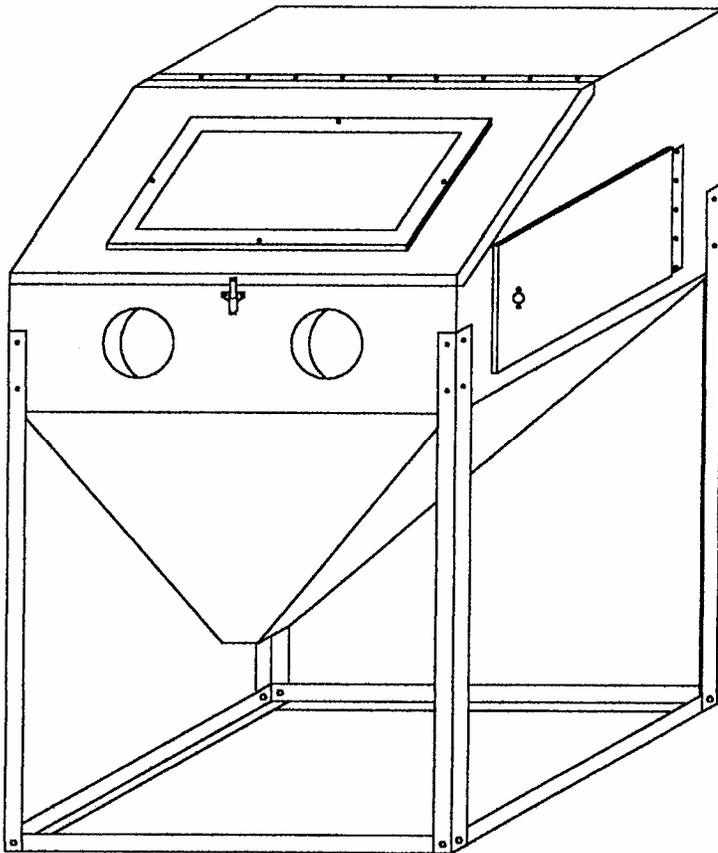




36 x 24 (SD) KNOCKDOWN CABINET BLASTER – 40393
36 x 24 (DD) KNOCKDOWN CABINET BLASTER – 40394
48 X 24 (DD) KNOCKDOWN CABINET BLASTER – 40395

INSTRUCTIONS AND ASSEMBLY MANUAL



**Please read instructions
completely before starting any
assembly.**



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WARNING!

Do not use an ALC Pressure 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 supplied-air respirator.

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 OSHA or NIOSH office to determine the proper respirator for your particular application.

Supplied-Air 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).

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.

PRESSURE 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 110 PSI. Failure to keep maximum working pressure below 110 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 pressure blaster: Put on eye protection, gloves, and NIOSH-approved respirator. Always wear these protective items when operating and while servicing your abrasive 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.**
- 6. Do not splice abrasive hose. The splice will wear out quickly and may violently spray media over the surrounding area. A worn blast hose could suddenly fail. Couplings**

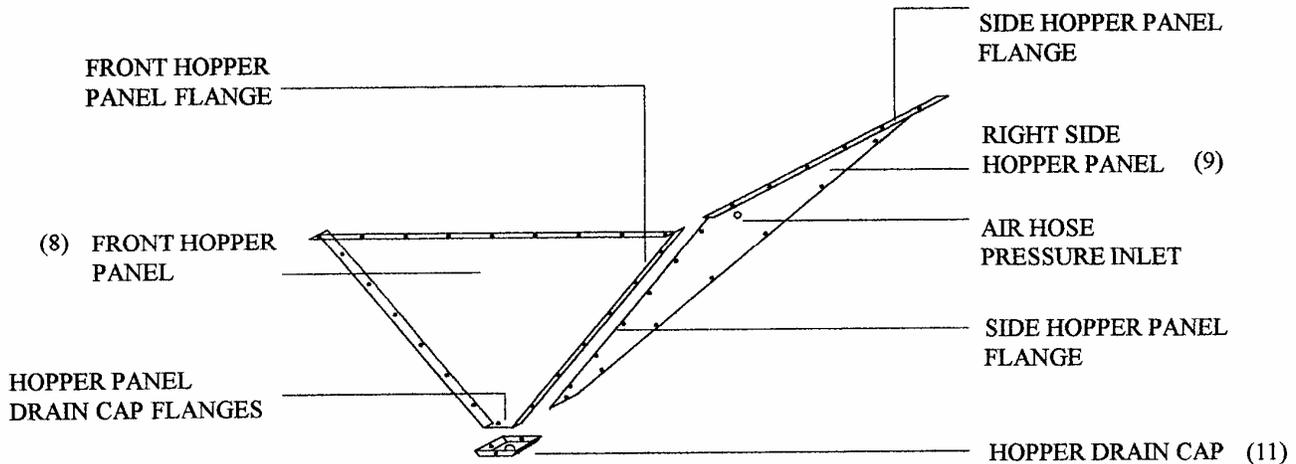
and nozzle holders may not adequately grip worn hose, causing them to blow off under pressure. Compressed air and abrasive escaping from a burst hose, or disconnected coupling or nozzle holder, could cause severe injury.

