

OPERATING INSTRUCTIONS

85120 Booth



Motor

Fan Size

Voltage

3 Phase

1 Phase

Amperage

Hz

50

60

Serial Number

WARRANTY

This Machine is covered with a 12 month warranty. The warranty covers replacement parts, except filters and wooden top (if applicable). The only way Denray will cover the labor is the work must be done by Denray at Denray's Facility. The shipping must be provided by the customer (owner of the machine) both ways. You may contact the dealer you purchased the machine from, and discuss with them, the possibility of their assistance in helping to solve the problem in your facility. Denray assumes or accepts no responsibility more than the cost of the machine. In the case of repair Denray will determine either to fix or replace the product. Denray reserves the right to modify or change the design of this and any model of their machines, without changing or updating any previous manufactured machine. The warranty will not cover any damage done by fire or any other act of nature or if abuse or improper maintenance was or was not performed.

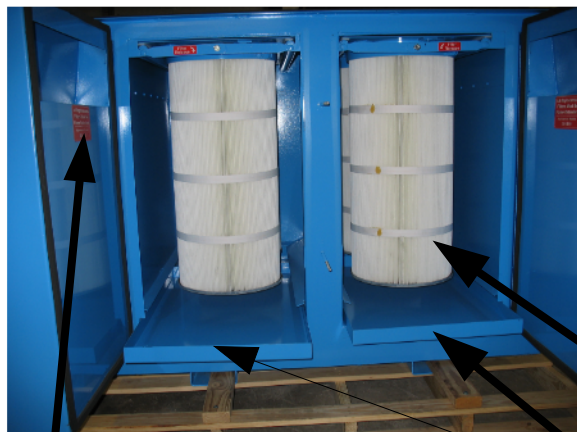
Never Allow Any Unauthorized or Untrained Person To Operate This Machine

Lockout and tagout any time maintenance is performed on this machine

WARNING

NEVER GRIND OR SAND ANY ALUMINUM OR MAGNESIUM, OR ANY SPARK CREATING PRODUCT ON THIS MACHINE

Filters are the main need of maintenance, the cleaner the filters are kept the better the machine will perform. This machine is equipped with timers to clean the filters, every so many minutes a pulse of air will be released into one of the filters, and a few minutes later the other filter will be pulsed, the time is needed to refill the tank. The time between pulses are adjustable, refer to the electrical diagram. Warning if the time is reduced between pulses the filter may plug up reducing the machines performance. The filters can also be pulsed with the machine off, it may blow dust back into the work area, so caution should be used here, pulse the machine then turn machine on to pull dust back into the filters.



The filters will clean better with machine off, you may shut machine off and before it slows down to a complete stop, pulse the filter and allow the fan to prevent the dust from exiting the filter compartment.
Filter replacement number is on the inside of the filter door. Be sure to replace with same type of filter or a filter made of polyester media.

Cartridge Filters 99.95% efficiency down to .5 micron

Filter replacement number Is on inside of this door. MUST replace with the proper fire retardant filter

Dust Drawer Clean regularly, as needed

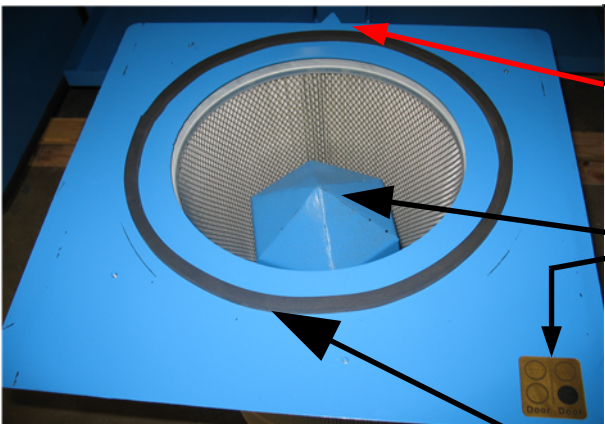
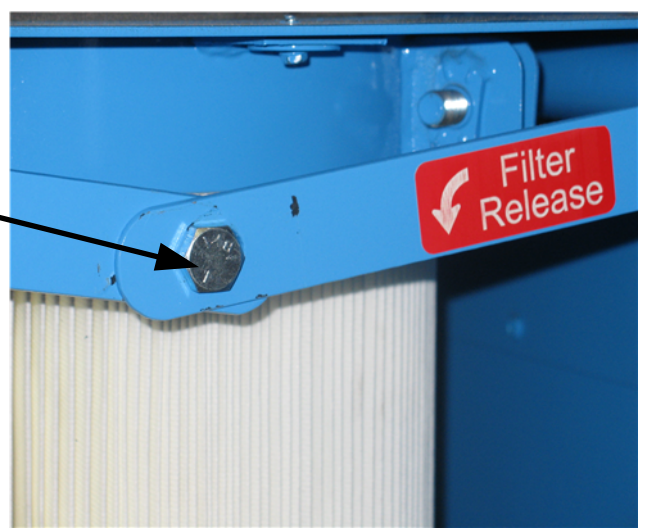
UMHW Plastic strips for ease of sliding the filters. Must be in place

Bolt that holds the band that secures the filter to the steel plate that slides in the filter unit. This makes removing filters from the plate very easy, Allowing filter deep cleaning a much easier task, thus allowing the filters to be cleaned better and easier.



Never Open Any Door While Machine Is Running

This bolt holds the levers that raise and lowers the filters. Once the machine is in place, remove the nut from this bolt, once the bolt is in the hole pull down on the levers to lock the bolt in place. looks like the picture

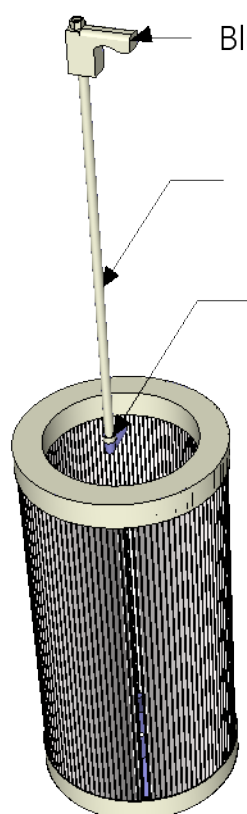


This Vee will align into the filter placed in first

The cone on the inside of the filters enhances the cleaning process. It is bolted into the bottom of the filter.

This shows the location of the four filters, the black circle shows this filter is the front right filter.

This seal needs to be inspected everytime the steel plate is removed. Look to see if any missing rubber, This seal prevents the dust from by passing the filter. If this seal is not intact it needs to be replaced. Order a booth filter plate seal



Blow Gun

1/8" pipe screwed to blow gun

elbow on the end of the pipe to direct the air through the filter thus blowing off the dirt.

Harbor Freight Catalog outlet sells a blow gun with a long stem that will reach into all the filters.

