

MODEL G0708 24" x 48" BLAST CABINET

OWNER'S MANUAL

(For models manufactured since 01/21)



COPYRIGHT © NOVEMBER, 2009 BY GRIZZLY INDUSTRIAL, INC., REVISED MARCH, 2021 (JL) WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.

#CR12333 PRINTED IN CHINA.



This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

INTRODUCTION	2
Manual Accuracy	2
Contact Info	2
Machine Description	2
Identification	3
Machine Data Sheet	4
CECTION 1. CAFETY	
SECTION 1: SAFETY	
Safety Instructions for Machinery	
•	
SECTION 2: POWER SUPPLY	9
SECTION 3: SETUP	11
Needed for Setup	
Unpacking	
Inventory	
Hardware Recognition Chart	
Site Considerations	
Mounting to Shop Floor	
Air Supply Setup	
Assembly	
Test Run	
Test null	20
SECTION 4: OPERATIONS	22
Preparation	22
Basic Operation	23
Blasting Media	
Media Notes	29
SECTION 5: ACCESSORIES	30
SECTION 6: MAINTENANCE	31
Schedule	31
Cleaning	31
SECTION 7: SERVICE	22
Troubleshooting	
Filter Replacement	
Motor Brush Replacement	
SECTION 8: WIRING	37
Wiring Safety Instructions	37
Wiring Diagram	
Air System Diagram	
Electrical Component Locations	
·	
SECTION 9: PARTS	
Parts List	
Machine Label Placement & Parts List	43
WARRANTY & RETURNS	45

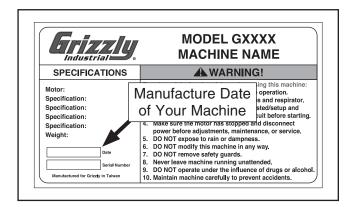
INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, your machine may not exactly match the manual. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support 1203 Lycoming Mall Circle Muncy, PA 17756 Phone: (570) 546-9663 Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager P.O. Box 2069 Bellingham, WA 98227-2069 Email: manuals@grizzly.com

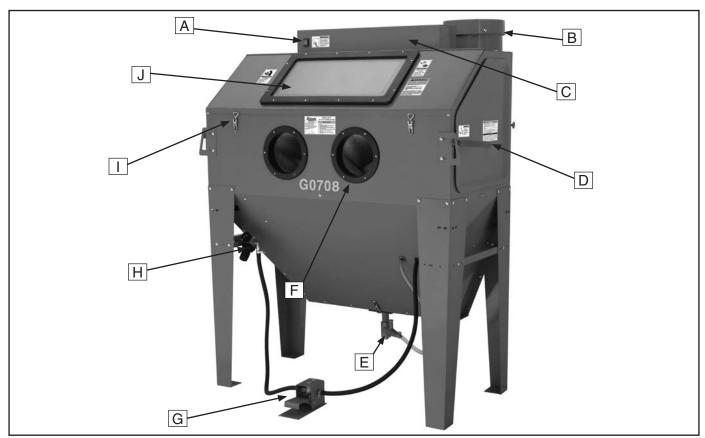
Machine Description

This blast cabinet is designed for high-use media blasting operations, where air flow up to 16 CFM and air pressure up to 120 PSI can be used. Air pressure is fully adjustable with an air pressure regulator, and the media output can be adjusted with the media flow valve. Blasting operations through a hand-held blast gun are controlled by a foot valve, and most operations can be carried out with all types of blasting media.

An internal set of fluorescent work lamps provide illumination during blasting operations, and a built-in dust collector maintains blasting environment visibility. The cabinet is equipped with front and side loading doors for ease of workpiece loading and unloading. Media is quickly unloaded through the hopper dump port door, and reloaded through one of the doors.



Identification



Features and controls.

- A. Power Switch
- B. Dust Collector
- C. Fluorescent Lamp Assembly
- **D.** Side-Loading Door
- E. Metering Valve and Dump Chute

- F. Gloves
- **G.** Foot Pedal Blasting Switch
- H. Pressure Regulator w/Gauge
- I. Front Loading Door Latch
- J. Viewing Window



Draduct Dimensions

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

MODEL G0708 24" X 48" BLAST CABINET

Product Dimensions:	
Width	52½"
Depth	
Height	66"
Foot Print (Length/Width)	24" x 47½"
Weight	276 lbs.
Shipping Dimensions:	
Type	Cardboard
Content	Machine
Weight	346 lbs.
Length/Width/Height	50" x 49" x 30"
Electrical:	
Switch	
Switch Voltage	
Cord Length	
Cord Gauge	3 3
Recommended Circuit Size	· · · · · · · · · · · · · · · · · · ·
Plug	
Number of Lamps	
Lighting Type	18 Watt Fluorescent
Dust Collector Motor:	
Type	Universal Brush Type
Horsepower	1½ HP
Voltage	110V
Phase	Single
Amps	
Cycle	60 Hz
Operation Information:	
Suggested Operating Air Pressure Range	60-120 PSI
Maximum Air Pressure	
Recommended Air Supply	
Maximum Abrasive Capacity	
Suggested Abrasive Capacity	55 lbs.
Abrasive Type	
Load & Unload Access	
Maximum Load Capacity	
Design Type	Floor Model



General Specifications:

Body Construction	Welded Heavy-Duty Steel
Dust Collector Filter Dimensions	
Dust Collector Filter Type	
Dust Collector Filter Rating	
Paint.	
er Specifications:	

Other

Features:

Dual Side Loading Doors Front Loading Door Feature Spare Blast Tips Spare Window Protection Sheets Included Dust Collector Filter Screened Work Table Adjustable Hopper Flow Valve Foot Pedal Blasting Control Hopper Dump Gate Easy-Clean Dust Collector Reusable Dust Collector Filter Element External Lighting System



SECTION 1: SAFETY

AWARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

AWARNING Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

ACAUTION

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

AWARNING Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

EYE PROTECTION. Always wear ANSIapproved safety glasses or a face shield when operating or observing machinery. to reduce the risk of eye injury or blindness from flying particles Everyday eyeglasses are not approved safety glasses.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

HEARING PROTECTION. Always wear hearing protection when operating or observiing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



AWARNING Safety Instructions for Machinery

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

INTENDED USE. Only use the machine for its intended purpose and only use recommended accessories. Never stand on machine, modify it for an alternative use, or outfit it with non-approved accessories.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

REMOVING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

DANGEROUS ENVIRONMENTS. Do not use machinery in wet locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well lighted to minimize risk of injury.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine *OFF* and ensure all moving parts completely stop before walking away.

MAINTENANCE & INSPECTION. A machine that is not properly maintained may operate unpredictably. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. Regularly inspect machine for loose bolts, alignment of critical parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or misadjusted parts before operating machine.

EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



AWARNINGAdditional Safety for Blast Cabinets

- 1. PERSONAL PROTECTION EQUIPMENT. Media blasting presents a real hazard of silicosis and other lung contamination injuries! These injuries are permanent and can get worse over time. If you use media blasting equipment without the proper headgear, eye protection, and respirator, your lungs and eyes may become permanently damaged. DO NOT use this blast cabinet unless you know how to use it. Protect yourself correctly, and keep all unprotected bystanders away. For latest types of protective equipment and acceptable respirator types, contact your local OSHA or NIOSH office.
- 2. **LEAVING THE AREA.** To prevent accidental blasting injury, disconnect air supply when leaving the blast cabinet.
- MAINTAINING MACHINE. To prevent accidental contamination of shop air, check the blast cabinet for any leaks before use, and reseal immediately.
- 4. SAFE ENVIRONMENT. To avoid media escaping from the cabinet or to prevent an entrapment hazard for animals or children, always close and latch shut the blast cabinet doors when not in use.

- WORK AREA SAFETY. To prevent accidental contamination of shop air, clean dust collector and filters often, and repair any suction hose leaks immediately.
- **6. MAINTAINING COMPONENTS.** To prevent accidental contamination or blast injury, replace tips, hoses, lenses, and gloves when they become worn.
- SAFE MEDIA BLASTING. Do not use system over the rated PSI or lines and seals may burst and cause injury.
- **8. CORRECT LIGHTING.** To prevent ballast overload and possible fire, do not install lamps that use over 18 watts.
- LOADING & UNLOADING. To prevent accidental blasting injury, disconnect the air supply before loading or unloading the workpiece from the blast cabinet.
- 10. SAFE MAINTENANCE. To prevent accidental blasting injury or shock, disconnect air supply and power before doing maintenance.
- **11. SAFE MEDIA BLASTING.** To prevent dust exposure, always secure the door(s) before beginning media blasting operations.

AWARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.



No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.