7. Always place the machine so that the outlet is pointed away from any objects or persons. Stand clear of the path of exiting abrasive. It may come out at high velocity. Impact from exiting abrasive could cause severe injury.
8. 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
9. 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 must be inspected each time the nozzle is secured to the holder. Check the threads for wear, and make sure nozzle holder securely grips the nozzle. The nozzle washer must also be inspected for wear. Worn nozzle washers cause thread erosion. A loose-fitting nozzle may eject from the holder under pressure and could cause severe injury.

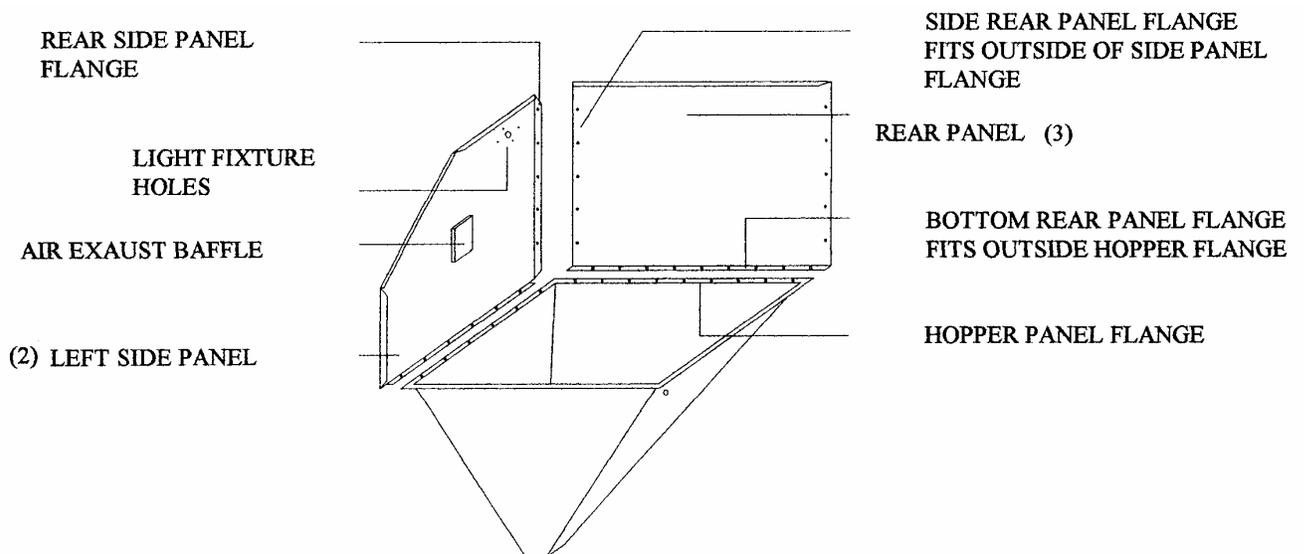
HOPPER PANEL ASSEMBLY INSTRUCTIONS



IMPORTANT: APPLY A UNIFORM BEAD OF CAULK ON ALL FLANGES AND AROUND BOLT HOLES. AFTER FINAL ASSEMBLY, RECAULK SEAMS IF NECESSARY.

Assemble the front/rear hopper panel to the right/left side hopper panel with front/rear hopper flanges to inside of side hopper panels. Secure all hopper panels by lining up panel holes. Secure hopper panels with 1/4-20 x 1/2" bolt. Secure with 1/4-20 hex nut from inside. Assemble hopper drain cap to bottom of hopper panels with drain cap flanges on outside. Secure with 1/4-20 x 1/2" bolts from outside. Secure with 1/4-20 hex nuts from inside.

