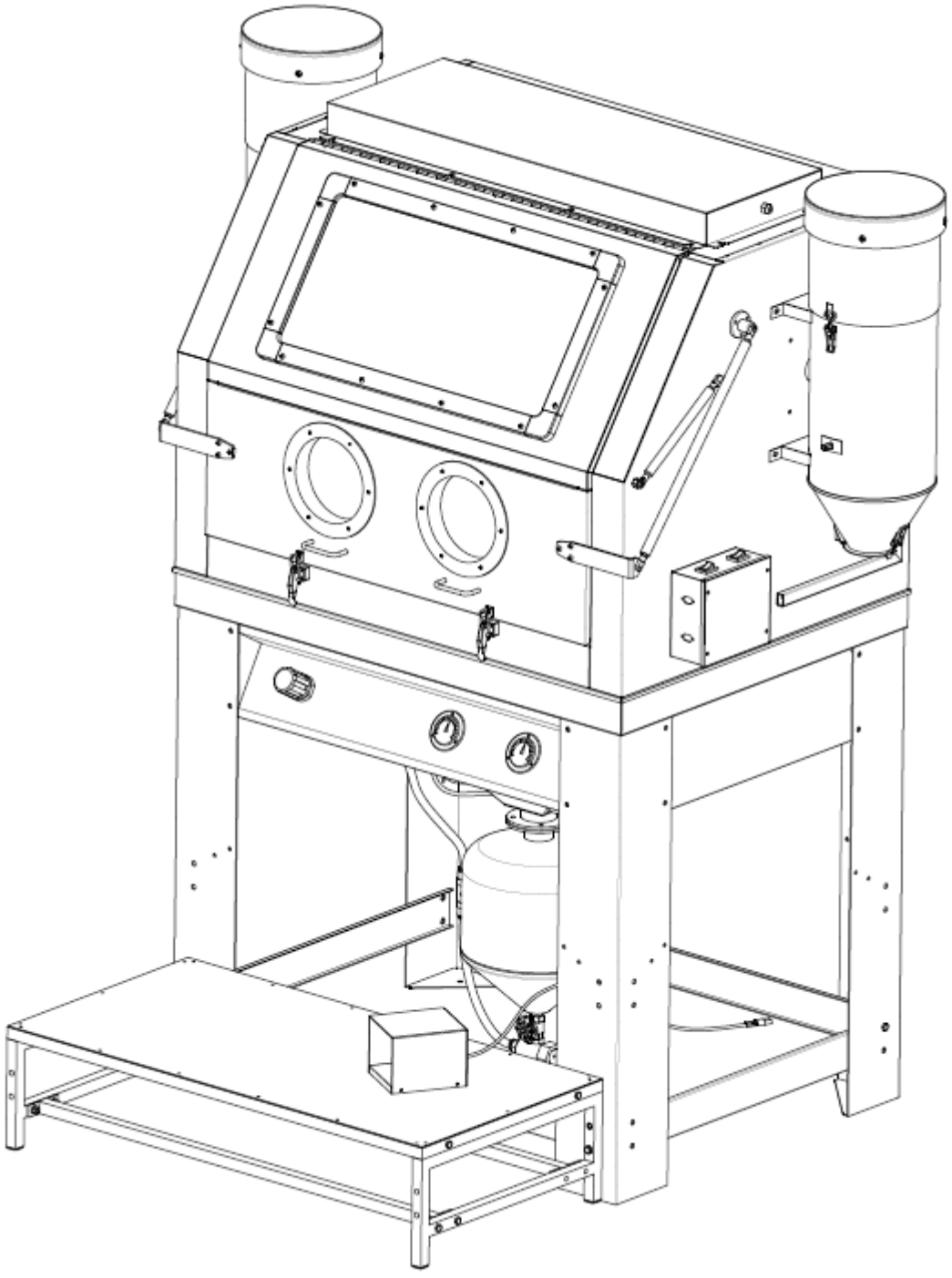
Operating Instructions and Parts Manual

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.

High Pressure Abrasive Blast Cabinet

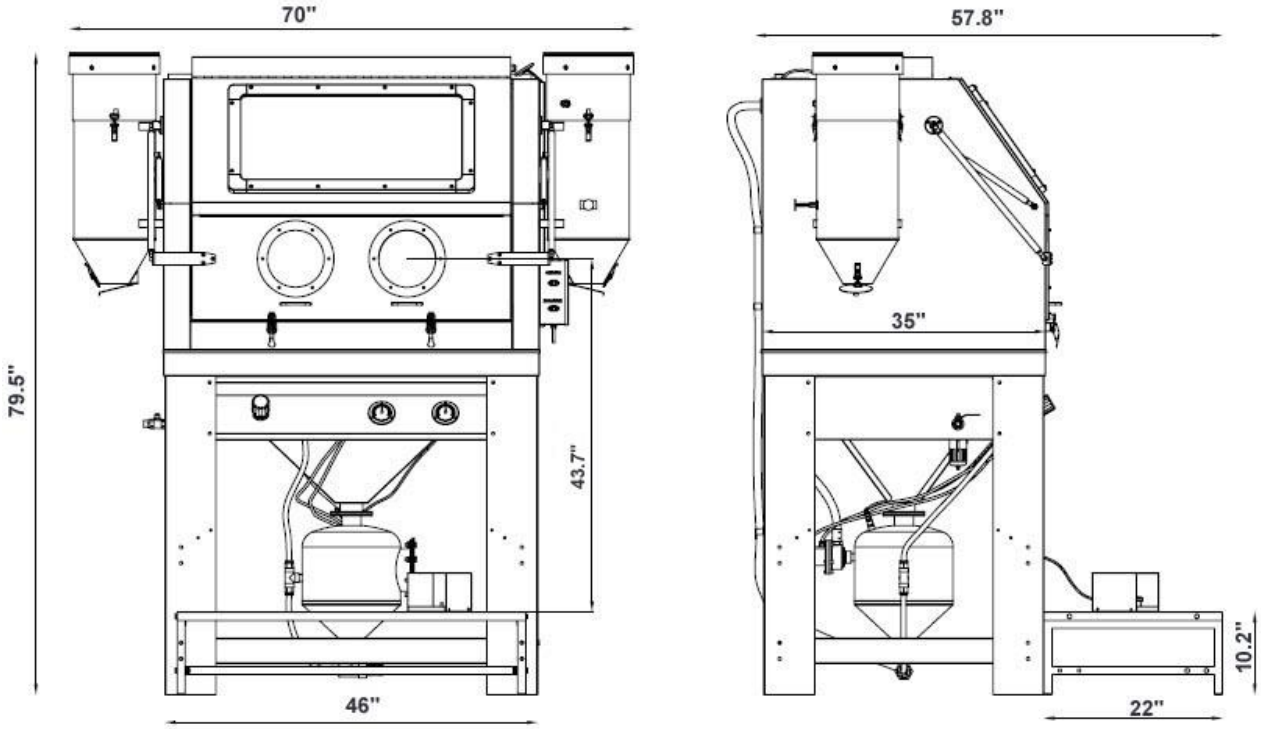


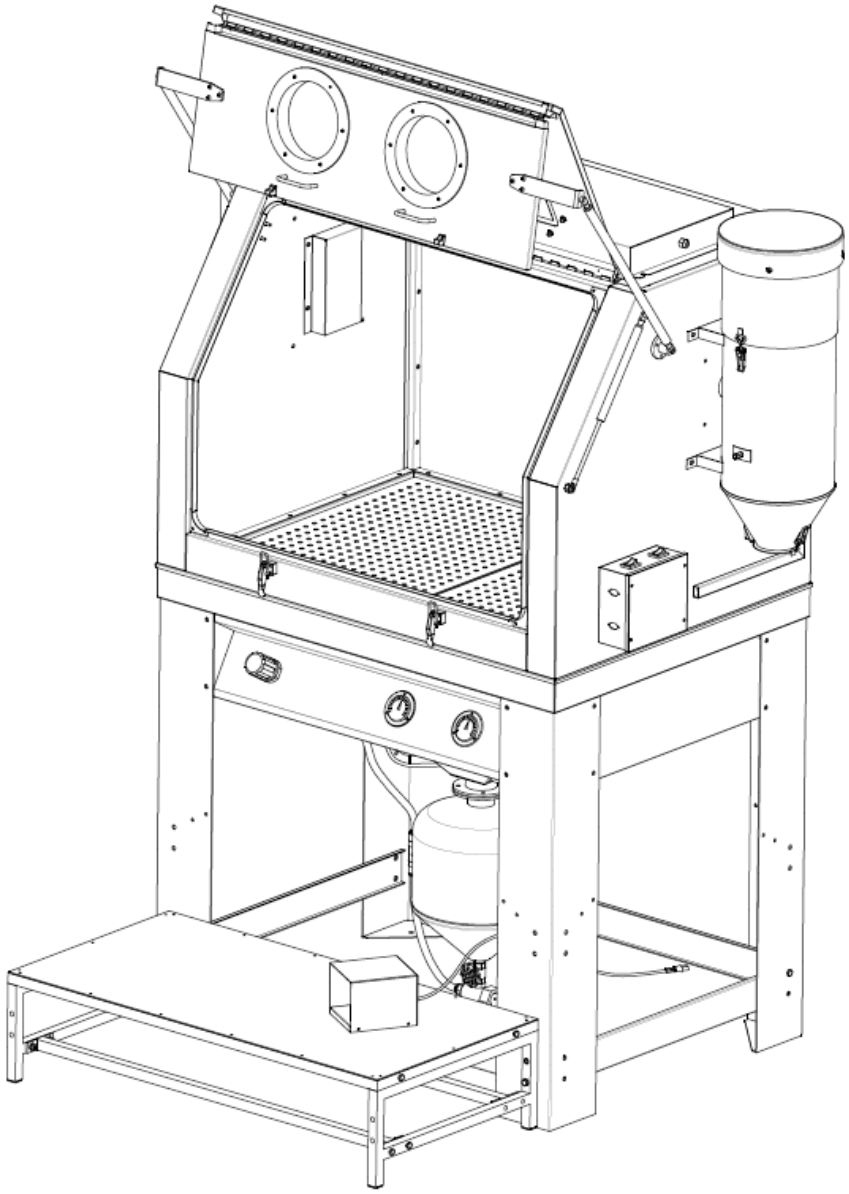
Description

- ✧ A Perfectly combined traditional abrasive blast cabinet with pressure blaster tank
- ✧ Provides deeper penetration of abrasive and higher strip rates
- ✧ Large front opening and work space, accommodates various kinds of work pieces
- ✧ Foot pedal valve control allows flexible operation and reduces hand fatigue
- ✧ Large viewing window, L.E.D. lighting and two dust collector provide greater visibility

Specifications and Dimensions

Nozzle Size: 5MM/6MM
Maximum Air pressure: 110PSI
CFM: 25 @ 80 PSI with 5MM nozzle
Overall Dimensions: 70”W x 79.5H x 57.8D (95”H with door open)
Working Pressure: 60~110PSI
Abrasive hose: 1”OD – ½” ID
Abrasive grit size: 40-120 with 5MM nozzle
Tank Capacity: 5.4 Gallon
Tank Dimensions: 12.1” x 14.5”
Motor Rating: 230V, 50 Hz, 1200W（Each SINGLE MOTOR）
Work Light: LED light 3 Bulbs,20W EACH
Air supply: 1/2” ID air line minimum





General Safety Information

Any blast cabinet will produce a powerful flow of abrasive particles. To avoid personal injury and property damage, study this manual thoroughly before assembling, operating or servicing this blast cabinet.

