

# **VEVOR<sup>®</sup>**

## **VACUUM PUMP**

**Model:VP245**



# VEVOR®

## VACUUM PUMP



### NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:



**CustomerService@vevor.com**

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

## SAFETY INSTRUCTION

**Before operating this appliance, please read the instructions manual carefully and save these instructions. Basic safety precautions should always be followed, including the following:**



Warning - To reduce the risk of injury, the user must read the instructions manual carefully.



This symbol, placed before a safety comment, indicates a kind of precaution, warning, or danger. Ignoring this warning may lead to an accident. To reduce the risk of injury, fire, or electrocution, please always follow the recommendation shown below.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



## WARNING

Household Use Only.

**WARNING:** Hot Surface-To reduce the risk of burns, do not touch.

**CAUTION:** To reduce the risk of electric shock, do not expose to rain. Store indoors.

**CAUTION:** To reduce the risk of electric shock, use indoors only.

**WARNING:** Risk of injury-Do not direct air steam at the body.

Utilisez seulement des menages.

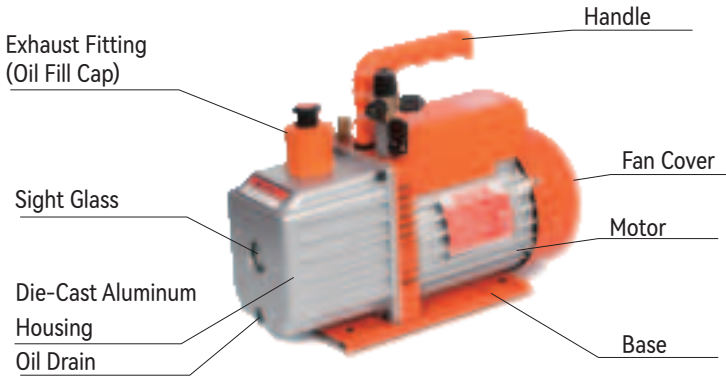
**AVERTISSEMENT:** Surface chaude-Pour reduire le risque de brulures, ne touchez pas.

**ATTENTION:** Pour reduire le risque de choc electrique, ne pas exposer a la pluie.

Stockez indoors

**ATTENTION:** Pour reduire le risque de choc electrique, utilisez uniquement a l'interieur. **AVERTISSEMENT:** Risque de blessure-Ne pas courir directement sur le corps.

## PUMP COMPONENTS



### Package list

**5 CFM vacuum pump x 1**

**330ml oil bottle x 1**

**230ml oil bottle x 1**

**User manual x 1**

## OPERATING MANUAL

### 1.Before using your vacuum pump

In all cases, 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 to be sure the voltage and frequency at the outlet match the specifications on the pump motor decal. Check the ON-OFF switch to be sure it is in the OFF position before you plug the pump into an outlet.Remove and discard the exhaust cap from the end of the pump's handle.

(2)The pump is shipped without oil in the reservoir.Before starting the pump, fill it with oil.Remove the Exhaust Fitting cap and add oil until the oil just shows in the bottom of the sight glass. The approximate oil capacity of the pump is 180~800ml(reference the technical data).

(3)Replace the Exhaust Fitting cap and remove the cap from one of the inlet ports. Turn the motor switch to ON.When the pump runs smoothly, replace the cap on the inlet port. This may take from two to 30 seconds, depending on the ambient temperature.After the pump runs for approximately one minute, check the sight glass for the proper oil level. The level should be even with the sight glass oil level line. Add oil if necessary.

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

## **2.To shut down your pump after use**

To help prolong pump life and promote easy starting. Follow these procedures for shut down.

- (1)Close the manifold valve between the pump and the system.
- (2)Remove the hose from the pump inlet.
- (3)Cap the inlet port to prevent any contamination or loose particles from entering the port.

