HAFCO METALMASTER

OPERATION MANUAL

SAND BLAST CABINET

Model. SB-420

Order Code S302

Edition No : SB-420-1

Date of Issue : 08/2022

MACHINE DETAILS

MACHINE	SAND BLAST CABINET
MODEL NO.	SB-420
SERIAL NO.	
DATE OF MANF.	

DISTRIBUTED BY

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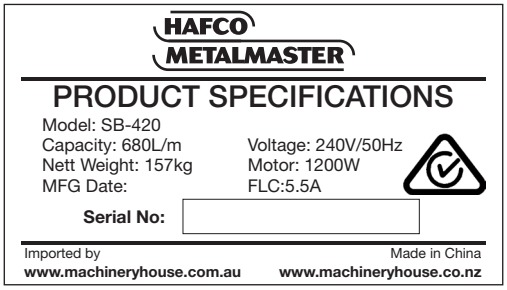
NOTE:
This manual is only for your reference. At the time of the compiling of this manual every effort to be exact with the instructions, specifications, drawings, and photographs of the machine was taken. Owing to the continuous improvement of the HAFCO METALMASTER machine, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating any electric machine.

SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible hazardous conditions

⚠ WARNING	*Indicates a potentially hazardous situation causing injury or death*
⚠ CAUTION	*Indicates an alert against unsafe practices.*
Note:	*Used to alert the user to useful information*

FIG.1



NOTE:
In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)

CONTENTS:

WARNING

The machine is the sole responsibility of the owner for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training, proper inspection and maintenance, manual availability and comprehension. The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

1.1 SPECIFICATION

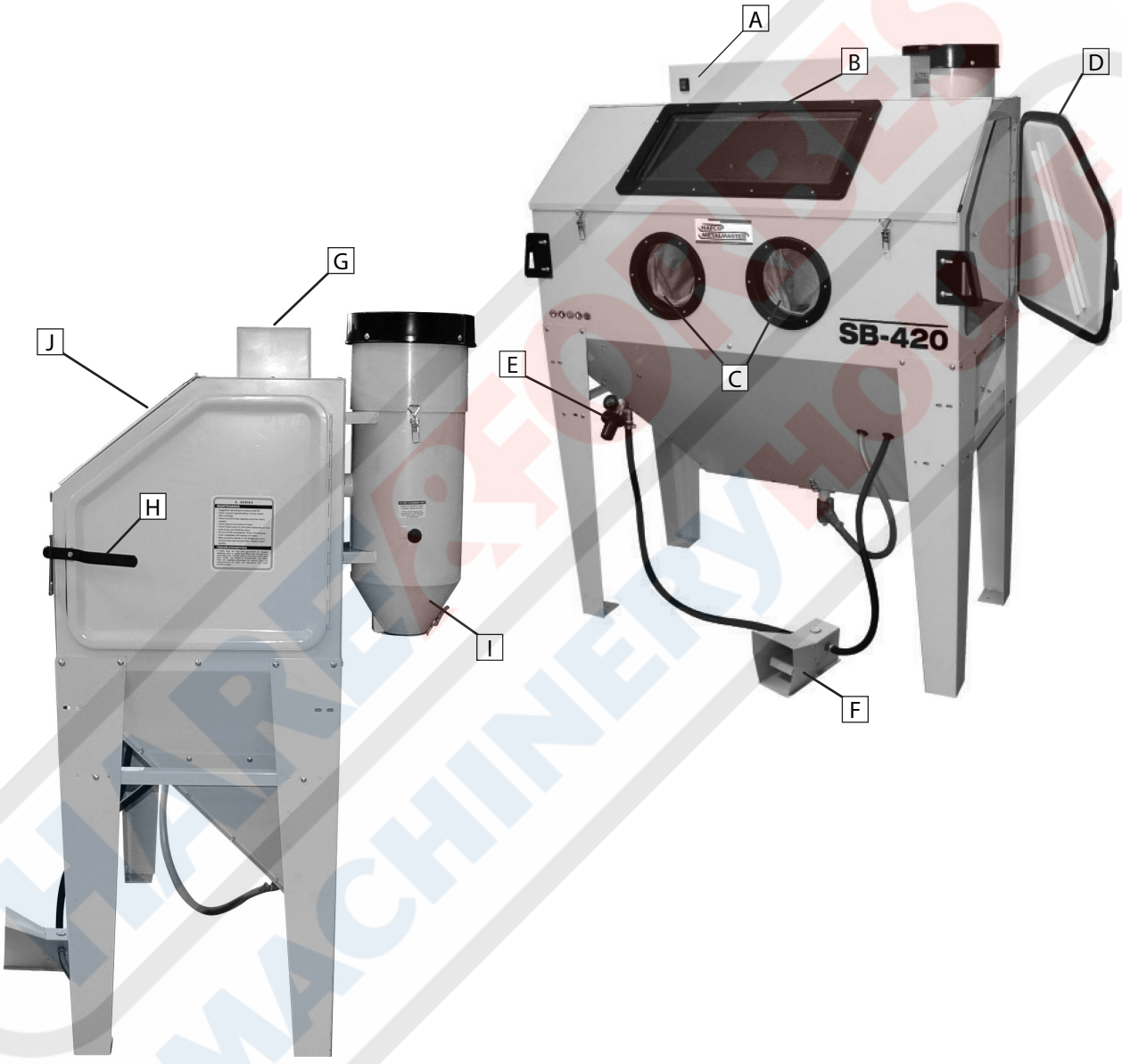
Order Code	S302
MODEL	**SB-420**
Approx. Inside Cabinet Size (L x W x H) (mm)	1200 x 600 x 340-570
Internal Light (type)	LED Light
Recommended Free Air Delivery @ 100psi (LPM)	680
Suggested Operating Air Pressure Range	60 ~ 125psi
Maximum Air Pressure	125psi
Recommended Air Supply ..	5 ~ 35 CFM
Dust Collector Filter Rating	5 microns
Floor Space with Door/Lid Open (L x W x H) (mm)	2340 x 950 x 1650
Shipping Dimension (cm)	128 x 125 x 76
Nett Weight (kg)	157

1.2 ACCESSORIES INCLUDED

Built in 240V vacuum and filter system at rear of sandblast cabinet
Internal LED lighting system
Complete tempered glass screen with replacement shields,
Gloves,
Blast gun & ceramic tips

1.3 IDENTIFICATION

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



A	ON/OFF Switch	**F**	Foot Pedal Blasting Switch
B	Viewing Window	**G**	LED Light Assembly
C	Gloves	**H**	Side Loading Door Latch
D	Side Access Door	**I**	Dust Collector
E	Pressure Regulator and Gauge	**J**	Top Door

2.1 GENERAL MACHINE SAFETY

DO NOT use this machine unless you have read this manual or have been instructed in the safe use and operation of this machine.

WARNING

This manual provides safety instructions on the proper setup, operation, maintenance, and service of this machine. Save this manual, 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 is solely responsible for its safe use. This responsibility includes, but is not limited to proper installation in a safe environment, personnel training and authorization to use, proper inspection and maintenance, manual availability and comprehension, of the application of the safety devices, integrity, and the use of personal protective equipment.