⚠WARNING

1. ***During operation, do not expose the hands or skin directly in the line of the blast nozzle.***
2. ***Ensure all components seal properly after assembly.***
3. ***Do not exceed the maximum operating pressure of the blasting equipment***
4. ***Disconnect the cabinet from the air supply before changing accessories or attempting to install, service, relocate or perform any maintenance.***
5. ***Check hoses and air lines for weak or worn condition before each use. Make sure all the connections are secure before use.***
6. ***Do not point the abrasive blaster nozzle at anyone or objects.***
7. ***Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.***

⚠ DANGER ***Chemicals, including lead are contained in this product or its power cord. Wash hands after handling***

⚠ DANGER ***Dust can be created when you sweep, blast, cut, abrasive, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.***

⚠ DANGER ***Fire or Explosion Hazard! DO NOT USE a abrasive blaster around combustible or flammable liquids, dusts, gases, oily rags, or other materials that can explode or burn quickly. Some abrasives create sparks when they hit surfaces. Abrasives similar to aluminum oxide may generate static electric sparks which will cause fires or explosions in an unsafe environment.***

⚠ DANGER ***Static electric shocks can be painful. Please wear leather or rubber soled shoes or boots and stand on the ground to avoid static electricity. A grounded wire attached to the nozzle retainer will safely remove the static electricity.***

Operation Method

Connect air and power supply, open operation door, load abrasive, place work piece on grate, lock the door, turn dust collectors on then the air intake valve, adjust working pressure and step on the foot pedal to start.

Operating Principle

Depressing the foot pedal allows air flow to the pressure tank, closing the sealing head and allowing abrasive to flow through the hose. Opening the gate valve on the tank controls the flow of abrasive. Open gate valve slowly until desired abrasive flow is obtained. Note: opening the gate valve too much will cause pulsing and can also cause the nozzle to clog. To depressurize the tank, close the air inlet valve and depress the foot pedal until pressure gauge reads zero pressure. When the foot pedal is in the rest position air flow to the sealing head is shut off allowing the abrasive to recycle back into the tank.

Maintenance

NOTE: Disconnect power and air before the maintenance.

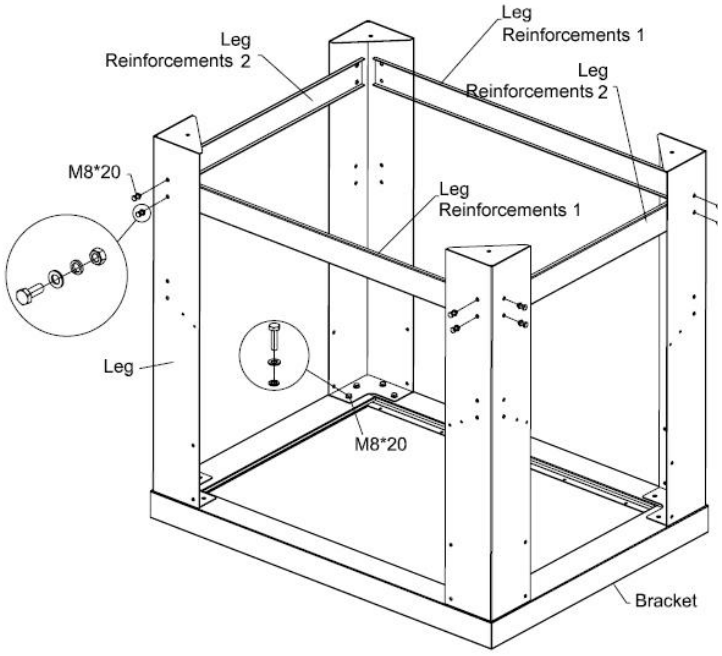
Cleaning: Please clean the machine or parts with a soft cloth. DO NOT use solvents to clean.

Operation Notice

1. Before operation, check the sealing of the valve, connecting fitting and hoses and replace when necessary to ensure safe and reliable performance.
2. Abrasive should be filtered through a screen to prevent debris from getting into the tank, gate valve or nozzle.
3. Do not add too much abrasive. Adding too much abrasive may cause the sealing head not to seal properly.
4. If abrasive stops flowing, disengage from foot pedal to allow abrasive to flow back into the pressure pot.
5. Use good quality, dry abrasives that are designed to be recycled. Keep abrasives dry. Moisture will cause clogging and flow problems. Replace abrasive when abrasive breaks down. Worn abrasive will cause decreased strip rates.
6. To change abrasive, place nozzle end of the hose in a woven bag and depress the foot pedal until all abrasive is removed from the unit.
7. Discharge water separator as needed. Minimum 1-2 times daily.
8. Clean dust collector filters as needed. Under certain dusty conditions the filters may need to be cleaned multiple times during a 6 hour cycle. Failure to clean will cause dust collector motors to overheat and this condition is not covered under warranty.
9. Do periodical inspection for the sealing head for any possible damage, aging, deformation; sealing leaking will affect abrasive blast pressure and results to air loss.
10. When you finish, clean all abrasive out in order to prevent breakdown for next operation. Store abrasives in a dry location.
11. **Avoiding clog**: Keep media dry! **Nozzle size needs to be 3-4 times larger than the size of the abrasive being used.**

Assembly

1

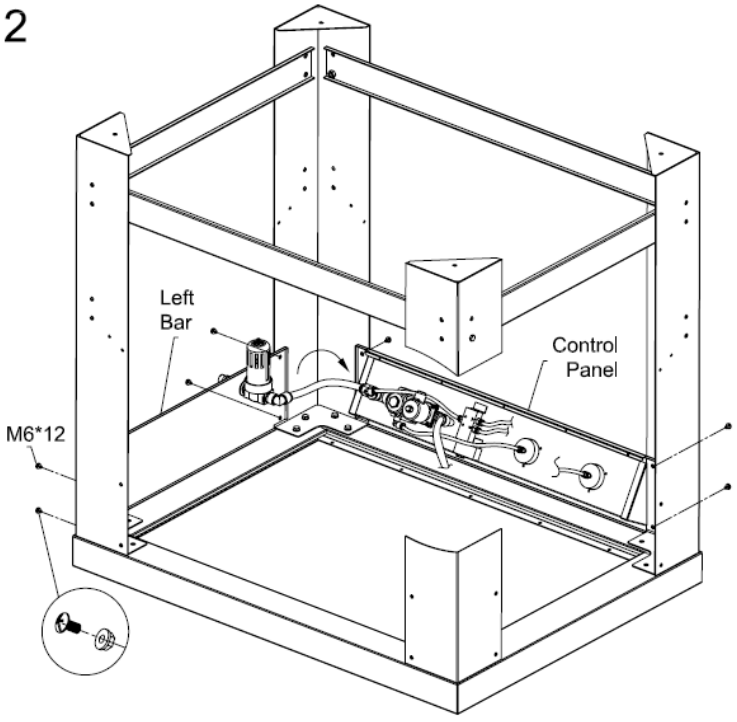


1. Fasten the four legs and the Leg Reinforcements to the Bracket by using M8*20mm bolt, Flat Washer, lock Washer and M8 Nut, tighten.

Hardware

M8x20mm Bolt	32	
M8 Nut	16	
8 Flat Washer	48	
8 Lock Washer	32	

2

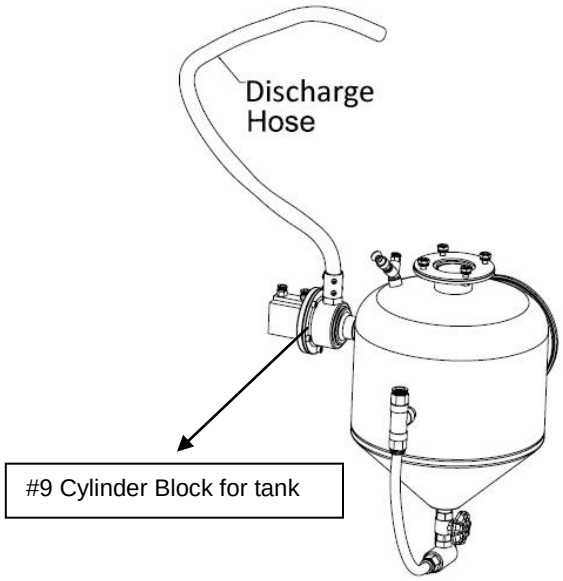


2. Assemble the Left Bar, Right Bar, Control Panel and Rear Bar by using M6*12mm bolt, Flat Washer, and M6 Nut in sequence.

Hardware

M6x12mm Bolt	8	
M6 Nut	8	

3



3: Assemble discharge hose with #9 Cylinder Block for tank

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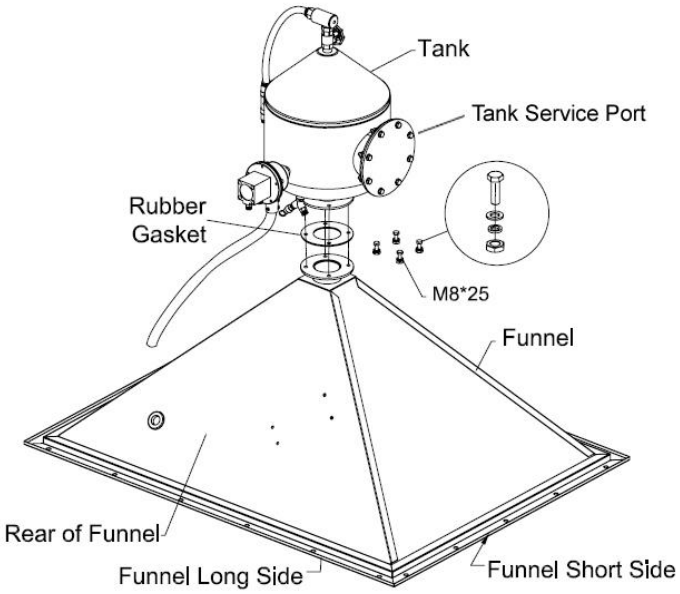
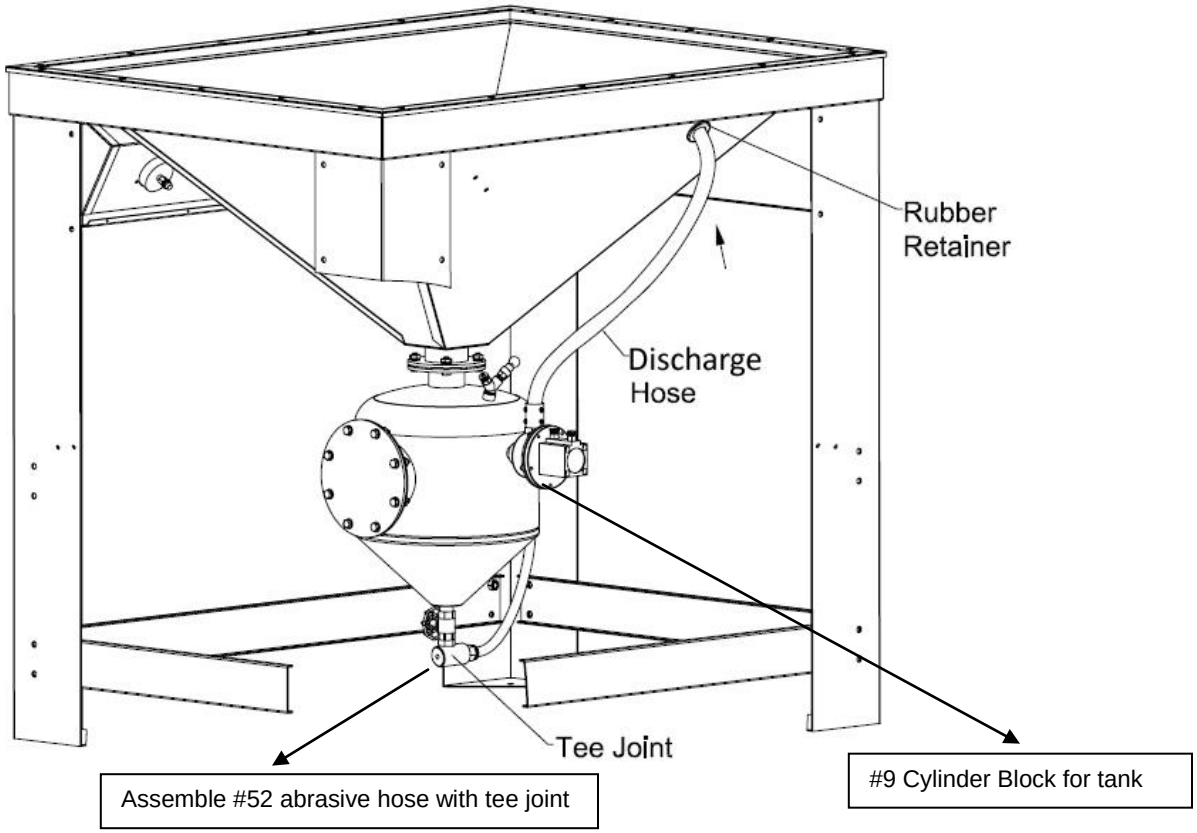


3. Place the funnel as shown in the diagram. Attach the tank assembly (including bolt, flat washer, lock washer, nut) and rubber seal onto the funnel.
Note: Locate tank service port with right side funnel on same direction.

