

OPERATION MANUAL

FOR

MODEL: W SERIES

MIYAWAKI INC.

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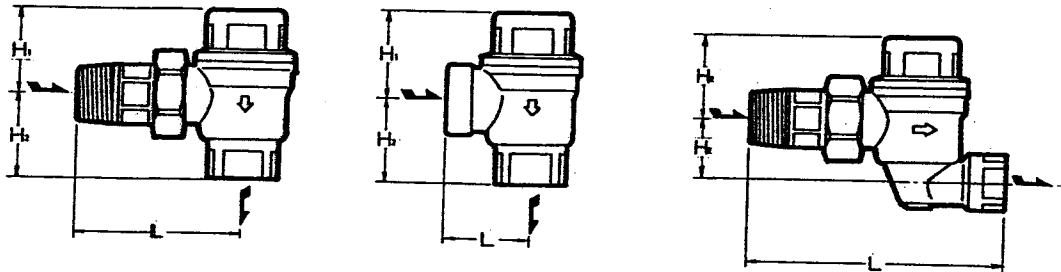
1. Introduction

"Miyawaki" Model W series are steam traps specially made for space heating equipments, such as radiators and convectors. W1,2 series being the angle type and W3 series being straight type.

This manual contains Installations, Trouble Shooting and Maintenance etc.. Never fail to read them to the end before using.

2. Specification and Dimensions

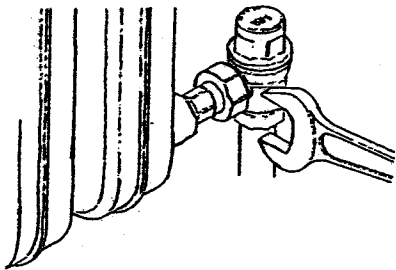
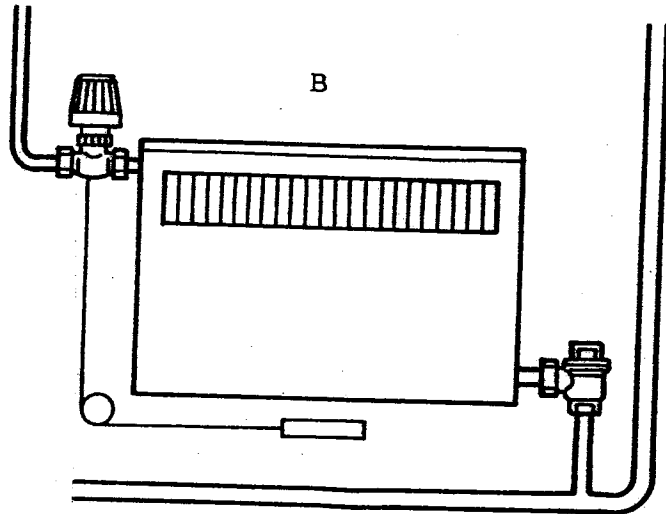
Material of body is brass.



Model	Size mm (inch)	Con- nec- tion	Valve open temp.	Pressure kgf/cm ²	Max. temp. ℃	Dimensions			Wight kg
						L	H2	H3	
W1-1.5	15 (1/2)	Screwed Inlet: Male	97℃	0.1~1.5	150	80	39	35	0.5
	20 (3/4)					87	39	41	0.6
W1-3	15 (1/2)	Outlet: Female	115℃	1.5~3.0		80	39	35	0.5
	20 (3/4)					87	39	41	0.6
W2-1.5	15 (1/2)	Screwed Inlet: Female	97℃	0.1~1.5		35	39	35	0.4
	20 (3/4)					35	39	41	0.5
W2-3	15 (1/2)	Outlet: Female	115℃	1.5~3.0		35	39	35	0.4
	20 (3/4)					35	39	41	0.5
W3-1.5	15 (1/2)	Screwed Inlet: Male	97℃	1.1~1.5		123	39	28	0.6
	20 (3/4)					135	39	34	0.7
W3-3	15 (1/2)	Outlet: Female	115℃	1.5~3.0		123	39	28	0.6
	20 (3/4)					135	39	34	0.7

3. Installations

- A. W series should be installed with inlet being horizontal.
- B. W series should be installed at the lowest point of the steam using equipment. Refer to the drawing below.
- C. Dismantling and installations from and to the equipment is easy by the hexagon shaped nipple. The size of the hexagon is 19mm for 1/2inch sized and 25mm for 3/4inch size.
- D. Do not insulate the trap.
- E. W series are designed to minimize the effect of dirt scales etc. If the dirt situation is bad, install " Y " type strainer upstream of the trap.



