

# 2005+ Hemi Pass Car Fuel Drop In

# 12-154 & 12-176

**NOTE:** Please read all instructions before proceeding with the installation of your new drop in fuel cell pump hanger. Failure to follow these instructions may result in poor performance, vehicle damage, personal injury, or death. If these instructions are not fully understood, an installation should not be attempted. In this case, please contact Holley's tech service department or a qualified mechanic.

#### **PARTS INCLUDED:**

Qty.	Description
1	Driver's Side Pump Unit
1	Passenger's Side Pump Unit
2	Vehicle Harnesses
1	Crossover Hose
2	3 x 15 Hydramat
1	Barb and Plug Kit
1	Small Parts Kit
1	Return Tube

Congratulations on the purchase of your Holley twin pump module set. Lots of thought and engineering went into the creation of these modules not only to deliver the flow you need to support your power goals but also to minimize pump cavitation and give you the most options when it comes to your install.

We provide the performance by utilizing either twin 255 LPH (12-154) or twin 525 LPH (12-176) pumps, which have the ability to flow 2 GPM or 3 GPM respectively at 58 PSI. Our patented HydraMat technology is also utilized to greatly reduce low fuel starvation issues and to provide the 10 Micron filtration needed for your EFI system.

Not only do the units provide performance, but they also give you many options for your install. The modules come with 58.8 PSI (4 BAR) regulators pre-installed so they can be dropped in to the tank and be used with the factory return-less style fuel system. The regulators can also be removed and all the parts are included to configure the modules for a more traditional return style system. Both 3/8 and 5/16 quick connect fittings are also included to allow easy connection to the factory fuel feed line or, if you choose AN plumbing, the inlets and outlets of each flange are machined with -8 O-ring ports to mate with AN fittings adapters and hose.

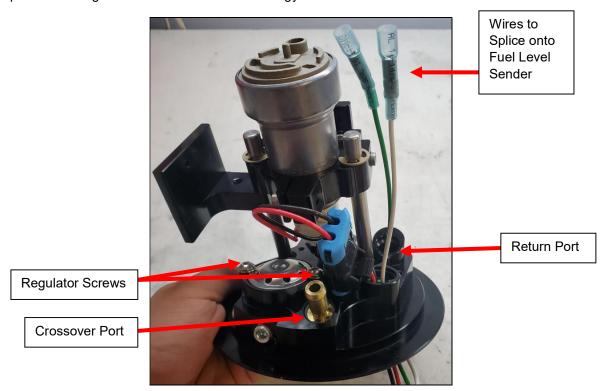
### **IDENTIFYING PUMP UNITS:**

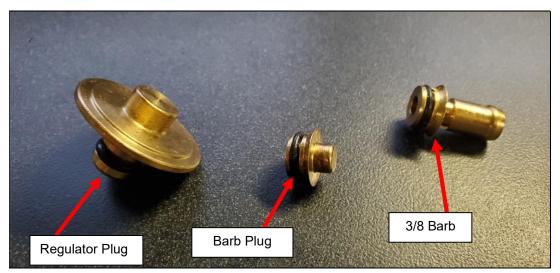
In the box, you will find two units, one driver's side and one passenger's side. The units are identical with the exception of the outlet and inlet fittings. The passenger's side unit will come with a 3/8 quick connect fitting in the fuel outlet port and a plug on the return port, while the driver's side unit will come with both the outlet and inlet plugged.



#### **CONFIGURING YOUR PUMP UNIT:**

As mentioned earlier, the modules come pre-installed with 58 PSI regulators allowing you to maintain the factory returnless style fuel system. They also come pre-installed with 3/8 barbs in the crossover port, so that the included crossover line can be used to allow the passenger's side flange to feed the driver's side flange. This should be maintained in most cases. The photos below goes over some useful terminology:





If you do not wish to run the modules as return-less units with a crossover line, they must first be configured in the following way:

## 1. Return System w/ Internal Crossover Line

- a. Remove the two screws that hold the regulator in place with a 1/8" hex L key.
- b. With a small flat head screwdriver, get under the regulator and carefully remove it.
- c. Replace the regulator with the included regulator plug. (The O-rings on the plugs come pre lubricated, so no further lubrication is needed.)
- d. Once inserted, spin the regulator plugs 1 full rotation before re-installing the regulator lock down screws. This ensures that the O-ring seats properly.

