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Composites Vacuum Pump

All vacuum pumps are different. If you've used other pumps in the past and think you know how to correctly operate this one then you still need to read and follow these instructions. Damaged caused to the pump by improper use will void the warranty and you will not eligible for a refund or replacement.

Before you Begin

1. Remove the exhaust cover

The vacuum pump has a rubber cap over the exhaust. Remove the rubber cap BEFORE switching on the pump.

2. Check the oil level

The vacuum pump requires vacuum pump oil to run. Some oil will be in the pump already but it may not be filled to the correct level. Sit the pump on a flat surface and look at the site-gauge. The oil level should be near the top mark on the sight-gauge.

If the pump requires more oil then use some of the vacuum pump oil (provided with the pump) to top it up.

Oil is added to the pump by unscrewing the black plastic exhaust chimney above the sight-gauge end of the pump. Screw the chimney back into place after topping up the oil.

Correct Use

Only run the pump for long periods against a perfectly sealed bag

This composites vacuum pump is designed to run for the long periods of time necessary in many composites processes such as degassing, vacuum bagging, resin infusion and pre-preg composites manufacture however it can only run for these long periods if it is pulling vacuum against a sealed bag.

When the pump is actually moving air, like when it first empties a bag or chamber, it will emit oil vapour from its chimney. As the bag or chamber approaches full vacuum the amount of oil vapour emitted will reduce until the bag or chamber is at full vacuum. At this point the pump will not noticeably emit any oil vapour and the sound of the vacuum pump will change slightly. After regular use you will become familiar with these signs and rely on them to know when your bags or equipment are fully sealed.

When pulling against a properly sealed bag or chamber there is no reason why the pump can't run for 12hrs continuously but it is a good idea wherever possible to keep an eye on the project to ensure that a previously sealed bag doesn't develop a leak (blown bags in autoclaves are a typical example of this).

If you leave the pump running against an unsealed bag…

If the bag (or catch-pot, or degassing chamber etc.) is not perfectly sealed then the pump will be working a lot harder and will be consuming its oil. If left unattended for long periods of time in this condition the pump may vaporise all of its oil and begin to run without oil. As soon as this happens it will overheat and certainly burn out.

Vacuum Pump Oil

Check the oil level on the pump before every use and top-up as necessary.

Only ever use dedicated 'high vacuum' ratary vane vacuum pump oil (such as the oil supplied with the pump). Do not be tempted to use oils designed for other or more general purposes.

Warranty

This pump is guaranteed against manufacturing defects for 1 year from the date of purchase. If the pump becomes damaged through improper use (namely running out of oil as described in detail above) then this will be self evident in the damage to the pump and the warranty will be void.