFS780 manifold.

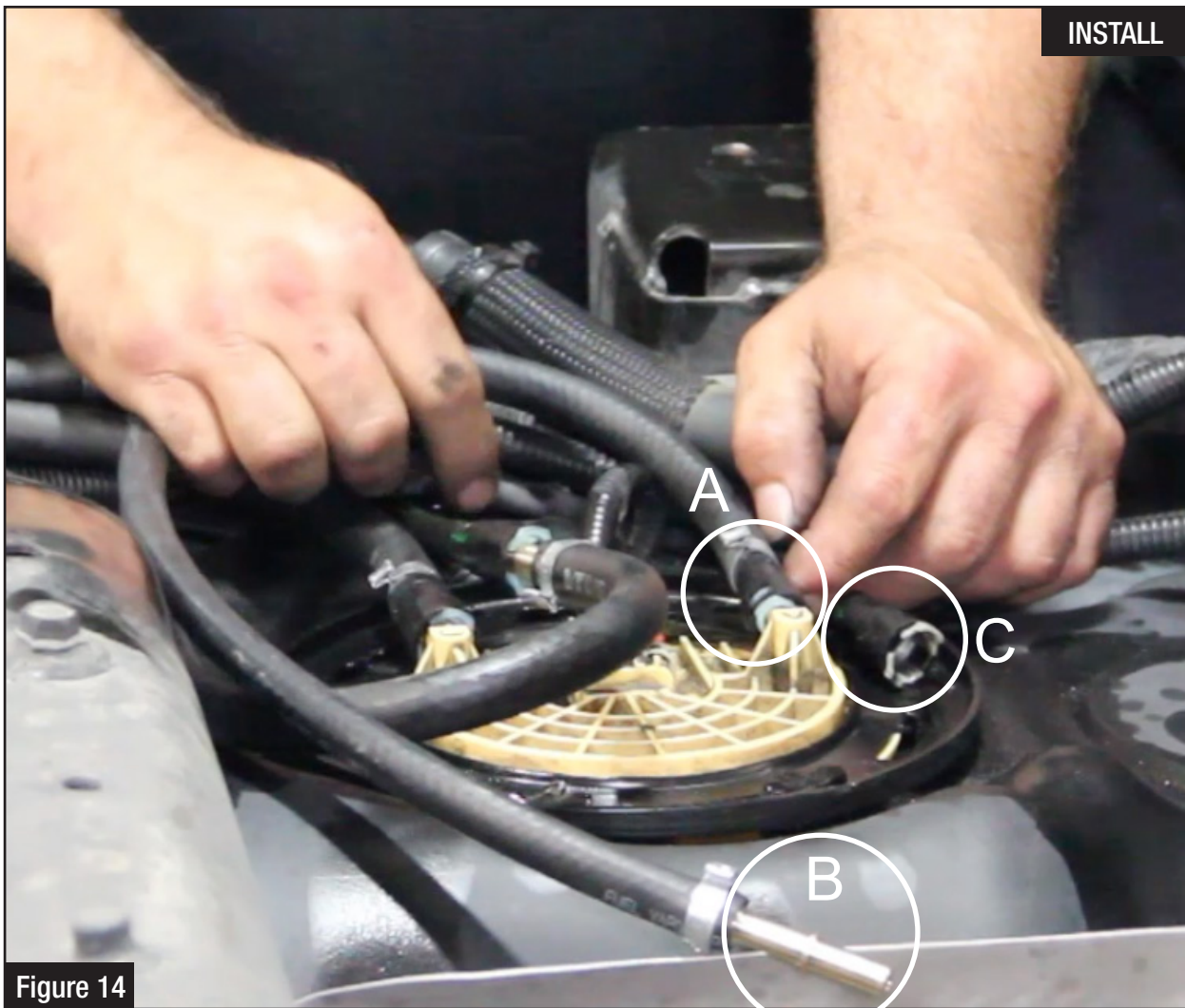


Figure 14

Step 14: Install the supplied return line (-4 AN fitting) onto the top of the DFS780.

Step 15: Route the return line along the frame following the new fuel lines.

Step 16: Install the new return line onto the inlet side of the fuel pump sender assembly.
(as shown in circle A)

Step 17: Install the 5/16" brass fitting (as shown in circle B) onto the quick disconnect fitting on the stock return line (as shown in circle C)



Figure 15

Step 18: Using a lite oil lube the gasket on the fuel filter before installation.



Figure 16

Step 19: Screw the fuel filter assembly onto the manifold and tighten.



Figure 17

Step 20: Route the supplied wiring harness along the frame.

Step 21: Plug the Deutsch connector into the mating connector on the DFS780.



