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# **1998½-2009 5.9L DODGE CUMMINS IN-TANK PUMP RETRO FIT KIT**

## **Installation Instructions**

<b>Part Number</b>	<b>1050302</b>
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PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.

## ***Kit Contents***

1604053	1505001
	
<b><i>3/8 Fuel Hose</i></b>	<b><i>Hose Clamp</i></b>
<b>Qty: 8"</b>	<b>Qty: 3</b>

## ***Required Tools***

- Razor Blade/Knife
- Pliers
- 3/16" Flat Screwdriver
- 10 mm Socket or wrench

## ***Optional Accessories***

- **1081130** - Low Fuel Pressure LED Alarm kit
- **1050350** – Water in Fuel Sensor kit (2000-2007)
- **1050351** – Water in Fuel Sensor kit (2007-2012)

## Installation

Continue to follow the normal pump installation instructions that come with your FlowMax Pump kit. Instead of removing the factory lift pump from its factory location, you will need to remove the aluminum spacer blocker where your OEM pump once existed, along with the hard lines and wiring harness.

The retrofit removes the unsatisfactory upgraded pump from inside the fuel tank basket while still pulling fuel from the same basket location. This reduces fuel slosh and prevents running out of fuel prematurely.

Raise the vehicle and support it safely.

You will now need to drop the factory fuel tank. ***Be very careful as a full fuel tank is very heavy.***

- a. Use a transmission jack or something similar to support the fuel tank.
- b. Locate the support straps that secure the fuel tank to the vehicle. Loosen these and remove.
- c. With the tank loose, reach up on top of the tank and un-clip and remove the factory fuel line quick connects and wiring connector.
- d. Lower the fuel tank.





Rotate the locking clip that secures the basket to the fuel tank.

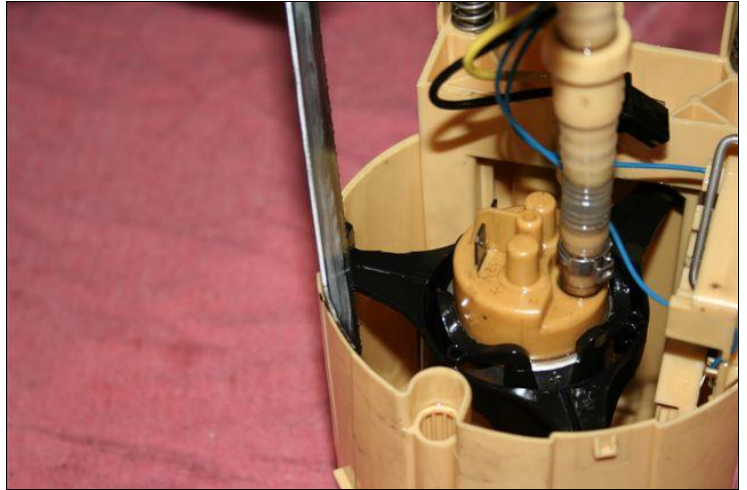
Remove the factory pickup can/basket from the top of the tank.



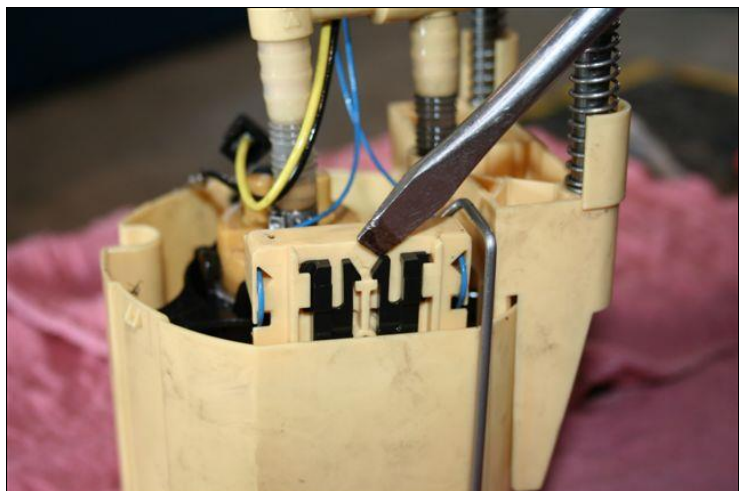
With the basket removed, use a hack saw blade and cut the three supports from the OE lift pump.

