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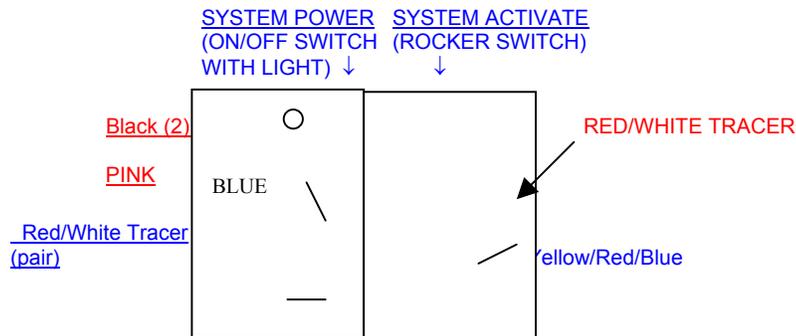


Powershot 2000 Propane System

Installation Instructions

- STEP 1: **FORD:** Unhook the vacuum hose from the vehicle MAP sensor. Be careful not to break the plastic fitting off of the map sensor. Attach the black hose with brass adapter fitting to the MAP sensor. Use zipties to secure. NOTE-Do not hook anything (ex: boost gauge) between the map sensor and the map sensor tee adapter.
- DODGE:** Tee into boost pressure gauge port with boost PSI line brass adapter tee. (24 valve-located behind the fuel filter) If no gauge port is present, locate a proper boost source or determine intercooler entry points, drill and tap 1/8 inch pipe threads into intercooler, approx. one inch forward of boost tube and hose clamp assembly. Install 1/8" pipe to 1/4" hose fitting (included), attach hose going to the top of the regulator to this fitting. Remove boost tube and clean to remove any metal particles from drilling and tapping before proceeding to Step 2.
- STEP 2: **Ford Only:** Attach hose previously coming from the MAP sensor to the opposite end of the brass adapter fitting.
All Vehicles: Run 2 hoses from under the vehicle hood to truck bed. Do not cut the hoses to equal lengths; one will be longer, run boost pressure line first. Mark hoses at both ends as follows: one-LP fuel the other-boost PSI. Attach BOOST PSI hose to adapter fitting "tee". At the tank, attach BOOST PSI line to the bottom of the Powershot. Attach Fuel line to the end of the Powershot fuel out fitting. Use hose clamps to secure hoses to Powershot.
- STEP 3: Remove air filter cover and air filter indicator, being sure to keep the rubber grommet. Run the fuel hose through the grommet making the fuel hose run down the inlet hose approx. 1 foot toward the turbo. If truck is equipped with Mass airflow sensor, route the hose around the sensor. Reinstall air filter cover.
- STEP 4: Run wire from under the dash to the fuel lock off solenoid valve. Ground the black wire under the dash. Hook yellow wire to yellow wire on switch harness. Hook ground wire from dual propane switch harness to ground. Hook the red wire to the fuse panel using the fuse taps provided
This power supply must turn on and off with the ignition switch. 12-Volt power with key on, no power with key off. The dual switches under the dash will be

used to turn system on and off and must be re- activated each time the vehicle is started by the momentary rocker switch. Power switch is illuminated when system is activated. See diagram below.



****Screws are provided for switch mounting****

- STEP 5: Secure all lines to frame rail keeping them clear of any moving parts. Leave a slight amount of slack in the hoses and wires leading from the bed of the truck to under the cab area. Truck beds are independent of cabs and can and do move.
- STEP 6: VERY IMPORTANT!!!! Always secure a vertical tank in the upright position only!!!! Never allow the tank to tip over. This will allow for the feed of liquid propane directly to the engine. Damage can occur. Check system for any leaks before initial vehicle operation and check hoses and wires regularly

This propane kit is intended to optimize the performance of your turbo-charged diesel engine. It is not recommended to operate a diesel engine at maximum power for extended periods. Improper use of propane injection may cause damage to the engine and/or void the manufacturer's warranty coverage. As with any aftermarket performance product designed to increase torque and horsepower, the user and purchaser assumes all risks and liabilities associated with and resulting from the installation and use of this product. **

Adjustments

Starting Pressure Adjustment - The system is normally factory set at 5 lbs unless a custom calibration was requested when ordering. (for example-a performance setting comes in at 2-3 lbs boost while a towing only setting comes in at around 10 lbs boost. *The black regulator is preset and needs no adjustments*)

To change when the system activates (the boost pressure the system comes on at):

To set for Performance Gains:

Remove both hoses from the regulator. Turn the system ON, loosen the 1" jam nut located on the top of the regulator. Screw this assembly out until you hear gas escaping. Then, turn the assembly in until the gas stops flowing. This is the lowest setting of the regulator (approximately 2 lbs) Tighten the 1" jam nut to lock this setting. This adjustment is very sensitive. It is recommended to mark the factory setting for future reference.

To set for Propane and Fuel Economy:

Follow the procedure above, EXCEPT: Screw in (right) for a later start time, (up to 15psi boost) or screw out (left) for an earlier start time (down to 2psi boost).

For the best fuel economy while towing- set regulator start pressure 2-3 PSI lower than average boost pressure when running on flat grade.

To reset to stock setting or any other start pressure setting, you can use a low pressure adjustable regulator or a Mighty Vac pump that reads pressure to simulate boost pressure and apply it to the top of the Powershot regulator, follow the steps above, (turn system on, remove hoses) and adjust to the starting boost pressure you desire. Tighten the 1" jam nut to lock setting in.

Flow Limit Adjustments:

The new Powershot 2000 does not contain fixed orifices but has an easy adjustment screw for regulating the flow for your specific needs. (ie - towing, propane economy, performance, etc.) To adjust the flow of LPG fuel - loosen 7/16" nut (located next to the Powershot 2000 engraving) turn this screw in for less LP flow. This is recommended to increase propane and fuel economy. Turn this screw out for more LP flow. The maximum adjustment is six turns out. The maximum flow rate is not recommended for vehicles with performance enhancements such as computer modules/chips or fueling boxes. Please use caution when making these adjustments. Listen for any signs of engine knocking or rattling when increasing the flow. Turn system off and readjust to stock setting immediately if any engine knocking or rattling occurs. This can indicate engine detonation, caused by excessive LPG flow.

These adjustments should only be made in well ventilated areas only.
Propane is extremely flammable.