

OPERATION MANUAL

FOR

Thermodynamic Steam Trap

MODEL:SC-310・SC-311・SF-340・SF-341



SAFETY

The following warnings and cautions are shown at appropriate places in this manual.



WARNING

Failure to observe this type of precaution may lead to serious injury or death.

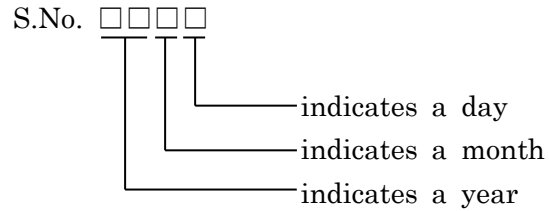


CAUTION

Failure to follow this type of precaution can lead to injury or damage to equipment and property.

S No. on the name plate of our product indicates a manufacturing date.

Indicating method of S No.



Example of indicating a year

06 → 2006 16 → 2016

Method of indicating a month

Mark	Month	Mark	Month	Mark	Month	Mark	Month
1	January	4	April	7	July	X	October
2	February	5	May	8	August	Y	November
3	March	6	June	9	September	Z	December

Method of indicating a day

Mark	Day	Mark	Day	Mark	Day	Mark	Day
1	1	9	9	H	17	Q	25
2	2	A	10	J	18	R	26
3	3	B	11	K	19	S	27
4	4	C	12	L	20	T	28
5	5	D	13	M	21	U	29
6	6	E	14	N	22	V	30
7	7	F	15	O	23	W	31
8	8	G	16	P	24		

(Example)

In case that S.No. is 0616, the manufacturing date is January 6, 2006

In case that S.No. is 16XM, the manufacturing date is October 21, 2016

TABLE OF CONTENTS

1. Introduction·····	P.1
2. Dimensions and Specifications·····	P.1
3. Installation·····	P.2
4. Trouble Shooting·····	P.3
5. Maintenance ·····	P.5
6. Construction·····	P.6
7. Warranty·····	P.7
★ Guidance for reading special product name·····	P.8

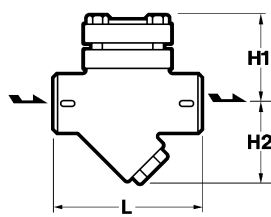
1. Introduction

Model SC and SF series are cast iron body thermodynamic disc trap with replaceable inner parts.

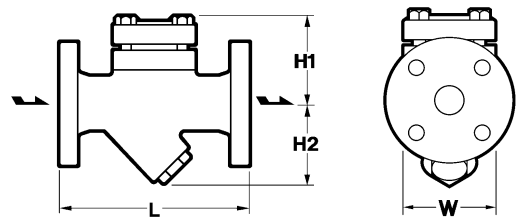
The connections are screw threaded (SC) and flanged (SF).

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

2. Dimensions and Specifications




SC-310·SC-311



SF-340·SF-341

Model No.	Connection	Size mm (inch)	Operating Pressure MPa	Maximum Temperature °C(°F)	Material of Body	Dimensions (mm)				Weight (kg)
						L	H1	H2	W	
SC-310	Screwed	20(3/4)	0.03 to 1.6	220 (428)	Cast Iron (FC250)	180	87	81	96	6
SC-311		25(1)								
SF-340	Flanged	20(3/4)				240	89	81	96	10
SF-341		25(1)								

3. Installation

 CAUTIONS	Before installing the trap, always blow off the sludge, scales, etc. from the piping.
---------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

- 1) Install the trap according to the direction of the arrow on the body.
- 2) Thermodynamic steam traps can be installed either horizontally or vertically.
- 3) Install the outlet condensate piping at the lowest point of the steam using equipment. The trap should be installed so that condensate will flow naturally into the trap.
- 4) The trap should be installed for easy maintenance.

