

Installation and Operation Instructions for Models AL113 & L113 (LPG only) RotaSeal Swivels

Oct. 2003

Form FVC 059 - Rev 01

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

WARNING

Before installation or removal of RotaSeal Swivels, the system must be purged completely of all product. Use proper safety equipment at all times. An abundant supply of clean water must be readily available and easily accessible as a means of providing **IMMEDIATE** First Aid treatment for exposure to ANHYDROUS AMMONIA. For LP-Gas Service, follow **NFPA / ANSI 58 Standard** for the Storage and Handling of Liquefied Petroleum Gases, plus any and all Local and State Safety Regulations. **To insure 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.**

USE PROPER SAFETY EQUIPMENT AT ALL TIMES. PURGE THE SYSTEM COMPLETELY OF ALL PRODUCT.

CAUTION: Contact with or inhalation of Liquid Anhydrous Ammonia or LP-Gas or their vapors can cause serious injury or death. Dispersment must be in accordance with local regulations. For the proper handling and storage of Anhydrous Ammonia, refer to ANSI Standard K61.1. For the proper handling and storage of Liquefied Petroleum Gas, refer to NFPA Pamphlet 58.

NOTE: The AL113 and the L113 are **WARRANTED** to be free from defects in material and/or workmanship and seal leaks for a period of two (2) years from the date stamped on the unit. This **WARRANTY** is valid only if the product has been used in normal propane or anhydrous ammonia operations. Should your RotaSeal leak during the Warranty Period, return it to any authorized distributor for replacement. If the warranty has expired, a seal kit may be purchased and the RotaSeal repaired as explained on page 2 of this document.

TOOLS REQUIRED: Safety Equipment (i.e. gloves, goggles, clothing, etc.), 5/32" Allen wrench, 24" Pipe Wrench.

RotaSeal Swivel Installation Notes

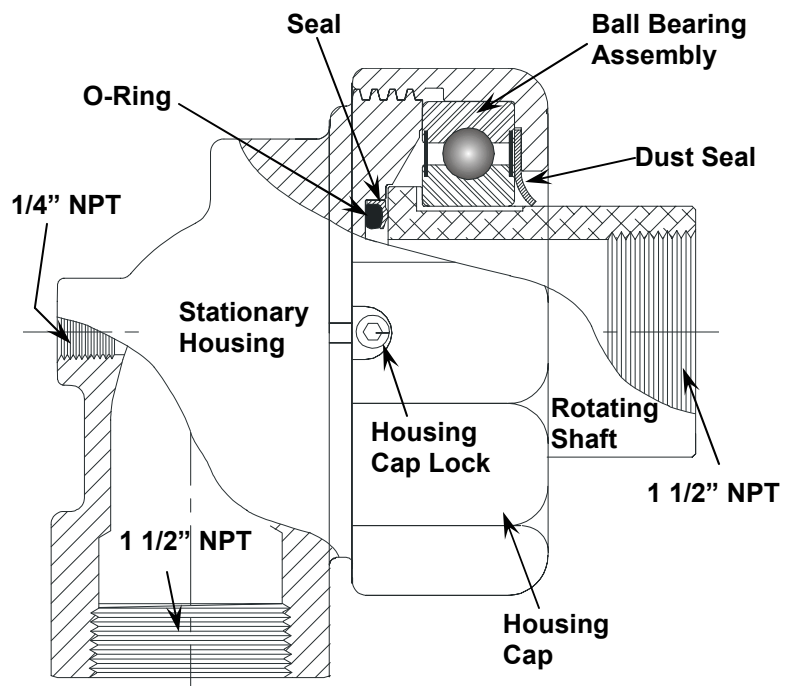
1. RotaSeal Swivels have 1 1/2" NPT female threads at the inlet and outlet connections. Always use Teflon tape or other pipe sealant on the male threads of mating parts.
2. RotaSeal Swivels are bi-directional and either connection may be used as the inlet or outlet.
3. All RotaSeal Swivels are shipped with a 1/4" Pipe Plug located on the Housing. This Pipe Plug can be removed and replaced with a Bleed Valve or a Hydrostat Relief Valve to accommodate system requirements.

Installation Recommendations

1. When RotaSeal Swivels are used as Reel Swivels, i.e., on Bobtail Delivery Trucks, the inlet piping to the RotaSeal must incorporate a short hose section to compensate for any misalignment due to variations in thread make-up of system piping.

NOTE: RotaSeal Swivels are designed for slow speed, intermittent rotation (60 rpm max.) i.e., hose reels. They are not intended for high speed or continuous duty applications.