AWARNING

Electrocution, fire, shock, or equipment damage may occur if machine is not properly grounded and connected to power supply.

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 110V...... 11 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

AWARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

110V Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage	110V, 115V, 120V
Cycle	60 Hz
Phase	Single-Phase
Power Supply Circuit	15 Amps

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

ACAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.



Grounding & Plug Requirements

This machine MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. DO NOT modify the provided plug!

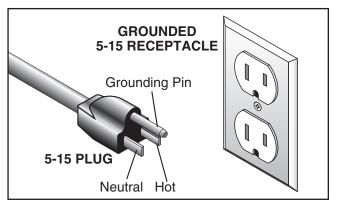
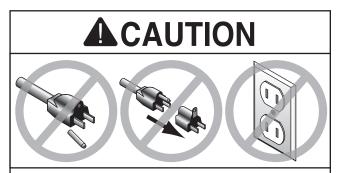


Figure 1. Typical 5-15 plug and receptacle.



SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

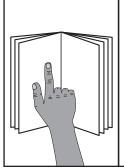
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size14 AWG Maximum Length (Shorter is Better)......50 ft.



SECTION 3: SETUP



AWARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



AWARNING

Wear safety goggles during the entire setup process!



WARNING

This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

Des	scription	Qty
•	Safety Goggles for Each Person	1
•	Forklift	1
•	Wrench 10mm	1
•	Additional People (For Lifting)	1
•	Screwdriver Phillips #2	1
•	Wrench or Nut Driver 3/8"	1
•	Exterior-Grade Silicone Caulking 1	Tube

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. *If items are damaged, please call us immediately at (570) 546-9663.*

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.



Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Box	x 1: (Figure 2)	Qty
Α.	Dust Collector Assembly w/Filter	1
В.	Cabinet	1
C.	Spare Door Seal 3/8" x 1" x 79"	1
D.	Teflon Tape	1
E.	Legs	4
F.	Left Door	1
G.	Right Door	1
H.	Side Leg Supports	2
l.	Blast Tip Set	1
	—Blast Tip 6mm ID	2
	—Blast Tip 7mm ID	2
J.	Canister Plunger Assembly	1
K.	Hopper Chute Door w/Metering Valve	1
L.	Lever and Latch Set (for 2-Doors)	1
Μ.	Viewing Window Dust Sheets 231/2" x 10)" 5
N.	Lamp Window Dust Sheets 211/2" x 4"	5
Ο.	Bolt Bag	1
	—Cabinet Screws 1/4-20 x 1/2"	26
	—Flange Nuts 1/4"-20	26
P.	Spare Front Door Seal 1/4" x 3/4" x 79"	1

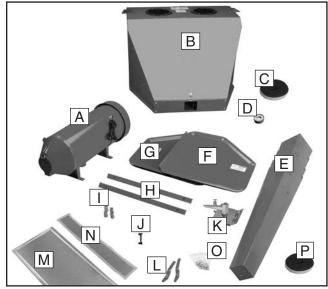
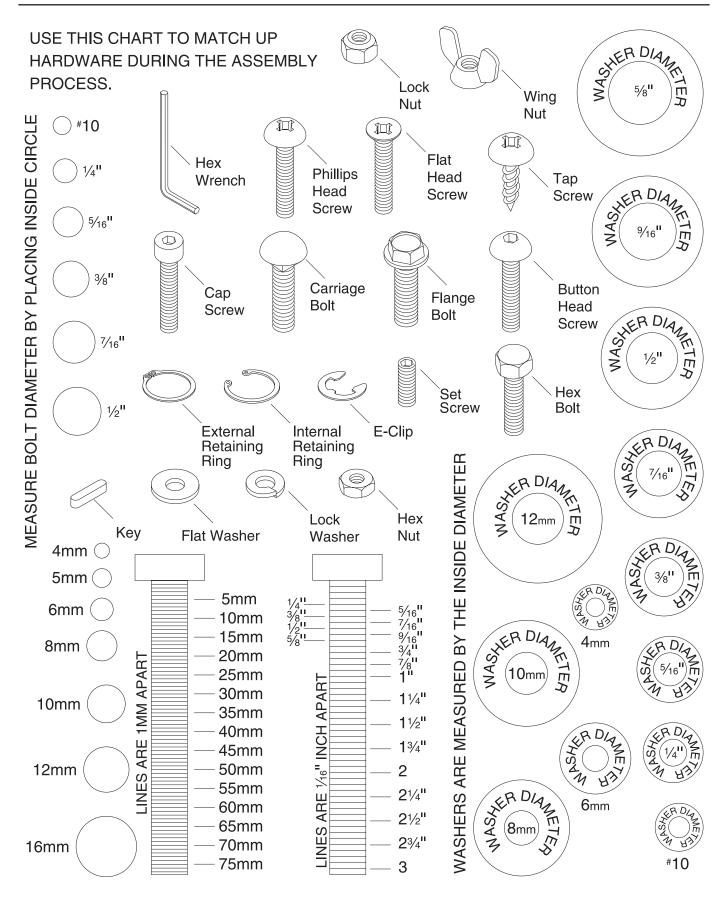


Figure 2. Inventory.



Hardware Recognition Chart



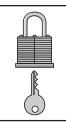
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. See below for required space allocation.



ACAUTION

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device, if required.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

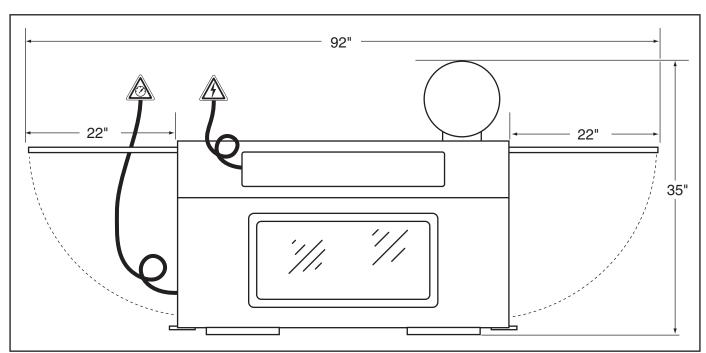


Figure 3. Space required for full range of movement.



Mounting to Shop Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. Generally, you can either bolt your machine to the floor or mount it on machine mounts. Both options are described below. Whichever option you choose, it is necessary to level your machine with a precision level.

Bolting to Concrete Floors

Lag shield anchors with lag bolts (**Figure 4**) and anchor studs are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

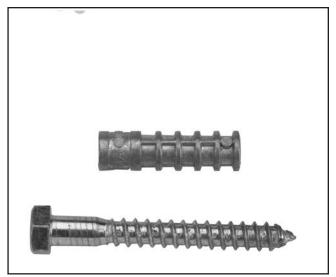


Figure 4. Typical fasteners for mounting to concrete floors.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.

Using Machine Mounts

Using machine mounts, shown in **Figure 5**, gives the advantage of fast leveling and vibration reduction. The large size of the foot pads distributes the weight of the machine to reduce strain on the floor.



Figure 5. Machine mount example.

NOTICE

We strongly recommend securing your machine to the floor if it is hardwired to the power source. Consult with your electrician to ensure compliance with local codes.



Air Supply Setup

The ability of this blast cabinet to accomplish its task is directly related to how well the air supply system is designed. For this blast cabinet to operate at its maximum potential with the largest blast tip, the CFM feeding the regulator should be 16 CFM at 120 PSI.

Refer to your compressor Owner's Manual and make sure that the compressor can handle the load of a blasting cabinet. Often a 5 HP compressors are used, but the duration of the work shift and tip size installed must be reduced so the compressor duty cycle is not exceeded. Ignoring this requirement could lead to compressor overheating and failure. The rule of thumb is that, the smaller the compressor, the less CFM available, and greater cool-down time required.

If this blast cabinet is to be used at full capacity in eight-hour work shifts at the maximum air pressure of 120 PSI using the largest tip, an industrial-grade compressor capable of delivering up to 16 CFM may be required.

For smaller compressors, make sure to increase the compressor maintenance interval and verify that your compressor has the best cooling airflow possible.

When filling or servicing the blast cabinet, there is a risk of subjecting the compressor to airborne media or dust. Be sure to locate the blast cabinet away from the compressor operating environment. If even small amounts of fine media dust enter the compressor through the intake or during general service, rings, pistons, valves, and bearings can be quickly destroyed.

Remove any in-line oilers, make the supply line long enough to allow the compressed air to fully cool before it reaches the gun, and install an in-line water separator or air dryer. Tilt air supply lines slightly back toward the compressor so residual condensation in the lines will run back to the tank instead of the media blasting unit. For a general summary of the typical air system of this blast cabinet and supply system, refer to the **Air System Diagram** on **Page 39**.

