INSTALLATION & OPERATION MANUAL

Atlas SBC1200

Extra Large, Dual Door Sandblast Cabinet

Atlas Automotive Equipment
www.atlasautoequipment.com
(866) 898-2604

Read this entire manual before operation begins.

Record below the following information which is located on the serial number data plate.

Serial No. _____
Model No. _____
Date of Installation _____

Contents

Important Information

READ ALL INSTRUCTIONS BEFORE USING THIS EQUIPMENT.
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

Due to continuing improvement, actual product may differ slightly from product described herein.

1. Start Up Preparations:

   The I.D of air line should be more than 8mm(.3”). ALL HOSES SHOULD BE RATED AT LEAST 125PSI (8.6Bar) AND AN ISOLATION VALVE SHOULD BE INSTALLED so that air supply can be turned off and then disconnected from sandblaster cabin for servicing.

   Air supply should be dry and clean from oil and other contaminants. (i.e. use air dryer, coalescent filter, or moisture separator as needed.)

   Blast machine must be ground to avoid shock.

   Electric extension cords should be three wire grounded (wire size can not be smaller than $3x1.5mm^2$)

2. Operator’s responsibilities before starting:

   Inspect fittings and hoses for damage and water.

   Check the seal on all doors. Only operate the blast cabinet with all doors securely closed and dust collection system running.

   Clean dust from dust collector and clean filter as needed.

3. Caution

   Watch for silicosis (dust created when using silica sand as a blast media) or toxic dust hazard. Do not use media containing free silica.

   Unless specified, working pressure of blast cabinet and related components must not exceed 125PSI.

   Keep blast nozzle controlled and aimed at the work.

4. Maintenance

   Keep your machine in good repair. Use original parts and do not substitute or modify original supplied items.

Important

For the safety of distributors, purchasers and end users:

The provided information described and illustrated in this material is intended for experienced, knowledgeable users of abrasive blasting equipment and supplies.

The products described in this material may be combined as determined solely by the user in a variety of ways and purposes. However no representations are made as to be intended use, performance standards, engineering suitability, safe practices, or compliance with government regulation and laws that apply to these products, products of other, or a combination of various products of third parties, and a combination of various products chosen by the user or others. It is the responsibility of the users of these products, products of third parties, and a combination of various products, to exercise caution and familiarize themselves with all applicable laws, government regulations and safety requirements.

Nor are representations made or intend to the useful life, maintenance cycles, efficiency, or performance of the referenced products or any combination of products.

This material must not be used for estimating purpose. Production rates, labor performance, or surface finished are the sole responsibility of the user based on the users expertise, experience, and knowledge of industry variables.

It is the responsibility of the user to insure that proper and comprehensive training of operators has been performed and all environmental and safety precautions observed.

We provide a variety of excellent products to the surface preparation industry, and we confident that all proficient users, operators, and contractors in this industry will continue to use our products in a safe and knowledgeable manner.

Technical Specifications

Rating: 220~240V/100~120V, 50/60Hz, 1200W

Maximum Work Pressure 125PSI (8.6Bar)

Air Consumption: 24CFM@125PSI (680L/min)

Work Light:

Fluorescent light: 4pcs

Each dimension: φ16x890

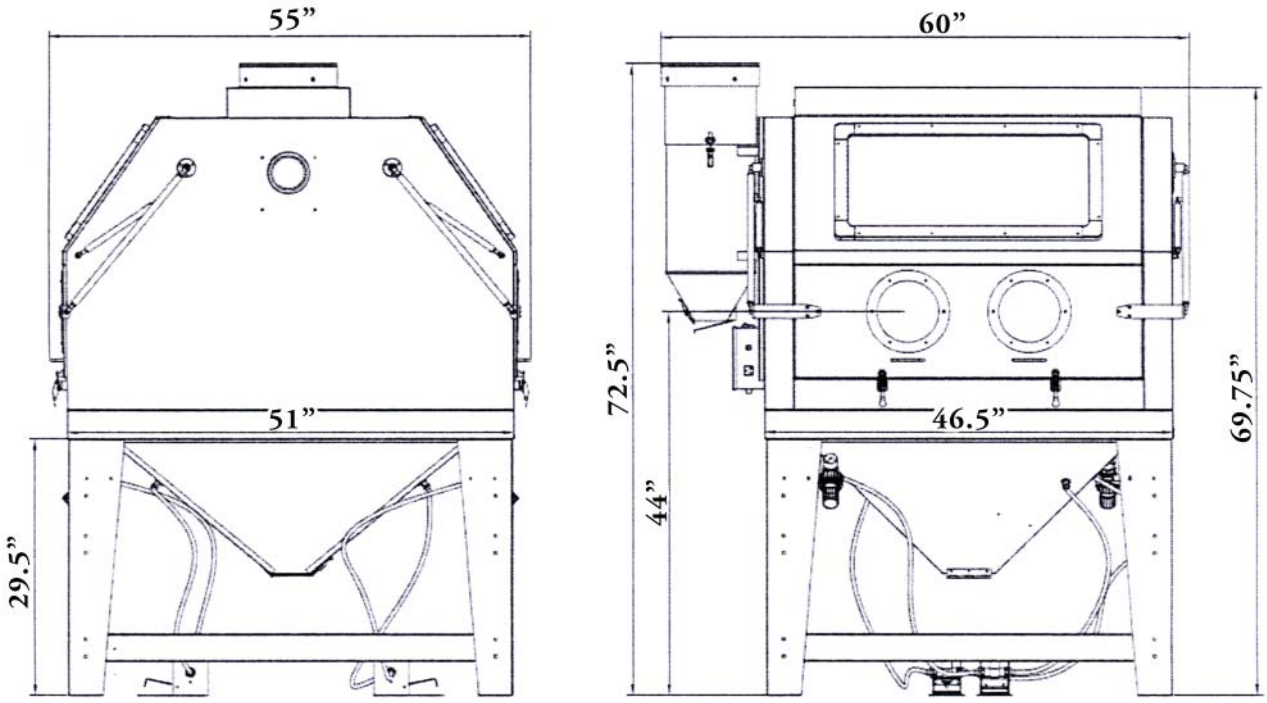
Each rating: 220~240V, 50Hz, 26W,
110~120V, 60Hz, 26W

