V20221214

Vacuum Chamber Set
User Manual

Read Carefully Before Use
Keep for Future Reference

Safety Information

⚠ Warning!

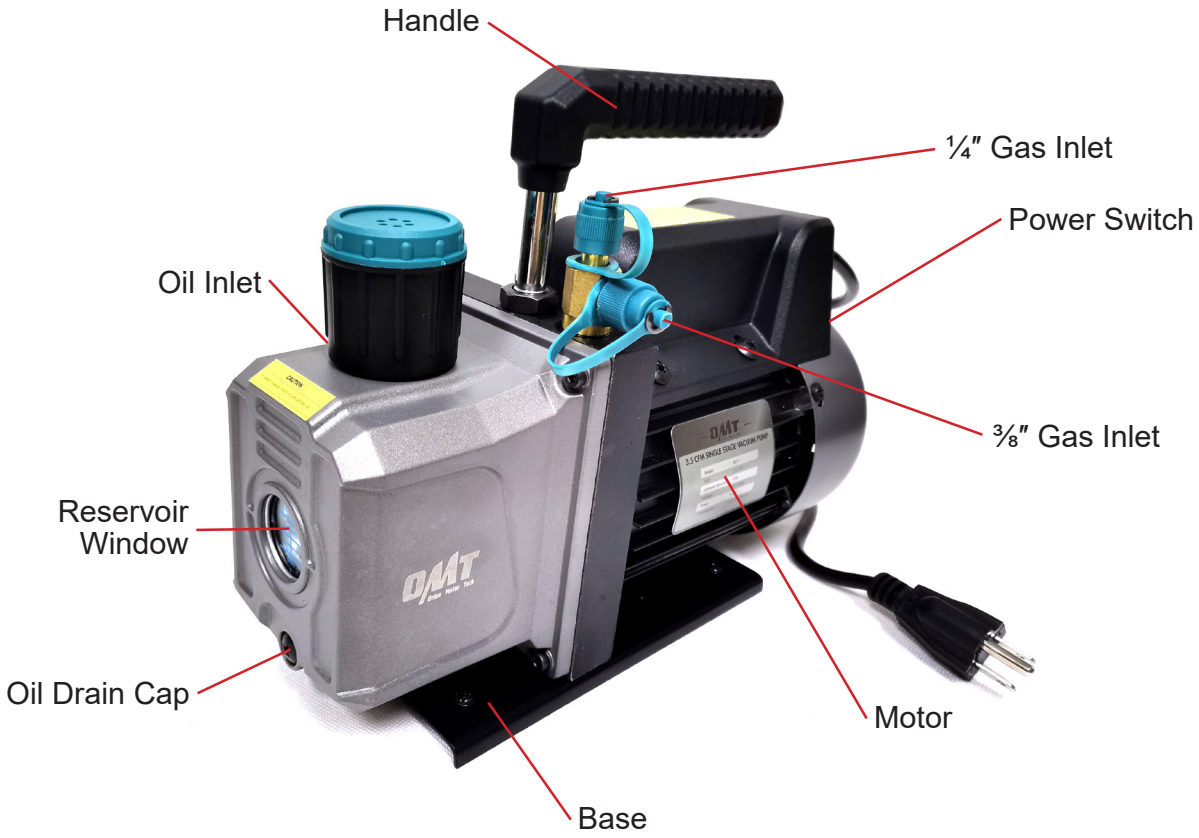
- Use this product only for its specific purpose, removing air bubbles from epoxy resin.
- **DO NOT** let children or persons with compromised physical or mental capabilities use this product. Do not allow people unfamiliar with this product or these instructions to operate it.
- **DO NOT** pour your resin into the vacuum chamber directly. Use a separate container suitable for resin processing.
- **DO NOT** leave this product unattended during use.
- **DO NOT** operate this product if it is damaged or malfunctions. Repair or replace damaged components before further use.
- **ALWAYS** use proper personal protective equipment for your purpose such as a dust mask, goggles, and work gloves. Do not use in poorly ventilated areas.
- **DO NOT** open the vacuum chamber after use until the internal and external pressures equalize.
- Store this product out of the reach of children.

Specifications

Input Power		110V/60Hz
Decompression Speed		3.5 cfm (0.1 m^3/m)
Vacuum Pump Dimensions		11 × 4 × 9 in. (28 × 10 × 23 cm)
Oil Capacity		0.26 qt. (250 mL)
Vacuum Chamber	Inner Diameter	9.8 in. (25 cm)
	Height	9.8 in. (25 cm)
Gauge Range		−30 to 0 inHg (−1 to 0 Bars)
Hose Length		4.9 ft. (1.5 m)
Hose Diameter		¼ in.

