OM No.E-G13-01 1001

OPERATING MANUAL

FOR

BALL FLOAT STEAM TRAP

MODEL:GTH12

MIYAWAKI INC.

SAFETY INSTRUCTION

Prior to using Model GTH12, read this manual thoroughly to understand the correct handling and operating procedure.

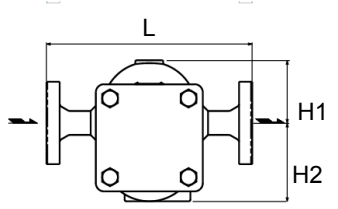
Observe the WARNING and CAUTIONS given by this manual, without failure, for safe operation of the Model GTH12.

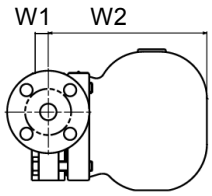
CONTENTS

1. Introduction

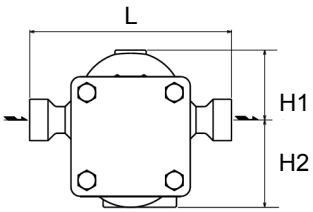
Ball Float Steam Trap Model GTH12 is mechanical traps with Carbon steel body.
This manual contains Installation, Trouble Shooting, Maintenance etc..
Never fail to read them to the end before using.

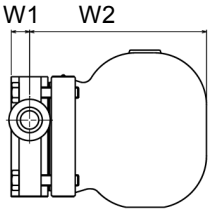
2. Dimensions and Specifications





GTH12-□F





GTH12-□W

Model No.	Connections	Size mm (inch)	Max. Oper. Pressure PMO (MPa)	Max. Diff. Pressure ⊿PMX (MPa)	Max. Oper. Temp. TMO ℃ (℉)	Material of Body	Dimensions (mm)					Weight (kg)
							L	H1	H2	W1	W2	
GTH12-16F	Flanged	15(1/2)	3.2	1.6	350 (662)	Cast Steel (SCPH2)	250	75	95	20	195	Refer to Table A
		20(3/4)										
		25(1)										
GTH12-16W	Socket Weld	15(1/2)	3.2	1.6			220					11.5
		20(3/4)										11.6
		25(1)										11.7
GTH12-25F	Flanged	15(1/2)	3.2	2.5	350 (662)		250					Refer to Table A
		20(3/4)										
		25(1)										
GTH12-25W	Socket Weld	15(1/2)	3.2	2.5			220					11.5
		20(3/4)										11.6
		25(1)										11.7
GTH12-32F	Flanged	15(1/2)	3.2	3.2	350 (662)		250					Refer to Table A
		20(3/4)										
		25(1)										
GTH12-32W	Socket Weld	15(1/2)	3.2	3.2			220					11.5
		20(3/4)										11.6
		25(1)										11.7

Table A :Weight of Flange types

Size		JIS		ANSI/JPI	
		10K・20K	30K・40K	150lb・300lb	600lb
mm	in	kg	kg	kg	kg
15	1/2	12.7	14.0	12.7	14.0
20	3/4	13.5	14.2	13.5	14.2
25	1	14.0	15.2	14.0	15.2