If using an existing air system, eliminate air supply restrictions and pressure drops that may occur at small quick-disconnect fittings, elbows, small supply piping, undersized water separators, kinked lines, or rust-filled piping.

Typically, when installing a new supply line for the blast cabinet with a 125 foot run or less, the air supply line up to the regulator inlet should have an inside diameter of 3/4". For runs up to 300', a supply line with a 1" inside diameter is recommended.

If an air compressor is not available or the blast cabinet is to be used at a remote location, NEVER connect this blast cabinet to pressurized bottled gasses such as oxygen bottles used in welding operations. Line ruptures or explosions can occur, causing equipment damage, serious injury, or death.

Make sure to install an air supply quick-disconnect fitting or a shut-off valve that can be locked out to prevent the air pressure from accidentally being turned on. These items allow for the blast cabinet to be serviced safely or allow it to sit idle when not in use.



Assembly

To assemble the blast cabinet:

- With the help of an assistant, lay a sheet of cardboard on the floor to protect the media blasting cabinet, and place the cabinet on its side or back.
- 2. Using a #2 Phillips screwdriver, fasten all four legs to the underside of the cabinet with (16) 1/4-20 x 1/2" cabinet screws and flange nuts (**Figure 6**).

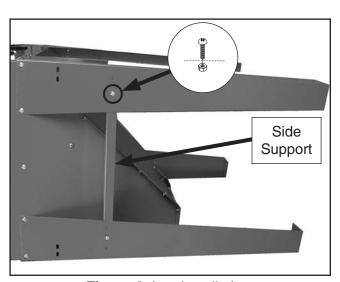


Figure 6. Leg installation.

- **3.** Attach the two side supports (**Figure 6**) to the left and right set of legs with four cabinet screws and flange nuts.
- **4.** With the help of an assistant, stand the blast cabinet upon the legs.
- 5. Remove the lamp box from inside of the cabinet, place the glass and the lamp box onto the top of the cabinet, and fasten them to the the cabinet with the six 1/4-20 x 1/2" cabinet screws.
- **6.** Fasten the pressure gauge and regulator "L" bracket (**Figure 7**) to the left front leg using two cabinet screws and flange nuts.

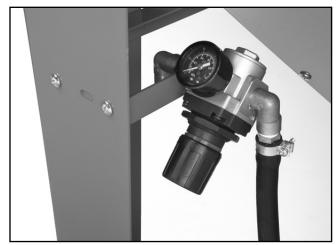


Figure 7. Regulator assembly.

7. Using three Phillips screws and flange nuts, fasten the hopper valve and chute door to the hopper, as shown in **Figure 8**. When secured, latch the hopper door closed.

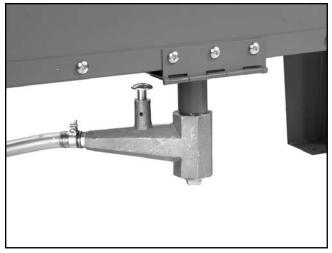


Figure 8. Hopper valve and chute door.

8. Using a Phillips screwdriver, remove the suction port baffle (**Figure 9**).

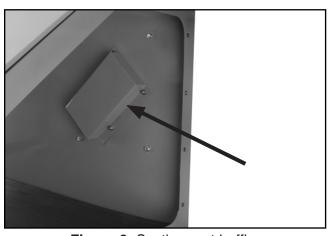


Figure 9. Suction port baffle.



9. Using four cabinet screws and flange nuts, fasten the dust collector to the rear of the cabinet, so the suction port protrudes through the hole cut into the back of the cabinet (Figure 10).

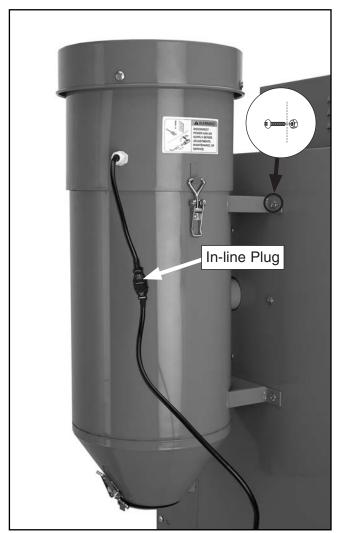


Figure 10. Dust collector.

- Plug the dust collector into the in-line power supply plug protruding from the control box (Figure 10).
- **11.** Unlatch the dust collector motor (**Figure 10**), lift the dust collector out of the canister, and set it aside.
- 12. Working from inside of the canister, insert the canister plunger through the canister wall so it can be seen protruding from the outside of the canister.

13. Place the spring on the plunger shaft, and thread the jam nut and knob onto the plunger, as shown in **Figure 11**.

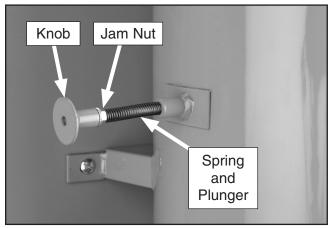


Figure 11. Canister plunger.

- 14. Re-install the dust collector into the canister.
- **15.** Using a 10mm wrench, tighten the jam nut against the knob.
- **16.** Using silicone (not supplied), seal the gap between the suction port and the hole in the cabinet wall (**Figure 12**).

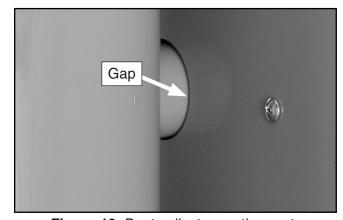


Figure 12. Dust collector suction port.

17. Re-install the baffle and install both side doors with the eight M5-.8 x 10 flat head screws and hex nuts already in the cabinet.



18. Verify that a plastic dust sheet is affixed to the inside of the cabinet viewing window and the lamp window (**Figure 13**).

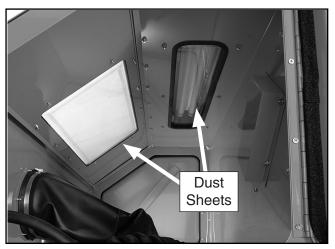


Figure 13. Viewing window and lamp window.

19. Using the fasteners already in the cabinet and doors, install the doors, then receivers, and adjust the receivers so the doors slightly compress the foam seal when closed (Figure 14).

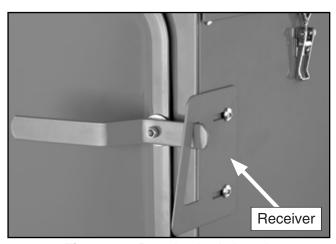


Figure 14. Door latched closed.

20. Lift the work table up, and route the blasting gun and hoses to the right-front side of the work table (**Figure 15**).



Figure 15. Work table and blast gun positioning.

21. Position the foot pedal (**Figure 16**) between the legs where it will be convenient to use. The pedal may also be fastened to the floor if the unit will not be moved.



Figure 16. Foot pedal positioning.



- 22. Pour the desired amount of media into the cabinet through one of the side doors. DO NOT overfill.
- 23. Wait 24 hours for the silicone sealant to fully setup and dry. Otherwise, when the machine is turned on and media blasting begins, the seal may be broken, causing leakage.
- **24.** Inspect all seals, hose clamps, glove clamps, and window seals for any potential leaks. Correct as required.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation. The test run consists of verifying the following: 1) The dust collector powers up and runs correctly, 2) the ON/OFF button works correctly, 3) the air system, controls, and the lamp work correctly, 4) and that there are no air leaks.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 30**.

If you cannot find a remedy, contact our Tech Support at (570) 546-9663 for assistance.

AWARNING

Before starting the machine, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run the machine:

- Make sure you understand the safety instructions at the beginning of the manual and that the machine is setup properly.
- 2. Make sure all tools and objects used during setup are cleared away from the machine.
- **3.** Make sure that the power switch is in the OFF position (see **Figure 17**).

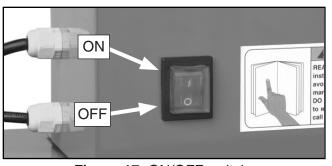


Figure 17. ON/OFF switch.

Model G0708 (Mfd. Since 1/21)



- **4.** Connect the machine to the power source.
- **5.** Verify that the machine operates correctly by pushing the ON button.
 - —When operating correctly, the dust collector runs smoothly with little or no vibration or rubbing noises and both fluorescent lamps will illuminate.
 - —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
- **6.** Press the OFF button.
- **7.** Put on safety glasses, and connect the blast cabinet to the air supply.
- **8.** Adjust the regulator knob to 120 PSI as shown on the gauge.

