

Vacuum Pump

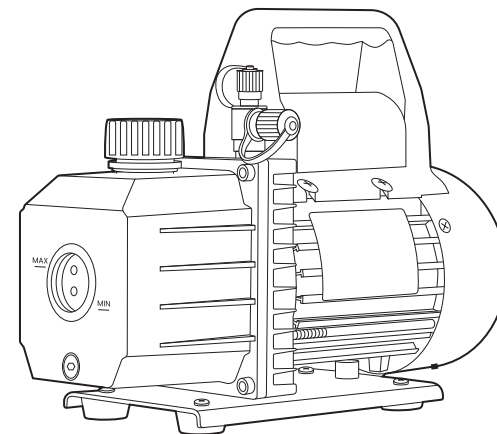
Instruction Manual



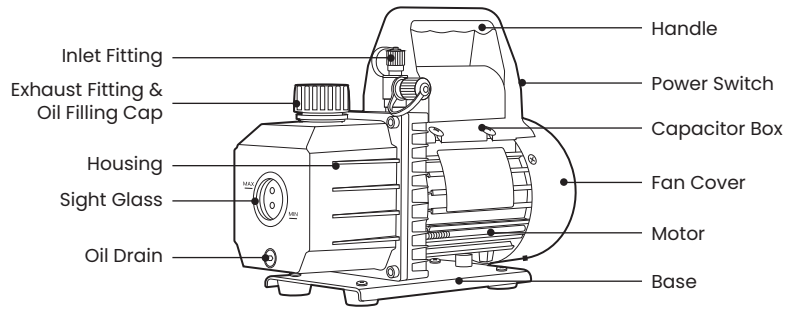
NOTE:

To continuously improve its products, VIVOHOME reserves the right to modify this information without prior notification.
For any questions regarding assembly, please watch the video on the product page or contact our customer service. Our customer service will gladly assist you with any additional questions, comments, or concerns.
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PUMP COMPONENTS



SPECIFICATIONS

Model	VP125	VP135	VP145	VP245
Voltage	110V~60Hz	110V~60Hz	110V~60Hz	110V~60Hz
Stage(s)	1	1	1	2
Free Air Displacement	3.5CFM	4CFM	4.5CFM	5CFM
Ultimate Vacuum	5Pa	5Pa	5Pa	3x10 ⁻¹
Power	1/4HP	1/3HP	1/3HP	1/2HP
Intake Ports	1/4"flare;1/2"ACMZ	1/4"flare;1/2"ACMZ	1/4"flare;1/2"ACMZ	1/4"flare;1/2"ACMZ
Oil Capacity (ml)	300	300	300	500
Dimensions (mm)	260x110x240	275x115x240	275x115x240	280x110x215
Net Weight(kg)	6	6.5	6.5	8

FEATURES

Preventing oil returning design

The passage for gas entering is specially designed, which can prevent the oil flowing back and causing the pumped container and tubes from being polluted.

Environment protecting design

The tank is separated and there are separating devices at the exhaust port. It can avoid oil spraying and reduce pollution.

Aluminum alloy casing

Aluminum alloy casing is used in this kind of electrical machinery; it has high heat-scattering efficiency, which can keep the pump running normally and long lasting. And it has better outerfigure quality.

Overall design

The electric machinery and the pump are wholly designed and direct drive, which makes the product more compact, lighter, and more rational.

Great starting moment

The design of great starting moment is easy for starting and high in efficiency, which can keep it running normally even in lower ambient temperature and lower volt.

Low noise and vibration

An elastomeric coupling insert between the motor and module results in extremely quiet, smooth running operation.

OPERATING

Before operating

All motors are designed for operating voltages plus or minus 10% of the normal rating. Single voltage motors are supplied fully connected and ready to operate.

1. Check the voltage and frequency at the outlet and ensure it matches the specifications on the pump motor metal plate.
2. Ensure that the ON-OFF switch is in the OFF position before you plug the pump into an outlet.
3. Ensure that the motor is running smoothly for a few seconds before adding pump oil. If the motor doesn't work, please stop here and contact the seller.
4. The pump is shipped without oil in the reservoir. Before starting the pump, fill it with oil. Remove the OIL FILL cap (or red plastic plug at the front of the handle), and add oil until oil appears at the middle of MAX and MIN of the sight glass. For oil capacities, refer to the SPECIFICATIONS in this manual.
5. Ensure the Oil Fill cap is capped and remove the cap from the inlet fitting.
6. Turn the motor switch to the ON position.
7. Replace the cap on the inlet fitting when the pump runs smoothly. This takes less than 30 seconds, depending on the ambient temperature.
8. After the pump operates for approximately one minute, check the sight glass for the correct oil level, which should be aligned with the sight glass oil Level line. Refill oil if necessary.

