



Manufacturer

TLV® CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001



Instruction Manual

Free Float Gas Trap
GAS1N / GAS2N / GAS3N

Manufacturer

TLV® CO., LTD.

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TLV CORPORATION

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Introduction

Thank you for purchasing the **TLV®** free float gas trap.

This product has been thoroughly inspected before being shipped from the factory. When the product is delivered, before doing anything else, check the specifications and external appearance to make sure nothing is out of the ordinary. Also be sure to read this manual carefully before use and follow the instructions to be sure of using the product properly.

If this product is used with toxic, flammable or otherwise hazardous fluids, all responsibility for regulatory compliance, product selection (including materials), handling, safety measures, etc. for the hazardous fluid(s) must be borne by the customer.

Under no circumstances will TLV CO., LTD. be liable for consequential economic loss damage or consequential damage to property or persons caused by explosions, poisoning or other accidents due to use with hazardous fluids.

This free float gas trap uses a precision-polished float and three-point seating for the valve body. With no hinges or levers, the trap continuously discharges condensate, preventing it from collecting. The three-point seating supports the precision-polished float securely at three points and ensures a high degree of sealing when even only minute quantities of condensate are present. The trap can also be disassembled and reassembled while still installed in the piping, which results in considerable time savings and facilitates repair and maintenance.

This gas trap's outstanding features of the precision-polished float and three-point seating, combined with a mechanism that has a proven record of success, increase the efficiency of a variety of systems and reduce time and labor needed for maintenance and bypass blowdown operations.

If detailed instructions for special order specifications or options not contained in this manual are required, please contact **TLV®** for full details.

This instruction manual is intended for use with the model(s) listed on the front cover. It is necessary not only for installation, but for subsequent maintenance, disassembly/reassembly and troubleshooting. Please keep it in a safe place for future reference.

Safety Considerations

- Read this section carefully before use and be sure to follow the instructions.
- Installation, inspection, maintenance, repairs, disassembly, adjustment and valve opening/closing should be carried out only by trained maintenance personnel.
- The precautions listed in this manual are designed to ensure safety and prevent equipment damage and personal injury. For situations that may occur as a result of erroneous handling, three different types of cautionary items are used to indicate the degree of urgency and the scale of potential damage and danger: DANGER, WARNING and CAUTION.
- The three types of cautionary items above are very important for safety: be sure to observe all of them as they relate to installation, use, maintenance, and repair. Furthermore, TLV accepts no responsibility for any accidents or damage occurring as a result of failure to observe these precautions.

Symbols

	Indicates a DANGER, WARNING or CAUTION item.
	Indicates an urgent situation which poses a threat of death or serious injury
	Indicates that there is a potential threat of death or serious injury
	Indicates that there is a possibility of injury or equipment / product damage
	<p>When used with toxic, flammable or otherwise hazardous fluids, manage properly and take appropriate safety measures for the hazardous fluids in use.</p> <p>Failure to do so may result in serious injury and/or severe damage to property caused by blockage or fluid leakage.</p>
	<p>NEVER apply direct heat to the float.</p> <p>The float may explode due to increased internal pressure, causing accidents leading to serious injury or damage to property and equipment.</p>
	<p>Install properly and DO NOT use this product outside the recommended operating pressure, temperature and other specification ranges. This product is for intended use only.</p> <p>Improper use may result in such hazards as damage to the product or malfunctions that may lead to serious accidents. Local regulations may restrict the use of this product to below the conditions quoted.</p> <p>DO NOT use this product in excess of the maximum operating pressure differential.</p> <p>Such use could make discharge impossible (blocked).</p>

Safety considerations continued on next page.

CAUTION	<p>Use hoisting equipment for heavy objects (weighing approximately 20 kg (44 lb) or more). Failure to do so may result in back strain or other injury if the object should fall.</p>
	<p>Take measures to prevent people from coming into direct contact with product outlets. Failure to do so may result in burns or other injury from the discharge of fluids.</p>
	<p>When disassembling or removing the product, wait until the internal pressure equals atmospheric pressure and the surface of the product has cooled to room temperature. Disassembling or removing the product when it is hot or under pressure may lead to discharge of fluids, causing burns, other injuries or damage.</p>
	<p>Take measures to ensure the proper handling, such as recovery or dilution, of hazardous fluids discharged at product outlets. Outflow of fluid or fluid leaks may lead to hazards such as flammable conditions or corrosion, which may result in injury, fires, damage or other accidents.</p>
	<p>Be sure to use only the recommended components when repairing the product, and NEVER attempt to modify the product in any way. Failure to observe these precautions may result in damage to the product and burns or other injury due to malfunction or the discharge of fluids.</p>
	<p>Use only under conditions in which no freeze-up will occur. Freezing may damage the product, leading to fluid discharge, which may cause burns or other injury.</p>