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

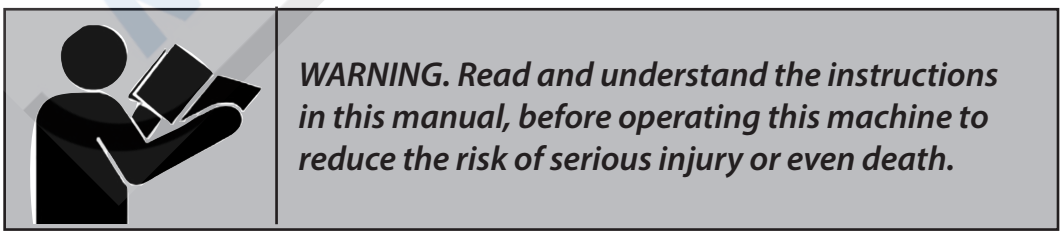
- ✓ Always wear safety glasses or goggles.
- ✓ Wear appropriate safety footwear.
- ✓ Wear respiratory protection where required.
- ✓ Gloves should never be worn while operating the machine controls, and only worn when handling the workpiece.
- ✓ Wear hearing protection in areas > 85 dBA. If you have trouble hearing someone speak from one metre (three feet) away, the noise level from the machine may be hazardous.
- ✓ DISCONNECTION THE MACHINE FROM POWER when making adjustments or servicing.
- ✓ Check and adjust all safety devices before each job.
- ✓ Ensure that guards are in position and in good working condition before operating.
- ✓ Ensure all machines have a start/stop button within easy reach of the operator.
- ✓ Each machine should have only one operator at a time. However, everyone should know how to stop the machine in an emergency.

2.1 GENERAL MACHINE SAFETY Cont.

- ✓ Ensure that keys and adjusting wrenches have been removed from the machine before turning on the power. Appropriate storage for tooling should be provided.
- ✓ Ensure that all cutting tools and blades are clean and sharp. They should be able to cut freely without being forced.
- ✓ Stop the machine before measuring, cleaning or making any adjustments.
- ✓ Wait until the machine has stopped running to clear cuttings with a vacuum, brush or rake.
- ✓ Keep hands away from the cutting head and all moving parts.
- ✓ Avoid awkward operations and hand positions. A sudden slip could cause the hand to move into the cutting tool or blade.
- ✓ Return all portable tooling to their proper storage place after use.
- ✓ Clean all tools after use.
- ✓ Keep work area clean. Floors should be level and have a non-slip surface.
- ✓ Use good lighting so that the work piece, cutting blades, and machine controls can be seen clearly. Position any shade lighting sources so that they do not cause any glare or reflections.
- ✓ Ensure there is enough room around the machine to do the job safely.
- ✓ Obtain first aid immediately for all injuries.
- ✓ Understand that the health and fire hazards can vary from material to material. Make sure all appropriate precautions are taken.
- ✓ Clean machines and the surrounding area when the operation is finished.
- ✓ Use proper lock out procedures when servicing or cleaning the machines or power tools.

DO NOT

- × Do not distract an operator. Horseplay can lead to injuries and should be strictly prohibited.
- × Do not wear loose clothing, gloves, necktie's, rings, bracelets or other jewellery that can become entangled in moving parts. Confine long hair.
- × Do not handle cuttings by hand because they are very sharp. Do not free a stalled cutter without turning the power off first. Do not clean hands with cutting fluids.
- × Do not use rags or wear gloves near moving parts of machines.
- × Do not use compressed air to blow debris from machines or to clean dirt from clothes.
- × Do not force the machine. It will do the job safer and better at the rate for which it was designed.



2.1 GENERAL MACHINE SAFETY Cont.

HAZARDS ASSOCIATED WITH MACHINES include, but are not limited to:

- Being struck by ejected parts of the machinery
- Being struck by material ejected from the machinery
- Contact or entanglement with the machinery
- Contact or entanglement with any material in motion

Health Hazards (other than physical injury caused by moving parts)

- Chemicals hazards that can irritate, burn, or pass through the skin
- Airborne items that can be inhaled, such as oil mist, metal fumes, solvents, and dust
- Heat, noise, and vibration
- Ionizing or non-ionizing radiation (X-ray, lasers, etc.)
- Biological contamination and waste
- Soft tissue injuries (for example, to the hands, arms, shoulders, back, or neck) resulting from repetitive motion, awkward posture, extended lifting, and pressure grip)

Other Hazards

- Slips and falls from and around machinery during maintenance
- Unstable equipment that is not secured against falling over
- Safe access to/from machines (access, egress)
- Fire or explosion
- Pressure injection injuries from the release of fluids and gases under high pressure
- Electrical Hazards, such as electrocution from faulty or ungrounded electrical components
- Environment in which the machine is used (in a machine shop, or in a work site)

WARNING!

Machines are safeguarded to protect the operator from injury or death with the placement of guards. Machines must not be operated with the guards removed or damaged.

2.2 SPECIFIC SAFETY FOR BLAST CABINETS

DO NOT use this machine unless you have been instructed in its safe use and operation and have read and understood this manual

Safety glasses must be worn at all times in work areas

A mask must be worn when excessive airborne dust is created

Sturdy footwear must be worn at all times in work areas

Close fitting/protective clothing must be worn

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 head gear, 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.
ALWAYS use approved protective equipment and acceptable respirator types.
SAFE MEDIA BLASTING. Do not use system over the rated PSI or lines and seals may burst and cause injury.
SAFE DUST EXPOSURE. To prevent dust exposure, always secure the door(s) before beginning media blasting operations.
LOADING & UNLOADING. To prevent accidental blasting injury, disconnect the air supply before loading or unloading the workpiece from the blast cabinet.
WHEN FINISHED. To prevent accidental blasting injury, disconnect the air supply when finished with the blast cabinet.
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.
CORRECT LIGHTING. To prevent ballast overload and possible fire, only install lamps that are the same voltage and wattage.
MAINTAINING BLAST CABINET. To prevent accidental contamination of shop air, check the blast cabinet for any leaks before use, and reseal immediately.
MAINTAINING COMPONENTS. To prevent accidental contamination or blast injuries, replace tips, hoses, lenses, and gloves when they become worn.

⚠ WARNING Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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.

To reduce your exposure to these chemicals: Work in a well ventilated area with protection

WARNING.

Compressed Air is Dangerous and can cause Death or Injury if misused. Always bleed off the airline before disconnecting from the compressor or machine. DO NOT use compressed air to blow dust from clothes

3. POWER SUPPLY

3.1 ELECTRICAL INSTALLATION

Place the machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure there is access to a means of disconnecting the power source. The electrical circuit must meet the requirements for 240V.

NOTE : The use of an extension cord is not recommended as it may decrease the life of electrical components on your machine.

ELECTRICAL REQUIREMENTS

Nominal Voltage..... 240V
Cycle..... 50 Hz
Phase..... Single Phase
Power Supply Circuit.....10 Amps
Full Load Current..... 5.5 Amps

(Full load current rating is also on the specification plate on the motor.)