REAR/SIDE PANEL TO HOPPER PANEL ASSEMBLY

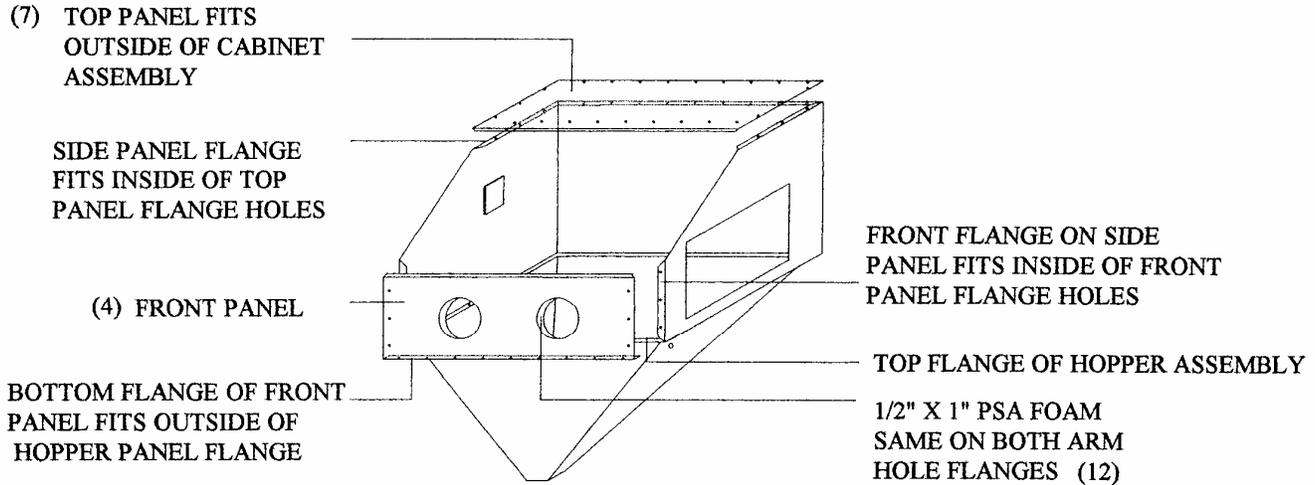


IMPORTANT: APPLY A UNIFORM BEAD OF CAULK ON ALL FLANGES AND AROUND BOLT HOLES. AFTER FINAL ASSEMBLY, RECAULK SEAMS IF NECESSARY.

Assemble rear/side panels to hopper assembly with bottom flange of rear/side panels to outside of hopper flanges. Assemble right side panel to right side hopper panel. Assemble side flange of rear panel to outside of side panel flange. Secure with 1/4-20 x 1/2" bolt from outside in two places per

side. Secure with 1/4 USS washer from inside in two places per side until all panels are secured. Secure all panels using above-mentioned hardware.

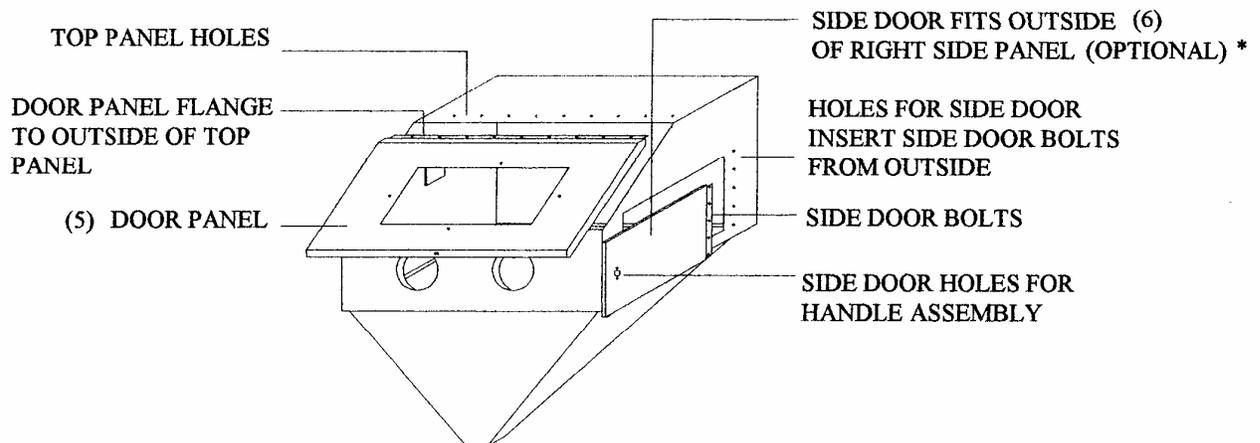
FRONT/TOP PANEL TO CABINET ASSEMBLY



IMPORTANT: APPLY A UNIFORM BEAD OF CAULK ON ALL FLANGES AND AROUND BOLT HOLES. AFTER FINAL ASSEMBLY, RECAULK SEAMS IF NECESSARY.

