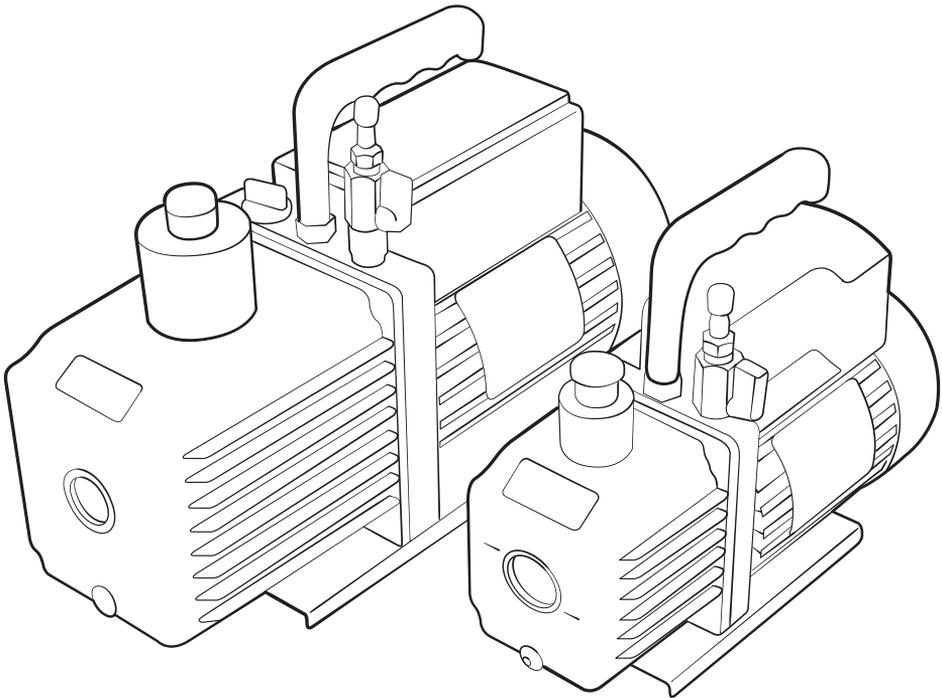




easycompositesTM
share the knowledge



SETUP & DAILY USE INSTRUCTIONS

Composites Vacuum Pump

**VP425
VP3400**

CONTENTS

1. Introduction	2
2. First Time Use - Setup Instructions	3
1. Fill pump with oil.....	3
2. Set voltage (if required).....	4
3. Connect to mains supply.....	5
4. Remove dust cap.....	5
3. Daily Operation	5
Check oil level.....	5
The vacuum valve.....	6
Switching off procedure.....	6
Replacing the oil.....	6
Oil vapour/mist when running.....	6
4. Operating Conditions & Maintenance	7
5. Warranty Information	7

1. Introduction

Thank you for choosing a *VP425* or *VP3400 Composites Vacuum Pump* from Easy Composites. These vacuum pumps are manufactured specifically for Easy Composites and have proved themselves to be very reliable pumps for daily use.

If used and maintained correctly, these pumps will provide years of trouble-free service. Please read the following instructions BEFORE USE to familiarise yourself with the correct setup and daily operation.

When you first receive your *VP425* or *VP3400* please follow the simple steps listed on the pages overleaf to prepare the pump for its first use.

Do NOT run the pump before you have read and followed the information.

2. First Time Use - Setup Instructions

1. Fill pump with oil

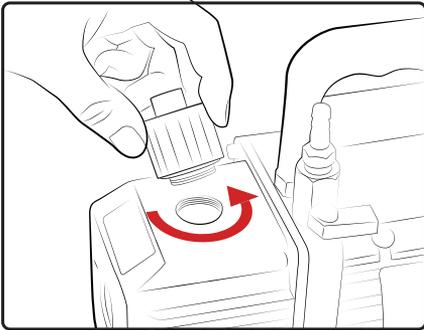
To avoid leakage during transport, VP425 and VP3400 are supplied without any vacuum pump oil in them. They need to be filled to the correct level using the supplied *Vacuum Pump Oil* before use.