3.2 FULL-LOAD CURRENT RATING

The full-load current rating is the amperage a machine draws when running at 100% of the output power. Where machines have more than one motor, the full load current is the amperage drawn by the largest motor or a total of all the motors and electrical devices that might operate at one time during normal operations.
Full-Load Current Rating for these machine at 240V is 5.5 Amps
It should be noted that 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 and if the machine is overloaded for a long period of time, damage, overheating, or fire may be caused to the motor and circuitry.
This is especially true if connected to an undersized circuit or a long extension lead. 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 requirements.

4 SETUP

4.1 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 contact your distributor.

NOTE: Save all the packaging materials until you are completely satisfied with the machine and have resolved any issues with the distributor, or the shipping agent.

When unpacking, check the packing list to make sure that all parts shown are included. If any parts are missing or broken, please contact the your distributor.

4.2 CLEAN - UP

The unpainted surfaces of the machine have been coated with a waxy oil to protect them from corrosion during shipment. Remove the protective coating with a solvent cleaner or a citrus based degreaser.
Optimum performance from your machine will be achieved when you clean all moving parts or sliding contact surfaces that are coated with rust prevented products.
It is advised to avoid chlorine based solvents, such as acetone or brake parts cleaner, as they will damage painted surfaces and strip metal should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

4.3 SITE PREPARATION

When selecting the site for the machine, consider the largest size of workpiece that will be processed through the machine and provide enough space around the machine for operating the machine safely. Consideration should be given to the installation of auxiliary equipment. Leave enough space around the machine to open or remove doors/covers as required for the maintenance and service as described in this manual.
It is recommended that the machine is anchored to the floor to prevent tipping or shifting. It also reduces vibration that may occur during operation.

4.4 LIFTING INSTRUCTIONS

⚠ WARNING This machine is extremely heavy. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and removing the machine from the crate.

On the day that the machine arrives, make sure that a forklift or lifting device, with sufficient capacity is available to unload the machine from the vehicle. Ensure access to the chosen site is clear and that doors and ceilings are sufficiently high and wide enough to receive the machine.

4.5 ASSEMBLY

The machine must be fully assembled before it can be operated. First clean any parts that are coated in rust preventative to ensure the assembly process.

To assemble the blast cabinet:

1. Unpack the blast cabinet close to where it will be installed

2. Lay a sheet of cardboard on the floor to protect the blast cabinet, and with the help of an assistant, place the cabinet on its side or back.

3. Using a Phillips screwdriver, fasten all four legs to the underside of the cabinet with (16) 1⁄4" x 1⁄2" cabinet screws and flange nuts. (Fig.1)

4. Attach the two side supports to the left and right set of legs with four cabinet screws and flange nuts. (Fig.1)

5. With the help of other people, stand the blast cabinet up on the legs.

6. Fasten the dust collector to the rear of the cabinet, using four 1/4" x 3/4" cabinet screws and flat washers, so the suction port protrudes through the hole cut into the back of the cabinet. (Fig.2)

7. A bead of silicone (not supplied) may be required to seal the gap between the suction port and the hole in the cabinet wall. (Fig. 3)

8. Attach the bracket with the pressure gauge (#8) to left front leg with two 1 /4 x 3/4" bolts, lock washers and nuts. (Fig. 4)

9. Attach metering valve (1113) using three self-lapping screws to back bottom on cabinet. Snap closed with door catch. (Fig. 5)

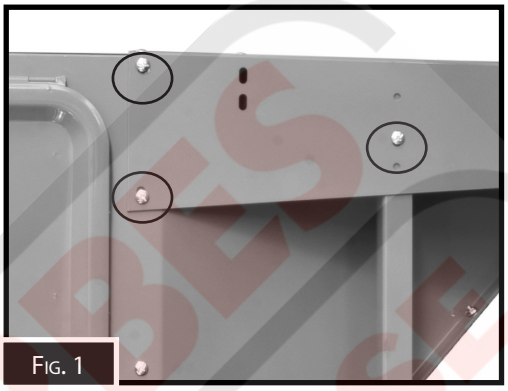


Fig. 1


Fig.2

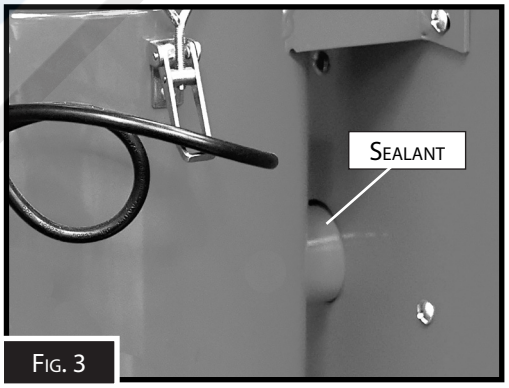


Fig. 3

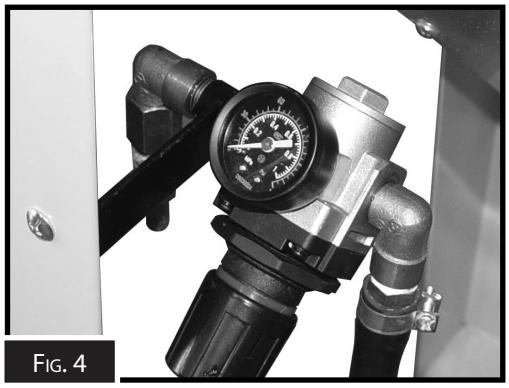


Fig. 4

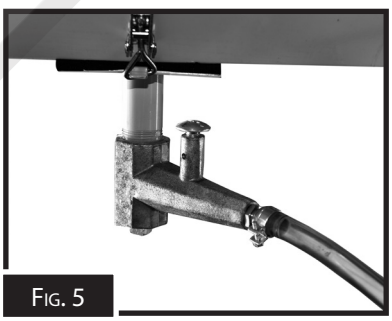


Fig. 5

4.5 ASSEMBLY Cont.

10. Connect the dust collector into the in-line power supply plug protruding from the back of the control box. (Fig. 6)

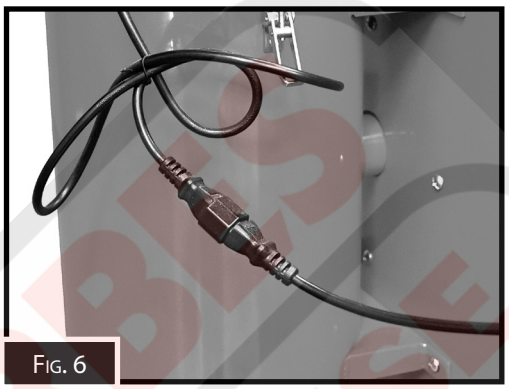


Fig. 6

11. Attach both the left and right door with the four nuts supplied.

12. Loosen the screws on the door catches and adjust the latch plate until the doors slightly compress the foam seal when closed. (Fig. 7)

13. Fit the glass window on top of machine with the rubber around hole.

14. Find the Internal Light assembly

NOTE: All electrical work must be done by a licenced Electrician. Before commencing this task, ensure the power is NOT connected to the machine.