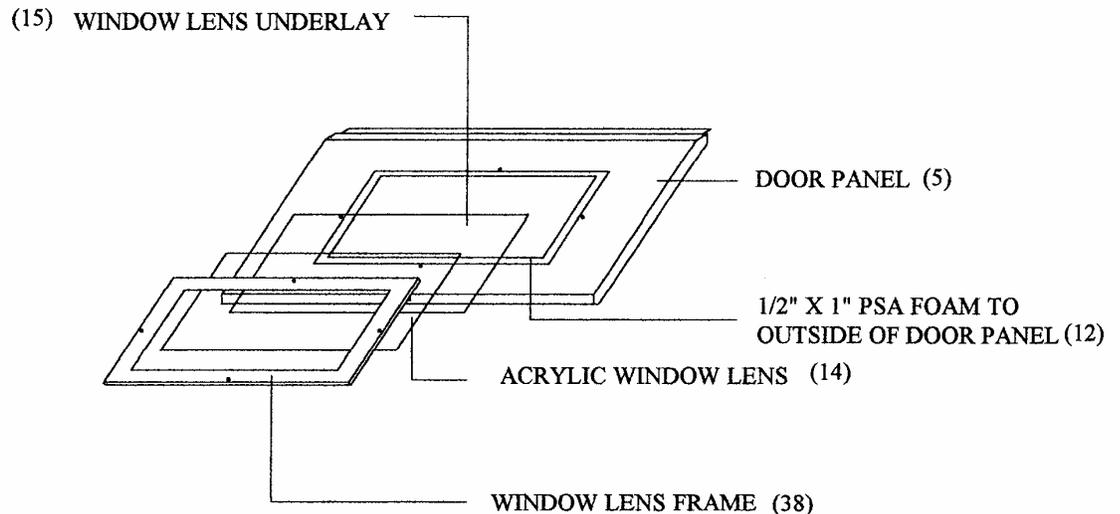
Assemble top panel to rear/side panels with angled lip to the front. Place top panel to the outside of rear/side panels. Assemble the front panel to hopper/side panels with bottom flange of front panel to the outside. Use top hole on each side of front panel for attachment to side panels. Use 1/4-20 x 1/2" bolts from outside. Secure with 1/4-20 hex nuts from inside. Use the same hardware for top panel assembly.

TOP/SIDE DOOR PANEL TO CABINET ASSEMBLY



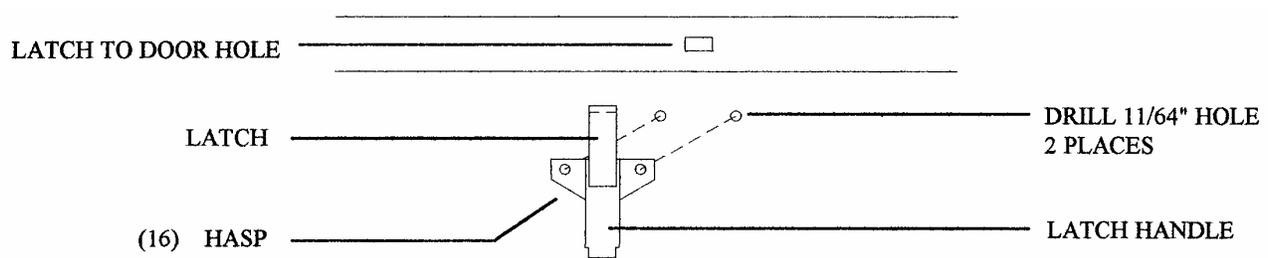
Assemble door panel to cabinet with door panel hinges to the outside of top panel. Secure with 1/4-20 hex nuts from inside. Assemble side door panel by placing side door bolts through holes on right side panel from outside. Secure with 1/4-20 hex nuts from inside. Assemble handle to side door with T-handle to the outside of side door. Line up holes on T-handle with holes on side door. Secure with 8-32 screws from outside. Secure with 8-32 hex nuts from inside. Assemble cam to stem of T-handle from inside. Secure with two 8-32 hex nuts. Adjusting may be needed to cam so that side door closed fully. Use 1/2 x 1 PSA foam on the inside of the door panel.

