
1. CONDITIONS FOR USE

This micro abrasive blaster may only be operated:

- Indoors;
- Below 6500 ft above sea level altitude;
- Ambient air temperature between 40°-105°F (5-40°C);
- Maximum relative humidity of 80% at 88°F;
- Power supply current fluctuations does not exceed 10% of nominal value;
- Under level 2 contamination conditions;
- Supply cool, dry air only, at a maximum pressure of 150 PSI.

2. SAFETY

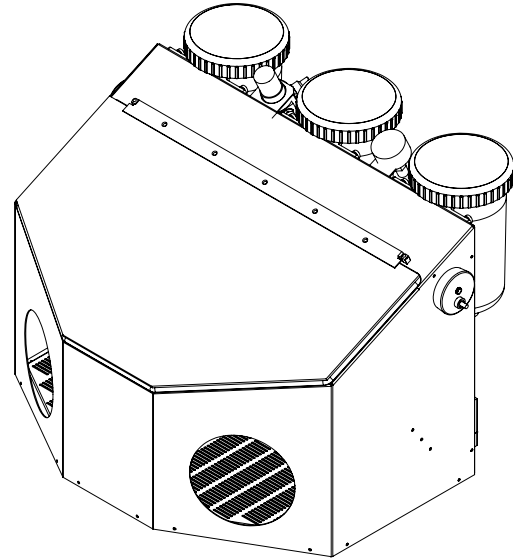
- Always disconnect the unit from the compressed air and power sources before beginning any maintenance.
- When working with the tank wear protective glasses to protect your eyes.
- Any abrasive material on the o-ring may lead to leakage and early wear of the o-ring. After filling, clean the thread and o-ring before applying the lid.
- Solvents will create cracks in the jar and weaken the jar (danger of explosion!). Clean the lid and tank only with a dry cloth. Do not write or adhere anything to the jar or lid.
- Check for damages on the lids and tanks regularly and replace them if there is any doubt of the structural integrity.
- Before operation, check to make certain the lid is secured properly. Using the product without the lid secured will create a serious explosive hazard.
- Never operate the blasting units without suitable dust extraction and appropriate protective gear. The type of dust extraction should be based on the type dust generated. Ask the proper authorities.
- Never direct the blasting material towards eyes or unprotected areas of skin. Improper use can result in risk of eye or skin injuries.
- Never work with the glass door open.
- Caution: Failure to wear eye protection can result in eye injury. Wear proper eye protection to protect your vision.
- Do not depress the foot switch when only the compressed air supply hose is connected. The loose hose could wrap around itself and cause serious injury.
- Unplug the unit from the wall before changing out the LED light. Do not squeeze or bend the light tube. Always wear gloves or use a towel to protect your hands from glass splinters.
- Inspect power cords before beginning operation. The unit may not be used if the power cord is damaged.

2.1 Liability Exclusion - Vaniman Manufacturing shall be absolved from all claims for damages and warranty if:

- The product is used for any purpose other than it was designed for.
- The product is altered in any way other than those described in the operating instructions.
- The product is repaired by any body other than an authorized facility or if any parts other than Vaniman OEM parts are used.
- The product continues to be employed, despite obvious safety faults.

PACKING LIST

- 1 - Master Problast 3
- 1 - Instructions
- 1 - DC Power Supply

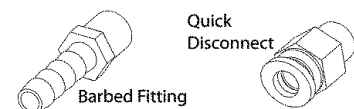


INSTALLATION & OPERATION

1. Remove all packing material.
2. Plug DC Power Supply into electrical outlet and into the right side of the light assembly.
3. Unscrew caps on media storage tanks.
4. Fill media storage tanks to fill line with blasting media of the size specified on tank label. Each tank can hold up to 4 pounds. **DO NOT OVERFILL** as clogging may result.

Part No.	Nozzle Size, Inches (mm)	Color	Recommended Media
Long Lasting Crystal Tips (2 per package)			
97902	Medium, .032" (.8mm)	Blue	25/50 μm Al_2O_3
97903	Large, .048" (1.2mm)	Black	50/100 μm Al_2O_3 , 50 μm Glass
97904	Extra Large, .065" (1.6mm)	Red	100-250 μm Al_2O_3 , 50/100 μm Glass
Precision Tungsten Carbide Tips (1 per package)			
97905	Small, .026" (.65mm)	Yellow	25 μm Al_2O_3
97906	Medium, .036"(.91mm)	Green	50/100 μm Al_2O_3 , 50 μm Glass
97907	Large, .059" (1.5mm)	Violet	100-250 μm Al_2O_3 , 50/100 μm Glass

5. Wipe off excess abrasive and screw caps securely back into place. **Do not over-tighten;** lid will self seal when under pressure.
6. Attach your 1/4" ID (inside diameter) hose air supply line to the quick disconnect fitting on the back of the unit, on the right of the small valve. If necessary, remove the fitting and replace with the larger barb fitting for larger hoses. Secure hose with a small screw-type clamp. **NEVER** depressurize the system by disconnecting the air supply line while under pressure, abrasive will be forced into the valve and regulator which causes damage. Vent the system with the "ON-OFF/FILL" inside the cabinet as explained in #9.