Please see section 5 for information on daily checking of oil level and oil maintenance once the pump is filled and in use.

WARNING! Never overfill the vacuum pump oil or run with insufficient oil in. If you accidentally over-fill the pump, use the drain screw to remove some oil before use.

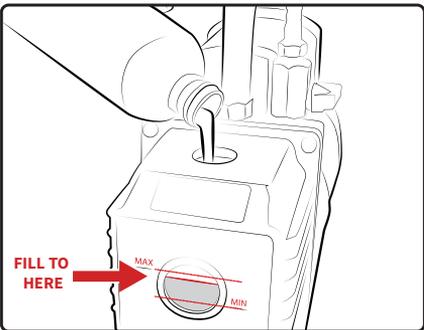
Follow the instructions below according to the model of your vacuum pump:

VP425 Vacuum Pump



Unscrew the black plastic exhaust fitting from the top of the vacuum pump (on the end with the oil sight-gauge).

After filling (see below), replace the exhaust fitting securely.



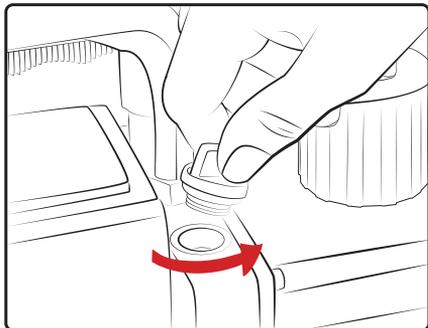
Fill the vacuum pump with oil until the oil level is halfway up the sight-gauge on the end of the pump.

Be aware that it might take a few minutes for the oil to work its way down into the pump.

If you accidentally overfill the pump, you can use the oil-drain screw towards the base of the pump to remove some oil.

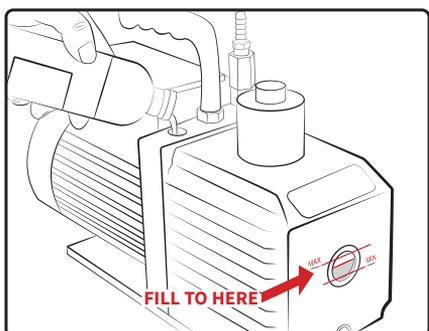
VP425 OIL CAPACITY = 260ml (8.8fl oz)

Vacuum Pump VP3400



Unscrew the red oil filler cap near the base of the pump's carrying handle.

After filling (see below), replace the filler cap securely.



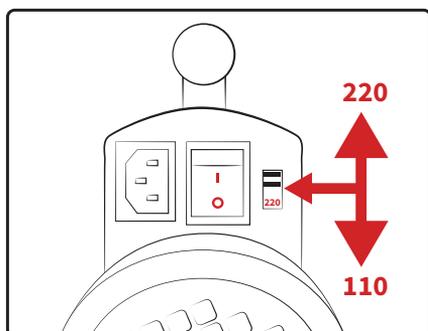
Fill the vacuum pump with oil until the oil level is halfway up the sight-gauge on the end of the pump. Be aware that it might take a few minutes for the oil to work its way down into the pump.

If you accidentally overfill the pump, you can use the oil-drain screw towards the base of the pump to remove some oil.

VP3400 OIL CAPACITY = 600ml (20fl oz)

2. Set voltage (if required)

WARNING! NEVER USE THE PUMP WITH THE WRONG VOLTAGE SETTING. DOING SO COULD CAUSE SERIOUS ELECTRICAL FAILURE.



VP425 and VP3400 have switch-able power supply modes so that they can be used on both 220/240V mains supply (UK, Europe, Australia, China etc.) and 110V (USA, Canada, Japan etc.).