WINDOW LENS/FRAME ASSEMBLY



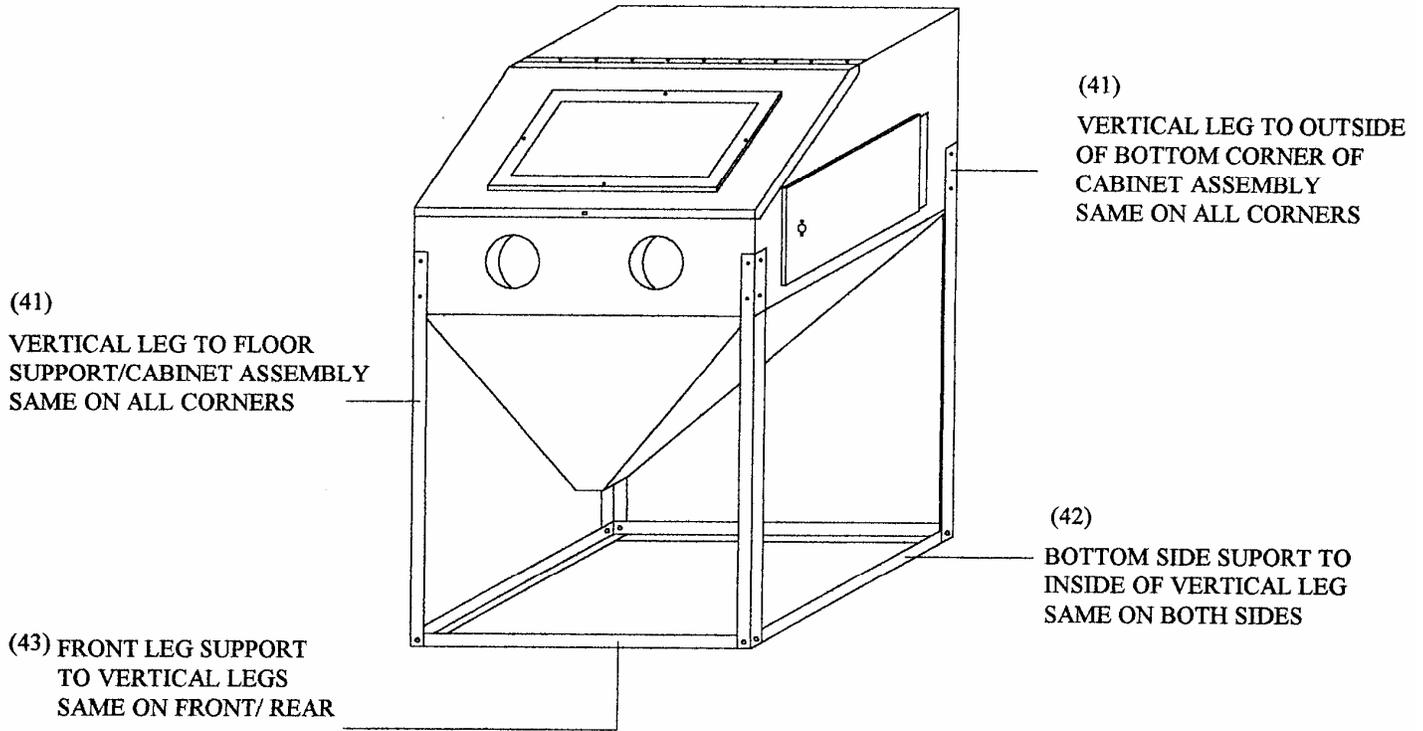
Use 1/2 x 1 PSA foam 24" long horizontally both top and bottom of door panel. Use 1/2 x 1 PSA foam 10" long vertically on both sides of door panel. Place 1/4-20 x 1" bolt through door panel from inside. Secure with 1/4-20 hex nut from outside. Place window lens underlay on top of PSA foam. Place acrylic window lens on top of underlay. Place window lens frame to outside of acrylic window lens. Use 1/4 USS washers outside of window frame on 1/4-20 x 1" bolts. Same in four places. Secure with 1/4-20 hex nuts from outside. Same in four places. Use 1/2 x 1" PSA foam on outside of top door. Use 48-1/2" of foam horizontally. Use 12-1/2" of foam vertically. Place foam on the surrounding outer surface. Installation will be made when closing top door to cabinet.