Product Diagram

Vacuum Pump



Vacuum Chamber

Package List

No.	Part	Qty.
1	Vacuum Pump	1
2	Vacuum Chamber	1
3	Vacuum Gauge	1
4	Hose	1
5	Air Filter	2
6	Silicone Rubber Gasket	4
7	Metal Gasket	4
8	Nut	1
9	Vacuum Pump Oil	1
10	Work Gloves	2
11	Tape	1
12	M17 Wrench	1
13	Phillips Screwdriver	1
14	Hose Clamp	2
15	¼″ to ½″ Adapter	1

Necessary but Not Included:

- M4 Hex Wrench × 1
- Resin Container × 1

Assembly

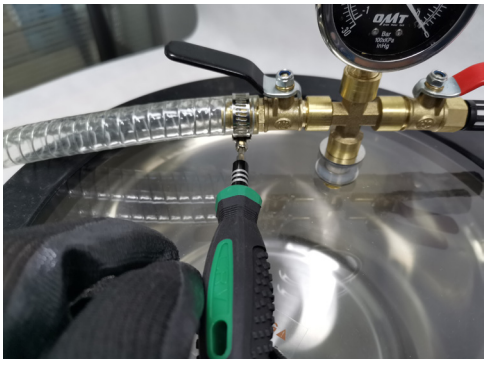
1. Attach one air filter to the vacuum gauge's intake valve, screwing it firmly into place.
2. Attach one silicone rubber gasket to the gauge's bottom, screwing it firmly into place.
3. Remove the vacuum chamber's cap and insert the bottom of the gauge into its hole. Attach it to one metal gasket on the other side of the cap, securing it with the nut and the provided M17 wrench.



4. Make sure the oil drain is tightly closed, securing its cap firmly in place with your M4 hex wrench.
5. Remove the pump's oil inlet cap by unscrewing it by hand. Add the provided oil until the reservoir window is completely covered. Replace the cap.
6. Remove the vacuum pump's ¼″ gas inlet cap by hand. Attach one end of the provided hose to the inlet, securing it using one hose clamp and the Phillips screwdriver.

   In the event that the ¼″ gas inlet malfunctions, connect the hose to the ⅜″ gas inlet using a ⅜″ to ¼″ adapter (not included) or repair the problematic inlet as needed.

   If using a ½″ hose (not included), connect it with the ¼″ gas inlet using the provided ¼″ to ½″ adapter.
7. Attach the other end of the hose to the gauge's decompression valve, securing it using the other hose clamp and the Phillips screwdriver.

Operation

1. Pour your resin into an open container made of nonreactive material (e.g. silicone, polyethylene, or polypropylone plastic). It should be no wider than 8 inches and no taller than 4 inches. Place this open container inside the vacuum chamber and seal the chamber by replacing the cap.
2. Turn the gauge intake valve completely clockwise to ensure it is tightly sealed.
3. Connect the vacuum pump to a stable compatible power supply using a grounded outlet. Do not use a 3-to-2 prong adapter or an ungrounded power strip.
4. Open the decompression valve by turning its knob counterclockwise.
5. Turn the pump on by pressing the power switch above the fan.
6. Wait until the gauge reads −30 inHg (−1 bar), at which point any air bubbles in your resin should be removed.
7. Close the decompression valve by turning its knob completely clockwise.
8. Turn the pump off using its power switch.
9. To equalize the internal and external pressures, open the intake valve by slowly turning its handle counterclockwise. Wait until the gauge's needle returns to 0. Close the intake valve by turning it completely clockwise.
10. Open the chamber's cap and remove your processed resin.

Maintenance

- Disconnect the pump from its power supply before any cleaning, maintenance, or repair.
- The vacuum chamber can be cleaned with water and light detergents. Do not use abrasive cleaners or caustic chemicals.
- When the oil turns turbid or its level falls near the bottom of the pump's reservoir window, replace it using the following procedure:
    1. Make sure the remaining oil is warm. If you are unsure of your oil's temperature, plug in and turn on your pump, running it for about 10 minutes to heat the oil sufficiently. Turn off the pump and unplug it before continuing.
    2. Remove the oil drain cap using your M4 hex wrench. Grip the handle of the pump and tilt it down to drain the remaining oil into a suitable container.
    3. Screw the cap into place and start filling it as instructed above. Once the initial oil can has been used up, only use oil of equivalent weight (ISO 100 or SAE 30) as a replacement.
- **NEVER** scrape or abrade the hose or drop the pump, chamber, or gauge on hard or rough surfaces.
- If any part of the pump, chamber, or gauge is damaged or worn, have it repaired or replaced before further use.
- Unplug the pump, disassemble all parts, and store them in a cool, dry, and clean place after use.

Troubleshooting

Problems	Possible Solutions
The vacuum pump cannot be turned on.	Check your power supply and the pump's power cord. Correct any problems as needed.
	Move the pump to a warmer location, wait a while, and activate your pump.
The vacuum pump turns off automatically during use.	The thermal protector will deactivate your pump if its motor reaches 160°F (70°C). Wait about 15 minutes to let it cool down and restart your pump.

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at **help@cs-supportpro.com** and we'll resolve your issue ASAP!

For a .pdf copy of the latest version of these instructions, use the appropriate app on your smartphone to scan the QR code to the right.