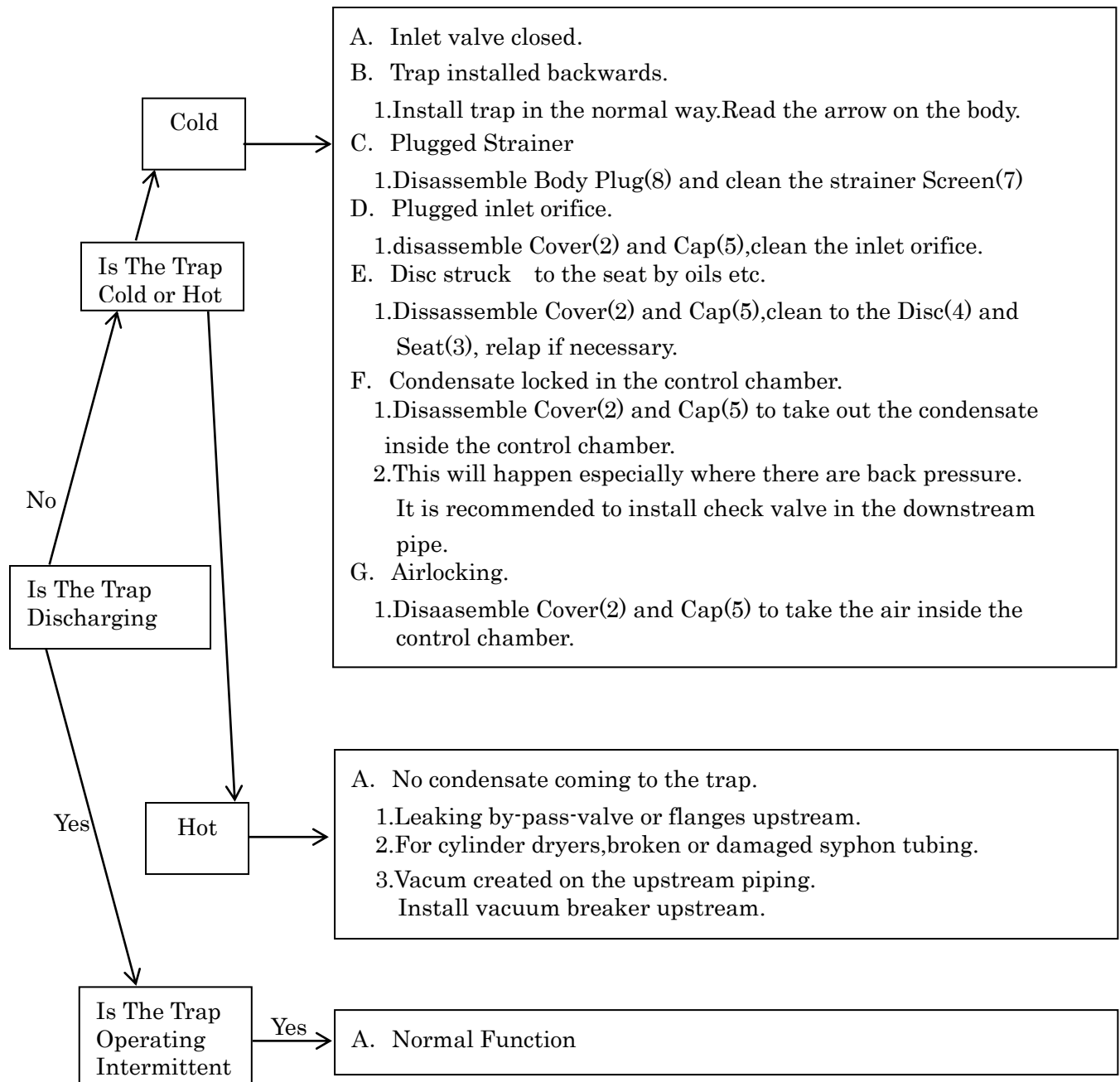
4. Trouble Shooting

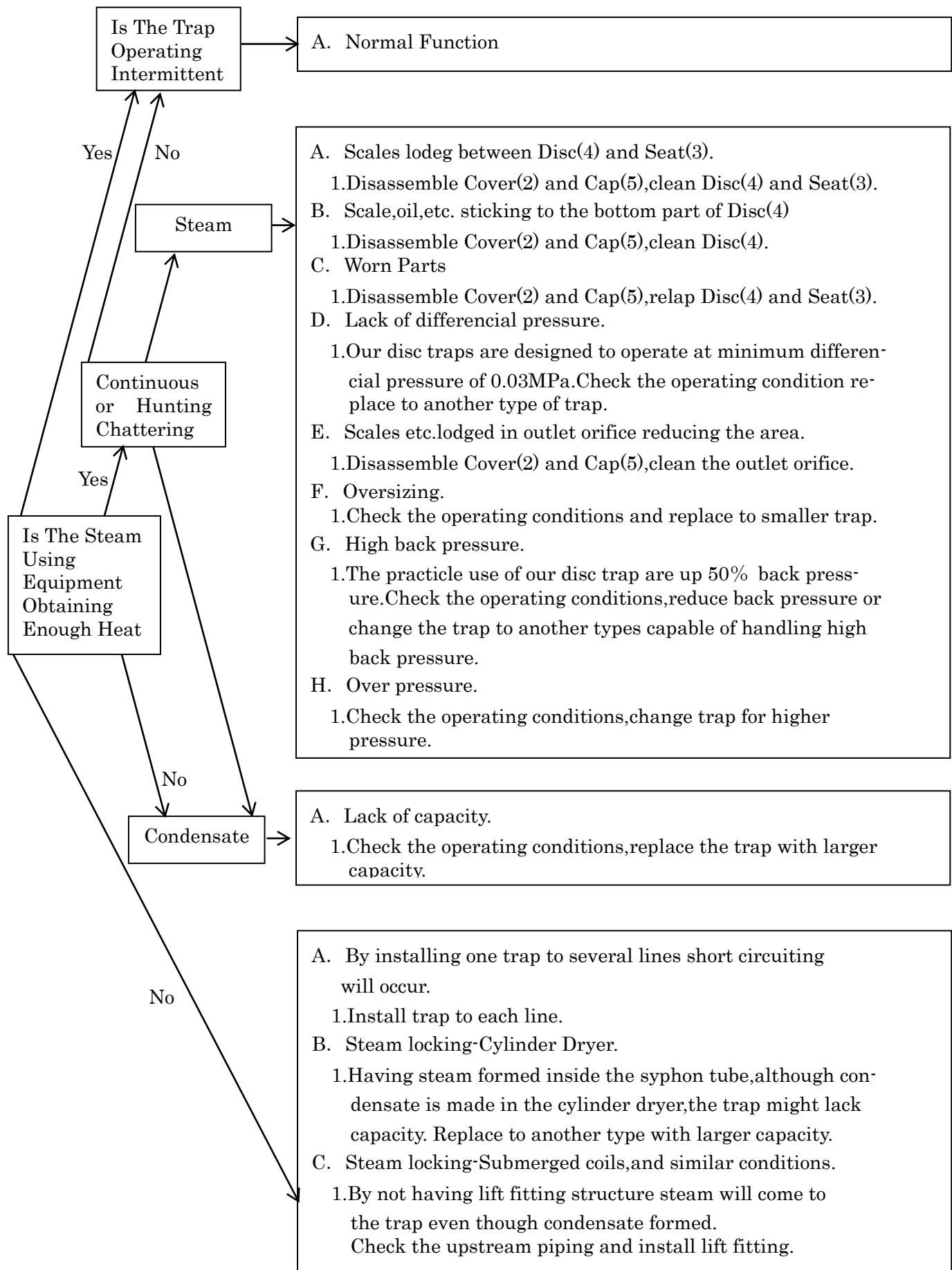
The thermodynamic disc trap has an intermittent operation function. It will discharge and stop at certain cycles. The improper operations will be : No discharge, trap hot or cold.

Continuous discharge condensate or steam.

Hunting, Chattering : The cycles being too short and/or a continuous noise without condensate discharge.