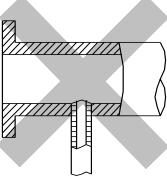
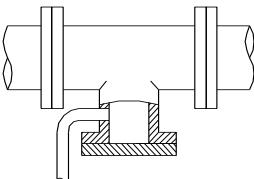
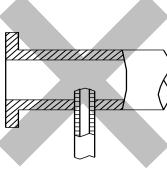
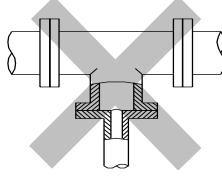
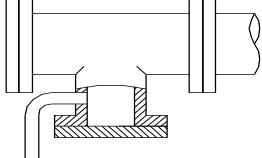
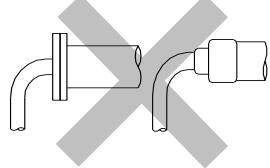
Checking the Piping



Use only under conditions in which no water hammer will occur. The impact of water hammer may damage the product, leading to fluid discharge, which may cause burns or other injury.

Check to make sure that the pipes to be connected to the trap have been installed properly.

1. Is the pipe diameter suitable?
2. Is the piping where the trap is to be installed horizontal?
3. Has sufficient space been secured for maintenance?
4. Have isolation valves and a strainer (40 mesh or finer) been installed at the inlet and outlet? If the outlet is subject to back pressure, has a check valve been installed?
5. Is the inlet pipe as short as possible, with as few bends as possible, and installed so the liquid will flow naturally down into the trap?
6. Has the piping work been done correctly, as shown in the figures below?

Requirement	Correct	Incorrect
Install catchpot with the proper diameter.		 Diameter is too small.
Make sure the flow of condensate is not obstructed.		 Diameter is too small and inlet protrudes into pipe interior.
To prevent rust and scale from flowing into the trap, the inlet pipe should be connected 25 – 50 mm (1 – 2 in) above the base of the T-pipe.		 Rust and scale flow into the trap with the condensate.
When installing on the blind end, make sure the flow of condensate is not obstructed.		 Condensate collects in the pipe.

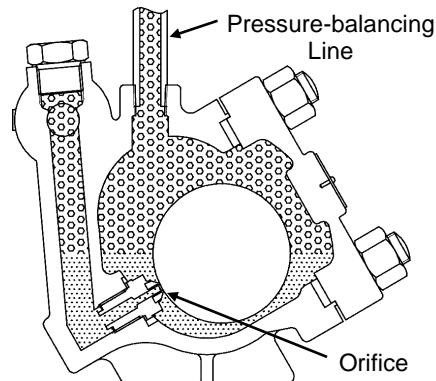
Operation

Principles of condensate discharge from a gas medium:

1. At Start-up

At start-up, a small amount of condensate will have accumulated in the body. The float and the orifice will form a water-seal.

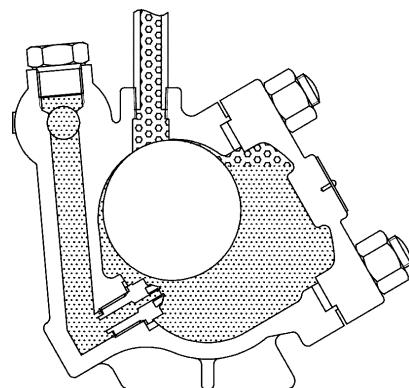
NOTE: When there is no condensate in the body, it will be necessary to prime the trap with a small amount of liquid through the pressure-balancing line to ensure a seal (after initial installation and after disassembly maintenance).



2. Condensate Discharge

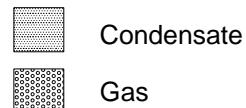
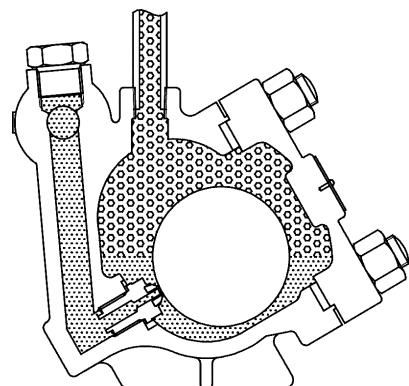
As condensate enters the trap, the float rises due to buoyancy, opening the orifice and allowing condensate to be discharged.

Increasing condensate inflow causes the float to rise more further enlargening the opening. In this manner, continuous condensate discharge occurs while the opening size of the orifice varies depending on the condensate flow rate.



3. Closed Position

When the condensate flow rate decreases, the float falls, closing off the orifice opening. A water seal is maintained at all times over the orifice to prevent steam loss.



Specifications



CAUTION
Install properly and DO NOT use this product outside the recommended operating pressure, temperature and other specification ranges. Improper use may result in such hazards as damage to the product or malfunctions which may lead to serious accidents. Local regulations may restrict the use of this product to below the conditions quoted.



