



ALC

43391

36" x 24" POLYMER WET BLAST CABINET



ASSEMBLY INSTRUCTIONS

ALC

DIVISION OF S&H INDUSTRIES

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Effective yet gentle cleaning of softer surfaces and intricate parts. By utilizing a mixture of water with glass bead media our wet blast cabinet ensures a thorough cleaning and stripping! Polymer cabinet design is long lasting and creates a lower introductory cost than typical wet blast cabinets.

- **Dust free operation reduces risk of exposure to dust.**
- **Gentle cleaning and stripping without harsh impact of typical abrasive media blasting.**
- **One piece polymer molded cabinet prevents leaks and rust from forming on the cabinet shell.**
- **Simple mixing valve design eliminates the need for expensive sump pump designs and replacement parts.**

WARNING!

Do not use an ALC Cabinet Blaster until you have read this manual, and you understand its contents and warnings. These warnings are included for the health and safety of the operator and those in the immediate vicinity. Keep this manual for future reference.

Dust created by power sanding, sawing, grinding, drilling, and other construction activities may contain chemicals known to cause cancer, birth defects or other reproductive harm and respiratory illnesses. Some examples of the chemicals include:

- 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 ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Abrasive blasting produces harmful dust. Everyone in the blasting area must wear a properly fitted and properly maintained NIOSH approved air supplied respirator.

*Must use a 2 to 3 horsepower shop vac to keep inside of blasting area clear and to create a negative pressure zone. Cabinet leaks will occur if not a visibility will be difficult from vapor.



SILICOSIS AND OTHER DUST WARNINGS:

Breathing dust from silica sand may cause silicosis, a fatal lung disease. Breathing dust during blasting operations may also cause asbestosis and/or other serious or fatal diseases. A NIOSH-approved, well-maintained air supplied abrasive blasting respirator must be used by anyone blasting, anyone handling or using media containing toxic substances or media with more than point one percent (.001) free crystalline silica and anyone in the area of the dust. Harmful dust can remain suspended in the air for long periods of time after blasting has ceased, causing serious injury or death.

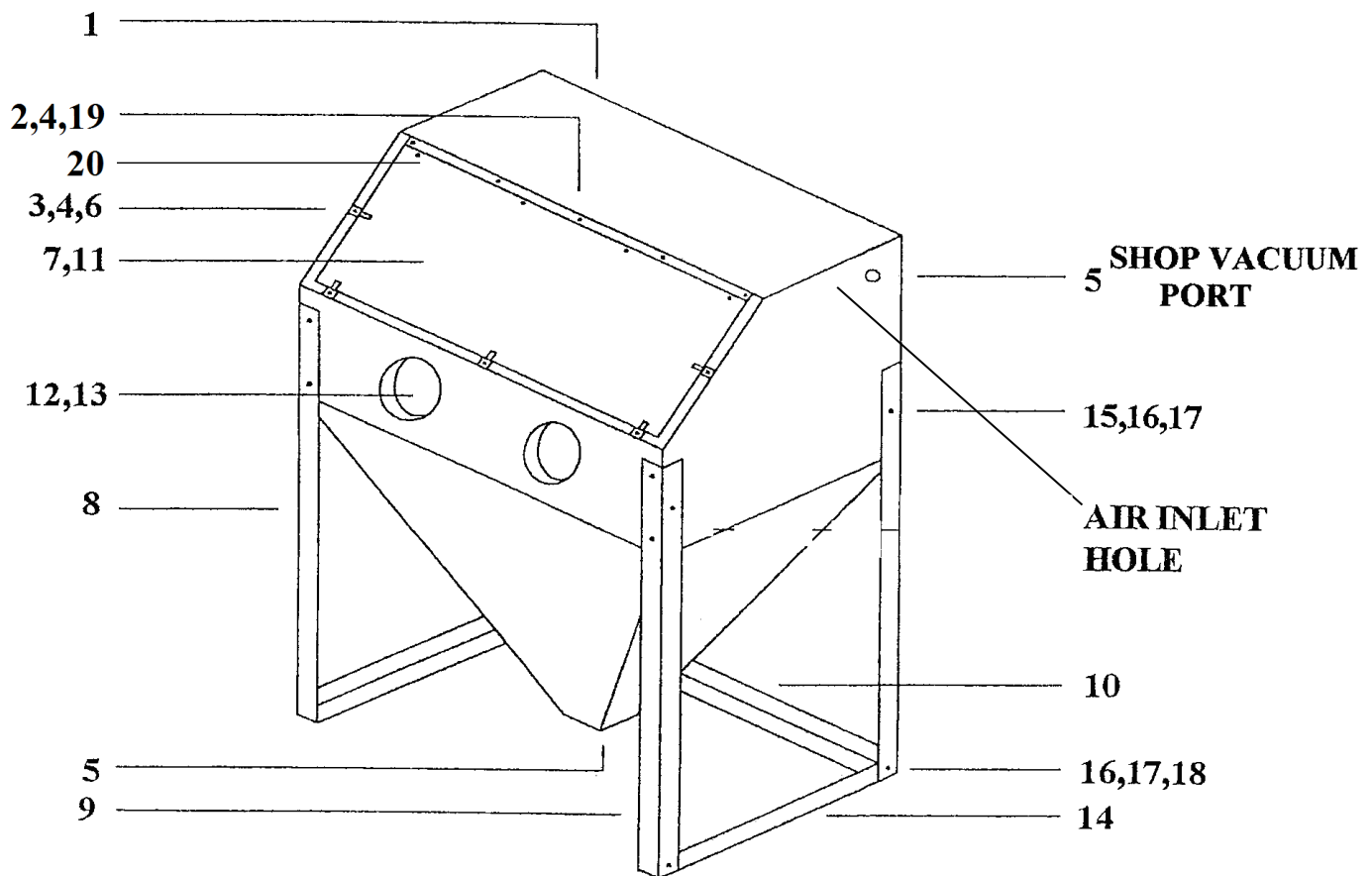
Before removing respirator, use an air monitoring instrument to determine if atmosphere is safe to breathe. Contact local OHSA or NIOSH office to determine the proper respirator for your particular application.

