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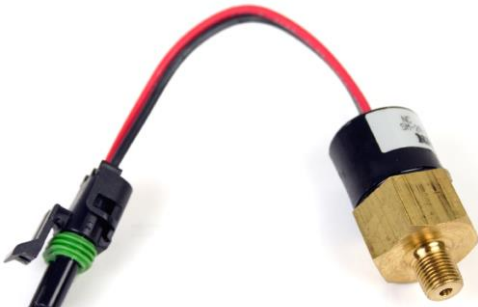



**DODGE AUXILIARY LIFT PUMP KIT**  
**For 1998½-2004½ Dodge 5.9L Cummins Trucks**  
- Installation Instructions -

**Part# 1050226**

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

# Kit Contents

|   |   |   |   |
|---|---|---|---|
| <p><b>P4601HP</b></p>   | <p><b>1100111</b></p>   | <p><b>1230116</b></p>   | <p><b>1300131</b></p>   |
|    |    |   |  |
| <p><b>Auxiliary Lift Pump Assy.</b><br/><b>Qty: 1</b></p>                           | <p><b>Flat Washer</b><br/><b>Qty: 6</b></p>   | <p><b>Lock Nut</b><br/><b>Qty: 6</b></p>  | <p><b>Tie Wrap (Medium)</b><br/><b>Qty: 5</b></p>                                   |
| <p><b>1300220</b></p>   | <p><b>1505001</b></p>   | <p><b>1400120</b></p>   |   |
|    |    |  |   |
| <p><b>Anti-Vibration Mount</b><br/><b>Qty: 3</b></p>                                | <p><b>Hose Clamp</b><br/><b>Qty: 4</b></p>  | <p><b>3/8\"NPT x 3/8\"PO Fitting</b><br/><b>Qty: 2</b></p>  |   |
| <p><b>1502020 / 1502023</b></p>   | <p><b>1502022</b></p>   | <p><b>1502025</b></p>   |   |
|  |  |                                      |   |
| <p><b>Boss to NPT Adapter / O-Ring</b><br/><b>Qty: 1</b></p>                        | <p><b>Lift Pump Wiring Harness</b><br/><b>Qty: 1</b></p>                            | <p><b>Pressure Switch</b><br/><b>Qty: 1</b></p>   |   |
| <p><b>1604053</b></p>   |   |   |   |
|  |   |   |   |
| <p><b>Fuel Line</b><br/><b>Qty: 25\"</b></p>  |   |   |   |

NOTE: Some parts will be contained inside of the sealed plastic bag found inside of the pump kit. You will not use all of these parts.

## ***Additional Parts Included with Kit***

- **Electrical contact Nut (2)**
- **Isolator nuts (3)**
- **Isolator washers (3)**
- **Isolators (3)**
- **Gear Clamp (3)**



Discard bag and contents once unit is installed.



## ***Optional Accessories***

- **1081130** - Low Fuel Pressure LED Alarm kit

## ***Before you Begin***

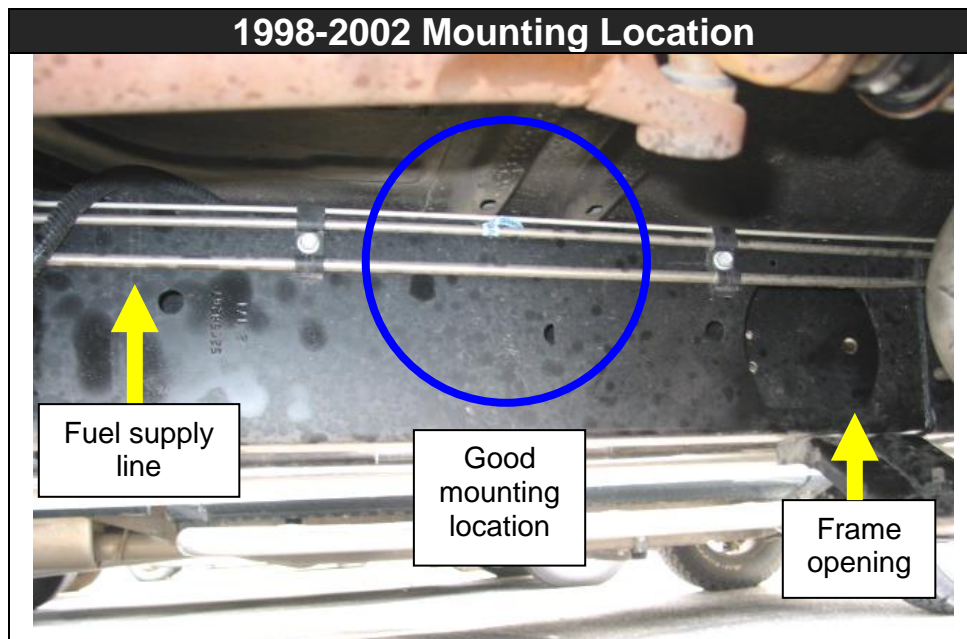
The BD auxiliary lift pump kit will provide the safety and performance of enhanced fuel flow to your Cummins engine. It will provide pressurized fuel to the stock fuel pump which increases fuel supply for higher horsepower requirements and will increase available fuel pressure to the VP44 or CP3 fuel injection pump.