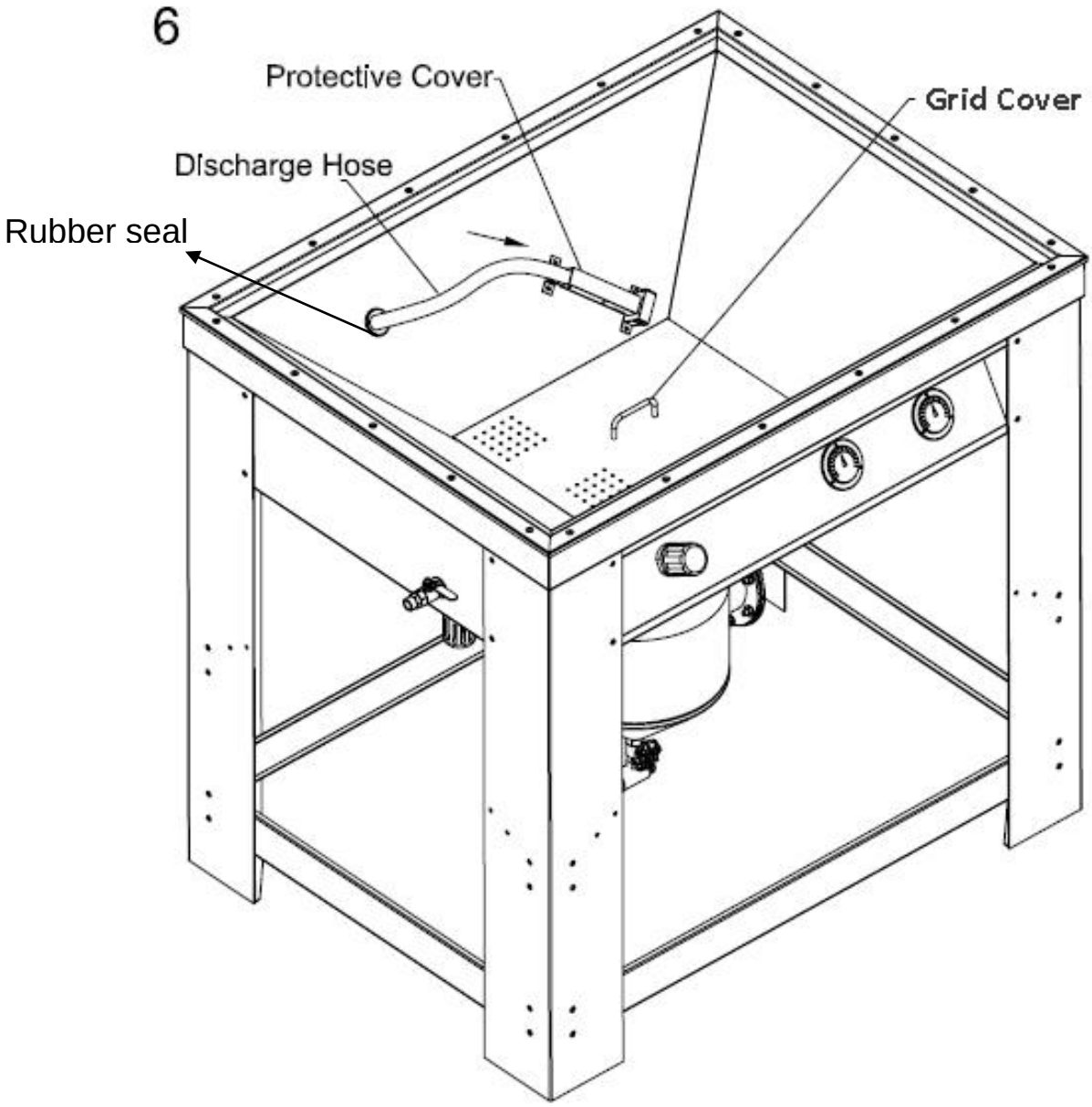
Hardware

M8x25mm Bolt	4	
M8 Nut	4	
8 Flat Washer	4	
8 Lock Washer	4	
Rubber Gasket	1	

5



Stand the lower assembly upright as shown, locate #9 Cylinder Block for tank in the rear, and then assemble #52 abrasive hose with tee joint and install the discharge hose through the rubber retainer as shown.



Place #6 grid cover, insert discharge hose into the protective cover.

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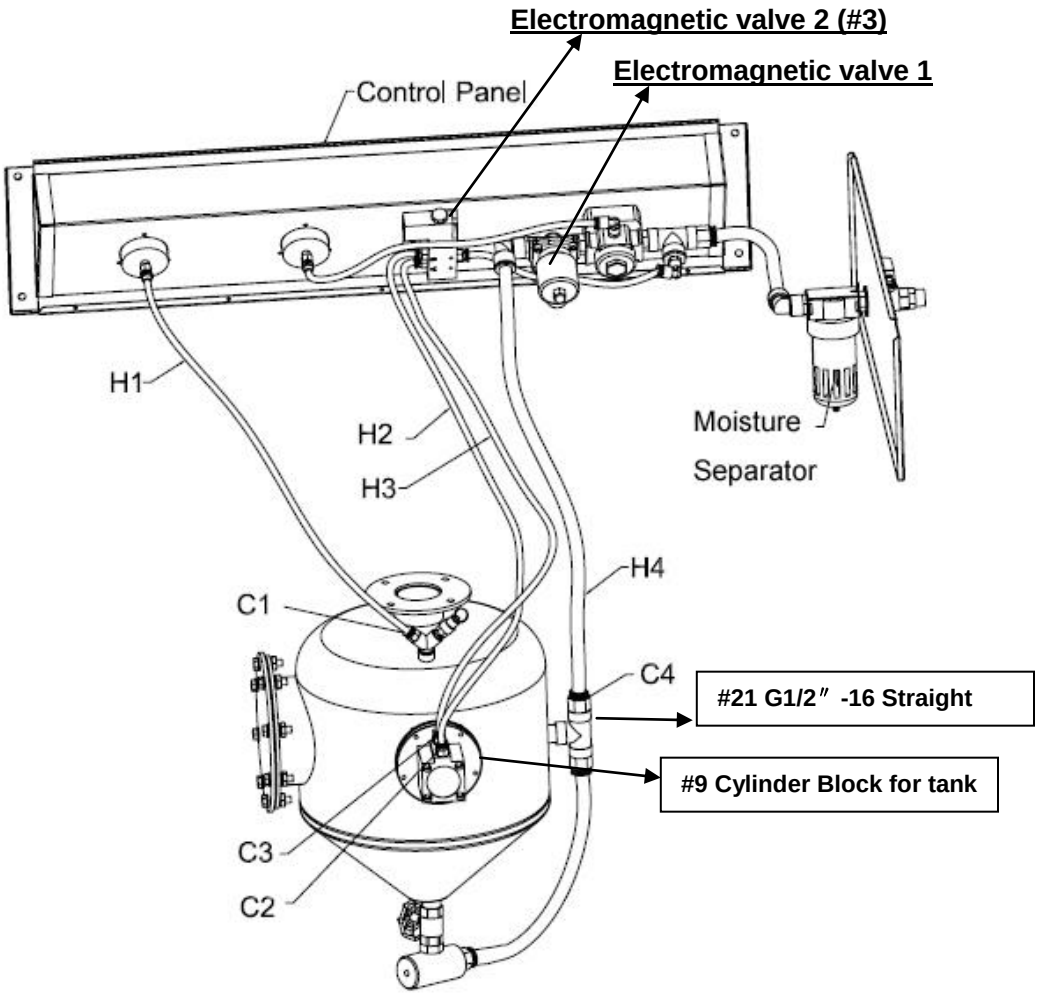

1:There are two 8mm hoses (color orange and blue) from Electromagnetic valve 2 (#3) on control panel, connect with the two adaptors for #9 Cylinder Block for tank , as shown in diagram H2-C2;H3-C3

2: There is a orange hose (16mm) from Electromagnetic valve 1(#2) on control panel, connect with #21 G1/2″-16 Straight for tank ,like the picture H4-C4 Note: The hose must be securely inserted in to the fitting. To release hose push plastic ring inward. Failure to connect hoses to the proper fittings will cause the blaster to not to operate properly.

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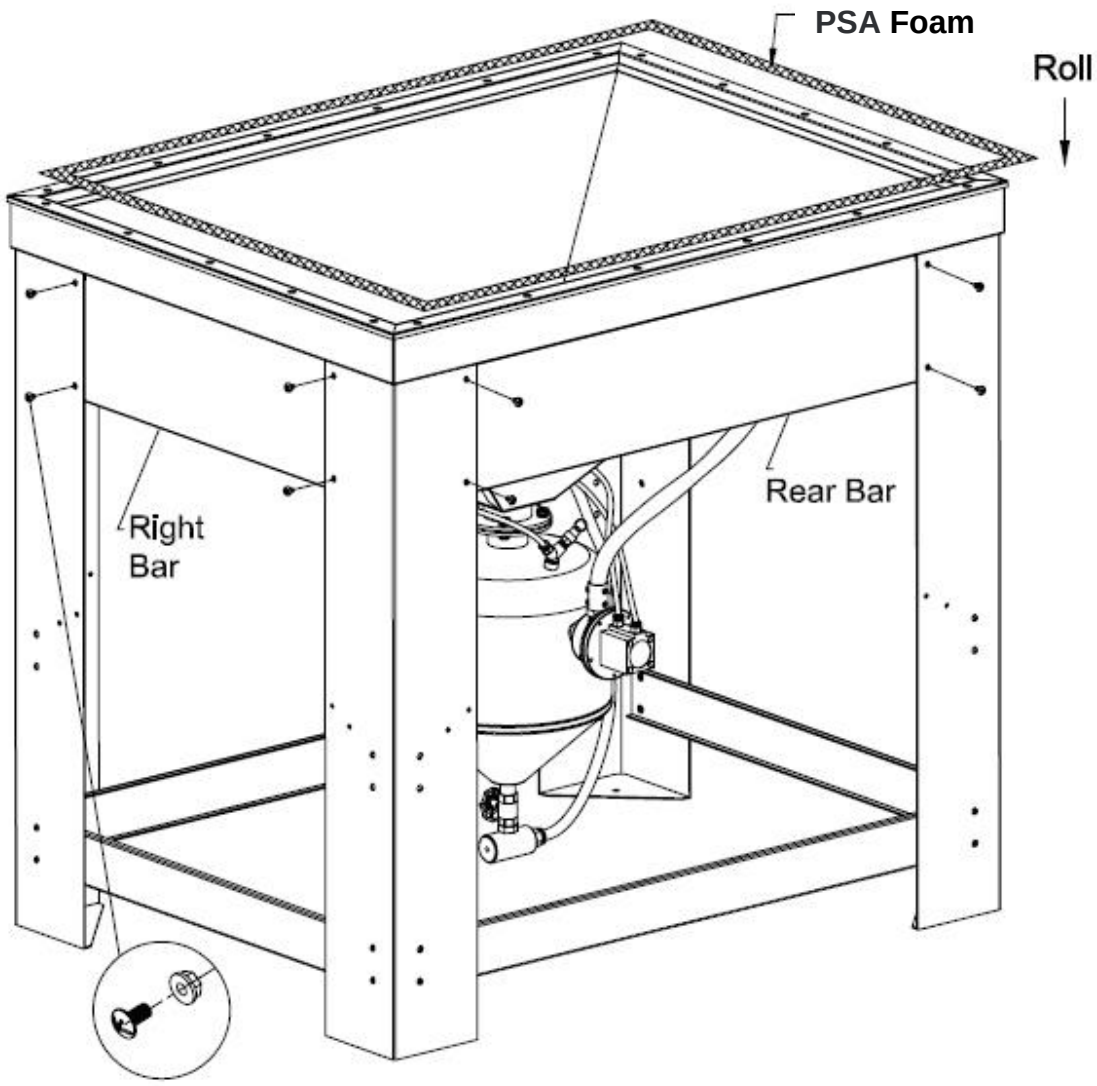

HARDWARE

M6x12mm Bolt	8	
M6 Nut	8	
PSA Foam Roll		

Assemble right bar and rear bar and legs with M6X12MM bolt and M6 nut, and then install the PSA foam to the funnel a shown.

