

# INSTALLATION MANUAL

## D-MAX SERIES



### APPLICATION:

D-MAX 7001 (120GPH @ 8-10psi)

Duramax Fuel Pump

2001-2010



PICKUP

**FASS**<sup>®</sup>  
Fuel Systems

# !WARNINGS!

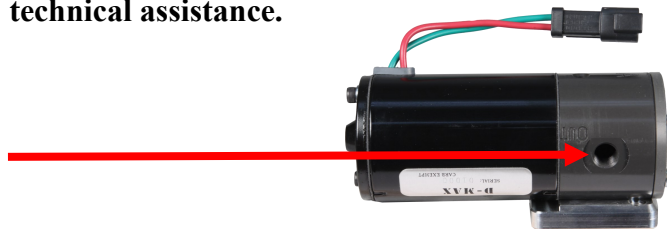
- Read all instructions before starting installation of this product!
- Installing the improper FASS Pump can cause *severe* engine damage.


FASS	Recommended Application
<b>D-MAX 7001</b>	Duramax 2001-2010 with stock - slight horsepower modifications
<b>Note:</b> Due to the increase of fuel flow you may encounter a problem with the stock fuel module. Adding a FASS suction tube kit will solve that issue.	

- Secure vehicle from **ROLLING!**
- Use caution when drilling. Steer clear of any electrical wires , air lines or other damageable components.
- Consult vehicle's manufacturers' instructions concerning the electrical system before attempting any electrical connections.
- Be sure that the serial # on this installation manual matches that of the outside of the box.



- Flush and clean all brass fittings and fuel line from debris.
- Keep debris from entering the internals of the system during installation. Getting debris in the "T" port can lock up the motor. If the motor does lock up from debris call FASS for technical assistance.



- Be sure to utilize the inline fuel filter included in this kit, or the equivalent,  to prevent a motor lock up.
- Wear safety glasses when operating power tools such as drills and grinders or when using a punch or chisel.
- Properly secure lines to prevent chaffing.

# INSTALLATION MANUAL

A fuel pressure gauge is highly recommended to identify fuel filter life and to prevent engine damage!

## Follow these steps to ensure a simple installation of your new FASS D-MAX FUEL PUMP

1. Inventory the package components completely. Notify the place of purchase immediately of any parts missing or damaged.
2. *Read the installation manual completely before attempting installation. Understand how the system operates and read installation recommendations before beginning installation.*
3. The installation recommendations contained herein are guidelines. Its important to understand your vehicles accessories and limitations. Use good judgment and take in to consideration your vehicles' accessories.



# D-MAX PUMP SERIES

110 GPH

8-10 PSI (APPROXIMATELY)

A fuel pressure gauge is highly recommended to identify fuel filter life and to prevent engine damage!



## INSTALLATION

- Step 1: Install Electrical Harness
- Step 2: Prepare Suction and Feed Lines
- Step 3: Mount Fuel System
- Step 4: Install Fuel Line
- Step 5: Review Installation