4. Maintenance

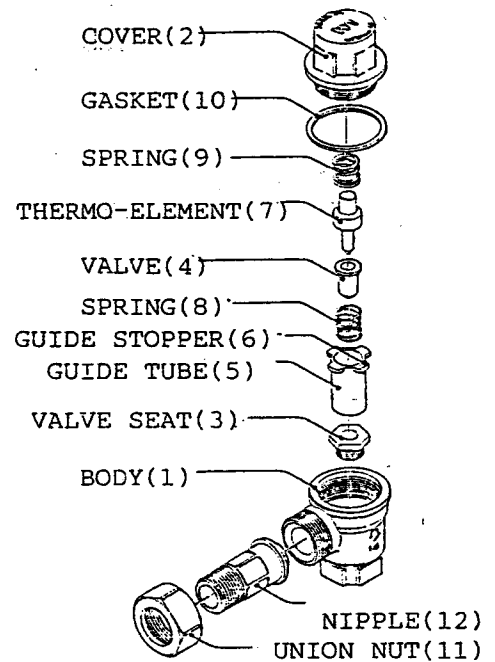
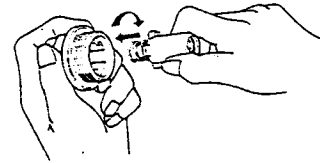
A. Disassemble the cover(2) all the internal parts excluding the valve seat(3) will be with the cover(2).

B. All the internal parts installed in the cover(2) can be dismantled by hand. First, push and turn the guide tube 90degrees as the drawing on the right. Guide tube(5), guide stopper(6), spring(8,9) valve(4), thermo-element(7) will come apart.

Reassembling will be the opposite but please check that the guide stopper(6) fits into the slot in the cover.

C. The springs(8,9) stronger spring(8) will be on the top and weaker(9) will be bottom.

D. There is a pin inside the thermo-element(7), please do not dismantle from the thermo-element. Trap will not work without this pin.



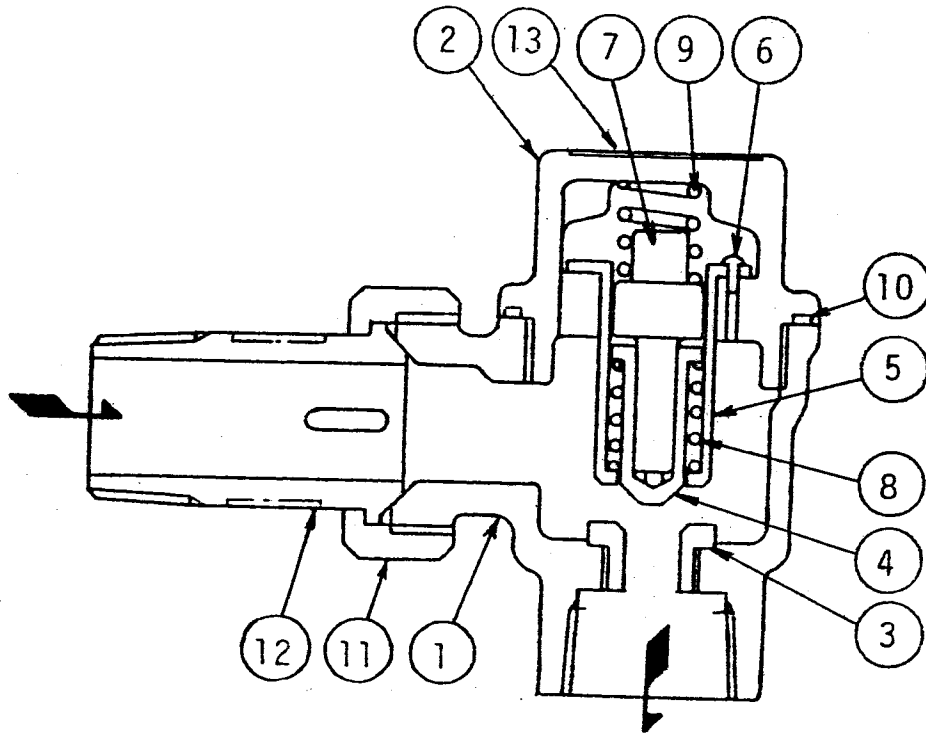
PARTS	NO.	TORQUE kgf.cm	SIZE mm	TOOL
VALVE SEAT	3	350	17	BOX WRENCH
COVER	2	500	32	WRENCH
UNION NUT	11	500	15A(1/2) 32 20A(3/4) 38	WRENCH