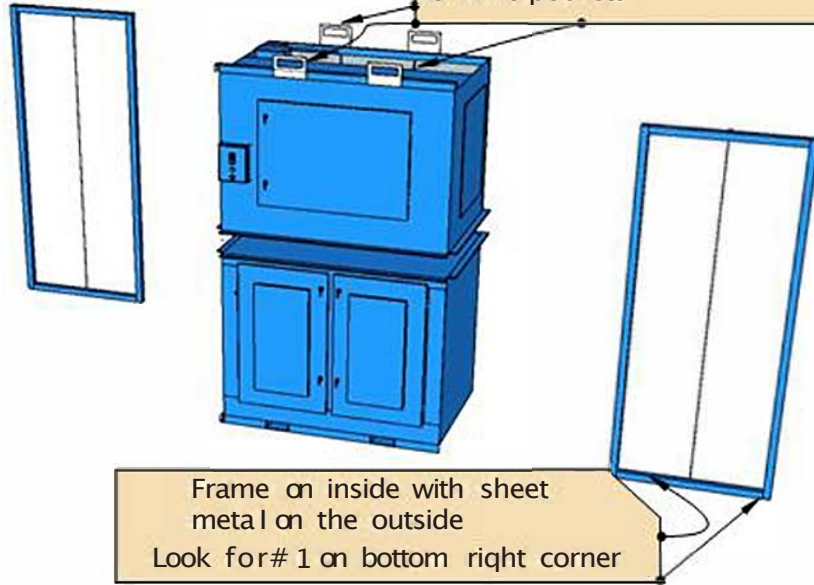
Filter Cleaning is almost the only thing that has to be done to maintain these machines. No lubrication to maintain The cleaner the filters are kept the better the machine will perform. The dirtier the filters the harder it is to pull air through them.

Step 1

Locate The bottom filter unit where you want the unit to set. Using a forklift, set the power/motor unit on top of the filter unit (Large phillips screwdriver or line up punches works good toalign the two units up together)

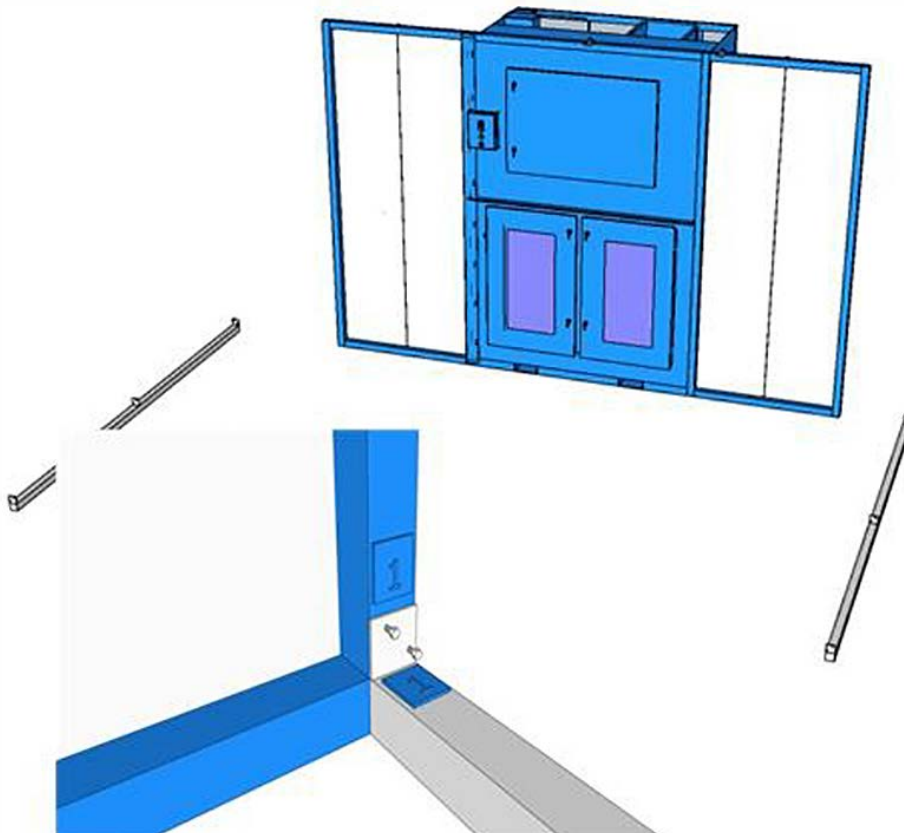
NEVER tighten a bolt until all bolts are in place, in the event the unit needs to be adjusted. These units have been preassembled at the factory.