HASP TO CABINET ASSEMBLY



Assemble hasp to outside of front panel of cabinet. Close top door tightly against cabinet. Place latch to door hole. Hold latch handle straight out (90° from cabinet front). Mark holes for placement. Drill 11/64" holes in two places. Secure with two 8-32 screws from outside. Secure with two 8-32 hex nuts from inside.

LEGS/FLOOR SUPPORT TO CABINET ASSEMBLY



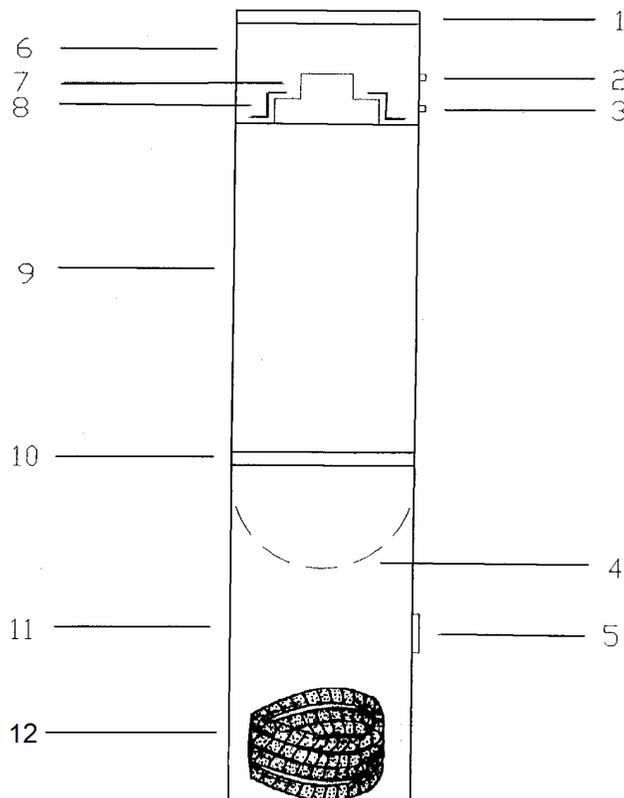
Note: Place cabinet on surface with rear panel facing downward.

Assemble vertical legs to bottom corners of cabinet with similar legs to outside of cabinet. Holes on legs will match holes on cabinet. Use bottom two holes on each corner of cabinet for leg assembly. Secure with 1/4-20 x 1/2" bolts from outside of legs. Secure with 1/4-20 hex nuts from inside of cabinet. Assemble floor support front/rear to inside of vertical legs. Secure with 1/4-20 x 1/2" bolts from outside and 1/4-20 hex nuts from inside. Assemble bottom side support to inside of front/rear floor support. Secure with 1/4-20 x 1/2" bolts from outside and 1/4-20 hex nuts from inside. Use same assembly to both bottom side supports.

ASSEMBLY DIAGRAM FOR OPTIONAL DUST COLLECTOR

Below is the component breakdown for ALC 100 CFM dust collector. The dust collector is assembled and ready for use. Dust collector hose is located in the bottom drum of the collector and must be removed and attached to dust collector and cabinet.

