

# Precautions for Use

Before using any of our products, please be sure to read the following precautions and the product's operation manual.

## Precautions for Compressors

### ⚠ CAUTION

- **The unit must be used as assembled in a device that has the appropriate casing and wiring.**  
Using it without appropriate casing may cause fire, electric shock or burns.
- **Do not give the unit heavy external shock during storage and transportation,** which may cause malfunction of the unit.
- **Do not use the unit with a power supply other than the voltage shown on the unit.**  
Negligence may cause a fire or an electric shock.
- **Do not install the unit in a completely enclosed case (box) without proper or adequate ventilation.**  
This may cause a fire or an electric shock.
- **Use the unit within the proposed ambient temperature range.**  
Using it out of the range may cause a fire or an electric shock.
- **Units must not be modified.**  
Modification may cause a fire or an electric shock.
- **Do not place flammable substances near the unit.**  
This may cause a fire.
- **Units with grounding screws should be earthed (grounded), except when connected to a double insulation device.**  
Not earthing the unit may result in a fire or an electric shock.

### ⚠ WARNING

**Do not let the unit take in any gas other than air.**  
There is a risk of an explosion, fire or electric shock.

**Make sure the unit is operated in a completely dry area.**  
There is the risk of a short circuit causing a fire or an electric shock.

- **The unit must be installed at a level higher than the water surface when it is used for bubbling.**  
If installed at a lower level, fluid may flow into the unit and cause an electric shock.
- **Do not allow anything to be placed on or to fall onto the electric cable,** which may damage the cable, causing a fire or an electric shock.
- **Do not pull, cut, twist, heat up or unnecessarily bend the electric cable,** which may damage the cable, causing a fire or an electric shock.
- **When installing the unit into another device, the cable from the unit should be connected securely to the wiring of the device by such as soldering, crimping or screw fasteners.**  
A loose connection may cause a fire or an electric shock.
- **The unit must not be disassembled or repaired by any other person than who has received Nitto Kohki technical training. (Except in the case of filter and piston maintenance and inspection in accordance with the operation manual.)**  
Otherwise it may result in a fire or an electric shock due to faulty operation.
- **The unit must be disconnected from its power source before the cleaning or replacing filters.**  
Failure to do so may result in an electric shock or injury.

## Precautions for Vacuum Pumps

### ⚠ CAUTION

- **Do not install the unit in a completely enclosed case (box).**  
This may cause a fire or an electric shock.
- **The unit must be used as assembled in a device that has the appropriate casing and wiring.**  
Using it without appropriate casing may cause fire, electric shock or burns.
- **Do not give the unit heavy external shock during storage and transportation,** which may cause malfunction of the unit.
- **Do not use the unit with a power supply other than the voltage shown on the unit.**  
Negligence may cause a fire or an electric shock.
- **Use the unit within the proposed ambient temperature range.**  
Using it out of the range may cause a fire or an electric shock.
- **Units must not be modified.**  
Modification may cause a fire or an electric shock.
- **Do not place flammable substances near the unit.**  
This may cause a fire.
- **In case there is a chance of moisture, particles, dirt or dust in the air the unit suck in, an additional filtration device must also be installed on the inlet port of the unit.**  
Contaminated air may cause an electric shock.
- **Units with grounding screws should be earthed (grounded), except when**

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- connected to a double insulation device.**  
Not earthing the unit may result in a fire or an electric shock.
- **The unit must be installed at a level higher than the water surface when it is used for bubbling.**  
If installed at a lower level, fluid may flow into the unit and cause an electric shock.
- **Do not allow anything to be placed on or to fall onto the electric cable,** which may damage the cable, causing a fire or an electric shock.
- **Do not pull, cut, twist, heat up or unnecessarily bend the electric cable,** which may damage the cable, causing a fire or an electric shock.
- **When installing the unit into another device, the cable from the unit should be connected securely to the wiring of the device by such as soldering, crimping or screw fasteners.**  
A loose connection may cause a fire or an electric shock.
- **The unit must not be disassembled or repaired by any other person than who has received Nitto Kohki technical training. (Except in the case of filter and piston maintenance and inspection in accordance with the operation manual.)**  
Otherwise it may result in a fire or an electric shock due to faulty operation.
- **The unit must be disconnected from its power source before the cleaning or replacing filters.**  
Failure to do so may result in an electric shock or injury.