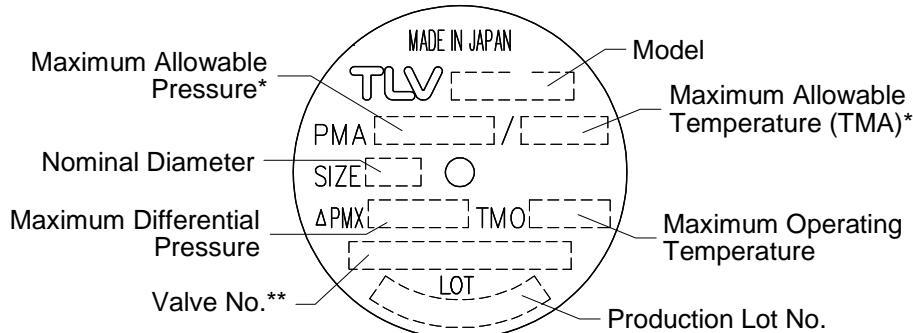
CAUTION
DO NOT use this product in excess of the maximum operating pressure differential; such use could make discharge impossible (blocked).



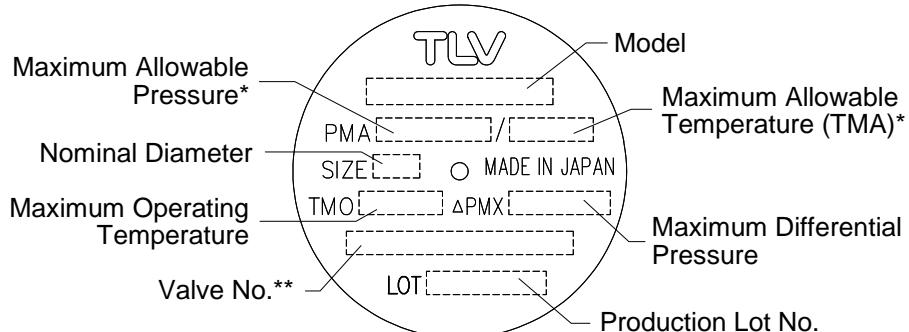
CAUTION
Use only under conditions in which no freeze-up will occur. Freezing may damage the product, leading to fluid discharge, which may cause burns or other injury.

Refer to the product nameplate for detailed specifications.

GAS1N



GAS2N/GAS3N



* Maximum allowable pressure (PMA) and maximum allowable temperature (TMA) are PRESSURE SHELL DESIGN CONDITIONS, NOT OPERATING CONDITIONS.

** Valve No. is displayed for products with options. This item is omitted from the nameplate when there are no options.

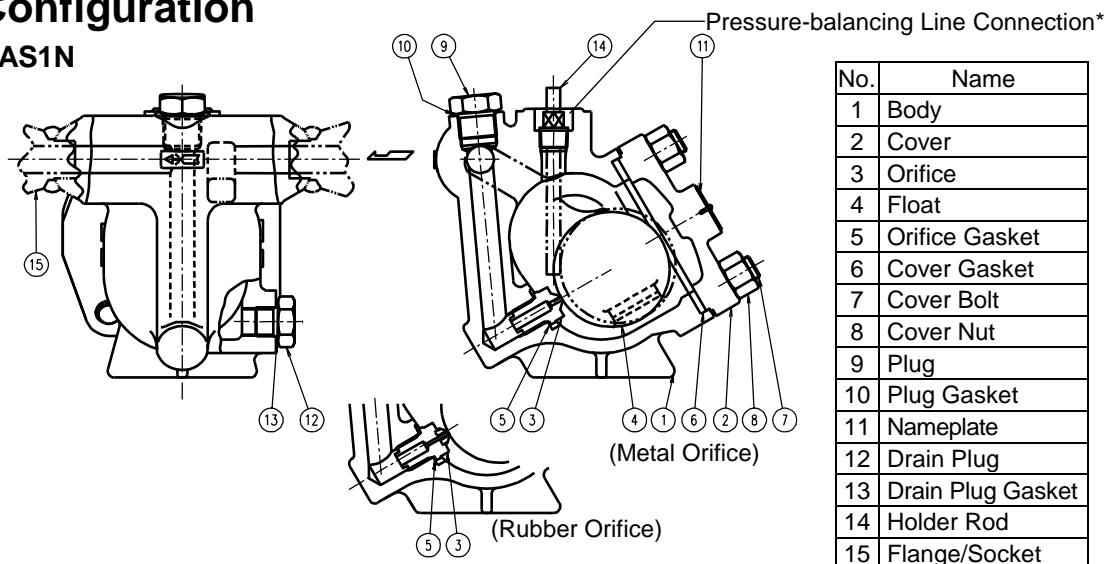
Minimum Required Condensate Load

For products with metal orifice, a minimum required condensate load is necessary to maintain a liquid seal. There is a chance of air/gas leak if the condensate load falls below this rate. Please refer to the chart below.