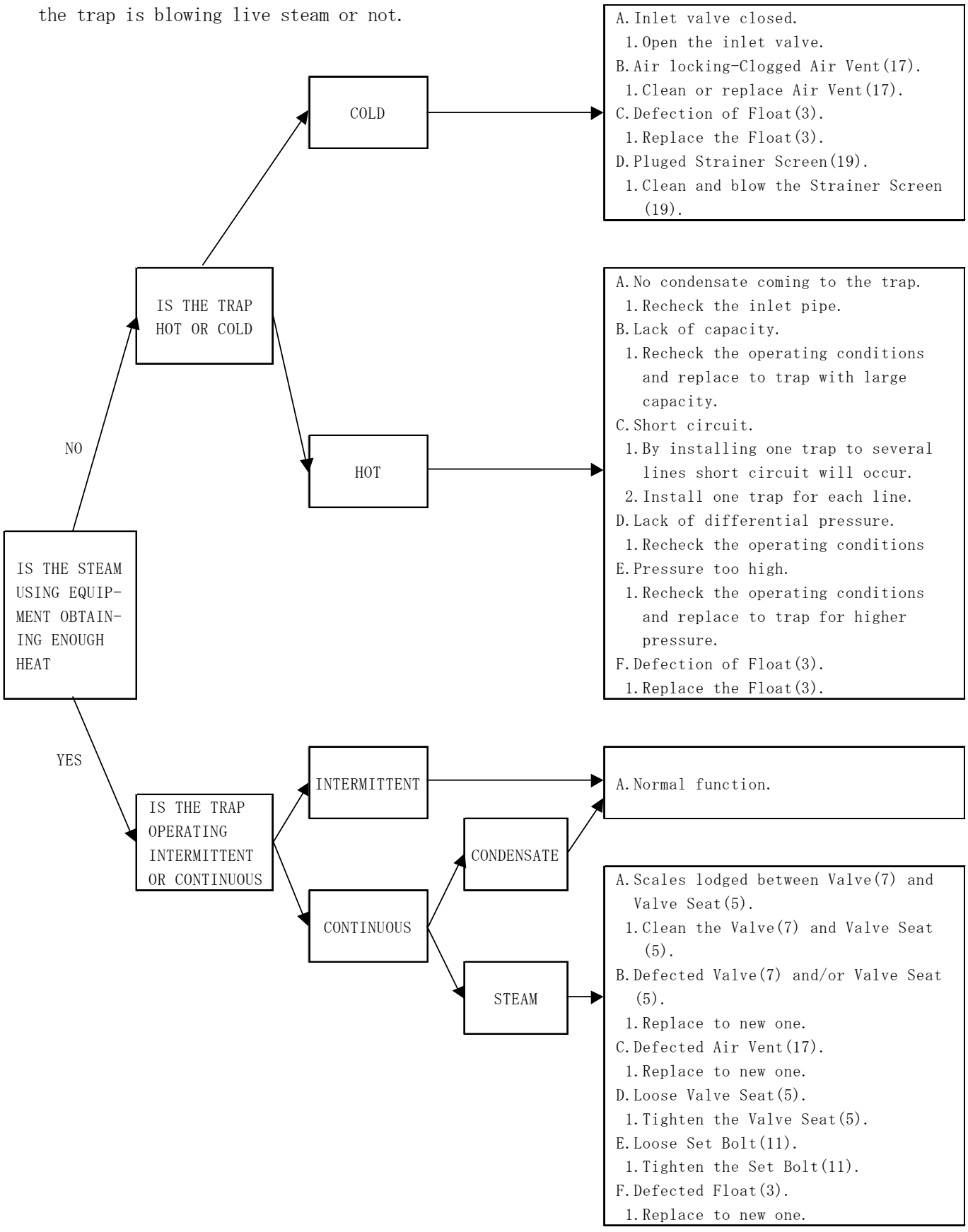
3. Installations

⚠ CAUTIONS	●Before installing the trap always blow off the sludge, scales, etc. from the piping. ●This trap can be installed horizontally.

1) Never confuse inlet with outlet.
2) Pipe the condensate piping at the lowest point of the steam using equipment.
3) When recovering the condensate, outlet branch line should be piped from the steam trap.
   Install a check valve on the downstream side of the steam trap.

4. Trouble Shooting

The operation function of this trap is intermittent when the condensate load is low and continuous when the condensate load is high.
It is very difficult to tell whether the trap is in good condition or not. The best way is to see if the steam using equipment is obtaining enough heat or not than if the trap is blowing live steam or not.



5. Maintenance, Disassembling and Assembling

⚠ WARNING	When disassembling a hot trap, be sure to release the pressure inside to atmospheric pressure, and cool the trap before the work.

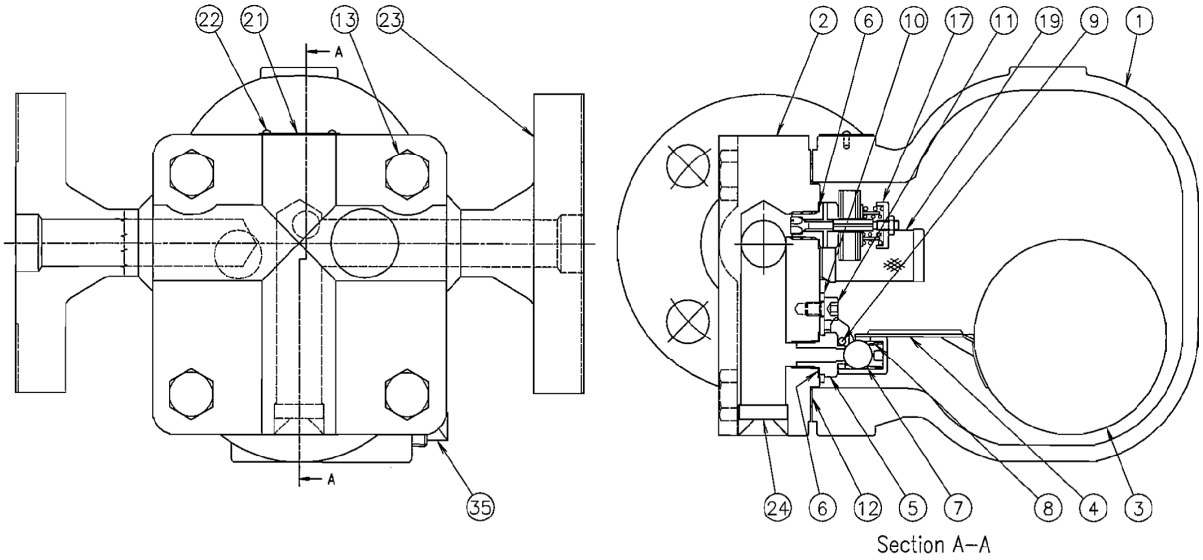
1) Dismantle the Cover Bolt(13),all the inner parts will come with the Cover(2).
2) Take out the Pin(9),the Lever(4) with the Float(3),the Valve(7),the Spring(8) will come off.
3) Firm the Cover(2) with a vise, unscrew the Valve Seat(5) and the Set Bolt(11),the Bracket(10) will come off.
4) Air Vent(17) can also be dismantled with a wrench.
5) After inspection of each part and cleaning, assemble in the opposite way of disassembling.

