



advanced FLOW engineering

DFS 780

Instruction Manual P/N: 42-12032/34

Make: **Dodge** Model: **2500/3500** Year: **2005-2010** Engine: **L6-5.9L / 6.7L (td)** (42-12032)

Make: **RAM** Model: **2500/3500** Year: **2011-2012** Engine: **L6-6.7L (td)** (42-12034)

Fuel Pressure: **20-22 psi (Boost Activated)**



- 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	05-60745
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 (32) / 05-60629 (34)
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 (32) / 05-60628 (34)
T	1	Hose, Fuel Outlet	05-60569 (32) / 05-60631 (34)
U	1	Switch, Pressure	05-60542





Figure 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.

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

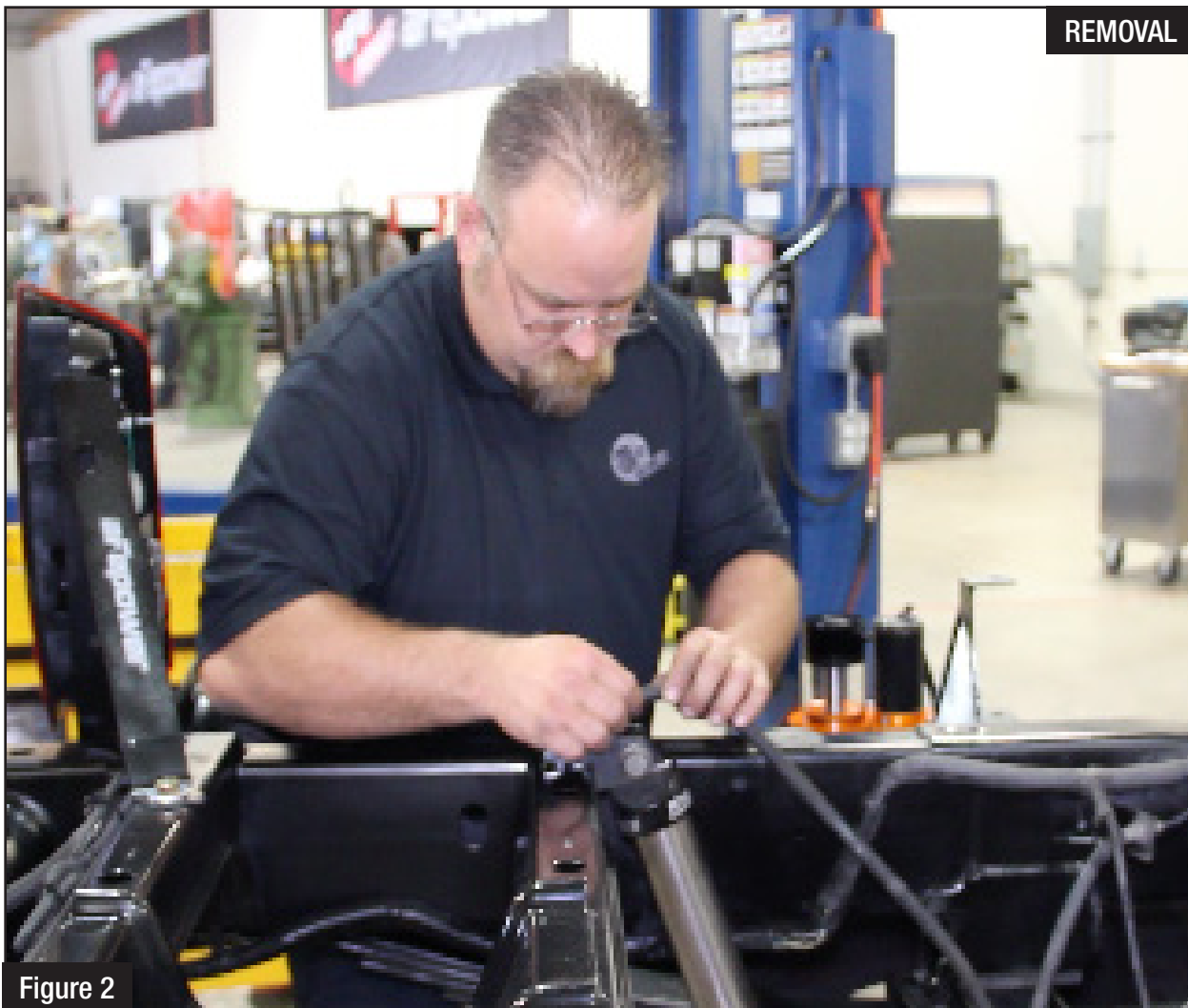


Figure 2

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)



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.