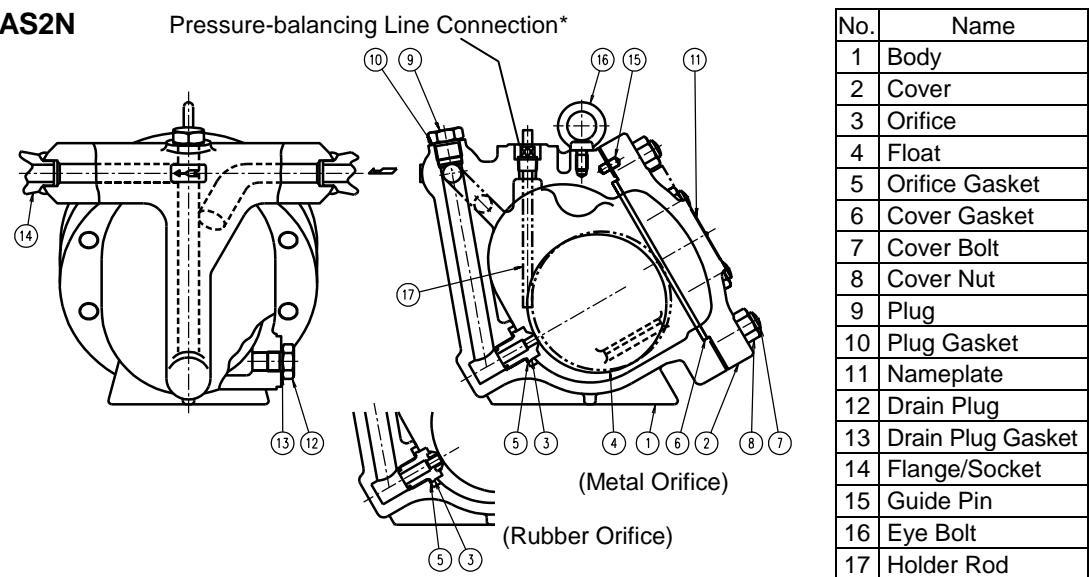
Model		GAS1N	GAS2N	GAS3N
Minimum Required Condensate Load	kg/h	1	5	20
	lb/h	2.2	11	44

Configuration

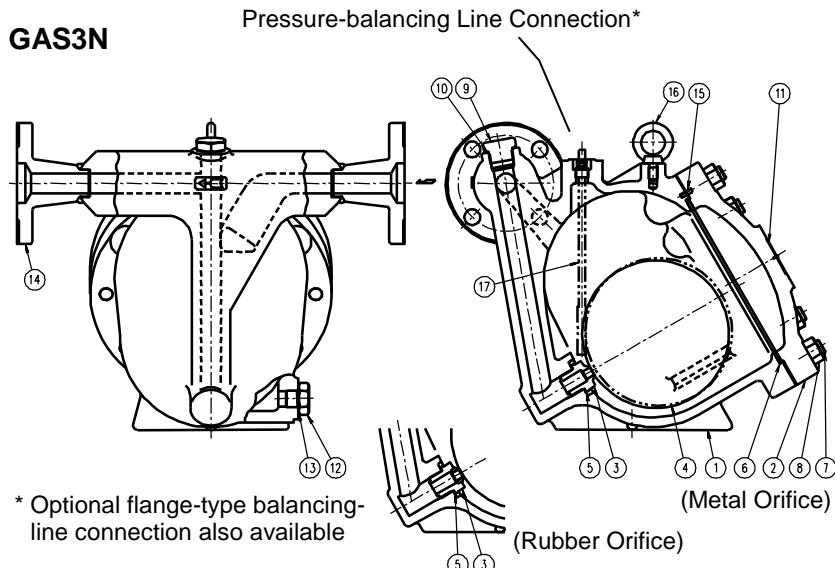
GAS1N



GAS2N



GAS3N



* Optional flange-type balancing-line connection also available

Installation



Install properly and DO NOT use this product outside the recommended operating pressure, temperature and other specification ranges. Improper use may result in such hazards as damage to the product or malfunctions which may lead to serious accidents. Local regulations may restrict the use of this product to below the conditions quoted.



Use hoisting equipment for heavy objects (weighing approximately 20 kg (44 lb) or more). Failure to do so may result in back strain or other injury if the object should fall.



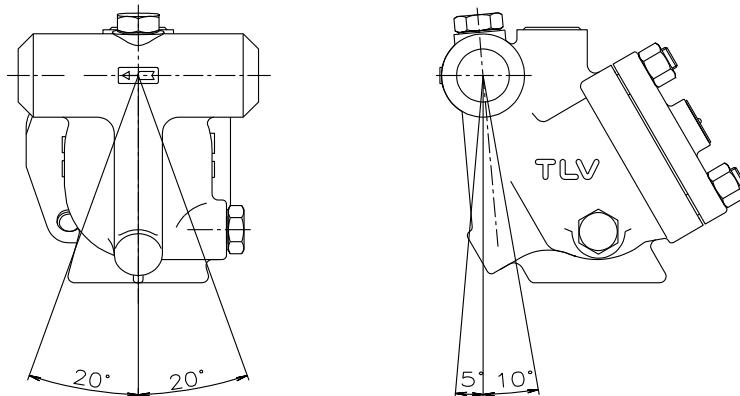
Take measures to prevent people from coming into direct contact with product outlets. Failure to do so may result in burns or other injury from the discharge of fluids.