Refer to the Drawing in Page 5





5. Maintenance

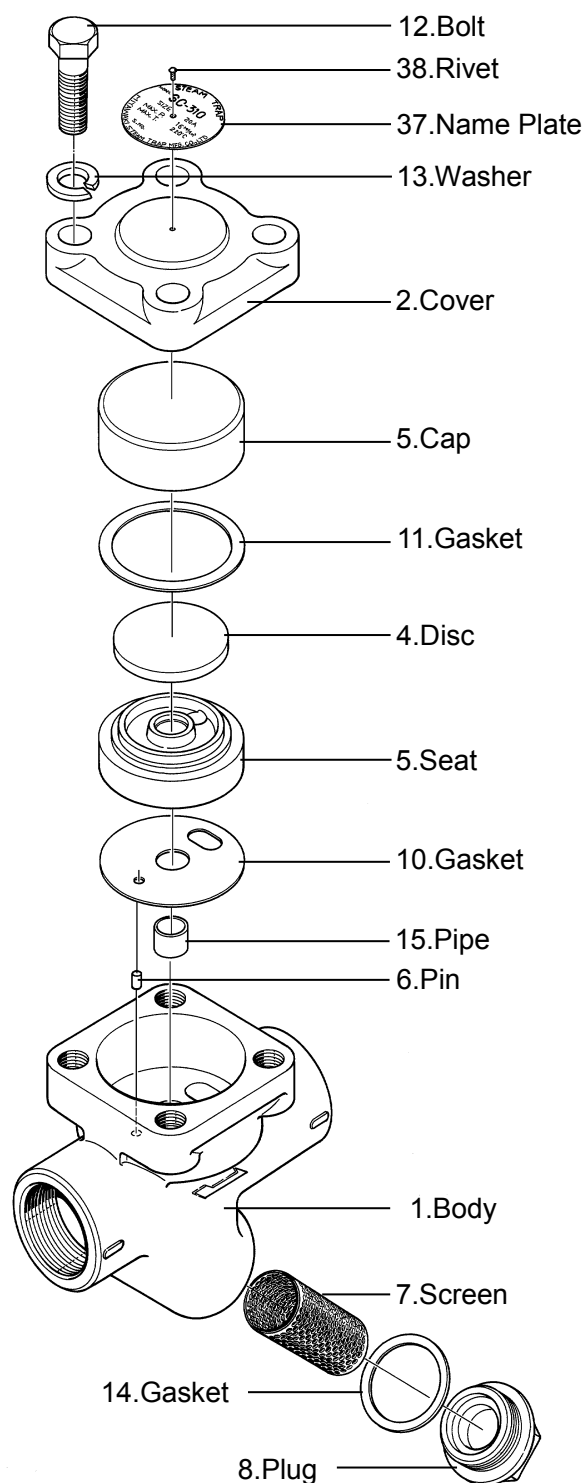


WARNING

When disassembling a hot trap be, sure to release the pressure inside to atmospheric pressure, and cool the trap before the opening it.

- A. Disassemble the Plug(8) with a wrench turning counter-clockwise take out the Screen(17), check and clean.
- B. Disassemble the Cover Bolt(12) by turning counter-clockwise, Cover(2), Cap(3), Disk(4), Seat(5), Pin(6), Gasket(10),(11),Pipe(15) will come out.
- C. Please check and clean these parts.
- D. If there are no defects resemble in opposite way of disassembling.
The clamp torque of the screws will be as per the following chart.
- E. If Disc(4) and/or Seat(5) is worn or defected please replace the whole inner unit Cap(3), Disc(4),Seat(5), and Gasket(10),(11).

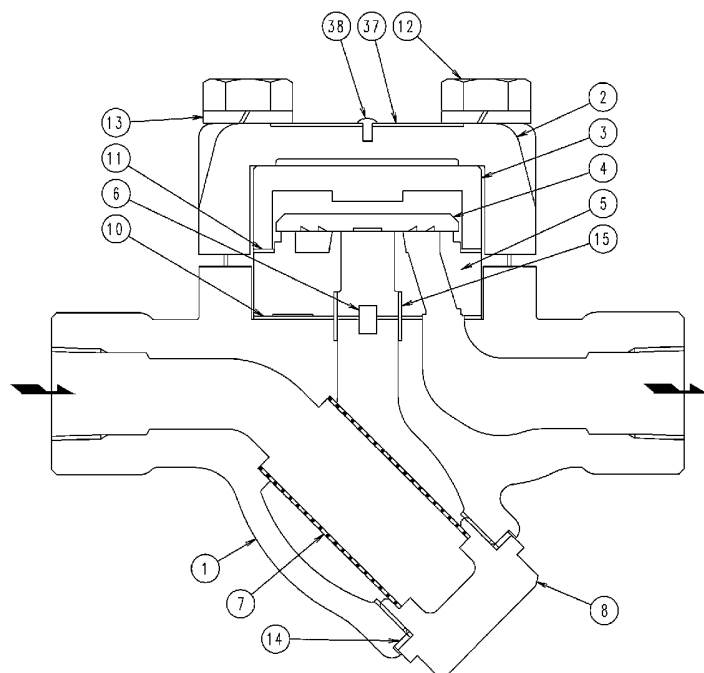
No.	Parts	Size	Clamp Torque
8	Plug	35mm	100N·m (1000kgf·cm)
12	Bolt	22mm	70N·m (700kgf·cm)



