



IM Vent Owner's Manual



IM Vent

Spring-loaded, dual-acting pressure and vacuum reclosing pressure relief vent that provides much needed protection from dangerous build-up of positive and negative forces on tank trailers transporting hazardous materials.

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Technical Data

- 1) Pressure/Vacuum Relief Vent
- 2) Single & dual spring options
- 3) All pressure bearing components are constructed of corrosion resistant 316 stainless steel.
- 4) 2 ½ BSP male connection style and 3" 80mm flange connection with slotted holes to fit Dn65 Pn10, Dn80 Pn6, 3" ANSI 150#.
- 5) Designed to meet the criteria of ISO-4126 and IMDG section 6.
- 6) Flanged mounts have a raised face designed with serrations in accordance with ASME B16.5 to ensure proper gasket seal for non-Teflon® lined models.
- 7) Tef-O-Sil (Teflon® encapsulated O-Ring) seals are compatible with all ladings for packing groups 1 & 2.

8) PERFORMANCE SPECIFICATIONS (2.5" DESIGN)

INLET SIZE: DN65 2.5 in

FLOW AREA: 3612 mm² 5.60 in²

MINIMUM LIFT: 17 mm 0.67 in

TEMPERATURE RANGE: -40 C TO 200 C

PERFORMANCE SPECIFICATIONS (3" DESIGN)