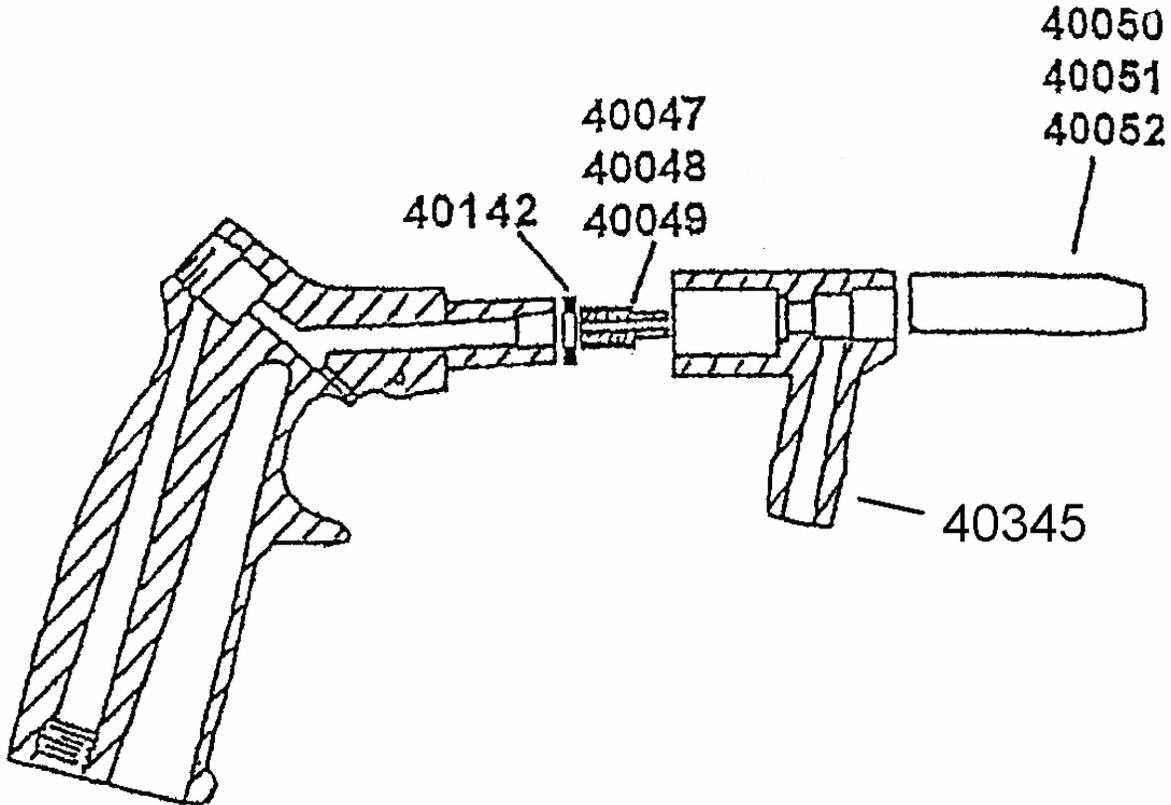
Item No.	Part No.	Description	Item No.	Part No.	Description
1	11568	Cap for dust collector	6	11567	Motor screen
1	10759	Protective edging	7	40287	Vacuum motor
2	11637	Switch	8	11602	Motor support bracket
3	11012	Connector	9	11564P	Top drum
3	11008	Electric cord	10		n/a
4	40267 SM	Filter bag	11	11565P	Bottom drum
5		n/a	12	11575	Dust Collector Hose 2 1/4" x 6"



Cabinet Parts

#	P/N	DESCRIPTION	QTY.
1		RIGHT SIDE PANEL	1 EA
2		LEFT SIDE PANEL	1 EA
3		REAR PANEL	1 EA
4		FRONT PANEL	1 EA
5		DOOR PANEL	1 EA
6		SIDE DOOR (OPTIONAL)	1 EA
7		TOP PANEL	1 EA
8		FRONT/REAR HOPPER PANEL	1 EA
9		RIGHT SIDE HPPER PANEL	1 EA
10		LEFT SIDE HOPPER PANEL	1 EA
11		HOPPER DRAIN CAP	1 EA
12	11601	½ X 1 PSA FOAM	19'/23'/25'
13	40343	PICKUP TUBE	1 EA
14	40251	ACRYLIC WINDOW LENS	1 EA
15	4025300	WINDOW LENS UNDERLAY	1 EA
16	11109	HASP	1 EA
17	10904	SHEET METAL PLUG	1 EA
18	11580	GRATE	1 EA
19	11610	T HANDLE FOR SIDE DOOR (DOUBLE DOOR)	1 EA
20	11611	CAM FOR T HANDLE (DOUBLE DOOR)	1 EA
21	11604	ECONOMY SIPHON GUN (TRIGGER)	1 EA
22	12800	ECONOMY SIPHON GUN (OPTIONAL FOOT PEDAL)	1 EA
23	11596	PRESSURE HOSE (FOOT PEDAL)	1 EA
24	40248	GLOVES 24" X 6"	1 EA
25	40240	GLOVE CLAMP	2 EA
26	11605	SIPHON HOSE	1 EA
27	11595	GUN PRESSURE HOSE	1 EA
28	11606	¼" PIPE COUPLING	1 EA
29	10188	½ USS WASHER	1 EA
30	12556	#10 X 5/8 SELF-TAPPING SCREW HEAD	103, 106, 132
31	10201	¼-20 HEX NUT	17, 22, 25
32	10199	¼-20 X 1 BOLT	4 EA
33	10218	¼ USS WASHER	4 EA
34	11160	8-32 X ½ SCREW	6 EA
35	11161	8-32 HEX NUT	8 EA
36	11594	FOOT PEDAL (OPTIONAL)	1 EA
37	40235	LIGHT KIT	1 EA
38	12002	WINDOW LENS FRAME	1 EA
39	11971	CAULK	1 EA
40	12003	RIGHT FRONT/LEFT REAR LEG	2 EA
41	12004	LEFT FRONT/RIGHT REAR LEG	2 EA
42	12005	SIDE LEG SUPPORT	2 EA
43	12006	FRONT/REAR LEG SUPPORT	2 EA