Fig. 7

15. Fit the existing spare Earth wire from lamp assembly to the Earth terminal screw supplied on top of the machine. Ensure it is tightened well. (Fig. 8)

16 Fit the 4 x push on control wires to the Circuit board making sure they are securely positioned. (Fig. 9)

17. Place the light fixture on the glass with the light switch on the right hand side. Fasten to the cabinet with 4 off 1/4"x 3/4" Bolts and flat washers

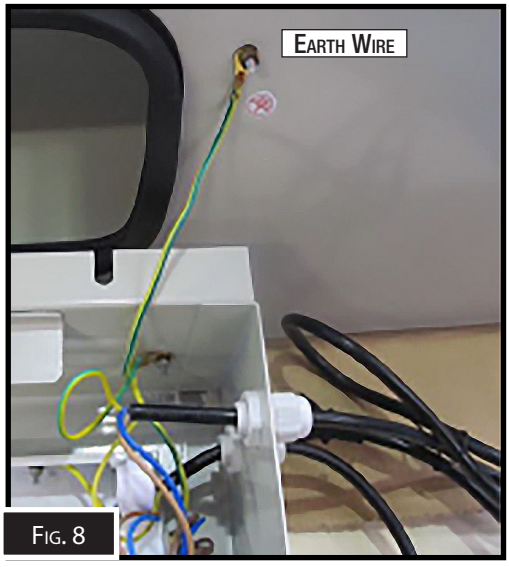


Fig. 8

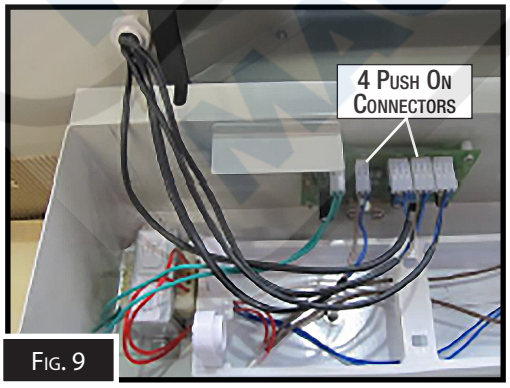


Fig. 9

4.5 ASSEMBLY Cont.

18. Place the floor grate with the cut out corner to the front right hand side of the cabinet.

19. Lift the floor grate and feed the hose through the grate and connect the connection in the cabinet. (See Fig. 10)
Connect the fixed blast gun (Fig. 11) and the hand blast gun (Fig. 12) to the connection in the cabinet.

20. Position the foot pedal between the front legs where it will be convenient to use.

21. Pour the media through the floor grate. (Approximately 1/4 of a bag)

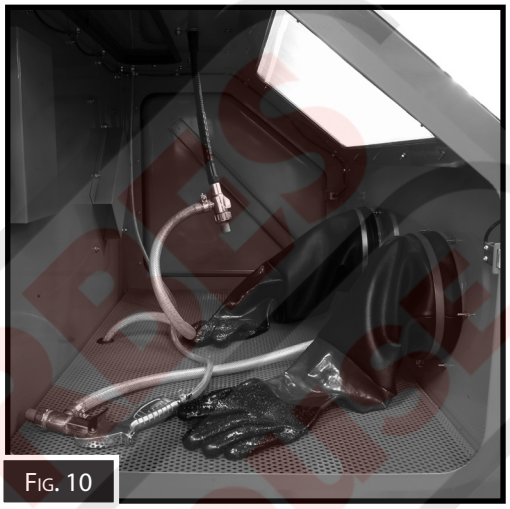


Fig. 10

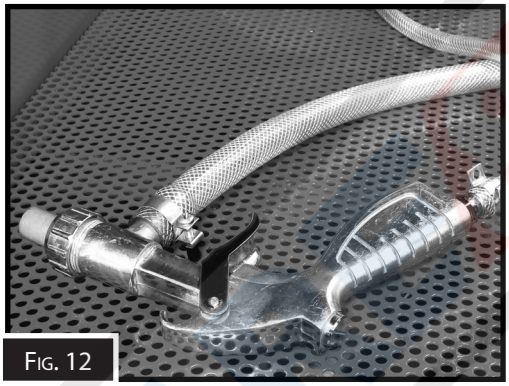


Fig. 12

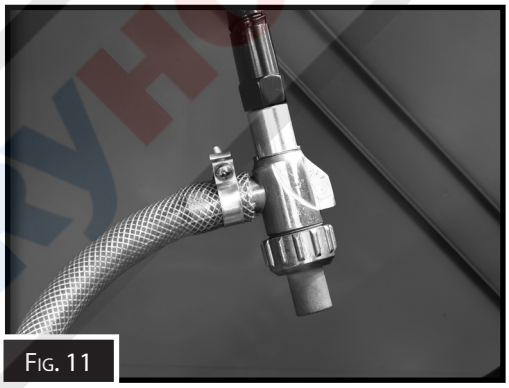


Fig. 11

4.6 TEST RUN

The machine should have a test run once the assembly is complete, 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 are working correctly,
4. 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 20.
If you cannot find a remedy, contact your local dealer

WARNING

Before starting the machine, make sure you have performed all the assembly and adjustment instructions. NEVER use the sand blast cabinet with the door open, or point the gun at yourself or anyone else. When servicing this machine disconnect the power and the air hose. Ignoring this warning may lead to severe injury.

4.7 AIR SUPPLY

Air compressors are normally rated with an output measurement of either Cubic Feet or Litres per minute of compressed air which affects sandblasting due to sandblasting cabinets requiring a large volume of air for them to perform at their optimum.

The compressors output of air refers to the volume or amount of compressed air an air compressor can produce based on the size of the pistons, within the compressor pump, & the horsepower of the motor to drive this pump. PSI or pounds per square inch is a measurement of pressure which is completely different to CFM/LPM (volume) & it is the larger volume of air that is required for a sandblast cabinet & not high pressure that is required.

Some abrasive blasting cabinets can operate on a 240-volt air compressor, but these generally have a smaller size sandblasting gun which do not require a large volume of air to operate correctly but they also take longer to sandblast an item due to the limited size of the nozzle & the amount of blast media the gun is able to expel during blasting. A larger gun will blast much more quickly but it will also require a larger volume of air to perform at its optimum usually requiring a larger 415-volt air compressor with sufficient output of air to blast effectively & efficiently.

It is recommended that the minimum diameter hose used, to connect the compressor to the sandblast cabinet, be at least ¾" (19mm) hose to ensure adequate flow of air volume to your cabinet. It is also recommended that a suitable water separator or filter be installed close to the sandblast cabinet to ensure the air, coming from the air compressor, is clean & dry.

Connecting To The Air Supply

When connecting the air supply, remove any in-line oilers, make the supply line long enough to allow the compressed air to fully cool before it reaches the gun. Install an in-line water separator or air dryer. Tilt the 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.