Motor Rating: 220~240V, 50Hz/110~120V, 60Hz, 1200W

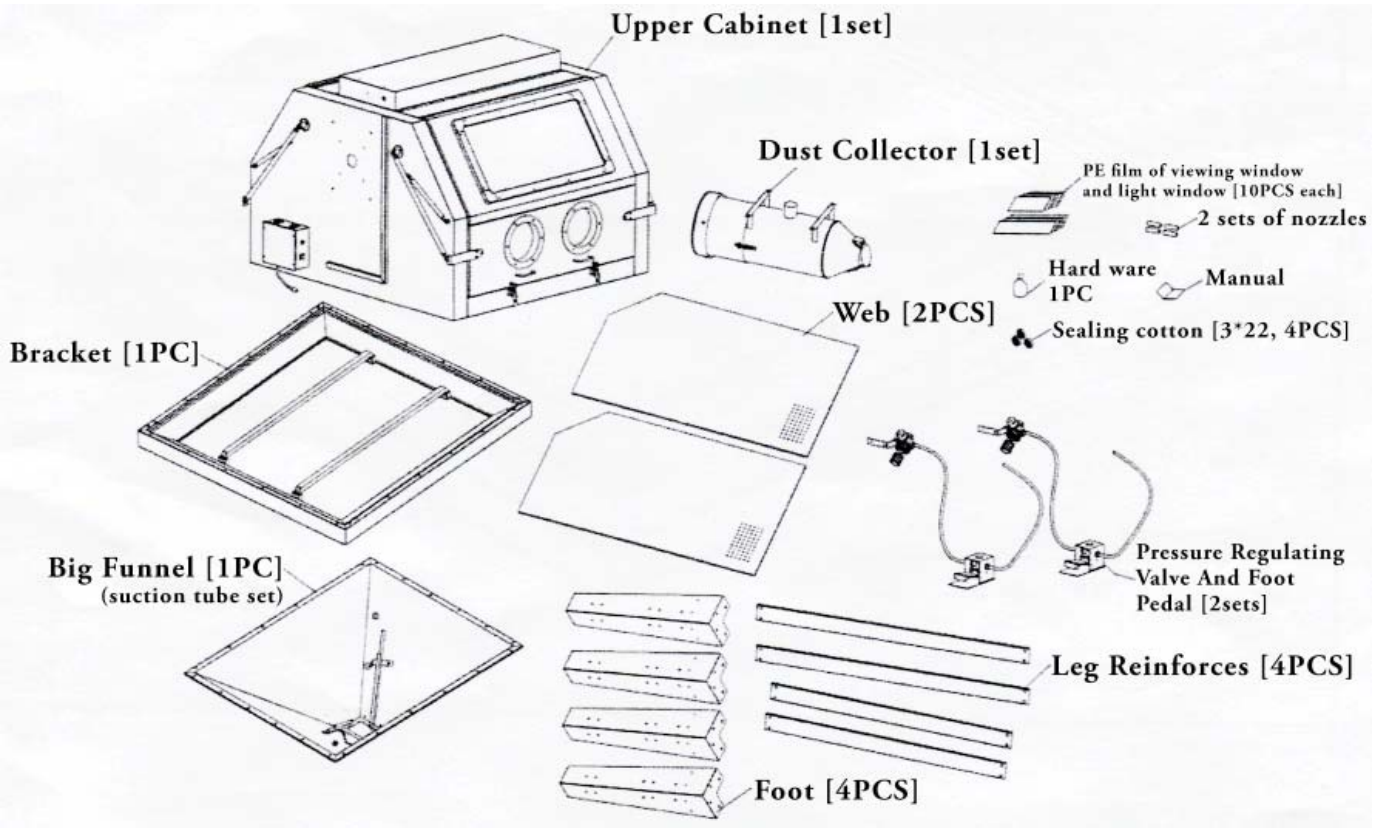
Overall Dimensions: W60” x D55” x H72.4”

