

# Model TA-2•TA-2C•TA-5•TA-5F TA-3•TA-3C•TA-6

(With quick air release mechanism)

# Air Vent Valve

## Instruction Manual

Thank you very much for purchasing our air vent valve. Please read this instruction manual thoroughly before using the air vent valve, so that you may do so correctly and safely. Please carefully store this manual in a handy place.

The following safety symbols are used in this manual.



### Warning

This symbol indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.



### Caution

This symbol indicates a hazardous situation that, if not avoided, may result in minor or moderate injury. ("Caution" may also be used to indicate other unsafe practices or risks of property damage.)

## Specification

With quick air release mechanism

TA-2 quick air release mechanism					
Model	TA-2		TA-2C	TA-5	TA-5F
Application	Hot and cold water·Oil (Specific Gravity:0.8 and more)				
Pressure	0.01~1.0MPa				
Max. Temperature	90℃		60℃	90℃	120℃
Materials	Body	Cast Iron	Cast Iron with Nylon Coating	Bronze	
	Cover	Bronze			
	Valve	Brass			
	Floating Valve	Brass with Disc (NBR)			Brass with Disc (FKM)
	Float	Stainless Steel			
Connection	JIS Rc				
Body hydraulic test	2.0MPa				

- Operating pressure of the quick air release mechanism is 0.01 MPa or less.
- The anticorrosion of the TA-2 is electrodeposition paint.
- The Max. Temp. of TA-2C for continuous usage is 90°C.
- TA-2C should be insulated when the temperature difference between inside the valve and outside is more than 40°C.
- TA-2C body only is coated by Nylon 11 (white) .

Model		TA-3	TA-3C	TA-6
Application		Hot and cold water·Oil (Specific Gravity:0.8 and more)		
Pressure		0.01~1.0MPa		
Max. Temperature		90℃	60℃	90℃
Materials	Body	Cast Iron	Cast Iron with Nylon Coating	Bronze
	Cover	Bronze		
	Valve	Brass		
	Floating Valve	Brass with Disc (NBR)		
	Float	Stainless Steel		
Connection		JIS Rc		
Body hydraulic test		2.0MPa		

- The anticorrosion of the TA-3 is electrodeposition paint.
- The Max. Temp. of TA-3C for continuous usage is 90°C.
- TA-3C should be insulated when the temperature difference between inside the valve and outside is more than 40°C.
- TA-3C body only is coated by Nylon 11 (white) .

Confirm the specifications and operate air vent valve



# Install Air Vent Valve

## **Caution**

- (1) Vertically install Air Vent on such a place where air likely gathers.  
※ It may affect the original performance.
- (2) Remove foreign matter and scales from the line before connecting the valve.  
※ Failure to do so may prevent the valve from functioning correctly.
- (3) Outlet of the valve should be led to drainage point.  
※ Failure to do so, water leakage make the surrounding dirt.

- (1) The valve (Cock or gate valve) should be installed inlet sides of the Air Vent Valve, it will enable to permit cleaning and repair if necessary.

## Precautions for Air Vent Valve Operation

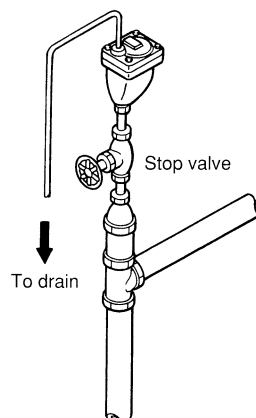
### **Warning**

- (1) Do not touch the product directly with bare hand in case high temperature application.  
※ Doing so may result in burns.