## **TO MAINTAIN YOUR HIGH VACUUM PUMP**

### **1.Vacuum pump oil:**

The condition and type of oil used in any high vacuum pump are extremely important in determining the ultimate attainable vacuum. We recommend the use of High Vacuum Pump Oil.This oil has been specifically blended to maintain maximum viscosity at normal running temperatures and to improve cold weather starts.

### **2.Oil Change Procedure**

- (1)Be sure the pump is warmed up.
  - (2)Remove the OIL DRAIN cap. Drain contaminated oil into a suitable container and dispose of it properly. Oil can be forced from the pump by opening the inlet and partially blocking the exhaust with a cloth while the pump is running. Do not operate the pump for more than 20 seconds using this method.
  - (3)When the flow of oil has stopped, tilt the pump forward to drain residual oil.
  - (4)Replace the OIL DRAIN cap.Remove the exhaust fitting and fill the reservoir with new vacuum pump oil until the oil just shows at the bottom of the sight glass. The approximate oil capacity of the pump is 180-800ml(reference the technical data).
  - (5)Be sure the inlet ports are capped, then turn on the pump. Allow it to run for one minute, then check the oil level space. If the oil is below the sight glass OIL LEVEL line, add oil slowly (with the pump running )until the oil reaches the OIL LEVEL line. Replace the exhaust fitting, making sure the inlet is
  - (6)
    - a)If the oil is badly contaminated with sludge that forms when water is allowed to collect in the oil,you may need to remove the oil reservoir cover and wipe it out.
    - b)Another method of dealing with heavily contaminated oil is to force the oil from the pump reservoir. To do this, allow the pump to run until it is warmed up. While the pump is still running, remove the oil drain cap. Slightly restrict the exhaust. This will back-pressure the oil reservoir and force the oil from it, carrying more contamination. When the oil ceases to flow, turn off the pump.
- Repeat this procedure as required until the contamination is removed.
- Replace the OIL DRAIN cap and refill the reservoir to the proper level with fresh pump oil.

## TROUBLESHOOTING GUIDE

Your pump has been for dependable use and has a long life. If something should go wrong, the following guide will help you get the pump back into service as quickly as possible.

If the disassembly of the pump is required, please check your warranty. The warranty may be voided by misuse or customer tampering, which results in the pump being inoperable.

### **1.Failure To Start**

Check the line voltage. The pump needs to start at  $\pm 10\%$  line voltage (loaded) at 320F. At extremes, switching between the standard run windings may occur.

### **2.Oil leakage**

(1) Be sure the oil is not a residual accumulation from spillage, etc.

(2) If leakage exists, the module cover gasket or the shaft seal may need replacing. If leakage exists in the area of the oil drain plug, you may need to reseal the plug using a commercial pipe thread sealer.

### **3.Failure To Pull A Good Vacuum**

(1) Be sure 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) Be sure the pump oil is clean. A badly contaminated pump may require several oil flushes.

(3) Be sure the oil is at the proper level. For maximum pump operation, the oil must be even with the OIL LEVEL line on the sight glass when the pump is running. 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.

## COMMON TROUBLE SHOOTING

Failure Description	Fault Cause	Solution
Low Vacuum	1.The air inlet cap on the spare port side of the air inlet port is loose.	Tighten the air inlet cap
	2. The rubber ring inside the air inlet cap on the spare port side of the air inlet port is damaged	Replace the rubber ring
	3. Insufficient oil	Refuel to the centerline of the oil gauge
	4. The pump oil is emulsified and unclean	Replace with new oil
	5. The oil inlet hole of the pump is blocked or the oil supply is insufficient	Clean the oil inlet hole and filter mesh
	6. Leakage of pipe container connected to the pump	Check the connected pipe container to prevent leakage
	7. Improper pump selection	Check the size of the pumped container, recalculate and select the appropriate pump model
	8. The pump has been used too long, and the clearance is increased due to the wear of parts	Check, repair, or replace the pump with a new one
Oil Leakage	1. The oil seal is damaged	Replace the oil seal
	2. The oil tank connection is loose or damaged	Tighten the screws and replace the O-ring
Oil Injection	1.To much oil	Drain the oil to the oil level line
	2.The inlet pressure is too high for a long time	Select the appropriate pump to increase the pumping speed
Hard Starting	1. The oil temperature is too low	The air inlet is ventilated, repeatedly starts the motor or heats the pump oil
	2. The motor or power supply is faulty	Check and repair
	3. Foreign objects fall into the pump	Check and eliminate
	4. The power supply voltage is too low	Check the power supply voltage

