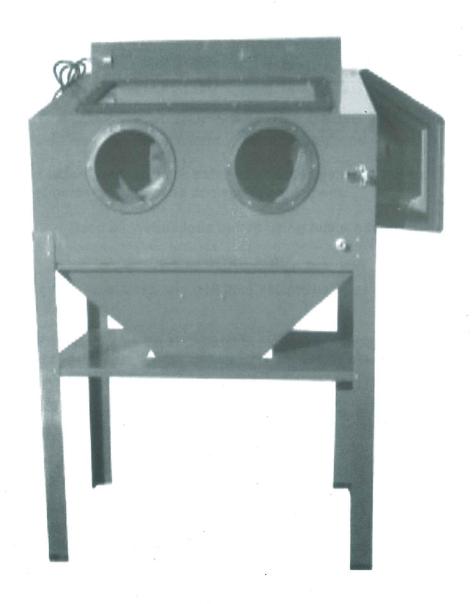
VERTICAL BLAST CABINET

ASSEMBLY & OPERATING INSTRUCTIONS





Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Technical Specifications

Overall Dimensions:

36-1/2" W x 23" D x 54-1/2" H

Gross Weight:

93.4 Lbs.

Power Requirement:

230V 50Hz Maximum Working Pressure: 125 Maximum PSI

CFM Requirement:

12-16 CFM @ 70-115 PSI

Inside Working Dimensions: 33" W x 22" D x 22" H (at rear) x 14" H (at front)

Work Light:

AC, 24" L x 1-1/2" D fluorescent light,

20W each fluorescent bulb

Includes: Blast Cabinet with Legs, (1) Abrasive Gun, (4) ceramic nozzles, (1) roll of Teflon tape, (5) extra protective window films, (1) set intake and Suction Port Caps, (1) interior light fixture and bulb, (1) package assembly hardware, (1) manual.



IMPORTANT SAFETY INSTRUCTIONS!



READ ALL INSTRUCTIONS BEFORE USING THIS PRODUCT!

Safety Warnings and Precautions

WARNING: When using product, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this product!

WORK AREA

- 1. Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- 2. Beware of operating the Blast Cabinet in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Electrical products create sparks which may ignite the dust or fumes.
- 3. Keep bystanders, children, and visitors away while operating the Blast Cabinet. Distractions can cause you to lose control.

ELECTRICAL SAFETY

4. Grounded products must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If a grounded product should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

- 5. Double insulated products are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.

 Double insulation ciliminates the need for the three wire grounded power cord and grounded power supply system.
- 6. Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- 7. Do not abuse the Power Cord. Never use the Power Cord to move the Blast Cabinet or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately. Damaged Power Cords increase the risk of electric shock.
- 8. When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These extension cords are rated for outdoor use, and reduce the risk of electric shock.

PERSONAL SAFETY

- 9. Stay alert. Watch what you are doing, and use common sense when operating the Blast Cabinet. Do not operate the Blast Cabinet while tired or under the influence of drugs, alcohol, or medication.
- 10. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair and clothing away from the Blast Cabinet. Loose clothes, jewelry, or long hair can be caught in the Blast Cabinet, causing personal injury.
- 11. **Be sure the Power Switch is off before plugging in.** Carrying appliances with your finger on the Power Switch, or plugging in appliances with the Power Switch on, invites accidents.
- 12. Use safety equipment. Always wear eye protection during assembly and maintenance.

TOOL USE AND CARE

- 13. Do not overload the Blast Cabinet. Use the correct Blast Cabinet for your application. The Blast Cabinet will do the job better and safer at the speed and capacity for which it is designed.
- 14. **Do not use the Blast Cabinet if the On/Off switch does not turn it on or off.** Any appliance that cannot be controlled with the On/Off Switch is dangerous and must be replaced.
- 15. Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the Blast Cabinet. Such preventive safety measures reduce the risk of turning on the product accidentally.
- 16. Store idle tools out of reach of children and other untrained persons. The Blast Cabinet is dangerous in the hands of untrained users.

17. **Maintain the Blast Cabinet with care.** Do not use a damaged Blast Cabinet. Tag damaged Blast Cabinet "Do not use" until repaired.

SERVICE

- 18. Blast Cabinet service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 19. When servicing the Blast Cabinet, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual.

 Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.
- 20. Always unplug the Blast Cabinet from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
- 21. WARNING! People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
- 22. Do not expose the Blast Cabinet equipment to rain or wet conditions. Water entering electrically powered equipment will increase the risk of electric shock. The Blast Cabinet is intended for indoor use only.