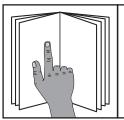
- **9.** Close all doors, grasp the blast gun and press the foot pedal. Air should exit from the blast gun.
 - **Note:** If after this test, the regulator gauge needle drops more than a few PSI when you press the foot pedal, verify that the air supply is not restricted. If setup correctly, the blast gun media suction tube should draw 15-17 inches of mercury on a manometer.
- 10. Listen for air leaks, and use a solution of warm water and dish soap on any areas where possible leaks may be located. Correct and reseal as required.
- **11.** Adjust the air pressure down to 60 PSI and disconnect the air supply and the electrical power supply.



SECTION 4: OPERATIONS

AWARNING

Media blasting presents a real hazard of silicosis and other lung contamination injuries! These injuries are permanent and can get worse over time. If you use media blasting equipment without the proper eye protection and respirator, your lungs and eyes may become irreversibly contaminated. DO NOT use this blast cabinet unless you know how to use it, protect yourself correctly, and keep all unprotected bystanders away. For the latest types of protective equipment and acceptable respirator types, contact your local OSHA or NIOSH office.



AWARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear safety goggles and a respirator when operating this machine.





NOTICE

If you have never used this type of equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Preparation

AWARNING

NEVER sand blast with the doors open, point the gun at yourself or anyone else, or attempt to service any part of this machine while it is plugged in or connected to air pressure. ALWAYS disconnect the blast cabinet from power and air pressure when not in use, or during maintenance or adjustments. Ignoring this warning may lead to severe injury.

To prepare for a typical media blasting operation:

- **1.** Conduct the daily-check of the cabinet.
- 2. Select and install the required blast tip, load the media, and empty dust collector canister.
- **3.** Empty the air supply water separators, connect power and air to the cabinet, and adjust the regulator to the required air pressure.
- **4.** Remove water, oil, grease, and loose paint or scale from the workpiece, then place the workpiece into blast cabinet.
- **5.** Put on your safety goggles and a respirator, and begin the media blasting operation.



Basic Operation

This section details the correct order of operations for using the Model G0708.

To use the blast cabinet:

- Conduct the daily check listed in Maintenance on Page 29.
- Prepare the workpiece as discussed in Pre-Use Overview on Page 20.
- 3. PUT ON safety goggles and a respirator.
- 4. Select and load the blasting media through one of the doors. Never load media that contains free silica, as this is a leading cause of silicosis. Refer to Page 25 for media types.

Note: Loading just enough media for the job at hand will help you prevent over-using or having to screen excess media. Typically use enough media to cover the metering valve opening by 6" Keep the metering valve adjusted properly for the type of media blasting being done and the media being used.

Note: If the metering valve screw (Figure 18) is turned clockwise and restricts the vents too much, the gun will pulsate and a low-velocity rich-media spray will result. If the metering valve screw is turned counterclockwise too far, opening the vents too much, the gun will be noisy and a lean media spray will result. Under both conditions, low productivity is the ultimate outcome. Trial-and-error is the best way to sort out your adjustments for the type of media and blasting to be done.

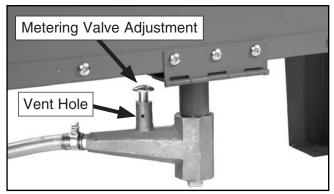


Figure 18. Metering valve. Model G0708 (Mfd. Since 1/21)

Install the correct tip into the blast gun, in the order shown (Figure 19). For lower air use the 6mm tip is used most often. Refer to Page 25 for air pressure and media options.

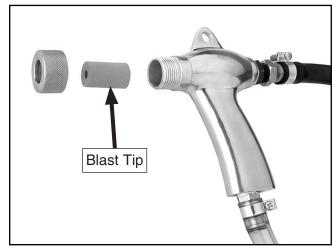


Figure 19. Blast tip installation.

Note: It is very important to maintain concentricity of the tip orifice as it wears. To do this you must rotate the media blasting tip \(^1/4\)-turn every 10 to 12 hours of use. Worn tips make an inconsistent media spray pattern. As a result, surfaces can be left with streaking or spots of tear-out. Replace any tip that has worn \(^1/16\)" in diameter larger than its original size.

6. Empty the dust collector canister periodically during long blasting operations and after every use. Every five hours of blasting operations, clean the canister filter using compressed air (Figure 20).

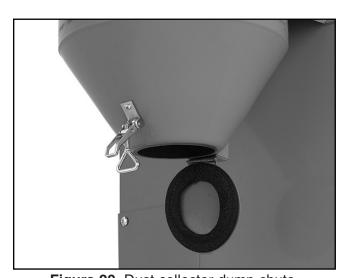


Figure 20. Dust collector dump chute.



- **7.** Empty the applicable water separators and connect the media blasting cabinet to power and to the air supply.
- 8. Turn the regulator knob to adjust the air pressure to the desired setting (**Figure 21**). Typically this is a trial-and-error process, but a good range to start at is between 60 and 80 PSI.



Figure 21. Air pressure regulator.

9. Place the properly-cleaned workpiece into the blast cabinet, close the doors, then move the latches until completely locked (**Figure 22**).



Figure 22. Properly latched door.

10. Inspect the windows (Figure 23) for clarity and for any evidence of damage to the protective film. Peel off worn or damaged film and affix new sheets as required. Replace the sheets BEFORE they are worn through. If using an aggressive media, you may have to double the sheets to protect from wear-through before your blasting project is finished. NEVER WIPE WINDOWS WITH WET OR DRY RAGS! Doing so will scratch the viewing surface. Instead, vacuum media away and then gently brush the remnants off the glass with a soft paint brush. If visibility becomes a problem, refer to Troubleshooting on Page 30 for further solutions.



Figure 23. Viewing windows.

11. Push the power switch to start the dust collector and to turn the work lamps *ON* (Figure 24).

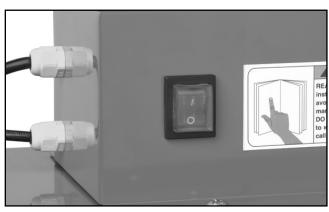


Figure 24. Main power button.

12. Point the blast gun tip at the workpiece in a direction where the ricochetting spray of abrasive will not contact the windows.



13. Slowly press on the foot pedal (Figure 25) and move the blast tip in a slow circular motion. Abrasive media will begin spraying from the blast qun tip.

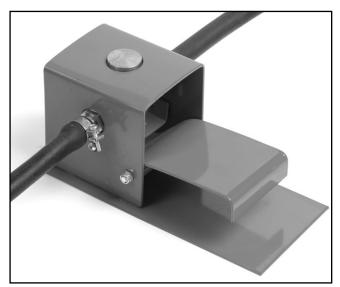


Figure 25. Blast gun ON/OFF control.

Note: For most media blasting operations, maintain a blast distance of six inches. Maintain a blasting spray at a 45°-60° degree angle from the workpiece so the media will ricochet off and not directly impact the lamp or viewing window. Doing this will help maintain workpiece visibility and make the protective viewing window film and media last longer. Do not point the gun at the workpiece where the tip is perpendicular or 90° degrees from the surface.

Note: When media blasting thin materials made of aluminum, copper, brass, wood, or other delicate parts, select the correct media and begin blasting at a low pressure, such as 45 PSI. Next, slowly increase the air pressure until you achieve the finish required. When using some types of glass bead media, you may have to keep the operating pressure between 50-80 PSI, or the media will break down prematurely. Some media like silicon carbide and aluminium oxide can withstand pressures of up to 120 PSI on this machine; however, most media blasting operations should occur at 80 PSI.

Note: If the gun or metering valve begins to clog or becomes completely clogged during use, cover the hole in the blast tip tightly, and pull the gun trigger. Air pressure will be then diverted back through the media suction piping and usually blow out the clog.

If clogging still persists, it is likely that the moisture or contamination ratio in the media is too high, or there could be a loose fitting or leak in a hose. Dry out the media, install a moisture trap, screen or replace the media, or check for leaking hose.

Only use high quality DRY media. DO NOT use regular sand, and recognize when media has broken down and is too fine or loaded up with contaminants to work properly. Worn-out media and contaminants will cause caking and clogging.

If clogging persists, refer to **Troubleshooting** on **Page 30** for further solutions.

14. Every 20-30 minutes during cabinet use, push the canister plunger in until it stops, then let your thumb slide off of the button so the spring slaps the plunger back against the canister wall. This causes vibration that knocks off the material which is caked onto the outside of the filter (Figure 26). Every five hours of cabinet use, service the dust collector filter. Refer to Maintenance on Page 29 for procedures.



Figure 26. Canister plunger.

