

INSTRUCTION MANUAL FOR MULTILEX VALVE

Direct Type

Model AB2

Prior to using the Product, it is essential to read this INSTRUCTION MANUAL, especially the description of safety-use issue.

For quick reference whenever necessary, keep this INSTRUCTION MANUAL in a good manner.



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FOR SAFETY USE

The Product is to be used by those who has a basic knowledge about material, fluid, piping electricity regarding Control Valves (solenoid valves, motor valves, air operated valves and so on.)

Never use this Product by those who have no knowledge or are not well trained about Control Valves.

Should be any trouble or accident caused by a wrong selection and/or wrong use of the Product even by a person of basic knowledge about Control Valves, we are not responsible therefore.

Since any customer of the Product have a variety of its application, we are not in a position to get all the information on how and where the Product is used. There may be the cases where that the Product may not meet customers' requirement or may cause any trouble or accident, by fluid, piping or other condition that are not within the specifications of the Product.

Under such a circumstance, select with their responsibility the most suitable application and use of the Product according to the customers' requirements.

The Product incorporates a various safety arrangement, however miss-handling of the product may lead to any trouble or accident on customers side. To avoid any possible trouble, read this INSTRUCTION MANUAL carefully and understand it fully.

Pay your attention to the items described in this Text, as well as the items indicated below.



CAUTIONS

- When energized, heat is generated at coil portion of solenoid valves and motor valves particularly "Class H" coil where may have a high temperature.
- There may have electric shock when wire connecting portion of solenoid valves or motor valves are touched. In case of disassembly or inspection, turn off power supply beforehand. Don't touch live portion by wet hands.
- Make piping so as not to have leakage and check for no leakage before use, because in case of control valves for high temperature fluid like steam, leakage may cause heat injury.



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INSTRUCTION MANUAL
FOR
SOLENOID VALVE
MODEL: AB2

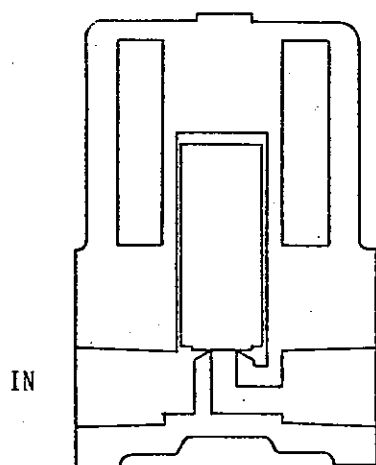
This manual is your introduction to CKD MULTILEX VALVE AB2 and will give valuable information on the installation, operation and maintenance servicing of there types Solenoid Valve.

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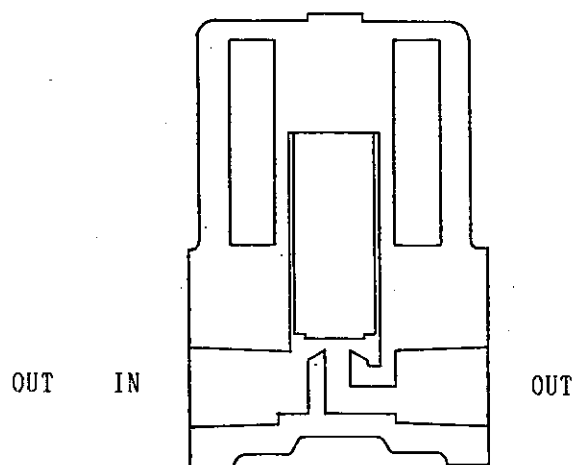
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1. Operation

Model : AB2



SOLENOID DE-ENERGIZED
: Ports closed.



SOLENOID ENERGIZED
: In open to OUT.



Precautions for operation

- 1) Never use the valve in a site where the atmospheric air contains corrosive or explosive gas.

We recommend you to use our chemical resistant solenoid valve or anti-explosive solenoid valve for operation in such a site condition.

- 2) Use the valve within the specified pressure range.

Pressure beyond the specified range may cause valve malfunction.

- 3) Use the valve within the specified range of atmospheric temperature as well as fluid temperature.

In a site where the fluid may freeze, protect the valve with a heat insulating material.

- 4) Where dried air or gas are being used frequently, DC power is recommended to keep the service life of the unit longer.

- 5) DC is recommended for use in a tranquil environment.

- 6) In case of being used water, be sure to use a brass body.

If the valve will not be used for a long time after water passes through it, the water left inside the valve must be completely removed.

If any water remains, the valve may corrode, causing operational defects or leakage to occur.

- 7) In case dust or foreign matter contaminates the fluid, or rust tends to develop inside the pipe, be sure to attach a filter or a strainer to the "IN" side of the solenoid valve.

We are ready to supply 100 mesh stainless steel filters as optional items.

