



Technical Document

Lead Gaskets

Hydro Instruments uses an assortment of lead gaskets throughout its equipment. This technical document will provide an overview of those lead gaskets, installation guidelines and disposal considerations.

Installation of Lead Gaskets

WARNING! It is imperative to use the correct lead gasket as indicated in the parts drawing for the equipment. Using a lead gasket other than what is indicated in the parts drawing can result in serious injury and damage.

After any lead gasket seal has been made it must then be checked for leaks. Systems feeding chlorine gas can use ammonia fumes to detect chlorine gas leaks. The ammonia fumes will mix with any leaking chlorine gas to create a visible white smoke. In other systems it may be necessary to use Nitrogen or dry air to pressure test for leaks.

It's important to check lead gasket seals for leaks often. While a leak may not initially be present, a leak can occur over time. Leaking lead gasket seals should first be tightened to try and stop the leak, but should the leak persist, the system must be evacuated and the lead gasket replaced.

Any time a lead gasket seal is broken it should be resealed using a new and undamaged lead gasket of appropriate size and thickness. Never reuse a lead gasket or use multiple stacked lead gaskets as the seal will not be as good as using a new lead gasket or one of appropriate thickness. Reusing lead gaskets and/or multiple lead gaskets stacked together is an unsafe practice that can lead to injury and damage.

NOTE: Some lead gasket seals require that they be tightened to a defined torque specification. The Operation & Maintenance Manual for the equipment should be checked for these torque specifications.

Lead Gaskets

Conventional Lead Gaskets

Description	Part No.	ID	OD	Thickness
Versatile	G-152	0.560" (14.2mm)	0.990" (25.2mm)	0.060" (1.5mm)
The G-152 gasket is diverse in application, but is ideal for mounting some non-Hydro Instruments brand vacuum regulators to chlorine cylinder valves.				
Standard	LG-100 GAH-LED-111	0.560" (14.2mm)	0.935" (23.8mm)	0.060" (1.5mm)
The LG-100 and GAH-LED-111 are the most commonly used. Use these gaskets to: <ul style="list-style-type: none">• Mount Hydro Instruments vacuum regulators to chlorine cylinder valves.• Mount Hydro Instruments isolation valve to chlorine cylinder valves.• Attach Hydro Instruments flexible connectors to chlorine cylinder valves.				
Thicker	GAH-LED-11T	0.560" (14.2mm)	0.935" (23.8mm)	0.097" (2.46mm)
The GAH-LED-11T is slightly thicker and is preferred by some for attaching Hydro Instruments flexible connectors to chlorine cylinder valves.				
Thickest	LG-332	0.560" (14.2mm)	0.935" (23.8mm)	0.120" (3.0mm)
The LG-332 is the thickest gasket offered. Use this gasket to: <ul style="list-style-type: none">• Attach the Hydro Instruments IW-1 ton ironworks assembly to the back of a Series 500, 200 or 700 vacuum regulator.• Mount the Hydro Instruments IV-1A ammonia isolation valve assembly to an upright ammonia cylinder valve.				



Product Specific Lead Gaskets

Product	Part No.	ID	OD	Thickness
Series 3000 (Vacuum regulators)	GAH-LED-124	1.00" (25.4mm)	1.375" (35mm)	0.060" (1.5mm)
PRV-71H (Upper end cap)	GAH-LED-333	1.425" (36.2mm)	1.675" (42.5mm)	0.070" (1.7mm)
PRV-71H (Lower end cap—Threaded) For PRV's shipped prior to July 2024.	GAH-LED-334	1.475" (37.4mm)	1.875" (47.6mm)	0.070" (1.7mm)
PRV-71H (Lower end cap—Flanged)	GAH-LED-335	1.800" (45.7mm)	2.200" (55.8mm)	0.060" (1.5mm)
C-100 (Chlorine gas filter)	C-100G	4.063" (103.2mm)	5.750" (146.0mm)	0.080" (2.0mm)
VPH-10000-1 & VPH-10000-2 (Vaporizer pressure chamber flange)	VPH-10000-001	6.332" (160.8mm)	7.796" (198.0mm)	0.060" (1.5mm)

NOTE: Some lead gasket seals require that they be tightened to a defined torque specification. For example the GAH-LED-334 gasket listed above. The Operation & Maintenance Manual of the equipment should be checked for these torque specifications.

Pressure Manifold Accessory Lead Gaskets

Product	Part No.	ID	OD	Thickness
Cl ₂ Manifold Union (3/4" AH-1461 & 1" AH-1462)	GAH-LED-1010	1.35" (34.3mm)	1.79" (45.5mm)	0.060" (1.5mm)
Cl ₂ Manifold Union (3/4" sold prior to 2010)	GAH-LED-1020	1.62" (41.1mm)	2.11" (53.6mm)	0.060" (1.5mm)
Manifold Y-strainer (RH-6786)	RH-6787	1.183" (30.0mm)	1.566" (39.7mm)	0.133" (3.3mm)

Usage & Disposal of Lead Gaskets

A lead products safety data sheet (SDS) should be kept on hand for reference. This document will contain useful information for the handling, storage and disposal of lead gaskets.

The disposal of lead gaskets should be considered. To prevent soil and water contamination, lead gaskets should be disposed of in accordance with regional, national and local laws and regulations.

Used and damaged lead gaskets should never be discarded with regular trash; instead these gaskets should be collected and provided to a metal-recycling company. Metal-recycling companies help dispose of and recycle lead waste in a safe and environmentally conscious manner.