15. When media blasting is complete, disconnect the cabinet from power and the air supply.



Blasting Media

Media Cost vs. Productivity

Often it is assumed that by using low-cost media, such as basic builder's sand or play sand, the worker can enjoy increased productivity costs because sand is so cheap. However, since sand is a "Dull Media," the blasting tip size must be increased and higher air pressure and more CFM are required to increase the blast velocity to overcome the dull media problem. This compensation usually results in longer compressor duty cycles that can overheat some units.

Compressor maintenance cycles, power consumption, and water separator service intervals may increase. Additionally, general sand can cause increased down-time from clogging tips, hoses, and valves, and generally create a hazardous, silica-laden environment.

With the correct research, excellent productivity can be achieved using sharp media with a smaller tip and less air pressure than with dull media at a higher pressure.

Maximizing Media Life

Screen the used media with a series of wire mesh screens to refine it to one consistent size. When using the blasting cabinet, experiment with using the least amount of media as possible. The result of using less media is that you will have less material to screen or discard and more fresh media for mixed projects. Store media in a dry place.

Grizzly Blasting Media Part Numbers

G6535: 15 lbs. Aluminum Oxide 220 Grit. **G6536:** 15 lbs. Aluminum Oxide 120 Grit. **G6537:** 15 lbs. Aluminum Oxide 60 Grit. **G6538:** 15 lbs. Glass Bead 50-Micron Grit.

Some of the common blasting media types are listed below with the MOH scale hardness value. All media have benefits and drawbacks, such as the quality of surface finish, media life, toxicity, and the precautions that must be taken to prevent environmental damage or personal injury to your respiratory system. However, all media presents a health risk. Never use media that contains free silica.

Aluminum Oxide (8.5-9)

For surface finishing, aluminum oxide is one of the most common and widely used media. Having an angular shape, it is considered an extremely sharp, has extended blasting times, and is highly recyclable.

Silicon Carbide (9-9.5)

This blast media is considered to be the hardest available. The crystal structure is sharp, cutting is fast and aggressive. This media is often use to engrave and etch glass and stone. Shorter blasting periods also result from this hard and sharp media. Silicon carbide has no free silica and it can be recycled many times.

Sand Type Media (6-7)

This media is easy to find and gives an average finish that is acceptable for many projects. Sand has a good recycling life and is economical. However, the cutting ability at lower air pressure and CFM can be poor—with a higher hazard of silicosis and machine clogging. Many sand-type media contain free silica and present a health hazard for silicosis.

Continued on next page ———



Steel Type Media

This aggressive media creates a rough finish that accepts paint well. The media is very durable and has a long life; however, it MUST be kept very dry to prevent rusting. The main types are as follows:

- —Steel Grit (8-9): Compared to aluminum oxide, steel grit is softer and has a low habit of fracture, which leaves an excellent etched surface on rubber coatings, paints, and other coatings. This is a popular choice for aircraft applications. Steel grit comes in many grit sizes and hardness.
- —Steel Shot (6-7.5): Steel shot is one of the most widely used media for stripping, cleaning, and general improvements of metal surfaces. This media has a rounded-ball shape and comes in many grades, sizes, and hardness. In most instances, this type of media gives the surface a shiny or polished look. Steel shot peening also serves as a method to strengthen machinery parts such as impeller fins, bearing parts, springs, and torsional components. This media does not create high amounts of dust and has a superior recycle rate.

Glass and Garnet Type Media

Glass media contains no free silica or heavy metals and is non-toxic and inert. This media works well for soft metals and is a common choice when critical tolerances of machine parts must not be affected. The life of this media is limited and is not well-suited for repetitive screening and recycling.

—Glass Beads (5.5): Just as the name indicates, this media is round in shape, chemically inert, and has no dangerous free silica. The glass beads come in various grit sizes and hardness. It is manufactured from lead-free, soda lime-type glass. Unlike angular abrasives that cut, these beads burnish and leave a bright finish that typically will have no dimensional change. The beads can be recycled many times. Common applications are honing wood, blending surfaces, polishing, peening, finishing surfaces, removing scratches, and basic cleaning of most materials.

- —Crushed Glass (5.5): This media is created from recycled bottle glass, and other glass. The media described here has a sharp cutting behavior, as the particles are angular shaped. Often this media is used to remove epoxy coatings, glues, polyure-thanes, vinyls, elastomers, rubbers and tar. Surfaces have less imbedded particles with this media, and as a result, the finishes are usually very light and clean-looking.
- —Garnet (6.5-7.5): This is a very effective blast media typically used in shipyards and the oil and gas sector where steel pipes and fittings must be cleaned. This media is also used on brick, stone, and stainless steel. It is naturally occurring and very dense and hard. The recyclability is good, and it is a common choice for use in cabinet-type blast cabinets.

Slag Media

Slag media are by-products of various types of smelting and coal burning processes. Be aware that some slag media may contain unwanted by-products from these processes.

- —Copper Slag (7-8): This media is considered an expendable media and is a very good alternative to sand media. Copper slag is a by-product from the copper manufacturing process and it is very economical but non-reusable. Compared to the use of silica sand usage, it does not present a silicosis health hazard. Blasting operations best suited for this media are cleaning rust, mill scale, and paint from steel. Copper slag leaves a good surface that is ready to anchor and bond coatings and paints. The structure is blocky and sharp-edged.
- —Coal Slag (6-7): This type of media is made from liquid coal slag from utility boilers. The material is hardened and crushed into a fast-cutting media that is sharp and angular. This media creates little dust, but can release hazardous pollutants into the air. Various grit sizes can be used from light blasting operations to heavy-duty rust, paint, and mill scale removal. The resulting finish is a good surface ready to anchor and bond coatings and paints.



Plastic Beads

Plastic abrasives are available in a variety of types such as urea, melamine, and acrylic compositions. These beads are shaped just as indicated and give reliable and consistent stripping results. Paints, varnishes, rusts, and oxidation can be stripped from soft metals, plastics, and wood. The aerospace and automotive industry are chief consumers of this blast media.

- —Urea (3-4): Considered to be an enviornmentally-friendly choice, urea is the most commonly used plastic media. It is recyclable and is an excellent choice for stripping tough coatings when speed is a high priority and the surface is not critical.
- —Melamine (3-4): Also a long-lasting recyclable media, this abrasive is the most aggressive in the family of the plastic beads. Due to its hardness, it can strip hard-to-remove coatings and be the substitute for some of the other types of glass beads.
- —Acrylic (3-4): This is a multipurpose blast media that is one of the longest lasting types available. It is often used for stripping sensitive surfaces or delicate parts that may consist of multiple types of compounds. It is available in a wide range of grit sizes.

Soft Blast Media

There are many types of "Soft" blast media, many of which are minerals, inert, and organic. Some blast cabinets with dust collection systems require special filters or dust collectors for soft types of media. For the Model G0708, filter cleaning interval will have to be increased to maintain flow.

—Ground Walnut: (4.5-5) This is a soft media that is produced from crushed or ground walnut shells. The structure is multi-faceted and angular with no free silica in the media. Durability is excellent, and this media is a good choice for blasting operations where the paint, varnish, or coating must be cleaned but not marred or removed. Hardwoods, jewelry, and electrical items can also be cleaned with this media. Using a larger grit under higher pressure settings, paint and varnishes, and engine parts can be cleaned of coke and carbon deposits.

- —Pumice (6-7): This media is the softest media available and is a natural volcanic ash that is an inert mineral. Pumice can be used for the most sensitive blasting operations where the painted or finished surface must be entirely unaffected by the removal of the foreign matter. The structure is block-shaped and is honeycombed.
- —Ground Corn Cob (4.5): Is an organic, soft blasting grit that has an angular shape. It has excellent surface cleaning behavior that is similar to ground walnut and peanut shells. Corn cob media is commonly used to strip bark off of wood, light coatings, and dirt without surface damage or grain blowout. It is available in a selection of grit sizes.
- —Sodium Bicarbonate (2.4): Baking soda is inert and has an excellent ability to remove and absorb the dirt or contaminants from a surface. It will not peen or cut the underlying workpiece. This important media can be used where small ports and bores must be cleaned without the hazard of clogging the passages. The workpiece and its passages can be cleaned with water as this blast media is water soluble.



Media Notes



SECTION 5: ACCESSORIES

WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

Grizzly PRO G0928—60-Gallon 5.0 HP Extreme Series Compressor

The Grizzly G0928 60-Gallon 5.0 HP Extreme Series Compressor operates at low RPMs for extended life and low maintenance. The 5.0 HP 220V motor operates with a maximum pressure of 175 PSI. This compressor delivers 13.5 CFM at 175 PSI and 15.3 CFM at 100 PSI.