## Troubleshooting

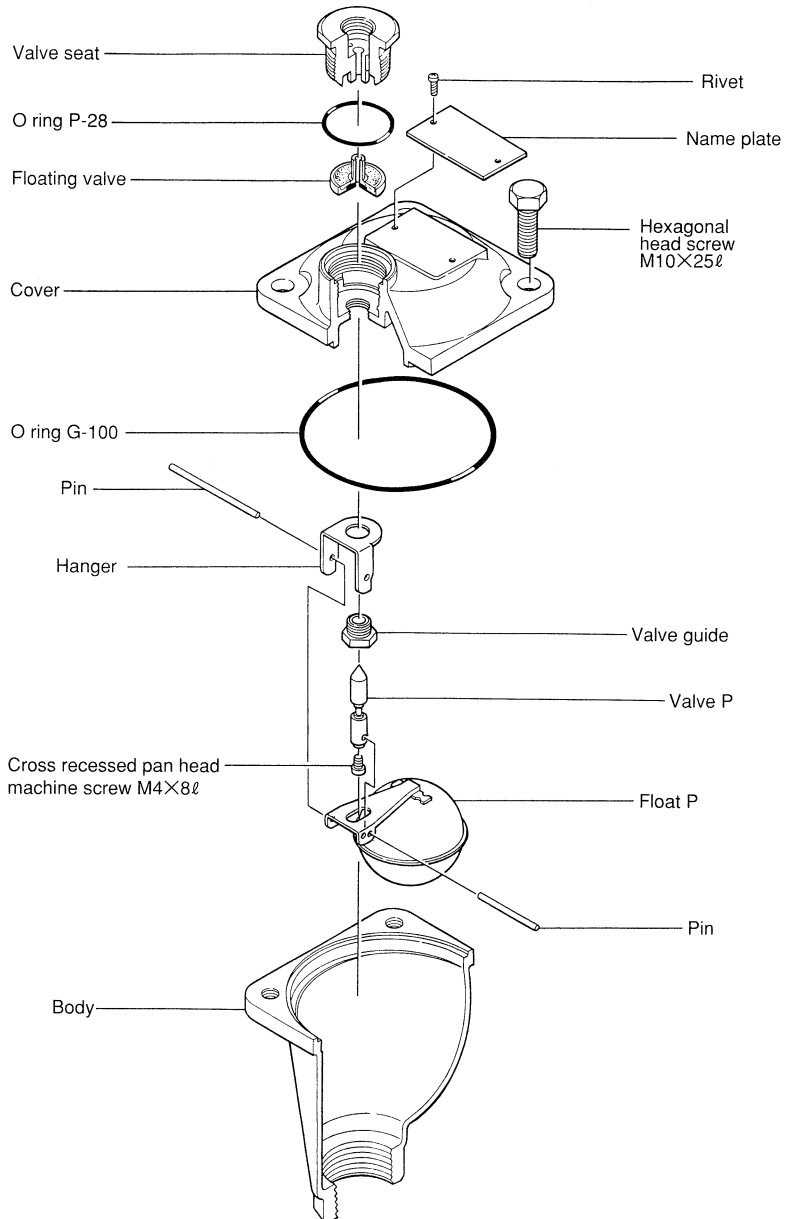
Problem	Cause	Solution
Air can not be exhausted	<ol style="list-style-type: none"> <li>1. Stop valve at inlet side is closed.</li> <li>2. Pipe pressure is above the optimum level.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fully open the stop valve.</li> <li>2. Reduce the pipe pressure, or replace the valve by the type for high pressure.</li> </ol>
Water is blown off	<ol style="list-style-type: none"> <li>1. The valve and valve seat is stuck by foreign substance.</li> <li>2. Valve seat is damaged.</li> <li>3. Float is damaged and loses the specified function.</li> </ol>	<ol style="list-style-type: none"> <li>1. Disassemble and clean the valve and valve seat.</li> <li>2. Clean up the valve and valve seat.</li> <li>3. Replace the float.</li> </ol>

