



REGISTERED FIRM

ISO 9001

JISZ 9901

LR104996

Instruction Manual

Our products are produced as per international quality system standards ISO9001.

Our products have got CSA approval (Canadian standards association).

Oil-free Scroll Vacuum Pump

ISP-250B

ISP-500B



For sales and service please call:

PTB Sales

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This instruction manual includes important warnings, cautions, and instructions for safe and effective use of the scroll vacuum pump. Be sure to read this manual thoroughly and understand it fully before use. Retain it carefully for easy reference.

※ Before use, be sure to fill in the below chart for future repair and servicing.

Serial No.
Dealer
Purchase date
When you began operation



Important information

Be sure to read this manual to understand operation and functions correctly. Only operators, who fully understand warnings, cautions and instructions, are to operate the equipment. If not, fire, explosion, serious bodily injury or death may occur.




◆ About safety

Warnings and cautions are especially important for safe operation. Symbols and marks have the following meanings.

Examples of symbols

 WARNING	Indicates a potentially hazardous situation which, if not avoided, may result in serious injury or loss of life.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

Examples of symbols

	Indicates [you must be careful]. We will explain briefly in or near the symbol. (The example on the left is [Be careful about electric shock])
	Indicates [you must not do]. We will explain briefly in or near the symbol. (The example on the left is [Never touch])
	Indicates [you must do]. We will explain briefly in or near the symbol. (The example on the left is [Be sure to ground])

* We shall not be responsible for any injury or damage caused by disregard of warnings, cautions or instructions.

Supplementary notes

Important	Indicates notes which we ask you to observe. They are helpful to achieve full performance and function of the equipment.
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1. For safe operation

As the below points are very important for safe operation, be sure to read and fully understand the contents before operation.



WARNING

 Pump clean gas	<p>Never pump toxic, explosive, flammable, corrosive gases, chemicals, solvents or powders. ※Flowing substances, explosion or fire can cause bodily injury.</p>			
 Install at a safe site	<p>Install in an area without explosive, flammable substances. ※ If not, it can cause explosion or fire.</p>	 Avoid moisture	<p>Install in an area which is not exposed to moisture such as rain or steam. ※ If not, it can cause electric shock.</p>	
 Cut off electric source	<p>Be sure to cut off electric source before wiring or inspection. ※If not, it can cause electric shock or damage by turning section(fan).</p>		 Ask qualified electrician	<p>Ask qualified electrician to perform electric wiring job. ※If not, electric shock may occur.</p>
 Do not touch	<p>Never put fingers or foreign matter into air hole of pump or clearance of cooling fins. ※ If done, it can cause injury.</p>	 Do not alter	<p>Never alter the equipment. ※ If done, it can cause damage or shorter lifetime.</p>	
 Be sure to ground	<p>Be sure to ground. ※ If not, it can cause electric shock or fire.</p>		 Install breaker	<p>Prevent short-circuit with ground leakage breaker of proper capacity. ※ If not, it can cause electric shock or fire.</p>
 Ask specialist to perform repairs	<p>Ask specialist to perform repairs. ※ If not, it can cause failure, damage or shorter lifetime.</p>		 Install emergency stop switch	<p>Be sure to install electric source switch. ※ If not, it can cause damage or fire.</p>



CAUTION



Install in a safe place

Install in a safe place.

○ Install on a level foundation (an inclination of less than 5°).

○ In a place free of dirt or dust from iron, stone or wood.

○ In a place free of corrosive gas.

※ If done, it can cause damage, decrease in performance or shorter lifetime.



Use at designated temperature

Use at temperature of 5 ~ 40°C (during operation).

※ If not, it can cause damage or shorter lifetime.



Conduct periodic maintenance

Conduct periodic maintenance and inspections.

※ If not, it can cause damage or shorter lifetime.



Maintenance after pump is cool

Do the maintenance after pump becomes fully cool.

※ If not, it can cause burns.



Start or stop after closing isolation valve

Be sure to close isolation valve between pump and vacuum system (chamber) during startup and stop.

※ If not, debris attached to inside of pump can be drawn back to vacuum chamber.