1. Connect the air line from the compressor to the back of the blast cabinet. (Fig. 10)

Note: If after operating the machine for the first time, the regulator gauge needle drops more than a few PSI when you press the foot pedal, check that the air supply is not restricted.

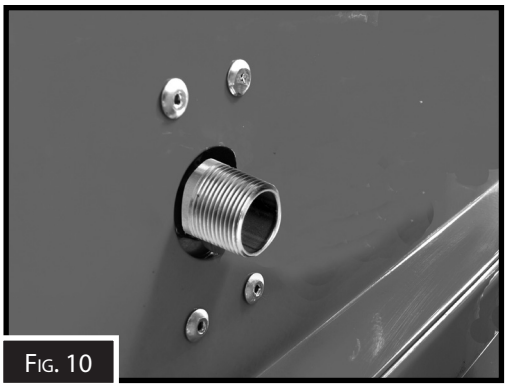


Fig. 10

5. OPERATION

This machine may perform many types of operations that are beyond the scope of this manual. Many of these operations may be dangerous or deadly if performed incorrectly.
The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. If at any time you are experiencing difficulties performing any operation, stop using the machine!
If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced operator before performing any unfamiliar operations.
Above all, your safety should come first!

5.1 CONTROLS

The purpose of this control overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, and the machine controls and what they do. It also helps the operator to understand if they are discussed later in this manual.

NOTE: DO NOT start the machine until all of the setup instructions have been performed. Operating a machine that is not setup may result in malfunction or unexpected results that can lead to serious injury, death or damage to the machine or property.

1. **MAIN ON/OFF Switch:** Switches ON/OFF the dust collector and the light, in the cabinet. (Fig. 11)
2. **Pressure Gauge:** Displays the air pressure supplied to the machine. (Fig. 12)
3. **Air Pressure Adjustment:** Adjusts the air pressure supplied to the machine. (Fig. 12)
4. **Foot Switch:** Activates the blast gun when pressed. (Fig. 13)

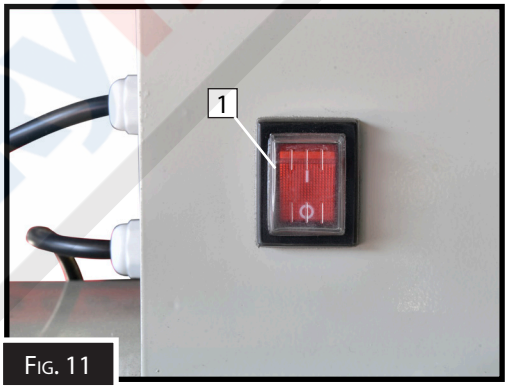


FIG. 11

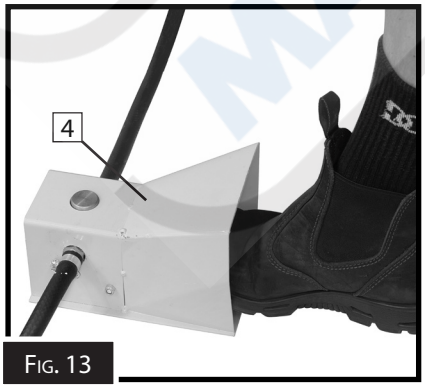


FIG. 13

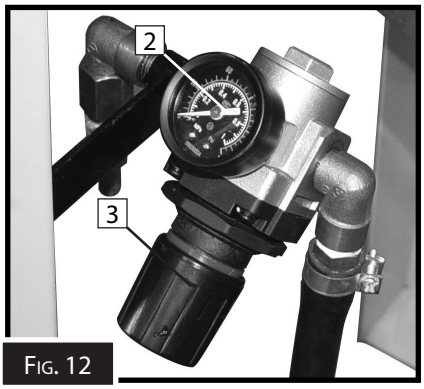


FIG. 12

5.2 BASIC OPERATION

Listed below is the order in which a normal operation for the SB-375 Blast Cabinet is carried out.

NOTE: Before using the blast cabinet the first time, fit the window protective film to the inside of the glass window.

1. Check the window protective film for holes or excessive etching. Replace the sheets BEFORE they are worn through and the window is damaged. (Replacement Film Order Code SC004)

2. Inspect all fittings and hoses for leaks. Inspect for damaged or leaking door seals. Make sure water separators are drained and make sure the dust collector is empty and the filter is clean.

3. Put on safety goggles and a respirator.

NOTE: To reduce your exposure to Dust Particles: 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.

4. Select the blasting media and load it through one of the doors.

NOTE: Never use media that contains free silica, as this is a leading cause of silicosis.

5. Select and install the required tip into the blast gun. (Fig. 11)

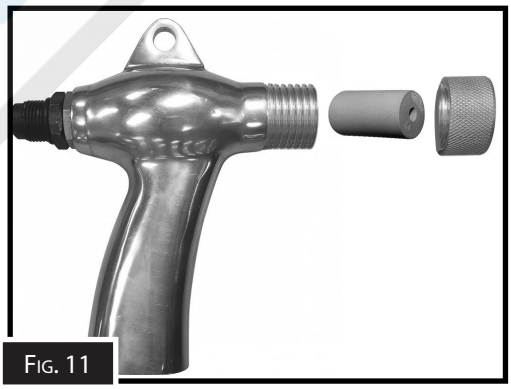


FIG. 11

NOTE: Tips available for this machine are 4.5mm and 5mm. As a general rule, your nozzle orifice minimum should be 3 times the size of the grit. 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.

6. Turn the regulator knob to adjust the air pressure to the desired setting. This is a trial-and-error process, but a good place to start is a pressure between 60 and 80 PSI. (Fig. 12)

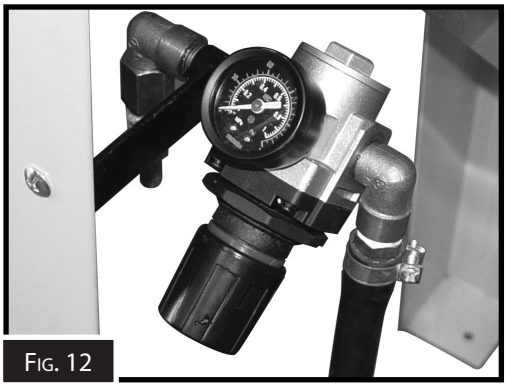


FIG. 12

5.2 BASIC OPERATION Cont.

7. Clean the workpiece of any oil or grease and place in the blast cabinet. Close the doors, then move the latches until the doors are completely locked. (Fig. 13)

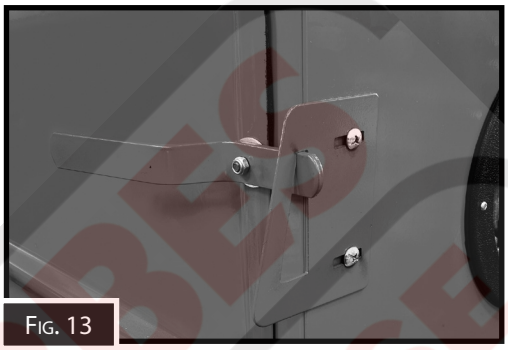


Fig. 13

8. Push the power switch ON, start the dust collector and turn the work lamp ON (Fig. 14)

9. Select the fixed or hand gun, then point the blast gun tip at the workpiece at an angle of 45° to 60°.

NOTE! Point the gun if possible in such a way that the ricocheting spray of abrasive will not contact the window.