Net Weight: 440 lbs

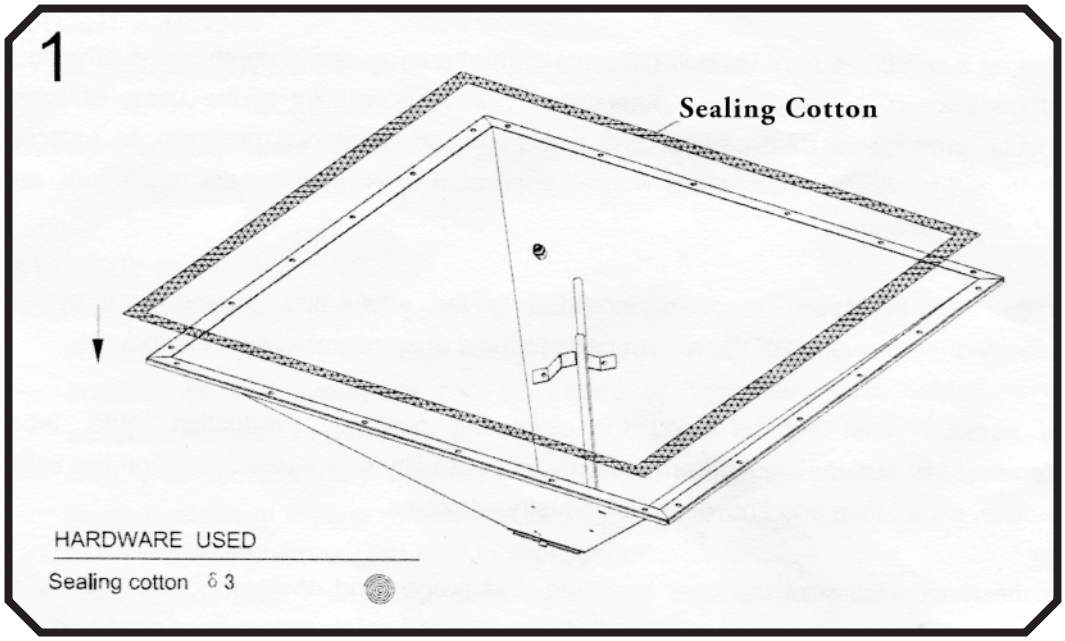
Gross Weight: 540 lbs



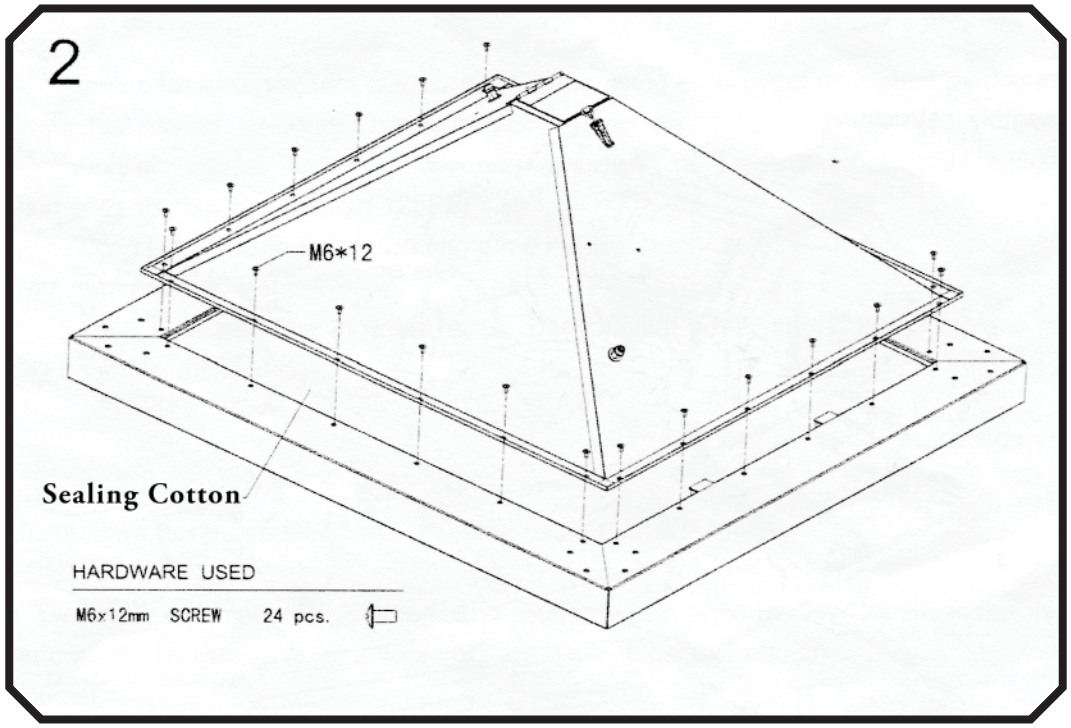
Assembly Instructions



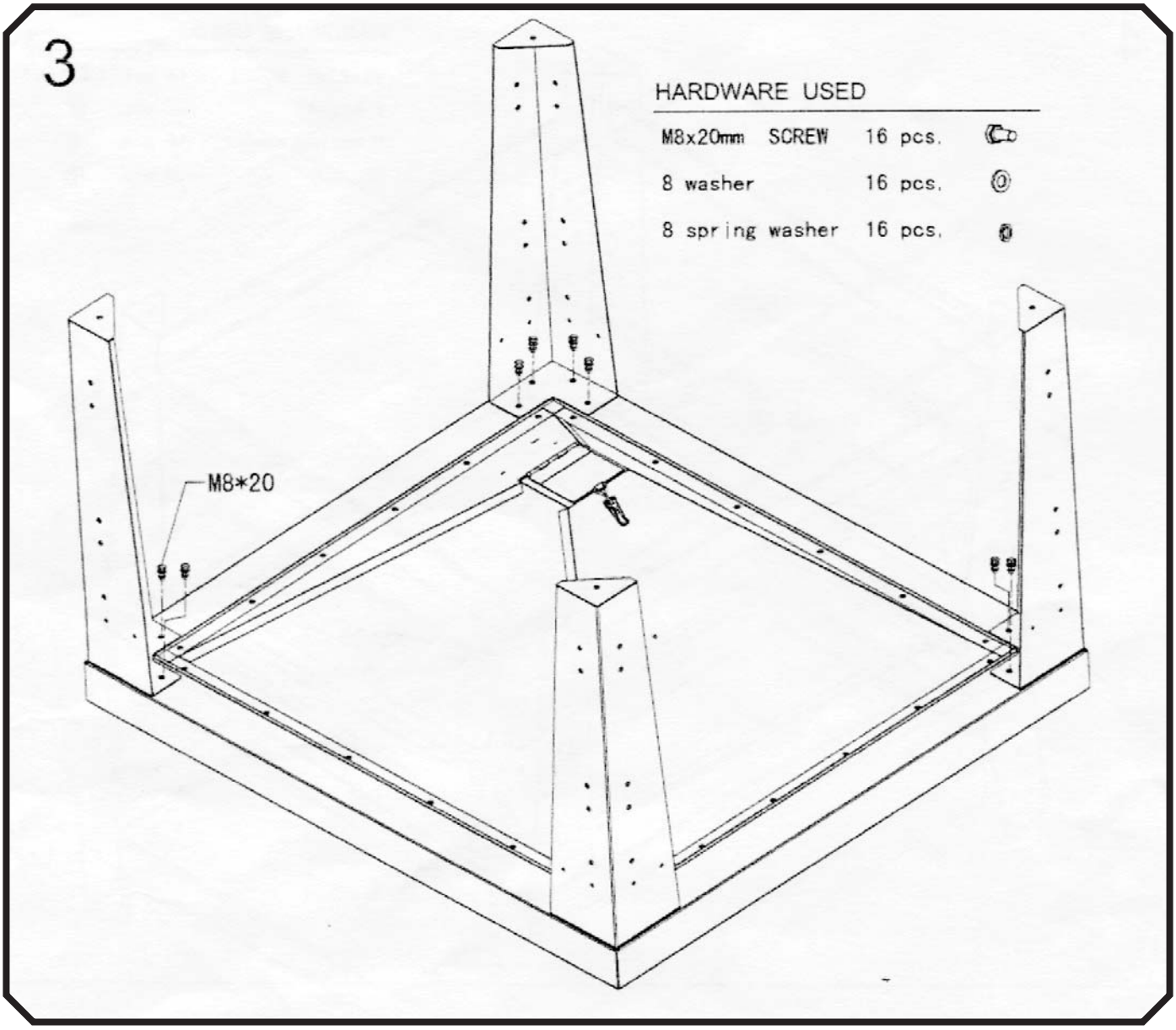
Step 1 - Shown with 3mm sealing cotton on the funnel.