# CONTENTS



3/8"-16 x 3" U-Bolt



FF-3248



46260



PLB-1212



QD-1002



DIPF-1003



PL-2003



Hex Bolt 5/16-18x1/2



46044



Ring Terminal



Locking Nut .375C



HC-1001



Cable Ties

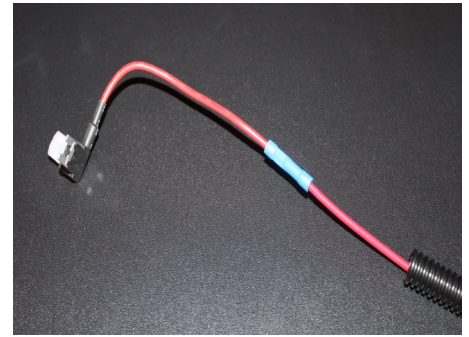
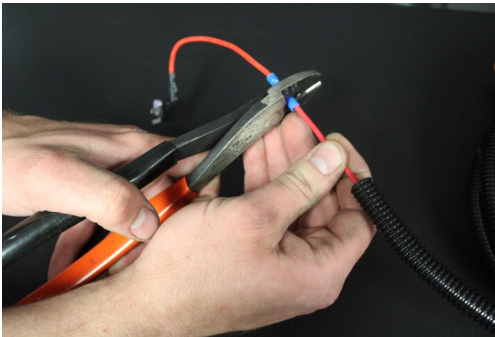
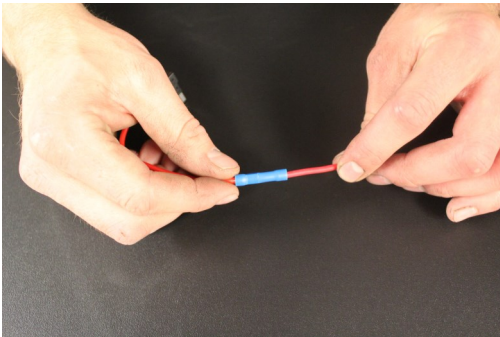
# STEP 1: INSTALL ELECTRICAL HARNESS

The installation of the electrical harness is done first, allowing power to be applied to the pump for lubrication purposes later in the installation.

- A. Using wire stripping tool remove excess insulation off the add-a-fuse and the WH-1006.



- B. Place wire from 46044 and WH-1006 into butt connector. Using crimping tool connect 46044 and WH-1006 with butt connector. Install 46260 to 46044 bottom slot (opening that is near the spade).



- C. Crimp the ring terminals to the red and green wires of the WH-1006 Wire Harness. Attach red wire to the positive terminal of the battery and the green terminal to the negative terminal. **The use of a corrosion preventative on electrical connections is recommended.**



- D. Secure relay and fuse in an upright position, as shown, to prevent moisture from entering. Di-electric grease may be applied to prevent corrosion.



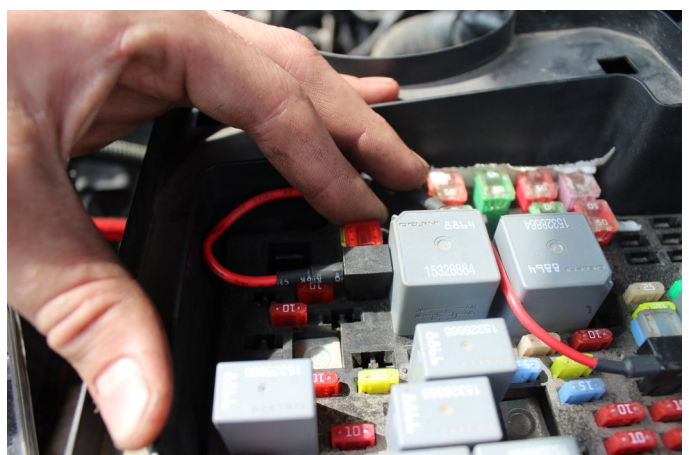
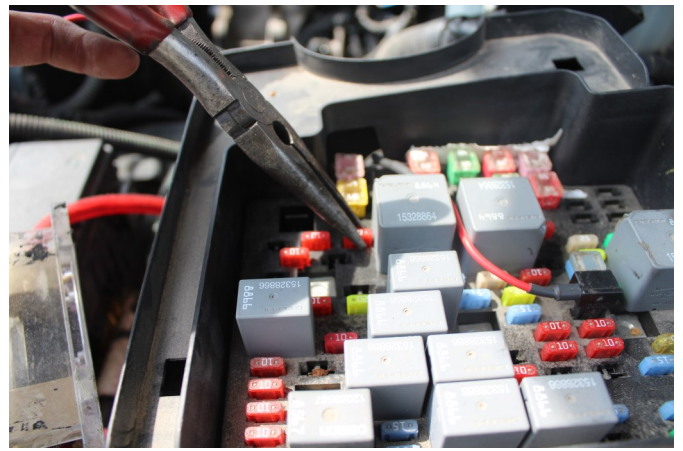
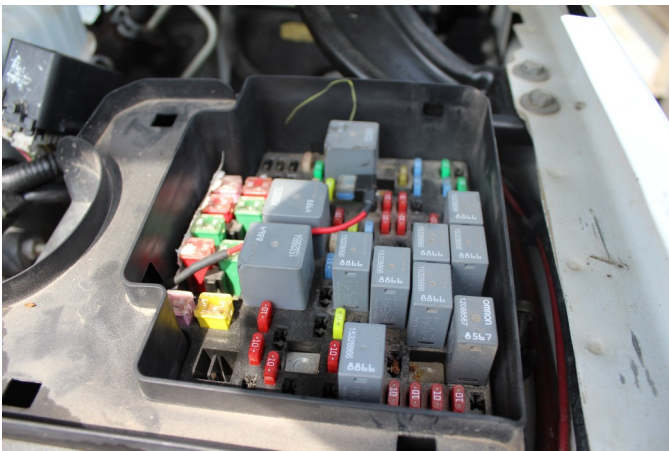