Disconnect the factory power and ground wires from the pump. Tie these out of the way.

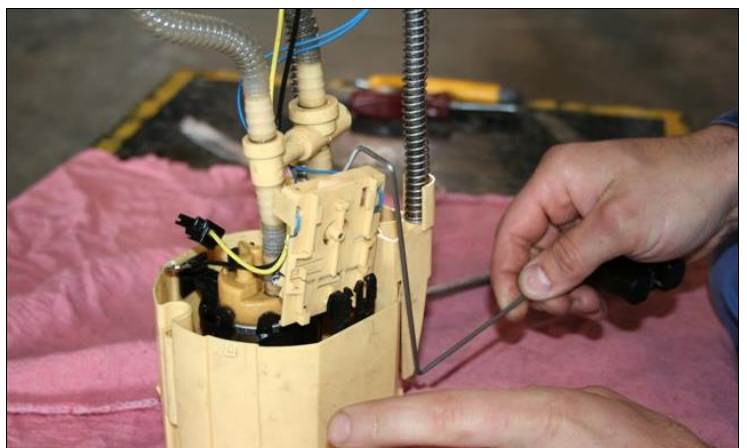
**USE ONLY NYLON TIE WRAPS AS OTHER MATERIAL MAY DISINTEGRATE IN THE FUEL**

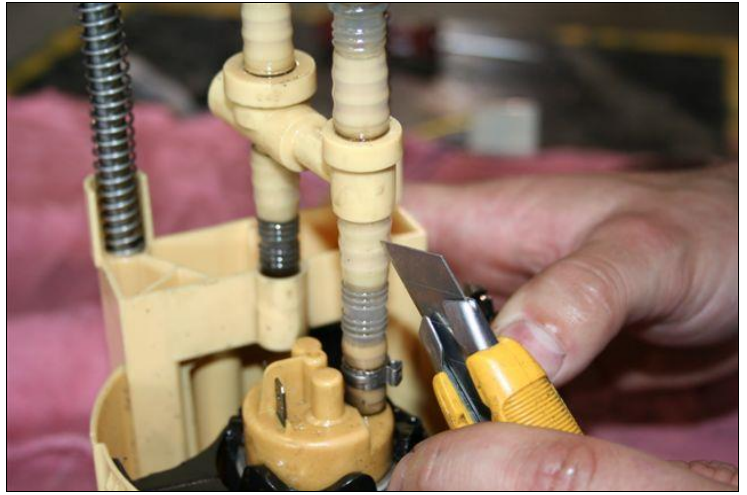


Release the two locking clips that secure the float with a flat head screwdriver.



With the float out, you should have more room to work.





With a sharp knife, score the plastic tube to release the outer tube and expose the 3/8" barb.

You should now be able to lift the OE pump out of the basket.

***DO NOT CUT INTO THE PLASTIC BARB.***



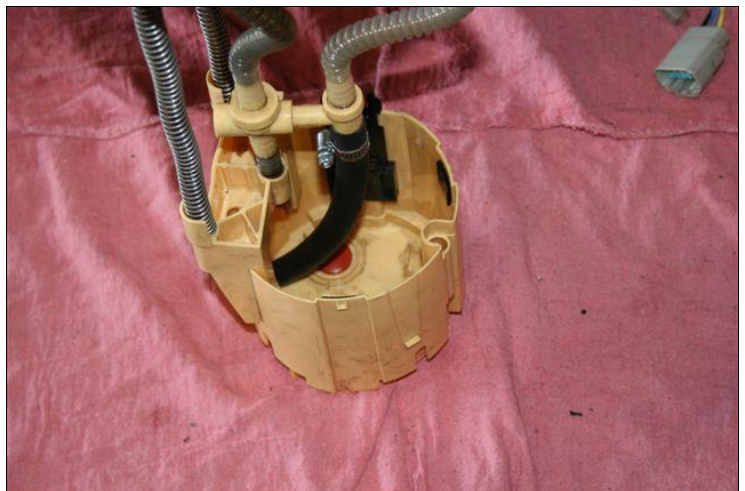


Use the supplied 3/8" hose and stainless hose clamp to attach the hose to the 3/8" barb.

