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# SAFETY INSTRUCTION

Prior to using G series,read this manual thoroughly to understand the correct handling and operating procedure.

Observe the **WARNING** and **CAUTIONS** given by this manual, without failure, for safe operation of the G serie.

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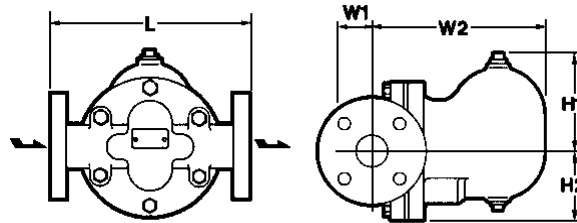
### 1. Introduction

Ball Float Type Steam Trap Model G15N is designed for large capacities with diaphragm type air vent and double ported balance valve.

This manual contains Installation, Trouble Shooting and Maintenance etc..


Never fail to read them to the end before using.


### 2. Dimensions and Specifications



Model No.	Connection	Size mm (inch)	Operating Pressure (MPa)	Maximum Temp °C (°F)	Material of Body	Dimensions (mm)					Weight (kg)
						L	H1	H2	W1	W2	
G15N-5	Flanged	32(1-1/4)	0.01 to 0.5	220 (428)	Cast Iron (FC250)	300	130	90	30	230	20
		40(1-1/2)									
		50(2)									

### 3. Installation

 <b>CAUTIONS</b>	Before installing the trap always blow off the slugges,scales, etc. from the piping.
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 <b>CAUTIONS</b>	This trap can only be installed horizontally.
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- A. Install the trap according to the direction of the arrow on the body.
- B. Install the trap at the lowest point of the steam using equipment.
- C. Pipe for easy maintenance.
- D. When recovering the condensate, outlet branch line should be piped from the trap as drawing below.


**CAUTIONS**

When starting of operation, be sure to control the inlet valve so that the steam and/or condensate flow into the trap slowly.

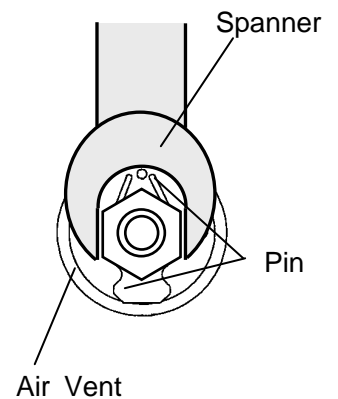
#### 4. Trouble shooting

Symptom	Causes	Remedy
Steam blowing	Piece of scale lodged between Valve and Holder.	Remove scale or dirt at source.
	Automatic Air Vent may be failed.	Repair or replace the Automatic Air Vent.
	Pressure may be too high.	Change the pressure for the installation or select the trap for higher pressure.
	Opened by-pass valve.	Close it.
	Worn valve and/or Holder.	Repair or replace.
	Loose or uneven tightness the Bolt.	Re-tighten the Bolt.
	Loose the Air Vent.	Re-tighten the Air Vent.
	Worn Gasket(34).	Repair or replace the Gasket.
Water logging	Loose or uneven tightness the Bolt(31),(38).	Re-tighten the Bolt.
	Orifice of holder may be clogged.	Check to see of orifice clogged with dirt.
	Float may be damaged or filled up with water.	Float should be replaced.
	Inlet valve closed.	Open the inlet valve.
	Strainer may be clogged.	Check to see of strainer clogged with dirt.
	Pressure may be too high.	Change the pressure for the installation or select the trap for higher pressure.
	Trap may be too small.	Re-check operating conditions and select the trap for new high capacity.
Condensate logging	Plugged inlet pipe and/or outlet pipe.	Re-check operating conditions select the trap for higher capacity.
	Lack of differential pressure. Condensate cannot flow into a trap easily.	Re-check operating conditions It changes into suitable piping.
	Scales etc. lodged between Holder(6) and Guide Wing(9).	Clean the Holder(6) and Guide Wing(9).

## 5. Maintenance, Disassembling and Assembling


 <b>WARNING</b>	<p>Before disassembling a steam trap, be sure to close the valves in both supply and discharge lines, reduce the pressure inside the trap to atmospheric pressure, and allow the trap to cool before opening it.</p>
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- 1) Take off the Bolt(31),(38) and the Body(1) can be removed.
- 2) Take off the Bolt(32), the Inner Unit with the Float can be removed from the Cover (2).
- 3) Take off Pin (40), and take off Pin (9),(10) then the lever (4) with Float (3) can be removed from the Holder (6). At this time, be careful not to lose the Collar (41) attached to the Pin (9).
- 4) In case that scales etc. is lodged, please move the valve, or remove scale by using a required tool.
- 5) Loosen the seat of Air Vent (15), and Air vent can be removed.  
When you loosen the Air Vent, please remove Air vent to make a spanner parallel to the pin of the Air Vent, as shown in the right figure.
- 6) Take off the Bolt(30), then Screen(29) can be taken off.
- 7) Clean and inspect the body(1) and all the inner parts.  
If not defected assemble in the opposite way of disassembling



### Clamp Torque :

No.	Parts	Size	Clamp Torque
31	Bolt	19mm	50N·m(500kgf·cm)
32	Bolt	14mm	30N·m(300kgf·cm)
38	Bolt	19mm	50N·m(500kgf·cm)
16	Air Vent	17mm	25N·m(250kgf·cm)

 <b>CAUTIONS</b>	<p>When reassembling always replace the Gasket(33),(34) to new ones.</p>
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 <b>CAUTIONS</b>	<p>Also the Bolt(32),(31),(38) should be tightened evenly.</p>
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6. Details of Construction