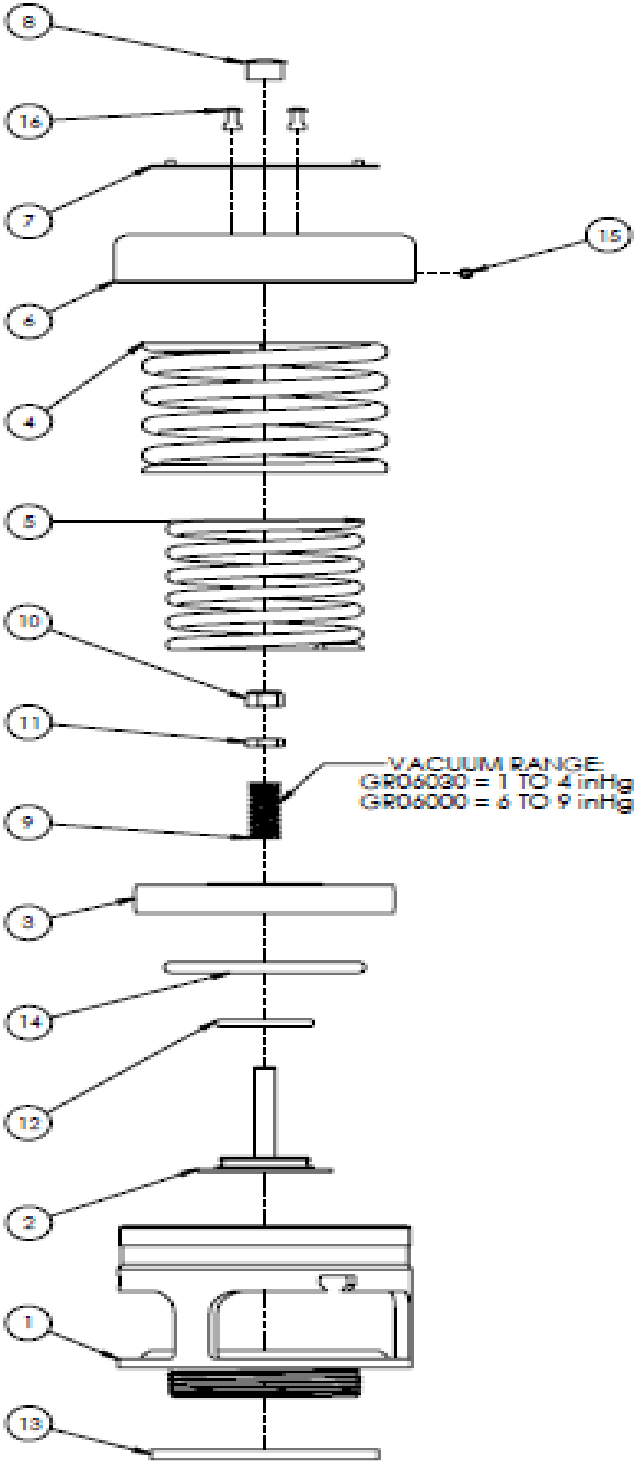
INLET SIZE: DN80 3 in

FLOW AREA: 5028 mm² 7.79in²

MINIMUM LIFT: 20 mm 0.79 in

TEMPERATURE RANGE: -40 C TO 200 C

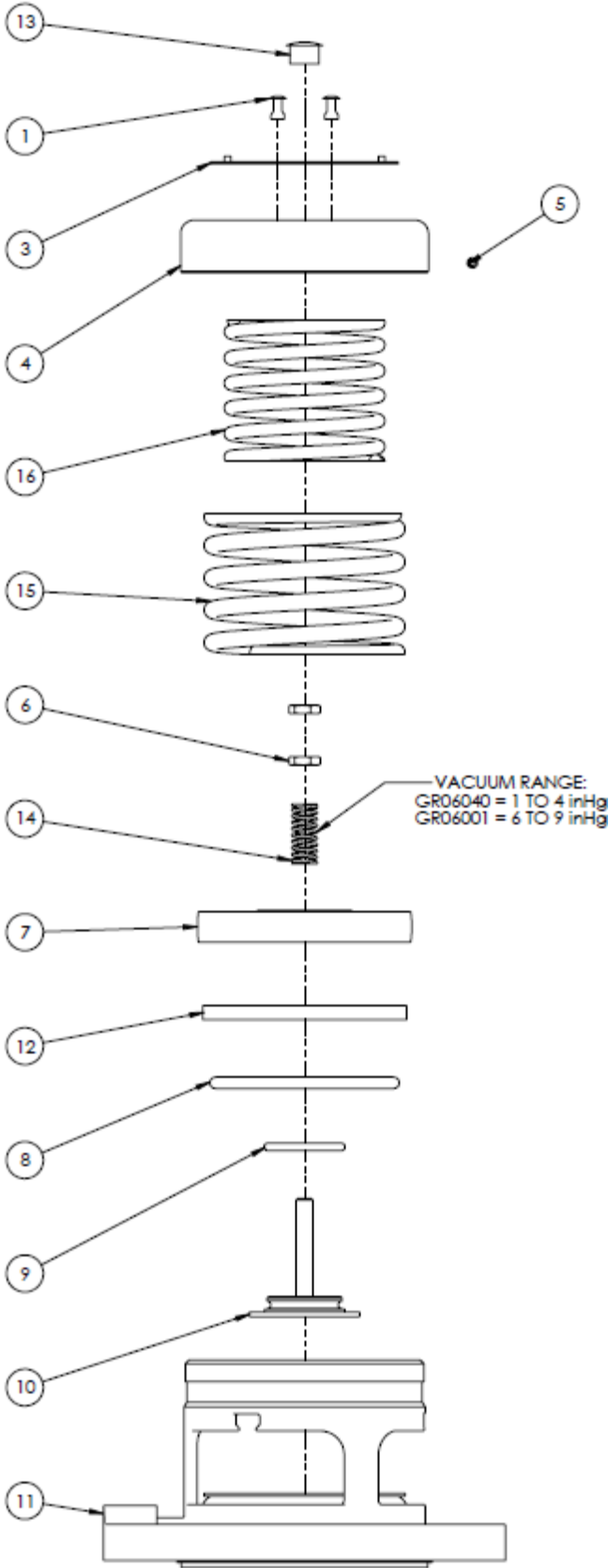
Exploded View of Product



Bill of Material

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GR11002	IM HOUSING 2-1/2" BSP MALE	1
2	GR10000	IM VACUUM POPPET	1
3	GR07000	IM PALLET 65MM PRESSURE/VACUUM	1
4	See Customer Rep	IM OUTER SPRING	1
5	See Customer Rep	IM INNER SPRING	1
6	GR02510	IM CAP STAMPED	1
7	GR01550	IM BLANK DISC POLISHED	1
8	GR98000	IM PLUG BLACK PLASTIC CAP	1
9	See Customer Rep	IM VACUUM SPRING	1
10	GR05010	M8 HEX LOCK NUT	1
11	GR05000	M8 HEX JAM NUT	1
12	GR09020	IM VACUUM O-RING	1
13	GM22030	2.5" DURASEAL VENT TANK GASKET	1
14	GR08020	IM PRES O-RING 65MM	1
15	GR03000	IM SET SCREW	1
16	GB98030	RIVET, VENT, 5/32" DIA	2
17	GO40150	PASSED INSPECTION STICKER	1

Exploded View of Product



Bill of Material

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GB98030	RIVET, VENT, 5/32" DIA	2
2	GO40150	PASSED INSPECTION STICKER	1
3	GR01550	IM BLANK DISC POLISHED	1
4	GR02520	IM CAP STAMPED TC	1
5	GR03000	IM SET SCREW	1
6	GR05002	M8 HEX JAM NUT TC	2
7	GR07008	IM PALLET LINED PRESSURE/VACUUM TC	1
8	GR08040	IM PRES O-RING 80MM	1
9	GR09020	IM VACUUM O-RING	1
10	GR10005	IM VACUUM POPPET LINED TC	1
11	GR11511	IM FLANGED 80MM LINED HOUSING TC	1
12	GR13001	TEFLON PALLET VACUUM	1
13	GR98000	IM PLUG BLACK PLASTIC CAP	1
14	See Customer Rep	IM COATED VACUUM SPRING	1
15	See Customer Rep	IM OUTER SPRING TC	1
16	See Customer Rep	IM INNER SPRING TC	1

Safety

General Safety Information



