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› BACOENG 1.5 Gallon 3.6 CFM Vacuum Chamber with Pump Instruction Manual

BACOENG 1.5 Gallon Chamber & Pump

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1. INTRODUCTION

This manual provides detailed instructions for the safe and effective use of your BACOENG 1.5 Gallon Vacuum Chamber with 3.6 CFM Vacuum Pump. This kit is designed for applications such as stabilizing wood, degassing urethanes, silicones, and epoxies, and extracting essential oils from organic materials. Please read this manual thoroughly before operation to ensure proper setup and usage.

2. PRODUCT OVERVIEW

The BACOENG vacuum chamber kit includes a durable stainless steel chamber, a tempered glass lid, a 3.6 CFM vacuum pump, and necessary accessories for operation.

Key Features:

- **Tempered Glass Lid:** Provides high strength and a clear view of the work in progress. Designed for stability with volatile compounds and maintains high vacuum for over 24 hours.
- **3.6 CFM Vacuum Pump:** Features an integrated tank and all-copper motor for efficient vacuum power, delivering -29.92inHg vacuum with low noise.
- **1.5 Gallon Vacuum Chamber:** Constructed from strong, durable stainless steel (8.6" ID × 5.9" H) with a silicone gasket designed for extended use. Includes a liquid-filled gauge with a measuring range of 0-30inHg.
- **5ft Pressure Hose:** A 1/4 SAE interface vacuum hose connects the chamber valve to the vacuum pump directly, requiring no additional tools.
- **Applications:** Suitable for stabilizing wood, degassing urethane, silicones, epoxies, and extracting essential oils.

Components:

VACUUM PROFESSIONAL GLASS LID

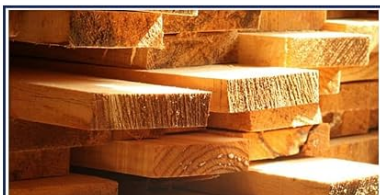
Superior Suitability to Acrylic Lids



Essential Oils



Epoxies



Stabilizing Wood

Work At A Glance

Real-Time Monitoring of
Internal Conditions



Reusable Silicone Gaskets

The complete BACOENG 1.5 Gallon Vacuum Chamber and Pump kit, ready for assembly and use.



Explosion-Proof Glass Lid

- Fit any material
- High Strength
- Convenient Overview Work

Durable Rubber Gasket

- Reversible For Re-Use
- Ensure Cavity Sealing

Heavy Duty Stainless Steel



Preventing Dents

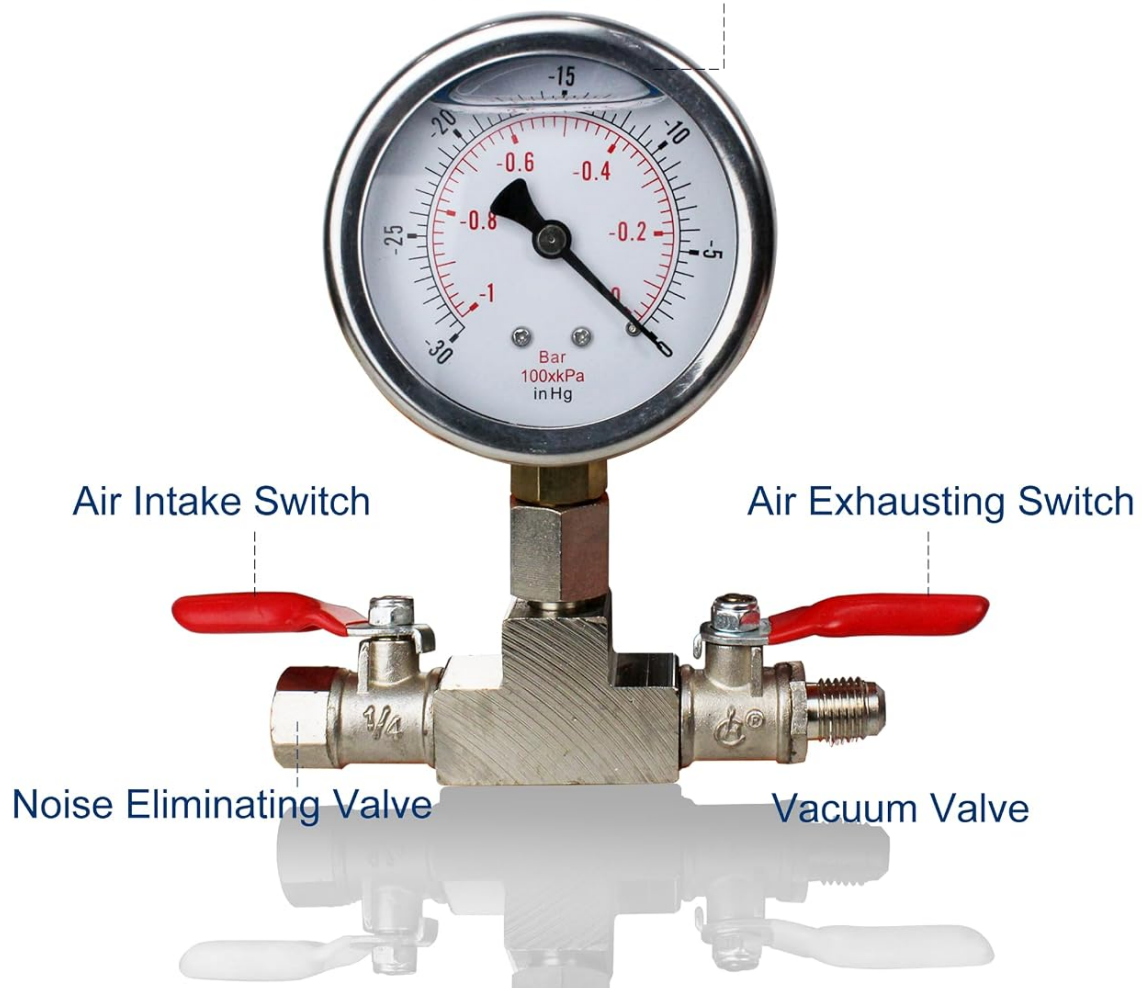
- Thickened Bottom
- High Strength Stainless Steel

An overview of all accessories provided with the vacuum chamber kit, including the vacuum hose, silencers, and rubber gaskets.

