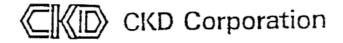
INSTRUCTION MANUAL

FOR

REGULATOR
MODEL NO. B2019

Please read this operation manual carefully before using this product, particularly the section describing safety.

Retain this operation 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.

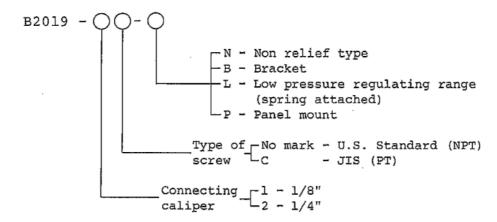
Thank you very much for purchasing the CKD's products.
This REGULATOR is a fruit of our long years of accumulated experience.

This INSTRUCTION MANUAL deals with the basic items regarding the installation, operation, maintenance, etc. required for bringing the efficiency of the REGULATOR into full play.

Our products are produced under severe quality control

You are requested to throughly read through this INSTRUCTION MANUAL before using the regulator, and to perform correct operation and maintenance.

(1) HOW TO READ MODEL NUMBER



(2) Cautions for installation

- 2-1) Install the regulator so that the air flowing direction and the arrow direction on the air inlet port conform.
- 2-2) Avoid the use the pipes whose connecting caliper is smaller than the regulator.
- 2-3) Install a regulator to a position easily visible.
 A hole on the opposite side shall be blocked with a plug.
- 2-4) Be careful that the primary side pressure does not exceed 2.06 MPa.

 Clockwise turning of the adjusting screw makes the secondary side pressure high and counterclockwise turning of it makes the secondary side pressure low.
- 2-5) Be sure to attach a filter before the regulator so that a dust, water, etc. may not get in.
- 2-6) Use the regulator as close as possible to a pneumatic device to be used together.
- 2-7) Never try to use the regulator under the ambient temperature more than 65 °C.

- 2-8) The adjusting knob may be locked and becomes unable to turn further, when it is turned.

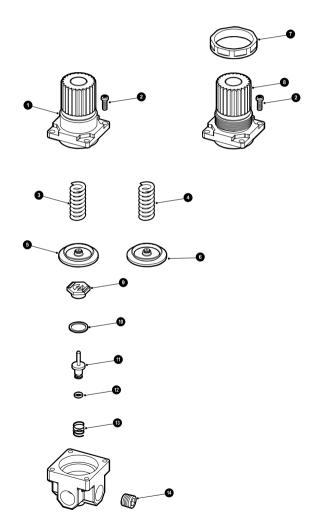
 When setting the pressure, pull up the adjusting knob to check that it is not locked first. Then turn the adjusting knob.
- 2-9) In case of fitting a panel, drill holes of 31 dia. ones.
- (3) Cautions for maintenance
 - 3-1) Disassembling procedure
 - a) Stop the air supply to the regulator.
 - b) Release the locked adjusting knob and turn it counterclockwise fully to discharge the air.

 - d) Remove the spring 3 and the diaphragm assemly 5.
 - e) After removed the valve seat $\ensuremath{\mathfrak{g}}$, also remove the valve assembly $\ensuremath{\mathfrak{g}}$ and the spring $\ensuremath{\mathfrak{g}}$.
 - 3-2) Either the pressure can not be made or the pressure drop becomes peculiar, clean the gasket ① , O-ring ② and valve assembly ① and check them for damage.
 - 3-3) If the air leaks from the relief port, clean the diaphragm assembly ⑤ and disc seal and check them for damage.
 - 3-4) When reassembling, give due consideration to the following items.
 - a) Tighten the valve seat @ upto the 0.8 N·m torque. Also the screw shall be tightened to the 2.2 \sim 2.7 N·m torque.
 - b) Apply Daphnie grease MP No1 to the gasket ® and O-ring ® .
 - c) The bonnet assembly ① is not able to disassemble.



B2019 Series

■ B2019 Series Parts Expanded View



Part na	ame	Part model No.	No.	Quantity
Consumable parts kit For standard	***	B2019-KİT	86660	1 each
Consumable parts kit (N) For non-relief		B2019-KIT-N	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 each
Knob cover kit		B2019-KNOB	0	1 4
Knob/cover kit (P) For panel mount		B2019-KNOB-P	2 9 8	4 1 1
Pressure adjustment sprin For standard		B2019-SPRING	6	1
Pressure adjustment sprin For l ow pressure	g (L)	B2019-SPRING-L	9	1
Diaphragm assembly For standard		B2019-DIAPHRAGM-ASSY	6	1
Diaphragm assembly (N) For non-relief		B2019-DIAPHRAGM-ASSY-N	6	1
Valve assembly		B2019-VALVE-ASSY	0	1 each
Metal plug (with sealant) R 1/8 * 1 set includes 10 pcs.		FRL-PLUG-R1/8	•	10
Packing box/label		B2019-PAC-BOX-KIT	-	1