



MASTER PROBLAST 3 ESD

ENGLISH

1. CONDITIONS FOR USE

This micro abrasive blaster may only be operated:

- Indoors;
- Below 1981 m (6500 ft) above sea level altitude;
- Ambient air temperature between 40°-105°F (5-40°C);
- Maximum relative humidity of 80% at 31°C (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 10.3 Bar (150 PSI).

2. SAFETY



WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or BATTERY-operated (cordless) power tool.

1. Work area safety:

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating this power tool.** Distractions can cause you to lose control.

2. Electrical Safety:

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.

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- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. **If operating a power tool in a damp location is unavoidable, use a RESIDUAL CURRENT DEVICE (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

3. Personal Safety

- a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or BATTERY pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h. **Do not let familiarity gained from frequent use of this tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

4. Power tool use and care:

- a. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. **Disconnect the plug from the power source and/or remove the BATTERY pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar**

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with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

- e. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- f. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5. Service

- a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

3. SPECIAL ATTENTION TO THIS PRODUCT

- Unplug equipment 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.
- Always disconnect the unit from the compressed air and power sources before beginning any maintenance.
- 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.
- 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.
- Maintain equipment and accessories. Check for breakage of parts and any other condition that may affect the equipment's operation.

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- The triangular light symbol labelled on the light indicates that the user should not look directly into the light and that doing so may cause eye damage.



- Please note that correct use requires reference to this manual and that the following label indicates that the user should reference this manual prior to operation.



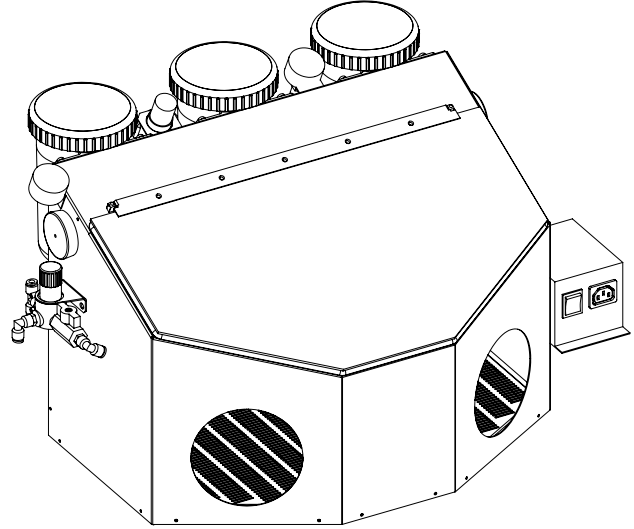
4. LIABILITY EXCLUSION

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 anybody 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 ESD
- 1 - Instructions
- 1 - DC Power Supply



INSTALLATION & OPERATION

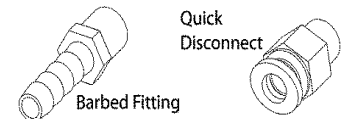
1. Remove all packing material.
2. Attach the ESD regulator to bracket (on left side of unit) with nut included on regulator.
3. The ESD generator must be connected to the supply cord and green ground wire. The loose black cord coming from the ESD air delivery unit (on rear of unit) is to be inserted and screwed into the back of the ESD generator. Either one of the two ports will work sufficiently. Attach the end of the green wire that has a "U" shaped connector to the ground bolt in the center of the two output ports on the ESD generator with supplied lock nut already on bolt.
4. Unscrew lids on abrasive storage tanks.
5. Fill media storage tanks to fill line with blasting media in the micron size specified on tank label. **DO NOT OVERFILL** - clogging may result.
6. Inspect lid for any cracks or areas that might create leaks. Wipe off excess abrasive and screw lid securely back into place. Do not overtighten.

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

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7. Attach your 1/4" ID (outside diameter) 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.

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



8. Inside the Problast is the “TANK” selector knob for using each of the tanks. For ease of use the handpieces, tanks, and valves are all color-coded. Select the tank of choice making sure this knob is dialed all the way to the appropriate position. The downward position will shut off air pressure to the tanks. (This “off” position should be used when filling the abrasive storage tanks.)
9. Regulate air pressure by turning the air regulator knob. Unlock by pulling up the knob then turn. Pressure reading will indicate pressure. DO NOT adjust above 100 psi (7 BARS).
10. To engage the ESD air flow, turn the valve on the rear of the unit for the ESD air supply. Any time full ESD protection is required, this valve must be on. The gauge should read roughly 30 psi before depressing foot pedal and can be changed by removing the tamper-resistant knob. This can be adjusted to increase flow by removing the snap-ring on the regulator knob, adjusting, and replacing the snap ring.
11. Turn the red power switch on the ESD power supply on, it will light when connected correctly. Both the power supply and the blaster's light cord must be connected to a properly grounded wall plug or cable.
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.

TUBING & HANDPIECE MAINTENANCE INSTRUCTIONS

1. Remove 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. Use Illustration 1 to 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.
4. **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.

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5. 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 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.
6. 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.

