

Installation Kit

for HLC Heaters with Series 32 Tanks

Overview:

The purpose of these instructions is to aid you in installing a fully functional propane fuel system between the propane container(s) and the H-LC heater that is safe and secure under both normal condition and, as much as possible, during an accident. These instructions were written with the latest standards for the US and Canada in mind and are intended to guide you in an installation that meets these standards. At the time of writing, the latest standards were the 2014 edition of NFPA 58, the Liquefied Petroleum Gas Code and the 2010 edition CSA-B149.5-10, Installation Code for Propane Fuel Systems and Tanks on Highway Vehicles. However, if the regulations that apply in your area should conflict with these installation instructions the regulations should always be followed instead.

Throughout this guide, the word “must” is used for any instruction that if not followed would create a safety hazard and/or yield an installation that would not comply with current standards. An instruction with the word “should” is necessary either for the proper functioning of the product or improves the long-term safe operation of the product. If you are unable to follow any instructions with the words “must” or “should”, please contact us and/or the authority responsible for regulating or approving your installation to discuss how your installation can be still be completed in a way that is functional, safe, and compliant. Finally, an instruction that recommends indicates an instruction designed to maximize the working life of the product, simplify installation, or improve the appearance of the installed product.

Please check the attached parts list to verify all parts were included with the installation kit.

Order of Parts from Propane Tank to Heater

[Outlet of Propane Tank]

- 1) 3' LP Gas Hose w/ MP Threads
 - Attach POL fitting to the Series 32 tank
 - Run hose through 3/4" Grommet attached to the 2 Stage Regulator Enclosure
 - Attach MP threaded end to the 2 Stage Regulator
 - 2) 2 Stage Low Pressure Regulator
 - Use the regulator enclosure with built in regulator bracket to attach the regulator to the bottom of the trailer and protect it from salt and road spray.
 - #8-32 Thread Cutting Screws are included to attach the regulator
 - When all fittings are attached to the regulator, snap on the regulator cover.
 - 3) 3/8" to 1/4" NPT Brass Bushing
 - 4) 1/4" NPT 3/8" tube SAE 45 Flare male connector
 - 5) SAE 45 Flare Long Nuts for 3/8" tube
 - 6) 3/8" OD Copper Tubing
 - Drill 5/8" holes in the trailer supports to run the tubing up to the front of the trailer. This will allow room for the 3/8" tubing and the included grommets (to protect the copper).
 - Use the partially cushioned clamps to hold the tubing on the front wall of the trailer.
 - 7) SAE 45 Flare Long Nuts for 3/8" tube
 - 8) 1/4" NPT 3/8" tube SAE 45 Flare male connector
 - 9) 1/4" NPT Brass Coupling
 - 10) 1/4" NPT 1/4" tube SAE 45 Flare male connector
 - 11) 3 ft Flexible Hose with 1/4" fittings
 - Use 5/8" clamps to prevent hose from vibrating excessively and to hold it in place.
 - 12) 1/4" NPT 1/4" tube SAE 45 Flare male connector
- [Bulkhead Fitting on Inlet of Heater]

Tips for Installation

Always follow best practices and applicable code for propane fuel systems when installing the fuel system. Be sure that all fuel lines are securely fastened against vibration.

Recommended Order of Installation

- 1) Attach POL fitting of part 1 to the tank.
- 2) Run unattached end of part 1 through the 3/4" grommet attached to regulator enclosure.
- 3) Attach MP thread end of part 1 and parts 3 and 4 to the 2 stage low pressure regulator.*
- 4) Attach the 2 stage low pressure regulator to the regulator enclosure and attach the regulator enclosure to the bottom of the trailer. If possible, attach the enclosure to one the beams that support the floor of the trailer in an area protected by the propane tank.
- 5) Attach parts 11 and 12 to heater. **
- 6) Determine the route for the copper tubing from the 2 stage low pressure regulator to the heater.
- 7) Drill 5/8" holes for the copper tubing into the trailer supports and install the grommets. Drill 5/8" routing holes if necessary and install grommets.
- 8) Pull the copper tubing into place. You may need to add a lubricant to the copper (compatible with rubber and copper) to help the tubing slide thru the grommets.
- 9) Trim the copper to length. Leave a little extra length to allow for contraction of the copper with the cold and in case a flare needs to be redone.
- 10) Slide the long nuts (parts 5 and 7) onto the tube and flare the ends of the tubing.
- 11) Attach the tubing to the fittings on the regulator and heater.
- 12) Use the included clamps to secure the tubing and hoses against vibration.
- 13) Attach the cover for the regulator enclosure using thread cutting machine screws.
- 14) Pressure test the system and complete any other necessary steps to meet code.

* Note: All brass connections must be made with the inclusion of pipe thread sealant, preferably yellow RectorSeal.

**Note: When attaching part 12 to the heater, the installer should remove the existing 1/4" NPT 3/8" tube SAE 45 Flare Male Connector from the bulkhead fitting on inlet of heater and replace with part 12.