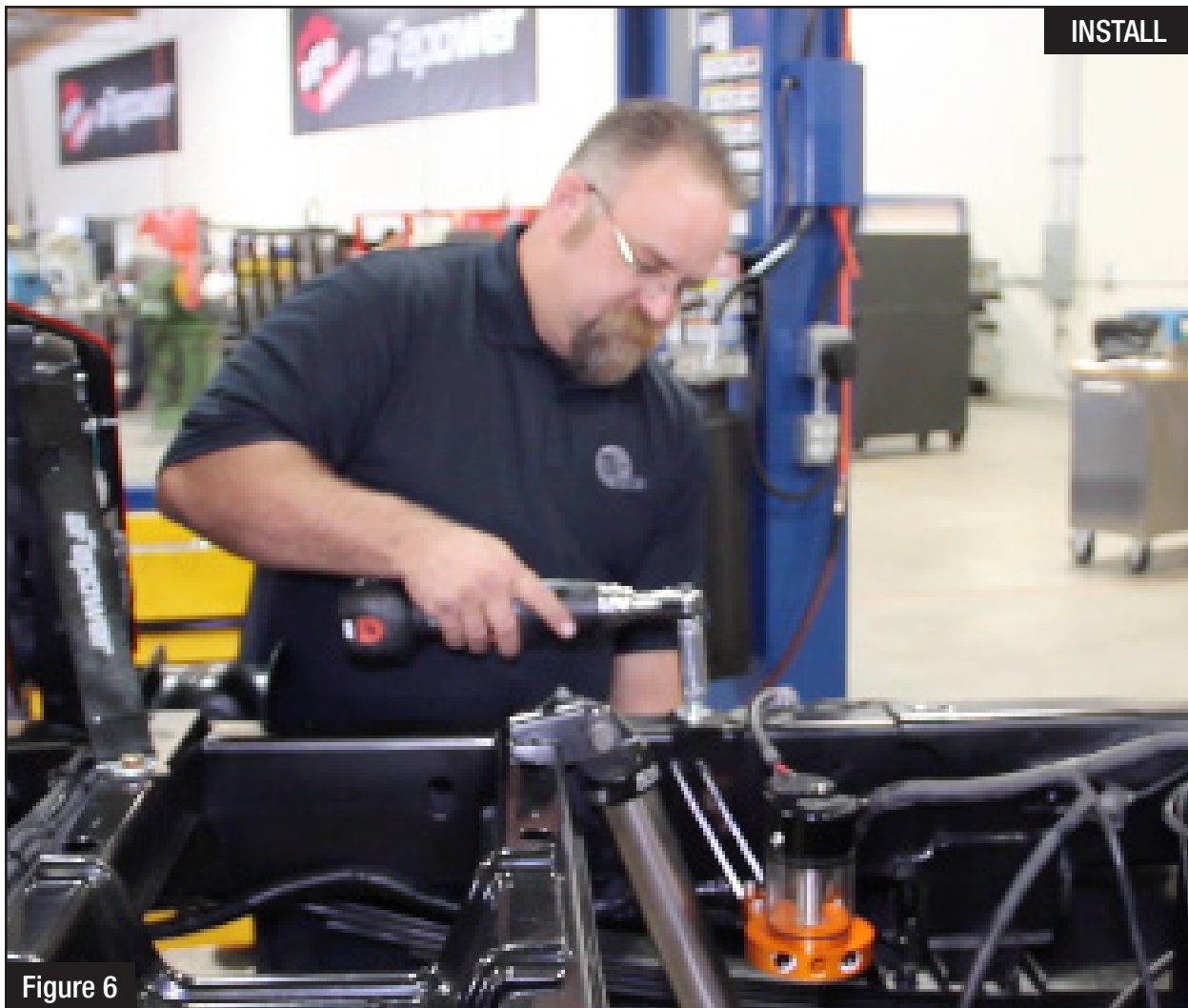


Figure 6

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.



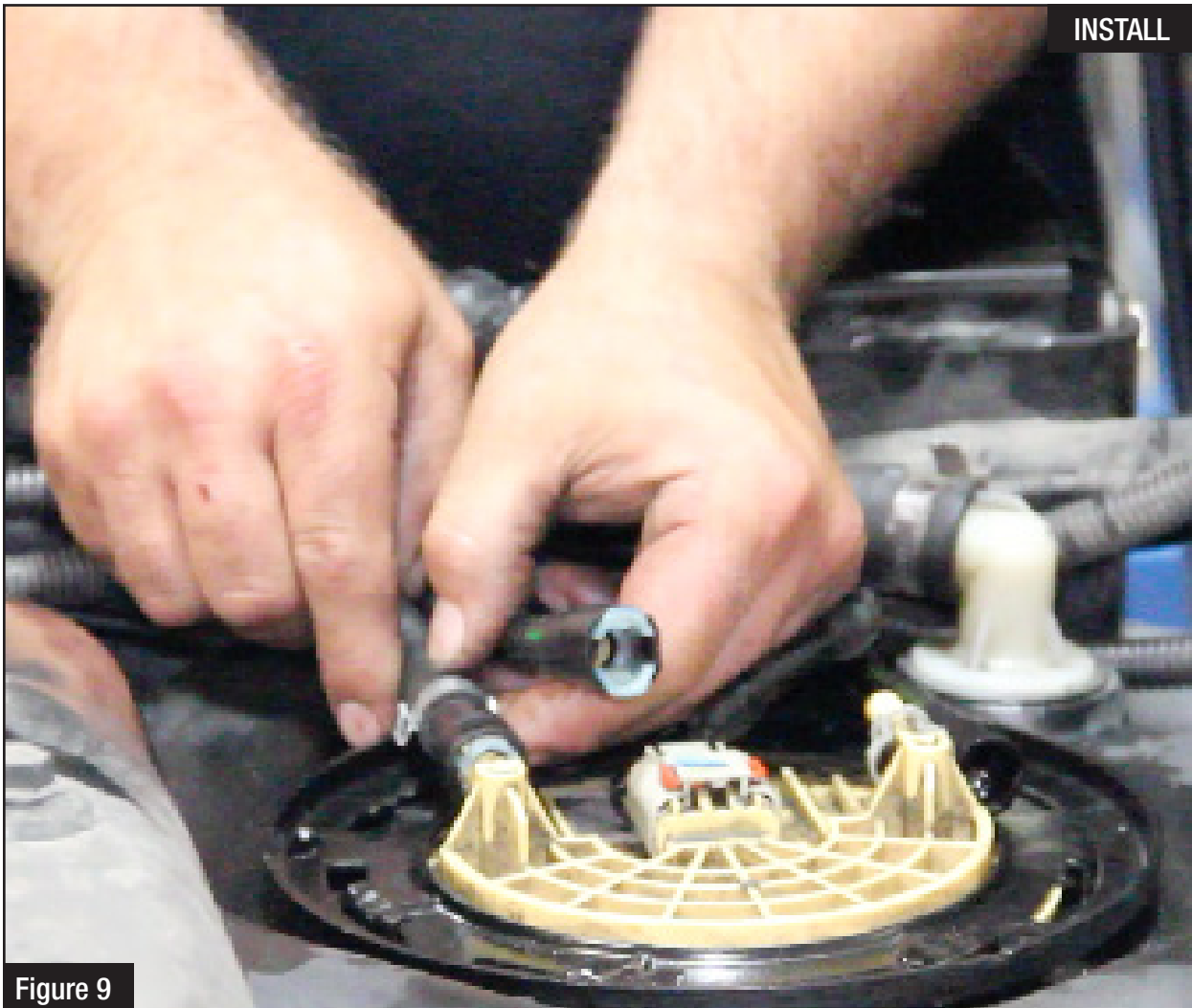
Figure 7

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



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: Remove the stock fuel feed line and return line from the fuel pump sender assembly.