- 8) We recommend to install a by-pass line.

Maintenance and repair will be facilitated by that.



Precautions for piping

- 1) Pipe fastening torques during piping should be 6A (Rc1/8)-max.
80 kgf-cm or 8A (Rc1/4)-max. 130 kgf-cm.
- 2) For gas piping, observe the effective length of the screw.
The screw edge must be bevelled for half a pitch from the point.
- 3) Before piping, conduct flushing to remove foreign matters or chips
in the pipes.
- 4) In connecting the pipes with the products, be sure to apply sealing agent
in a proper quantity and at the right position and to wind sealing tape at the
right position so that the sealing agent, tape etc. may not enter the pipings.
- 5) Piping must be so executed that the fluid flowing direction is in conformity
with arrow mark on the solenoid valve body.
- 6) After finishing piping, check each connection for any leakage.



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Precautions for wiring

- 1) Use wires having nominal cross sectional dimension of 0.5mm^2 or more.
- 2) Use switching circuit where no contact point chattering occurs.
- 3) In the electric circuit, put a fuse (1A) and the like.
- 4) Use power with the rated voltage $\pm 10\%$.
- 5) When using DC coil for a semi-conductor, design the circuit at 1% (max.) of the rated voltage, the release voltage of the DC coil being low.

Others

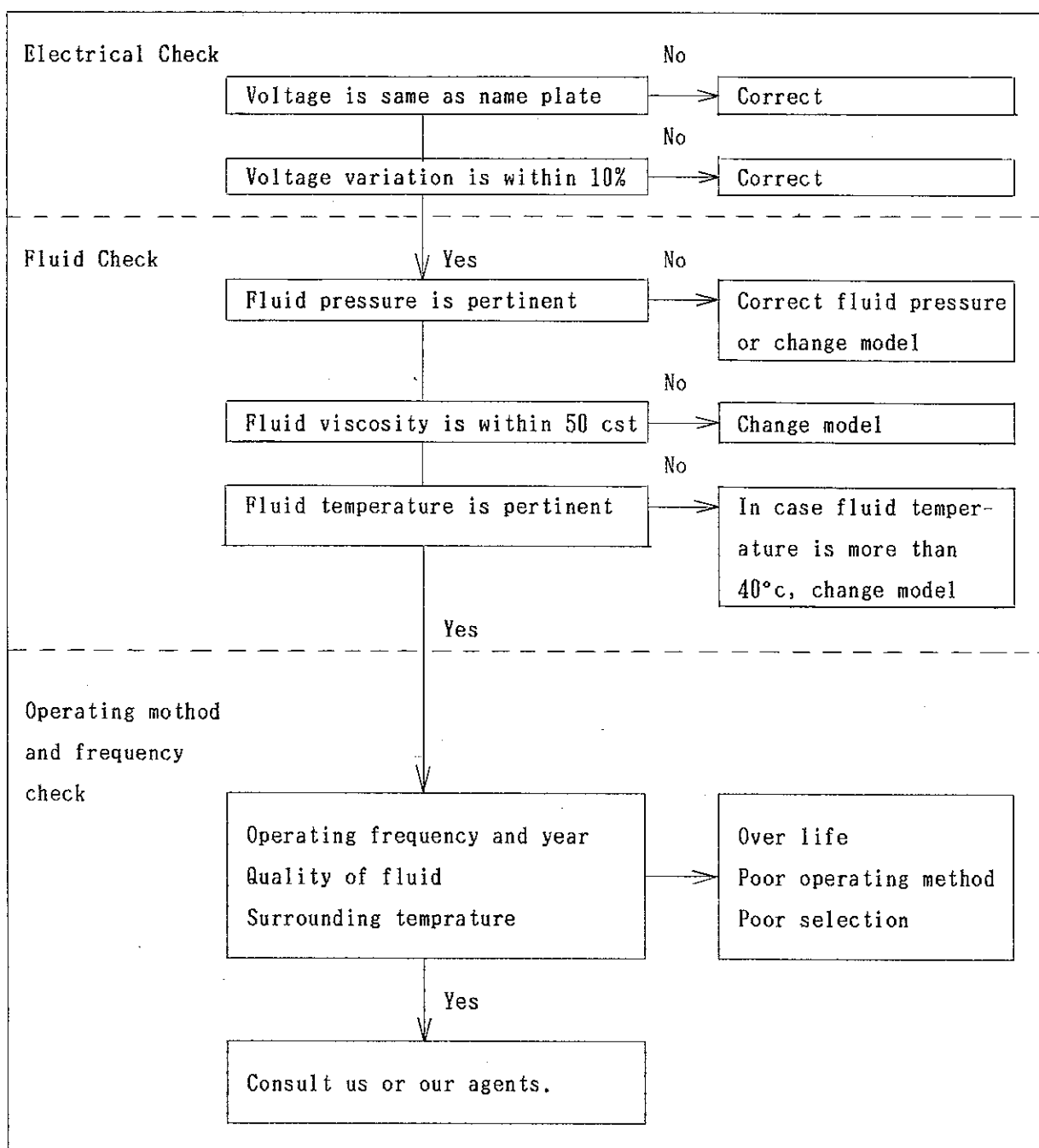
- 1) Do not disassemble the bonnet and the body as these parts have been fastened with tapping screws.
- 2) If any defection occurred in the product, replace the whole product with a new one.