WARNING: All safety regulations must be followed during the operation of this product. Follow maintenance instructions as set forth in this manual to avoid serious injury. Do not attempt to disassemble the device unless you have been properly trained by a Girard Equipment representative. It is strongly recommended that this entire manual be read prior to the operation of this equipment.

Product Storage

- Temperature Range: -40° F to 250° F
- Humidity Range: N/A
- Altitude Range: N/A

Store the unused device in its original container, to maintain a dust-free environment. We recommend that stored valves be retested every six months. The initial test date will be listed on the valve certificate.

Product Handling

Follow OSHA practices for lifting of heavy objects.

Disposal Requirements

Due to spring pressure, authorized personnel must disassemble the device before disposal. Use extreme caution. If authorized personnel are not present, please contact Girard Equipment.

Installation Instructions

- 1) Remove valve from packaging.
- 2) Insert new, clean gasket.
- 3) Align the valve with the tank mount.
- 4) Girard Equipment recommends using new 316 stainless steel studs and nuts, lubricated with light-weight oil, to bolt device to tank car.

Operation Instructions

No instructions are needed during the operation. This safety relief valve opens and re-seats automatically.

Maintenance Instructions

Girard recommends that all products be placed on a regular maintenance schedule which includes a visual inspection for leaks. The end user must determine their own schedule based on use and environment. Ensure the schedule meets regulations and the operators are aware of all applicable codes.

PLEASE VIEW THE ASSOCIATED VIDEO ON OUR WEBSITE.

O-Ring and Gasket Maintenance

All soft goods should be replaced during regular maintenance and requalification, or if device fails an in-service STD (Start to Discharge) pressure test.