# STEP 1: INSTALL ELECTRICAL HARNESS

E. If fuse panel is located in the cab it will be necessary to guide the single red wire from the relay through the fire wall grommet to access the fuse panel.



F. Locate fuse box under hood and select ignition hot fuse. Remove fuse and put Add-A-Fuse in place. Install fuse previously removed. **The use of a corrosion preventative on electrical connections is recommended.**



G. Route WH-1006 wire harness along frame rail to mounting location of pump. **Completion of this step will be addressed in the Mounting Step 3.**



## STEP 2: PREPARE SUCTION & FEED LINES

**NOTE: Before installing fittings make sure to inspect for burrs or flare imperfections. When cutting fuel line make sure to blow out line to keep debris from moving forward.**

- A. Remove the 3 bolts holding the fuel cooler to the mounting bracket. The fuel cooler is located in front of the fuel tank.



- B. Using a fuel line disconnect tool, disconnect the factory suction line located above the fuel cooler. Place the disconnect tool around the fuel tube and slide the tool under the fuel line connection to release the fuel line. Pinch in tabs on 2011- models.



- C. Using oil, insert PLB-1212 into one end of the provided FL-1002 fuel line. Feed line over frame to the stock fuel connection.



- D. Push the PLB-1212 into the factory suction line until you hear a click and the tabs are locked in place. Slide square tab back in to secure.



- E. Using an HC-1001 hose clamp, insert the QD-1002 into the other end of the provided FL-1002 fuel line and secure. Oil the rings inside the QD-1002 and slide over the factory feed line until you hear a click. **Do not cut the line at this time.**

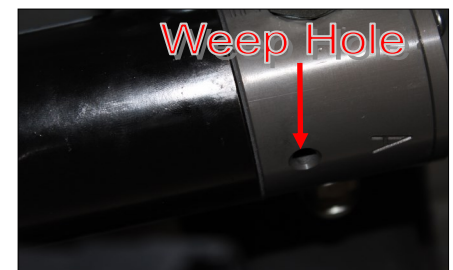


# STEP 3: MOUNT THE D-MAX

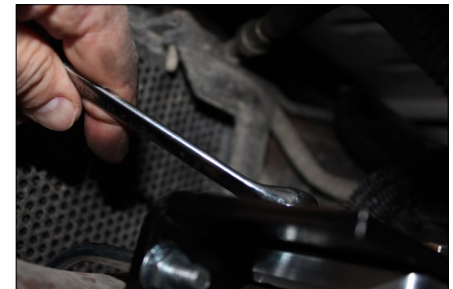
- A. Position FB-4002 bracket to mounting location on the cross member directly in front of the fuel tank making sure there are no obstructions. The pump should be mounted parallel to the frame.



