



MASTER PROBLAST TITAN ESD

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.

- 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 tool 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 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.

- 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.



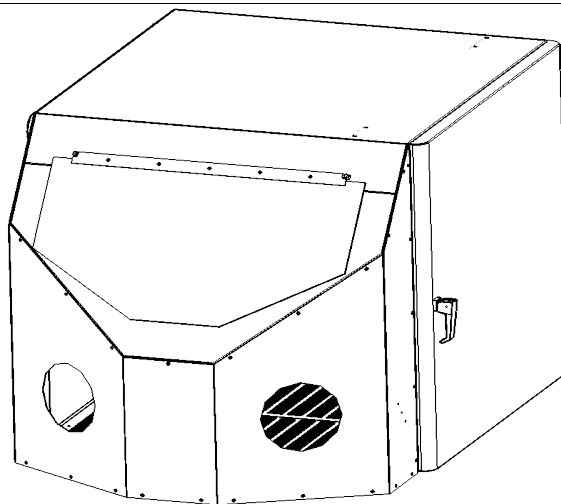
4. LIABILITY EXCLUSION

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 - Micro-Abrasive Blaster
- 1 - Instructions
- 1 - DC Power Supply (if applicable)
- 1 - Additional Air Supply Connection
- 1 - Static Cling Sample



INSTALLATION & OPERATION

1. Remove the unit and all packaging material from the box. Check against the packing list.
2. The ESD generator must be connected to the power supply cord that includes a green ground wire. Proper grounding is essential for safe and effective operation. Attach the end of the green wire, fitted with a ring connector, to a verified earth ground point. This may be a grounding stud, grounding bar, or equivalent connection, depending on your local electrical standards. Refer to page 10 for additional details on ESD setup and grounding guidelines.
3. For units with lights: Plug the DC Power Supply into the jack on the unit's light and plug the other end into a standard outlet.
4. Unscrew lid(s) on abrasive storage tank(s) and fill to the line marked on the tank. **DO NOT OVERFILL** as clogging may result.
5. Inspect lid and tank for any cracks or areas that might create leaks. Ensure the threads on the tank and lid are clean of abrasive before screwing the lid securely back into place. Do not over-tighten.
6. Use the plumbing diagrams at the end of these instructions to locate the fitting on the back of the unit to connect your air supply line. Most units come equipped with a barbed fitting for a 1/4" (6mm) ID (inside diameter) hose while the IO/Master units come equipped with a quick disconnect fitting for a 1/4" (6mm) OD (outside diameter) air line. All Vaniman units are shipped with both fittings included to meet the customer's needs. For more help on connecting your unit to an air supply visit:

www.vaniman.com/air-supply-connections-blasters/

7. Regulate air pressure by turning the air regulator knob, pulling up on the knob to unlock and pressing back down to lock. The pressure reading will be indicated on the pressure gauge and should NOT be adjusted above 100 psi (7 BARS).

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. 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. Before disconnecting the air supply line, turn the regulator down (counterclockwise) until the pressure gauge reads zero.
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 30psi 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. The ESD generator LEDs will turn on when connected to power. Engage the ESD air flow first and then connect to power.
12. Press the foot pedal to start the flow of air and blasting media. Release the foot pedal to stop the flow.
13. It is recommended that a dust collector is attached to the unit to remove excess media and improve visibility during blasting.

StoneVac Brushless w/ Accumulator	120V	PN: 11057
StoneVac II	120V	PN: 10201

StoneVac Brushless w/ Accumulator	220V	PN: 11058
StoneVac II	220V	PN: 10209

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 IO/Master units, there is a pinch valve that controls the flow of media by squeezing and releasing the handpiece tube. This will be the point of highest wear on the tubing and therefore the hose should be moved periodically 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 in Fig. 1 and ensure the tip and o-ring sit 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 over-tighten 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 the tube reaches beyond the black o-ring that is just above the quick disconnect fitting in the tank. Improper installation will result in leakage and damage to the tanks.

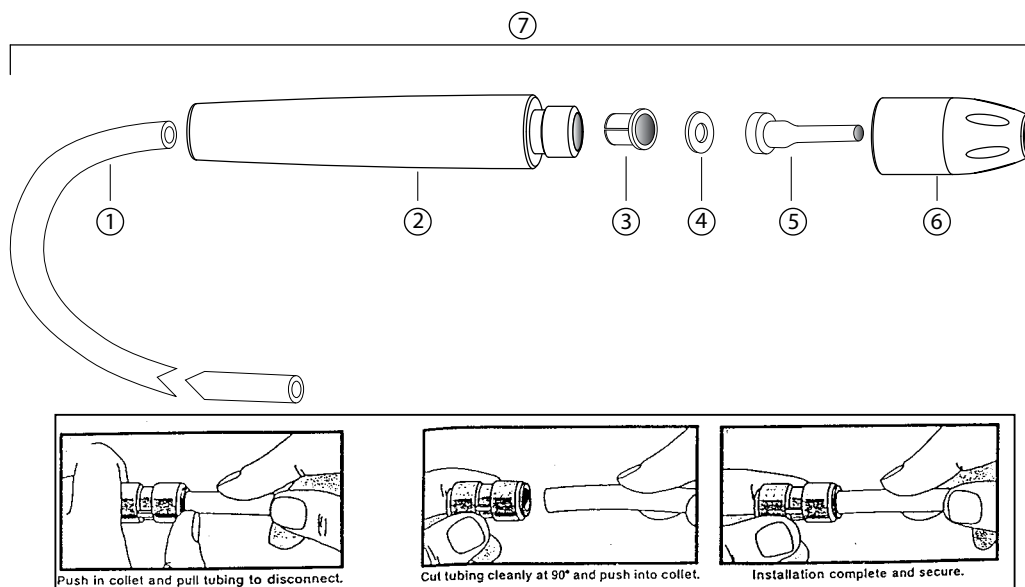
Glass Window:

