
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;
- Cool, dry air only.

2. SAFETY

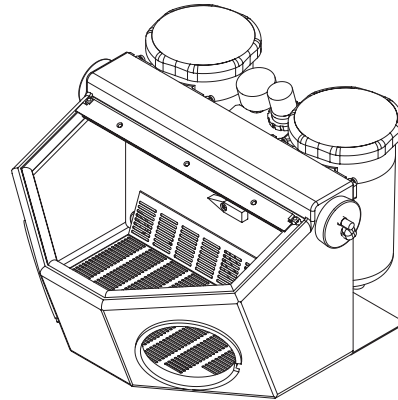
- Always disconnect the unit from the compressed air and power sources before beginning any maintenance.
- When working with the tank wear protective glasses to protect your eyes.
- Any abrasive material on the o-ring may lead to leakage and early wear of the o-ring. After filling, clean the thread and 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 of 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 light bulb. 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 - SandStorm Expert
- 1 - Instructions



INSTALLATION & OPERATION

1. Remove the unit and all packaging material from the box.
2. Plug power cord into electrical outlet.
3. Unscrew lid(s) on abrasive storage tank(s).
4. Fill abrasive storage tank(s) to fill line with the appropriate size media specified on tank label. DO NOT OVERFILL as clogging may result.
5. Inspect lid for any cracks or areas that might create leaks. Wipe off or use compressed air to clean abrasive from jar and lid mating surfaces. Check to make sure the o-ring is in place in the lid and screw lid securely onto jar. Do not overtighten.
6. Attach your 1/4" ID hose air supply line to the quick connect on the back of the unit. If you do not have the proper hose for the quick disconnect on the unit, a barb fitting is provided. To use the barb fitting, remove the quick disconnect fitting with a wrench and replace with the barb fitting. NEVER depressurize the system by disconnecting the air supply line while under pressure. Abrasive will be forced into the foot valve and regulator, causing damage..
7. Inside the SandStorm is the selector knob for using the left or right hand piece. Select either one, making sure this knob is dialed all the way to the left or right position. The center upright position will shut off air pressure to both tanks. This "off" position should be used when filling the abrasive storage tanks.
8. Turn on the light by turning the knob on the right side of the abrasive unit.
10. Securely attach the AbrasiveVac dust collection system to the SandStorm Expert.
11. 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).
12. To begin blasting, use the foot pedal to start the flow of air and blasting media. Release the foot pedal to stop the flow. Note: After releasing the foot pedal, air and abrasive will continue to flow for a few seconds until the pressure in the tank has been depleted.

Plumbing Diagram Key (see last Fig. A at end of manual) - i - Air Supply, ii - To inside regulator fitting, iii - Handpiece hose, iv - Dust collector connection, v - Hose to foot valve

USING THE MAGNIFIER

Your SandStorm Expert arrived with a magnifier. This magnifier can be set on the window, or permanently attached to the unit.

To permanently attach the magnifier to the window:

1. Loosen the screws on the top bracket of the window assembly (black). Be careful not to remove them entirely as the window will come apart.
2. Slide the top edge of the magnifier between the top surface of the glass and the window bracket. Tighten the screws.
3. The magnifier can now be used.

COMMON REPLACEMENT PARTS AND ACCESSORIES

Sand-Vac Dust Collector (VMC part #10211)

“Contact Lens” View Port/Magnifier (VMC part #97940)

Static Cling Protective Shield (VMC part #97950)

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

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

Replacement Cuffs, (VMC part #2033); ordered each.

