

Hi-Ball™

KEEP THIS DOCUMENT WITH THE PRODUCT UNTIL IT REACHES THE END USER.

WARNING

Use proper safety equipment at all times.

Before installation or removal of any valve, the system must be purged completely of all product. To prevent the accidental opening of any valve, never grasp or carry a valve by its hand-wheel or handle.

This equipment must be installed, operated and maintained in accordance with federal, state and local codes, and manufacturer's instructions. For LP-Gas service, follow NFPA 58 Standard for the storage and Handling of Liquefied Petroleum Gases, plus all Local and State Safety Regulations. Only personnel trained in the proper procedures, codes, standards and regulations should install, inspect repair and/or replace this equipment. Failure to follow these instructions or to properly install and maintain this equipment could result in property damage and/or personal injury or death.

To ensure long term safe operation, the manufacturer recommends that under normal service conditions, this product should be inspected at least once every five (5) years and be repaired or replaced as required.

CAUTION: Contact with or inhalation of Liquefied Petroleum Gas or its vapors can cause serious injury or death. Dispersment must be in accordance with local regulations. For the proper handling and storage of Liquefied Petroleum Gas, refer to NFPA Pamphlet 58, plus all Local and State Safety Regulations.

TOOLS REQUIRED: Safety Equipment (i.e. Gloves, Goggles, and Clothing), Bench-Mounted Vice, 1/4" Allen Wrench

Removal of Ball Valve for Repair or Replacement

1. Safety equipment (i.e. gloves, goggles, and clothing) must be worn before proceeding to the next step.
2. Before removing the L427B from service, slowly move the valve handle to the **HALF OPEN POSITION** to ensure all pressure is bled from the system. See WARNING at the top of this page.

Disassembly of the L427B for Replacement of Ball Bearings (Refer to Figure 1 for Item Numbers)

1. Secure the Valve Body ① in a bench-mounted vice. Using a 1/4" allen wrench, remove the Cap Screw ③ from the Hammer Nut ②.
2. Turn the Hammer Nut so that the 1/4" Balls may fall through the hole.
3. Clean all parts thoroughly with a suitable cleaner which is compatible with propane service.

Re-assembly of the L427B

1. Slide the Carrier ⑦ against the Adapter ⑤ and position the Hammer Nut over the Carrier so that the Cap Screw hole is facing upward.
2. Insert the fifty (50) 1/4" Balls through the Cap Screw hole. It may be necessary to shake and rotate the Hammer Nut occasionally.
3. Apply two (2) drops of Loctite Threadlocker Blue 242 to the threads of the Cap Screw, install it into the Hammer Nut, and tighten with a 1/4" allen wrench. **WARNING! The Cap Screw must be checked at least once a month to make absolutely sure that it remains tight.**
4. Spin the Hammer Nut to check for smooth operation.

The Valve is now ready for re-installation.

PLEASE CONTACT SQUIBB-TAYLOR FOR ANY OTHER REPAIRS OR REPLACEMENT.

**Kit Number SP2-005-C0
 for MODEL L427B**

Item	Qty	Description
1	50	1/4" Balls

7	1	Carrier
6	1	Set Screw
5	1	Adapter
4	50	1/4" Balls
3	1	Cap Screw
2	1	Hammer Nut
1	1	Valve Body
Item	Qty.	Description