Step 10: Install the supplied inlet fuel line (with silver “AN” fitting) onto the larger (outlet) side of the fuel pump sender assembly.

**Note: 2005-2010 Fuel pump sender assembly shown in picture.
2011-2012 models slightly different from picture above.**

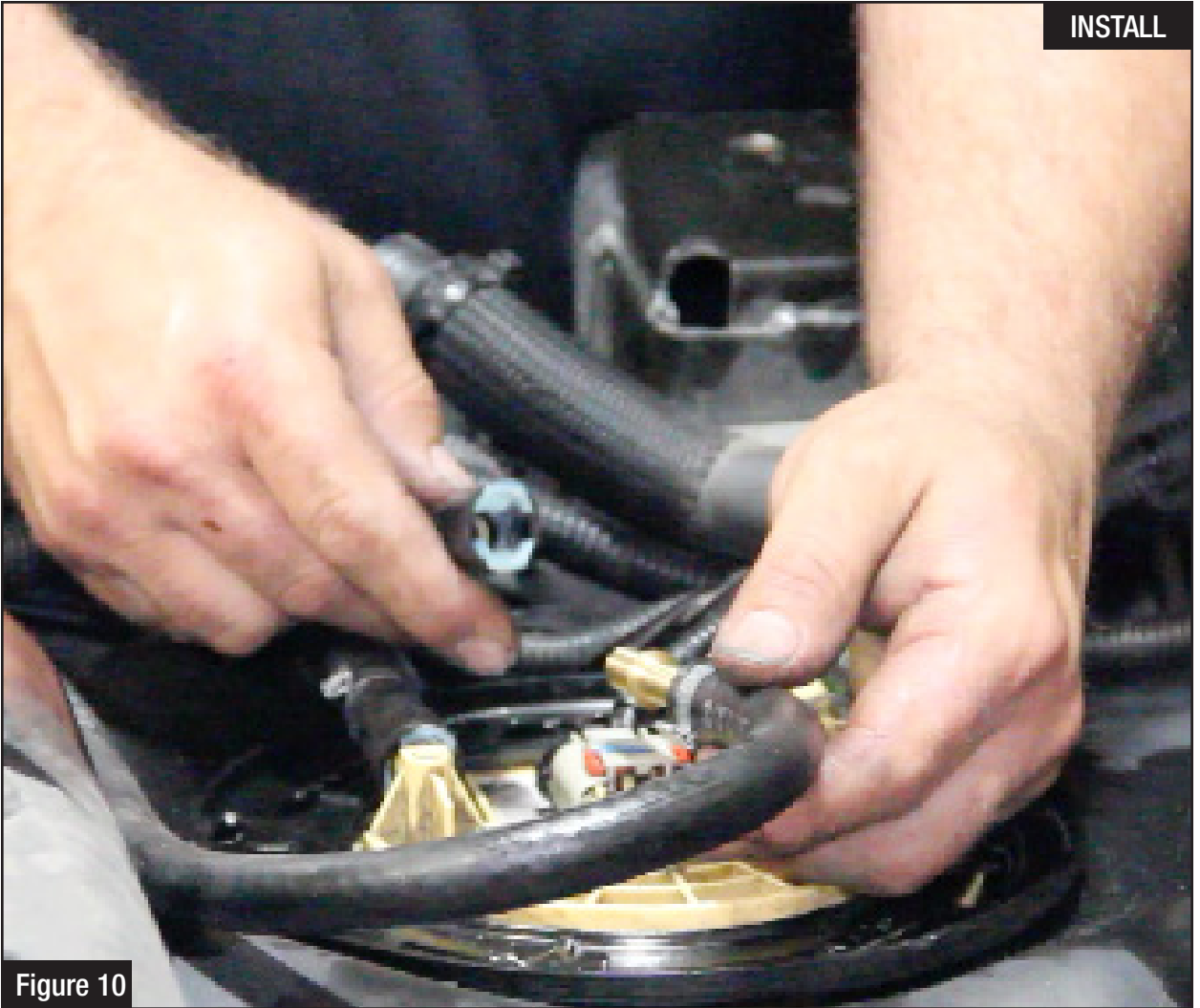


Figure 10

Step 11: Install the 3/8" quick disconnect fitting on the supplied outlet fuel line (with black "AN" fitting) into the quick disconnect fitting on the stock fuel feed line.



Figure 11

Step 12: Install the supplied inlet fuel line (silver “AN” fitting) onto the fuel inlet port of the DFS780.