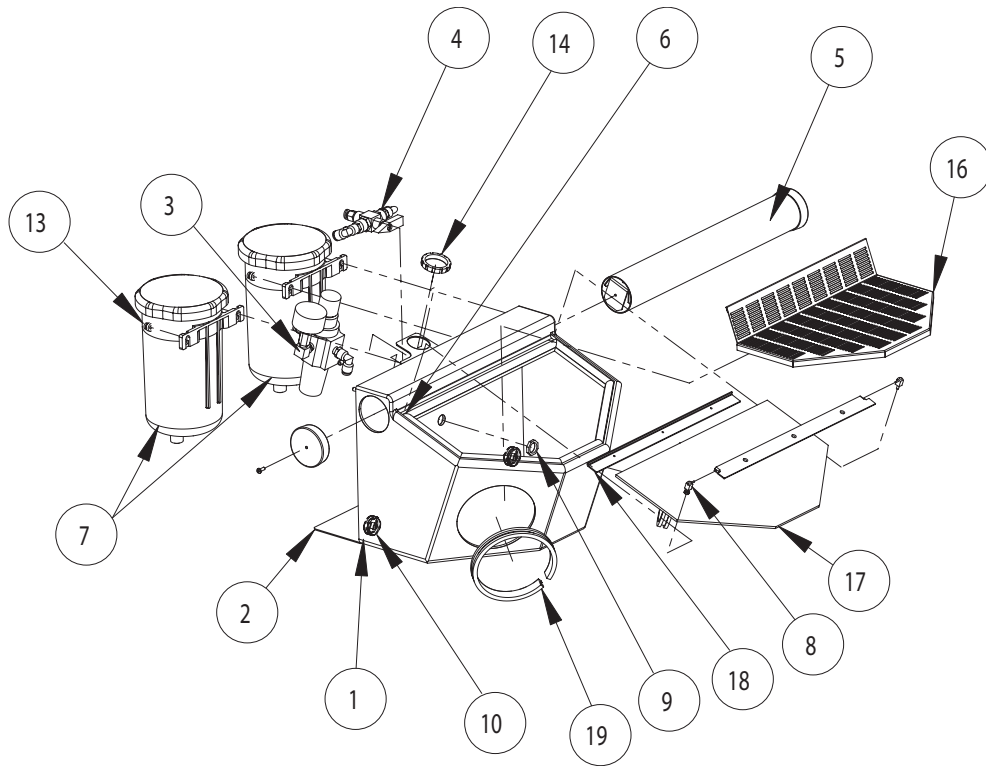


Figure	Description	Reorder Part Number
1	Cabinet	N/A
2	Bracket Assembly	2274
3	Filter Regulator Assembly	2047
4	Valve Assembly	2046
5	Light Assembly, Complete 115Volts Replacement Light Tube (only) Replacement Light Bulb	2070 2073A 2078
6	Window Gasket Kit	2030A
7	Sand Jar Assembly 25 micron Sand Jar Assembly 50-100 micron Sand Jar Assembly 110-250 micron	97956 97957 97958
8	Pin--Hinge Assembly	2010
9	Nut, Valve Panel	2259
10	Handpiece Hose Grommet	2005
13	Thumb Nut	2266
14	Regulator Nut	2121B
16	Floor Screen	2032
17	Replacement Window Glass	2019
18	Window Bracket Assembly (with glass)	2029
19	Cuff Holder (ring)	2034
not shown	Cuff (black cloth)	2033

TUBING & HANDPIECE MAINTENANCE INSTRUCTIONS

1. Dump abrasive from the tank before removing the tubing from the bottom fitting of the sand tank. See illustration 2 for instructions on quick fittings.
2. Remove the handpiece assembly from inside the cabinet by pulling the tubing through the rubber grommet.
3. Unscrew the nozzle cap ⑦ and remove the tip ⑥ and the sealing washer ⑤. Using a pair of pliers, grasp the handpiece insert ④ and with a twisting motion pull the tubing through the handle ③. Pull the handpiece insert from the tubing by twisting and pulling.

NOTE: On some units, a steel barbed nozzle may be in the tubing - this should be removed from the tubing and discarded it can no longer be used with the new long lasting polyurethane tubing. It may be necessary to moisten the tubing and/or soak the tubing in warm water to ease onto the barb at the bottom of the sand tank.

4. Using the new piece of tubing, push the tubing through the handle-using a twisting motion. When the tubing is through the handle, pull in out several inches and press the handpiece insert ④ all the way onto the end of the tubing, until the tubing is flush with the front of the insert (see inset). It may be necessary to moisten the tubing to ease the installation of the handpiece insert.
5. Pull the tubing back into the handle until the collar on the handpiece insert is butted-up to the end of the handle. Pull the tubing through the rubber grommet and re-attach it to the jar assembly by pushing it into the quick-release fitting. Re-assemble the sealing washer, tip and nozzle cap to the handle.
6. Blow out tank bottom fitting and press tubing back into the tank. Visually make sure the tube travels past the black seal looking through the transparent raised area.

Illustration 1

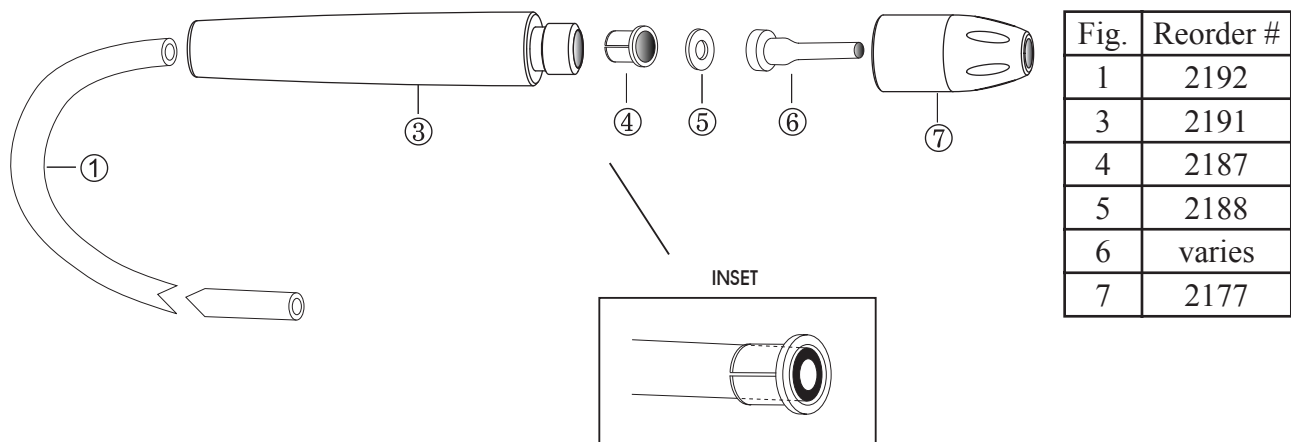


Illustration 2

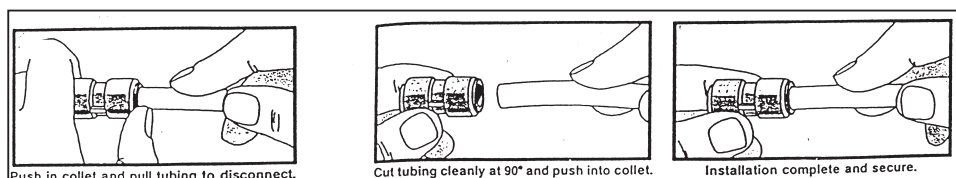


FIG A