Fig. 14

10. Slowly press the foot pedal and abrasive media will begin spraying from the blast gun tip. Move the blast gun in a slow circular motion.

11. When used for prolonged periods, service the dust collector filter every five hours of cabinet use. Tap the side of the dust collector to release the caked on dust and remove through the bottom door. (Fig. 15)


Fig. 15

12. The blasting media can be changed by releasing the bottom flap in the base of the machine. (Fig. 16)

WARNING

NEVER use the sand blast cabinet with the door open, or point the gun at yourself or anyone else. When servicing this machine disconnect the power and the air hose. Ignoring this warning may lead to severe injury.

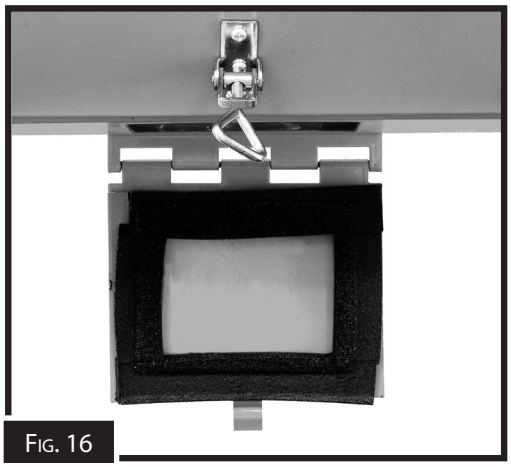


Fig. 16

WARNING. ***When cleaning the cabinet or the filter, wear a respirator and safety goggles. Failure to comply can cause serious personal injury.***

5.3 BLASTING MEDIA

Using low-cost media, such as basic builder's sand or play sand, is not recommended since sand is dull and does not have the cutting power. Excellent productivity can be achieved using sharp media listed below.

Garnet

Depending on zyour required finish, there is an ideal garnet grain size for your job. Here's what to know. For general applications when a surface profile above 75 microns is specified, the 30/60 mesh garnet abrasive is the ideal industry standard garnet grade.

When you remove thick, soft coatings, the surface may absorb the energy before the garnet grains achieve full impact potential. Therefore, the heavier features of larger grain garnet can be more effective. For this application 20/40 grit size is available.

Inda Glass Bead

Bead blasting is one type of shot blasting. This process releases, at high pressure, fine glass beads to clean or finish a surface. In this process, a bead blaster shoots bead-shaped media from a high-pressured tool towards the material's surface. A bead blast finish aims to leave a smooth, shiny, and cleaner surface.

5.4 ACCESSORIES & CONSUMABLES

SANDBLASTING BEADS
GARNET
20 - 40 Coarse Beads 25kg
Order Code S295

20/40 Coarse grade garnet is suitable for removal of thick coatings and extreme rust. 20-40 Garnet enables high productivity rates and an exceptional surface finish.Cuts the surface and is suitable for preparing surfaces for coating applications. Has Increased recyclability, reducing cost and waste

SANDBLASTING BEADS
GARNET
30-60 Medium Beads 25kg
Order Code S296

30/60 Mesh premium abrasive is a versatile product for removal of medium to heavy grade coatings or rust. Can be used for a wide variety of applications. It enables high productivity rates and an exceptional surface finish.Is suitable for Steel or cast iron.

SANDBLASTING BEADS
GARNET
80 Fine Beads 25kg
Order Code S293

80 Fine grade garnet is the mostly used for waterjet cutting but can be used in blast cxabinets. Its a versatile abrasive which can be used for a wide variety of applications. It is the perfect balance between fine cutting and edge finish. Is suitable for Steel, Aluminium, Stone, Tiles, Composites and Timber.

SANDBLASTING BEADS
INDA
-300 + 106 INDA (Glass Bead)
25kg
Order Code S297

106/300 Glass Beads is one of the most popular forms of blast media and can be used on a variety projects. Glass beads are used for general cleaning, peening and cosmetic finishing of sensitive metal surfaces. Achieves a smooth, bright finish. Glass beads are the best option where fine polished finishes are required.. Glass beads are also recyclable and can be used up to 100 times before replacement, making them an extremely cost effective option. Glass bead media works well on soft metals like aluminium and brass as well as plastic.

5.4 ACCESSORIES & CONSUMABLES

#15 REPLACEMENT GLOVES
SUITS: SB-420 PAIR
ORDER CODE 2SC0035

#1~7 REPLACEMENT SANDBLAST GUN
SUITS: SB-420
ORDER CODE 3SC0300

#25 REPLACEMENT PVS SHEETS
SUITS: SB-420 PKT 5
550 X 250MM
ORDER CODE SC004

#2 - NOZZLES
6.0MM PKT 2
SUITS SB-420
ORDER CODE 3SC0206

7.0MM PKT 2
SUITS SB-420
ORDER CODE 3SC0207

CYCLONE DUST COLLECTOR

A high efficiency Cyclone Dust Collector, with two stage dust cleaning system.
Powerful extraction fan providing large dust vacuum, ideally equipped for sandblaster cabinet.
Noise Level: 75dB@ 1m
Dust Collecting Capacity: 2.9 kg/h
Electrical Requirements: 240 Volt, 50Hz, 10 amp

ORDER CODE S310

5.5 TROUBLESHOOTING

1. **Blast Gun**. After 10 to 12 hours of blasting time, the Nozzle should be checked. If it shows uneven wear it should be turned 1/4 turn every 10 hours of use. Replace as needed.
2. **Caking of media.** Media caking is caused by moisture in the air supply or from oily or greasy parts. If not corrected the media will not flow evenly and will block the system. Check the air supply. If water is present, install a quality moisture trap. If oily or greasy parts are being blasted, degrease and dry the part first.
3. **Reverse pressure.** If the media stops flowing use an object to plug the Nozzle and press the Foot Pedal down for about two seconds. This will cause the system to back blast. This will help loosen any clogs. DO NOT use a finger to block the gun
4. **Blast Gun air pressure drop**. Turn the Air Regulator Knob and set the air pressure to 80 PSI as indicated on the Pressure Gauge. This could also indicate the air supply hose is too small, The air supply line should be 12mm diameter or larger.
5. **Poor visibility** (viewing window). The Glass Window is equipped with a clear plastic protector on it and may become pitted. If necessary, replace the plastic protector and/or Glass Window.
6. **Poor media flow.** Check for moisture. Holes in media hose will also cause poor media delivery. If necessary, replace the hose. Debris in the media can also cause slow media flow. Replace or screen media.

6 MAINTENANCE

It is very important that regular maintenance of the equipment is carried out. The operators meed to of follow the daily maintenance procedures.
For optimum performance from this machine, the maintenance schedule listed below and in this section must be followed.