Installation, inspection, maintenance, repairs, disassembly, adjustment and valve opening/closing should be carried out only by trained maintenance personnel.

1. Before installation, be sure to remove all protective seals.
2. Before installing the product, open the inlet valve and blow out the piping to remove any piping scraps, dirt and oil. Close the inlet valve after blowdown.
3. Install the product so that the arrow on the body is pointing in the direction of flow.
4. The product should be installed within the allowable angles of inclination, shown below.
5. Install a condensate outlet valve and outlet piping.
6. To ensure proper condensate flow into the trap, install a pressure-balancing line. Remove holder rod and its associated parts (see "Configuration") and connect the pressure-balancing line. Connect the opposite end of the pressure-balancing line to the air/gas main or an air/gas space above any possible condensate accumulation in the system. For more details, see the section "The Need for a Pressure-balancing Line".
7. Open the inlet and outlet valves and check to make sure that the product functions properly.

If there is a problem, determine the cause using the "Troubleshooting" section in this manual.

Tolerance Angles for Installation

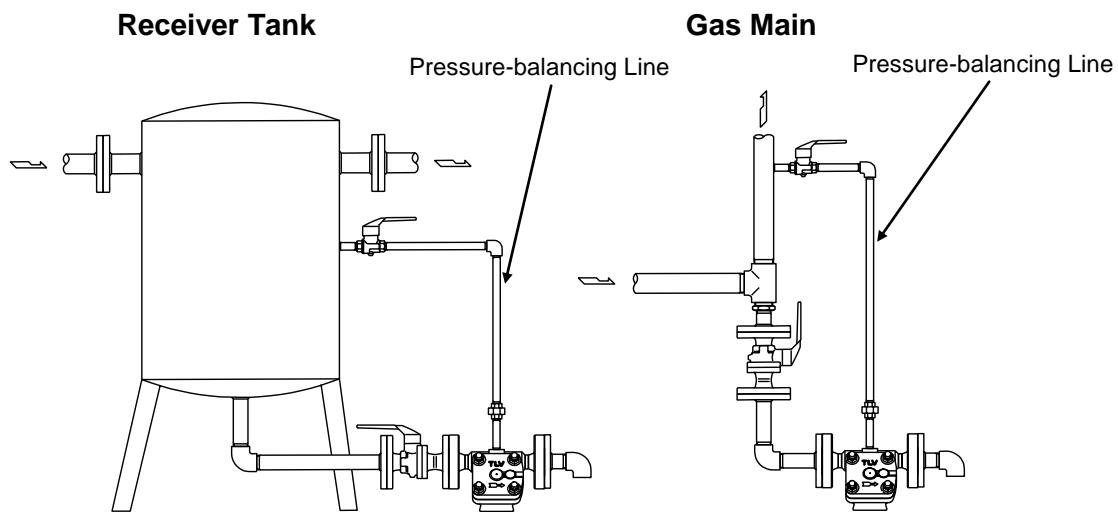


The product should be installed so that the letters **TLV** on the trap are horizontal.

The Need for a Pressure-balancing Line

In principle, gas traps automatically and continuously discharge condensate that flows in. However, gas caught in the piping or trap body may obstruct condensate flow. This phenomenon is called "air binding". Air binding occurs more often in piping with long horizontal lengths, smaller diameters or multiple bends. To prevent air binding and ensure gas can be displaced by incoming condensate, a pressure-balancing line should be installed between the trap cover and the dry portion of the receiver tank or gas main.

Connect the pressure-balancing line in the following manner:



Secondary Side Precautions



CAUTION
Take measures to ensure the proper handling, such as recovery or dilution, of hazardous fluids discharged at product outlets. Outflow of fluid or fluid leaks may lead to hazards such as flammable conditions or corrosion, which may result in injury, fires, damage or other accidents.

Be sure to take precautions on the secondary side when using flammable, toxic or other hazardous gases.

Sample precautionary procedures:

1. Flare method
2. Collection in a seal pot
3. Collection in a sealed container

Maintenance



Take measures to prevent people from coming into direct contact with product outlets. Failure to do so may result in burns or other injury from the discharge of fluids.



Be sure to use only the recommended components when repairing the product, and NEVER attempt to modify the product in any way. Failure to observe these precautions may result in damage to the product or burns or other injury due to malfunction or the discharge of fluids.

Operational Check

A visual inspection of the following items should be done on a daily basis to determine whether the trap is operating properly or has failed. Periodically (at least biannually) the operation should also be checked by using diagnostic equipment such as a stethoscope or thermometer.

If the product should fail, it may cause damage to piping and equipment, resulting in faulty or low quality products or losses due to steam leakage.