***This kit is for trucks with an engine mounted fuel pump only. This kit is not for vehicles with an in-tank fuel pump. Some 2003-2004 trucks may have had the engine mounted fuel pump retrofitted to an in-tank pump, in this case this kit will not work. This pump will outflow in-tank pumps which can lead to aeration issues, shortened pump life and hard start problems.***

If you are unsure if your truck has an in-tank lift pump simply check to see that the lift pump is on the engine next to the fuel filter housing, if it is not there then your truck has the in-tank pump.

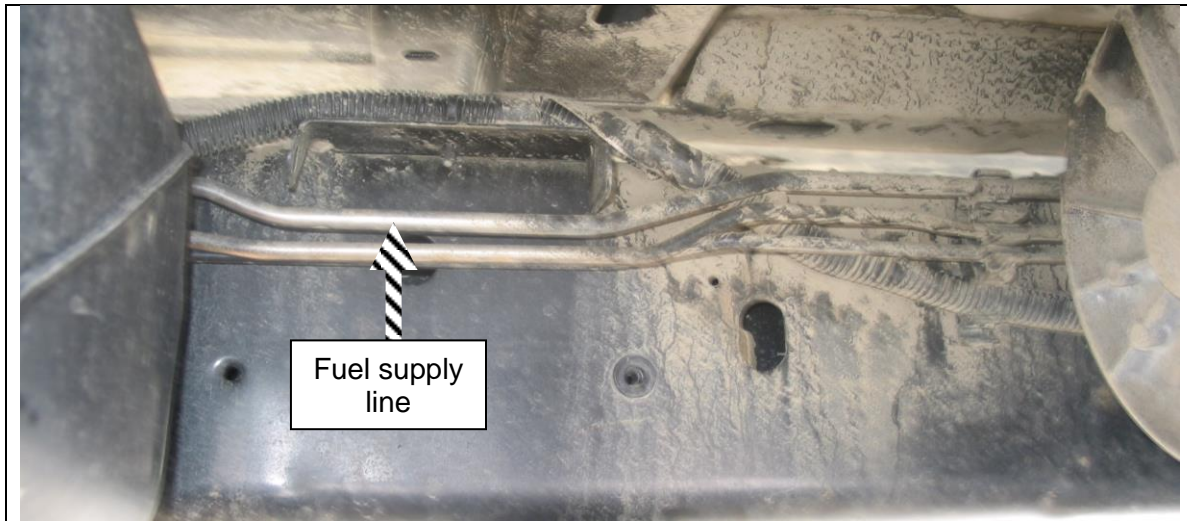
## Installation

1. Disconnect both batteries.
2. Raise the vehicle and support it safely.
3. Locate a spot on the driver's side frame rail near the frame opening so you can get the nuts and lock washers onto the back of the rubber isolators. Alternately if you cannot get to the backside frame to install the lock washers and nuts, you can drill and tap the holes to ¼ NC (drill bit #7 or 13/64") for mounting the rubber isolators. If you choose this method be sure to use Loc-tite on the threads.



For 2003 and newer trucks you will need to locate the largest fuel line. This line is the upper most line on the frame rail. As well you will need to drill and tap the frame rail to ¼ NC (drill bit #7 or 13/64"); as there is no frame opening. Be sure to use Loc-Tite to secure the isolators.