You will need to trim the hose to the exact length so it sits flush with the bottom of the basket.

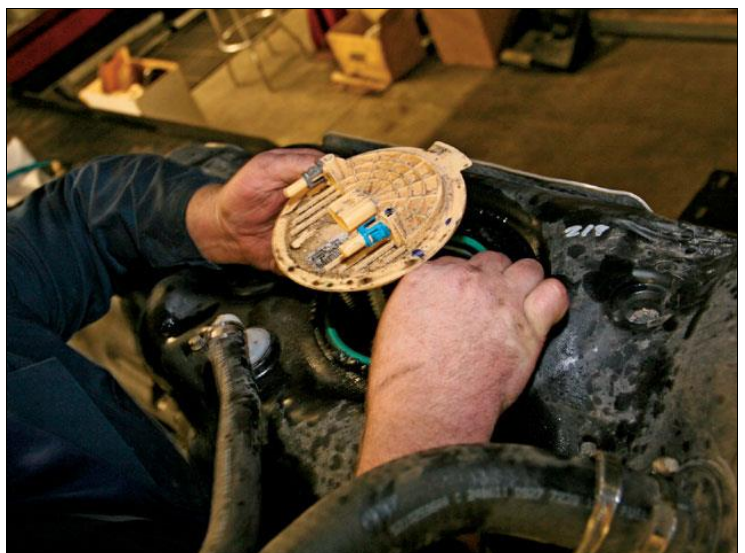
BE SURE TO CUT THE HOSE AT AN ANGLE OR V-NOTCH THE BOTTOM, OTHERWISE THE HOSE WILL SUCTION TO THE BOTTOM OF THE BASKET.

IF YOU CUT THE V-NOTCH TOO HIGH, THE TRUCK MAY RUN OUT OF FUEL PREMATURLY.



Re-attach the float.

Drop the modified basket into the fuel tank and secure with the locking ring.



Raise fuel tank back up into vehicle and reconnect the fuel line quick connects and the electrical connector.

**NOTE** Even though there is no pump in the tank anymore, the connector must still be plugged in for the fuel level sender to function.

Reattach the fuel tank support straps.



Locate the electrical connector that had originally connected to the factory fuel transfer pump that was located on the side of the engine. This will currently be plugged into a retrofit wiring harness that was installed at the time of the in-tank pump retrofit. Disconnect the plug to allow the Flow-Max harness to plug in instead.

The remaining unused Chrysler retrofit wiring harness may be removed from the vehicle or left disconnected.