REPLACEMENT PARTS AND OPTIONAL ACCESSORIES



REPLACEMENT PARTS	
Part No.	Description
S1599	Blast gun with 1/4" nozzle, 1/8" air jet
S1555	13/64" Steel nozzle (gold), 7 CFM @ 80 PSI** Nozzle Kit
S1556	1/4" Steel nozzle (silver), 15 CFM @ 80 PSI Nozzle Kit
	5/64" Air jet (gold)** Inc. in Nozzle Kit
	1/8" Air jet (silver) Inc. in Nozzle kit
40142	Air jet washer
155513	13/64" Ceramic nozzle, 7 CFM @ 80 PSI** Nozzle Kit
155512	1/4" Ceramic nozzle, 15 CFM @ 80 PSI** Nozzle Kit
40345	Siphon head
40370	7' x 3/8" hose with 90° molded end
** = optional, not included	

Coal Slag

Coal Slag is used when paint and rust has to be removed from steel, such as car bodies, tanks or heavy machinery. Coal Slag is faster cutting, can be re-used, is moisture free, and will not pack or absorb moisture. (25 Lb. container)

Steel Grit

Steel grit is extremely fast cutting on rusty metal and hard to remove paint. Steel Grit is popular because it leaves a very smooth finish. It is also comparable in price to most other specialty abrasives. Steel Grit is recommended in reclaim systems or cabinets. (25 Lb. container)

Glass Bead

Glass Bead is used in creating a satin or matte finish. Glass Bead is recommended in reclaim systems or cabinets. (25 Lb. container)

Aluminum Oxide

Aluminum Oxide is a high quality abrasive that is sharper than sand (not recommended) and cuts twice as fast as sand. It leaves a smooth textured finish with no pits or burrs. Aluminum Oxide is rougher than glass bead and can be used over and over again. It is one of the most economical abrasives you can use in any reclaim systems or cabinets. (4/25 Lb. container)

Plastic Grit

Primarily used to strip aluminum and fiberglass. Great for stripping paint, light oxidation and surface rust. Recommended for use in blast cabinets because it creates very little dust. Works quickly, last a long time and increases visibility within the cabinet. (10 Lb. container)

Walnut Shells

Walnut shells are recommended for use on "soft" surfaces such as aluminum, glass, wood, and other areas where no pitting is desired. Leaves a smooth, dull finish. (10 Lb. container)

TROUBLESHOOTING TIPS

PROBLEM/CAUSE

POSSIBLE SOLUTION

Surging of blast flow:

Air pressure too low
Too much media

Check pressure gauge on compressor

Excessive media consumption:

Media valve open too far
Air pressure too low

Close slightly
Check pressure gauge on compressor

Clogging and plugging of blast flow:

Debris in media
Media size too large
Nozzle plugs
Nozzle plugs
Wet media

Purge and screen
Use smaller grit size
Use larger nozzle
Adjust media valve 40200
Dry media, drain water from air

Moisture in abrasive media:

Wet media
Water in air
Water in tank

Change or use dry media
Drain water from air lines
Empty, dry out and refill

Humid weather:

Moderate humidity
Moderate humidity
High humidity

Keep media as dry as possible
Use drier or moisture separator
Avoid that period of use if possible

Overtaxed compressor:

Compressor too small
Nozzle size too large
Too many leaks in plumbing
Holes in abrasive hose
Air filter on compressor plugged

Restrict time used
Use smaller size
Seal and tighten plumbing
Replace hose
Clean

Lack of air pressure:

Compressor too small
Supply valves not on full position
Nozzle size too large
Leaks in plumbing
Holes in abrasive hose
Air filter on compressor plugged
Urethane gasket worn or dirty

Use smaller nozzle
Open valves
Use smaller size
Seal and tighten plumbing
Replace hose
Clean filter
Clean or replace gasket

Lack of abrasive flow:

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

Fill tank (6" from top)
Dry media
Check system
Straighten hose
Clean or screen media

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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.