## 2003-04 Mounting Location

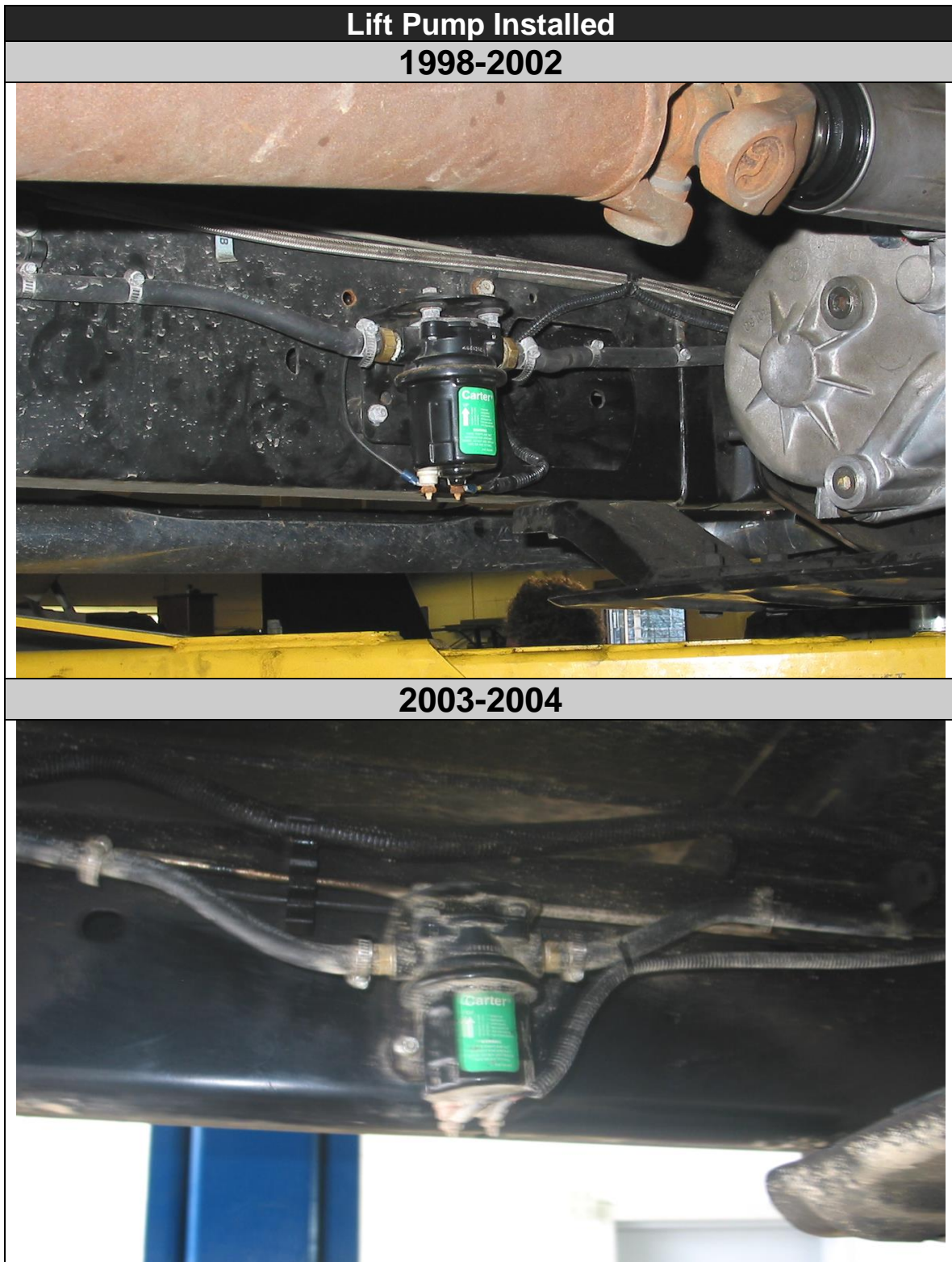


4. Cut the steel fuel supply line and remove a 14" section, centered on the location you chose to mount the mounting at. A pipe cutter is strongly recommended to cut the line, be sure not to squish or compress the fuel line, and remove any burrs that are left over from the process.