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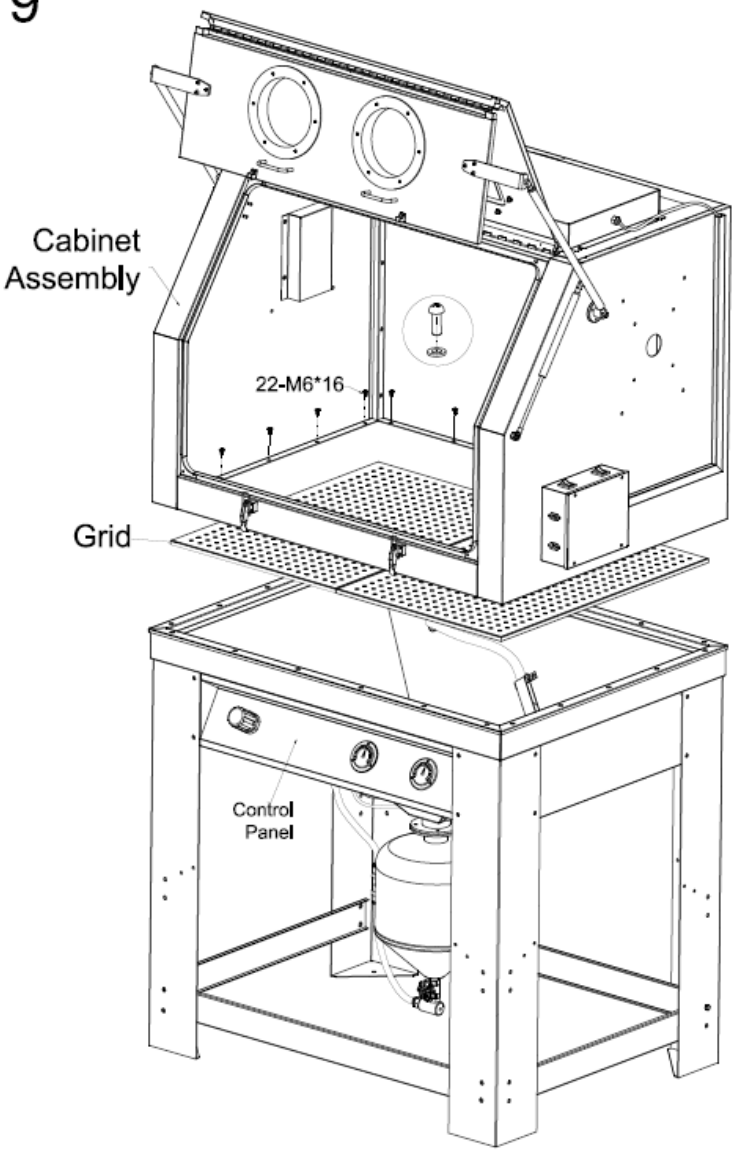

TIGHTEN BOLTS

HARDWARE USED

M6x16mm Bolt	22	
6 Flat Washer	22	

Place the grid on the funnel, with assistance place cabinet assembly on the lower assembly, while lining up the holes, open the door, assemble cabinet assembly and funnel with M6X16MM bolts and 6 flat washers

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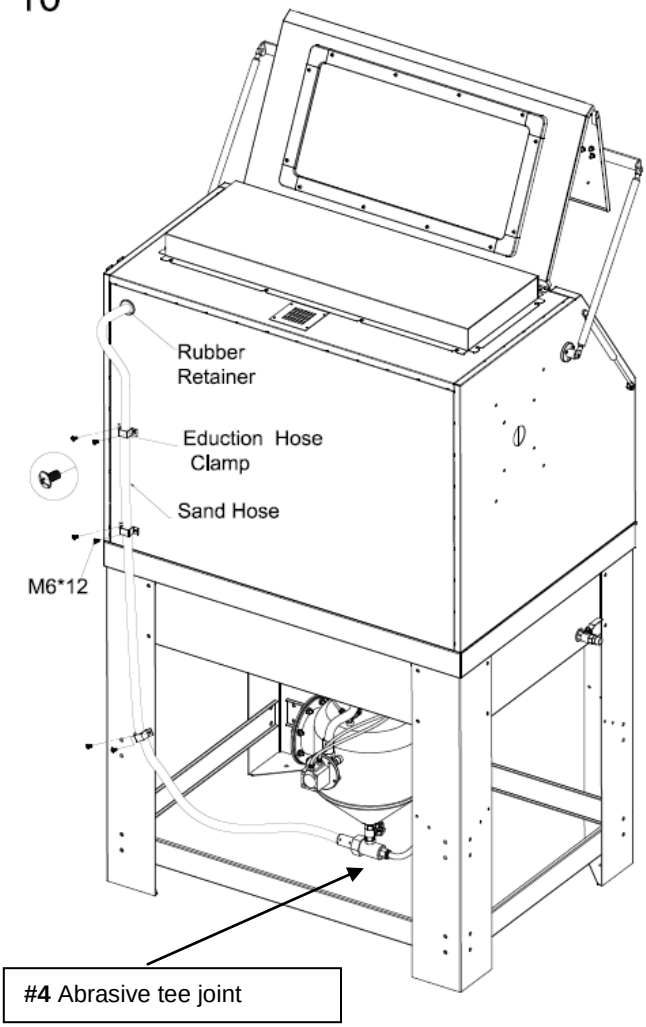

TIGHTEN BOLTS

HARDWARE USED

M6x12mm Bolt	6	
M6 Nut	2	

1: Open the door, Insert abrasive hose through rubber retainer , adjust the abrasive hose ,avoid sharp bends to help prevent excessive wearing of the abrasive hose , next secure the abrasive hose with hose clamp(use M6X12mm bolts and M6 nut)

2: Assemble abrasive hose and #4 abrasive tee joint, seal thread with Teflon tape.

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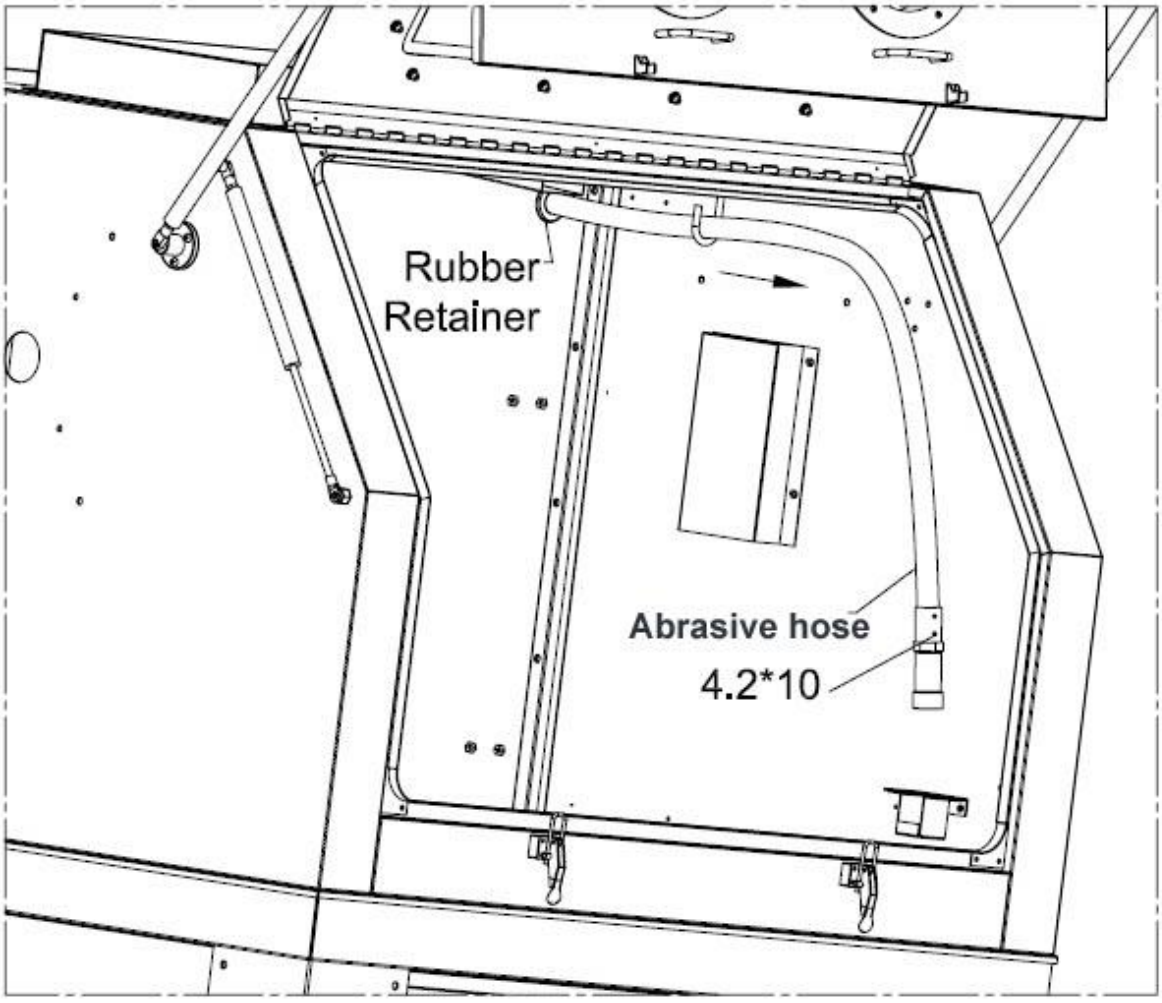

Install nozzle retainer to end of the abrasive hose, fasten the abrasive hose with 4.2 * 10MM self tapping screws