After top has been set, Remove the fork lift pockets

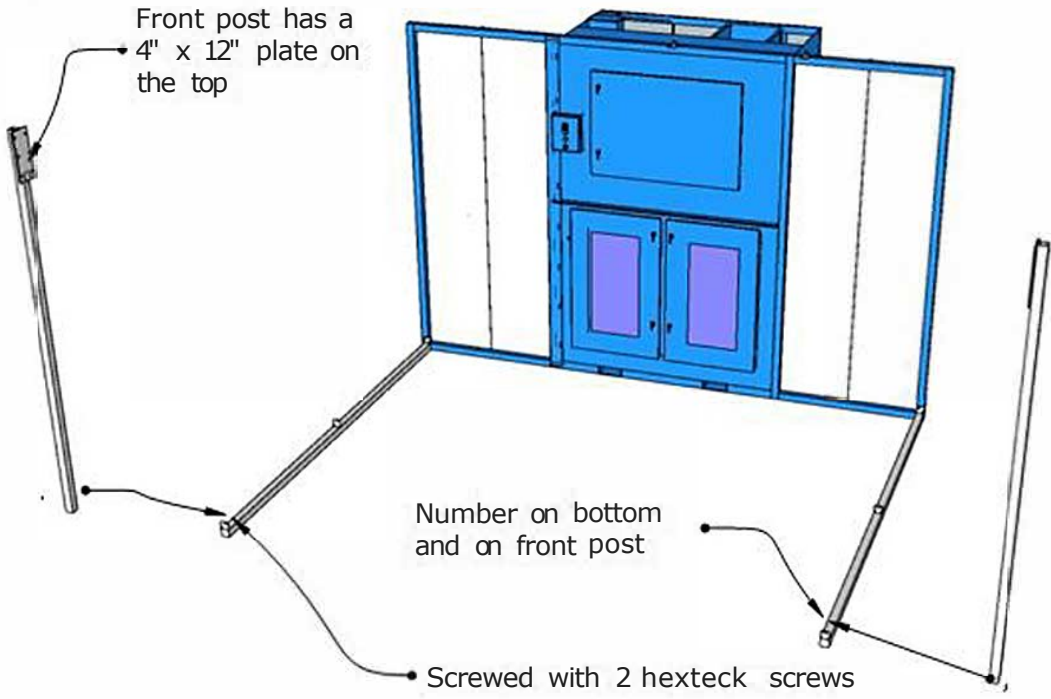


Step 2

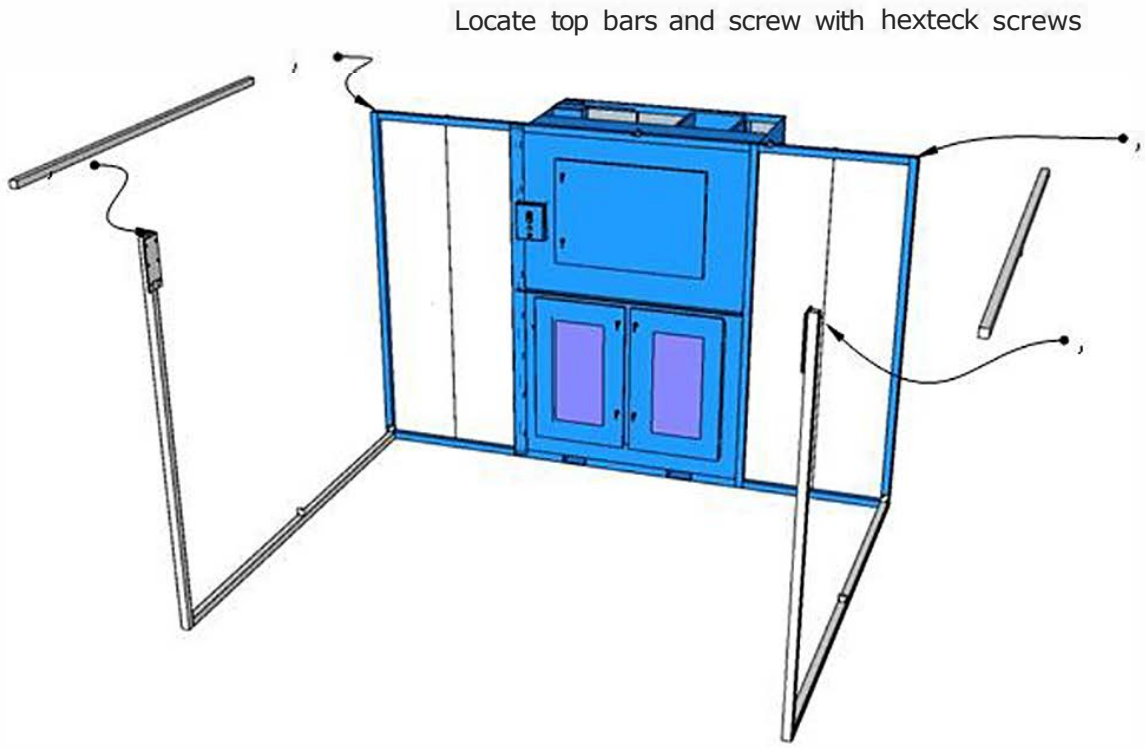
Frame on inside with sheet metal on the outside
Look for # 1 on bottom right corner