6.1 SCHEDULE

Daily Check

- ❑ Loose mounting bolts or fasteners.
- ❑ Worn, frayed, cracked, or damaged wires.
- ❑ Damaged ON/OFF button
- ❑ Check and clean if necessary filter cartridge
- ❑ Any other condition that could hamper the safe operation of this machine

Monthly Check:

- ❑ Check 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 the motor.
- ❑ Empty cabinet, wipe down inside and inspect for leaks or damage.
- ❑ Cover windows and repaint bare metal portions of cabinet.
- ❑ Inspect work gloves for holes or wear.
- ❑ Remove the filter and clean or replace as require

6.2 CLEANING THE FILTER

For major cleaning or replacement of the filter,

1. DISCONNECT THE MACHINE FROM THE POWER.
2. Unplug the power to the motor and unlatch the top of the dust collector and remove the motor, then the filter element. (Fig. 17)
3. Inspect all sealing foam and replace as required.
4. Clean the filter canister pleats outside in the open by carefully blowing it from the inside out with compressed air.
5. If usability of the filter is in question, or any holes or tears exist, replace it.

Fig. 17

⚠ WARNING ***When cleaning the cabinet or the filter, wear a respirator and safety goggles. Failure to comply can cause serious personal injury.***

SPARE PARTS SECTION

SAND BLAST CABINET

Model. SB-420

Order Code S302

Edition No : SB-420-1
Date of Issue : 08/2022

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at any time without notification.

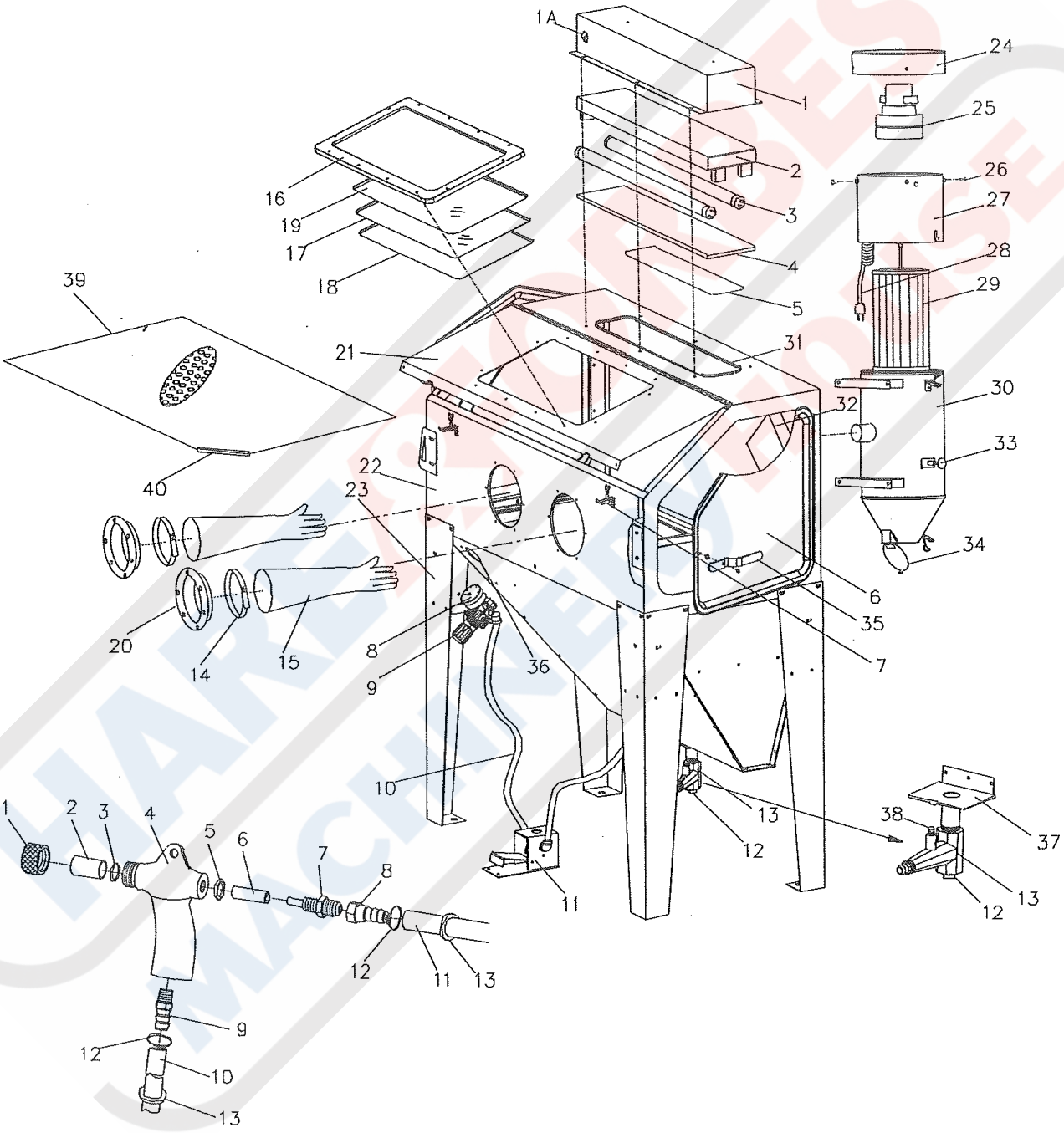
HOW TO ORDER SPARE PARTS

1. Have your machines model number, serial number & date of manufacture on hand, these can be found on the specification plate mounted on the machine
2. A scanned copy of your parts list/diagram with required spare part/s identified.