## i. Torque screws to: 20-30 in-lbs

- e. Install the included 3/8 barb into the return port. (The O-rings on the plugs come pre lubricated so no further lubrication is needed.)
- Once inserted, spin them 1 full rotation before retaining with the included retaining ring (**Figure 1**).
- g. Cut a 3-3/8" section out of the included return tube and install it onto the barb installed on step f.
- h. Secure the tube to the barb with the included 12mm clamp (Figure 2).

# NOTE: Return fuel must be routed to both passenger's and driver's side fuel units.



Fig 1: Barb installed into return port and retained with lock ring.



Fig 2: 3-3/8" section of return tube installed on return barb and retained with 12mm clamp

# **INSTALLING THE PUMP UNITS:**

Installation should only be attempted if vehicle has 1/4 tank or less of fuel. The lower the amount of fuel the better.

1. Remove the lower portion of the rear seat by pulling up on the two latches below the center of each butt pad (**Figure 3**).



Pull up firmly at these two places

Figure 3

- 2. Remove the two large sealing grommets and disconnect the wiring connectors that go to each factory pump unit.
- 3. Disconnect the fuel supply line from the factory passenger's side pump unit.
- 4. Remove the two fuel tank lock rings holding the factory pump units in place.
  - a. It is recommended to do this using a fuel tank lock ring removal tool for your vehicle.
- 5. Install included HydraMats onto the pumps in the desired orientation.
- 6. Install fuel crossover line onto the crossover port of the Holley driver's side fuel unit and retain with included 16mm clamp.
- 7. Remove factory driver's side fuel unit.
  - a. Be careful not to damage the fuel level sender during the removal.
- 8. Carefully remove the fuel level sender from the factory fuel unit. Cut the wires so that there is around 3" still attached to the fuel level sender.
- 9. Splice the level sender wires onto the two heat shrink butt slices attached to the green and white wires on the Holley unit.
  - NOTE: As these wires only carry a resistance value, either sender wire can be connected to the green or white wire.
- 10. Use a heat gun to shrink the butt splices. It is okay if it does not shrink completely onto the wires.
- 11. Retain the level sensor to the unit with the included 10-32 screws and washers. Apply blue thread locker to the threads. See **Figure 3** for level sensor mounting locations.

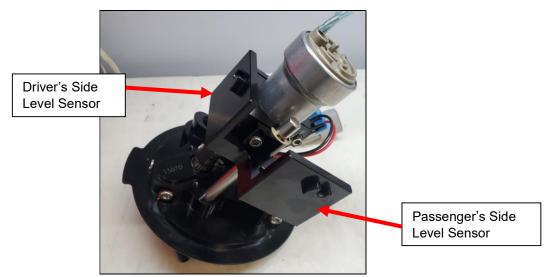
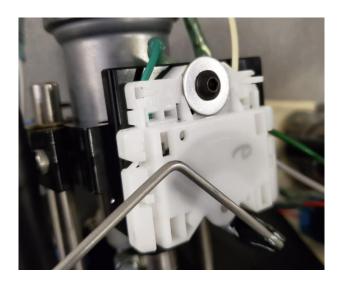
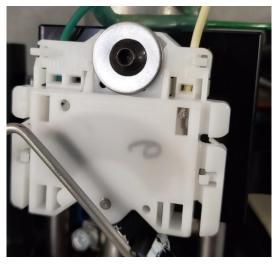


Fig 3: Level Sensor Mounting Location

- 12. Take the loose end of the crossover hose and transfer it to the passenger's side of the tank.
- 13. Carefully insert the driver's side fuel unit into tank and retain with lock ring.
- 14. Repeat steps 7 10 for the passenger's side unit.
- 15. Press the loose end of the crossover line onto the crossover barb on the Holley passenger's side unit. Retain with included 16mm EFI clamp.
- 16. Carefully insert the passenger's side unit into the tank and retain with lock ring.