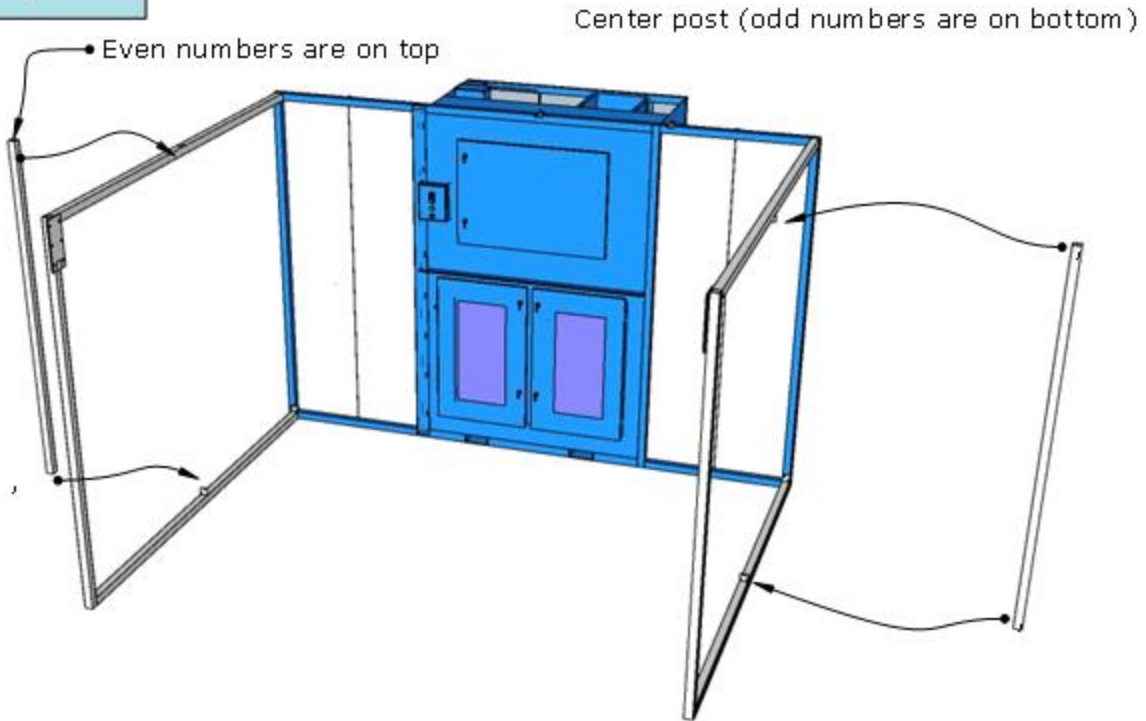
Step 3



Step 4

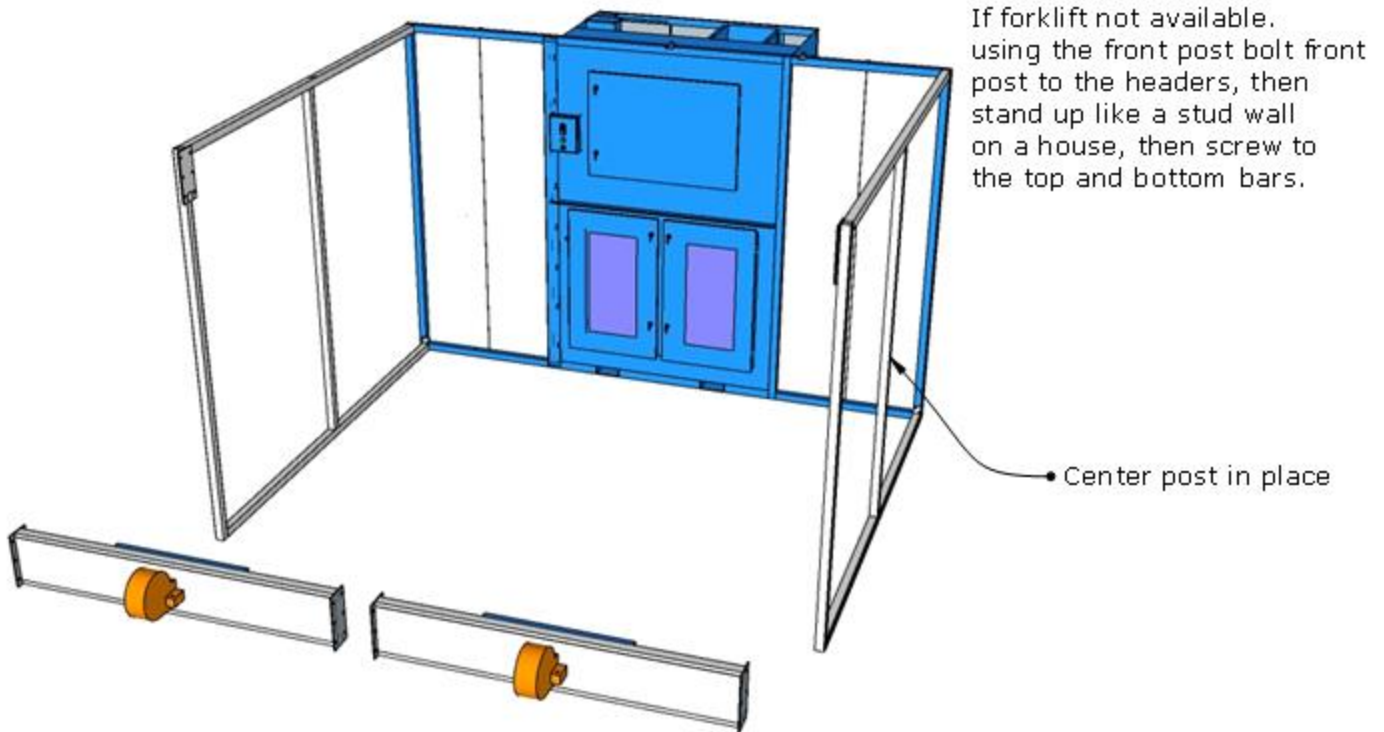


Step 5

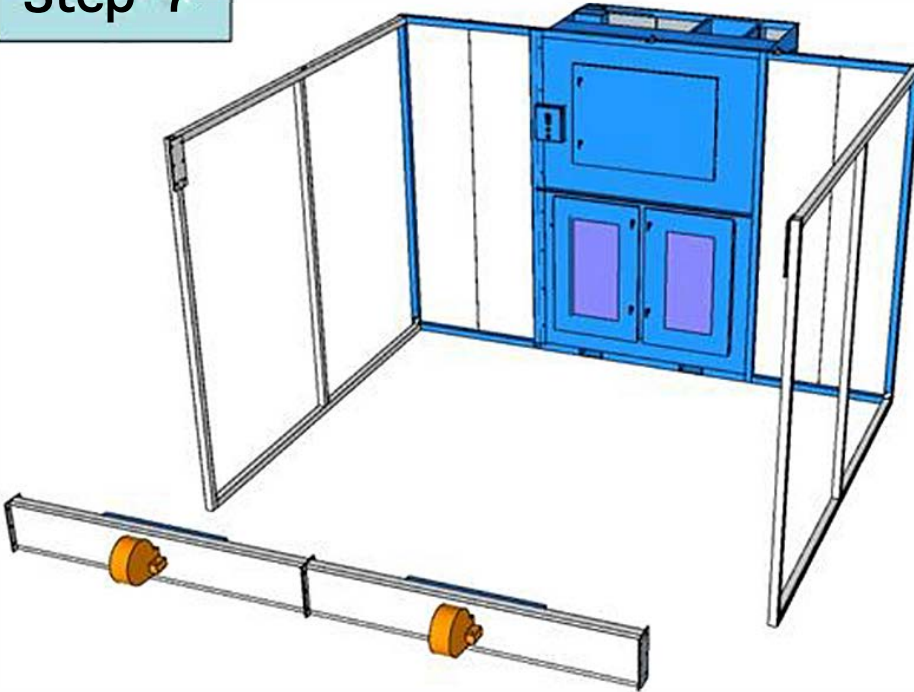


Step 6

Front headers Bolt together on the floor, and lift up with forklift



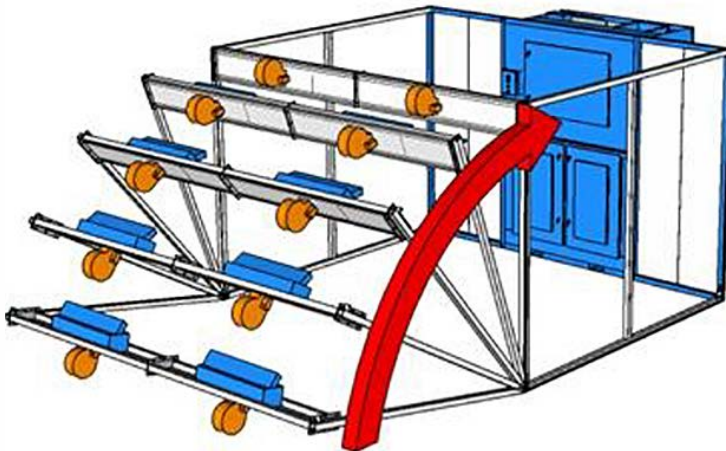
Step 7



Placing the Headers with positive air fans in place

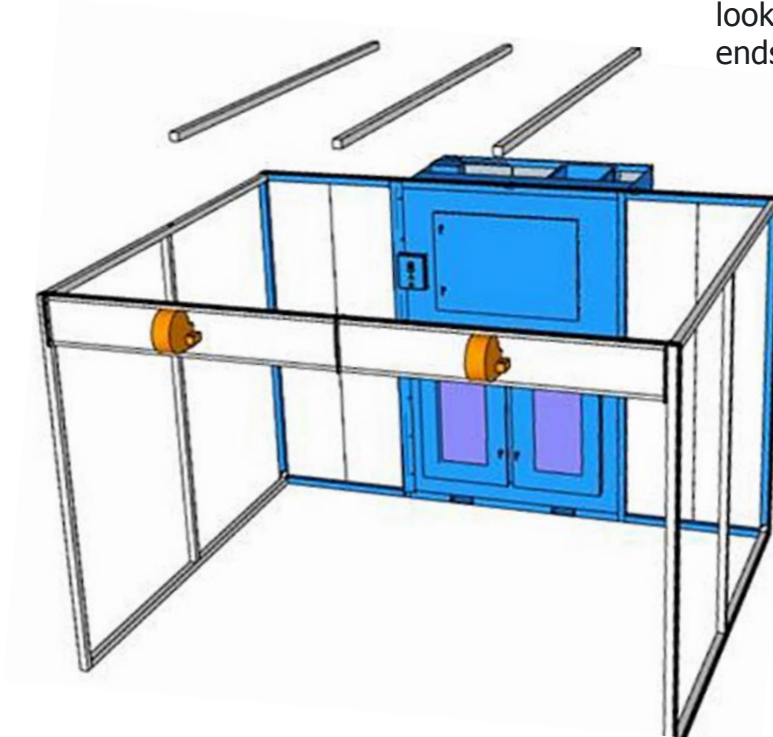
Step 8

Bolt the headers together then bolt to the post, Top bolt on the inside can not be used, because it will hit the tube.