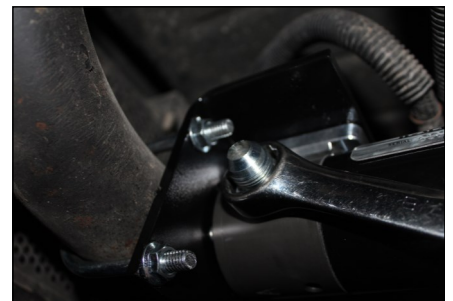
**VERY IMPORTANT: MOTOR MUST BE MOUNTED HORIZONTALLY WITH THE MOUNTING BRACKET TOP SIDE IN ORDER TO MAINTAIN PROPER WARRANTY STATUS AND PROTECT THE MOTOR. THUS PLACING THE WEEP HOLE BOTTOM SIDE AND KEEPING MOISTURE FROM DAMAGING THE MOTOR.**



- B. Mount pump to FB-4002 bracket with three 5/16" bolts with weep hole facing down. **Make sure the pump is level or positively angled. The electric motor must be level or above the weep hole. Adjust bracket as necessary. Use Loctite on mounting bolts**



- C. Install two DIPF-1003 fittings into the Inlet/Outlet ports on the DMAX. Torque to 18 ft./lbs. **The DIPF fitting does not require sealant on it's threads. It is an O-ring sealed fitting.**



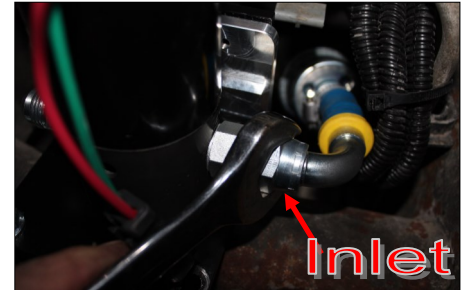
- D. Connect the male end of the wire harness to the female electrical connector on the FASS pump. Turn key to the "On" position. With the FASS pump on, squirt a liberal amount of WD-40 or other lubricant into the Inlet port. This procedure will "wet" the Gerotor and allow for better suction during initial priming.



# STEP 4: INSTALL FUEL LINE

**Do Not use sealant on AN (male flare) fittings. Only use sealant on threads installed into pump assembly.**

- A. Route suction line from Step 2d to the Inlet port. Cut FL-1002 to needed length. Using oil, insert PL-2003 and connect to the DIPF-1003. Torque to 18 ft./lbs.

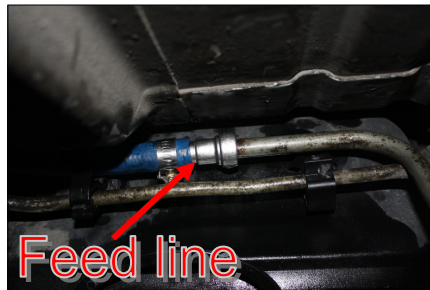


- B. Install in-line fuel filter in an accessible location in the suction line using the HC-1001's. Make sure the fuel flow travels the direction of the arrow on the canister.

**Note: Inline filter will need to be replaced every 6,000 miles.**



- C. Measure from the factory feed connection from Step 2e to the Outlet port of the FASS pump. Cut and insert PL-2003. Connect to the Outlet DIPF-1003. Torque to 18 ft./lbs.



- D. Secure all fuel lines and electrical harness with wire ties.

**Note: Secure all fuel lines with cable ties. Cable ties are an economical way to prevent the possibility of problems occurring!**



## **STEP 5: REVIEW INSTALLATION**

- Blow out any open lines/cover any open ports
- Bolts and fasteners properly tightened?
- Electrical harness and fuel lines secured and properly tightened?
- Has the system been primed?
  1. Turn key to the ignition position, turning on the FASS pump for 15 sec..
  2. Crank engine and allow to run for at least 1 minute.
- Check for leaks.
- Start the engine
- Recheck all fluid and filter connections for leaks