⚠ CAUTIONS	●Do not disassemble the Air Vent(17). ●Also Bolt(13) should be tightened evenly. ●When reassembling always replace the Gasket(6),(12) to new ones.

No.	Parts	Size	Shape	Clamp Torque	Tools
5	Valve Seat	17mm	Hexagon	25N·m(250kgf·cm)	Wrench
11	Set Bolt	5mm	Hexagon	11N·m(110kgf·cm)	Wrench
13	Bolt	19mm	Hexagon	80N·m(80kgf·cm)	Wrench
17	Air Vent	17mm	Hexagon	22N·m(220kgf·cm)	Wrench

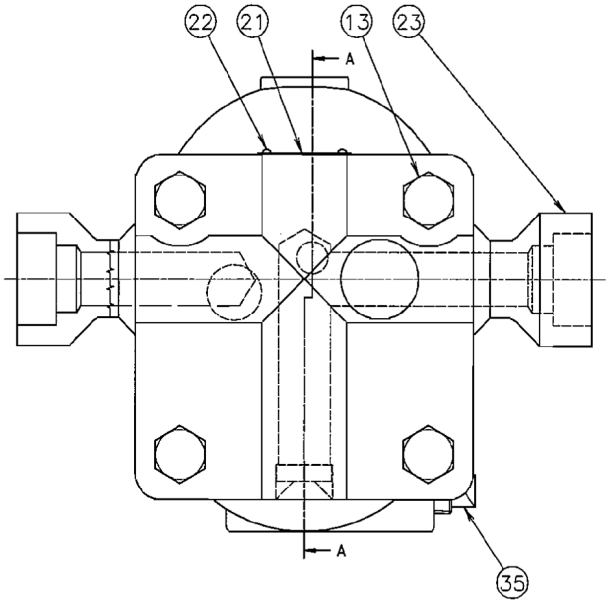
6. Construction

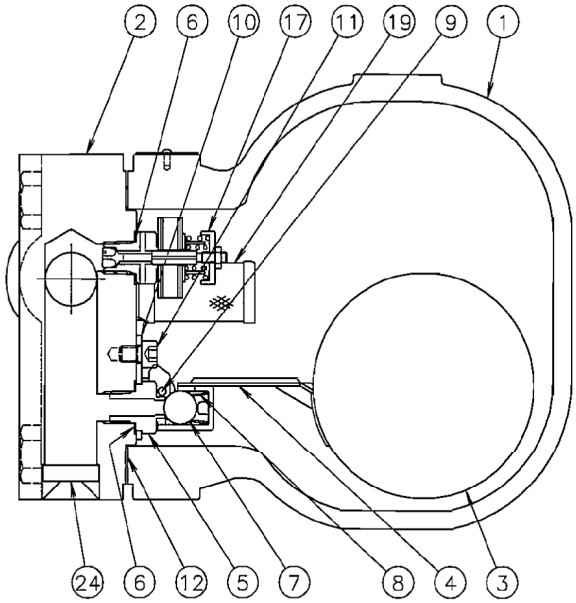
Model GTH12-F (Flanged end)



1. Body
2. Cover
3. Float
4. Lever
5. Valve Seat
6. Gasket
7. Valve
8. Spring
9. Pin
10. Bracket
11. Set Bolt
12. Gasket
13. Bolt
17. Air Vent
19. Screen
21. Name Plate
22. Rivet
23. Flange
24. Plate
35. Plug

Model GTH12-W (Socket Weld end)





Section A–A

1. Body
2. Cover
3. Float
4. Lever
5. Valve Seat
6. Gasket
7. Valve
8. Spring
9. Pin
10. Bracket
11. Set Bolt
12. Gasket
13. Bolt
17. Air Vent
19. Screen
21. Name Plate
22. Rivet
23. Coupling
24. Plate
35. Plug