- | | |
|-----------------------------------|--|
| Normal | : Condensate is discharged intermittently together with flash steam, and the sound of flow can be heard. If there is very little condensate, there is almost no sound of flow. |
| Blocked
(Discharge Impossible) | : No condensate is discharged. |
| Blowing | : Gas continually flows from the outlet and there is a high-pitched hissing sound. |
| Gas Leakage | : Gas is discharged through the trap outlet together with condensate, accompanied by a high-pitched hissing sound. |

Parts Inspection

When parts have been removed, or during periodic inspections, use the following table to inspect the parts and replace any that are found to be defective.

Procedure	
Gasket(s):	Check for warping and damage
Orifice:	Check for damage
Orifice Opening:	Check for dirt, oil film, wear and damage
Float:	Check for scratches, dents, etc.
Body Interior	Check for build-up

Disassembly/Reassembly



WARNING NEVER apply direct heat to the float. The float may explode due to increased internal pressure, causing accidents leading to serious injury or damage to property and equipment.



CAUTION Use hoisting equipment for heavy objects (weighing approximately 20 kg (44 lb) or more). Failure to do so may result in back strain or other injury if the object should fall.



CAUTION When disassembling or removing the product, wait until the internal pressure equals atmospheric pressure and the surface of the product has cooled to room temperature. Disassembling or removing the product when it is hot or under pressure may lead to discharge of fluids, causing burns, other injuries or damage.

Use the following procedures to remove components. Use the same procedures in reverse to reassemble. (Installation, inspection, maintenance, repairs, disassembly, adjustment and valve opening/closing should be carried out only by trained maintenance personnel.)

Removing/Reattaching the Drain Plug

NOTE: Before removing other parts, be sure to drain the condensate from inside the trap body.

Part	During Disassembly	During Reassembly
Drain Plug	Remove with a socket wrench	Consult the table of tightening torques and tighten to the proper torque
Drain Plug Gasket	Remove the gasket	Replace with a new gasket; coat surfaces with anti-seize

Removing/Reattaching the Plug

Part	During Disassembly	During Reassembly
Plug	Remove with a socket wrench	Consult the table of tightening torques and tighten to the proper torque
Plug Gasket	Remove the gasket and clean sealing surfaces	Replace with a new gasket; coat surfaces with anti-seize

Removing/Reattaching the Cover and its Components

Part	During Disassembly	During Reassembly
Cover Nut	Remove with a socket wrench	Consult the table of tightening torques and tighten to the proper torque
Cover Bolt	Remove only if necessary	Screw into holes in body
Cover	Remove the cover	Make sure there are no pieces of the old gasket left on the sealing surfaces and then reattach
Cover Gasket	Remove the gasket and clean sealing surfaces	Replace with a new gasket

Disassembling/Reassembling the Parts inside the Body

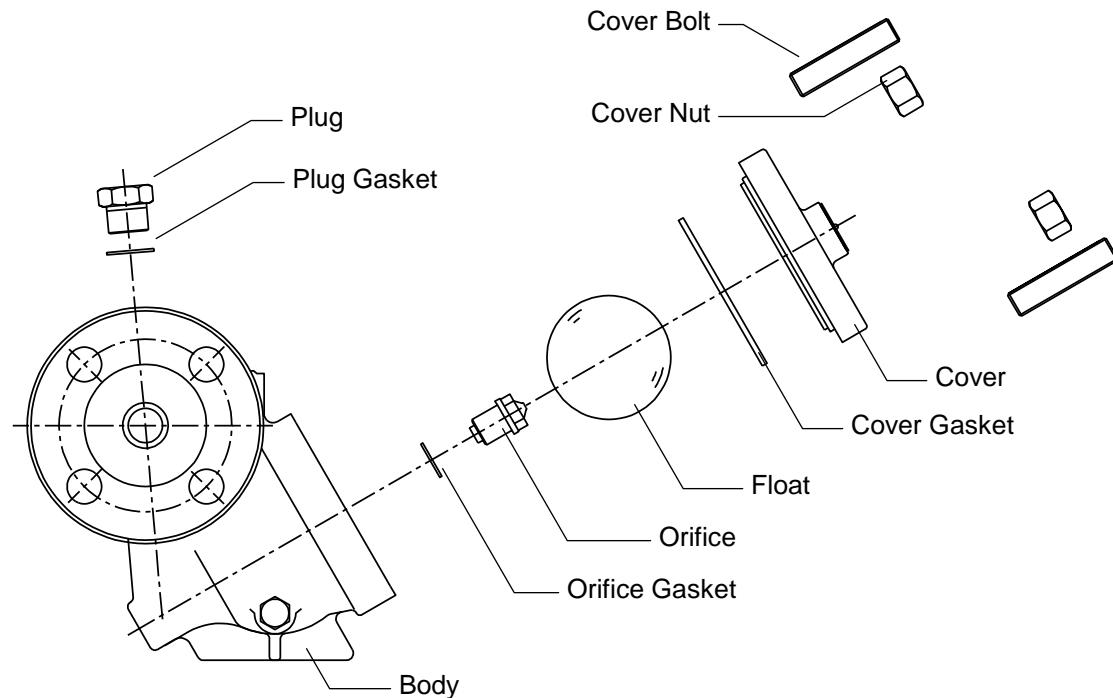
Part	During Disassembly	During Reassembly
Float	Remove, being careful not to scratch the polished surface	Insert, being careful not to scratch the polished surface
Orifice	Remove with a socket wrench	Consult the table of tightening torques and tighten to the proper torque
Orifice Gasket	Remove the gasket and clean sealing surfaces	Replace with a new gasket; coat surfaces with anti-seize