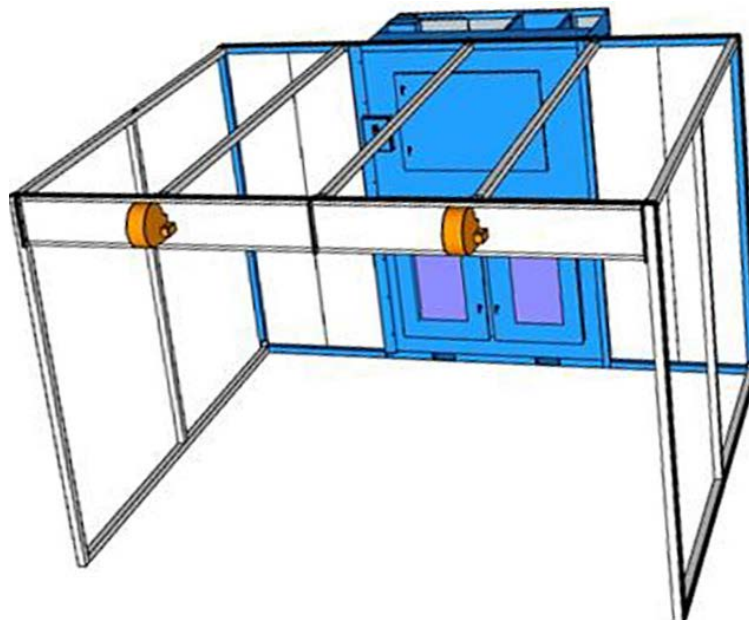
Step 9

Locate the bars that fit overhead, looking for EVEN numbers at the ends of the bars.



Step 10

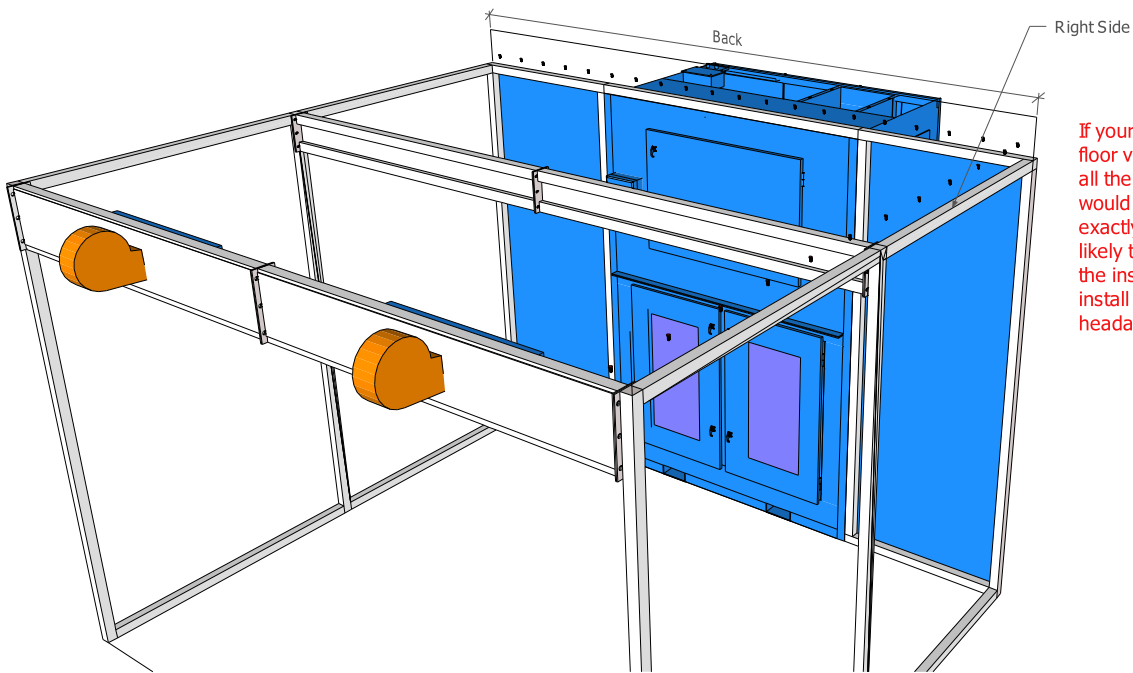
After the bars have been located, place on top of the front and back, and screw into permanent location.



Add on Instructions for Machines With Metal Tops

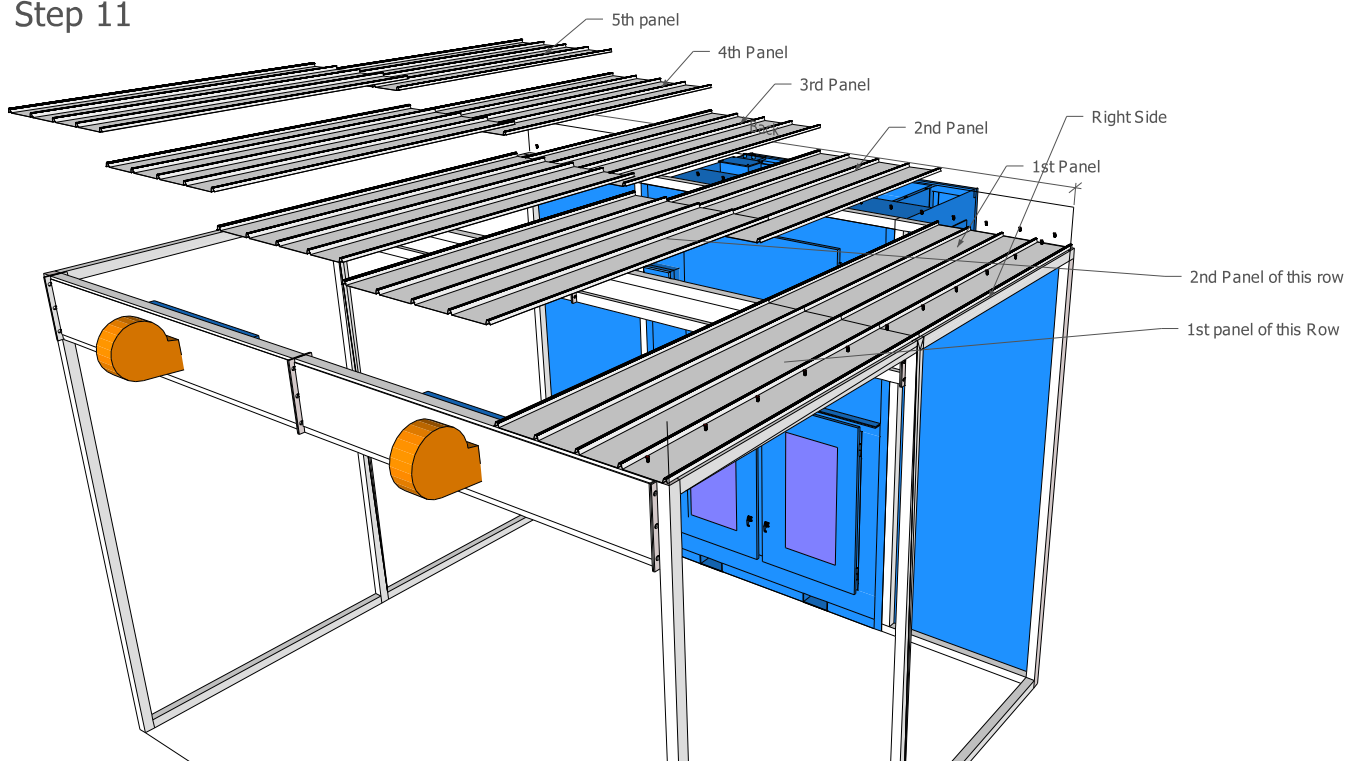
When installing the frame DO NOT Tighten any of the Screws or bolts in the frame, UNTIL the roof panels are on.