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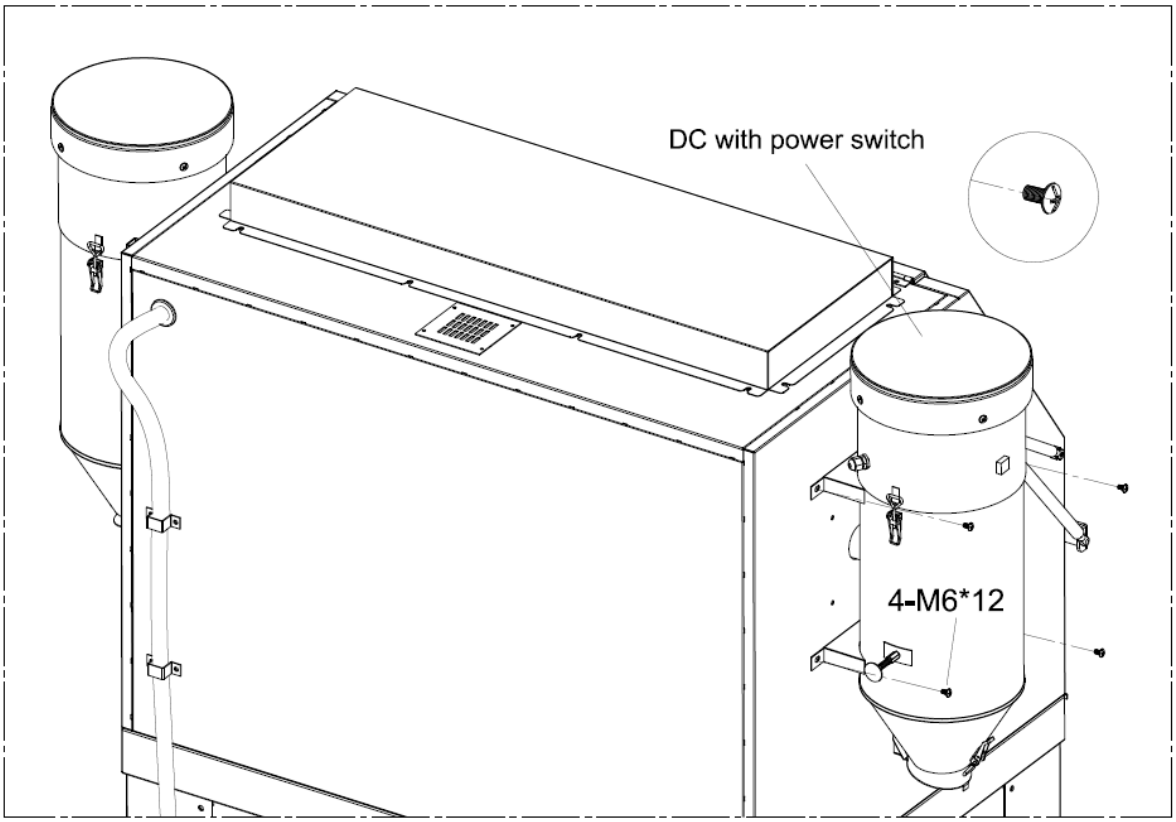


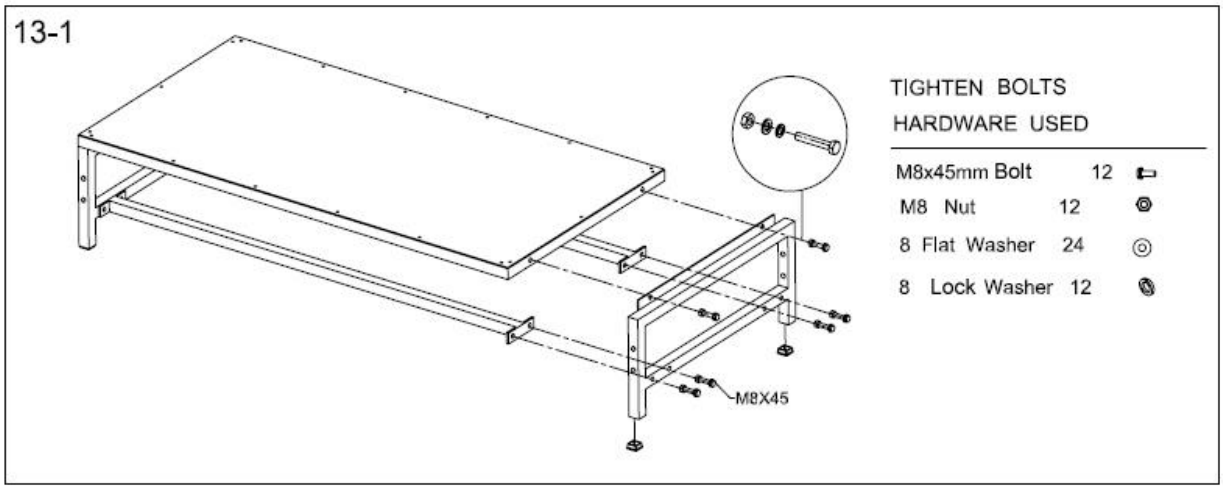
TIGHTEN BOLTS

HARDWARE USED

M6x12mm Bolt	8	

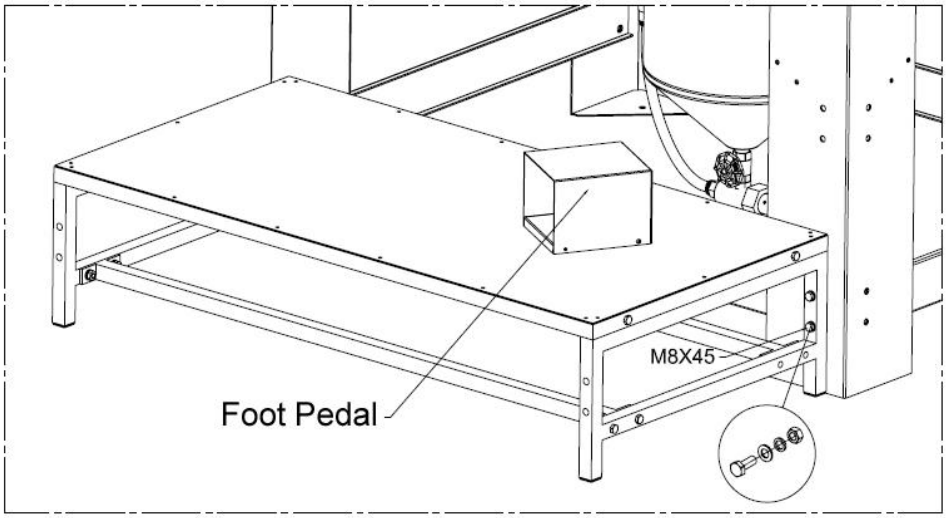
Attach the two dust collectors #20 on both sides of the cabinet assembly #1 with M6*12 bolts (8PCS). Note: The longer electrical cord on left side dust collector allowing cord to reach power box.

Stand & Cabinet Base



13-1: Assemble stand with M8*45mm bolt ,M8 Nut ,8 flat washer, 8 lock washer, see above diagram

13-2



TIGHTEN BOLTS		
HARDWARE USED		
M8x45mm Bolt	4	
M8 Nut	4	
8 Flat Washer	8	
8 Lock Washer	4	

13-2: Install stand to front legs of cabinet as shown in the diagram with M8*45mm bolt, M8 Nut ,8 flat washer,8 lock washer.

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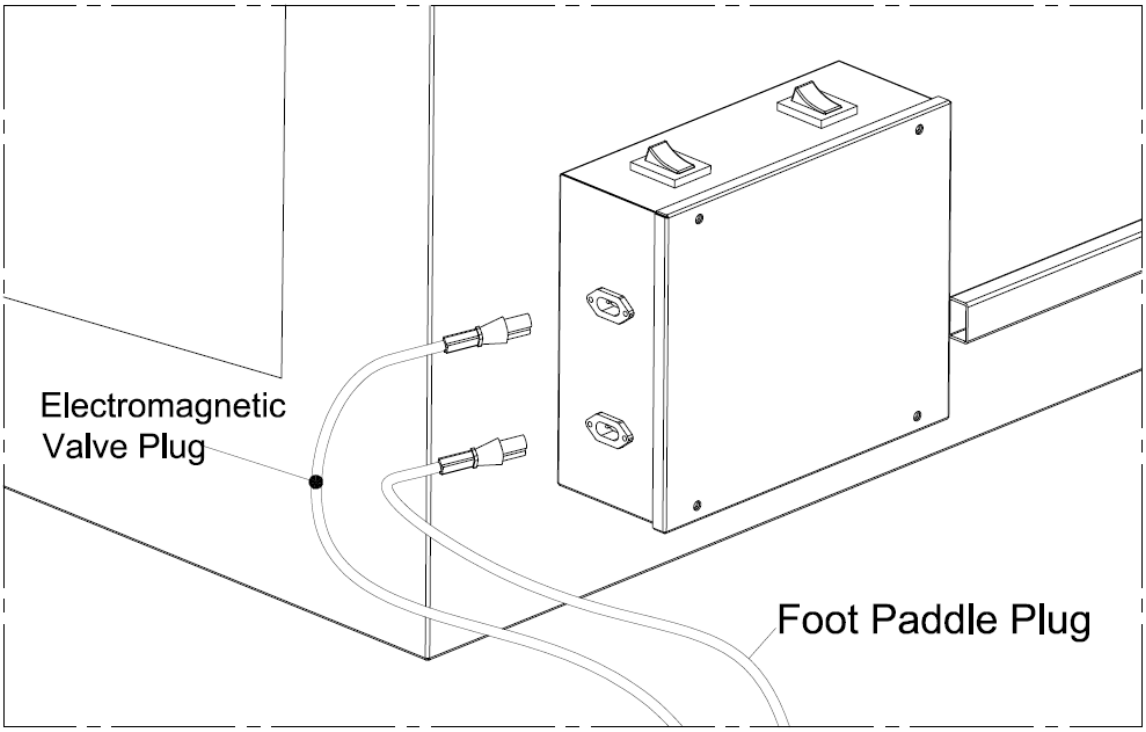
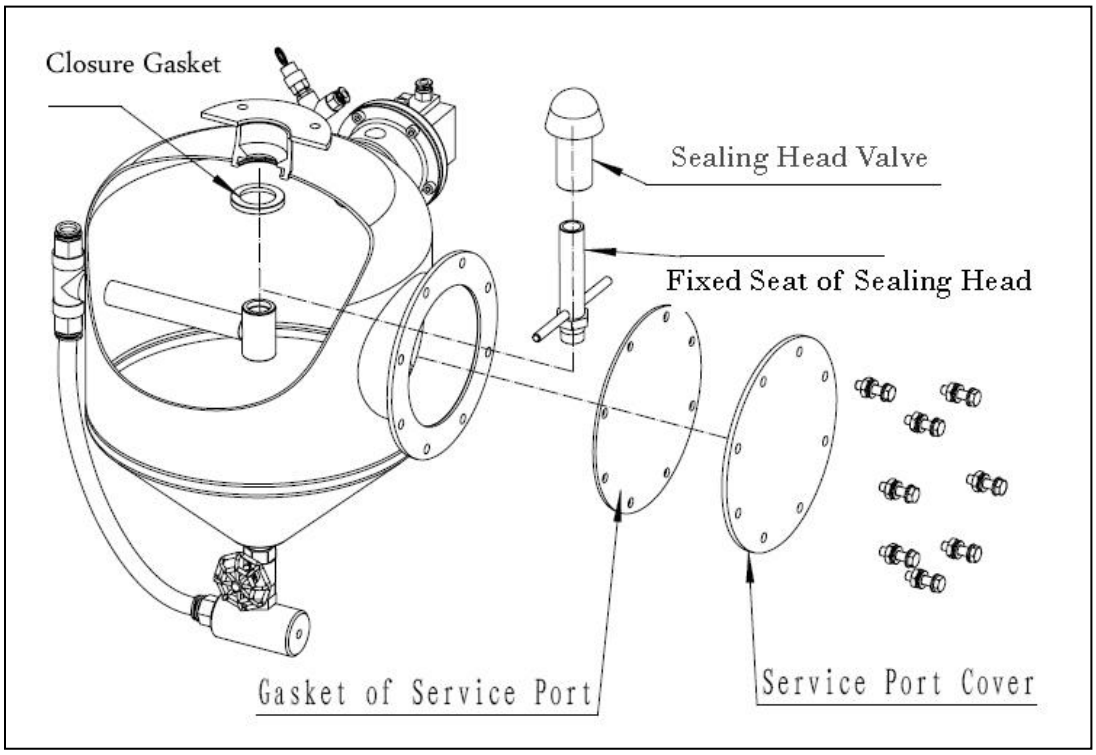
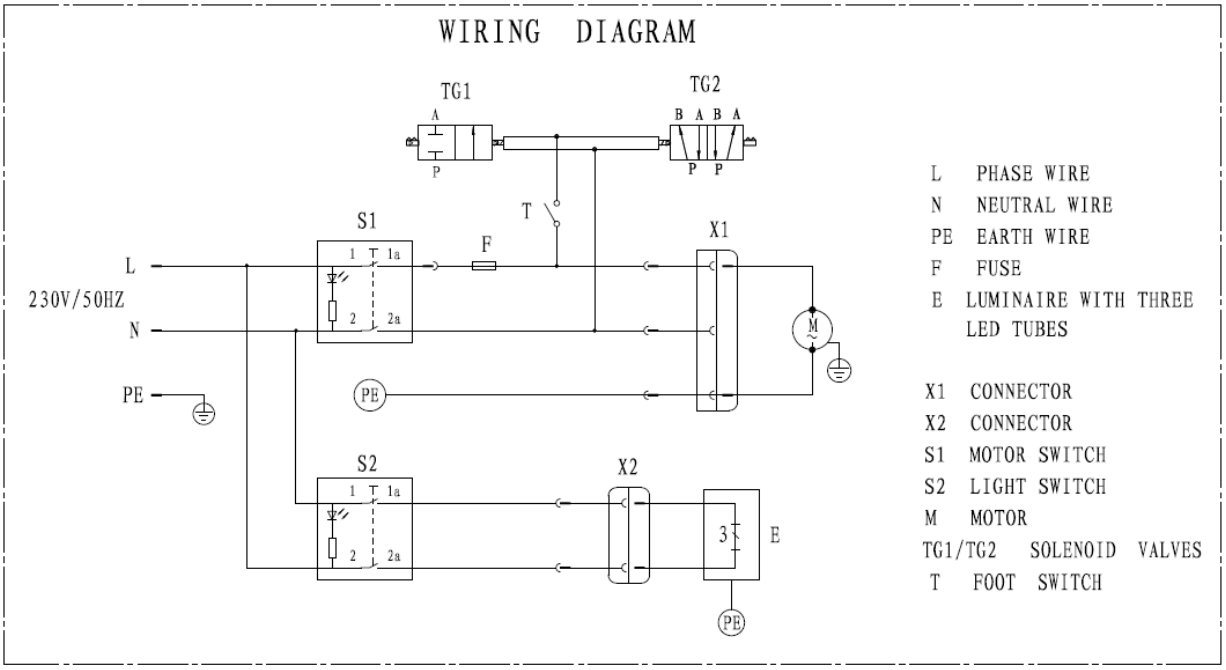