## Precautions for Blowers

### ⚠ CAUTION

- **Do not place the unit on the spot where may be soaked with water or covered with snow.**  
This may cause an electric shock or a fire.
- **Do not use the unit in a damp or wet place.**  
This may cause an electric shock or fire.
- **Always place the unit above water level.**  
Failure to do so may result in an electric shock or fire.
- **Use a waterproof wall outlet socket to supply power to the unit.**  
Failure to do so may cause an electric shock or fire.
- **Use a power supply equipped with a set of earth leakage and overcurrent breakers.**  
Failure to do so may result in an electric shock or fire.
- **Electric work must be done by a qualified electrician.**  
Failure to do so may result in an electric shock or fire.
- **Do not modify the unit.**  
Modification may cause a fire or an electric shock.
- **Do not use with the outlet port closed or at free displacement.**  
This may cause an electric shock, malfunction, or fire.
- **Do not use the unit with a power supply other than the voltage shown on the unit.**  
Negligence may cause a fire or an electric shock.
- **Never touch the power plug with wet hands.**  
This may cause an electric shock.

### ⚠ WARNING

**Do not let the unit take in any gas other than air.**  
There is a risk of an explosion, fire or electric shock.

- **Insert the power plug securely to the hilt of the contact blades so that it does not wobble.**  
Failure to do so may result in an electric shock.
- **Do not put anything on the power cable.**  
This may cause a fire or an electric shock.
- **Do not place anything near the unit (within 50cm reach)**  
This may cause a fire or an electric shock.
- **Do not use the unit where flammables, such as gasoline, solvents, lacquer, benzene, etc. are being used.**  
This may cause a fire or an explosion.
- **Check the power plug at least once a year for dirt and dust and clean.**  
Failure to do so may result in an electric shock or a fire.
- **The power plug must be disconnected before the air filter is cleaned or replaced.**  
Negligence may cause an electric shock or accident.
- **Always grasp the power plug not the cable when disconnecting the unit from the power socket.**  
Pulling it out by grasping the cable may cause an electric shock or short circuit.
- **Any disassembled air filter must be put back before resuming the operation.**  
Negligence may cause a fire or an electric shock.
- **Never try to disassemble or repair the unit.**  
This may cause an electric shock or an injury. Any repairs must be done by an electrician authorized by Nitto distributors.
- **Do not cover Blower with a box or the like without proper or adequate ventilation.**  
This may cause malfunction and fire.

## Precautions for Liquid Pumps

### ⚠ CAUTION

- **Please avoid any liquid that contaminated with solids such as debris or dust.**  
If dust sticks to the valve, the unit may not give a good performance. When intrusion of dust is expected, place a filter to the inlet.
- **Please avoid any liquid that may crystallize.**  
If crystals stick to the valve, the unit may not give a good performance. Preparatory test on the unit with the liquid is recommended.

### ⚠ WARNING

**Please confirm the suitability of the liquid that passes through the unit before use.**  
Otherwise there will be possible leak, burst, fire or electric shock.

- **The performance is measured with the unit at its proper position, which is described in the user's manual. Different unit positions or the nozzle directions may result in different performances.**

## When in use of compressors and vacuum pumps

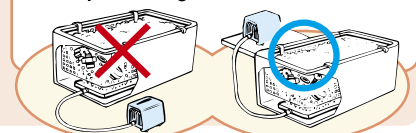
As compressors and vacuum pumps employ self-cooling system, if used at more than rated pressure, **duty cycle of some of the models will be shortened.**

- When you want to prolong the duty cycle, it is recommended for you to cool the compressor with fans. For instance, AC0902, whose duty cycle is 30 minutes, is effective.

Please check with our distributor in advance if you like to use the compressor/vacuum pump at **free displacement (OMPa), or the vacuum pump with inlet port closed, or the compressor at maximum pressure.**

- Do not use the compressor near **flammable gas.**
- Do not use the compressor **in the rain or in wet and damped place.**
- Do not suck **corrosive gas.**

- Be sure to install and use the compressor **at a position higher than water level.**



## Handling Problems

In any of the right cases, **stop operation immediately, switch off the power and disconnect the unit from the power supply.** Ask our distributor for repair.

- When **oil such as lubricant** has been applied to the unit in error.
- When the unit has suffered a severe **shock such as being dropped.**
- When **liquid such as water** has entered into the unit by mistake.

- When an **abnormal operation** is observed, such as the emission of smoke, or an unusual smell or noise.