Note: ESD Grounding not shown on this diagram

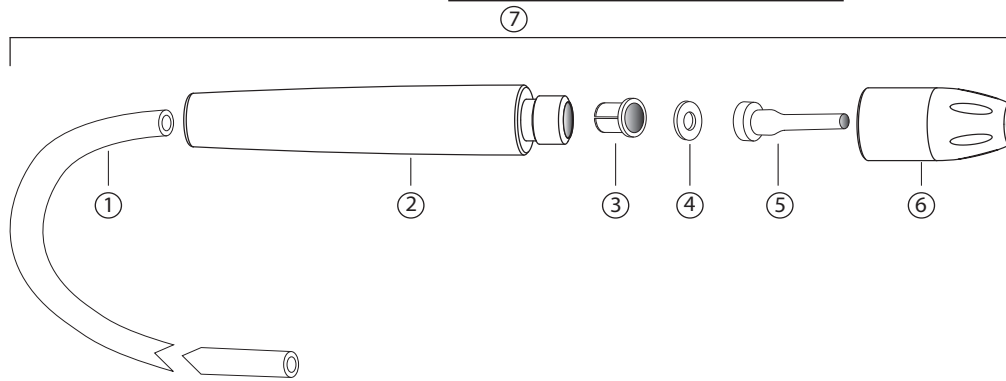
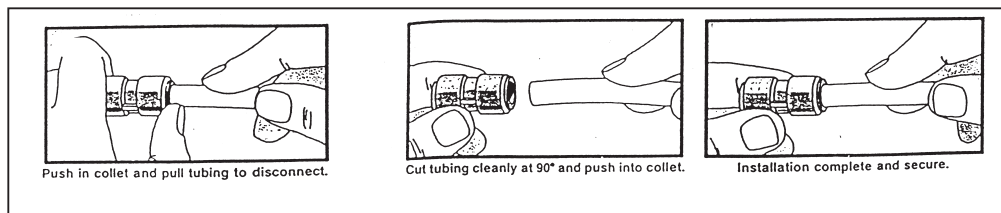


Fig.	Reorder #
1	2192
2	2191
3	2187
4	2188
5	varies, #4 Included
6	2177
7	97959, #4 & #5 Not Included

Illustration 2



REPLACEMENT PARTS

Blasting Media

Part No.	Material	Size	Applications
97921	Aluminum Oxide	25µm	Fine surfacing of metal or hard materials.
97922	Aluminum Oxide	50µm	Deburring and deflashing of metals and other hard materials.
97923	Aluminum Oxide	100µm	Aggressive removal of materials, semi-rough finished surface.
97924	Aluminum Oxide	250µm	Bulk removal or surface cleaning of tough materials. Rough surface preparation.
97925	Glass Bead	50µm	Smoothing/polishing. Cleans and polishes without removing material.

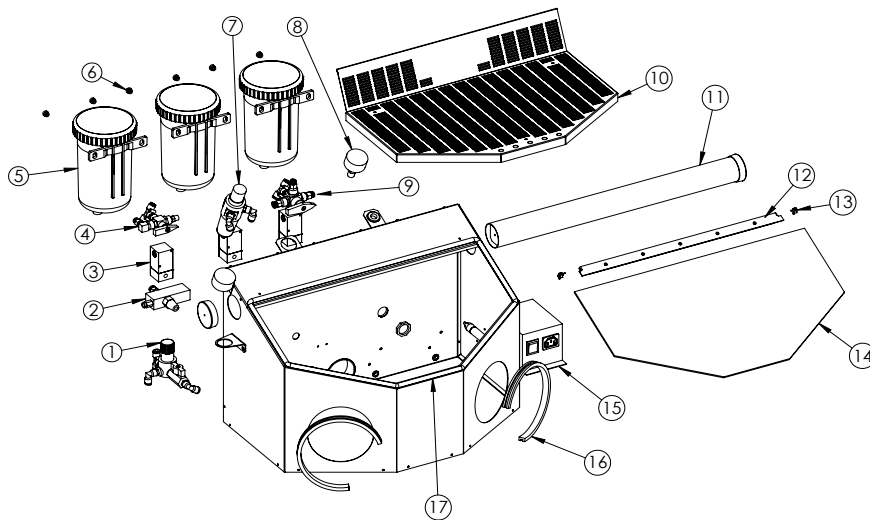


Fig. #	Description	Reorder Part Number
1	ESD Regulator	2227
2	ESD Air Delivery Unit	2216
3	Pinch Valve	2234
4	Vent Valve Assembly	2283
5	Sand Jar Assembly 25 micron Sand Jar Assembly 50-100 micron Sand Jar Assembly 110-250 micron	97956 97957 97958
6	Thumb Nut	2266
7	Regulator	2286
8	Air Pressure Gauge	2112
9	Selector Valve Assembly	2284
10	Floor Screen	2240
11	LED Light Assembly	97969
12	Window Bracket Assembly (with glass)	2282
13	Pin-Hinge Assembly	2290
14	Window Only	2241
15	ESD Generator	2216
16	Cuff Holder	2260
Not Shown	Cuff (black cloth)	2033XL
17	Window Gasket Kit	2030B
Not Shown	Blow Off Gun	2285
Not Shown	Window Protector Shield	97951

PLUMBING