OPERATION GUIDE TIPS

- **Must use a 2 to 3 horsepower shop vac to keep the inside of the blasting area clear and to create a negative pressure zone. Cabinet leaks will occur around openings and seals if not in a negative pressure zone and visibility will be difficult from vapor formation. Cabinet is predrilled with a 1-1/4" hole to accommodate that size hose. Shop Vac must be plugged into a GFCI outlet, since using around water. Light kits comes with a GFCI plug.**
- **Cabinet should be emptied of water and glass bead after use. Separation of glass bead will occur if left in the water for extended periods of none use.**
- **Ideal pressure setting is around 65 to 70 psi with foot pedal depressed. Testing of different PSI rates must be done to achieve your desired finish.**
- **Use only glass bead and not crushed glass. Ideal abrasive is a medium glass bead around 80 grit for most general cleaning. Crushed glass will cause clogging.**
- **The ideal mix of water and glass bead is 4 gallons of clean and cool water to 1 pound of quality glass bead abrasive, such as ALC glass bead. When effectiveness of the glass bead wears off the cabinet should be emptied of the water and glass bead and refilled.**

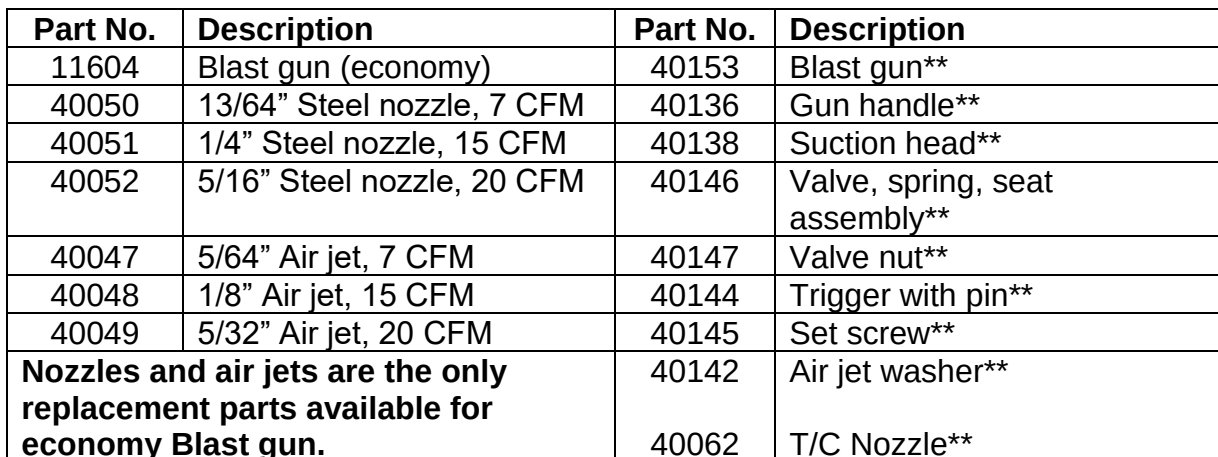
Air supplied respirators do not remove or protect against carbon monoxide (CO) or any other toxic gas. Use a carbon monoxide removal device and monitoring device with the respirator to ensure grade D quality air. Follow all applicable OSHA standards and OSHA regulation 1910.134 (d).