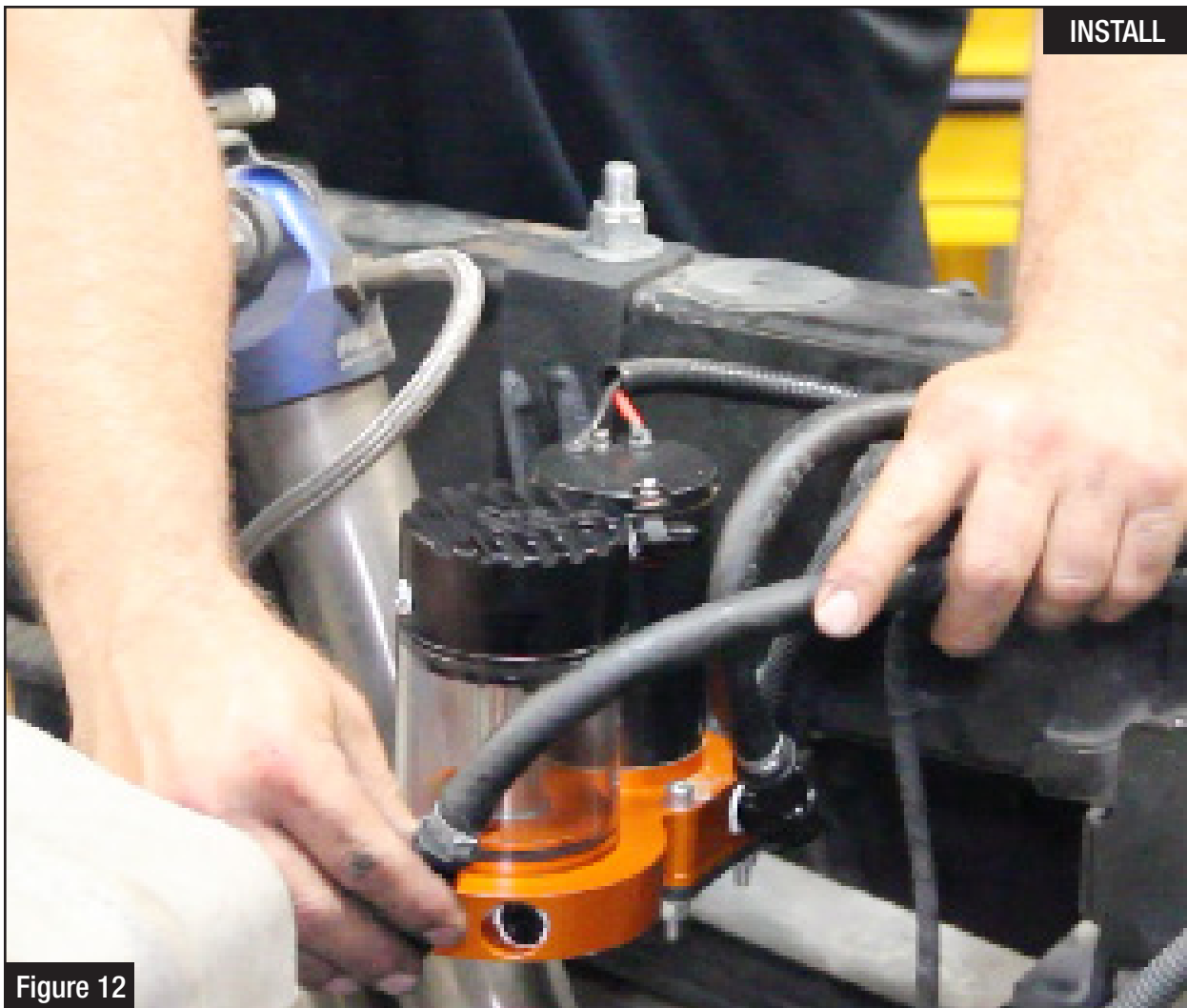


Figure 12

Step 13: Install the supplied outlet fuel line (black “AN” fitting) onto the fuel **outlet** port of the DFS780.

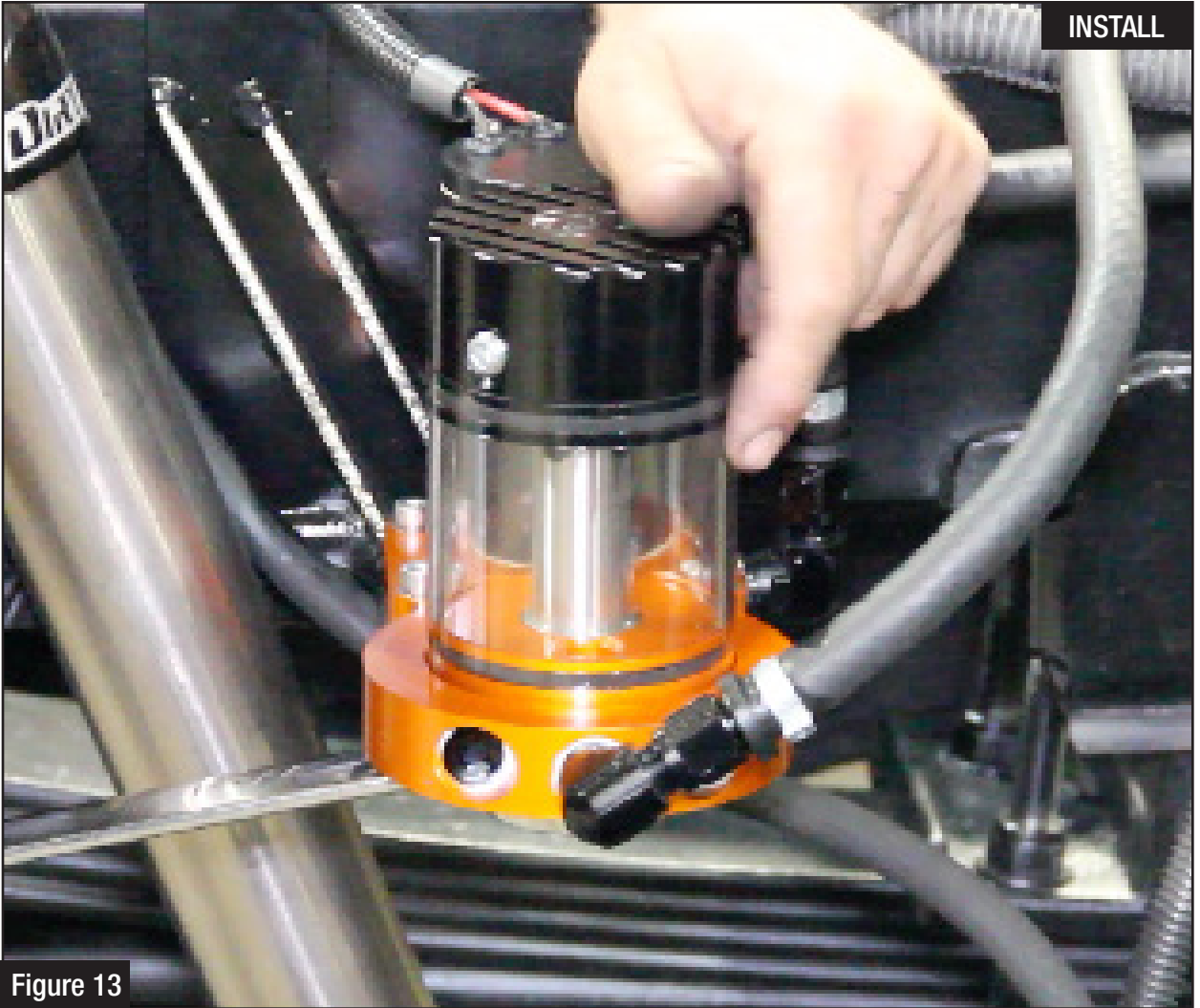


Figure 13

Step 14: Turn sight glass to the desired angle and using a 1-1/4" wrench, tighten the center nut under the DFS780 manifold.