For more help visit: [www.vaniman.com/air-supply-connections-blasters/](http://www.vaniman.com/air-supply-connections-blasters/**)

7. Inside the unit is the “TANK” selector knob for use of each the tank. The handpieces, tanks, and valves are all color-coded for easy identification and use. Select the tank of choice by turning the selector knob completely toward the appropriate position. The center upright position will shut off air pressure to the tanks. This “OFF” position should be used when filling the abrasive storage tanks.

NOTE: When the “TANK” selector knob is turned, the other handpieces (the handpieces not selected) will expel air and blasting media for up to a minute while the residual pressure escapes. To prevent this, vent the system by moving the “ON/OFF” selector to “ON/OFF,” change the “TANK” selector, and then turn back ON.

8. Also inside the unit is the “ON/OFF” selector knob. This knob must be turned to the ON position in order for the machine to operate.

NOTE: To fill the tanks or disconnect the unit from the air line, the ON/OFF knob must be turned to the OFF/VENT position. Failing to do so will cause blasting media to escape from the unit and/or damage to the unit itself. The ON/OFF selector will cause the handpieces to expel media and air for a few seconds while the residual pressure in the system is expelled.

9. Turn on the light by turning the knob on the right side of the unit.
10. There should be no leaking air when the unit is on. If there is, check your air supply connection and tighten secure it.
11. Securely attach the optional dust collection system to the hole in the back of the cabinet. A dust collector is strongly recommended to contain the dust inside the cabinet. Vaniman recommends the AbrasiveVac for single blaster use or the StoneVac II for high volume or multiple blasting systems.
12. Regulate air pressure by turning the air regulator knob. Pull knob up to unlock before turning. Pressure will indicate pressure reading. DO NOT adjust above 100 psi (7 BARS).
13. To begin blasting, use the foot pedal to start the flow of air and blasting media. Release the foot pedal to stop the flow.

MAINTENANCE

Vaniman blasters are designed to be low maintenance. However, as the materials used in a microblaster are abrasive by design, components do wear out. A few minor areas should be maintained regularly for a long product life.

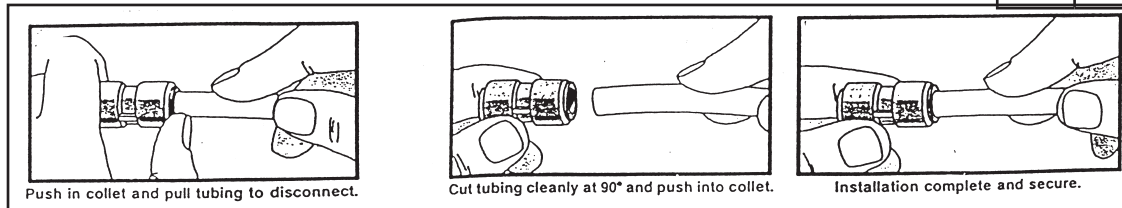
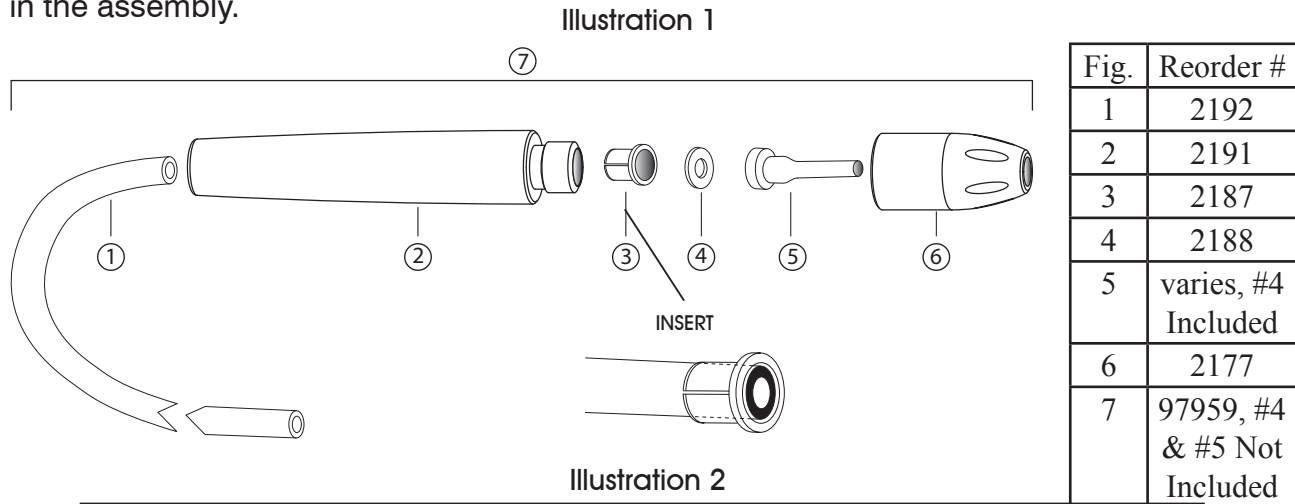
Handpieces Hoses:

Check handpiece hoses for wear regularly. When hose feels thin or holes develop, the tubing should be replaced.