36" X 24" POLYMER CABINET – 43391

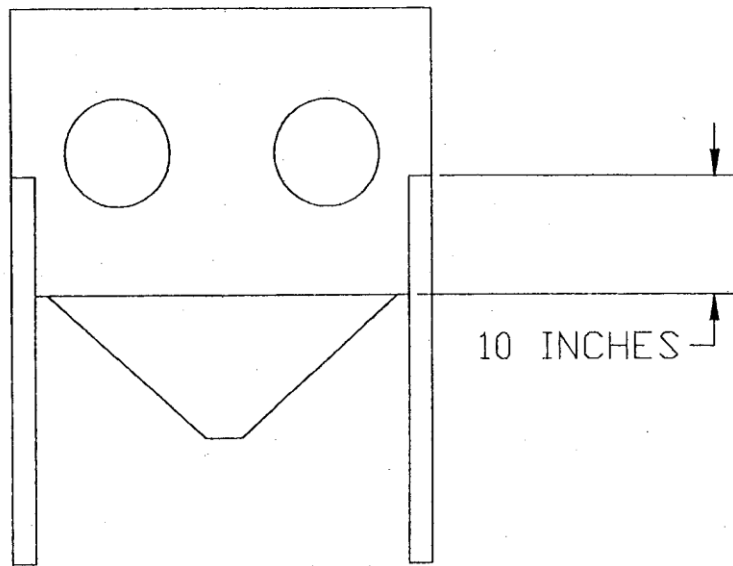


Key	Part No.	Description	Qty.	Key	Part No.	Description	Qty.
1	11646	Louwer vent	1	11	11670	Lens underlay	1
2	11659	Hinge	1	12	11640	Rubber Gloves	1
3	11160	8-32 x 1/2" Screw	5	13	40240	Glove clamps	2
4	11161	8-32 Nut	14	14	11650	Side support	2
5	43004	Plug	1	15	10199	1/4-20 x 1" Bolt	12
6	11644	Snap fastener	11	16	10218	1/4" USS washer	18
7	11647	Lens	1	17	10201	1/4-20 Nut	18
8	11652	Leg (LF & RR)	2	18	10182	1/4-20 x 1 1/2" bolt	6
9	11652	Leg (RF & LR)	2	19	10169	8-32 x 7/8" Screw	5

36" x 24" POLYMER CABINET SIPHON GUN REPLACEMENTS PARTS



****optional- not included**

36" x 24" POLYMER CABINET**DRAWING SHOWING LEG LOCATION**

Left front leg and right rear leg are not the same as right front leg and left rear leg. Leg top with two holes on one side should point front and rear, not to side of cabinet. Install legs per instructions. After installation of all corner legs, install side supports and back support.

ASSEMBLY INSTRUCTIONS

1. Install all four legs: there are two types of legs. One leg fits Left Front (LF) or Right Rear (RR). The other leg fits Right Front (RF) or Left Rear (LR). Install front and back supports on the bottom.
2. Take gloves and slip over circular flanges inside the cabinet. Secure gloves to flanges with glove clamps. If cabinet is supplied with 18" rubber gloves, help may be required to stretch gloves over the flanges. This is normal. If cabinet is supplied with 24" vinyl gloves, excess material at gauntlet must be folded over before installing glove clamp.
3. Attach abrasive blast hose to pick-up tube on inner portion of pick-up tube leaving 1/4" gap between hose end and outer tube. Lay pick-up tube assembly in bottom of cabinet with mixing valve.
4. Attach T valve assembly to top corner of cabinet with 6' air line outside of cabinet. The air line barb will attach through the cabinet holding the T valve assembly on the inside. Tighten down.
5. Attach pressure inlet hose (not supplied) to 1/4" threaded inlet on foot pedal.
6. Attach light kit to the top of the cabinet using supplied screws. Holes are pre drilled in the top of the cabinet.
7. Attach watertight connector to top left of cabinet for light power cord to pass through. Tighten it down to seal against cord. Next install the GFCI plug end. Black power wire from cord to the brass/gold terminal on the plug. White common wire from cord to the silver terminal on plug. Green to the green ground terminal. Do not use cabinet without GFCI plug.
8. Insert water plug into the bottom of the hopper hole. Tighten down firmly to create a watertight seal.