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If your floor and the manufactures floor varied in level and they screwd all the top metal down, the installers would have to shim this frame to be exactly the same as theirs. Now most likely the floors will be different and the installers making new holes as they install will prevent a lot of installation headaches.

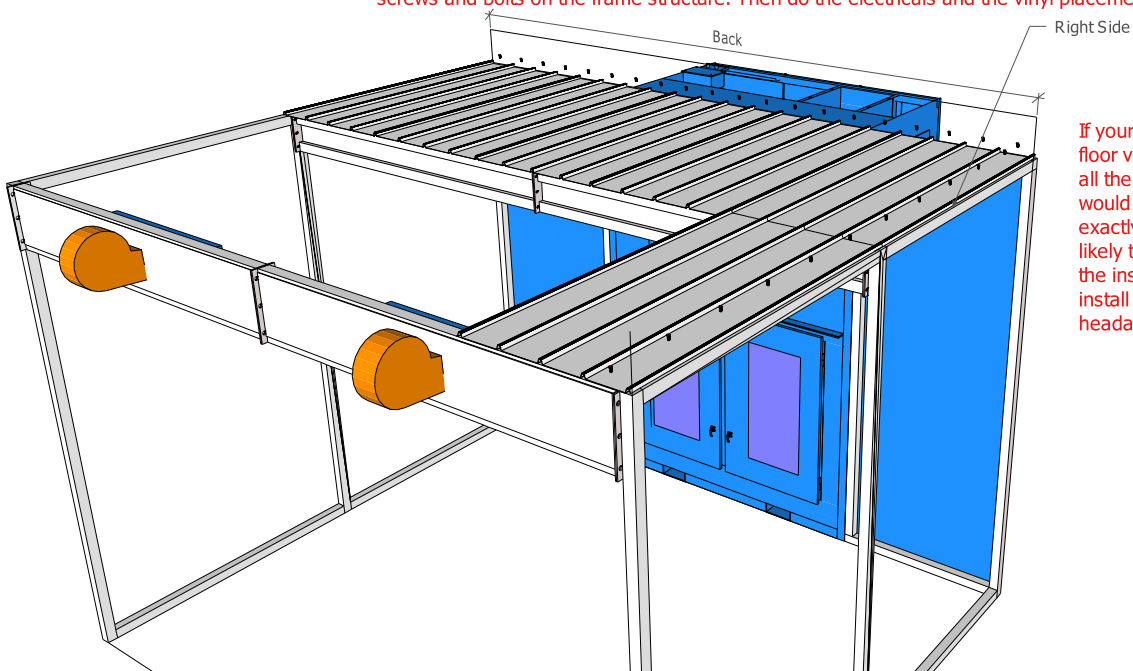
Step 11



Step 12

The manufacture has only installed the screws on the back and on the right side. You can shift the frame structure some in order to realign the screw holes in the back and right side. With back and right side screws in place, this will hold the frame square, Now finish screwing the roof panels in place then tighten the screws and bolts on the frame structure. Then do the electricals and the vinyl placement.

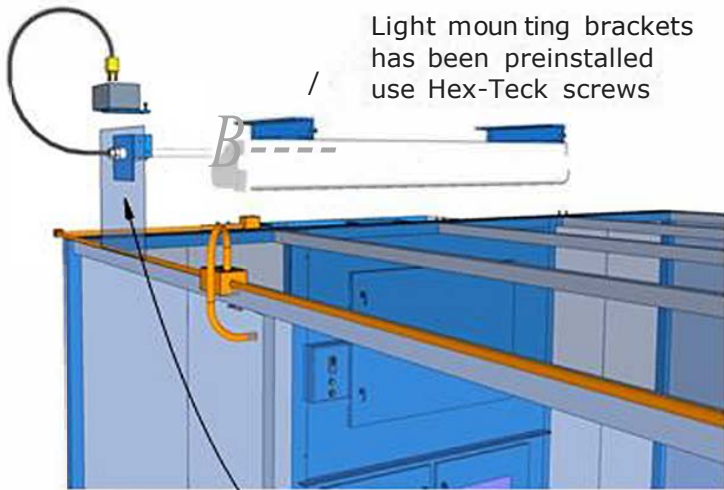
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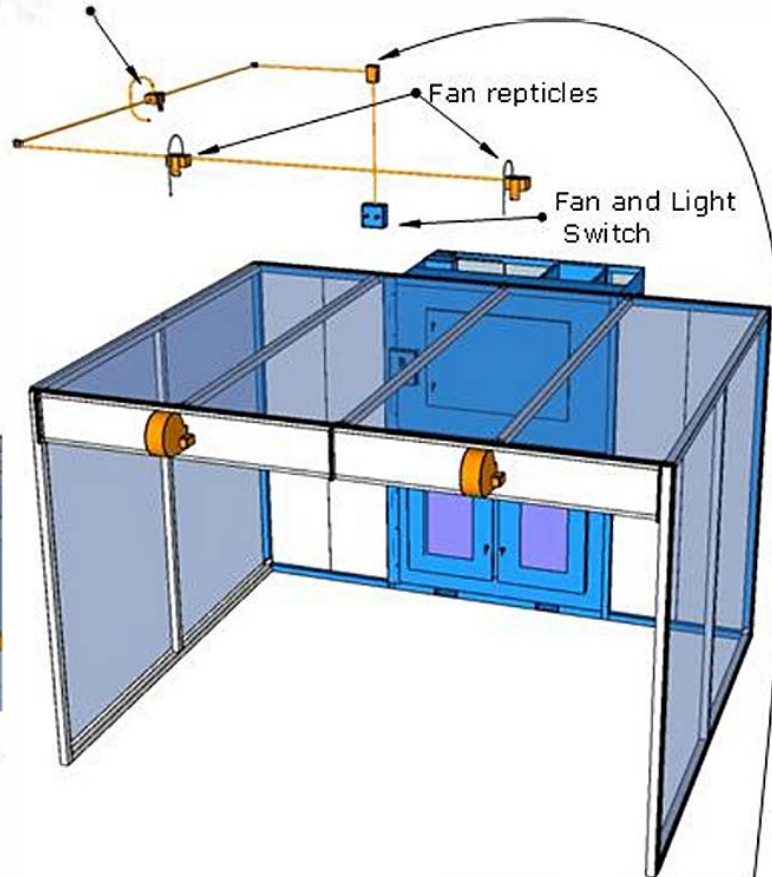
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Electrical component parts