Table of Tightening Torques

Model	Part Name	Torque		Distance Across Flats	
		N·m	(ft·lb)	mm	(in)
GAS1N	Cover Nut	110	(81)	21	($\frac{13}{16}$)
	Orifice	100	(73)	17	($\frac{21}{32}$)
	Plug	200	(150)	26	(1)
	Drain Plug	100	(73)	26	(1)
GAS2N	Cover Nut	200	(150)	24	($\frac{15}{16}$)
	Orifice	150	(110)	24	($\frac{15}{16}$)
	Plug	200	(150)	26	(1)
	Drain Plug	100	(73)	26	(1)
GAS3N	Cover Nut	250	(185)	27	($1\frac{1}{16}$)
	Orifice	300	(220)	32	($1\frac{1}{4}$)
	Plug	300	(220)	36	($1\frac{13}{32}$)
	Drain Plug	150	(110)	30	($1\frac{3}{16}$)

NOTE: -Coat all threaded portions with anti-seize.
 (1 N·m \approx 10 kg·cm)
 -The same tightening torque is used for both the metal orifice
 and the rubber orifice.
 -If drawings or other special documentation were supplied for the
 product, any torque given there takes precedence over values
 shown here.

Exploded View



Troubleshooting



WARNING NEVER apply direct heat to the float. The float may explode due to increased internal pressure, causing accidents leading to serious injury or damage to property and equipment.



CAUTION When disassembling or removing the product, wait until the internal pressure equals atmospheric pressure and the surface of the product has cooled to room temperature. Disassembling or removing the product when it is hot or under pressure may lead to discharge of fluids, causing burns, other injuries or damage.

When the product fails to operate properly, use the following table to locate the cause and remedy.

Problem	Cause	Remedy
No condensate is discharged (blocked) or discharge is poor	The float is damaged or filled with condensate	Replace with a new float
	The orifice opening, screen or piping are clogged with rust and scale	Clean parts
	The trap operating pressure exceeds the maximum specified pressure or there is insufficient pressure differential between the trap inlet and outlet	Compare specifications and actual operating conditions
	The specific gravity of the fluid is not suitable for this product	Consult TLV
Gas is discharged or leaks from the outlet* (blowing) (gas leakage)	Rust and scale have built-up around the orifice or beneath the float	Clean parts
	The orifice is scratched or damaged	Replace with a new orifice
	The float is misshapen or coated with scale	Clean or replace with a new float
	Improper installation orientation	Correct the installation
	Trap vibration	Lengthen the inlet piping and fasten it securely
Gas is leaking from a place other than the outlet	Gasket deterioration or damage	Replace with new gasket(s)
	Improper tightening torques were used	Tighten to the proper torque

* The GAS1N/GAS2N/GAS3N with metal valve seat has a minimum condensate load requirement to ensure proper sealing (see "Specifications").

TLV EXPRESS LIMITED WARRANTY

Subject to the limitations set forth below, TLV Corporation, a North Carolina corporation ("TLV") warrants that products which are sold by it or TLV International, Inc., a Japanese corporation ("TII"), which products (the "Products") are designed and manufactured by TLV Co., Ltd., a Japanese corporation ("TLVJ"), conform to the specifications published by TLV for the corresponding part numbers (the "Specifications") and are free from defective workmanship and materials. With regard to products or components manufactured by unrelated third parties (the "Components"), TLV provides no warranty other than the warranty from the third party manufacturer(s).

Exceptions To Warranty

This warranty does not cover defects or failures caused by:

1. improper shipping, installation, use, handling, etc., by other than TLV or service representatives authorized by TLV; or
2. dirt, scale or rust, etc.; or
3. improper disassembly and reassembly, or inadequate inspection and maintenance by other than TLV or service representatives authorized by TLV; or
4. disasters or forces of nature; or
5. abuse, abnormal use, accidents or any other cause beyond the control of TLV; or
6. improper storage, maintenance or repair; or
7. operation of the Products not in accordance with instructions issued with the Products or with accepted industry practices; or
8. use for a purpose or in a manner for which the Products were not intended; or
9. use of the Products in a manner inconsistent with the Specifications; or
10. failure to follow the instructions contained in the TLV Instruction Manual for the Product.

