



Propane Injection for Diesel Engines Installation

1) Mount the regulator in a convenient location to allow for the shortest run of outlet hose.

2) Install pressure hose between the tank service valve & the lock off valve on the regulator using hose & reusable fittings supplied with your kit. Be sure the hose is routed in a safe manner, away from sharp metal edges & hot exhaust pipes. Use mounting clamps (supplied with kit) to keep the hose anchored securely and in a safe location.

3) HOT WATER HOSES: If a vapor tank is used, the hot water hoses to the regulator are optional. If frost develops on the regulator, the hot water hoses may need to be installed. If using a liquid tank, the hot water hoses are necessary to convert the liquid to vapor. The easiest way to supply hot water in most situations is to cut a heater hose and connect one end to a water port on the regulator and the other end to the second port. This may require a longer heater hose based on the regulator location.

4) Install the fuel delivery tube in the air intake by drilling and tapping for 1/4" NPT OR 3/8" NPT depending on the kit. A small amount of silicone may be used for a tight and secure seal. **NOTE:** No contamination from this installation can be allowed inside the air intake. Therefore you may choose to remove the air intake tube for this procedure. **LOCATION OF TUBE:** The end of the fuel tube should be about midway in the air intake. It may be cut to length if necessary. It is also desirable to have the fuel delivery tube placed about 3 to 4 inches from the turbo inlet.

5) Connect the fuel tube to the outlet of the regulator with the push-on hose supplied with kit. There are 2 possible connections at the regulator for this hose. Use the most convenient port and plug the second port with the supplied plug. (This plug is identified by the hex socket in the plug)

6) If a pressure switch is used, you will need to drill and tap a hole for the switch (Letter "Q" drill .332 for 1/8" N.P.T.) on the outlet side or pressure side of the turbo. This switch will allow the injection system to turn on and off based on fuel demand. (determined by the turbo boost pressure)

NOTE: The same caution needs to be taken with regard to contamination in this procedure as was described with the fuel delivery tube installation.

WIRING FOR PRESSURE SWITCH

1) Determine if you will use the supplied toggle switch or a pre existing switch already mounted in the cab. (Some manufacturers install auxiliary switches for your convenience)

2) If using the supplied toggle switch, drill a hole at a convenient location to mount the switch. Find a circuit that turns on with the key switch. (ex. radio, heater blower, etc.) Use this circuit to run a hot wire to the toggle switch and connect to the battery terminal of the toggle switch. Connect a second wire to the toggle switch that closes in the on position; route this wire to the pressure switch at the boost side of the turbo and connect to the common (C) terminal. Connect another wire to the normally open (NO) terminal on the pressure switch and route to the red wire on the fuel lock off valve at the regulator. Connect the black wire on the fuel lock to ground. (You can use a screw in the cover of the regulator if the regulator is grounded).

NOTE: If the pressure switch is not used, the red wire on the lock off can be connected directly to the circuit that would have been selected to energize the switch.

The use of a switch is highly recommended so that you can turn the system on when the engine reaches operating temperature and off when you do not want to use the injection system.

IMPORTANT: If any pinging noise is detected in the engine, the amount of propane is excessive. Immediately reduce the amount of propane with the adjusting screw in the fuel delivery tube. Turning clockwise will reduce the amount of propane being introduced into the air intake. Excessive propane delivery can cause engine damage.

KIT PICTURES

Basic Kit: Includes everything below, hoses **ARE** included but not pictured



Installation Example: See below for a basic example of spud installation and regulator mounting



OPTIONAL EQUIPMENT AVAILABLE FOR THE PROPANE INJECTION SYSTEM

OUTLET LOCK OFF VALVE: This valve is installed in the regulator outlet and wired together with the pressure lock off valve to keep the propane that is in the regulator from escaping into the intake after the system has been shut off by low boost pressure. Instead of being wasted, propane is saved for use with the next activation of the system by increased boost pressure. This can result in considerable propane savings based on driving conditions.

TANKS & BRACKETS: We have a large selection of tanks (both liquid & vapor) along with brackets that are suitable for use with injection systems. We can also provide safe and legal tanks that can be used inside trunk and passenger areas by using vapor seals that vent all connections to the outside of the vehicle.

TANK EXAMPLES: Under truck beds inside or outside of frame rails; multiple tanks hoses together; manifold tanks for tight spaces such as under a tool box in a truck bed; frame-mounted saddle tanks; inside trunks of passenger cars and many other applications.

REMOTE FILL KIT: Allows fueling of tanks that are not accessible due to location.

DASH MOUNTED FUEL LEVEL GAUGE: 12 volt system for reading propane tank fuel level.

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