

INSTRUCTION MANUAL

REGULATOR

2001

- Please read this instruction manual carefully before using this product, particularly the section describing safety.
- Retain this instruction manual with the product for further consultation whenever necessary.

For Safety Use

To use this product safely, basic knowledge of pneumatic equipment, including materials, piping, electrical system and mechanism, is required (to the level pursuant to JIS B 8370 Pneumatic System Rules).

We do not bear any responsibility for accidents caused by any person without such knowledge or arising from improper operation.

Our customers use this product for a very wide range of applications, and we cannot keep track of all of them. Depending on operating conditions, the product may fail to operate to maximum performance, or cause an accident. Thus, before placing an order, examine whether the product meets your application, requirements, and how to use it.

This product incorporates many functions and mechanisms to ensure safety. However, improper operation could result in an accident. To prevent such accidents, read this instruction manual carefully for proper operation.

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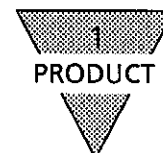
2001

Regulator

Manual No. SM7005-A

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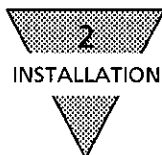
NOTE: Letters & figures enclosed within Gothic style bracket
(examples such as [C2-4PP07] · [V2-503-B] etc.) are editorial
symbols being unrelated with contents of the book.



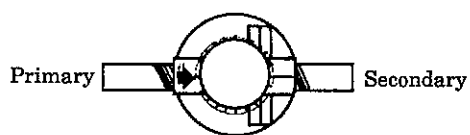
1. PRODUCTS

1.1 Specifications

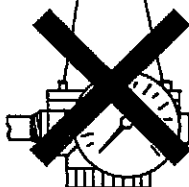
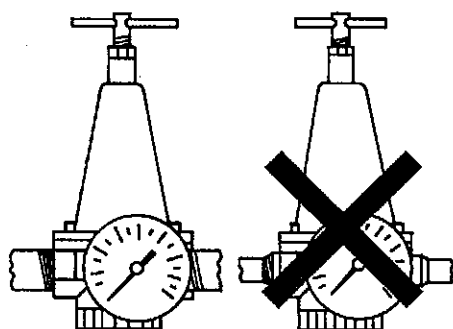
Model code	2001-2C · 3C · 4C · 6C
Item	
Max. service pressure MPa {kgf/cm ² }	2.06 {21}
Withstanding pressure MPa {kgf/cm ² }	3.09 {31.5}
Range of servicable temperature °C	5~65
Range of service pressure MPa {kgf/cm ² }	0.03~0.83 {0.3~8.5} (H : 0.07~1.72 {0.7~17.5} L : 0.02~0.34 {0.2~3.5})
Relief pressure MPa {kgf/cm ² }	Set pressure + 0.049 {0.5}
Connecting port dia (Re)	1/4 · 3/8 · 1/2 · 3/4
Mass of product (kg)	1.2



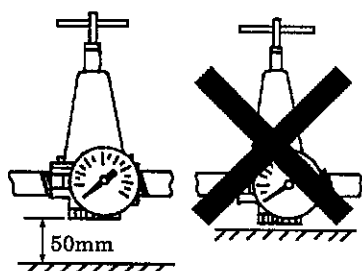
2. INSTALLATION



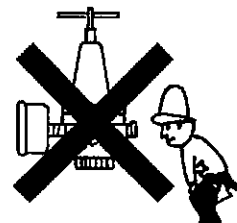
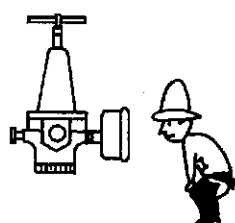
[T4-102-A]



[T4-102-B]



[T4-102-C]



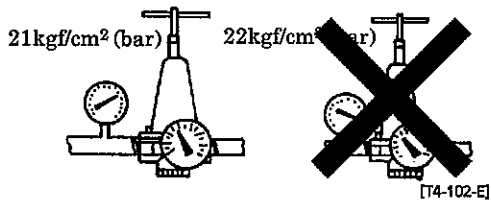
[T4-102-D]

1) Affirm, while piping the regulator, the direction of an arrow mark on the flange of a regulator matches with the intended direction of flow.

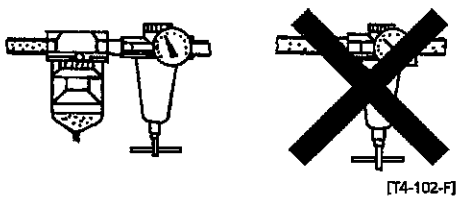
2) Eliminate using the pipe which diameter is extremely smaller than that of connecting port dia. of regulator.

3) Provide 50mm or more space when installing the regulator, for easy access during maintenance work afterward.

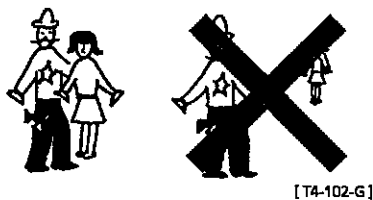
4) Install a pressure gage on a easily visible side of regulator and apply a plug to the outlet on the other side of regulator.



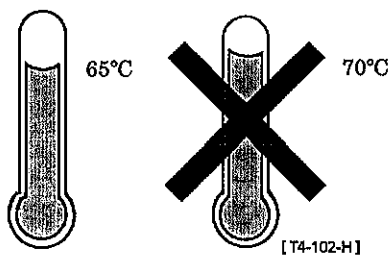
- 5) Carefully retain the air pressure within 2.06 MPa {21kgf/cm²}. Secondary pressure rises when turning the adjusting screw clockwise and lowers when turning the screw counterclockwise.