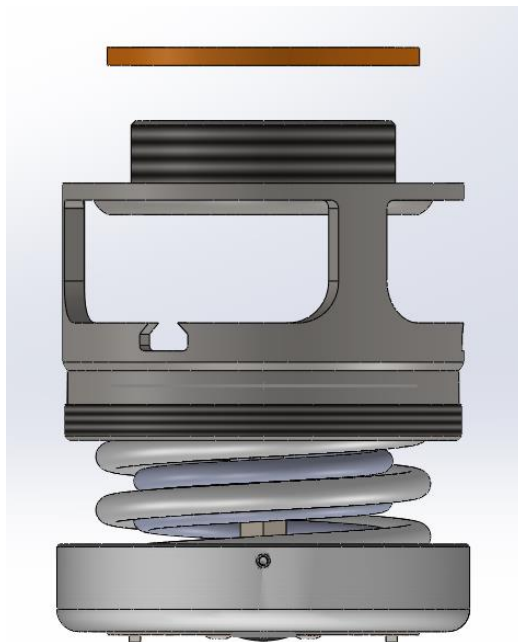
NOTE: Counting the exposed threads between the cap & housing body, before you begin, will allow you to reassemble as close to the factory set pressure setting as possible.

To Replace O-Rings

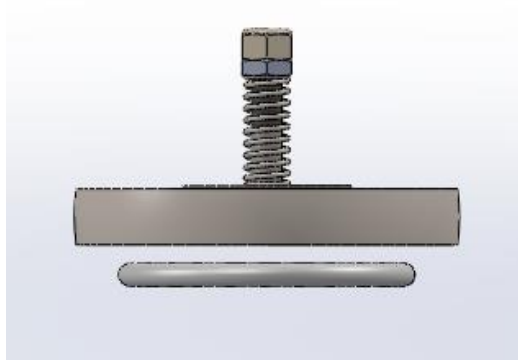


WARNING: All safety regulations must be followed during the operation of this product. Follow maintenance instructions as set forth in this manual to avoid serious injury. Do not attempt to disassemble the device unless you have been properly trained by a Girard Equipment representative. It is strongly recommended that this entire manual be read prior to the operation of this equipment.

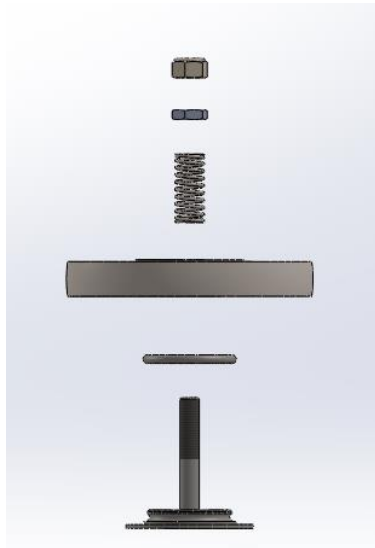
1. Remove the GR02510 IM CAP STAMPED by unscrewing the housing body with the pallet pressed down using an arbor press, as shown in the video.