On the rear of the unit, where the handpiece hoses come through the cabinet, there is an aluminum assembly that is a pinch valve for stopping and starting the media flow for the I/O option. This will be the point of highest wear on the tubing. The hose can be slid back and forth in order to "wear" a new section of hose. If a hole develops, replace the tubing.

Handpiece Tip Installation:

It is imperative that the handpiece tip and sealing o-ring be installed correctly and securely to avoid damage or leaks. Install in the manner shown being sure the tip and o-ring seat evenly in the assembly.



Tanks:

When installing the lids on the tanks, be sure the lid is rid of any blasting material or debris. If the tank or lid begins to wear, replace immediately. Do not overtighten the lid on the unit. The fittings on the bottom of the tank are designed for easy maintenance of the hoses. To remove a handpiece tubing from quick disconnect fitting, push toward the tank on the plastic ring while pulling the tubing out. Do not remove the hose fittings while tank is full of media and upright; turn the tank upside down or empty before removing hoses. To replace, be sure the fitting and hose are free of debris or abrasives and push the hose firmly into the fitting. Be sure it goes in until you can see it through the clear wall of the tank fitting. Improper installation will result in leakage and damage to the tanks.

Glass Window:

Included with the unit is a free "Static-Cling" blasting shield for the inside of the window. These are inexpensive protection for the viewing clarity of the window. To install, pull off the backing on the shield and adhere to the inside of the window. Replace when necessary.

Moisture

Vaniman blasters include a Filter for small amounts of oil and moisture. If moisture causes the media to clump or cake in the tanks, improper media flow will result. Be sure the air supply is relatively oil and moisture free. An addition of the heavy duty air filter/dryer may solve the problem (See below for ordering information).

REPLACEMENT PARTS

AbrasiveVac Dust Collector (VMC part #10660) & StoneVac II Dust Collector (part #10201)

Blasting Media

Part No.	Material	Size	Applications
97921	Aluminum Oxide	25µm	Fine surfacing of metal, porcelain and acrylic.
97922	Aluminum Oxide	50µm	Removal of oxides. Preparation of porcelain faces before firing.
97923	Aluminum Oxide	100µm	Deflasking. Alloy preparation for porcelain work.
97924	Aluminum Oxide	250µm	Bulk removal of investment and tough oxide layers. Rough surface preparation.
97925	Glass Bead	50µm	Smoothing/polishing. Devesting porcelain. Finishing of occlusal surfaces/crown interiors.

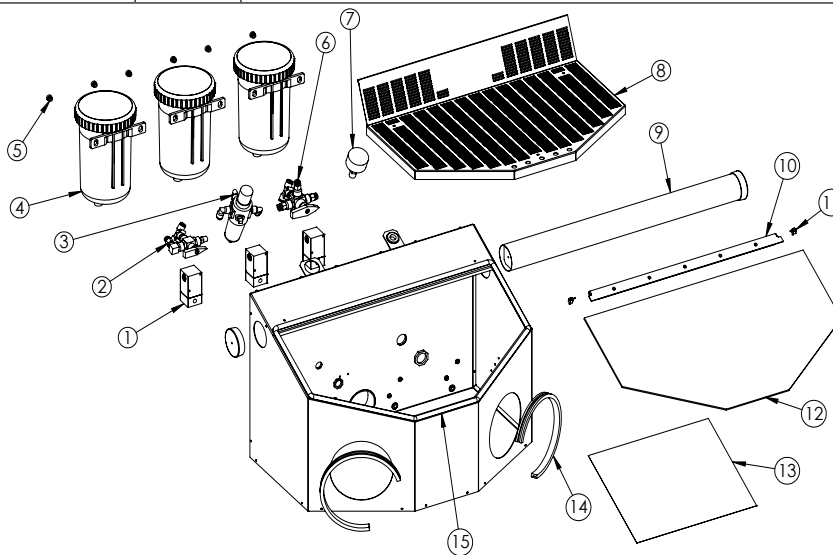


Fig. #	Description	Reorder Part Number
1	Pinch Valve Assembly	2234
2	Vent Valve Assembly	2283
3	Filter Regulator Assembly	2286
4	Sand Jar Assembly 25 micron Sand Jar Assembly 50-100 micron Sand Jar Assembly 110-250 micron	97956 97957 97958
5	Thumb Nut	2266
6	Selector Valve Assembly	2284
7	Air Pressure Gauge	2112
8	Floor Screen	2240
9	LED Light Assembly	97969
10	Window Bracket Assembly (with glass)	2282
11	Pin-Hinge Assembly	2290
12	Window	2241
13	Protector Shield	97951
14	Cuff Holder	2260
Not Shown	Cuff (Black Cloth)	2033XL
15	Window Gasket Kit	2030B
Not Shown	Blow Off Gun	2285

PLUMBING