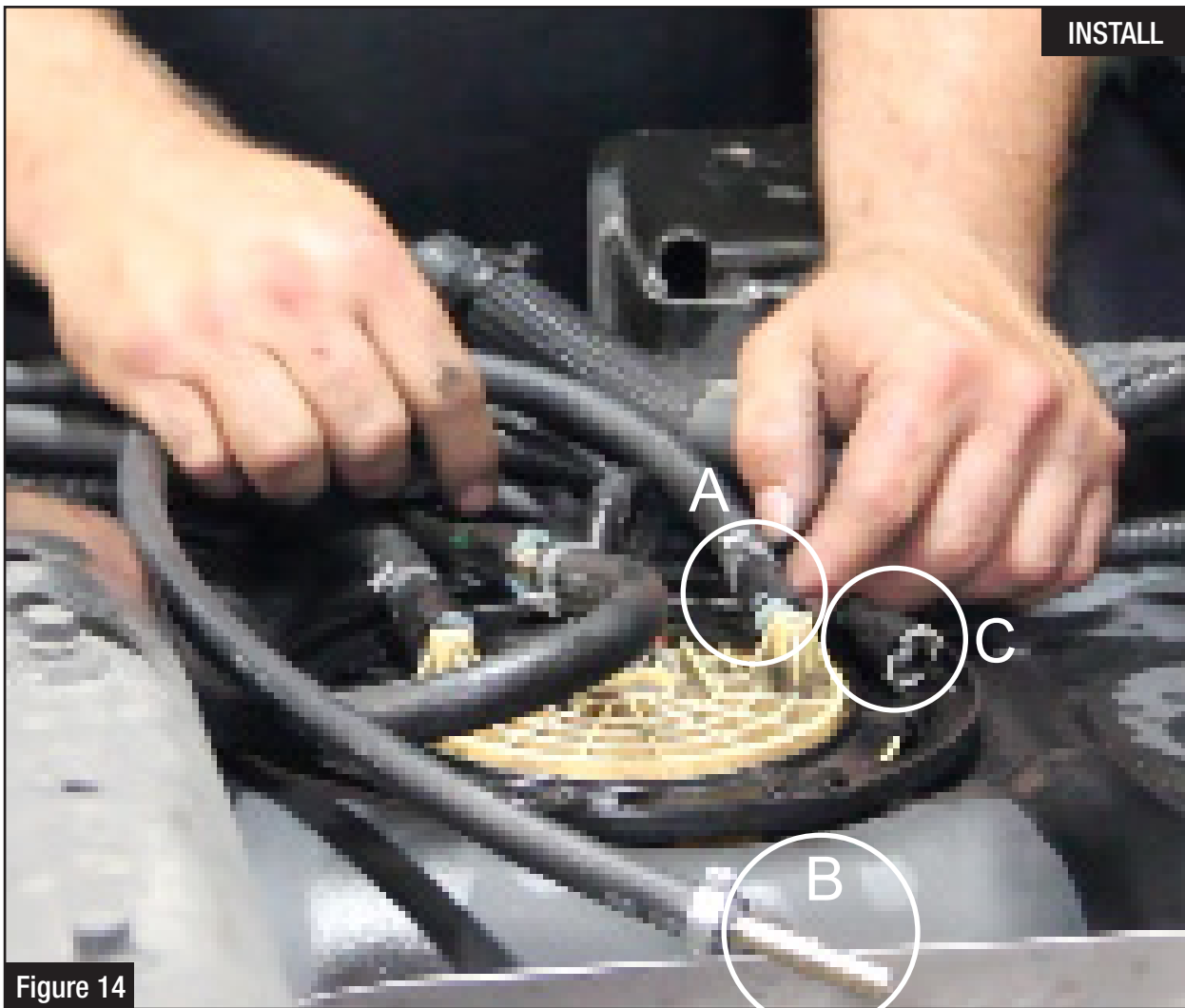


Figure 14

Step 15: Install the supplied return line (-4 AN fitting) onto the top of the DFS780.

Step 16: Route the return line along the frame following the new fuel lines.

Step 17: Install the new return line onto the smaller (inlet) side of the fuel pump sender assembly.
(as shown in circle A)

Step 18: Install the 5/16" fitting (as shown in circle B) onto the quick disconnect fitting on the stock return line (as shown in circle C)

**Figure 15**

Step 19: Attach supplied water separator bowl onto the supplied fuel filter. Using a light oil, lube the gasket on the fuel filter before installation.



Figure 16

Step 20: Screw the fuel filter assembly onto the manifold and tighten.



Figure 17

Step 21: Route the supplied wiring harness along the frame.

Step 22: Plug the Deutsch connector into the mating connector on the DFS780.