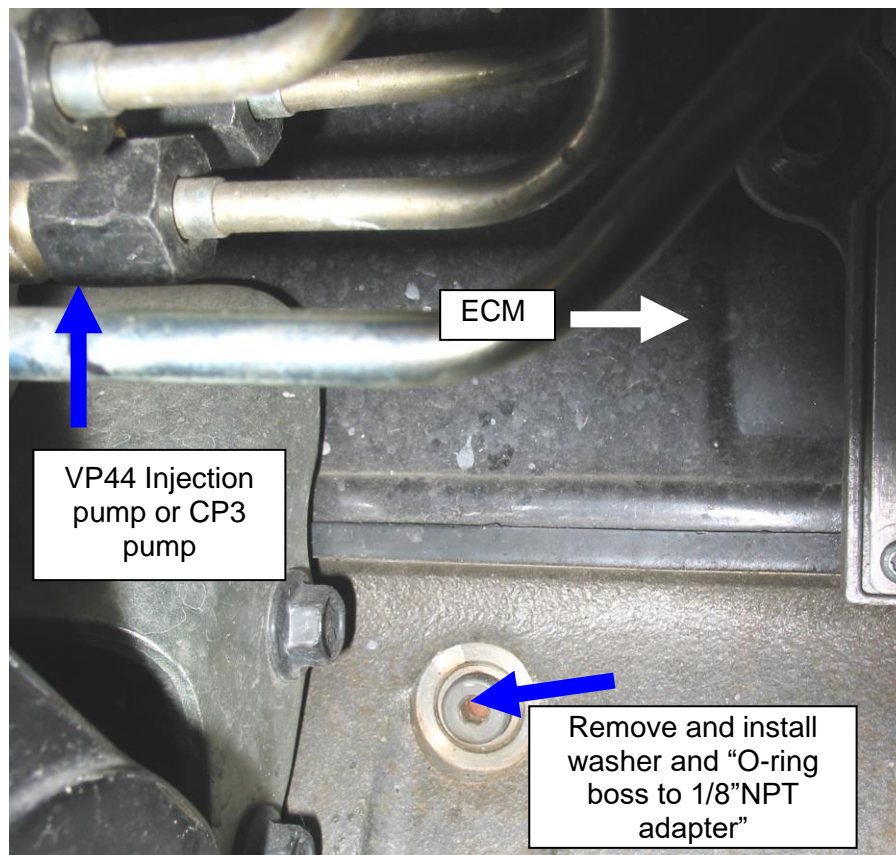
5. Using the pump bracket as a template, mark the three hole locations as shown and drill to 1/4". If you cannot access the rear of the frame rail you will need to drill and tap the three holes. Use drill bit #7 or 13/64, then tap to 1/4" NC.
6. Install the three rubber isolators with the long threaded end through the frame. Be sure to use Loc-tite if you are threading the isolators into the frame.
7. Install the pump bracket on to the three rubber isolators with the supplied nuts and lock washers (These parts are found inside the sealed bag inside the pump box). Mount the pump to the "L" bracket with the supplied isolators and bolts. The pump is marked inlet and outlet so be sure that the outlet is pointed of the front the front of the vehicle.
8. Install the two brass fittings in the pump. Apply liquid thread sealant to the threads to seal the NPT fittings. Do not use thread sealing tape as it may dislodge during installation and cause non-warrantable damage to the pump.

9. Install the two pieces of rubber fuel lines with one clamp on each barb fitting and two on the steel line. Tighten the hose clamps on the factory fuel line and the brass-barbed fittings.



10. Connect the wiring harness to the pump (red [+], black [-]) and run it to the engine compartment along the left frame rail. Attach the harness to the battery (red [+], black [-]) and secure it with the zap straps provided. Coat the lift pump connections with Anti-Seize, silicone, or battery terminal paint to protect them against corrosion.
11. Remove the o-ring boss plug (5mm Allen head) from the driver side of the engine, behind the power steering pump, and install the pressure switch with the "O-ring to NPT" adapter. Make sure to use liquid pipe sealant or Teflon tape on the pressure switch to the adapter. Use the supplied seal washer (1502023) to seal the adapter to the engine (do not use thread sealant here). Plug the wiring harness into the pressure switch.

Note that there are a number of identical ports towards the rear of the engine.



12. Reconnect the batteries and reset the radio station presets.

13. Start your engine, and verify that your auxiliary pump starts when your oil pressure builds up. Check for fuel and oil leaks at the various connections made during the installation. It is also recommended that you monitor the fuel pressure initially to ensure proper operation. Typically fuel pressure at idle should be ~20-28psi.

If you experience any problems or difficulties with this kit, please contact the BD Technical Department at 1-604-853-6096 or fax at 1-604-853-8749, between 8:00am and 4:30pm Pacific Time.



# Wiring Diagram