WARNING!

Disconnecting hose while Unit is under pressure could cause serious injury or death. Use safety lock pins and safety cables in all coupling connections to help prevent hose couplings from accidental disconnection.

If twist-on type air hose couplings are used, they must be secured by safety lock pins or wires to prevent accidental disconnection while under pressure. Hose disconnection while under pressure could cause serious injury.

OPERATING INSTRUCTIONS

1. Maximum operating pressure is 100 PSI. Air consumption with medium nozzle supplied with cabinet is 15 CFM at 80 PSI. Ideal pressure to run is 65 to 70 PSI @ gauge with foot pedal depressed

2. To change abrasive, remove plug at bottom front of cabinet and drain into suitable container. Reinstall plug and pour new abrasive and fresh clean water mixture into cabinet.
3. The plug in the right upper side of cabinet is for installation of a dust collector or shop vac. Remove plug and install vacuum.
4. The 3" hole with louver vent in the top of the cabinet provides for proper venting of the cabinet during use. Never plug.

AIR COMPRESSOR RECOMMENDATION:

To permit efficient operation of your air compressor, follow these guidelines:

1. Use a smaller size nozzle and air jet to control the demand of air.
2. Do not blast continuously. Stop blasting operation periodically to allow the compressor to cool. No compressor is designed to constantly run at full RPM. Use 70% of the rated output.
3. Use a minimum 1/2" air hose or metal piping from your air compressor to the blaster. If your compressor is creating an excessive amount of moisture, we recommend using a water trap or a moisture separator.
4. The air compressor should be drained at the bottom of the supply tank through a drain valve and should be blown down daily. It is not unusual to drain three or four gallons of water from the supply tank on a high humidity day. An additional supply tank will help.
5. Keep dust and media created by blasting away from the air compressor unit. Observe maximum air pressure requirements for the blaster and either set your compressor to run within these limits or use a pressure regulator valve to reduce the air pressure to the appropriate range.

CABINET BLASTER SAFETY PROCEDURES

**CAUTION: READ THESE SAFETY PROCEDURES IN THEIR ENTIRETY –
PARTS OF THE OPERATING INSTRUCTIONS ARE WITHIN THESE WARNINGS.**

These procedures are not intended to be exhaustive due to the many variables in the abrasive blasting field. Therefore, we INSIST that the hands, ears, mouth, nose and eyes be covered with appropriate safety protection at all times.

ADDITIONAL WARNINGS!

CAUTION MUST BE EXERCISED BY USER AT ALL TIMES

1. Do not exceed maximum working pressure of 100 PSI. Failure to keep maximum working pressure below 100 PSI can cause the blast machine to burst, causing death or serious injury.
2. Everyone in the blast area including the equipment operator should correctly use and maintain a NIOSH approved air supplied respirator, even after blasting has ceased. Harmful dust can remain suspended in the air for long periods of time after blasting has ceased causing injury or death
3. Before using the cabinet blaster: Put on safety glasses, gloves, and NIOSH approved respirator. Always wear these protective items when operating and while servicing your cabinet blaster. A well maintained air supplied blasting respirator must be used by anyone blasting.
4. For safe operation, perform recommended preventive maintenance on blaster cabinet, and accessories. Replace all worn parts before they fail. Immediate replacement of worn components is required. Failure to replace worn components could result in exposing the operator or bystanders to high speed media and compressed air, causing serious injury.
5. Do not use corrosive materials of any type in unit. Use only clean, dry media and fresh cool water.
6. Static electricity can be created by the use of this equipment. Do not use within fifty feet of any explosive, potentially explosive substances, or their vapors as an explosion can occur.
7. Do not use this equipment in any area that might be considered hazardous or where flammable gases or liquids are present. Failure to do so may cause an explosion resulting in serious injury.

WARNING!