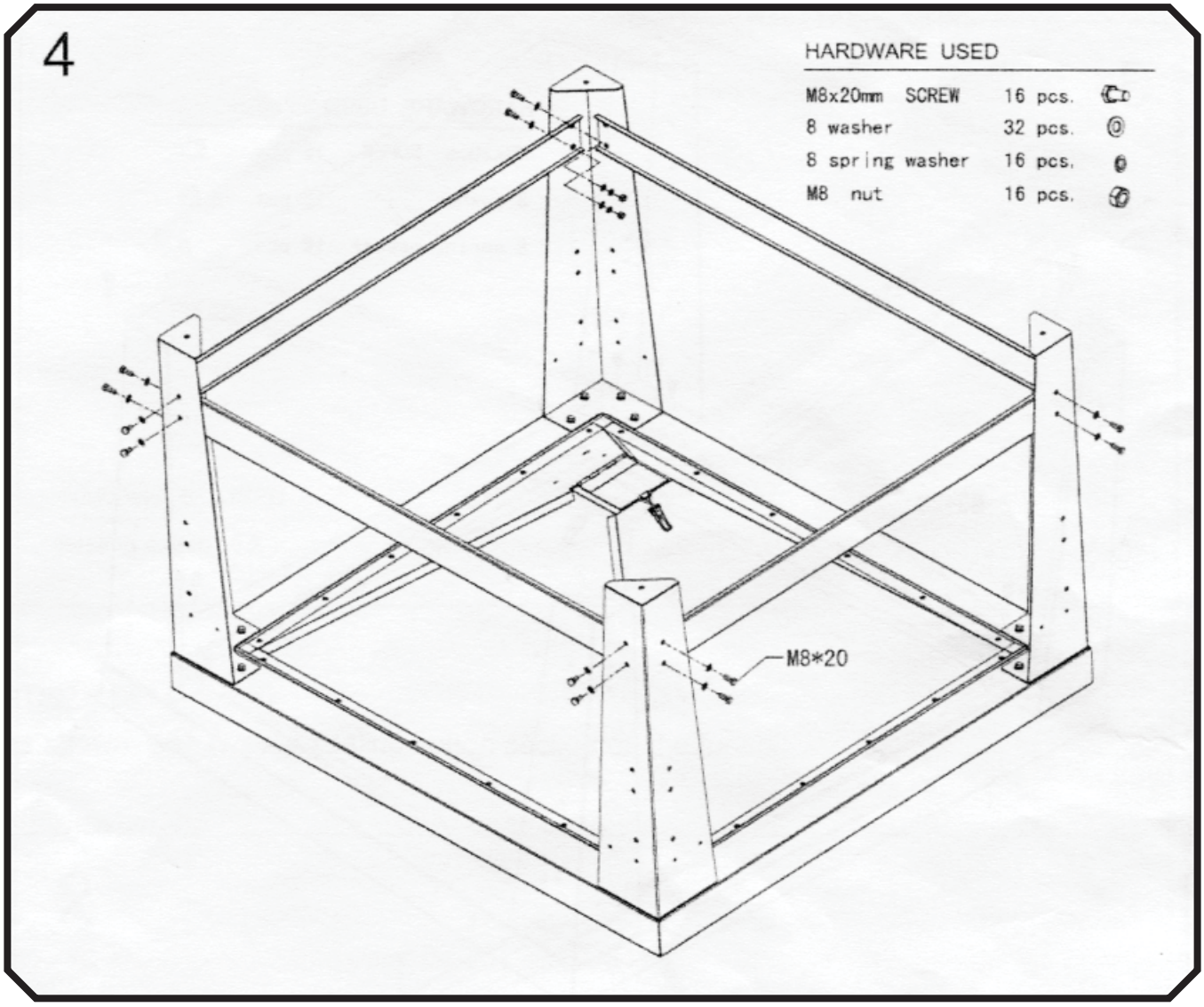
Step 2 - With the supporting frame upside down, the funnel is installed on the supporting frame with M6*12 screw



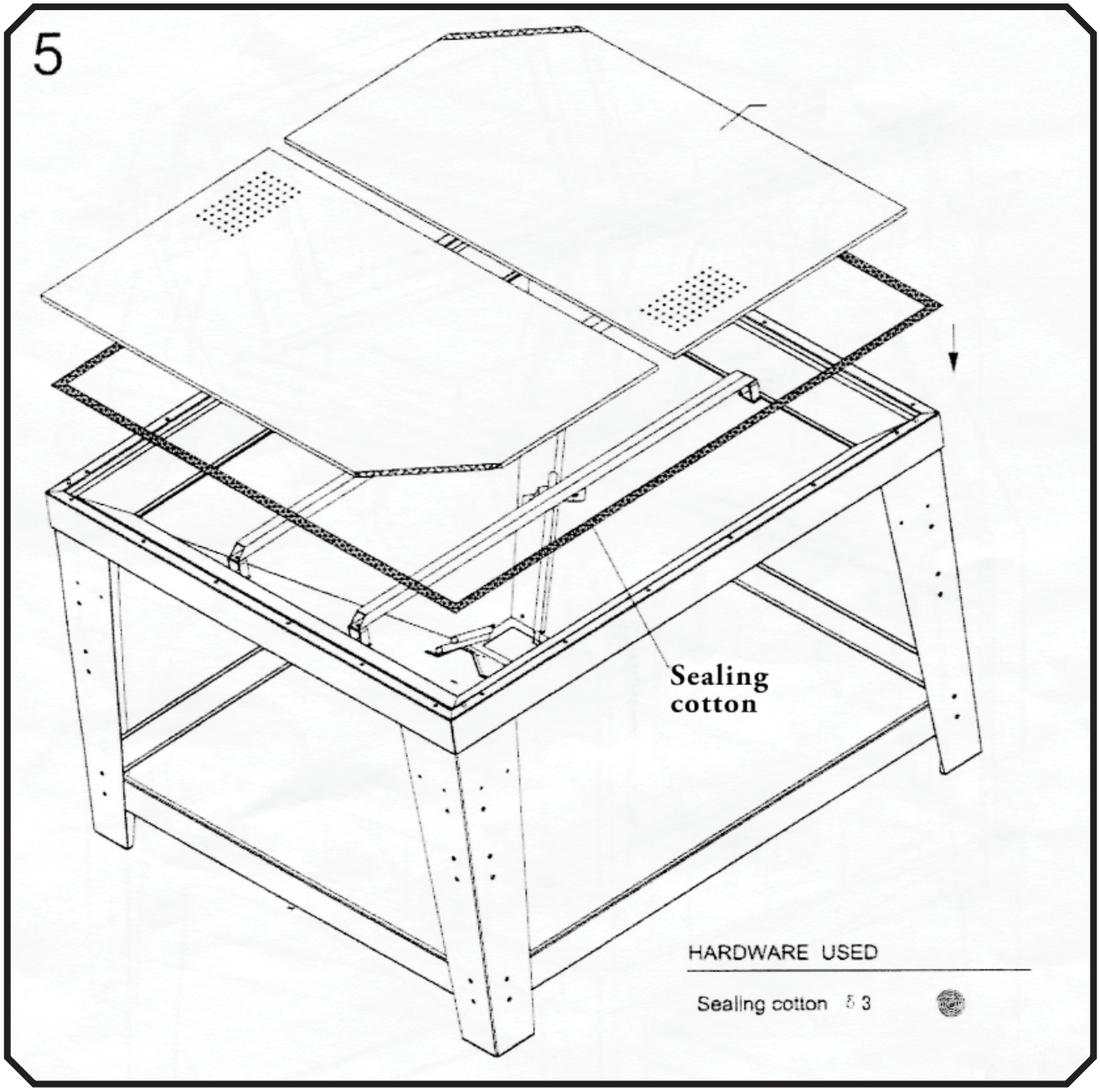
Step 3 - The 4 piece feet are arranged on the supporting frame with M8*20 screw (with φ8 spring washer and flat pad)