Figure 18

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

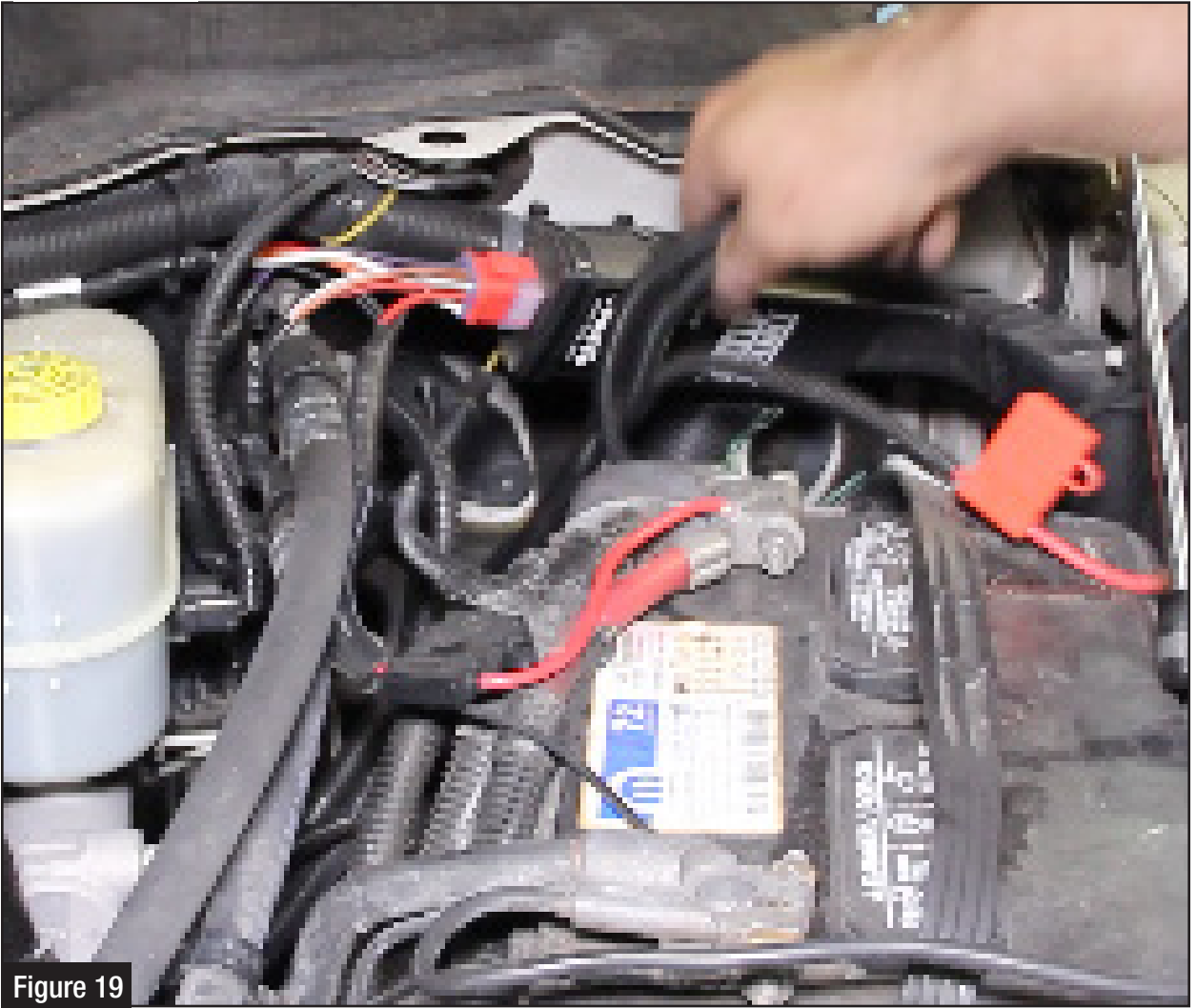


Figure 19

Step 24: Run the remaining wire harness along the frame to the engine compartment. Secure using supplied zip ties.

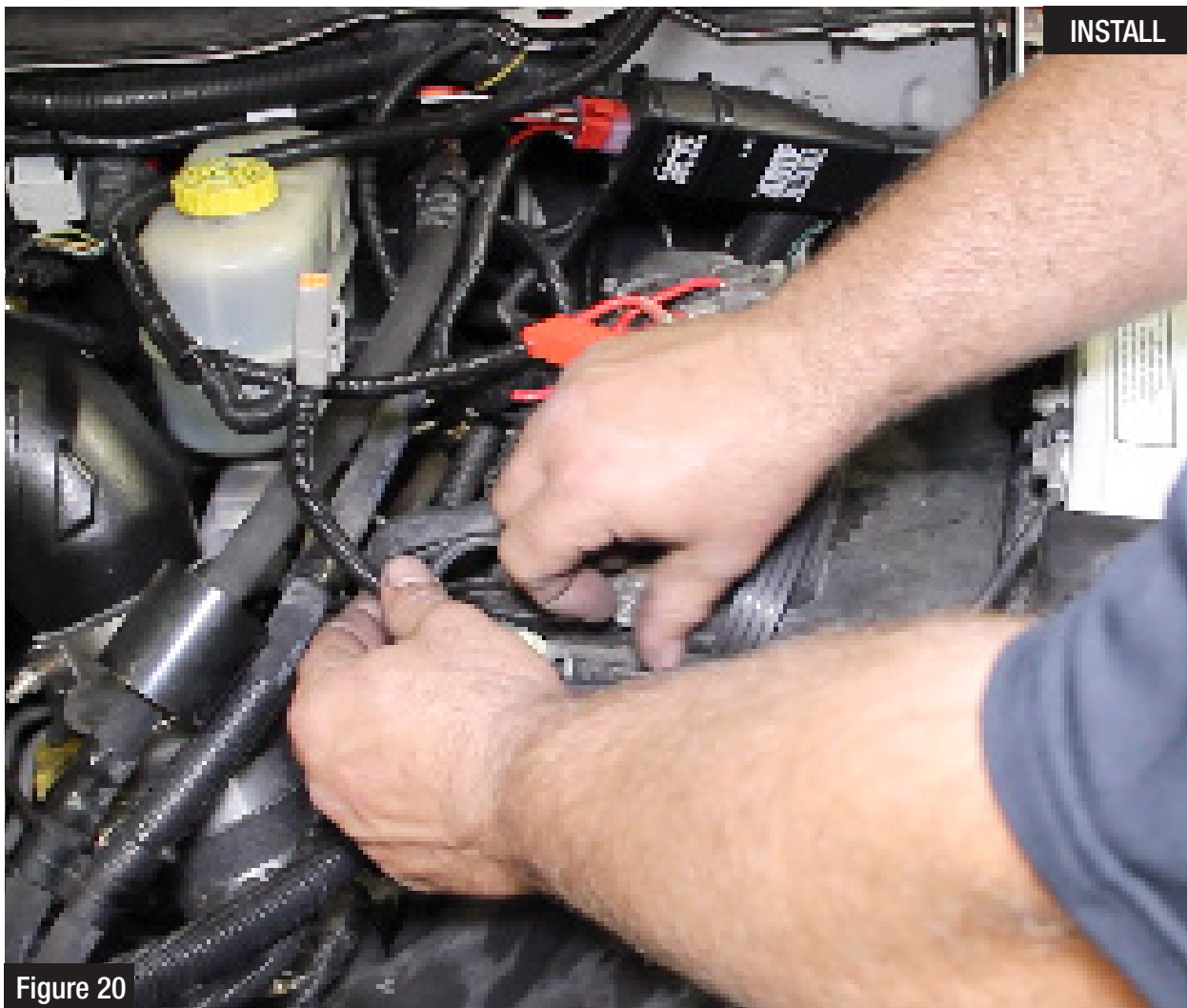


Figure 20

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



Figure 21

Step 26: 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.