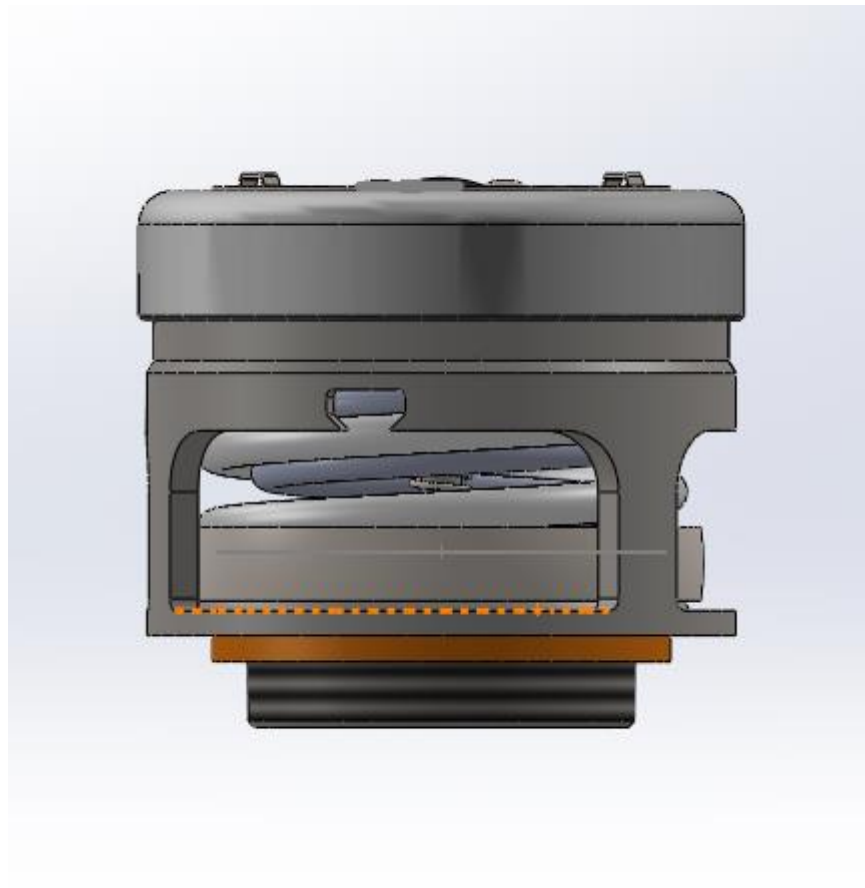
2. Remove IM PRES O-ring and replace.



3. Remove hex lock nut and hex jam and replace vacuum O-ring.



4. Reassemble and test.



Test Instructions

Test the valve per the manufacturer's guidelines.

Test Performed: ISO 4126:2004(E) Part 1, Section 7.2

1. Rapidly increase air pressure and blow out the assembly, assure that the o-ring does not unseat.
2. Remove all pressure and bleed off.
3. Increase pressure approximately 0.1 bar per second until reaching set pressure.
4. Set pressure must be within +/-3% bar or 0.1 bar, whichever is greater. reference the device set pressure from chart below.
5. Close air supply off and wait for valve to reseat; record pressure reading. this value must be within 15% or 0.3 bar below set pressure, whichever is greater.
6. No leakage shall be allowed

We recommend using the Girard Equipment Test Box.



Troubleshooting and Repair

<p>If device fails STD (Start to Discharge) test</p>	<ol style="list-style-type: none"> 1. Replace O-ring as shown in the Maintenance Instructions section, Steps 1-4. 2. Clean the ceiling of the poppet with a Scotch-Brite™ pad.
<p>If device fails vacuum set pressure test</p>	<ol style="list-style-type: none"> 1. Tighten or loosen the vacuum spring to reach the desired pressure setting.
<p>If device fails to reseat</p>	<ol style="list-style-type: none"> 1. Clean the ceiling of the poppet with a Scotch-Brite™ pad.
<p>If device doesn't seal properly</p>	<ol style="list-style-type: none"> 1. Wipe sealing area with a clean rag. 2. Install a new gasket, pressure O-ring, or vacuum O-ring. 3. If problem cannot be corrected, contact a Girard Equipment representative.

Replacement Parts

O-rings – Refer to Parts List

Gaskets – Refer to Parts List

Accessories

2 Ea. 13 mm Wrenches

O-Ring Pick

Spanner Wrench

Warranty

All goods manufactured by Girard Equipment, Inc. from “genuine” Girard parts are warrantied to be free from defects and will be replaced free of charge if failure occurs within 5 years of date of shipment, provided that these parts have been used in accordance with seller’s recommendations. Our liability in any case shall be limited to the sale price of the product and will not extend to any consequential damage.

Contact Information



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www.GirardEquip.com