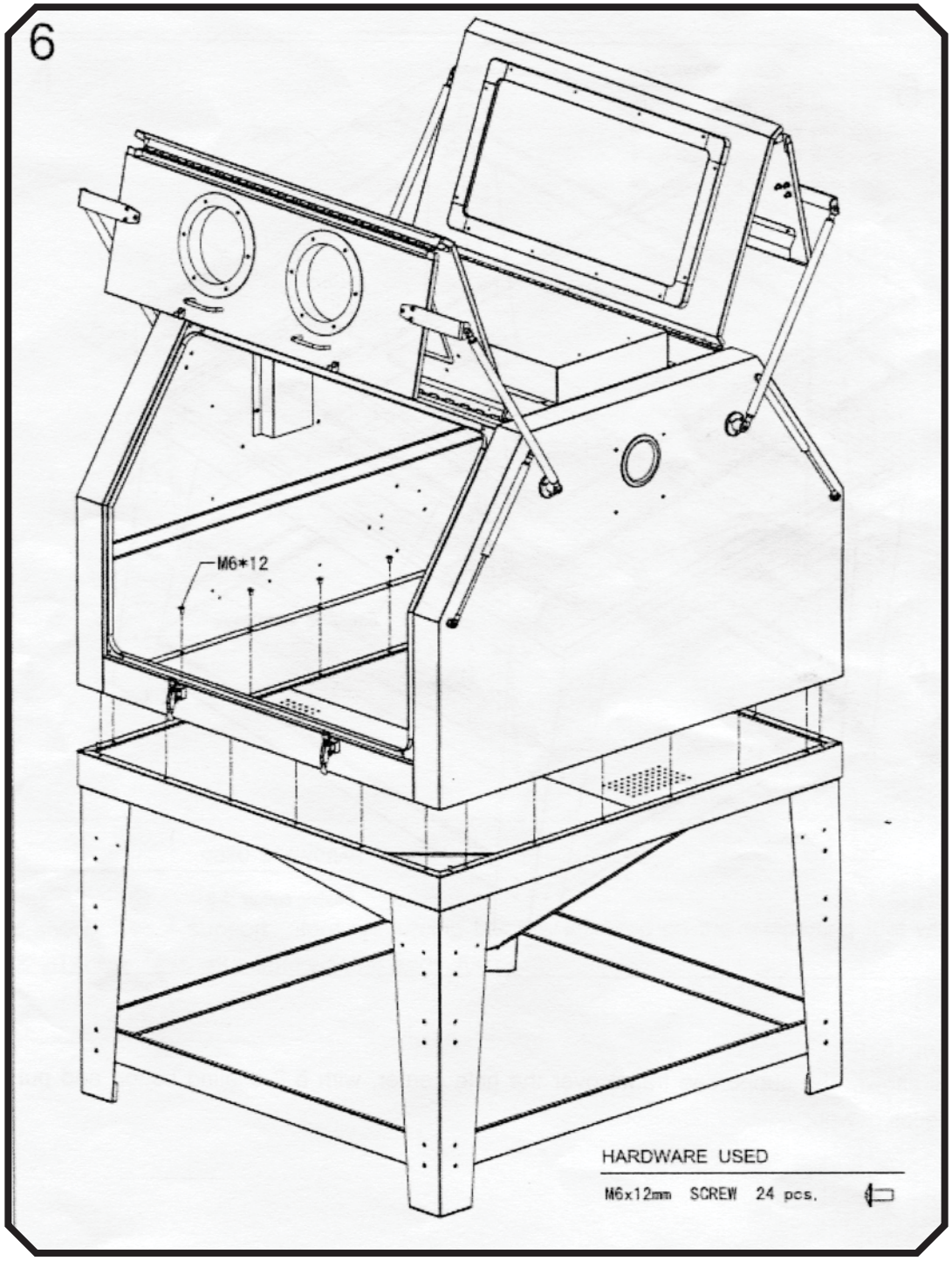
Step 4 - The 4 support foot reinforcing bars are installed on the supporting foot with M8*20 screw (with φ8 spring washer and flat pad)



Step 5 - Center the supporting frame over the hole, with sealing cotton and put 2 pieces of web.