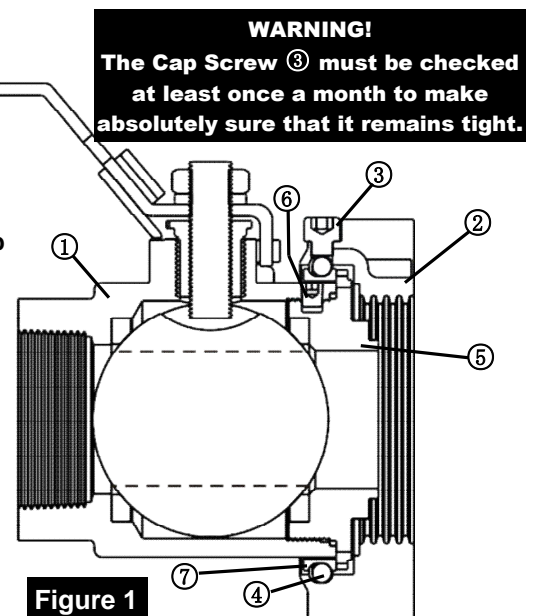
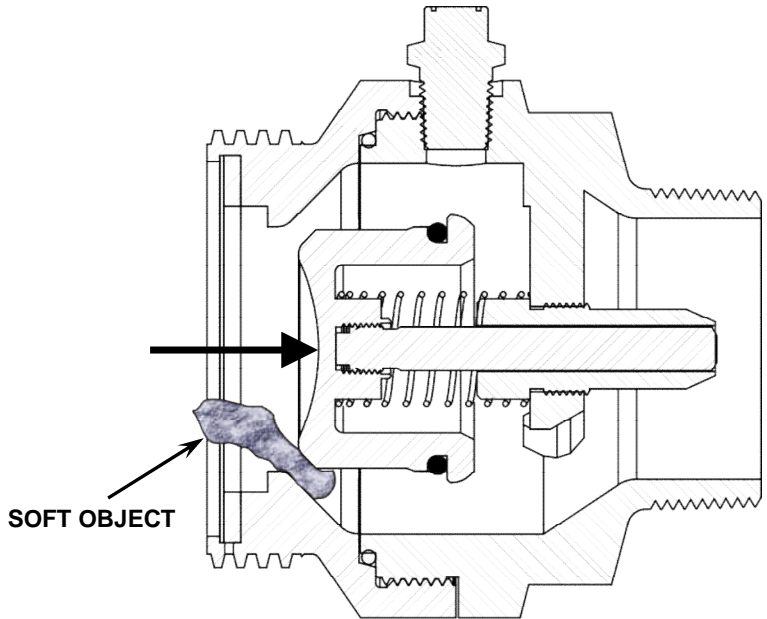


Figure 1

WARNING!

Vent the Check Valve before removal and use a clean, soft object (a wad of paper or a rag) to hold the Poppet open to ensure vaporizing liquid does not re-pressurize the Check before removal. **FAILURE TO DO THIS COULD RESULT IN SERIOUS INJURY OR EVEN DEATH!**

DO NOT TAP ON THE POPPET TO VENT THE VALVE, AS THE O-RING WILL BECOME CUT OR DISLODGED.



Removal of Check Valve for Repair or Replacement

1. Safety equipment (i.e. gloves, goggles, and clothing) must be worn before proceeding to the next step.
2. Before removing the L427K or L427KF Check Valve from service, **bleed all pressure from the Bobtail piping.**
3. **Vent the Check Valve** and use a clean, soft material (a wad of paper or a rag) to hold the poppet open to ensure vaporizing liquid does not re-pressurize the Check before removal.

Procedure for Disassembly of the L427K or L427KF for Repair and/or Seal Replacement (Refer to Figure 2 for Item Numbers)

TOOLS REQUIRED: Safety Equipment (i.e. Gloves, Goggles, and Clothing), Bench-Mounted Vice, 9/16" Hex Wrench, 15" Strap Wrench

1. Secure the unit in a bench-mounted vise, gripping the hex portion of Check Body ① in the vise with the 2" NPT Male Thread downward.
2. Mark the 'Check Body/Poppet Housing Interface' prior to removing the Hydrostat Fitting or Pipe Plug ②. Remove the Hydrostat Fitting or Pipe Plug using a 9/16" hex wrench.
3. Remove the Poppet Housing ③ using a 15" strap wrench. **CAUTION!** The Poppet is spring loaded, so use care when lifting the Poppet Housing from the Check Body.
Note: Clean all parts thoroughly with a suitable cleaner compatible with propane service. Lightly lubricate all seals with a silicone based lubricant or any grease compatible with propane service.