Figure 18

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



Figure 19

Step 23: Run the remaining wire harness along the frame to the engine compartment. Secure using supplied zip ties.



Figure 20

Step 24: Connect the black wire ring terminal to the negative side on the battery.



Figure 21

Step 25: 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 22

Step 26: Organize any of the loose wire harness and secure with the remaining zip ties.



Figure 23

Step 27: Install the supplied pressure sensor into the intake manifold.



Figure 24

Step 28: Plug the supplied wire loom into the deutsch connector.



Figure 25

Step 29: Plug the wire loom into the connections on the pressure sensor.

Note: Check to make sure the fuse is installed in the fuse holder

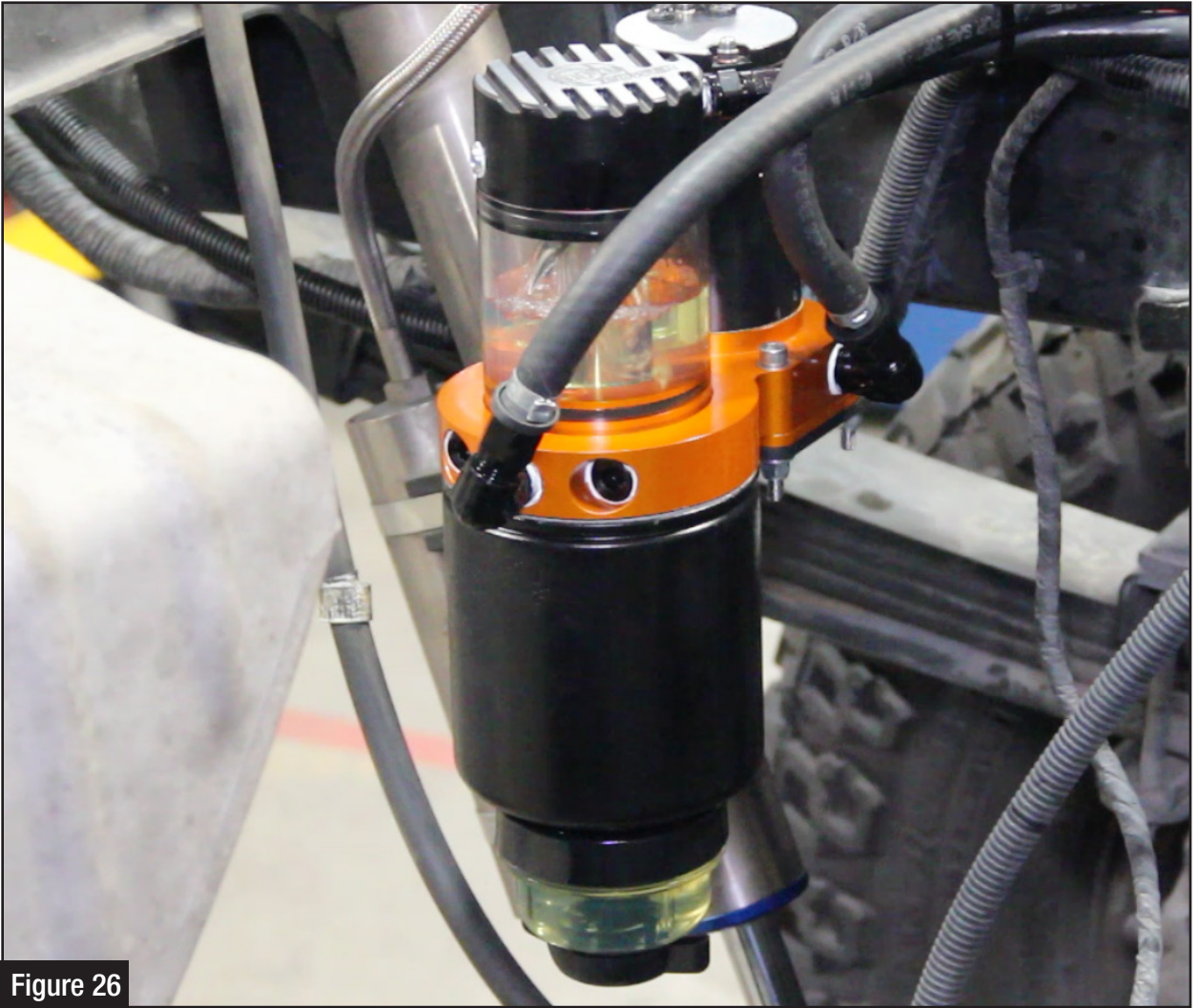


Figure 26

Step 30: Start the engine. The fuel system will begin to fill with fuel.

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.