Trouble & Check Manual

Noise is appeared in case electric power supplies

Followings should be checked

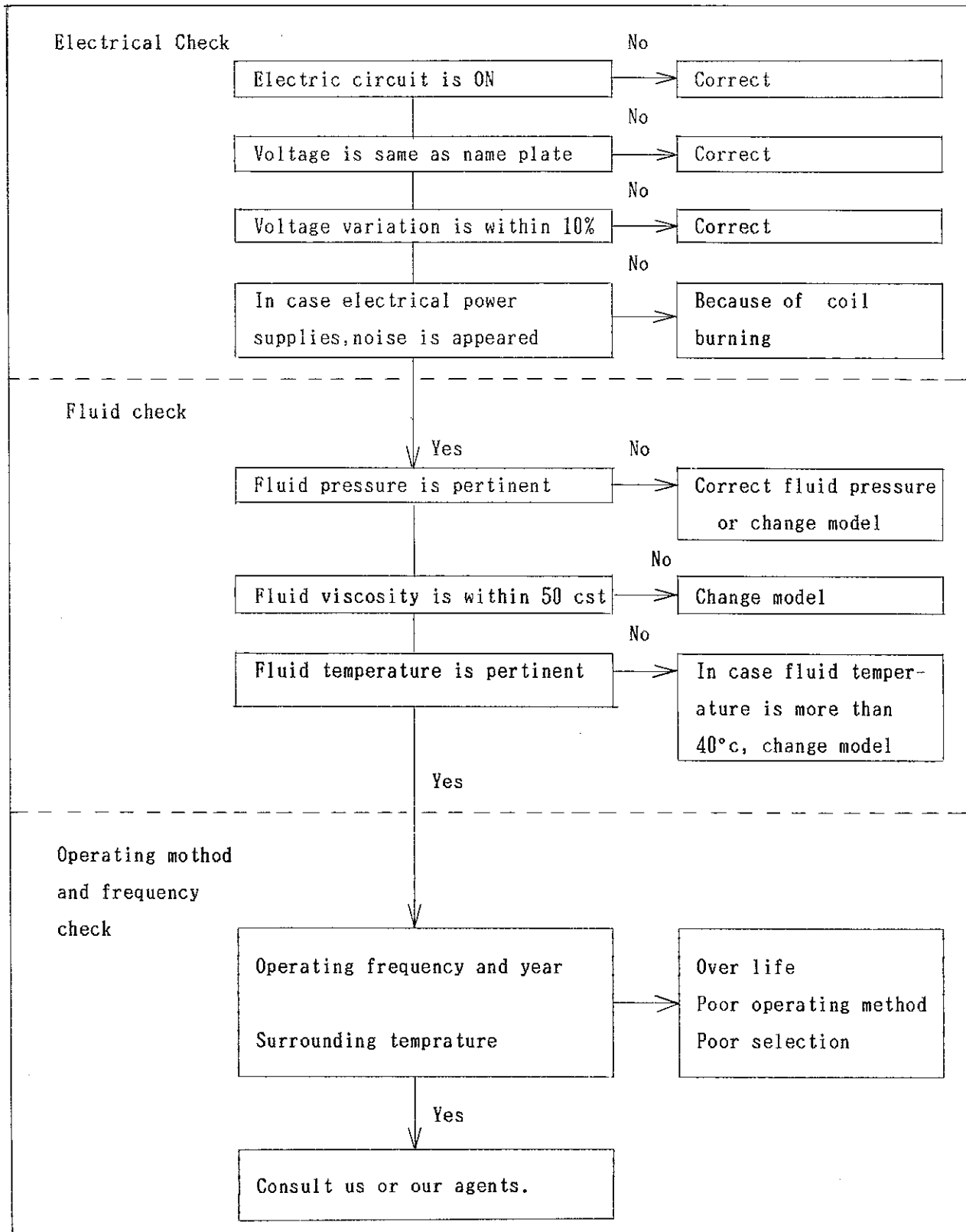




Trouble & Check Manual

Fluid is not flowed

Followings should be checked





Trouble & Check Manual

Flowing fluid is not stopped

Followings should be checked