Grizzly PRO G0929—80-Gallon 4.7 HP Stationary Air Compressor

The Grizzly PRO G0929 80-Gallon 4.7 HP Stationary Air Compressor will be more than enough to satisfy your garage or industrial needs. The 4.7 HP 230V motor operates with a maximum pressure of 155 PSI. This compressor delivers 14.0 CFM at 90 PSI and 16.1 CFM at 40 PSI.

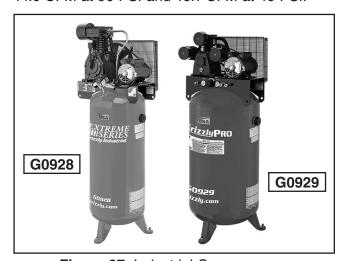


Figure 27. Industrial Compressors.

H2499—Small Half-Mask Respirator H3631—Medium Half-Mask Respirator

H3632—Large Half-Mask Respirator

H3635—Cartridge Filter Pair P100
Wood dust has been linked to nasal cancer and severe respiratory illnesses. If you work around-

severe respiratory illnesses. If you work arounddust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



Figure 28. Half-mask respirator with disposable cartridge filters.

Basic Eye Protection

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20452—"Kirova" Anti-Reflective S. Glasses

T20456—DAKURA Safety Glasses, Black/Clear



Figure 29. Assortment of basic eye protection.

SECTION 6: MAINTENANCE

Schedule

Always disconnect power and the air supply to the machine before performing maintenance. Failure to do this may result in serious personal injury.

For safe and optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check:

- Inspect all fittings and hoses for leaks.
- Inspect for damaged or leaking door seals.
- Make sure water separators are drained.
- Make sure the dust collector is empty and the filter is clean.
- Verify the media is correct for task.
- Verify the air pressure is set correctly.
- Inspect for worn or damaged power cord.
- Look for any other unsafe condition.
- Replace window protective film for holes or excessive etching. Replace the sheets BEFORE they are worn through and the window is damaged.
- Rotate blast tip to compensate for wear.
- Blow out dust collector filter every five hours.

Monthly Check:

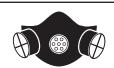
- Use soapy water on fittings and hoses while looking for bubbles that indicate leaks.
- Verify all fasteners and clamps are tight.
- Inspect suction lines carefully for spots that collapse or leak during operation.
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Inspect work gloves for holes or wear.
- Empty cabinet, wipe down inside and inspect for leaks or damage.
- Cover windows and repaint bare metal portions of cabinet.
- Remove filter and clean/replace as required.

Cleaning

AWARNING

Wear safety goggles and a respirator when cleaning the cabinet or the filter. Failure to comply can cause serious personal injury.





Wipe down the exterior of the cabinet with a light solution of mild dish soap and water, then dry with a clean towel. To avoid scratching windows, never wipe windows with wet or dry rags. Instead, vacuum media away and then gently brush the remnants off of the glass with a soft paint brush.

The blast cabinet is equipped with 6¾" diameter x 12" long pleated filter that is designed to filter media and contaminants from air that re-enters the shop. During operation, basic de-caking is done manually every 20 to 30 minutes with the canister plunger. Empty the canister (**Figure 30**) at least every five hours of use. Typically this media is discarded as it has a high ratio of fine dust contaminants. For major cleaning, unlatch the top of the dust collector and remove the filter element. Inspect all sealing foam and replace as required. Clean the filter canister pleats by carefully blowing it from the inside out with compressed air. If usability of the filter is in question, or any holes or tears exist, replace it.

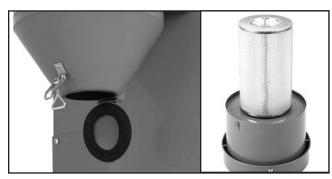


Figure 30. Dust collector service.



SECTION 7: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Operation

Intermittent,	Suction tube has been clogged from a	Cover blast tip and press the foot pedal to use
clogging, or no	contaminant.	air pressure to purge the foot valve and suction
media spray at the blast gun; or		system. Repeat this step periodically during
striping is occurring		blasting operations.
on the workpiece.	2. Incorrect media.	2. Verify that the media chosen is the correct material
·		for your blasting operation (Page 25), and that
		the media is not worn out or contaminated with
		moisture. Screen or replace media as required.
	3. Worn or incorrect blast tip.	Disconnect machine from air and inspect blast
		tip for wear and rotate 1/4-turn to unworn tip area.
		Replace or install with correct blast tip.
	4. Low air flow or pressure up to cabinet.	4. Troubleshoot air supply system and verify the
		compressor, supply lines, moisture separators, and
		air dryers have the correct air flow and are in good
		working order.
	5. Blasting system has incorrect air flow or	5. Adjust the air regulator on cabinet to maintain
	pressure.	correct air pressure and flow, and verify no hose
		kinks or clogs exist.
	6. Cabinet is overloaded with media.	6. Remove media but leave just enough for blasting
		operation.
	7. Media metering valve is out of adjustment.	7. Turn the metering valve adjustment screw
		clockwise in small increments until proper media
		output is achieved (Page 22).
	8. Blast gun is damaged or has bad seals.	8. Disassemble blast gun, clean and reseal.
	9. Foot valve is damaged, clogged, or has	9. Clean and reseal foot valve.
	leaks.	



Motor and Electrical

Symptom	Possible Cause	Possible Solution
Dust collector won't start or circuit	Damaged or loose power cord.	Re-secure and test the power cord. Replace as required.
breaker trips.	2. ON/OFF switch at fault.	2. Test and replace open switch.
	3. Circuit breaker/fuse has tripped.	Verify that a short does not exist and that the motor brushes are not shorted, replace motor brushes if required, and reset circuit breaker.
	4. Wiring at fault.	4. Repair for open or shorted wiring connections.
	5. Motor brushes at fault.	5. Replace motor brushes (Page).
	6. Motor at fault.	6. Test and replace motor as required.
Lamp is dim or will	1. Lamp is burned out.	Replace both lamp bulbs.
not illuminate.	2. Ballast is at fault.	2. Replace ballast.
	3. ON/OFF switch at fault.	3. Test and replace open switch.
	4. Wiring at fault.	4. Repair for open or shorted wiring connections.

Filter Replacement

AWARNING

Wear safety goggles and a respirator when cleaning the cabinet or the filter. Failure to comply can cause serious personal injury.





Replace the filter when it no longer cleans the air– even after being cleaned with compressed air.

To replace the filter:

- DISCONNECT MACHINE FROM POWER!
- 2. Unlatch (Figure 31) the dust collector and lift the entire motor and filter unit out of the canister and place it on a workbench upside down.
- **3.** Spin the wing nut off of the retaining stud, and remove the filter (**Figure 31**).
- Place a new five-micron filter over the retaining stud, then reinstall the wing nut and the dust collector.

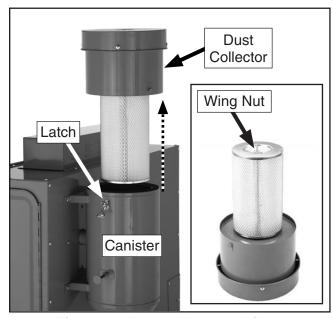


Figure 31. Dust collector and filter.

Motor Brush Replacement

During the life of your media blasting cabinet, you may find it necessary to replace the dust collector motor brushes. If the motor operates loudly, or the dust collector still has low suction after a new filter has been installed, the motor brushes likely have reached the end of their usable life and need to be replaced.

Tools Needed	Qty
Phillips Screwdriver #2	1
Standard Screwdriver #2	1
Acetone and Cotton Rag	1
Crocus Cloth (From Local Auto Parts Sto	re) 1
Brush Set	´ 1

To replace the brushes:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Unlatch the dust collector and lift the entire motor and filter unit out of the canister and place it on a workbench for ease of service (Figure 32).

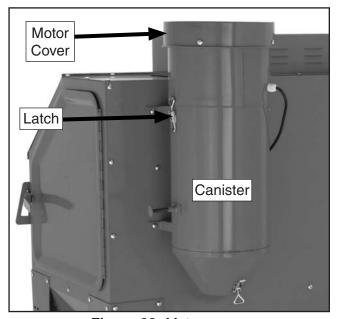


Figure 32. Motor cover.

3. Using the Phillips screwdriver, remove the four motor cover screws and the cover (**Figure 32**).

4. While pulling the fan cover upwards, use a standard screwdriver to slightly pry out the cover lock tangs (**Figure 33**) and remove the cover from the motor.

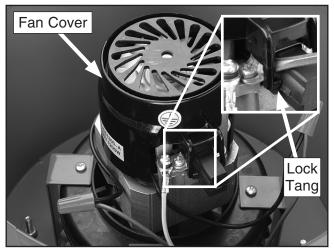


Figure 33. Brush removal.