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 blaster regulators 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. Installation of a heavy duty air filter/dryer between the air supply and unit may be required.

Fig. 1



HANDPIECE PARTS

Number	Description	Part Number	Corresponding Units
1	Anti-Static Handpiece Tubing	97928 (2ft.) 97929 (3ft.) 97930 (4ft.) 2192 (by the foot)	-SandStorm Edge, Professional, 2, Expert, & Problast 2 -SandStorm XL & Problast -SandStorm Prestige & Problast 3 - All Units
2	Handle	2191	- All Units
3	Handpiece Insert	2187	- All Units
4	O-Ring	97909 (5-pack)	- All Units
5	Tip (o-ring included)	See Above	- All Units
6	Nozzle Cap	2177	- All Units
7	2ft. Handpiece Assembly* 3ft. Handpiece Assembly* 4ft. Handpiece Assembly* 6ft. Handpiece Assembly*	97947 97949 97959 98109	- SandStorm Edge, Professional, 2, Expert, & Problast 2 - SandStorm XL & Problast - SandStorm Prestige & Problast 3 - SandStorm Mobile & Mobile Problast and Problast 3 Titan

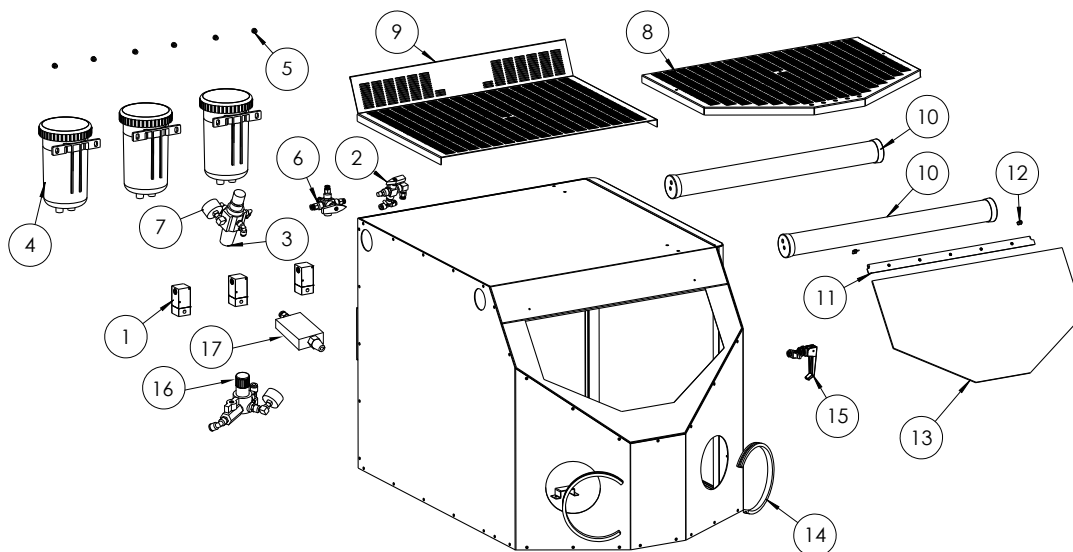
*Does not include o-ring or tip

BLASTER TIPS

Tip Type	Part No.	Color	Nozzle Size	Recommended Vaniman Media	Recommended Tank Assembly	
					Part Number	Description
Crystal Tip (2 per pack)	97902	Blue	Medium 0.032" (0.8mm)	25µm Al2O3	97956	25µm
	97903	Black	Large 0.048" (1.2mm)	50µm Al2O3	97957	50-100µm
				50µm Glass Bead		
				100µm Al2O3		
	97904	Red	Extra Large 0.065" (1.6mm)	50µm Glass Bead		
				100µm Al2O3		
Tungsten Carbide Tip (1 per pack)	97905	Yellow	Small 0.026" (0.65mm)	25µm Al2O3	97956	25µm
	97906	Green	Medium 0.036" (0.91mm)	50µm Al2O3	97957	50-100µm
				50µm Glass Bead		
				100µm Al2O3		
	97907	Violet	Large 0.059" (1.5mm)	50µm Glass Bead	97958	110-250µm
				100µm Al2O3		
				250µm Al2O3		