14. Plug the Electromagnetic Valve Plug and Foot Pedal Plug into the Power Supply. (Note the label on the power supply)

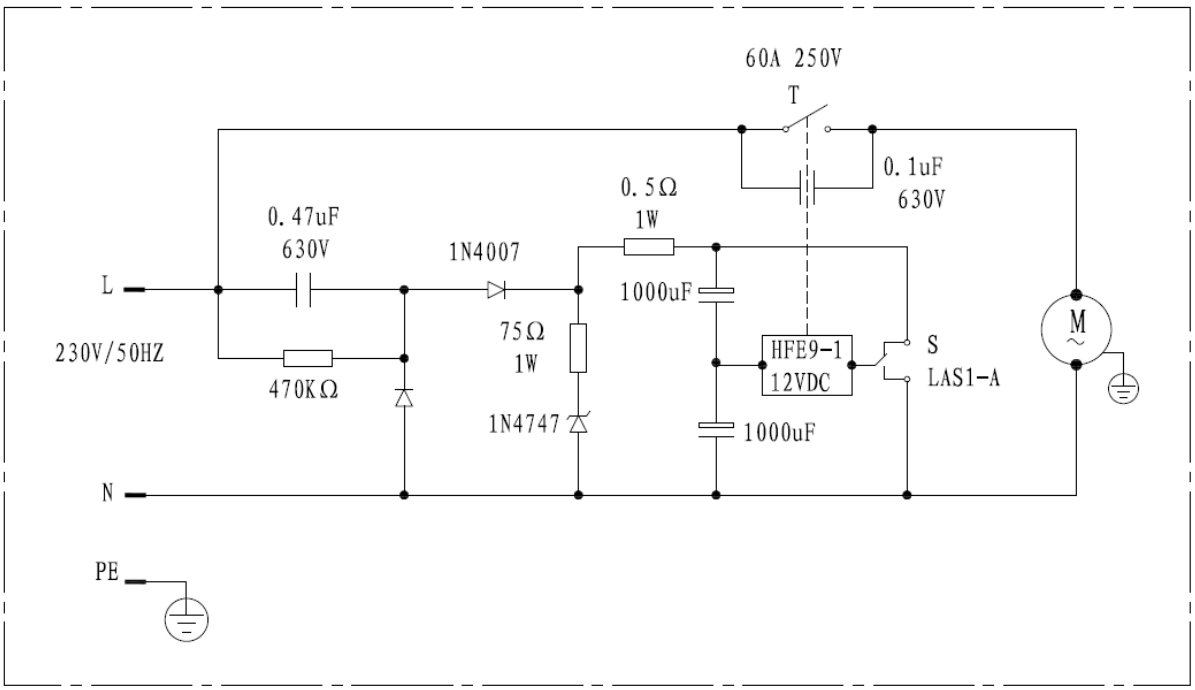
Sealing Head Replacement Graphics：



Wiring Diagram



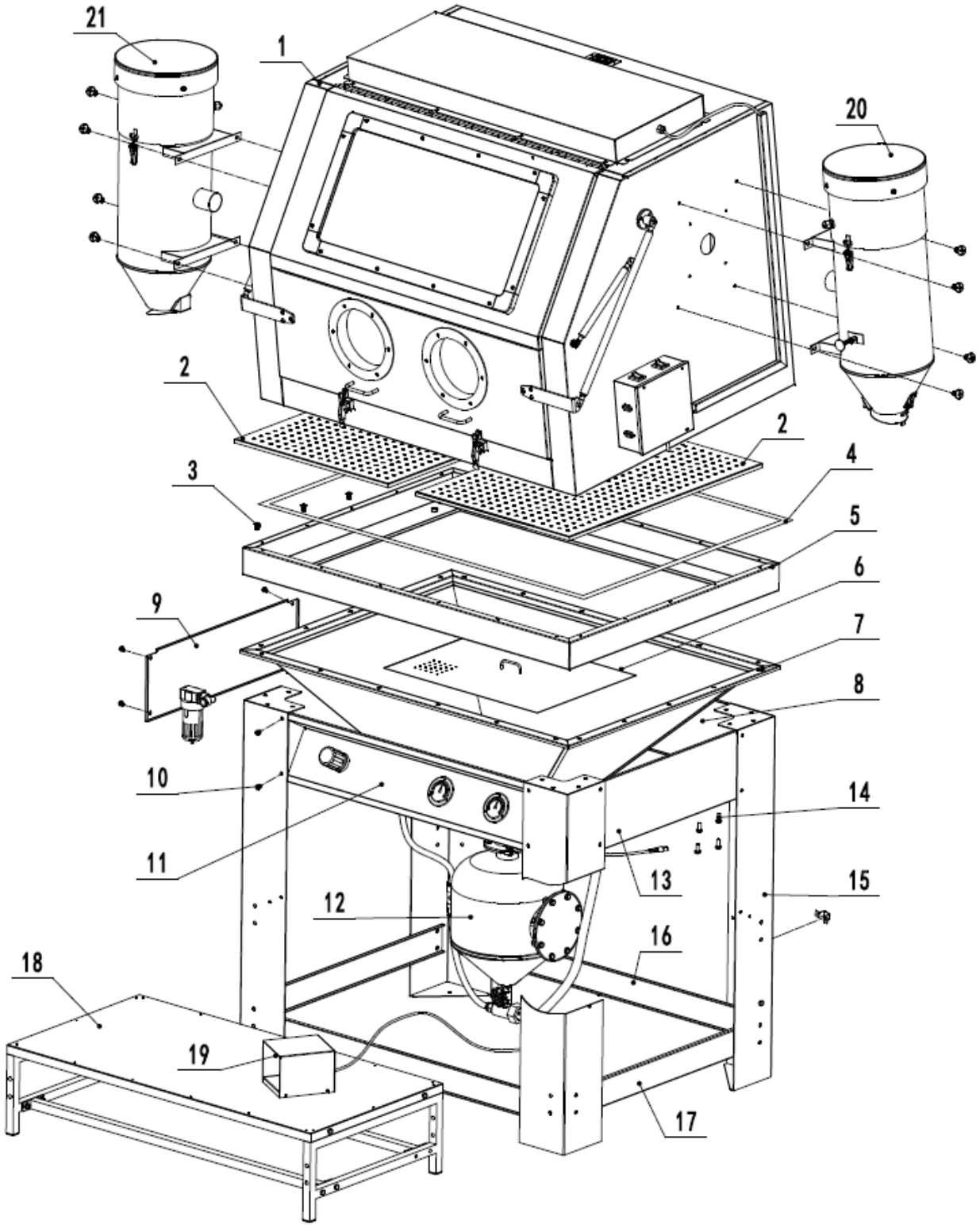
DC with power switch Wiring Diagram

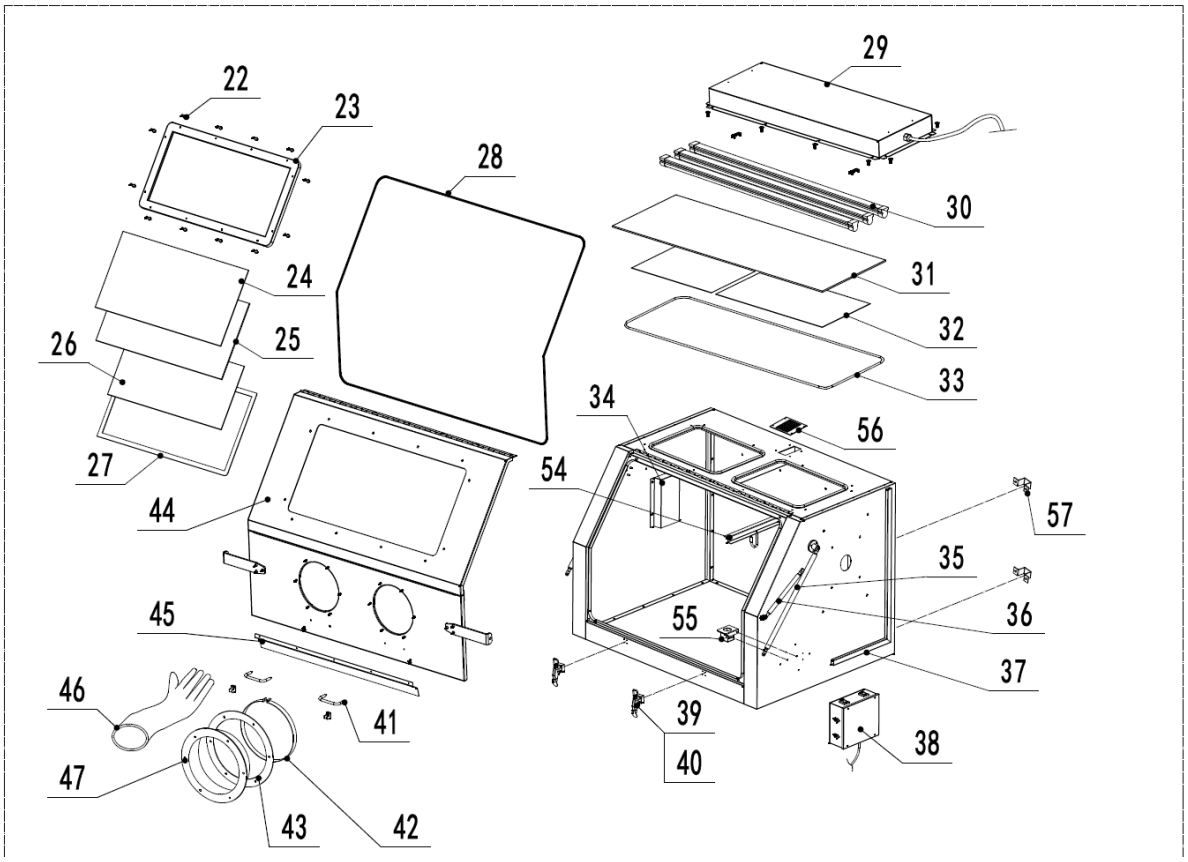


Troubleshooting

Symptom(s)	Possible Causes(s)	Possible Solution(s)
Intermittent, clogging, or no media spray at the nozzle	✓ No more media in the pressure tank.	1. Release foot pedal to let media flow back from funnel to pressure tank.
	✓ Nozzle has been clogged by a contaminant.	1. Close air source, remove the nozzle, and remove contaminant. Repeat the same procedure at the bottom of the pressure tank by removing the valve and fitting to clear contaminant. 2. Make sure that the media is not worn-out, saturated with debris, or contaminated with moisture causing it to cake. Screen or replace media as required.
	✓ *Too much or too less media*	1. Rotating the gate valve under the pressure tank. If too much media, rotate clockwise; otherwise, counterclockwise. 2. Check nozzle for wear, replace as needed.
Sealing head air-leaking	✓ Closure Gasket or sealing head worn out	1. Open maintenance cover to change closure gasket or sealing head inside.
Sealing head cannot move up and down	✓ Too much media	1. Discharge part of abrasive from the tank. 2. Tap on sealing head to release

Parts

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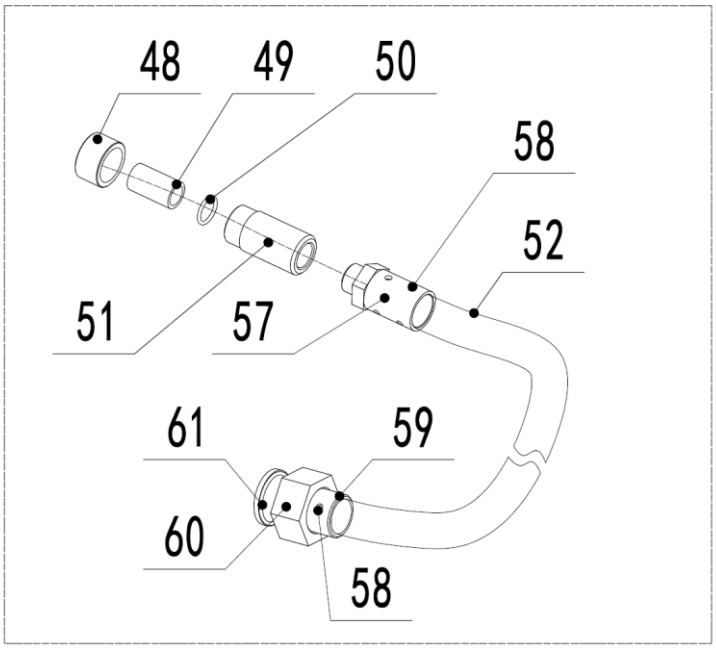