5. Using the Phillips screwdriver, remove the two retainer screws for each brush housing and remove the retainers (**Figure 34**).

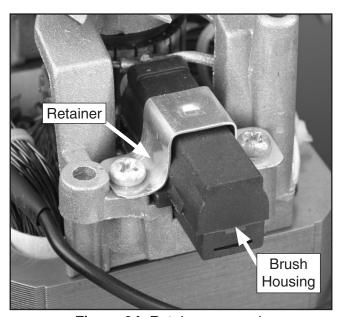


Figure 34. Retainer removal.



6. Lift each brush housing out of its seat and unplug the power wire (**Figure 35**).

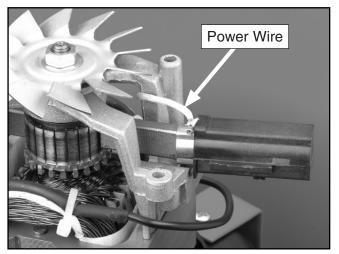


Figure 35. Brush housing removal.

Slide the brush assembly apart, clean the housings and brass sleeves with mineral spirits, and allow the parts to dry (Figure 36).



Figure 36. Brush assembly.

- **8.** Reassemble the housings with the brass sleeves and the new carbon brushes (**Figure 36**) and set aside.
- 9. Inspect the commutator surface (Figure 37).

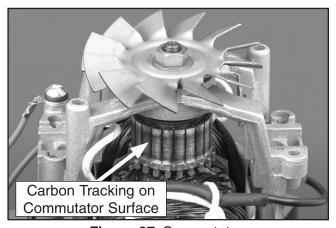


Figure 37. Commutator.

- —If the brushes have worn deep grooves in the commutator, we recommend replacing the motor. Typically the labor involved with re-turning the commutator on a lathe and then undercutting the insulator segments far exceeds the price of a new motor.
- —If the commutator only has minor wear and black-colored carbon tracking (Figure 37), use a fine crocus cloth to polish the commutator where the brushes ride. DO NOT use emery cloth or sandpaper to clean the commutator or you will make it out-ofround, which will cause the new brushes to arc, overheat, and wear out quickly.

Finish the cleaning process by using acetone and a cotton rag to wipe off any oils or contaminants from the commutator.

 Insert the power wire spade terminal into the brush assembly between the brass sleeve and the housing (Figure 38).

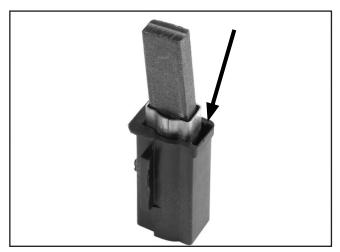


Figure 38. Brush power lead location.

11. Place the brush housing into the brush seat on the motor, and place the retainer over the brush housing so the lock lug drops into the slot in the brush housing (**Figure 39**).

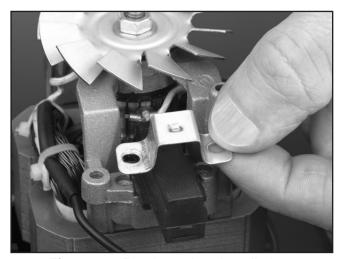


Figure 39. Brush retainer installation.

- **12.** Install and tighten the brush housing retaining screws.
- 13. When the brush housings are installed, make sure to route the brush power wires well away from the commutator, as shown in Figure 40, or the commutator will wear into the wire, causing an electrical short.

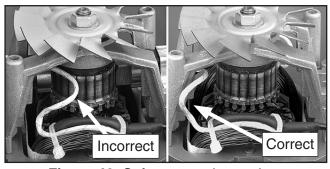


Figure 40. Safe power wire routing.

14. Place the fan cover back onto the motor so the lock tangs lock onto the brush housings, as shown in **Figure 41**.

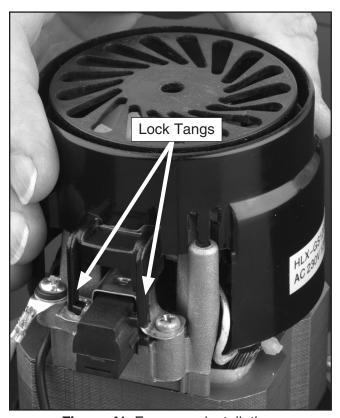


Figure 41. Fan cover installation.

- 15. Route the motor cover and the dust collector assembly into the canister, and latch the dust collector in place.
- **16.** Test the dust collector operation.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this section carefully. If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine.

AWARNINGWiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

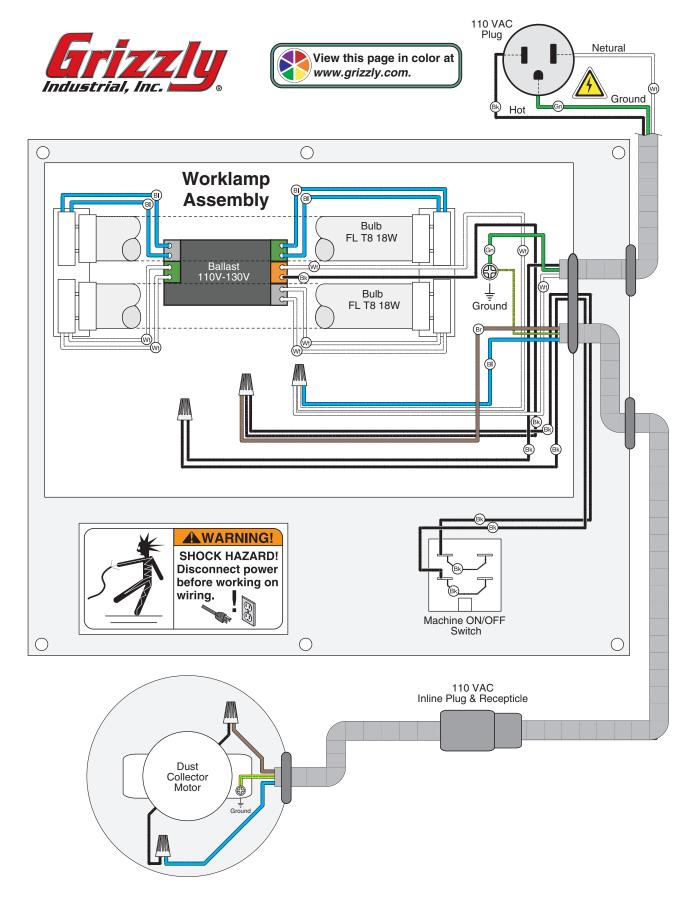
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE **COLOR KEY** BLACK • The photos and diagrams BLUE YELLOW LIGHT included in this section are YELLOW WHITE = BROWN **BLUE** GREEN best viewed in color. You WHITE GREEN • **GRAY** PURPLE can view these pages in TUR-QUOISE (Rd) **PINK** RED **ORANGE** color at www.grizzly.com.



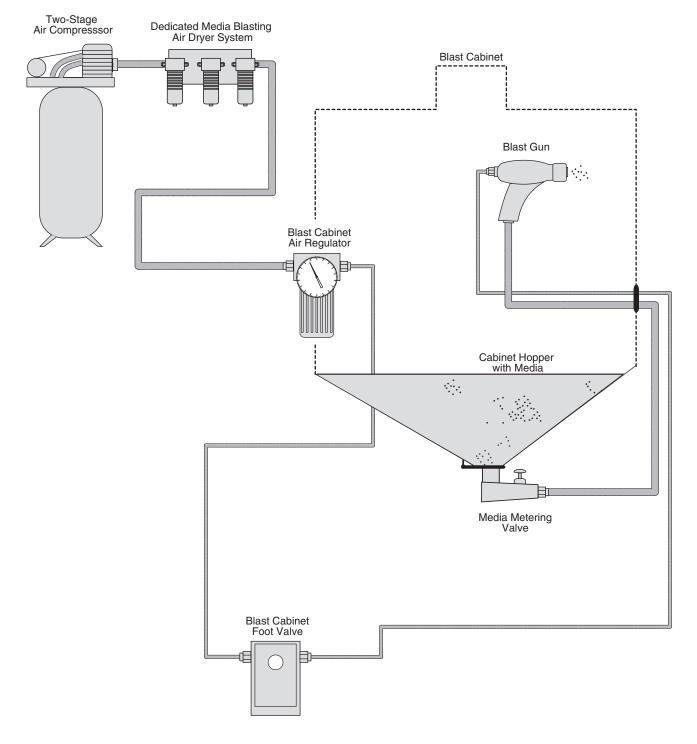
Wiring Diagram



Air System Diagram







Electrical Component Locations



Figure 43. Lamp ballast.