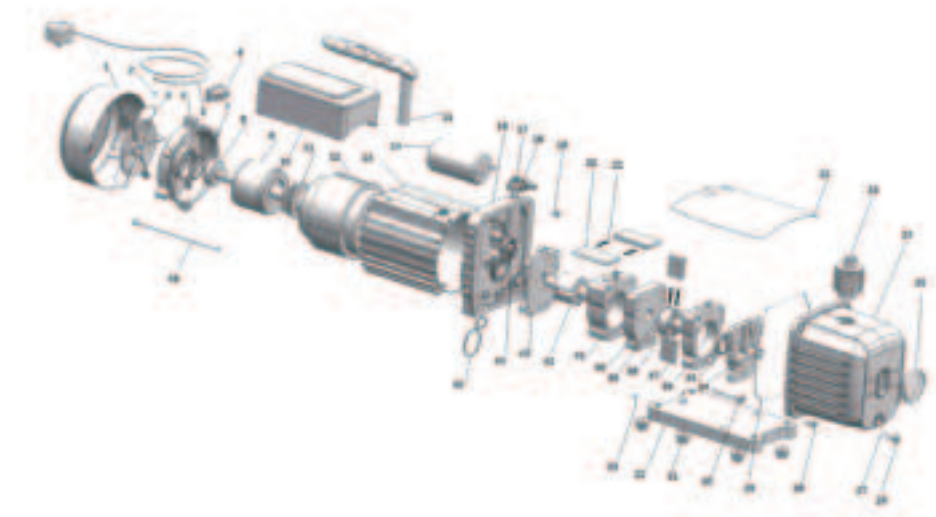
**Note: If the above solutions do not solve your problem, please contact the nearest dealer, or send your pump to a professional repair center, and we will do our best to serve you.**



## TECHNICAL PARAMETER

		Dual Stage Vacuum Pump
Model		VP245
Voltage		115V/60Hz
Free Air Displacement	CFM	5.0
	L/min	142
Ultimate Vacuum	Pa	$3 \times 10^{-1}$
	mbar	0.003
	Microns	25
Motor		1/2 HP
Intake Fitting		1/4" SAE male; 3/8" SAE male; 1/2" ACME male
Oil Capacity (ml)		330
Dimensions(mm)		385x210x315
Net Weight(kg)		9.3

## EXPLODED DRAWING



1	Fan cover	24	Die-cast aluminum housing
2	Cross screw	25	Sight glass
3	Fan	26	Oil drain
4	Motor cover	27	Oil drain screw O-ring
5	Power supply cords	28	Screw
6	Power switch	29	Sealing ring
7	Washer	30	Screw
8	Bearing	31	Rubber foot
9	Motor rotor	32	Base plate
10	Capacitor box	33	Self-tapping screw
11	Centrifugal switch	34	Back-pump cover
12	Motor stator	35	Oil seal
13	Casing	36	Back-pump body
14	Capacitor	37	Back-rotary -vane
15	Handle	38	Back-pump rotor
16	Trestle	39	Spring
17	Gas cap	40	Middle fence
18	The air inlet nozzle	41	Front-pump body
19	Screw	42	Front-pump rotor
20	Front rotary-vane	43	Front cover
21	Spring	44	Oil seal
22	Cap board	45	O type ring
23	Exhaust and oil inlet fitting	46	Screw

Manufacturer: WENLING YANGYI MECHANICAL AND ELECTRICAL  
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Made In China

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