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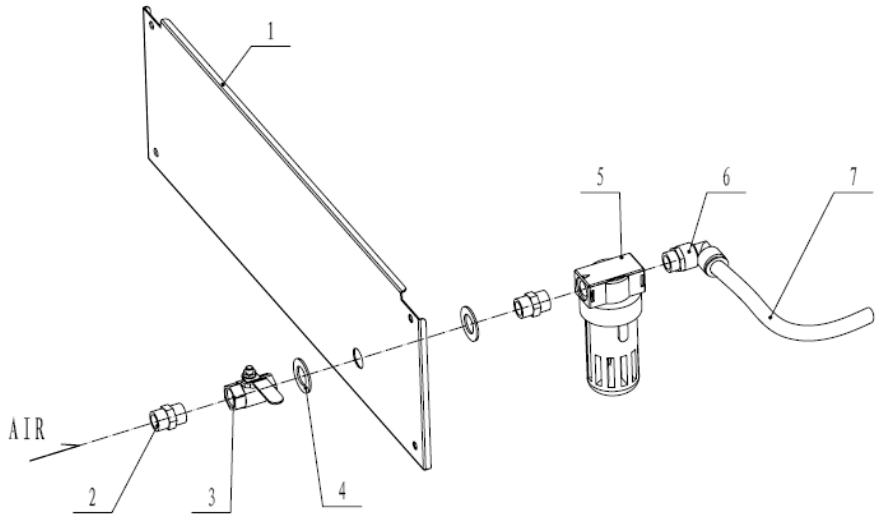
Item No.	Description	Qty.
1	Cabinet Assembly	1
2	Grid	2
3	Bolt M6x16 (matched with φ6*16 washers)	22
4	PSA foam	1
5	Bracket	1
6	Cover grid	1
7	Funnel	1
8	Rear Bar	1
9	Left Bar	1
10	Bolt M6*12	24
11	Control Panel	1
12	Tank Assembly	1
13	Right Bar	1
14	Bolt M8*20	32
15	Leg	4
16	Leg Reinforcements	2
17	Leg Reinforcements	2
18	Stand	1
19	Foot Pedal	1
20	Dust Collector	1
21	DC with power switch	1
22	Bolt M6*32	12
23	Window Frame	1
24	Window lens outer	1
25	Window lens inner	1
26	Window Underlay	1
27	PSA foam of Viewing Window	1
28	Rubber Door Seal	1
29	Lamp Housing	1
30	LED Light	3
31	Light lens	1
32	Light lens underlay	2
33	Rubber seal of light lens	1
34	Cover plate	2
35	Main Support Pole	2
36	Air Spring Support Rod	2
37	Plastic Slot	1
38	Switch Box	1
39	Front Door Latch	2
40	Latch Seat	2
41	Handle	2
42	Glove Clamp	2

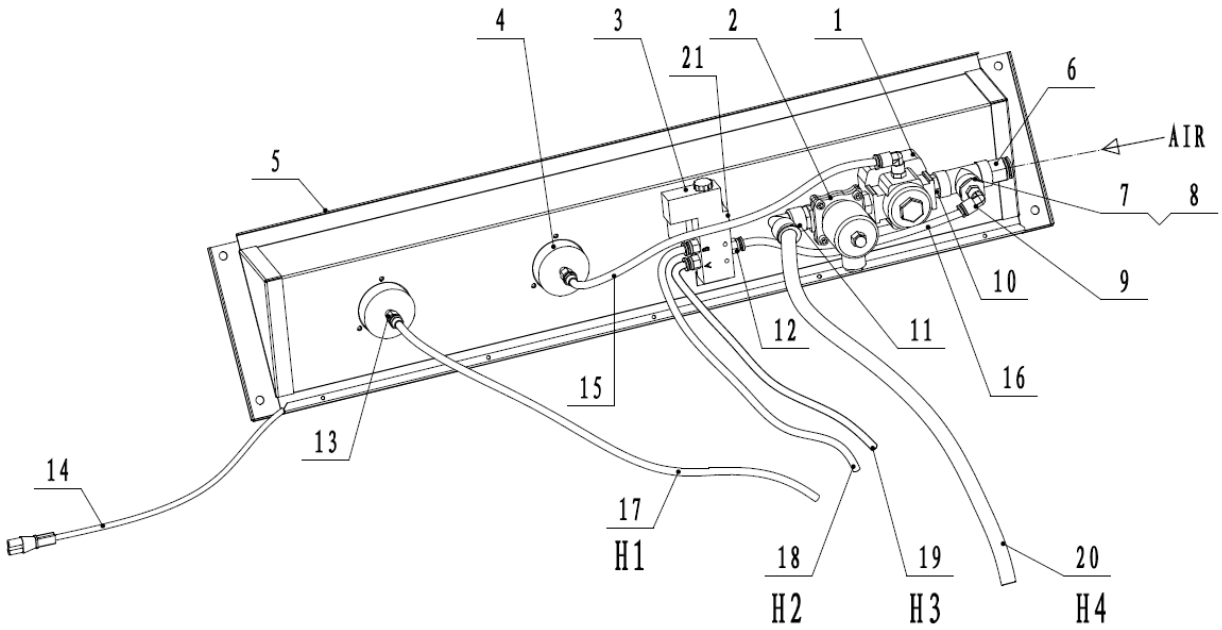
43	Seal Ring of Glove	2
44	Front Door	1
45	Front Bar	1
46	Glove 24”	1
47	Glove Seat	2
48	Nozzle Nut	1
49	Nozzle	1
50	O-Ring	1
51	Nozzle retainer	1
52	Abrasive hose	1
53	Hook	1
54	Nozzle seat	1
55	Dust baffle	1
56	Pressure hose clamp	3
57	Nozzle retainer adapter	1
58	4.2*12 screw	12
59	Tee joint adapter	1
60	Tee joint nut	1
61	O-Ring	1

Exploded View of Left Bar



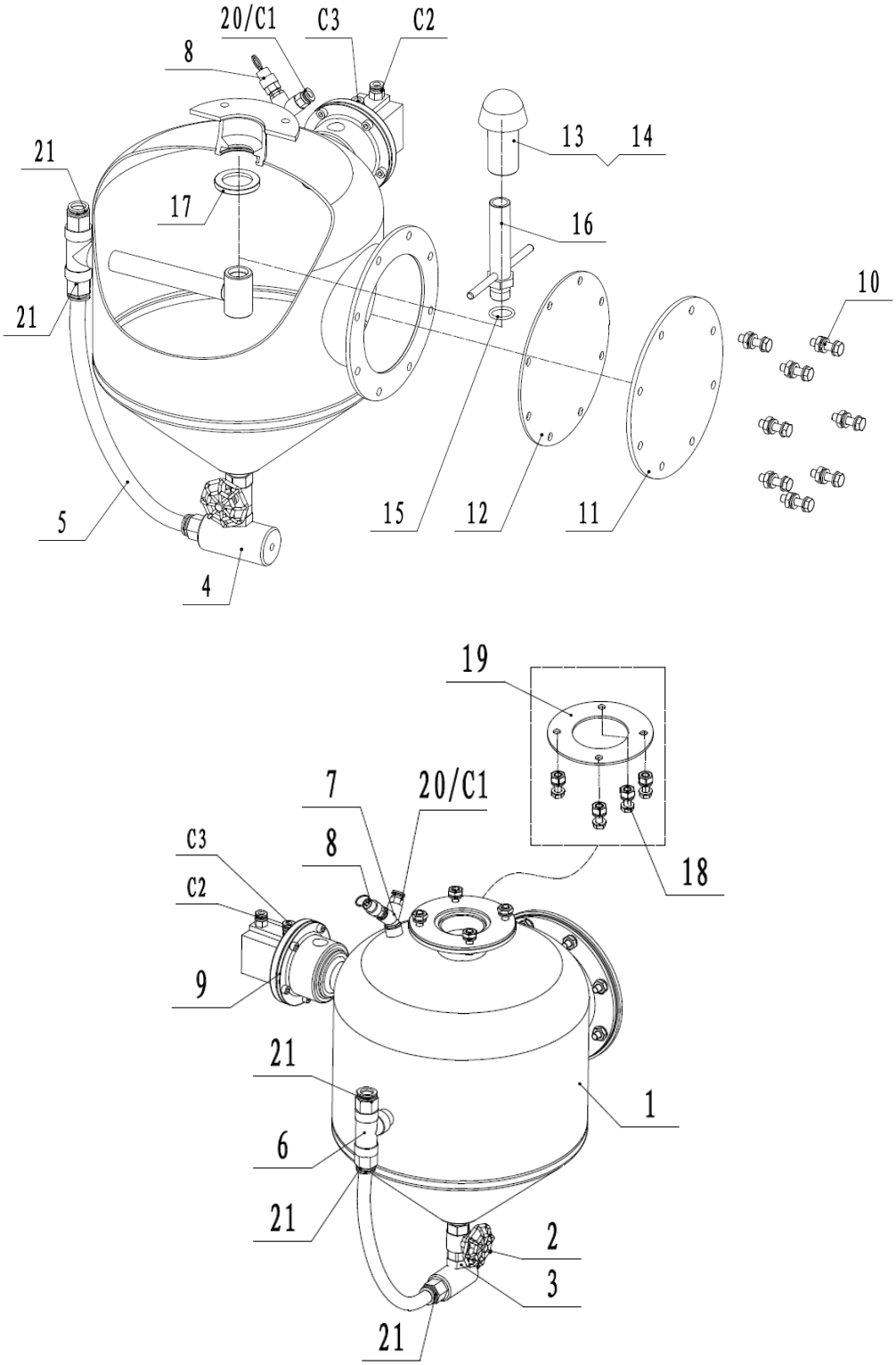
Item No.	Description	Qty.
9-1	Left Bar	1
9-2	Straight Coupling	2
9-3	Ball Valve	1
9-4	Washer	2
9-5	Moisture separator	1
9-6	Right-angle Quick Coupling	1
9-7	Air Hose	1