Duration Of Warranty

This warranty is effective for a period of the earlier of: (i) three (3) years after delivery of Products to the first end user in the case of sealed SST-Series Products for use in steam pressure service up to 650 psig; (ii) two (2) years after delivery of Products to the first end user in the case of PowerTrap® units; or (iii) one (1) year after delivery of Products to the first end user in the case of all other Products. Notwithstanding the foregoing, asserting a claim under this warranty must be brought by the earlier of one of the foregoing periods, as applicable, or within five (5) years after the date of delivery to the initial buyer if not sold initially to the first end user.

ANY IMPLIED WARRANTIES NOT NEGATED HEREBY WHICH MAY ARISE BY OPERATION OF LAW, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY EXPRESS WARRANTIES NOT NEGATED HEREBY, ARE GIVEN SOLELY TO THE INITIAL BUYER AND ARE LIMITED IN DURATION TO ONE (1) YEAR FROM THE DATE OF SHIPMENT BY TLV.

Exclusive Remedy

THE EXCLUSIVE REMEDY UNDER THIS WARRANTY, UNDER ANY EXPRESS WARRANTY OR UNDER ANY IMPLIED WARRANTIES NOT NEGATED HEREBY (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE), IS **REPLACEMENT**; PROVIDED: (a) THE CLAIMED DEFECT IS REPORTED TO TLV IN WRITING WITHIN THE APPLICABLE WARRANTY PERIOD, INCLUDING A DETAILED WRITTEN DESCRIPTION OF THE CLAIMED DEFECT AND HOW AND WHEN THE CLAIMED DEFECTIVE PRODUCT WAS USED; AND (b) THE CLAIMED DEFECTIVE PRODUCT AND A COPY OF THE PURCHASE INVOICE IS RETURNED TO TLV, FREIGHT AND

TRANSPORTATION COSTS PREPAID, UNDER A RETURN MATERIAL AUTHORIZATION AND TRACKING NUMBER ISSUED BY TLV. ALL LABOR COSTS, SHIPPING COSTS, AND TRANSPORTATION COSTS ASSOCIATED WITH THE RETURN OR REPLACEMENT OF THE CLAIMED DEFECTIVE PRODUCT ARE SOLELY THE RESPONSIBILITY OF BUYER OR THE FIRST END USER. TLV RESERVES THE RIGHT TO INSPECT ON THE FIRST END USER'S SITE ANY PRODUCTS CLAIMED TO BE DEFECTIVE BEFORE ISSUING A RETURN MATERIAL AUTHORIZATION. SHOULD SUCH INSPECTION REVEAL, IN TLV'S REASONABLE DISCRETION, THAT THE CLAIMED DEFECT IS NOT COVERED BY THIS WARRANTY, THE PARTY ASSERTING THIS WARRANTY SHALL PAY TLV FOR THE TIME AND EXPENSES RELATED TO SUCH ON-SITE INSPECTION.

Exclusion Of Consequential And Incidental Damages

IT IS SPECIFICALLY ACKNOWLEDGED THAT THIS WARRANTY, ANY OTHER EXPRESS WARRANTY NOT NEGATED HEREBY, AND ANY IMPLIED WARRANTY NOT NEGATED HEREBY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, DO NOT COVER, AND NEITHER TLV, TII NOR TLVJ WILL IN ANY EVENT BE LIABLE FOR, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO LOST PROFITS, THE COST OF DISASSEMBLY AND SHIPMENT OF THE DEFECTIVE PRODUCT, INJURY TO OTHER PROPERTY, DAMAGE TO BUYER'S OR THE FIRST END USER'S PRODUCT, DAMAGE TO BUYER'S OR THE FIRST END USER'S PROCESSES, LOSS OF USE, OR OTHER COMMERCIAL LOSSES. WHERE, DUE TO OPERATION OF LAW, CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER THIS WARRANTY, UNDER ANY OTHER EXPRESS WARRANTY NOT NEGATED HEREBY OR UNDER ANY IMPLIED WARRANTY NOT NEGATED HEREBY (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) CANNOT BE EXCLUDED, SUCH DAMAGES ARE EXPRESSLY LIMITED IN AMOUNT TO THE PURCHASE PRICE OF THE DEFECTIVE PRODUCT. THIS EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES, AND THE PROVISION OF THIS WARRANTY LIMITING REMEDIES HEREUNDER TO REPLACEMENT, ARE INDEPENDENT PROVISIONS, AND ANY DETERMINATION THAT THE LIMITATION OF REMEDIES FAILS OF ITS ESSENTIAL PURPOSE OR ANY OTHER DETERMINATION THAT EITHER OF THE ABOVE REMEDIES IS UNENFORCEABLE, SHALL NOT BE CONSTRUED TO MAKE THE OTHER PROVISIONS UNENFORCEABLE.

Exclusion Of Other Warranties

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY DISCLAIMED.

Severability

Any provision of this warranty which is invalid, prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, prohibition or unenforceability without invalidating the remaining provisions hereof, and any such invalidity, prohibition or unenforceability in any such jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

TLV CORPORATION

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