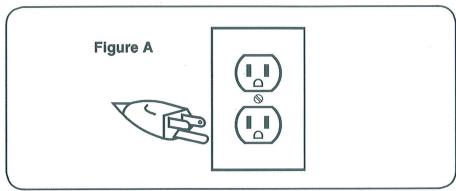
GROUNDING

WARNING!

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the Blast Cabinet. Never remove the grounding prong from the plug. Do not use the Blast Cabinet if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

GROUNDED TOOLS: TOOLS WITH THREE PRONG PLUGS

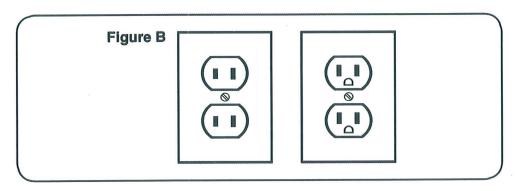
- 1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the Blast Cabinet should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See Figure A.)
- 2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See Figure A.)
- 3. A grounded appliance must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. (See Figure A.)



DOUBLE INSULATED APPLIANCES: APPLIANCES WITH TWO PRONG PLUGS

Note: The Vertical Blast Cabinet has a Two Prong Plug.

- 1. Appliances marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Figure B.)
- 2. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. (See Figure B.)



EXTENSION CORDS

- 1. **Grounded** appliances require a three wire extension cord. **Double Insulated** products can use either a two or three wire extension cord.
- 2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. (See Figure C, next page.)
- 3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Figure C.)
- 4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Figure C.)
- 5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Figure C.)

- 6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
- 7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
- 8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS*					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 - 2.0	18	18	18	18	16
2.1 - 3.4	18	18	18	16	14
3.5 - 5.0	18	18	16	14	12
5.1 - 7.0	18	16	14	12	12

Specific Safety Rules for the Vertical Blast Cabinet

- Use eye and ear protection. Always wear ANSI-approved impact safety goggles. Wear a full face shield if you are producing metal filings and wood chips. Wear an ANSI-approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
- 2. Always check hardware and assembled parts after assembling. All connections should be tight and hardware tightened.
- 3. Avoid sharp edges during assembly and use of this product.
- 4. Carefully inspect the condition of the nozzle before each use. If any damage is noted, replace the nozzle with a new one.
- 5. **Protective gloves and nonskid footwear is recommended.** Wear leather gloves and long sleeves when unloading or moving the Cabinet. Always use the factory supplied gloves (29) when using the Blast Cabinet.
- 6. Clean up all spills; abrasive media particles are very slippery.
- 7. Make certain that the compressor is OFF before hooking up the tool.
- 8. Make sure all clamps, locks and bolts are tight.
- 9. Make certain to disconnect the Blast Cabinet when doing any maintenance. The Blast Cabinet should be turned off and disconnected from the compressor when not in use.

- 10. This product, when used for abrasive blasting and similar applications, produces chemicals known to the State of California to cause cancer and birth defects (or other reproductive harm).
- 11. Abrasive blasting with sand containing crystalline silica can cause serious or fatal respiratory disease. Exposure to crystalline silica may cause silicosis (a serious lung disease), cancer and death. Exposure to aluminum oxide (a dust generated from material removing processes) can result in eye, skin and breathing irritation. Always use a NIOSH (National Institute for Occupational Safety and Health) approved respirator and safety goggles. Avoid skin exposure. Proper ventilation in the work area is required.

Warning:

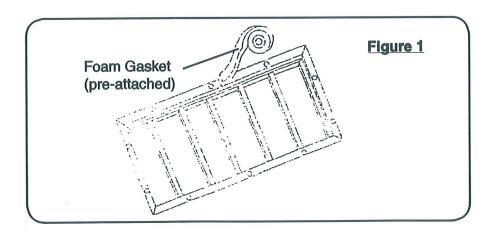
The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

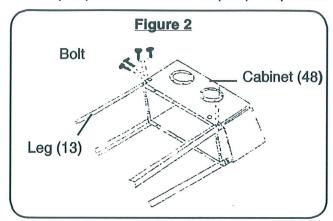
When unpacking your Blast Cabinet, check to make sure all parts listed on page 12 are included.