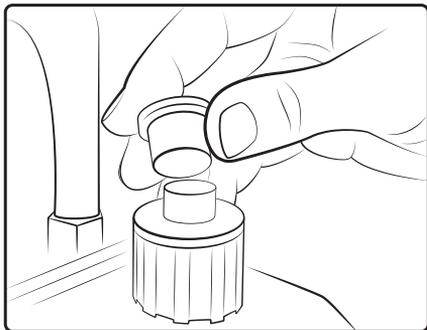
When shipped, the pump will be set to 220V. If you will be using the pump in a country where the mains supply is 110V it is essential to slide the voltage setting on the pump BEFORE switching it on.

3. Connect to mains supply

Ensure the power switch is in the OFF position before connecting the vacuum pump to the mains power supply.

Having done so, ensure the power plug is firmly connected to the vacuum pump and finally connect the power lead to the mains power supply.

4. Remove dust cap



Before switching the pump on, be sure to remove the rubber dust-cap from the exhaust fitting.

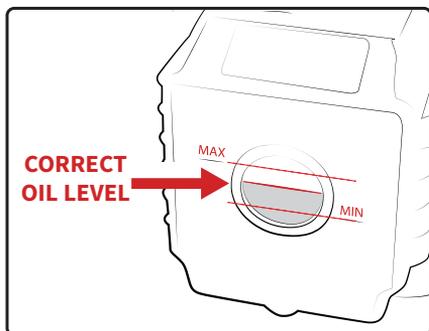
The rubber cap can be left off the pump in future or replaced for longer term storage.

NEVER run the pump with the exhaust cap in place, it could be ejected with considerable force causing damage or injury.

3. Daily Operation

**VP425 AND VP3400 ARE NOT INTENDED FOR UNATTENDED OPERATION.
NEVER LEAVE THE PUMP RUNNING UNATTENDED.**

Check oil level

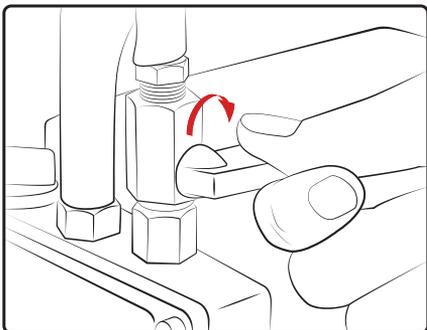


Before every use of your vacuum pump, check the oil level in the pump using the sight-glass on the end of the vacuum pump. The oil level should be half-way between the minimum and maximum markers.

If the oil needs topping up, do so as described in section 2.1.

Only ever use 'high vacuum' specification vacuum pump oil with your vacuum pump. Use of alternative grade oils will shorten the life of the pump.

Switching-off procedure



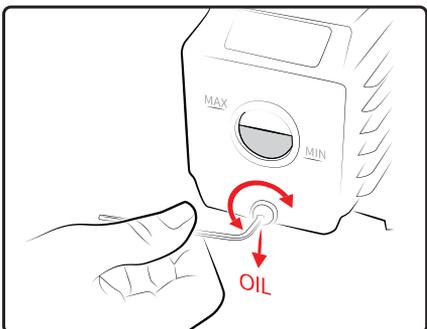
The vacuum valve on the pump is used to close off the vacuum pump from any connected hoses or equipment.

The vacuum valve is OPEN when the handle is in the vertical position and closed by turning 90° into the horizontal position.

Always close the vacuum valve before switching off the vacuum pump.

Failure to do so can result in residual vacuum in connected hoses, chambers or vacuum bags sucking air and oil back through the vacuum pump, contaminating vacuum lines and damaging the vacuum pump.

Replacing the oil



Depending on how frequently you use your vacuum pump and how you are using the vacuum pump, you will periodically need to change the vacuum pump oil completely.