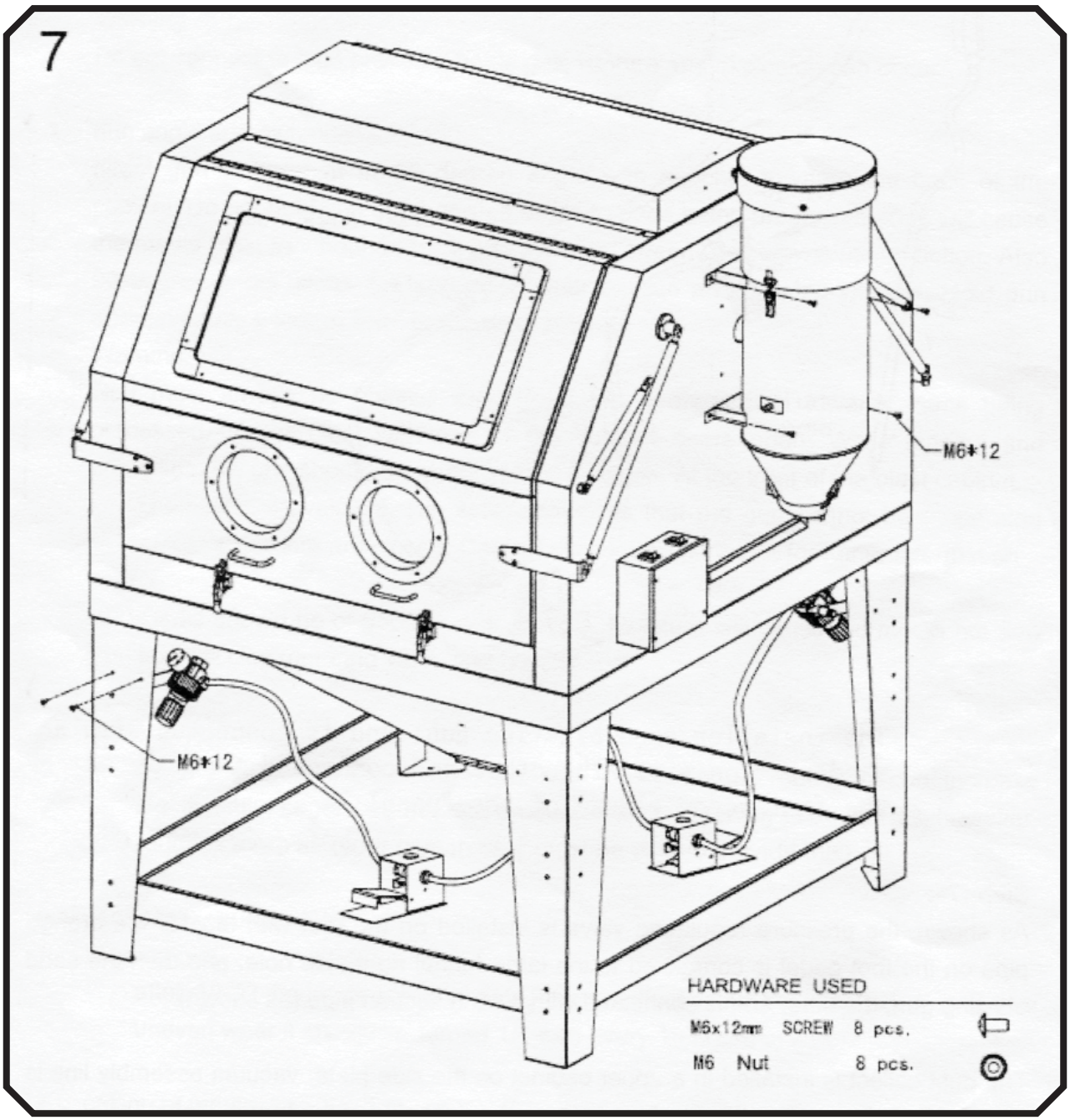


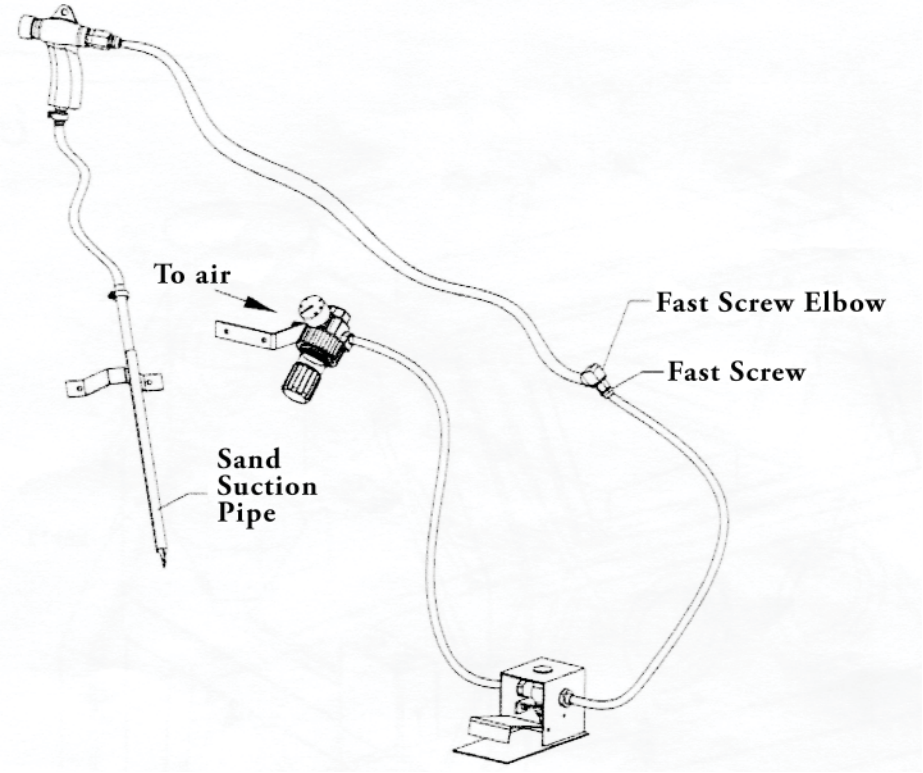
Step 6 - The upper cabinet on the supporting frame, open the double folding door, and fixed on a supporting frame with M6*12 screw.



Step 7 - The pressure regulating valve is installed on the feet with M6*12, the orange pipe on the foot pedal is connected to the large funnel right side hole, and then the sand blasting gun, the other end is connected with a sand suction pipe.

The dust collector is installed in the upper cabinet on the side plate. The vacuum assembly line is inserted in the socket on the box by a switch on the right side of the trough plate.





To install the sand blasting gun, connect one end with a sand suction pipe and the other end to the fast screw elbow of the funnel.

Operating Instructions

1. Prepare parts for blasting. All parts processed must be free of oil, grease, and moisture. Make sure parts are dry before putting into the cabinet for cleaning.
2. Recommended operating air pressure is from 50 to 80 PSI. Up to 125 can be used, but this breaks down some types of media prematurely. Most parts for blasting cleaning can be blasted at 80 PSI. For light gauge steel, aluminum, and other more delicate parts, start at lower pressure and gradually increase the pressure until the desired finish is achieved. *Do NOT connect to high pressure bottle gas. Rupture and explosion can occur.*
3. Direct gun at 45-60 degree angle at parts to ricochet towards the back of the cabinet. Do not hold gun at 90 degree angle to parts being processed. This will cause the media blast to bounce back into the blast stream and slow blasting action. Also 90 degree angle will cause excessive wear on gun and viewing window. Hold gun approximately 6 inches from parts being blasted. Gun must always be pointed away from the operator and towards items being processed. Never blast with any of the cabinet doors open or while loading and unloading.
4. Media should be of good quality and dry. Moisture will cause the media to not flow and will clog metering valve and hopper.
5. By changing to the next larger size of nozzle, production can increase significantly. Larger size nozzles produce a large cleaning pattern. This, however, requires more air (your compressor must be able to provide this).

Maintenance Instructions

1. After 10-12 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.
2. Media caking is caused by moisture in the air supply of oily and greasy parts. If this is not corrected, the media will not flow evenly and will plug up in the metering valve and gun. Check air supply. If water is present, install a good moisture trap. If oily or greasy parts are being blasted, you should degrease and dry the parts first.
3. If media stops flowing occasionally, place thumb over nozzle (hold tight) and push foot pedal down for a couple of seconds this will cause the stem to back blast through the gun and up the media hose. This will help loosen any clogs.
4. If the gun air pressure drops, set the air pressure to 80PSI on the air gauge at the regulator. Push the foot pedal while holding gun and see if the gauge pressure drops significantly. If the pressure drops, this indicates that there is a restriction in the supply line. This could be that the hose is too small, a reducer of quick coupler, a plugged filter, or other piping that doesn't allow enough air through. Also if the cabinet is too far from the compressor, a pressure drop will occur. Air supply line should be 1/2 or larger.
5. For poor visibility/excessive dust:
    a. An air inlet at front left above regular should be free to allow air into the cabinet.
    b. Empty the dust container when it is full via the latch at the bottom of the dust collector, or remove the black cover on the vacuum.
    c. Remember to clean or replace filter in dust collector.
    d. Eventually the media becomes so small that it is essentially dust. Replace media and clean the dust collector.
6. Viewing windows come with a clear plastic protector on them. As these become pitted they can be easily replaced to extend the life of the window. The window can also be easily replaced.
7. For poor media flow:
    a. Check for moisture as indicated above. Install moisture trap as needed, replacing damp media and clean hoses.
    b. Holes in media hose will cause poor media delivery. Replace hose.
    c. Replace or screen media.