<u>Level Sender Installed:</u> Below is an example how the level senders should look when properly installed onto the Holley Unit.





## **NOTE ON LEVEL SENDERS:**

The Holley units are designed for use with the later style OEM level senders, which were available on all 2012+ vehicles as well as some 2011 vehicles as this was a transition year. If you wish to install the units in a 2005 – 2010 vehicle, the later style level senders must be sourced. The factory part numbers are listed below:

Driver's Side: 68145782AA / W0133-1932847

Passenger's Side: 68000605AC / W0133-1932842

# **WIRING THE PUMP UNITS:**

Included with your units are vehicle pigtails that will take the place of the factory connectors and be used to wire the Holley pump units to the vehicle. Each has 4 wires:

- 1. Red Pump +12V
- 2. Black Pump Ground
- 3. Green Fuel Level Sender 1
- 4. While Fuel Level Sender 2

WARNING! USE A MINIMUM OF 12 GAUGE WIRE. BE SURE TO CRIMP OR SOLDER ALL CONNECTORS SECURELY AND CLEAN ANY AREA WHERE GROUND LEADS WILL BE FASTENED. FAILURE TO USE THE MINIMUM WIRE GAUGE COULD RESULT IN PUMP MALFUNCTION AND/OR ELECTRICAL FIRE, RESULTING IN PROPERTY DAMAGE, SERIOUS INJURY, AND/OR DEATH.

- 1. Disconnect the negative terminal of the battery.
- 2. Connect the following wires for the level sender:

#### 2005 - 2010

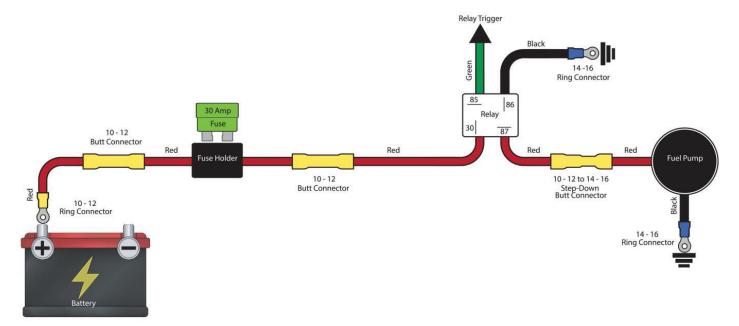
Factory Wire Color	Holley Wire Color/Side
DK BLU/WHT	WHITE / Driver's Side
DK BLU/WHT	WHITE / Passenger's Side
BLK	GREEN / Both Sides

#### 2011+

Factory Wire Color	Holley Wire Color
DK BLU/WHT	WHITE / Driver's Side
DK BLU/GRY	WHITE / Passenger's Side
BLK	GREEN / Both Sides

- 3. Connect the Black wires from each flange to a suitable chassis ground or the negative terminal of the battery.
- 4. Connect the Red wires from each flange to a relay as such:

NOTE: Be sure to route all electrical wires clear of any moving suspension or drivetrain components and any exhaust components! Protect wires from abrasion and road obstructions or debris.



- In the diagram above, the relay trigger should be connected to the factory fuel pump +12V DK BLU/ORG wire.
- Two relays will be necessary, one for each pump.
- Holley P/N 12-753 is recommended

Technical Service: 1-866-464-6553
Phone: 1-270-781-9741
For online help, please refer to the Tech Service section of our website: <a href="https://www.holley.com">www.holley.com</a>

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