BLASTER MEDIA

Material	Size	Part Number			Applications
		55lbs.	15lbs.	One Tank	
Aluminum Oxide	25µm	98201	97921	97935	Fine surfacing of metal and other hard materials.
	50µm	97927	97922	97936	Deburring and deflashing of metals and other hard materials.
	100µm	98202	97923	97937	Aggressive removal of materials, semi-rough finished surface.
	250µm	98203	97924	97938	Bulk removal or surface cleaning of tough materials. Rough surface preparation.
Glass Bead	50µm	98204 (50 lbs)	97925	97939	Smoothing/polishing. Cleans and polishes without removing material.
Sodium Bicarbonate	50-100µm	98206 (50 lbs.)	97934	98200	Aggressive removal of materials, water soluble and does not embed into the material.
Walnut Shell	200 Grit	-	97933	-	Organic, used for cleaning purposes.
	40/100 Grit	98207 (50 lbs.)	97932	-	
	20/40 Grit	97931 (50 lbs.)	-	-	



1	2234	Pinch Valve	Válvula	Vannes à pincement	Quetschventil	Valvola a Manicotto
2	2283	Vent Valve	Válvula ensamblada de ventilación	Ensemble de soupape de ventilateur	Ventilbaugruppe	Gruppo Valvola di Sfogo
3	2430	Regulator	Ensamblado de Regulador de Filtro	Ensemble régulateur filtre	Filter/Regler Baugruppe	Gruppo regolatore del filtro
4	97956 97957 97958	Sand Jar Assembly 25µm Sand Jar Assembly 50-100µm Sand Jar Assembly 110-250µm	Ensamblaje de Tubo de Arena de 25 micrones Ensamblaje de Tubo de Arena de 50-100 micrones Ensamblaje de Tubo de Arena de 110-250 micrones	Ensemble récipient de sable 25 micron Ensemble récipient de sable 50-100 micron Ensemble récipient de sable 110-250 micron	Sandbehälter 25 micron Sandbehälter 50-100 micron Sandbehälter 110-250 micron	Gruppo del serbatoio sabbia 25 micron Gruppo del serbatoio sabbia 50-100 micron Gruppo del serbatoio sabbia 110-250 micron
5	2266	Thumb Nut	Tuerca Manual	Ecrou à oreille	Halterungsmutter	Dado ad alette
6	2294	Selector Valve	Ensamblado de Válvula	Ensemble clapet	Ventilbaugruppe	Gruppo valvola
7	2112	Air Pressure Gauge	Calibrador de presión de aire	Jauge de pression d'air	Luftdruck Gage	Misuratore Pressione dell'Aria
8	2987	Front Floor Screen	Pantalla de Piso Delantero	Ecran de sol avant	Bodensieb	Schermo a terra anteriore
9	2988	Rear Floor Screen	Pantalla de Piso Trasera	Ecran de sol arrière	Hinteres Bodensieb	Schermo a terra posteriore
10	97969	LED Light Assembly	Conjunto de luces LED	Ensemble d'éclairage à LED	LED-Leuchte	Gruppo Luce LED
11	2282	Window Bracket Assembly (with window)	Ensamblaje del Soporte de Ventana (con vidrio)	Ensemble support fenêtre (avec vitre)	Fensterhalterungsbaugruppe (mit Fenster)	Gruppo staffa della finestra (con vetro)
12	2290	Pin-Hinge Assembly	Ensamblaje Clavija—Visagra	Assemblage broche—articulation	Bolzen-Scharnier Baugruppe	Gruppo perno-cerniera
13	2241	Replacement Window	Vidrio de la Ventana de Reposición	Vitre de rechange fenêtre	Ersatzfenster	Vetro della finestra sostitutivo
14	2260	Cuff Holder	Sostenedor del Manguito	Support manchette	Manschettenhalter	Porta-manicotto
-	2033XL	Cuff (black cloth)	Manguito (tela negra)	Manchette (tissu noir)	Manschette (schwarzes Tuch)	Manicotto (tessuto nero)
-	2030B	Window Gasket Kit	Kit para Junta de Ventanas	Kit joint statique fenêtre	Fensterdichtungssatz	Kit guarnizione finestra
-	2285	Blow-Off Gun	Pistola de aire	Pistolet soufflage	Knallpistole	Pistola Soffiante
15	2690	Lift and Turn Latch	Pestillo de elevación y giro	Loquet de levage et de rotation	Verriegelung anheben und drehen	Chiusura a scatto
16	2254	ESD Regulator	Régulateur ESD	Régulateur ESD	ESD-Regler	Regolatore ESD
17	3490	ESD Ionizer	Ionizador ESD	Ioniseur ESD	ESD-Ionisorator	Ionizzatore ESD

PLUMBING