- 6) Install an air filter to the upstream side of regulator to filtrate any dust or condensed humidity from coming through the regulator.



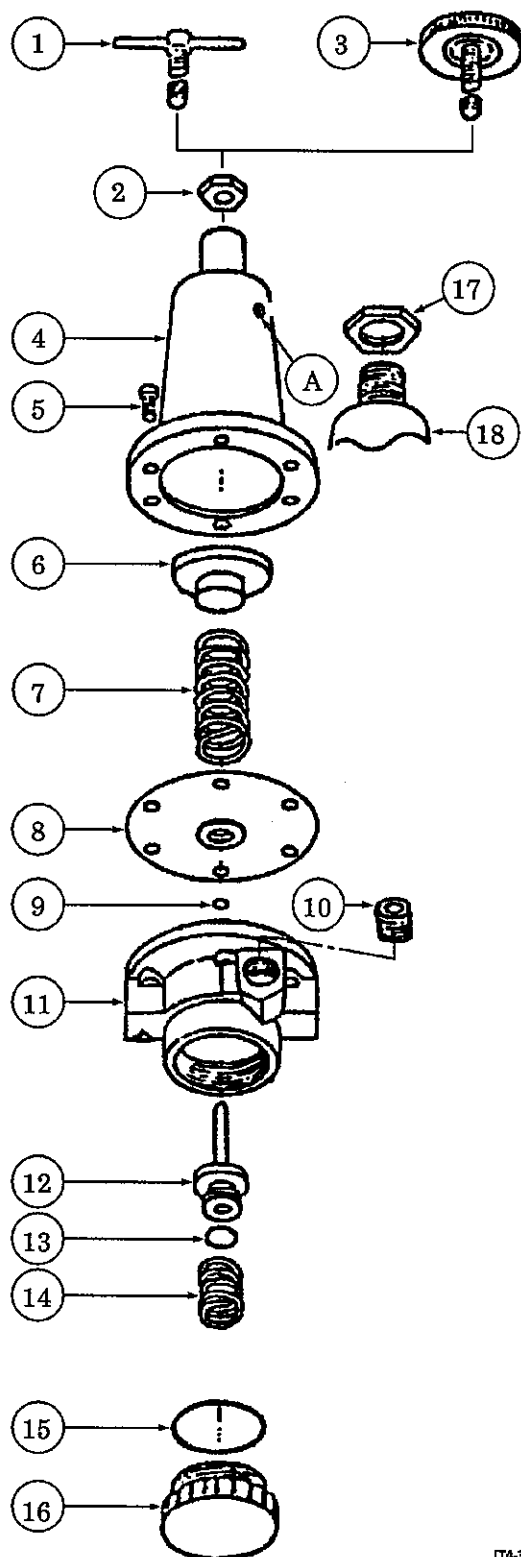
- 7) Install a regulator as possibly near by upstream of pneumatic equipment to be serviced.



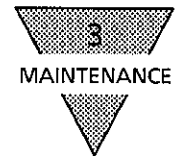
- 8) Eliminate its installation where the ambient temperature is expected to exceed 65°C



3. MAINTENANCE



[T4-302-A]

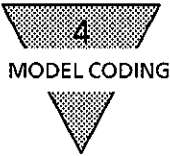


1) Disassembling procedure

- (1) Stop to supply compressed air and decompress within the equipment.
 - (2) Remove adjusting screw ① by turning it counterclockwise.
 - (3) Remove screws ⑤ to disassemble cover ④, spring ⑦, spring disk ⑥ and diaphragm ass'y ⑧.
 - (4) Remove bottom plug ⑩ to disassemble spring ⑭ and valve ass'y ⑫.
- 2) When it becomes unable to regulate pressure or remarkable pressure drop occurs
- (1) Remove bottom plug ⑩, spring ⑭ and valve ass'y ⑫.
 - (2) Wash out O ring ⑬ and diaphragm ass'y ⑧ to inspect for any flaws.
- 3) In case much air leaks through relief port A
- (1) It may caused due to improper assembling of valve ass'y ⑫, O ring ⑬ and diaphragm ass'y ⑧.

No.	Parts	Qty	Remarks
1	Adjusting screw	1	
2	Nut	1	
3	Plastic knob	1	Accessory
4	Cover	1	
5	Screw	6	
6	Spring disk	1	
※ 7	Spring H	1	for 0.07~1.72MPa {0.7~17.5kgf/cm ² }
7	Spring	1	for 0.03~0.83MPa {0.3~8.5kgf/cm ² }
7	Spring L	1	for 0.02~0.34MPa {0.2~3.5kgf/cm ² }
8	Diaphragm ass'y	1	
9	Disk seal		Mounted on ⑧
10	Pipe plug	1	
11	Body ass'y	1	
11	Body ass'y	1	For model 6C
12	Valve ass'y	1	
13	O ring	1	Expendable item
14	Spring	1	
15	O ring	1	Expendable item
16	Bottom plug	1	
17	Nut	1	For panel mounting
18	Cover	1	For panel mounting

※ When ordering for high tension spring ⑦, order the following items together with it. Spring disk No. 06-161 and diaphragm ass'y No. 15-238.



4. MODEL CODING