Step 13



Light mounting brackets has been preinstalled use Hex-Teck screws



Step 14

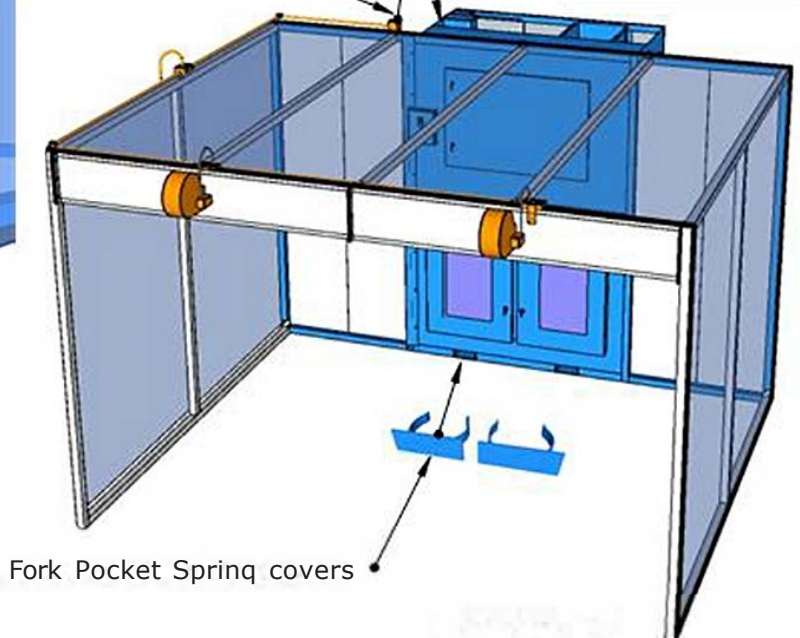
A slit will have to be cut big enough for the plug in to go through

Cord for lights and fan connect to the machine here

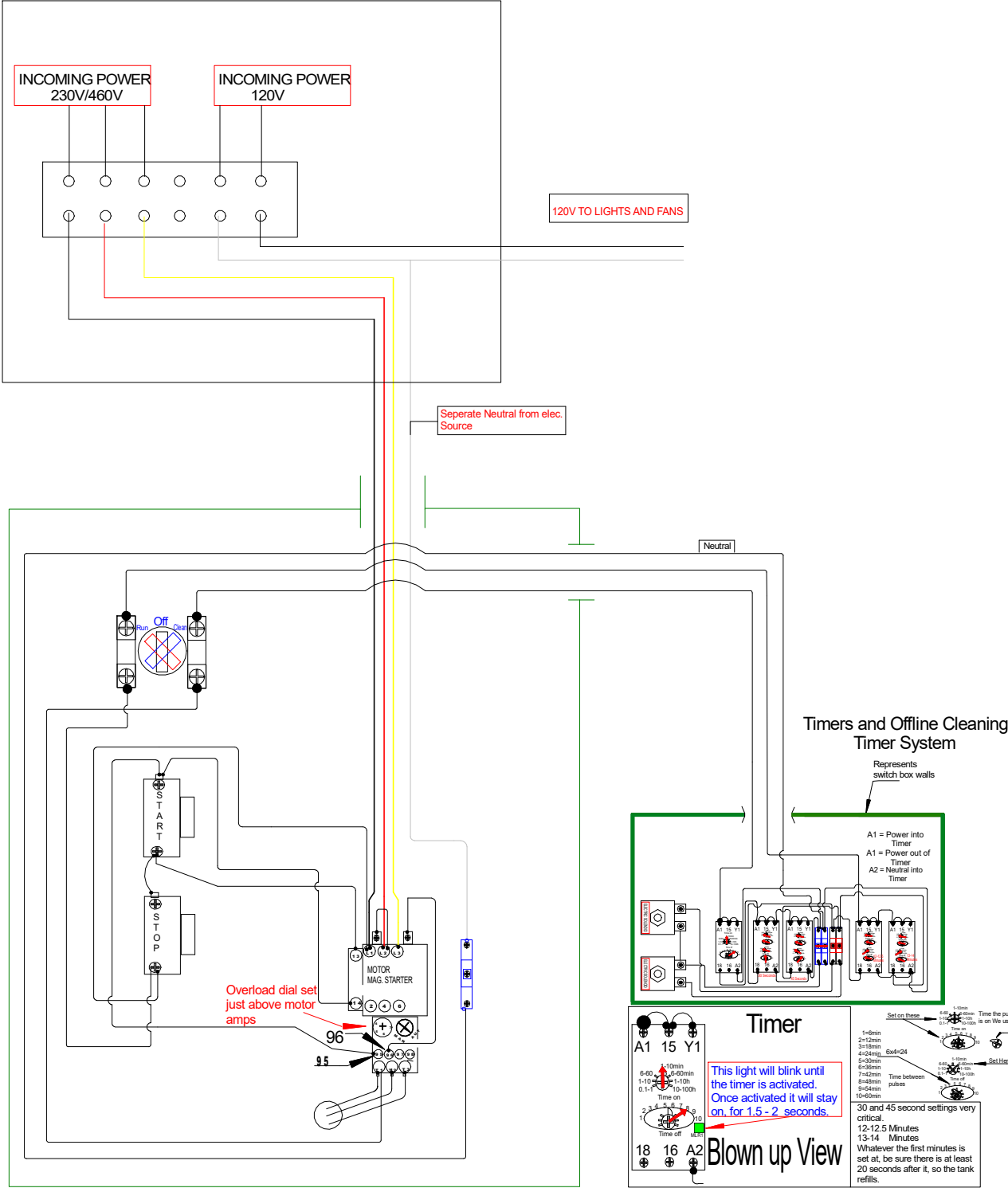
Cord coming from this box ties in to box in the top of the machine, Cord grip inside of machine for cord to go through the wall.



