



advanced FLOW engineering

DFS780 Max Fuel System - Full-time Operation

Instruction Manual P/N: 42-30001

Adjustable Pressure 10-20 psi (Nominal)



- 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.
- Ensure that your vehicle is cooled off before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description	Part Number
A	1	Fuel Pump Assembly	05-60857
B	1	Bracket, Mounting; Billet Aluminum	05-60795
C	6	Ties, Nylon Cable, 12", 50 lb.,	05-60167
D	2	Fitting; 3/8" NPT to AN -8 (Straight)	05-60685
E	1	Nut, Hex: M6 X 1.0mm	03-50059
F	2	Rivet, Nut: M6 x 1.0mm	03-50574
G	1	Screw, Cap: M6 x 1 x 25mm	03-50186
H	3	Washer, Fender M6	03-50160
I	2	Screw, Socket Head Cap: M6x1.0x25mm	03-50415
J	1	Screw, Socket Head Cap: M6x1.0x12mm	03-50032
K	2	Locknut, Flanged M6	03-50445
L	1	Connector, Add-a-harness: (ATO)	05-70027
M	1	Connector, Add-a-harness: (Micro 2)	05-60691
N	1	Connector, Add-a-harness: (Mini)	05-60583
O	1	Connector, Add-a-harness: (Mini Low Profile)	05-70028
P	1	Harness, Relay Switch	05-60551
Q	1	Harness, Power	05-60523

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.



Note: The fuel lines are not included with this kit.



1. Slide the supplied billet aluminum mounting bracket over the supplied fuel pump assembly and secure it using the supplied M6 x 1.0 x 12mm socket head cap screw.

Note: Please make sure you mount this pump with the motor facing up (as shown above).

Note: Please make sure that you slide the bracket as far down the motor as possible (shown above).



2. Find a suitable location for the fuel pump assembly and mark the two (2) holes using the billet aluminum mounting bracket as a guide.

Note: Be careful when drilling. Check behind where you are drilling for anything that might get damaged and move it before drilling.

3. If you are using the supplied rivet nuts, you will need to drill two (2) 10mm holes into sheet metal with a minimum thickness of 3/16" (0.188). Otherwise, you will need to drill two (2) 1/4" holes into sheet metal with a minimum thickness of 3/16" (0.188").
4. If installing the rivet nuts, use the supplied M6 x 1.0 x 25mm cap screw, M6 hex nut and M6 fender washer to make the installation tool.





5. Using the tool assembled in step #4, attach the rivet nut to the drilled material by holding the bolt steady and turning the nut clockwise. This will force the rivet nut to collapse and tighten onto the drilled material.
6. Install the fuel pump assembly and the billet aluminum mounting bracket to the frame using the supplied hardware:
 - (2) M6x1.0x25mm Socket Head Cap Screw
7. If the rivet nuts were not installed, install the fuel pump assembly and the billet aluminum mounting bracket to the frame using the supplied hardware:
 - (2) M6x1.0x25mm Socket Head Cap Screw
 - (2) M6 Flanged Locknut
 - (2) M6 Fender Washer
8. Install the two (2) supplied 3/8" NPT to -8 AN fittings to the fuel manifold assembly using thread sealant.



9. Plug the weatherproof connector on the end of the supplied power harness into the mating connector on the fuel pump assembly motor.
10. Route the power harness along the inside of the frame and into the engine compartment.
11. Organize the power harness and secure with the supplied nylon cable ties.
12. 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 fuse holder.

13. Connect the black wire ring terminal on the power harness to the negative side of the battery.
14. Plug the supplied relay harness into the weatherproof connector on the power harness.



15. Secure the relay harness using a cable tie.
16. Locate a 12-volt source inside the fuse box that only comes on with the key in the “run” position. Once a 12-volt source is located, remove the fuse from the fuse box.
17. Select the correct style of the supplied add-a-harness connector.
18. Attach the power wire from the relay harness to the add-a-harness connector.
19. Insert the fuse removed in step #16 into the open location on the add a harness connector (not in line with the wire).
20. Insert the add a harness connector (with installed fuses) into the 12-volt source location from step #16.
21. Carefully route the power wire outside the fuse box and reinstall the cover (making sure not to pinch the wire).
22. Organize the wire harnesses and secure with the remaining nylon cable ties.



Note: You will need a pressure gauge to see the fuel pressure for step 24

23. Turn the key to the “Run” position and wait for 30 seconds. Start the engine.
24. Attach a pressure gauge to the fuel pressure testing valve on the fuel pump assembly (shown above).
25. Adjust the fuel pressure by turning the ring in (for less pressure) and out (for higher pressure). The fuel pressure regulator will allow adjustments from approximately 10-20psi.

Note: Make sure you know what pressure you need for your vehicle. The incorrect pressure can cause the vehicle to run incorrectly or will cause the high-pressure pump to leak fuel.

26. Make sure that all fittings are tight and that fuel is not leaking from any of the connections made during installation.

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