If the oil appears cloudy, discoloured or contaminated in any other way, drain the old oil from the vacuum pump using the drain screw and then refill the pump with fresh 'high vacuum' vacuum pump oil such as our *VPO1 High Vacuum Pump Oil*.

Oil vapour when running

It is perfectly normal for this type of vacuum pump to emit oil vapour (a faint blue/grey smoke) from the exhaust fitting during operation. The emission of oil vapour is greatest when the pump is working hardest and will become almost negligible once the pump is pulling against a sealed bag or empty chamber.

If oil vapour is unacceptable in your working environment, a hose can be fitted to the exhaust fitting to vent the oil vapour outside or an oil mist separator can be fitted inline with the exhaust to separate the oil from the exhaust air.

4. Operating Conditions & Maintenance

The Easy Composites VP425 and VP3400 vacuum pumps are designed to provide years of reliable service however it is very important to ensure that you are using the pump in an appropriate environment and maintaining it properly; failure to do so will shorten the life of the pump and invalidate the warranty.

Please read and follow these important points on operating conditions and maintenance:

Do...

- **Regularly check the oil level in the pump and top-up as necessary.**
- If oil appears contaminated (cloudy), empty it from the pump and replace it with fresh vacuum pump oil.
- Use the system in a clean, dry environment and in an elevated position such as on a workbench or counter-top.
- Keep the pump clean using a damp cloth and soapy water.
- Make sure all fittings are properly sealed. Use PTFE to seal and fittings you need to adjust or re-fit.

Don't...

- **Never run the pump unattended.**
- **Never switch off the pump without closing the vacuum valve first.**
- Never use the pump on the floor.
- Never operate the pump in dusty conditions. Dust particles will be drawn into the pump and will contaminate the oil and accelerate wear.
- Don't use the pump as a vacuum dryer. Moisture extracted from damp materials such as wood or plaster will emulsify the oil.
- Never use anything other than 'High Vacuum' oil such as our *VPO1 High Vacuum Pump Oil* to top-up your pump.
- Never use solvents to clean the pump.

5. Warranty

Easy Composites Ltd warrants that this Vacuum Pump will be free from defects in materials and workmanship for a period of 12 months from the date of purchase. Should a failure occur within this period, Easy Composites Ltd will repair or replace any defective part of the system on a like-for-like basis.

This limited warranty does not cover damage to the pump caused by misuse, improper maintenance or use not in accordance with these instructions. In circumstances of very frequent use it is quite possible for the vanes on the vacuum pump to wear-out, indicated by reduced vacuum levels being achieved. This is normal wear-and-tear and not covered by the warranty. Although not considered a user-serviceable part, replacement vanes can be supplied for installation by a competent person to renew the pump and restore the vacuum level.

Easy Composites Ltd is not liable for, and does not cover under warranty, any damages or losses of any kind whatsoever resulting from failure of this product. In the event of a claim, Easy Composites Ltd's sole obligation shall be to issue a refund or replacement of the product itself.

Expert materials, equipment and training for advanced composites.

Casting Equipment & Materials

- Wide range of casting resins
- Filler powders and additives
- Metal powders for cold casting
- RTV silicone rubber
- Pigments and tints
- Degassing chambers, vacuum pumps and complete degassing systems
- Casting ancillaries

Advanced Composites

- Bench-top curing ovens
- Huge range of reinforcement fabrics, braids and tapes
- Carbon fibre sheet, tube and sections
- Vacuum bagging / infusion consumables
- Prepreg equipment and materials
- Pattern and mould making materials
- Core materials
- Epoxy, polyester and vinylester resins
- Starter kits for advanced processes
- Training courses

WWW.EASYCOMPOSITES.CO.UK

Easy Composites Ltd. Unit 39, Park Hall Business Village, Longton, Stoke on Trent, Staffordshire, ST3 5XA. United Kingdom.

Tel. +44 (0)1782 454499 | Fax. +44 (0)1782 596868 | sales@easycomposites.co.uk