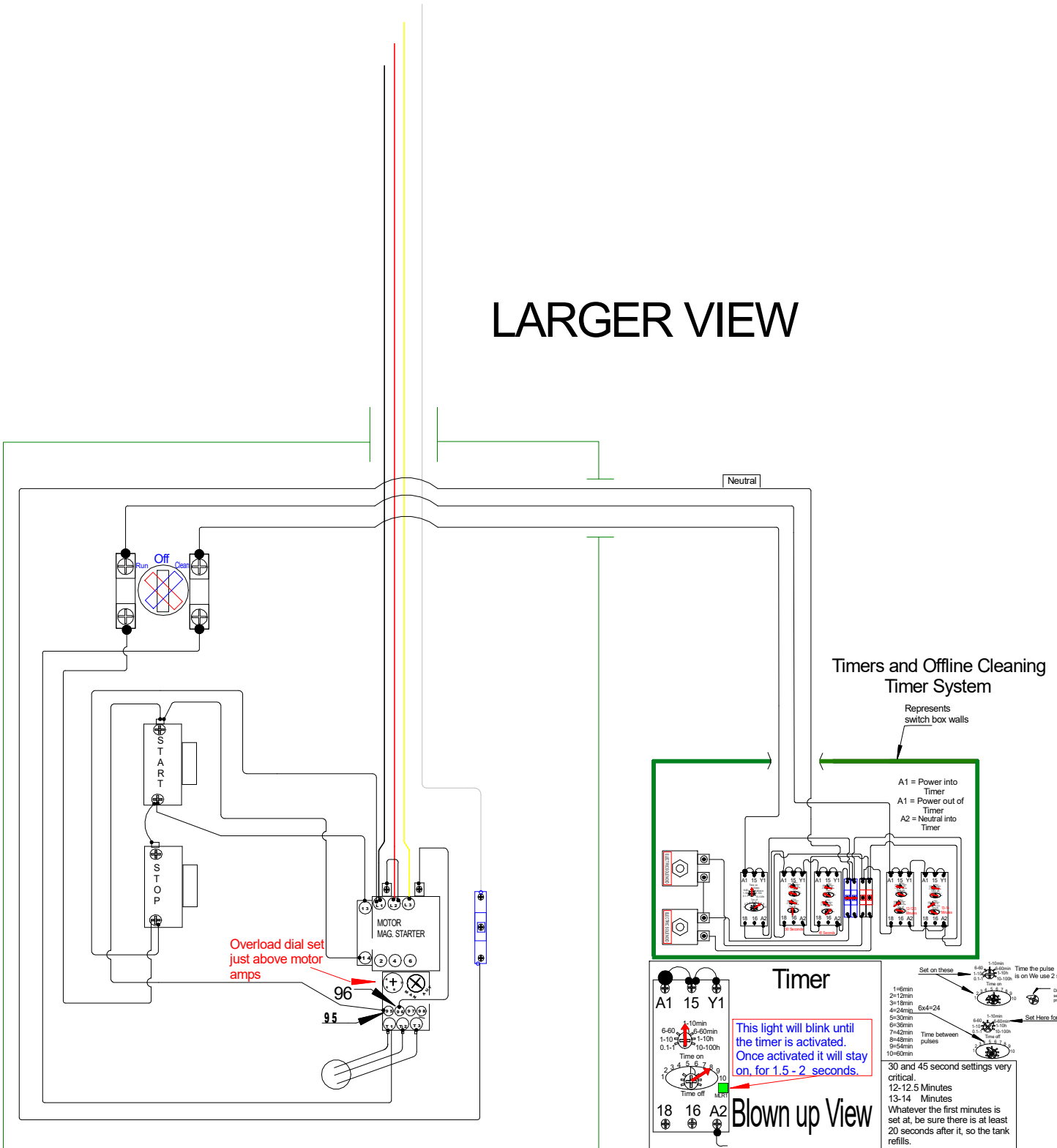
Using the screws and fender washers, Place the screws to secure the vinyl and Velcro together, Temperature changes makes the vinyl shrink and swell, causing Velcro to come loose. Place screws randomly, about every 16"



INCOMING POWER ON TOP OF POWER UNIT



LARGER VIEW



TROUBLE SHOOTING

All the below solutions are meant to be done only by a qualified technician

1	Motor not running	Look to see if L1- L2 -L3 wires are in and secured and proper voltage is there	Check if wires at bottom of mag starter to the motor are in bottom and secured.
2	The above checks OK	In center of the contactor is a rectangle post that is hooked to coil below. With screwdriver push in and see if motor will run. If motor will run something is wrong with the push buttons, That activates the starter.	
3	Motor runs when center post is held in, but not by the switches	Make sure every wire is secured on starter if still no results call Denray for further assistance	
4	If center post is held in and nothing happens hook power leads to motor leads at bottom of mag starter if motor runs the problem is the starter.	Call factory for switch replacement	
5	If on switch closes mag starter and motor does not run.	FIRST take tester and check see if there is the proper voltage at bottom of starter	
6	If proper voltage is at bottom of starter	Check to see wiring at motor is properly hooked together	
7	Mag starter works and motor only hums	Check for proper voltage check all wire connections to be tight check wiring diagram and motor leads to be correct	
8	Motor runs for a few minutes and shuts off	Turn the amp dial on overload to increase the number. Increase only 1 amp at a time Never increase more than 2 amps above motor full load amps	
9	Filter Cleaning valve will not pulse	Check the three 1 amp fuses on top of the transformer in the switch box.	
10	Fuses OK	Check wiring in front of and behind the fuses	
11	Fuses and wiring checks out OK	With it being quiet activate the switch and listen to hear a clicking sound from the valve or valves.	
12	You hear it clicking	Make sure air is hooked up to tank	
13	Air is hooked up and it still clicks	Call Denray Replace valve	

TROUBLE SHOOTING

All the below solutions are meant to be done only by a qualified technician

14	Machines with timers Timer not working	Check fuses:: Check wiring between mag starter and timer. Any loose connection, secure the connection
15	Green light on timer does not work	See above Bad timer needs replacement
16	Filters need to be cleaned more often	Turn dial on timer to a lesser number set at factory at approx. every 20 minutes.
17	Lots of dirt remaining on filters after being cleaned	Decrease time between cleanings. Check air pressure going into machine. Keep between 100-140 psi
18	Filter never completely cleans all dirt off	Not supposed to:: Machine designed to operate at 30% filter blockage. The cleaner a filter is the better the machine will perform.
19	Loss of suction on top of table	Dirty filters :: Refer to above
20	Excessive exhaust air on the floor	Any air that is sucked into the table top must come out in exhaust somewhere. Look into adding Muffler to machine
21	Dirt packed in top 1/3 of filters	Rotate filters two times a week 1/4 turn
22	Inside of filters are rusty colored	Blowing water from air tank inside of filter. Drain air tank more often (daily if possible) Installation of a dryer or water trap may be necessary
23	Filters will not come clean	Pull filters out of machine and take blow gun and from inside blowing out give filters a deep cleaning
24	How often do I need to do the above	Some companies do it daily and some weekly and some monthly. You must determine that for yourself
25	Moisture blowed in filters will make filters harder to clean	Refer to 22
26	Are filters washable?	Spun-bond filters in the grind tables can be washed only a couple times and must let thoroughly dry. Filter cleaning service companies may be available in your area.

TROUBLE SHOOTING

All the below solutions are meant to be done only by a qualified technician

27	Fan making a loud roar	Fan rotation backwards, on three phase, switch wires on L1 and L2
28	Lack of proper suction	Fan running backwards will produce 2/3rds less suction check fan rotation Verify Correct Fan Direction on your Machine
29	Machine vibration on direct drive systems	All fans are factory balanced from fan company, fans checked and rebalanced at table MFG, if table has vibration, fan weights may need to be moved to another blade.