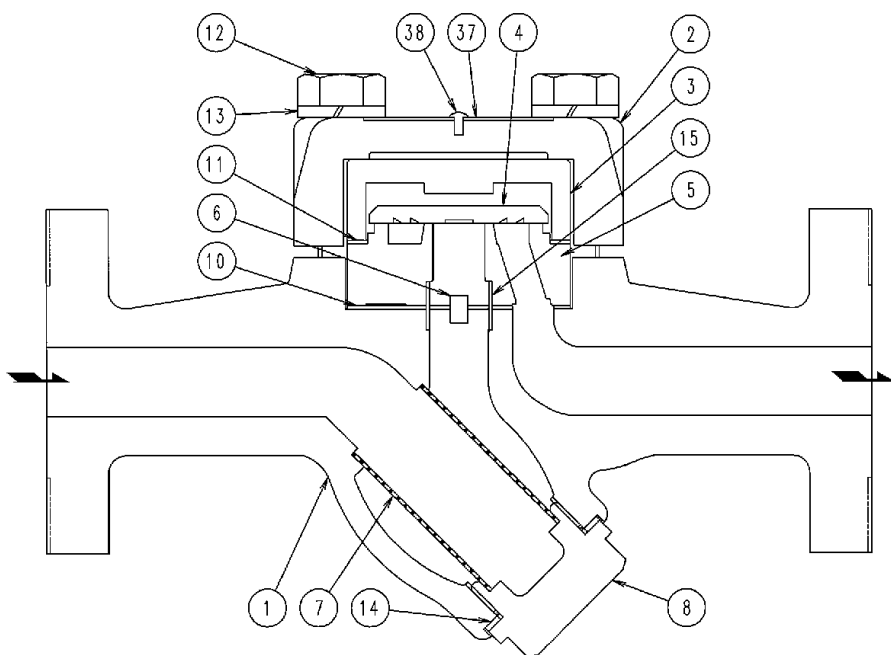
CAUTIONS

- When reassembling always replace the Gasket(10),(11),(14) to new ones.
- Also Bolt(12) should be tightened evenly.

6. Construction
Model:SC-310•SC-311



Model:SF-340•SF-341



- | | |
|----------|---------------|
| 1.Body | 10.Gasket |
| 2.Cover | 11.Gasket |
| 3. Cap | 12.Bolt |
| 4.Disc | 14.Gasket |
| 5.Seat | 15.Pipe |
| 6.Pin | 37.Name Plate |
| 7.Screen | 38.Rivet |
| 8.Plug | |

7 Warranty

7.1 Warranty period

The warranty period shall last 12 months from the date of product delivery.

7.2 Details of the warranty

If the product stops working correctly within the warranty period, we will repair or replace the product free of charge if the cause of the trouble is not one of the following items.

- 1) The precautions described in this manual were not observed
- 2) User's errors or mistakes such as an inappropriate installation or incorrect handling, or an excessively large impact caused by dropping
- 3) Problems caused by devices or equipment other than ours, or a disallowed use environment
- 4) When a repair or modification has been performed by anyone other than us or people who are authorized to make such repairs
- 5) Intrusion of salt or other substances that promote significant rust or corrosion or problems from fluids that contain the same substances
- 6) Consumable parts such as Packing, Gasket, O-ring, Diaphragm, etc
- 7) Attachment or accumulation of foreign matter in the pipe, such as dust and scale
- 8) Problems from fires, natural disasters, or other force majeure which is not our responsibility

7.3 Warranty limitation

The remedy available under the warranty shall not exceed the sales price of the products delivered, for any cause whatsoever.

★ Guidance for reading special product name

○○○-○○-□

**Special symbol: symbol apply only to special product
(Please refer to table 1 for details)**

1 suffix English letter after “-”.

Model symbol: Product model number

Table 1 Symbol description

Suffix	Special contents
A	Approved high-pressure gas trap
C	Blow valve attached & countermeasure against scale
K	Change of gasket
L	Special face to face dimension
M	Change of parts material
P	Change of operating pressure
R	Change of screen mesh or countermeasure against scale
T	Parts are standards, and the specification (operating temp, press. etc.) is changed
V	Change of air vent
X	Other than mentioned above or complex of special contents above

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- For any questions about the product that you purchased or about the details in this user's manual, please contact the following.
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 - Some special specifications of the product you have, may found to be different from the ones in the user's manual. If you have any question, please contact MIYAWAKI, our local authorized agent, or the place where you purchased.
-



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SC/SF