5. Trouble Shooting

Symptom	Cause	Remedy
Intermittent Operation or Continuous Discharge of Condensate	Normal	
Blow Through	Scales etc. lodged between valve and valve seat.	Disassemble the cover clean valve and valve seat.
	Wear and tear of valve and valve seat.	Replace the valve and valve seat.
	Temperature exceeding 150°C	Replace the thermo-... element
No discharge	Oily substance sticking and blocking the outlet orifice.	Disassemble the cover clean the valve and valve seat.
	Over Pressure	Exchange trap with higher pressure capability

6. Construction

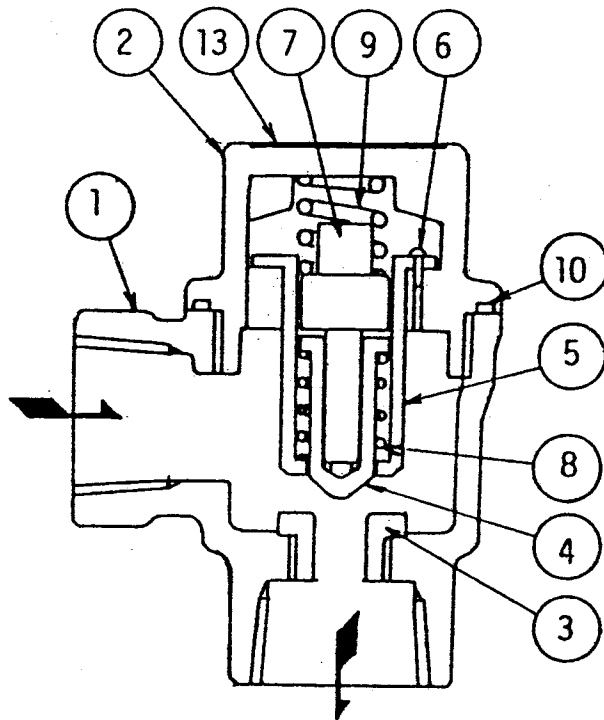
W1



- | | |
|------------------|-------------------|
| 1. Body | 7. Thermo Element |
| 2. Cover | 8. Spring |
| 3. Valve Seat | 9. Spring |
| 4. Valve | 10. Gasket |
| 5. Guide Pin | 11. Union Nut |
| 6. Guide Stopper | 12. Nipple |
| | 13. Name Plate |

6. Construction

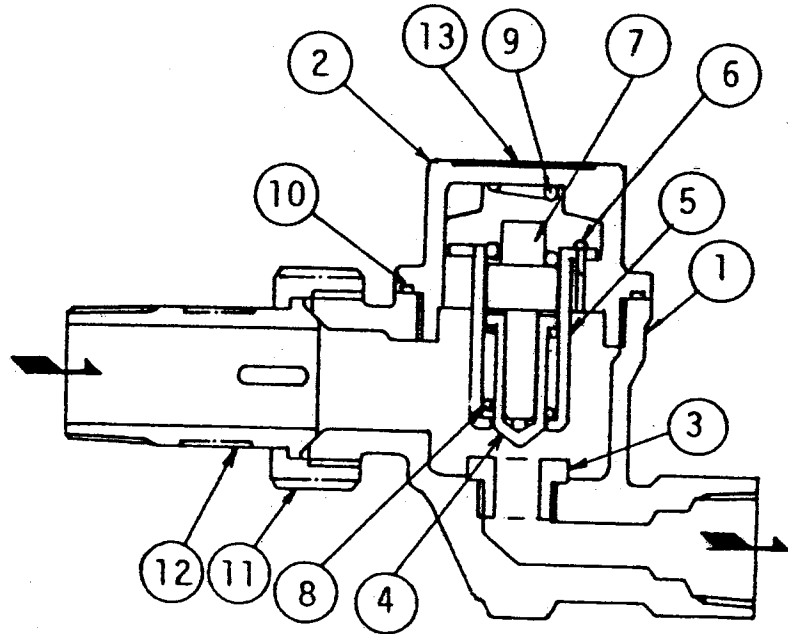
W2



- | | |
|---------------|-------------------|
| 1. Body | 6. Guide Stopper |
| 2. Cover | 7. Thermo Element |
| 3. Valve Seat | 8. Spring |
| 4. Valve | 9. Spring |
| 5. Guide Tube | 10. Gasket |
| | 13. Name Plate |

6. Construction

W3



- | | |
|------------------|-------------------|
| 1. Body | 7. Thermo Element |
| 2. Cover | 8. Spring |
| 3. Valve Seat | 9. Spring |
| 4. Valve | 10. Gasket |
| 5. Guide Tube | 11. Union Nut |
| 6. Guide Stopper | 12. Nipple |
| | 13. Name Plate |