Maintaining Suction Efficiency

The most common problem customers have with their suction (venture) blast cabinets is a decrease in production rates. A properly maintained suction cabinet should provide years of constant service. When production rates fall, the operator can usually locate the problem by checking:

1. Air supply

   If the pressure gauge on the regulator shows an adequate no-load supply (when the blaster is not running), press the foot pedal. If the pressure drops more than a few PSI your air supply is restricted or inadequate. Clean filters and moisture separators all the way back to the air compressor. Straighten any kinky lines. Use a master gauge to check the air pressure or replace existing gauge if you suspect it is giving you false readings.

2. Blast gun

   The nozzle will wear out eventually. Replace it if it is measured 1/16 over its original size or if it shows uneven wear. Adjust as needed for different media and conditions. A properly working gun will pull 15-17 inches of mercury on manometer.

3. Dust collector

   Inadequate cabinet ventilation results in reduced cleaning power at the nozzle as well as diminished view of the work in progress. Use the dust collectors and shake every 20-30 minutes when the cabinet is turned off (more often in dusty conditions). Empty dust collector at least once a day. Remove filter and blow out occasionally to keep the dust collector or vacuum working efficiently. Replace as needed.

4. Media

   Use quality blast media sized to the job. Damp or dirty media can bring blasting to an instant halt. Store media in a dry area and load the appropriate quantity. Add enough media through the flooring to have 6 inches of media on top of the metering valve. If you run out of media as you are blasting, add enough so it keeps circulating to the gun. The media will eventually breakdown or get too contaminated to use. The less there is in the system, the less you will have to replace.

5. Media delivery

   Replace any media hose that has soft spots or visible wear. Adjust the metering valve to provide adequate flow. A mixture that is too rich will

cause pulsating at the gun. An unusually loud noise while blasting means the mixture is too lean. A rich mixture can result in lower impact velocities. While a lean mixture reduces the number of impacts. Both reduce your cleaning rate.

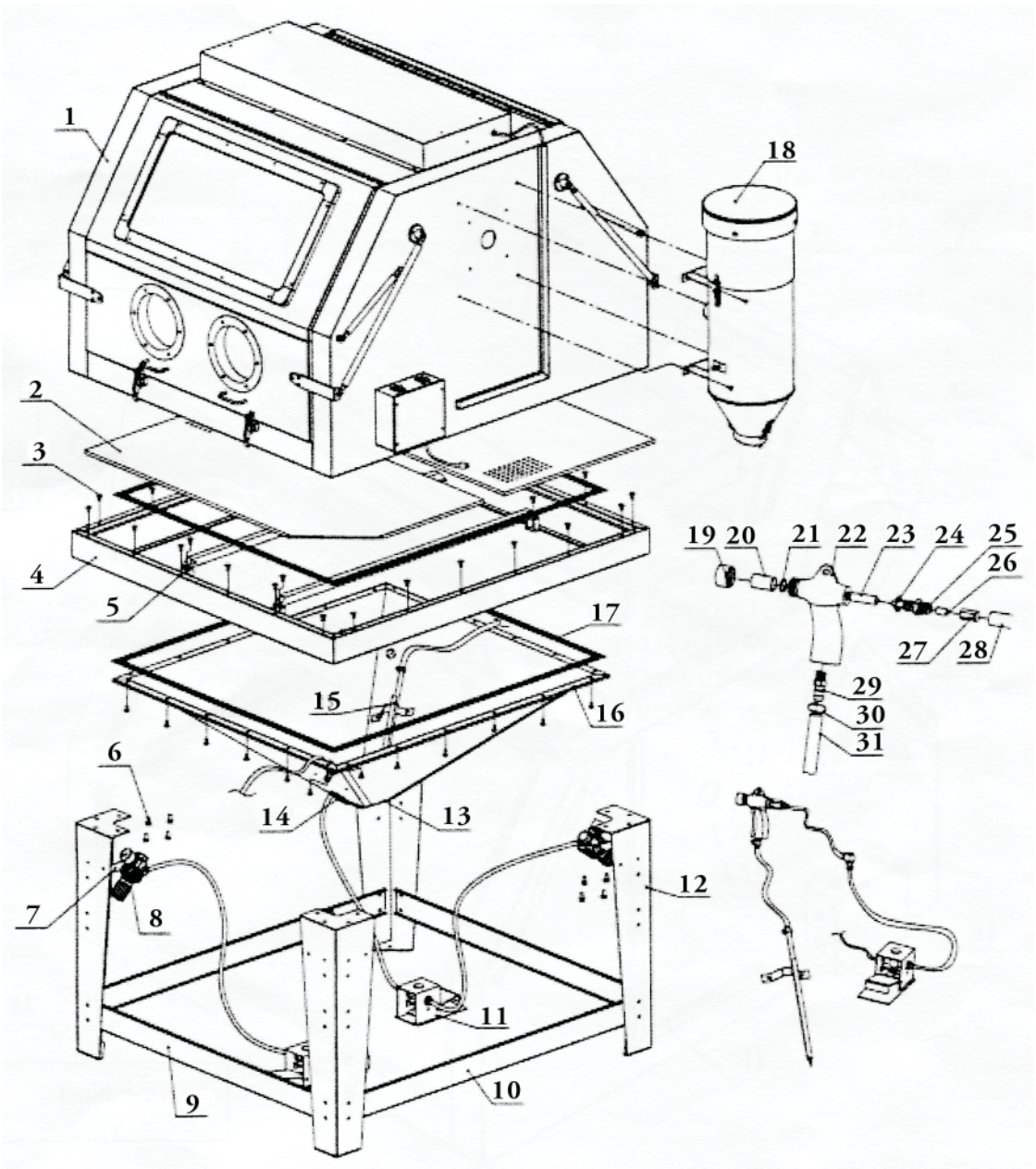
If everything is adjusted right and you are still not getting the production levels needed, contact your distributor.