Step 27: Organize any of the loose wire harness and secure with the remaining zip ties.

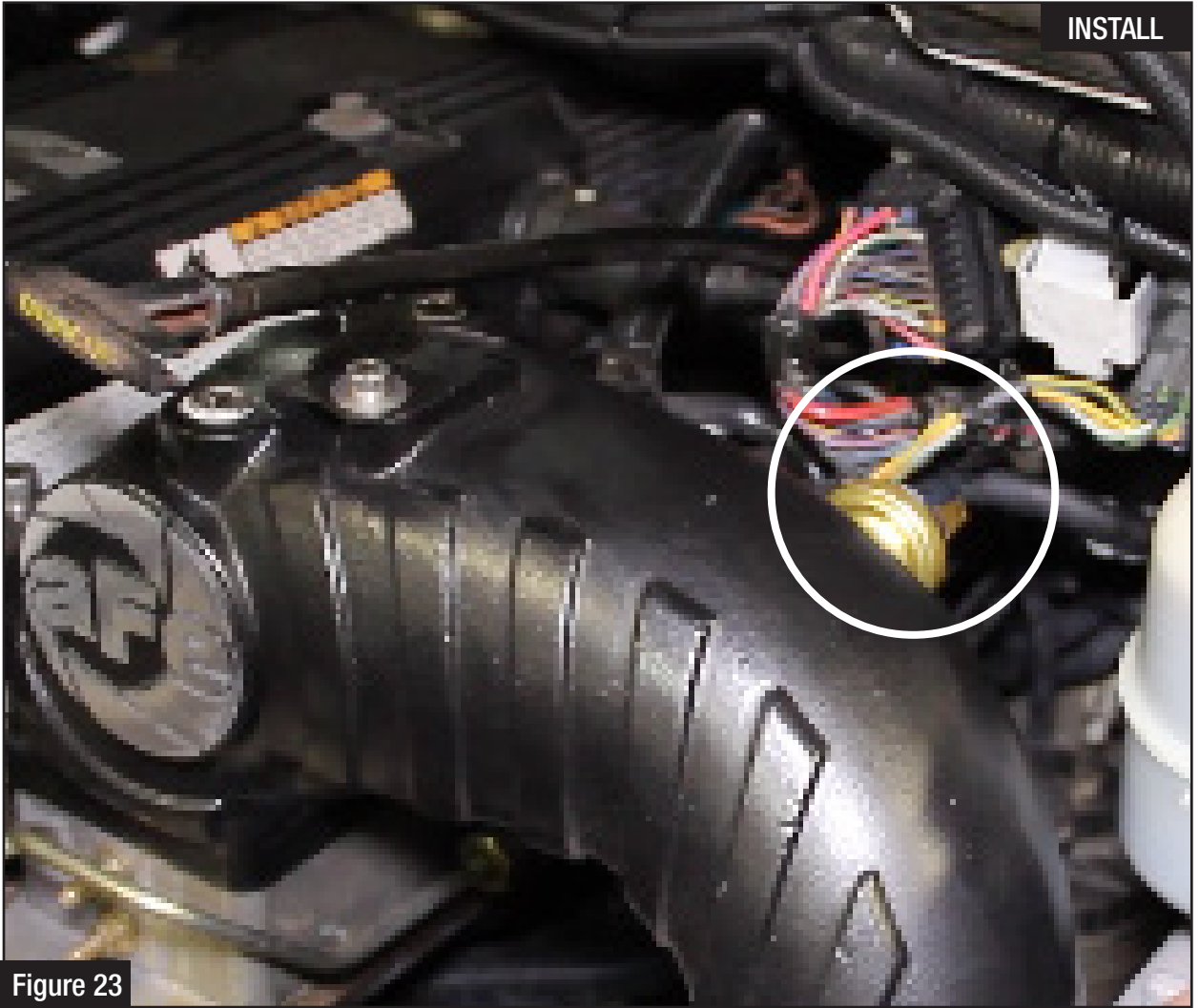


Figure 23

Step 28: Install the supplied pressure sensor into the intake manifold.



Figure 24

Step 29: Plug the supplied wire loom into the Deutsch connector.