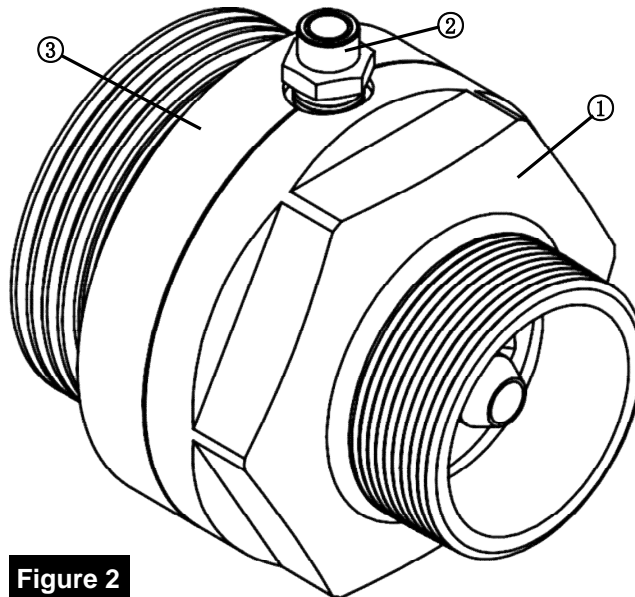


Figure 2

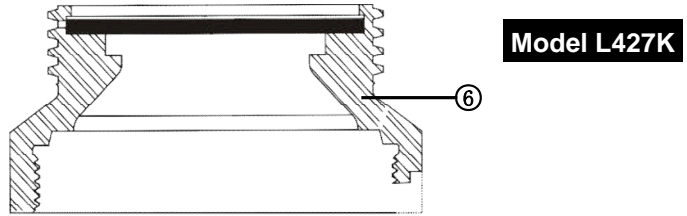
Re-assembly of the L427K or L427KF (Refer to Figure 3 for Item Numbers)

DO NOT LEAVE THE SIDE PORT OPEN! SEE STEP 4 FOR PROPER INSTALLATION OF FITTING OR PLUG.

1. With the Check Body ① still in the vise, place the Spring ② over the hub of the Poppet Guide ③.
2. Insert the Poppet Stem ④ through the Spring and into the Poppet Guide, with the Spring fitting over the hub at the bottom of the Poppet ⑤.
3. Press the Poppet downward into the Poppet Guide and install the Poppet Housing ⑥ over the top.
Note: When tightening the Poppet Housing, use the mark made in Step 2 above to help get it to the exact location as in the original assembly. This **MUST** be done in order to allow the Hydrostat Fitting ⑦ (or Pipe Plug) to be installed properly.
4. **Do not use thread tape on the Hydrostat Fitting or Pipe Plug.** Use an applicator (like a foam swab) to apply a thick coat of Loctite Thread Sealant with PTFE (30561) or equivalent to the **FEMALE THREAD ONLY**. **Do not apply sealant to the Fitting or Pipe Plug.**

The valve is now ready for a Pressure Test.

CAUTION: The Hydrostat has a pressure setting of 440 psig. Use a test pressure less than 400 psi.



Model L427K

7	2	Hydrostat Fitting (or Pipe Plug)
6	1	Poppet Housing
5	1	Poppet
4	1	Poppet Stem
3	1	Poppet Guide
2	1	Spring
1	1	Check Body
Item	Qty.	Description

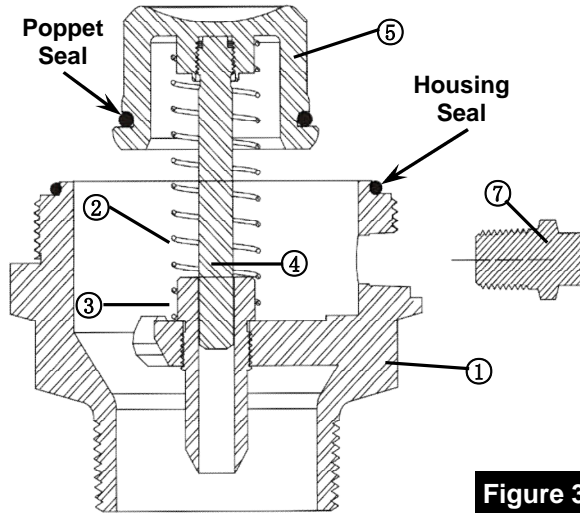


Figure 3

Available Kits

FOR MODEL L427K

427-0022 O-Ring Kit	
1	Poppet Seal
1	Housing Seal
Qty.	Description

S427-1100 Poppet Kit	
1	Poppet/Stem Assembly (Items 4 & 5 in Figure 3)
1	Poppet Seal
1	Housing seal
Qty.	Description

FOR MODEL L427KF

S427-1200 Flat Poppet Kit	
1	Poppet/Stem Assembly (See Figure 4)
1	Poppet Seal
1	Housing seal
Qty.	Description