Note: When the pump is running, the oil level should be even with the line on the sight glass. Underfilling the pump will result in poor vacuum performance; overfilling can result in oil blowing from the exhaust fitting.

After usage

To help prolong pump life and promote easy starting, follow these procedures:

1. Turn off the manifold valve between the pump and the system.
2. Shut off pump and unplug the power cable.
3. Remove the hose from the pump inlet.
4. Cover the inlet port to prevent any contamination or loose particles from entering the port.

MAINTENANCE

Vacuum Pump Oil

- The condition and type of oil used in any high-performance vacuum pump are extremely important in determining the ultimate attainable vacuum. It is recommended to use High-Performance Vacuum Pump Oil, which is specifically blended to maintain maximum viscosity at normal running temperatures and to improve cold weather starts.
- Keep the oil clean. If it becomes dirty, muddy, or has water or other volatile substances which affect and limit the vacuum, the oil should be replaced.

Oil Change Procedure

1. Ensure the pump is warmed up.
2. Remove the OIL DRAIN cap. Drain contaminated oil into a suitable container, and dispose of it according to local regulations.
3. When the flow of oil has stopped, tilt the pump forward to remove the residual oil.
4. Replace the OIL DRAIN cap.
5. Remove the OIL FILL cap and fill the reservoir with new vacuum pump oil until the oil appears at the middle of the MAX and MIN of the sight glass.

Cleaning The Pump

Clean the pump with soap and water only. Do not use commercial cleaners that contain degreasing agents.

TROUBLESHOOTING

Failure To Start

1. Check the operating voltage.
2. Ensure ambient temperature is 23~ 140°F.

Oil Leakage

1. Verify the oil is not a residual accumulation from spillage, etc.
2. If leakage exists, the module cover gasket or the shaft seal may need to be replaced. If leakage exists in the area of the oil drain plug, you may need to reseal the plug using a commercial pipe thread sealer.

Failure To Pull A Good Vacuum

1. Ensure the vacuum gauge and all connections are in good condition and leak-free. You can confirm leakage by monitoring the vacuum with a thermistor gauge while applying vacuum pump oil at connections or suspected leak points. The vacuum will improve briefly while the oil is sealing the leak.
2. Ensure the pump oil is clean. A badly contaminated pump may require several oil flushes. See OIL CHANGE PROCEDURE.
3. Ensure the oil is at the correct level. For maximum pump operation, the oil must be even with the OIL LEVEL line on the sight glass when the pump is running. See OIL CHANGE PROCEDURE. Do not overfill—operating temperatures will cause the oil to expand, so it will appear at a higher level than when the pump is not running.—To check the oil level, start the pump with the inlet capped. Check the oil level in the sight glass. Add oil if necessary.

Important Safety Instructions

1. Wear goggles when working with refrigerants. Contact with refrigerants may cause injury.
2. Incorrect use or connections may cause electrical shock hazards. Read and follow the instructions carefully, and take precautions to avoid electrical shock hazards. Confirm that all associated devices are grounded correctly before energizing circuits.
3. The normal operating temperature will cause certain external portions of the pump to be hot to the touch. Do not touch the pump housing or motor during operation.

Warranty

Products developed and sold by VIVOHOME Co., Ltd come with a guarantee for the reasonable life of the product, for the purpose it is commonly used.

1. The warranty is only valid upon presentation of the original receipt (from dealer/retailer) by the original purchaser with the product to be repaired or replaced.
2. The warranty is void if the serial number, date of purchase, or label has been removed.
3. The warranty does not cover damage or product failure resulting from normal wear and tear, physical abuse, improper installation, misuse, modification, or repairs by unauthorized third parties.
4. We do not assume responsibility for any loss or damage incurred during shipment or as a result of a force majeure.
5. We are not liable for any incidental or consequential damages arising from the use or misuse of this product.
6. Warranty claims are limited to repair or replacement of the defective product and are at our sole discretion.
7. If we repair or replace the product, the product will be covered for the remaining time of the original warranty period. Repair or replacement may involve the use of reconditioned units that are equivalent in function. Replaced defective parts or products become our property.
8. Consumable components such as batteries are not covered by the warranty.