MORE PRECISION & LESS NOISE

Shockproof Industrial Gauge

Filled with glycerin



Detailed view of the shockproof industrial gauge and the air intake/exhausting valves, showing their connection points.

Reduce Exhaust Velocity & Noise



1/4" Male



Vacuum Chamber Interior



Accurate Display



Diagram illustrating the key components of the vacuum pump, including the oil filling cap, sight glass, motor, and non-slip base.

3. SETUP INSTRUCTIONS

1. Assemble the Vacuum Gauge with Valve:

- Remove any screws and spacers from the vacuum gauge assembly.
- Insert the gauge assembly into the designated opening on the vacuum chamber lid.
- Place the shims and screw in the assembly from the underside of the lid. Tighten the screw slightly *Note: Do not overtighten the screws, as this can deform the gasket and cause gas leakage.*
- Install the silencer accessories onto the appropriate valve port.

This video demonstrates the step-by-step installation process for the BACOENG Vacuum Chamber and Pump, focusing on connecting the components.

A quick guide on installing the glass lid onto the BACOENG Vacuum Chamber, ensuring a proper seal.

2. Connect the Vacuum Pump:

- Connect the provided vacuum hose to the vacuum pump's intake port.
- Connect the other end of the vacuum hose to the appropriate valve on the degassing chamber.

3. Prepare the Chamber:

- Place the silicone pad at the bottom of the chamber.
- Ensure both valves on the chamber are closed (handles turned outward, 90 degrees to the hose).

4. OPERATING INSTRUCTIONS

Follow these steps for effective degassing or stabilization:

1. **Prepare Material:** Place the material to be degassed (e.g., mixed epoxy, silicone, wood with stabilizing resin) inside a suitable container within the vacuum chamber. Ensure the container is smaller than the chamber and can withstand vacuum.
2. **Seal the Chamber:** Place the tempered glass lid securely onto the chamber, ensuring the silicone gasket forms a tight seal.
3. **Connect and Open Valve:** Ensure the vacuum hose is securely connected to both the pump and the chamber. Open the valve on the chamber that is connected to the vacuum pump (turn the handle parallel to the hose). Keep the other valve closed.
4. **Start Vacuum Pump:** Turn on the vacuum pump. The gauge will begin to show a decrease in pressure.
5. **Monitor Degassing:** Observe the material through the glass lid. Bubbles will rise and burst. Allow the pump to run until the bubbling subsides, indicating that most of the trapped air has been removed. This typically takes several minutes, depending on the material.
6. **Close Valve and Turn Off Pump:** Once degassing is complete, close the valve connected to the vacuum pump (turn handle 90 degrees to the hose). Then, turn off the vacuum pump. The chamber should maintain its vacuum.
7. **Release Vacuum:** To open the chamber, slowly open the other valve (air intake valve) to allow air back into the chamber. The gauge will return to zero.
8. **Remove Material:** Once the pressure is equalized, remove the lid and your degassed material.

This video illustrates the use of the vacuum chamber and pump for stabilizing wood, showing the process of vacuum application.

Demonstration of using the vacuum chamber to degas resin, removing air bubbles for a smoother finish.

A short video showcasing the vacuum chamber's application for DIY resin projects, specifically for degassing.

5. MAINTENANCE

- **Clean the Chamber:** After each use, clean the interior of the vacuum chamber and the lid, especially the silicone gasket, to prevent residue buildup. Use appropriate cleaning agents for the materials processed.
- **Gasket Care:** Inspect the silicone gasket regularly for any signs of wear, cracks, or damage. A well-maintained gasket is crucial for maintaining a proper vacuum seal. The silicone gasket is designed for over 10,000 uses.
- **Vacuum Pump Oil:** Regularly check the oil level and clarity in the vacuum pump's sight glass. Replace the vacuum pump oil according to the pump manufacturer's recommendations or if it appears cloudy or discolored.
- **Storage:** Store the vacuum chamber and pump in a clean, dry environment when not in use.

6. TROUBLESHOOTING

- **Vacuum Not Holding:**

- Check all connections, including the vacuum hose and valve fittings, for tightness.
- Inspect the silicone gasket on the lid for any debris, damage, or improper seating. Clean or replace if necessary.
- Ensure both valves on the chamber are fully closed after the pump is turned off.

- **Pump Not Reaching Full Vacuum:**

- Verify the vacuum pump oil level and condition. Low or contaminated oil can affect pump performance.
- Check for any blockages in the vacuum hose or silencer.

- **Excessive Bubbling/Foaming:** This is normal during the initial stages of degassing. If it persists excessively, ensure the material is not overfilled and that the vacuum is being applied correctly.

7. SPECIFICATIONS

Package Dimensions	15.5 x 13.3 x 12.5 inches
Item Weight	22.8 pounds
Manufacturer	BACO ENGINEERING
ASIN	B09K4XX9F9
Date First Available	December 14, 2016

8. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your BACOENG product, please contact the manufacturer, BACO ENGINEERING, directly through their official channels or the retailer where the product was purchased. Please refer to your purchase documentation for specific warranty terms and contact details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question