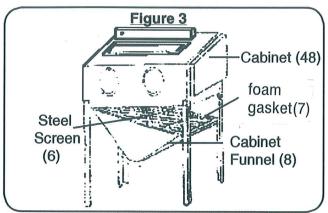
Assembly

- 1. Layout the parts of the Blast Cabinet on a work bench, worktable or floor.
- 2. Locate the Cabinet (48), the Cabinet Funnel (8) and the steel Screen (6). Peel off the paper backing from the Foam Gasket (7) that is attached to the steel Screen. Note: The gasket will fit between the Screen Frame and the upper edge of the Cabinet Funnel. Use a punch or nail to make holes in the Foam Gasket for bolt installation-see Figure 1 below.



3. Attaching the Legs (13) to the Cabinet (48). Lay the Cabinet (48) on its side. Insert the Short Bolts (31b) through the Leg (13) and into the Cabinet (48). Slide on Washer (31b), Lock Washer (31b) and thread on Nut (31b). Repeat for the remaining 3 Legs (13)-see Figure 2.

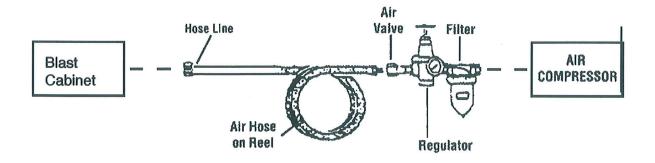


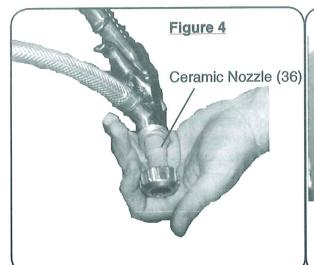


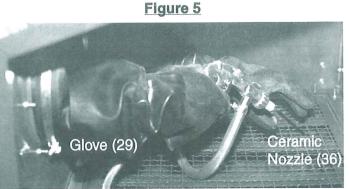
- 4. With the assistance of a second person, connect the Cabinet Funnel (8), the Cabinet (48) and the steel Screen with foam gasket (6). Stand the Cabinet (48) upright on the Legs (13). Place the Steel Screen (6) onto the Cabinet Funnel (8). Set the Screen Frame (down onto the Cabinet Funnel (8)). Insert fourteen Long Bolts (31a) M6 X 20 up through the Cabinet Funnel (8) and into the Cabinet (48). Slide on Washers and thread on Nuts and tighten. -see Figure 3.
- Slide the Shelf (12) into place under the Cabinet Funnel (8) see Assembly Diagram, page 13.
 Attach the Shelf to each Leg (13) using two Short Bolts (31b) and matching Washers and Nuts.
- 6. Attach one Foot (30) to each Leg (13) by sliding Foot (30) onto bottom of Leg (13).
- 7. The Blast Cabinet comes with replaceable Protective Film (49) to be placed on the inside of the Window to protect it from the abrasive media. To replace it, peel off the old Protective Film (49). Remove the backing from the Protective Film (49). Line up the Protective Film (49) with the inside of the window and press it on. Replace Protective Film (49) as it becomes severely worn.

Air Connection

- 1. You will need a Union fitting (sold separately) before you can connect your Blast Cabinet to an air compressor. Attach the Union fitting to the Air Inlet and tighten the fitting.
- Attach a Quick Connect Set-Up (sold separately) to the Union fitting if desired. This is a useful accessory as it allows quick-coupling action when using a variety of tools with the same air compressor.







Place your hands into the Gloves (29) inside the Cabinet (48). Make certain your fingers are in the proper positions and that you can easily move your hands and grip things

Operation

- 1. Fill the bottom of the cabinet with approximately 10 pounds of fine abrasive material. Fill the funnel area about 1/2 full. Do not overfill to prevent clogging. Do not use harsh abrasive media such as steel shot or aluminum oxide.
- 2. The abrasive feeds from the Suction Hose (26) which is attached to the front of the Abrasive Gun (25). The Abrasive Gun (25) is fitted with 1/4"-18 NPT threads which will fit most air hoses. Connect your Air Compressor Hose to the fitting on the bottom handle of the Gun. This hose is routed via the Hose Inlet Fitting (22).
- 3. It is recommended that you set up a vacuum dust collector (not included) to remove media dust while blasting, attach the vacuum hose to the Suction Flange (21) and turn on the vacuum dust collector.
- 4. On the back of the Blast Cabinet is an Intake Vent (33). If using a dust collector with the Blast Cabinet, remove the Intake Vent Cover (16). If you are not using a dust collector with the Blast Cabinet, the Intake Vent (33) must remain in place on the Blast Cabinet.
- 5. When using a vacuum dust collector (not included), clean filter periodically to maintain good suction and effectiveness of the vacuum. Use the appropriate vacuum for the job.
- 6. Open the Plastic Door (14) of the Vertical Blast Cabinet and place the work piece in the center of the Cabinet (48). Close door latches SECURELY.
- 7. Set the compressor's air pressure regulator to between 40 and 80 PSI. Do not set the regulator over 80 PSI. Do not exceed this Maximum PSI. Turn on the air compressor and the vacuum dust collector (not included).
- 8. Place your hands into the Gloves (29) inside the Cabinet (48). Make certain your fingers are in the proper positions and that you can easily move your hands and grip things -see Figure 5.

