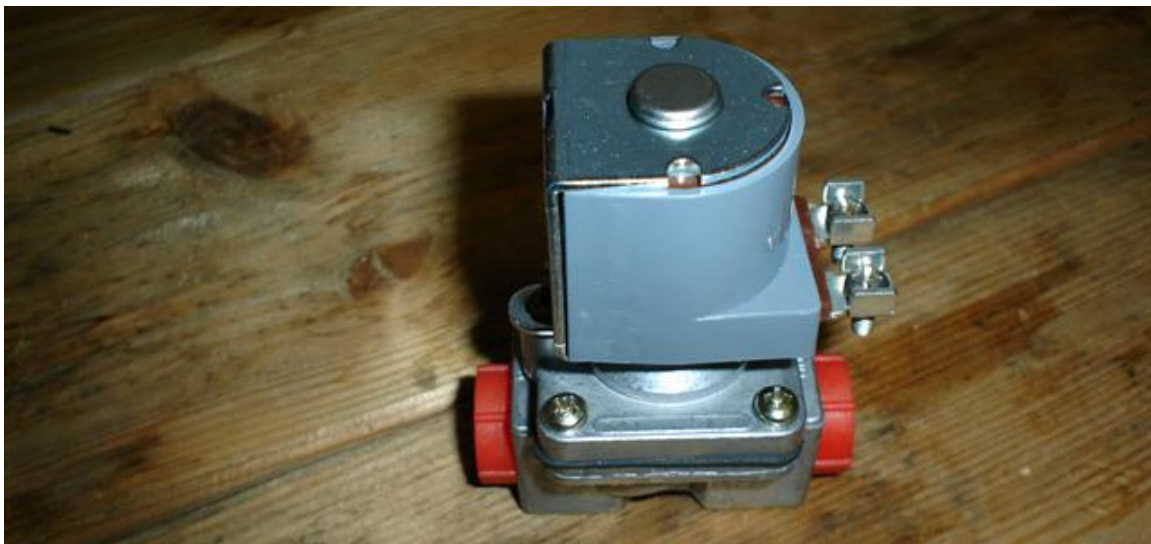




Electrically Controlling the LP Gas Flow

While traveling we made a habit of turning off the LP gas valve at the LP tank. We run the Xantrex Inverter to power the Norcold refrigerator while traveling the engine alternator provides plenty of amperage to re-charge the house and chassis battery banks, which allows us to run the refrigerator on AC while we are traveling. Turning the LP gas **ON** or **OFF** has been a manual operation after purchasing our 2007 Phaeton four years ago our prior coach had a LP gas valve switch to turn the LP gas **ON** and **OFF**. In a recent bout of laziness I decided to install an electrically controlled gas solenoid down stream of the LP tank regulator which with the flip of a lighted switch mounted on the driver console will turn the LP gas flow **ON** or **OFF**.

The gas solenoid selected was purchased from Pacific RV Parts it is a RV LPG Solenoid Shutoff Valve # 7718 which was found at the following link.
<http://www.pacificrvparts.com/ProductDetail.asp?CID=281&DID=93&PID=22454&SID=32>



To control the solenoid a 14 gauge wire was routed from the front electrical fuse panel under the driver's seat up and into the driver's side console, a blank fused terminal on the house battery side of the electrical panel was used for powering the gas solenoid. The deciding factor on where to install the switch was convenience the switch needed to be close to the driver, so the driver's side console was selected. After determining the switch cutout size, in this case 9/16" x 1 1/8", the hole was cut and the switch was installed. Three wires are required for operation of the switch one for the

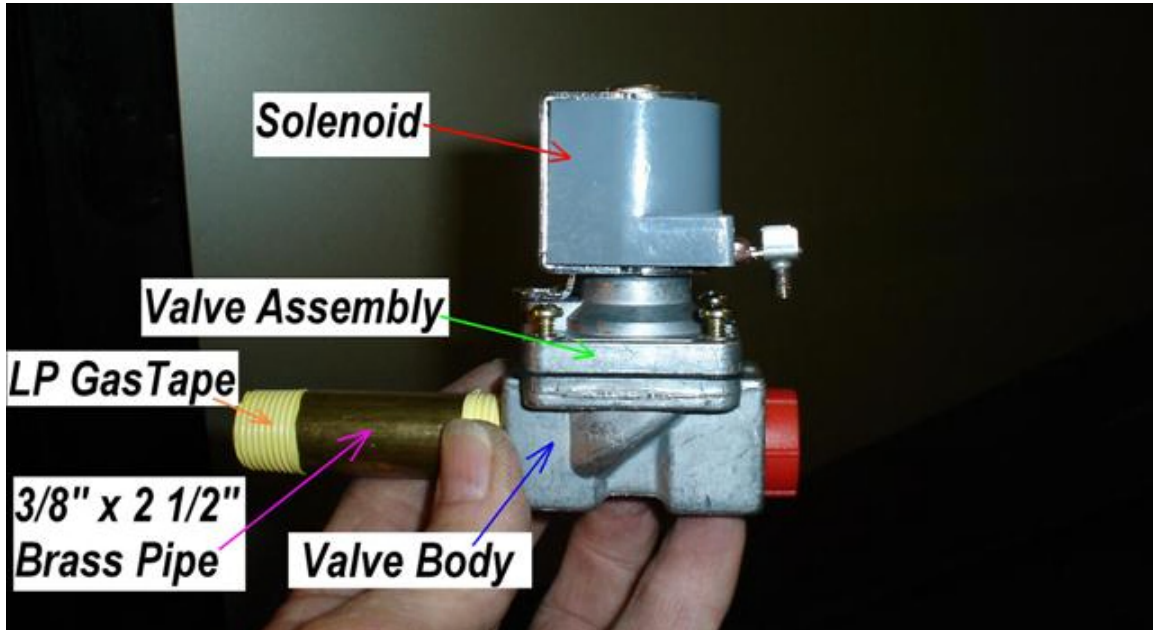
fused 12 volts to open the gas solenoid, a second is required as the ground for the light bulb in the switch, the third wire controls the switched voltage routed to one terminal on the gas solenoid. A ground wire is also connected to the second terminal on the gas solenoid the opposite end of the wire is connected to the same ground connection used by the tank fill indicator.



When the LP gas switch is turned **ON**, the RED cover on the switch will illuminate, the LP gas solenoid will energize opening the valve allowing LP gas flow to the appliances. After this modification when we are ready to travel all that is necessary to turn **OFF** the LP gas is to turn **OFF** the switch on the console. When we arrive at our destination, I'll just flip the LP gas control switch **ON** and the LP gas appliances are ready to use. Current consumed when the solenoid is energized is .8 Amps about 10 watts of power per hour.

After turning off the tank gas valve the flexible hose and gas fitting installed on the regulator were removed. The new gas valve assembly required a 3/8" x 2 1/2 " brass pipe to be installed between the regulator and the gas valve a protective skirt on the tank prevented installing the valve without this

extension. LP gas tape was used on all pipe fittings, but not on the flared fitting. The top of the valve body is marked IN and OUT for gas flow. Installing the new electric gas valve required disassembly of the valve. The assembled valve is too tall to thread onto the regulator. The solenoid and valve assembly were both removed which allows the valve body enough clearance to thread the pipe into the regulator. Be extremely careful, there is a small spring sitting on top of the valve plunger, in the tower of the valve assembly. Do not lose it or forget to re-install it prior to valve reassembly.



Completely assembled and installed NC (normally closed) LP gas valve controlled by the lighted switch on the Drivers Side Console.