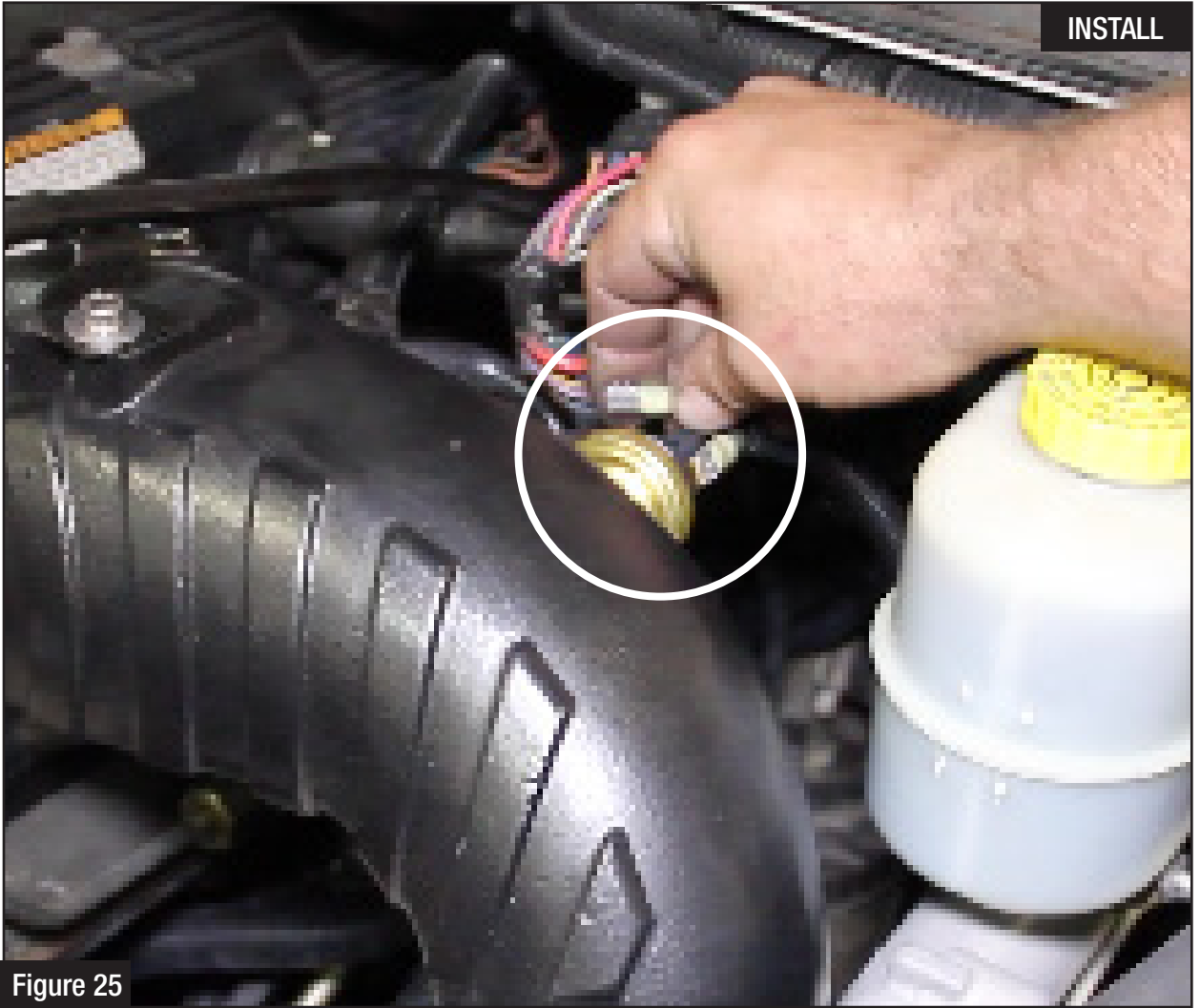


Figure 25

Step 30: Plug the wire loom into the connections on the pressure sensor.

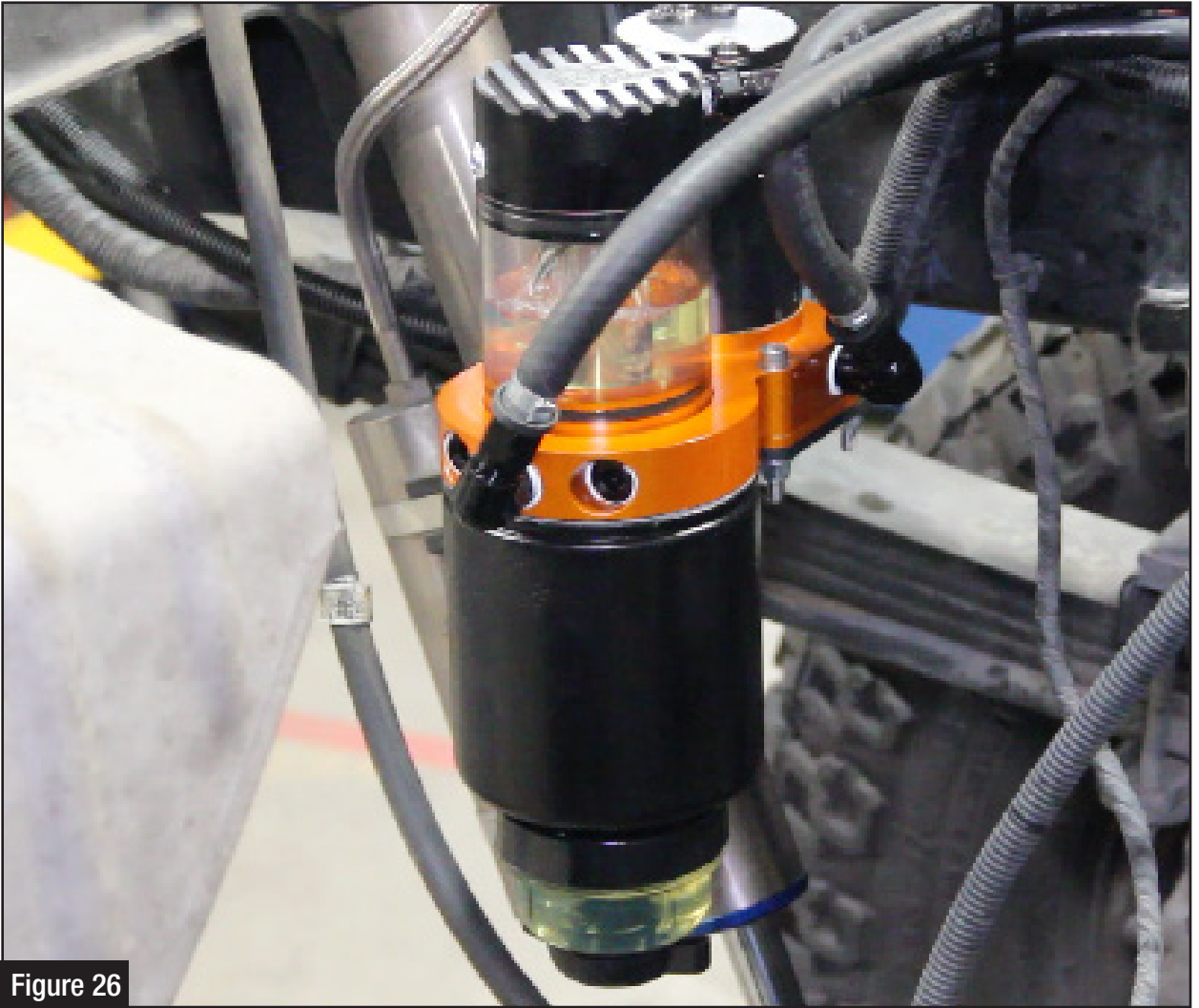


Figure 26

Step 31: Start the engine. The fuel system will begin to fill with fuel.

Step 32: If the pump is having trouble priming, remove the cap from the pressure port on the top of the sight glass and relieve pressure using a small screwdriver.

Step 33: 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.



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