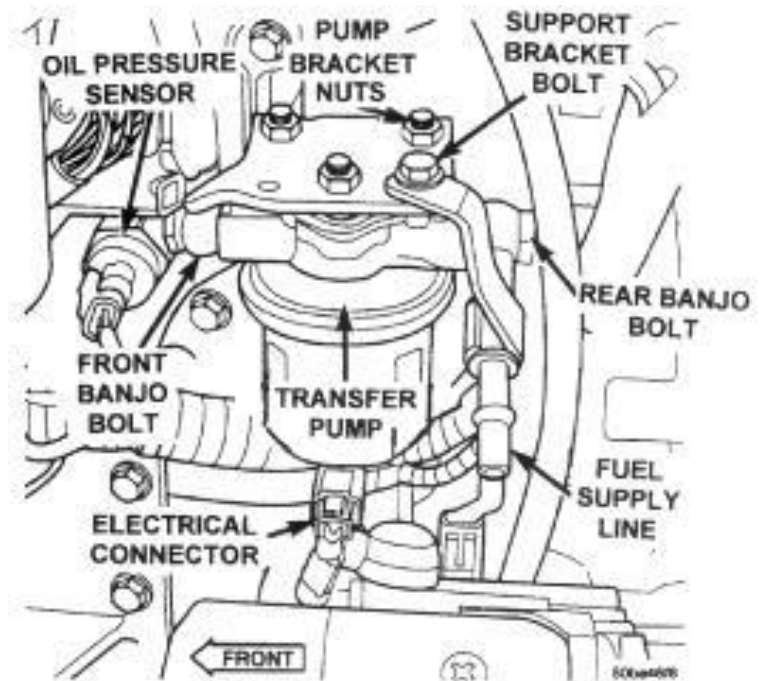
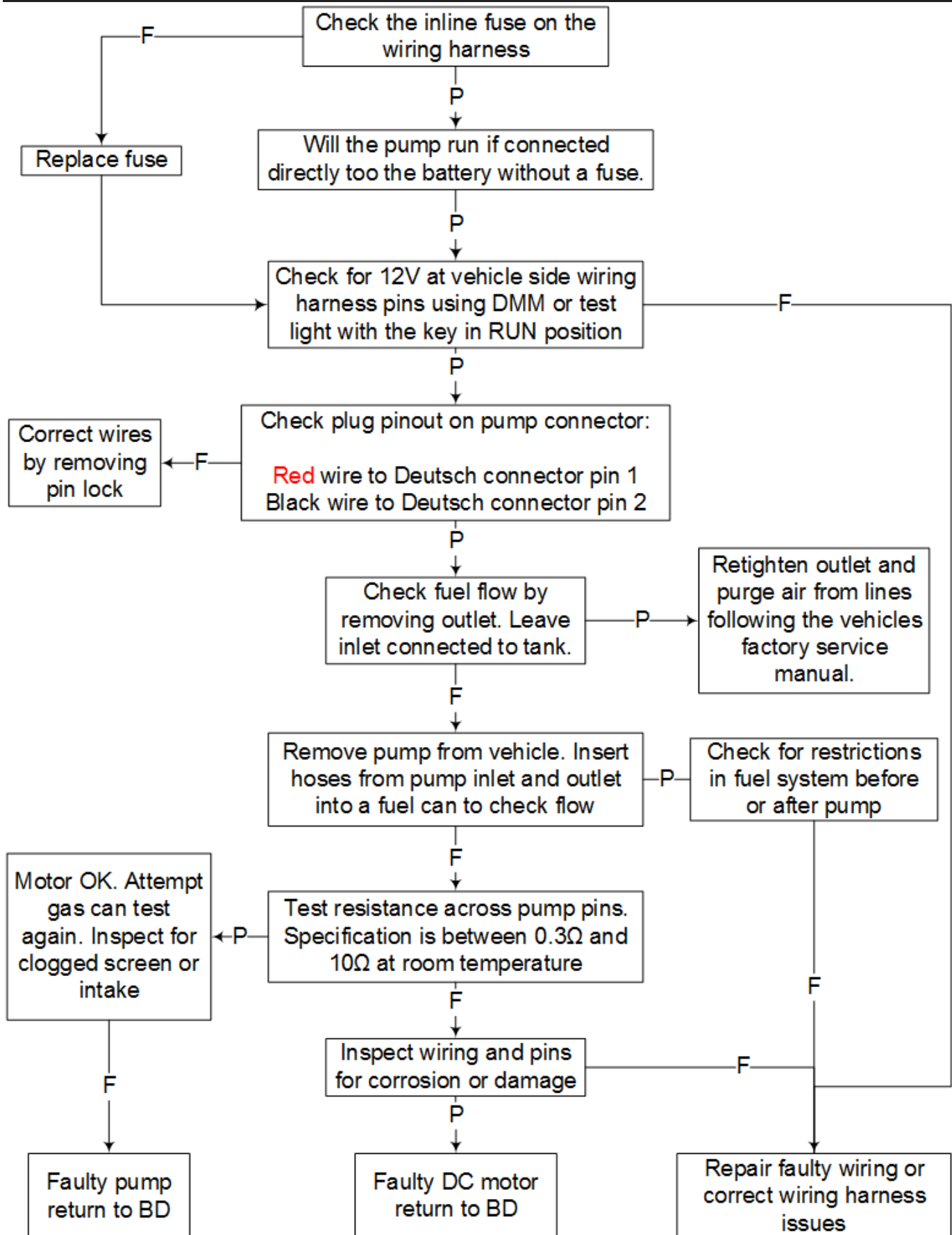


Figure 3

## Flow Specifications

- Flowrate should be MINIMUM 2.5GPM(150GPH) @ 14VDC
- OR
- Filling a 1 gallon container every 24 seconds @ 14VDC

## Troubleshooting



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