Figure 45. Power switch and lamp connection.

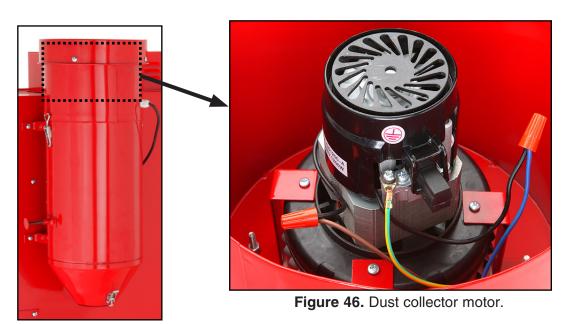
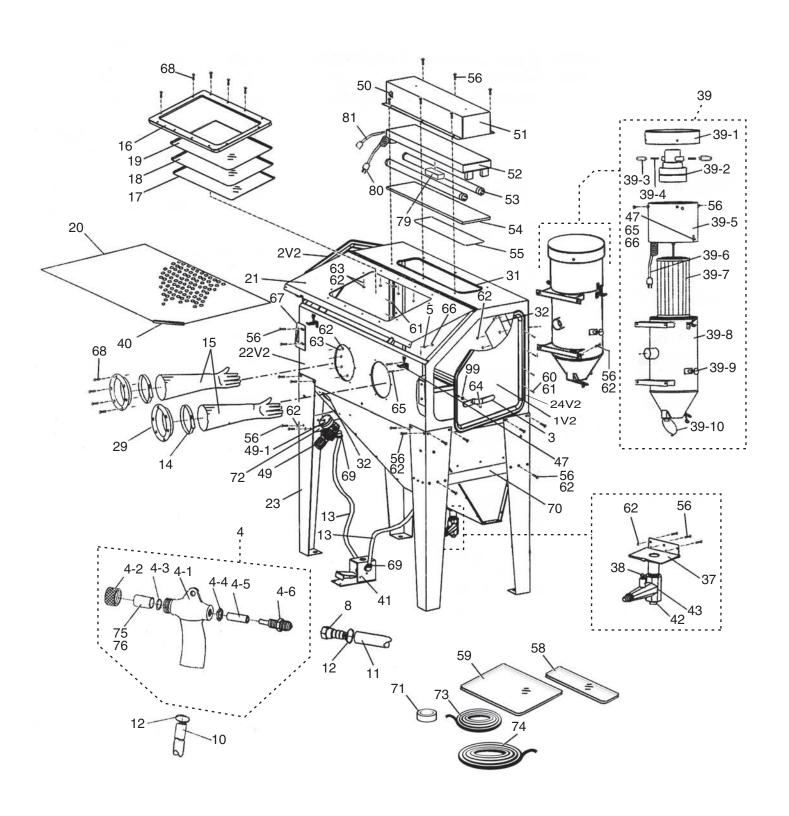


Figure 44. Dust collector unit.



SECTION 9: PARTS



Parts List

REF PART # DESCRIPTION

1V2	P0708001V2	RIGHT DOOR V2.01.21		
2V2	P0708002V2	LEFT DOOR V2.01.21		
3	P0708003	DOOR LEVER		
4	P0708004	BLAST GUN ASSEMBLY		
4-1	P0708004-1	BLAST GUN BODY		
4-2	P0708004-2	NOZZLE NUT		
4-3	P0708004-3	O-RING 17.8 X 2.4 P18		
4-4	P0708004-4	BRASS JET NUT		
4-5	P0708004-5	AIR JET SLEEVE		
4-6	P0708004-6	AIR JET		
5	P0708005	FLAT WASHER 4MM		
8	P0708008	PUSH-ON SWIVEL FITTING 3/8"		
10	P0708010	MEDIA HOSE 1/2" ID		
11	P0708011	AIR HOSE 1/2" ID		
12	P0708012	HOSE CLAMP 1/2"		
13	P0708013	AIR HOSE		
14	P0708014	GLOVE CLAMP		
15	P0708015	SANDBLASTING GLOVES		
16	P0708016	WINDOW FRAME		
17	P0708017	WINDOW COVER FILM 21-1/2" X 9-3/4"		
18	P0708018	VIEWING WINDOW GLASS		
19	P0708019	PLEXIGLASS WINDOW		
20	P0708020	WORK TABLE		
21	P0708021	FRONT LOADING DOOR		
22V2	P0708022V2	BLAST CABINET BODY V2.01.21		
23	P0708023	LEG		
24V2	P0708024V2	DOOR GASKET V2.01.21		
29	P0708029	GLOVE MOUNTING RING		
31	P0708031	SEAL		
32	P0708032	BAFFLE PLATE		
36	P0708036	VENTED WORK TABLE		
37	P0708037	DUMP CHUTE DOOR		
38	P0708038	FLOW ADJUSTMENT SCREW		
39	P0708039	DUST COLLECTOR ASSEMBLY		
39-1	P0708039-1	MOTOR COVER		
39-2	P0708039-2	UNIVERSAL MOTOR 110V		
39-3	P0708039-3	PLASTIC/BRASS BRUSH HOLDER		
39-4	P0708039-4	CARBON BRUSH SET		
39-5	P0708039-5	MAIN HOUSING		
39-6	P0708039-6	MALE POWER CORD 3-WIRE 14-GA		
39-7	P0708039-7	CARTRIDGE FILTER 5-MICRON		

REF PART # DESCRIPTION

39-8	P0708039-8	CANISTER		
39-9	P0708039-9	CANISTER PLUNGER W/SPRING		
39-10	P0708039-10	CLEANOUT DOOR		
40	P0708040	RUBBER EDGE SEAL		
41	P0708041	FOOT VALVE		
42	P0708042	VALVE PLUG		
43	P0708043	MEDIA METERING VALVE		
47	P0708047	LATCH ASSEMBLY		
49	P0708049	AIR PRESSURE REGULATOR W/GAUGE		
49-1	P0708049-1	AIR PRESSURE GAUGE		
50	P0708050	POWER SWITCH		
51	P0708051	LAMP COVER		
52	P0708052	LAMP HOUSING		
53	P0708053	FLORESCENT BULB 18W		
54	P0708054	LAMP WINDOW GLASS		
55	P0708055	WINDOW COVER FILM 21-1/2" X 4"		
56	P0708056	CABINET SCREW M6-1 X 12		
58	P0708058	SMALL WINDOW COVER FILM (5 PACK)		
59	P0708059	LARGE WINDOW COVER FILM (5 PACK)		
60	P0708060	FLAT HD SCREW M58 X 10		
61	P0708061	HEX NUT M58		
62	P0708062	FLANGE NUT M6-1		
63	P0708063	FLAT WASHER 6MM		
64	P0708064	LOCK NUT M6-1		
65	P0708065	PHLP HD SCR M47 X 6		
66	P0708066	HEX NUT M47		
67	P0708067	LATCH RECEIVER		
68	P0708068	PHLP HD SCR M47 X 25		
69	P0708069	HOSE CLAMP 1/2"		
70	P0708070	CROSS BRACE		
71	P0708071	TEFLON TAPE		
72	P0708072	REGULATOR MOUNTING BRACKET		
73	P0708073	ADHESIVE DOOR SEAL 1/4" X 3/4" X 79"		
74	P0708074	ADHESIVE DOOR SEAL 3/8" X 1" X 79"		
75	P0708075	BLAST TIP 7MM ID		
76	P0708076	BLAST TIP 6MM ID		
79	P0708079	BALLAST 110V-130V 40-WATT		
80	P0708080	MACHINE POWER CORD 3-WIRE 14-GA		
81	P0708081	FEMALE POWER CORD 3-WIRE 14-GA		
99	P0708099	FENDER WASHER 6MM		
		<u> </u>		





Machine Label Placement & Parts List



REF	PART #	DESCRIPTION		
100	P0708100	MACHINE ID LABEL		
101	P0708101	READ MANUAL LABEL		
102	P0708102	GLASSES/RESPIRATOR LABEL		
103	P0708103	DISCONNECT AIR/POWER LABEL		
104	P0708104	DUST WARNING LABEL		

REF	PART #	DESCRIPTION		
105	P0708105	MODEL NUMBER LABEL		
106	P0708106	AIR PRESSURE HAZARD LABEL		
108	P0708108	FILTER CLEANING LABEL		
109	P0708109	GENERAL WARNING LABEL		

WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.





WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

To take advantage of this warranty, you must register it at https://www.grizzly.com/forms/warranty, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.





Buy Direct and Save with Grizzly® – Trusted, Proven and a Great Value! ~Since 1983~

Visit Our Website Today For Current Specials!

ORDER 24 HOURS A DAY! 1-800-523-4777