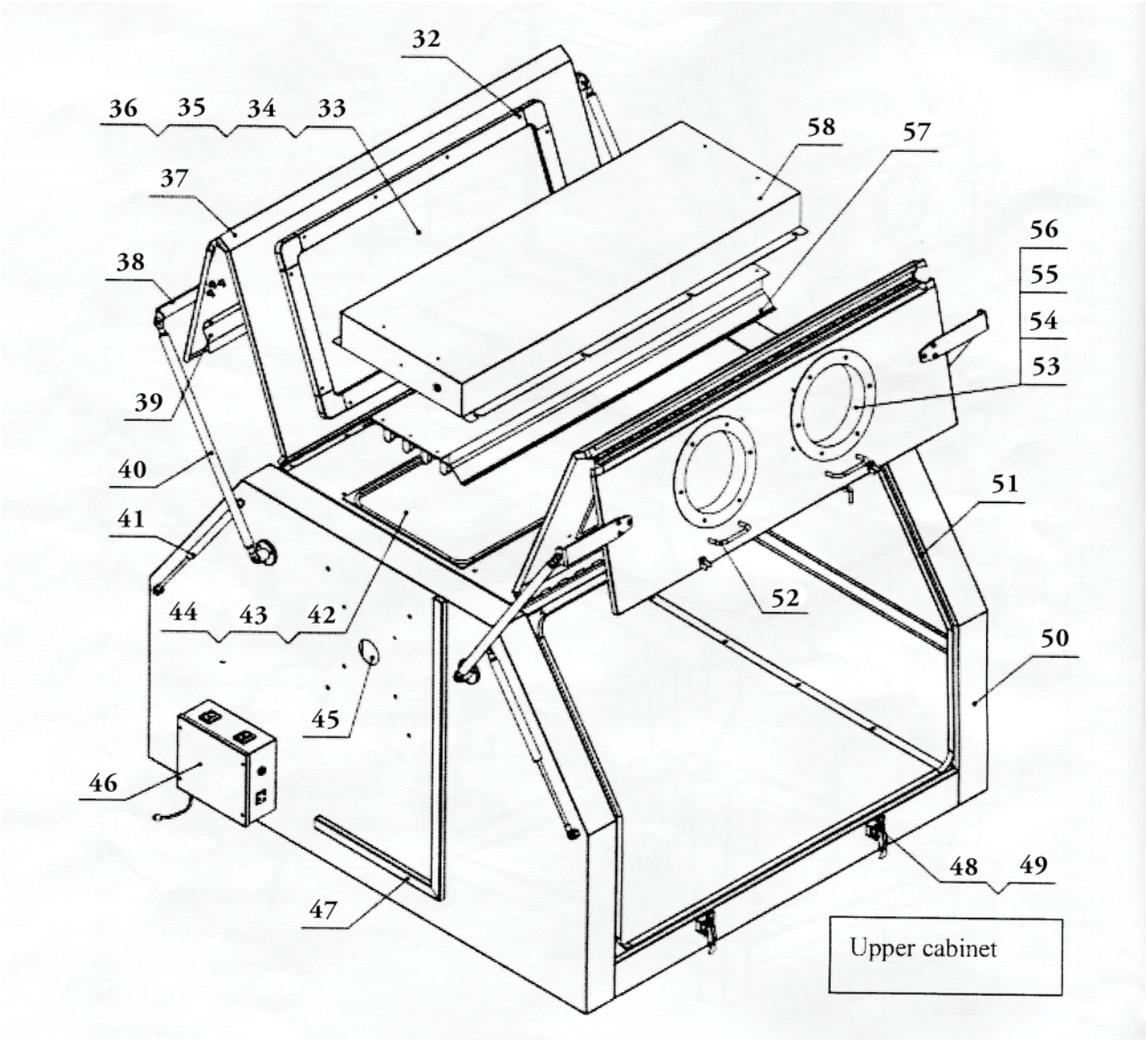
Parts List

Part Num	Part Name	Quantity
1	Upper cabinet	1
2	Steel screen	2
3	Screws M6*12	58
4	The supporting frame	1
5	The supporting rod for steel screen	2
6	Screws M8*20	32
7	The fixed bracket	2
8	Air regulator with pressure gauge	2
9	Leg reinforcers 1	2
10	Leg reinforcers 2	2
11	Foot pedal	2
12	Legs	4
13	Cover for draining sand	1
14	Latch	3
15	Suction sand hose	2
16	Funnel	1
17	Sealing tape	1
18	Dust collector	1
19	Cap of nozzle	2
20	Nozzle	8
21	O-Ring, nozzle	2
22	Gun body	2
23	Sheath of air jet pipe	2
24	Lock nut	2
25	Air jet pipe	2
26	12-g1/4” quick connector	2
27	Conversion connector	2
28	Air hose φ12”φ8	6
29	Quick fitting G3/8”	2
30	Clamps	4

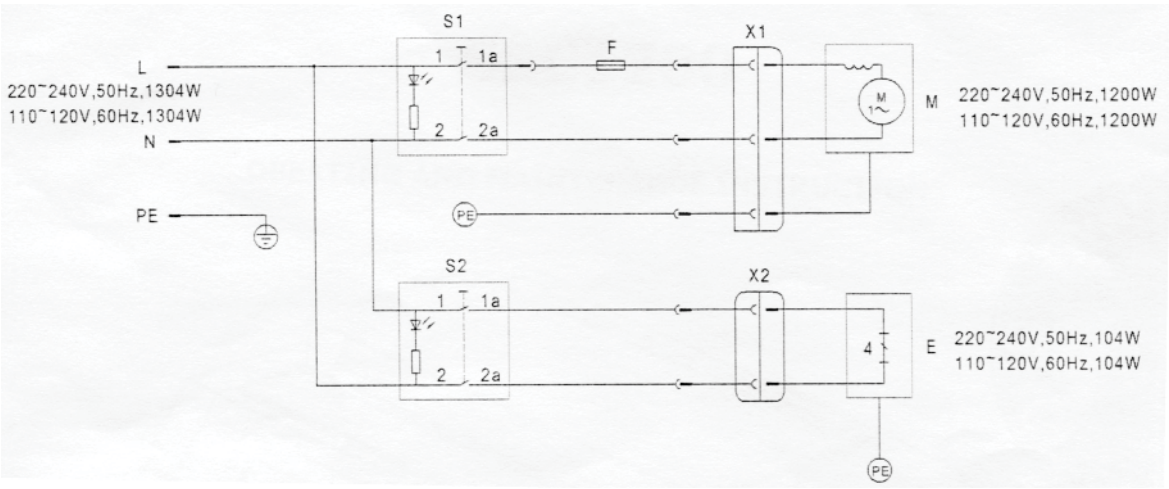
Part Num	Part Name	Quantity
31	1/2” Sand hose	2
32	Window frame cover	2
33	Glass board of viewing window	2
34	Glass of viewing window	2
35	PE film of viewing window	2
36	Sealing tape of viewing window	2
37	Elements of front opening door	2
38	The support plant for front door	4
39	Front operation board/sand board	2
40	Main support poles	4
41	Support pole of air springs	4
42	Rubber seal strip of light window	2
43	PE film of light window	1
44	Glass of light window	1
45	Sand boards	2
46	E-Box assemble	1
47	Plastic slot boards of wire	1
48	Front door latch	4
49	Latch seats	4
50	Upper cabinet	1
51	Rubber seal strip of front opening door frame	2
52	Handle	4
53	Glove	2
54	Glove seat	4
55	Mounting ring of glove	4
56	Big hoop of glove	4
57	Seat of fluorescent lamp/lamp 4pcs	1
58	Bracket of top light	1

Exploded View




32
36
35
34
33
58
57
37
56
55
54
53
38
39
40
41
51
52
44
43
42
50
45
46
48
49
47
Upper cabinet

Wiring Diagram



L Phase Wire

N Neutral Wire

PE Earth Wire

F Fuse

E Luminaire with Four Fluorescent Tubes

X1 Connector

X2 Connector

S1 Light Switch

S2 Motor Switch

M Motor