Exploded View of Control Panel



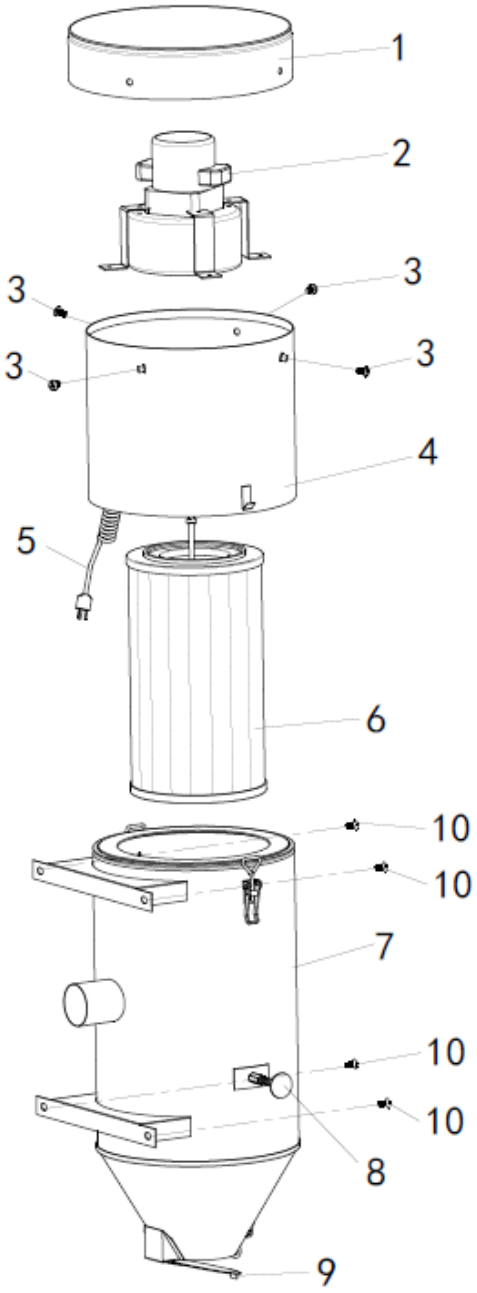
Item No.	Description	Qty.
11-1	Pressure Regulating Valve	1
11-2	Electromagnetic Valve 1	1
11-3	Electromagnetic Valve 2	1
11-4	Pressure Gauge	2
11-5	Control Panel	1
11-6	G1/2″-16 Straight Coupling	1
11-7	Tee Joint	1
11-8	G1/2″-G1/4″ Bushing	1
11-9	G1/4″-8 Straight Coupling	2
11-10	G1/2”Straight Coupling	2
11-11	G1/2″-16 Straight Coupling	1
11-12	G1/4″-8 Straight Coupling	3
11-13	M10*11-8 Pressure Gauge Coupling	2
11-14	Electromagnetic Valve Wire	1
11-15	φ8 Air Pipe	1
11-16	φ8 Air Pipe	1
11-17/H1	φ8 Air Hose	1
11-18/H2	φ8 Air Hose	1
11-19/H3	φ8 Air Hose	1
11-20/H4	φ16 Air Hose	1
11-21	G1/8″ muffler	2

Exploded View of Tank Assembly



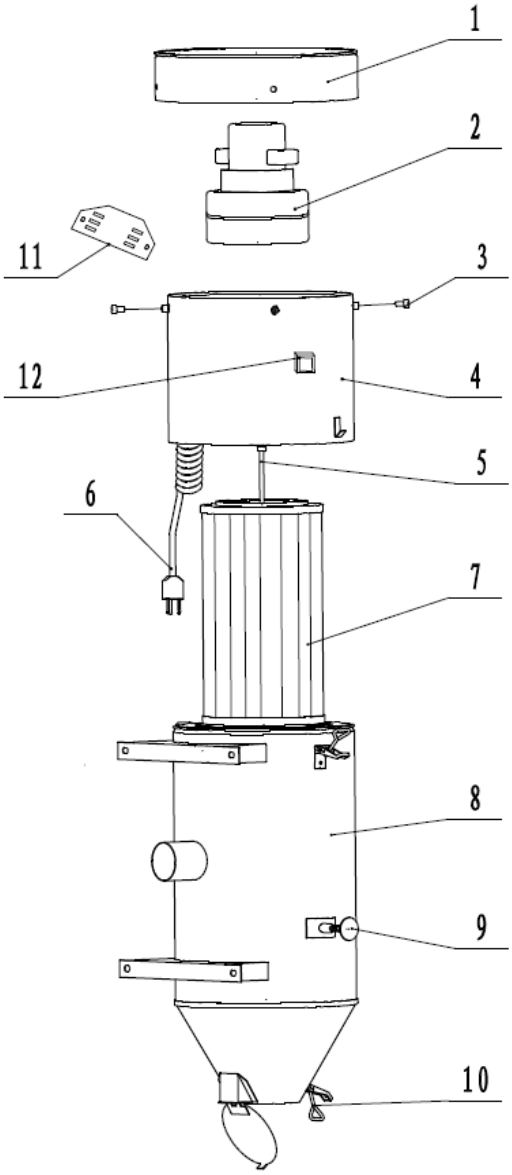
Item No.	Description	Qty.
12-1	Tank	1
12-2	Gate Valve	1
12-3	G1/2″Straight Coupling	1
12-4	Abrasive Tee Joint	1
12-5	16mm Air Hose	1
12-6	G1/2″ Tee Joint	1
12-7	G1/4″Y Joint	1
12-8	Safety Valve	1
12-9	Cylinder Block	1
12-10	Bolt M8*30	8
12-11	Service Port Cover	1
12-12	Service Port Gasket	1
12-13	Sealing Head	1
12-14	Fixed-tube	1
12-15	O-Ring	1
12-16	Inlet Welding Assembly	1
12-17	Closure Gasket	1
12-18	Bolt M8*25	4
12-19	Rubber Gasket	1
12-20/C1	G1/4″Straight Coupling	1
12-21	G1/2″-16 Straight Coupling	3
12-C2	G1/8″Straight Coupling	1
12-C3	G1/8″Straight Coupling	1

Exploded View of Dust Collector 1



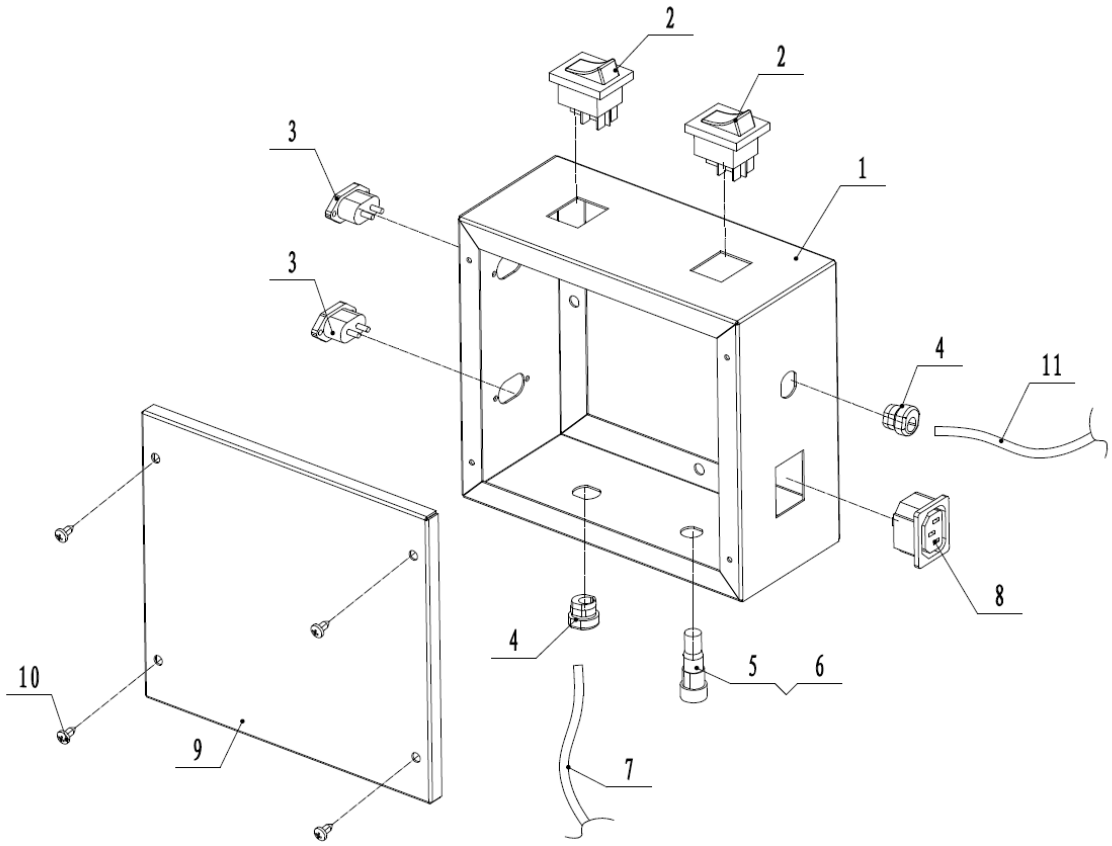
Item No.	Description	Qty.
20-1	Top of D.C.	1
20-2	Vacuum Motor	1
20-3	Bolt	4
20-4	Cover motor	1
20-5	Power Cord	1
20-6	Dust Filter	1
20-7	Round Dust Collector	1
20-8	Push Rod	1
20-9	Cap, Round Dust Collector	1
20-10	Bolt	4

Exploded View of Dust Collector 2



Item No.	Description	Qty.
21-1	Top of D.C.	1
21-2	Vacuum Motor	1
21-3	Bolt	4
21-4	Cover motor	1
21-5	Power Cord	1
21-6	Dust Filter	1
21-7	Round Dust Collector	1
21-8	Push Rod	1
21-9	Cap, Round Dust Collector	1
21-10	Bolt	4
21-11	Small circuit board	1
21-12	Button switch module with protective cover	1

Exploded View of Switch Box



Item No.	Description	Qty.
38-1	Switch Box Body	1
38-2	Switch	2
38-3	Two Holes Socket	2
38-4	Buckle	2
38-5	Fuse Case	1
38-6	Fuse	1
38-7	Power Cord	1
38-8	Three Holes Socket	1
38-9	Switch Box Cover	1
38-10	4.2*10 Screws	4
38-11	Power Cord Of Lamp	1