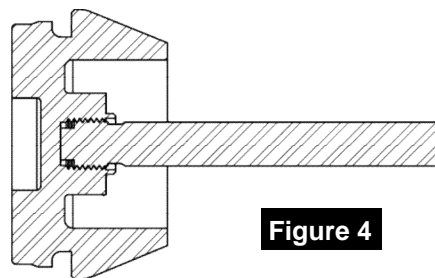
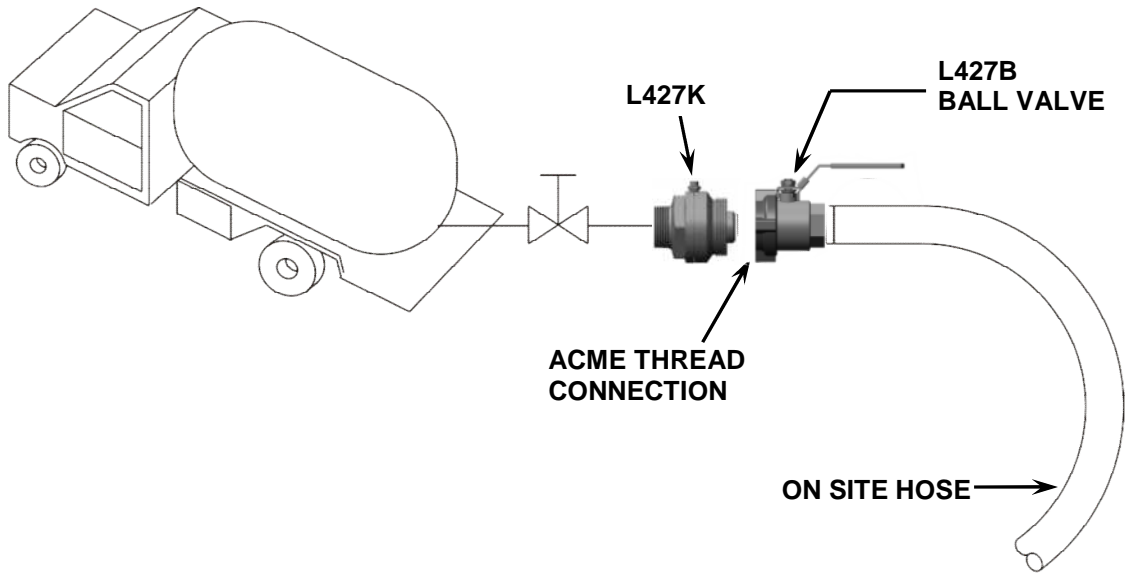


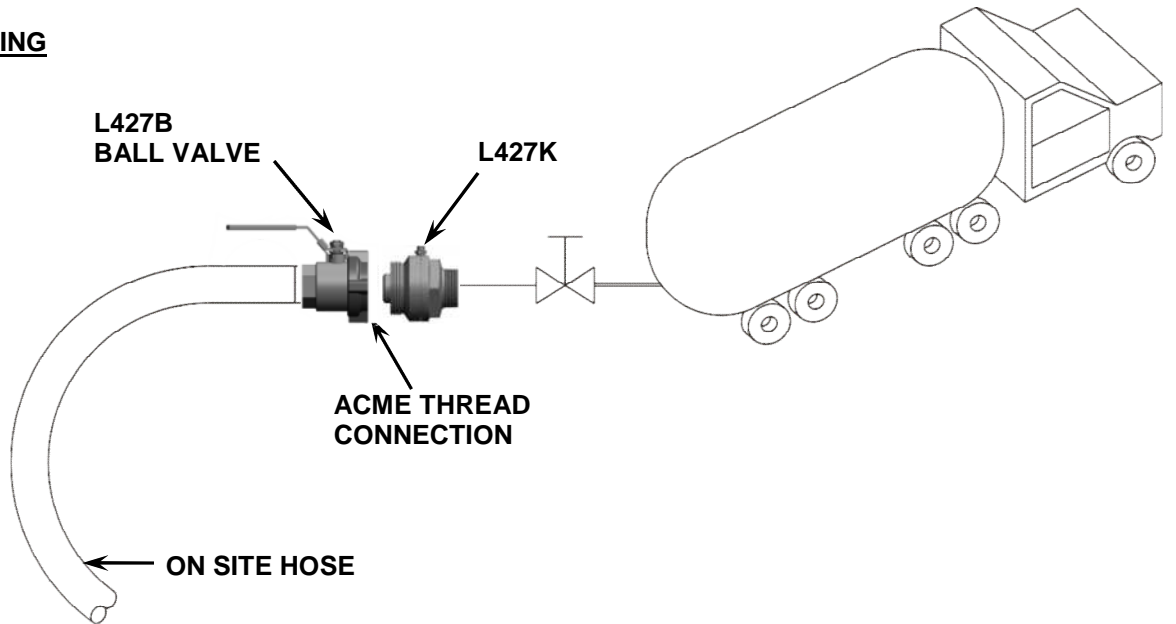
Figure 4

TYPICAL INSTALLATION SCHEMES FOR BOBTAIL AND TRANSPORT LOADING AND UNLOADING

BOBTAIL LOADING



TRANSPORT LOADING



TRANSPORT UNLOADING