- 9. Grip the Abrasive Gun (25) with one hand. Point the Nozzle at the bottom of the Cabinet (48) and operate the Abrasive Gun (25) by pulling the trigger. Releasing your fingers off the Abrasive Gun (25) will stop the abrasive blast-see Figure 4. Check to make sure the abrasive media is flowing through the suction hose with no leaks.
- 10. Hold the material you are working with in your other hand. Position your fingers so that the Glove (29) is not in the way of the area you are blasting. You may have to reposition your fingers many different times during the blasting to ensure that you have blasted all areas of your workpiece.
- 11. Press the trigger of the Abrasive Gun (25) to begin blasting. Aim the nozzle directly at the surface of the material. Bring the nozzle to within 2 inches of the material if necessary. Move the gun in a side-to-side or circular motion, always making sure that your fingers are not in the way.

WARNING: Do not aim the nozzle at your fingers or the Blast Gloves.

- 12. To check on the progress of your blasting, release your finger from the trigger, and take your hands out of the Gloves (29). Once gun and Compressor and vacuum (not included) are turned OFF, open the door and inspect your material. If necessary to continue blasting, again follow the steps discussed on the previous page.
- 13. Once completed, remove your hands from the gloves and shut off the compressor. Open the door and remove your material.

Nozzie Replacement

Twist off the Ceramic Nozzle (36) end as in Figure 2. Insert a new Ceramic Nozzle (4,6 or 7 mm). The Sandblast Cabinet comes with the 5mm Nozzle installed on the Abrasive Gun (25). Always use a nozzle of the appropriate size to match the media particles used.

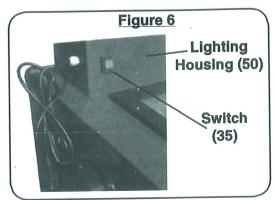
Light

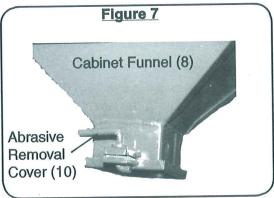
- 1. The Blast Cabinet comes with a Light (32). Plug in the light's electrical plug. Turn the light on using the Switch (35) located on the Lighting Housing (50) see Figure 6.
- 2. Replacing the Light must be done by a qualified service technician.

Maintenance

- To empty the Cabinet Funnel (8), first make sure there is a suitable catch container in place to store and dispose of media. CAUTION: Always wear eye and breathing protection when emptying the abrasive media. Turn the latch on the Abrasive Removal Cover (10) - see Figure 7. The Abrasive Removal Cover (10) will open and all of the abrasive media will pour out from the Cabinet Funnel (8).
- 2. **BEFORE EACH USE**, inspect the general condition of the Blast Cabinet. Check for loose connections, misalignment or binding of moving parts, cracked, torn, or broken parts, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**

- If Gloves are punctured or if you feel air blowing in the Glove, replace them immediately. DO NOT use a damaged or punctured Glove.
- Abrasive media will not be effective after much use. Replace abrasive media periodically.





Troubleshooting

- 1. <u>If abrasive media doesn't fire from the Abrasive Gun (25)</u>, make sure that you are using the right size Ceramic Nozzle for your abrasive.
- 2. <u>If not enough abrasive media is coming from the Abrasive Gun</u>, check the level of abrasive in the Cabinet Funnel (8). If the level is too low, add additional abrasive.
- 3. <u>If the light does not work</u>, check to make certain that the electrical plug is plugged into an outlet and that the Switch (35) is ON.
- 4. If the you dust collector has insufficient air movement/vacuum, check to make sure that the Intake Vent Cover (16) is off when using a dust collector.

PLEASE READ THE FOLLOWING CAREFULLY

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