### Installation



# Exploded drawing

## Type TA-2, 2C, 5, 5F Air Vent Valve

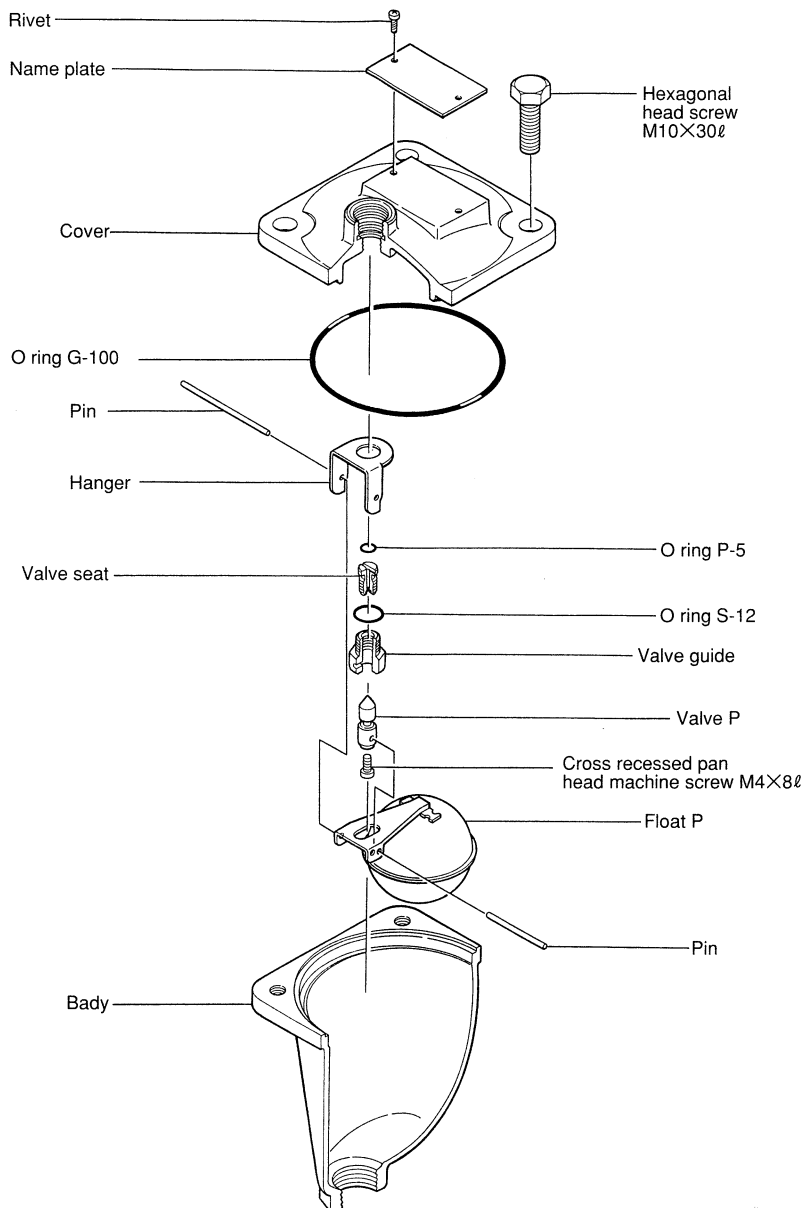


Be sure that all internal pressure has been discharged before disassembling and inspecting the valve.

# Exploded drawing

## Type TA-3, 3C, 6 Air Vent Valve

※For TA-3C only, washers are needed for the hexagon bolts.



Be sure that all internal pressure has been discharged before disassembling and inspecting the valve.

# Disassembly

## **Warning**

The pressure reducing valve shall be disassembled and inspected by qualified persons.

- (1) Be sure that all internal pressure has been discharged before disassembling and inspecting the valve. And, in case high temperature application, be sure to be cooled down the valve before disassembling and inspecting.
  - ※ Failure to do so may result in injury or burns due to residual pressure or spillage around the valve.

### TA-2, 2C, 5, 5F

- (1) Remove the valve seat by using a spanner (width across flats:36)
- (2) Remove the Oring P28.
- (3) Remove the floating valve.
- (4) Remove the clamping bolt (M10) of the cover.
- (5) Remove the Oring (G100).
- (6) Remove the pin to fix the float and remove the float.
- (7) Remove the cross recessed pan head machine screw (M4) (by using a cross recessed head screw driver).
- (8) Remove the pin which is fixing the valve and remove the valve and the float.
- (9) Remove the valve guide (width across flats:14) and the hanger.

### TA-3, 3C, 6

- (1) Remove the valve seat . (by using slotted head screw (—) driver)
- (2) Remove the cover clamping bolt (M10) .
- (3) Remove the Oring G100.
- (4) Remove the pin which is fixing the float and remove the float.
- (5) Remove the cross recessed pan head machine screw (M4) (by using a cross recessed head screw driver) .
- (6) Remove the pin to fix the valve disc and remove the valve disc and float.
- (7) Remove the valve guide (width across flats:14) and the hanger Oring S12.

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# After Sales Service

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## 1. Warranty application and period

Products delivered to user are manufactured with our high level of engineering techniques under strict quality control. Please observe the descriptions in this instruction manual or precautions on the hazard labels attached to the product. Should the product be faulty due to material or factors in our manufacturing processes, we will repair the product at no charge.

This warranty is valid for one (1) year after delivery.

## 2. Repairs will be charged even during the warranty period in the following cases:

- (1) Damage and failure due to user's incorrect operation, repairs and remodeling upon user's discretion.
- (2) Damage and failure due to location change of the product after delivery and drop of the product.
- (3) Damage and failure due to use under severe conditions beyond design specifications or incorrect operation.
- (4) Damage of failure due to natural disasters, such as fire, earthquake, lightening, corrosion due to salt, gas, wind, and abnormal voltage.
- (5) Replacement of excessive worn parts.



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