The threads on the nozzle holder and set screws must be inspected each time the nozzle is secured to the holder. Check the threads for wear, and make sure nozzle set screw securely grips the nozzle. The nozzle washer must also be inspected for wear. Worn nozzle washers cause erosion. A loose-fitting nozzle may eject from the holder under pressure and could cause severe injury.

WARNING

**Follow all electrical and safety codes as well as the
National Electrical Code (NEC) and OSHA Regulations
MAINTENANCE**

WARNING!

Failure to observe the following before performing any maintenance could cause serious injury or death from the sudden release of compressed air:

- Disconnect power supply.
- Lockout and tagout the compressed air supply.
- Bleed the air supply line to the blast gun.

Immediate replacement of worn components is required. Failure to replace worn components could expose the operator or bystanders to high speed media and compressed air could cause death or serious injury.

Leaks around couplings and nozzle holders indicate worn or loose fitting parts. Nozzle holders and couplings that do not fit tightly on hose and nozzles that do not fit tightly in nozzle holders could disconnect while under pressure. Impact from nozzles, couplings, hoses, or abrasive, and parts disconnected while under pressure could cause severe injury.

TROUBLESHOOTING TIPS

PROBLEM/CAUSE

Surging of blast flow:

Air pressure too low

Excessive media consumption:

Air pressure too low

Clogging and plugging of blast flow:

Debris in media

Media size too large

Nozzle plugs

Humid weather:

Moderate humidity

Moderate humidity

High humidity

Overtaxed Compressor:

Compressor too small

Nozzle size too large

Too many leaks in plumbing

Holes in abrasive hose

Air filter on compressor plugged

Lack of air pressure:

Compressor too small

Supply valves not on full position

POSSIBLE SOLUTION

Check pressure gauge on air compressor

Check pressure gauge on air compressor

Purge and screen

Use smaller grit size

Use larger nozzle and correct

Keep media as dry as possible

Use drier or moisture separator

Avoid that period of use if possible

Restrict time used

Use smaller size

Seal and tighten plumbing

Replace hose

Clean or replace filter

Use smaller nozzle

Open valves

Nozzle size too large
Leaks in plumbing
Holes in abrasive hose
Air filter on compressor plugged

Use smaller size
Seal and tighten plumbing
Replace hose
Clean or replace filter

Lack of abrasive flow:

Blaster empty
Not enough air pressure
Abrasive hose kinked
Debris in media

Fill cabinet
Check system
Straighten hose
Clean or screen media. Unclog media hose.

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Indemnification Agreement. Buyer agrees, to the fullest extent permitted by the law, to fully indemnify, hold harmless, and defend Seller, its parent, subsidiary, and affiliated companies, its owners, officers, directors, employees, agents, representatives and insurers (collectively, "Indemnities") from and against any and all claims, demands, suits, damages, judgments of sums of money, losses and expenses, including but limited to attorney's fees and costs (collectively "referred to herein as "Claims") arising out of or resulting from any bodily injury, sickness, disease or death or injury to or destruction of tangible property, arising out of or resulting from the use, sale or distribution of any and all products purchased from Seller by Buyer, regardless of whether or not such claim arises in whole or in part out of Seller's alleged fault, including but not limited to Seller's negligence, strict liability, products liability, breach of warranty or any other act or omission. Buyer expressly waives any and all immunity from suit by Seller, its parent, subsidiary, and affiliated companies, and its owners, officers, directors, employees, agents, representatives and insurers, by operation of any workers' compensation law or statute. **By purchasing from S & H Industries, Inc., Buyer acknowledges and represents that Buyer has read, fully understands and agrees to the Indemnification provisions set forth above.**

LIMITED WARRANTY

S & H Industries, Inc. warrants this product to be free from defects in materials or workmanship for two years after the date of original purchase.

If the product should become defective within that warranty period, we will repair or replace it (at our option) free of charge including return transportation to you provided you deliver it prepaid to S & H Industries, Inc., 5200 Richmond Road, Bedford Hts., Ohio 44146.

This warranty does not include damage resulting from accident, abuse or misuse of the product. Nor does it apply to parts subject to abrasive wear, i.e., nozzles, air jets, seal blocks, valves, hose connections and hoses.

Implied warranties including those of merchantability and fitness for a particular purpose are excluded to the extent permitted by law, and any and all implied warranties are excluded. This is the exclusive remedy and liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law.