NOTE: SOME PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

3. Go to www.machineryhouse.com.au/contactus and fill out the inquiry form attaching a copy of scanned parts list.

SPARE PARTS DIAGRAM



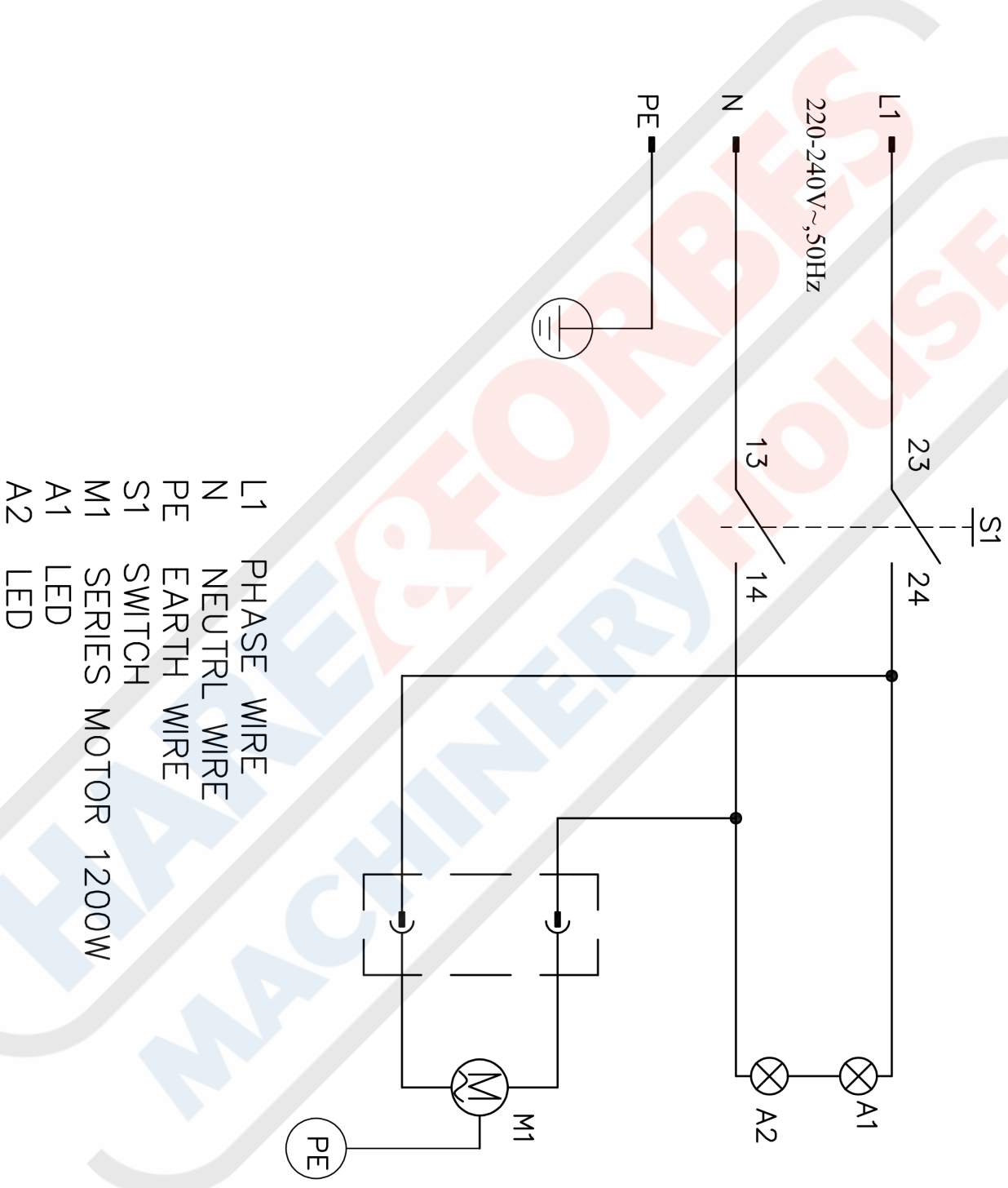
SPARE PARTS LIST CABINET

Item	DESCRIPTION	Item	DESCRIPTION
1	Lamp Housing	21	Lid,cabinet
1A	Switch	22	Cabinet
2	LED Fixture, 2 Bulbs	23	Legs, Cabinet
3	LED	24	Top of D.C.
4	LED Window	25	Vacuum Motor
5	Trim-Lock Window Seal, PE	26	Screws
6	Side Door	27	Cover, Motor
7	Door Latch	28	Power Filter
8	Pressure Gauge,1/4", 150psi	29	Dust Filter
9	Regulator, Air 3/8"	30	Round Dust Collector
10	Hose, Air Push on 1/2"	31	Sealing tape
11	3/8" Foot Pedal Complete	32	Board, Exhaust
12	Metering Valve Plug	33	Push rod
13	Metering Valve	34	Cap, round dust collector
14	Clamp, Gloves	35	Side door-post
15	Gloves, pair	36	Hole
16	Window Frame Cover	37	Cover
17	Glass	38	Bolt
18	Protection Film, PE	39	Web
19	Plastic board	40	Rubber strip
20	Mounting ring,Gloves		

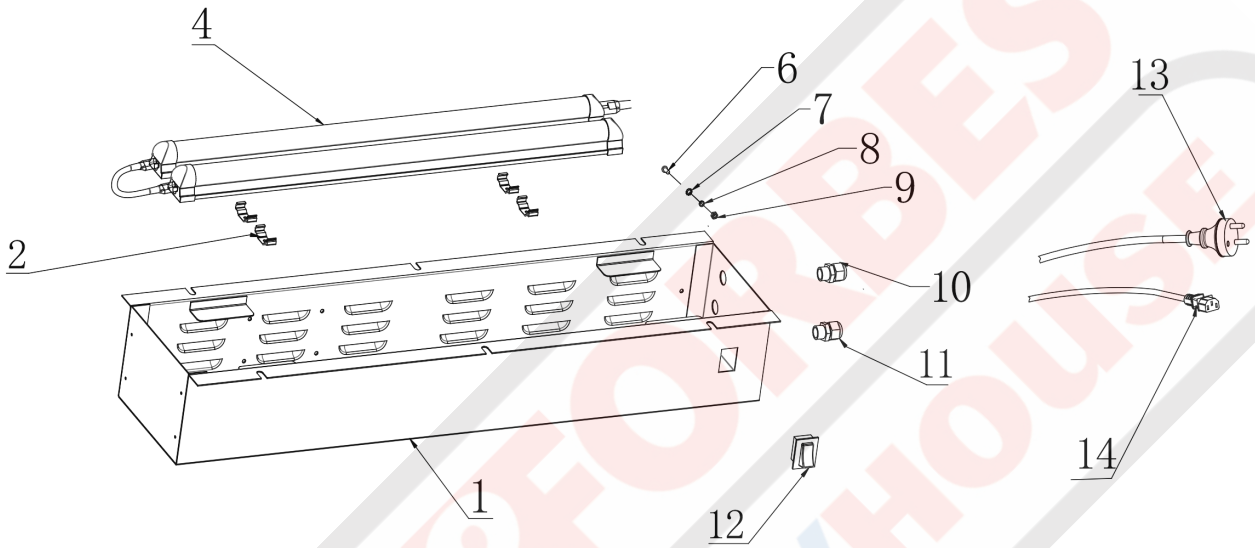
SPARE PARTS LIST GUN

Item	DESCRIPTION
1	Nozzle Holding Nut, Brass Ceramic Nozzle set
2	Ceramic Nozzle, 6mm 2PCS Ceramic Nozzle, 7mm 2PCS
3	O-ring, Nozzle
4	Gun Body, Mod-U-Blast(Only)
5	Air Jet Hex Nut, Brass
6	Sleeve, Air Jet
7	Air Jet
8	Swivel Air Inlet Fitting, 3/8"
9	Media Inlet Fitting, Barb 3/8"
10	Hose, Media 1/2"
11	Hose,Air 1/2"
12	Seal
13	Ring

WIRING DIAGRAM



LED LIGHT ASSEMBLY



Item	DESCRIPTION	QTY
1	LED Light Housing	1
2	LED Light Retaining Clips	4
3		
4	LED Lights	2
5		
6	Screw M4 x 12mm	1
7	M4 Flat Washer	1
8	M4 Star Washer	1
9	M4 Nut	1
10	Cable Gromet	1
11	Cable Gromet	1
12	Switch	1
13	3 pin 10amp Marked with SAA Approval Number Plug and Lead	1
14	Dust Filter Cable	1