2. When RotaSeal Swivels are used for Tank or Railcar Filling applications, overhung loads must not exceed 150 ft.-lbs. torque at the 1 1/2" NPT outlet connection. All piping must be Schedule 80 minimum.

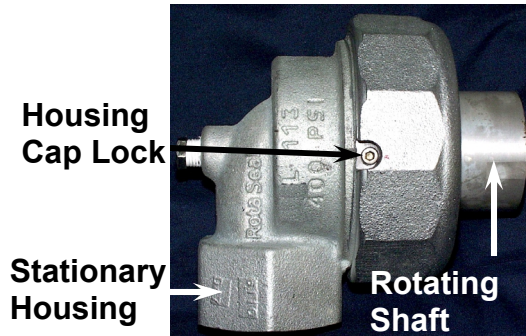


Installation of RotaSeal Swivel on Bobtail

Note: Safety Equipment (i.e. gloves, goggles, and clothing) must be worn before continuing with the next step.

Step 1: Apply Teflon tape or other thread sealant to the 1-1/2" NPT hose that will be mated with the Stationary Housing. **Avoid excessive use of thread sealant.**

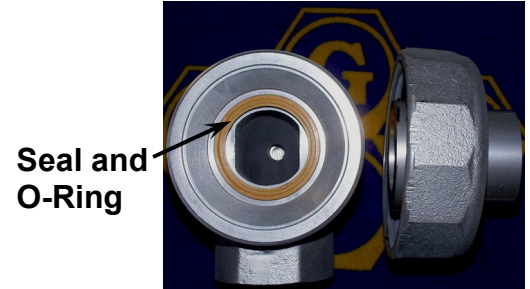
Step 2: Install the 1-1/2" NPT hose to the Stationary Housing. **Do not over-tighten.**



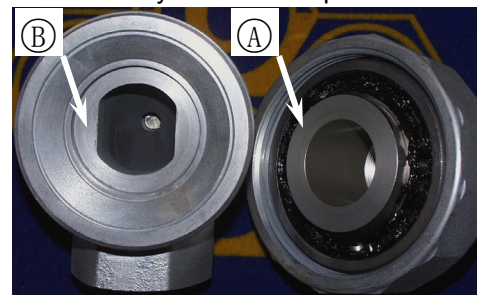
Step 3: Apply Teflon tape or other thread sealant on the male pipe threads of the hose reel inlet. **Avoid excessive use of thread sealant.**

Step 4: Install the Rotating Shaft to the hose reel inlet. Place the 12" Crescent wrench on the wrench flats on the Rotating Shaft to tighten. **Do not over-tighten.**

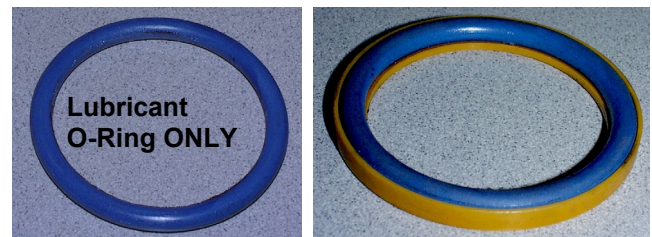
Step 3: Twist the Stationary Housing toward you and remove the Seal and O-Ring.



Step 4: Wipe debris from Housing Seal face A and B. Inspect seal face A. If surface A is not smooth, the RotaSeal assembly should be replaced.



Step 5: Lightly lubricate the replacement O-Ring only with Dow 111 lubricant (provided when Seal Kit is ordered), then insert the O-Ring into the Seal.



Model Number	Seal Kit Number	Inlet/Outlet Size
AL113	113-0022	1-1/2" FNPT x 1-1/2" FNPT
L113	113-0023	1-1/2" FNPT x 1-1/2" FNPT

Seal Kit includes Seal Assembly, Lubricant & Set Screw.

Step 6: Place the new Seal and O-Ring into the Stationary Housing with the O-Ring toward Seal Face B.

Step 7: Twist the Stationary Housing back toward the Rotating Shaft and re-install the Housing Cap. **Note:** When the Housing Cap is tightened to approximately 100 ft. lbs., the slot in the Cap should be re-aligned with the threaded hole and the Set Screw may be installed.

Step 8: Install the new Set Screw and test pressurize the system.

Replacing the Seal Assembly

Note: Safety Equipment (i.e. gloves, goggles, and clothing) must be worn before continuing with the next step.

Step 1: Before performing maintenance on the RotaSeal Swivel, ensure that all pressure is bled from the system.

Step 2: Using a 5/32" Allen wrench, remove the Housing Cap Lock completely and unscrew the Housing Cap from the Stationary Housing.

NOTE: Do not allow dirt, debris, etc. to contaminate the Bearing Assembly grease.