## OPERATING INSTRUCTIONS



#### To find YOUR tables pertinent information please locate the table sticker on your table.

\*Please note the image above is a "generic" table sticker for visual purposes only! The table sticker on your machine reflects how it left the manufacturer and does not reflect any after-market changes made by previous owners. If you have questions please call Denray Machine at (800) 766-8263.

#### 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.

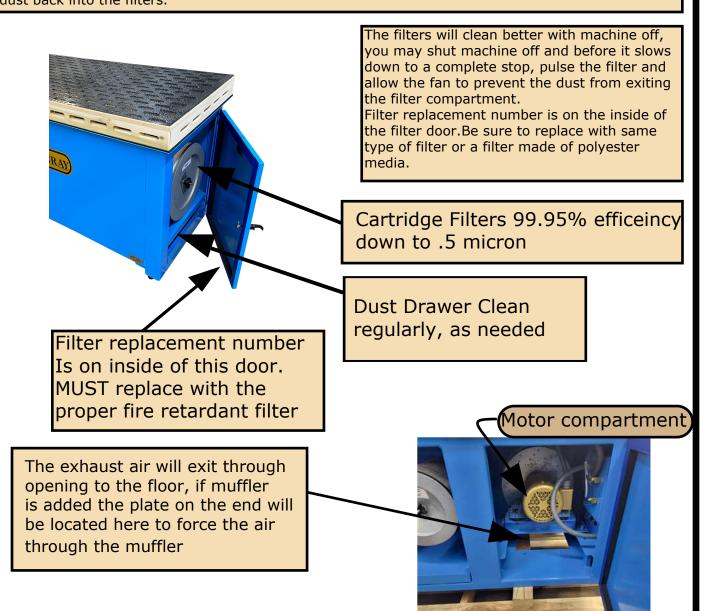
Never Allow Any Unauthorized or Untrained Person To Operate This Machine

Lockout and tagout any time maintenance is performed on this machine

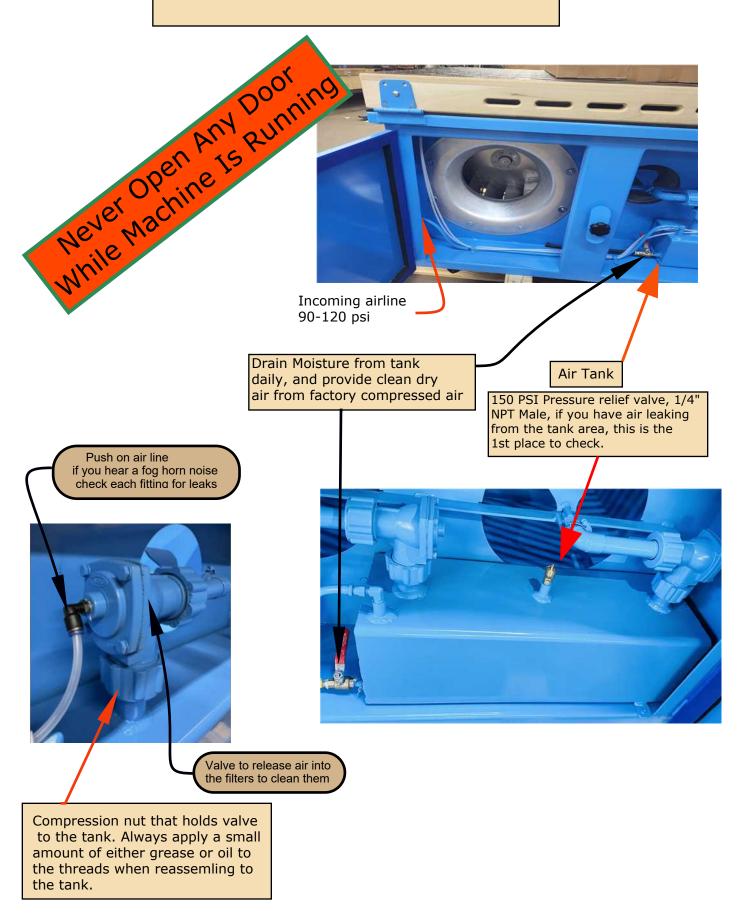
#### WARNING

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

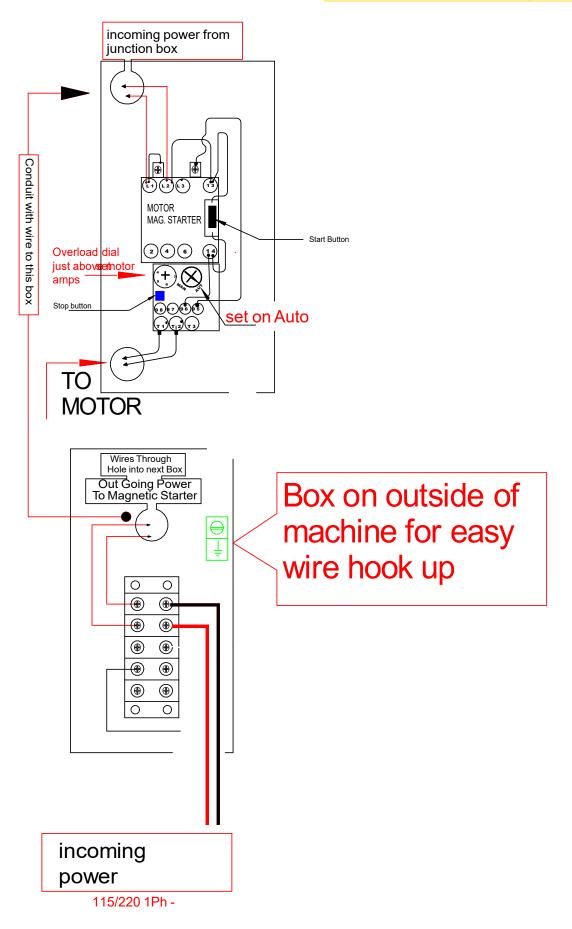
Filters are the main need of maintenance, the cleaner the filters are kept the better the machine will perform. This machine is equipped with timers to clean the filters, every so many minutes a pulse of air will be released into one of the filters, and a few minutes later the other filter will be pulsed, 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.

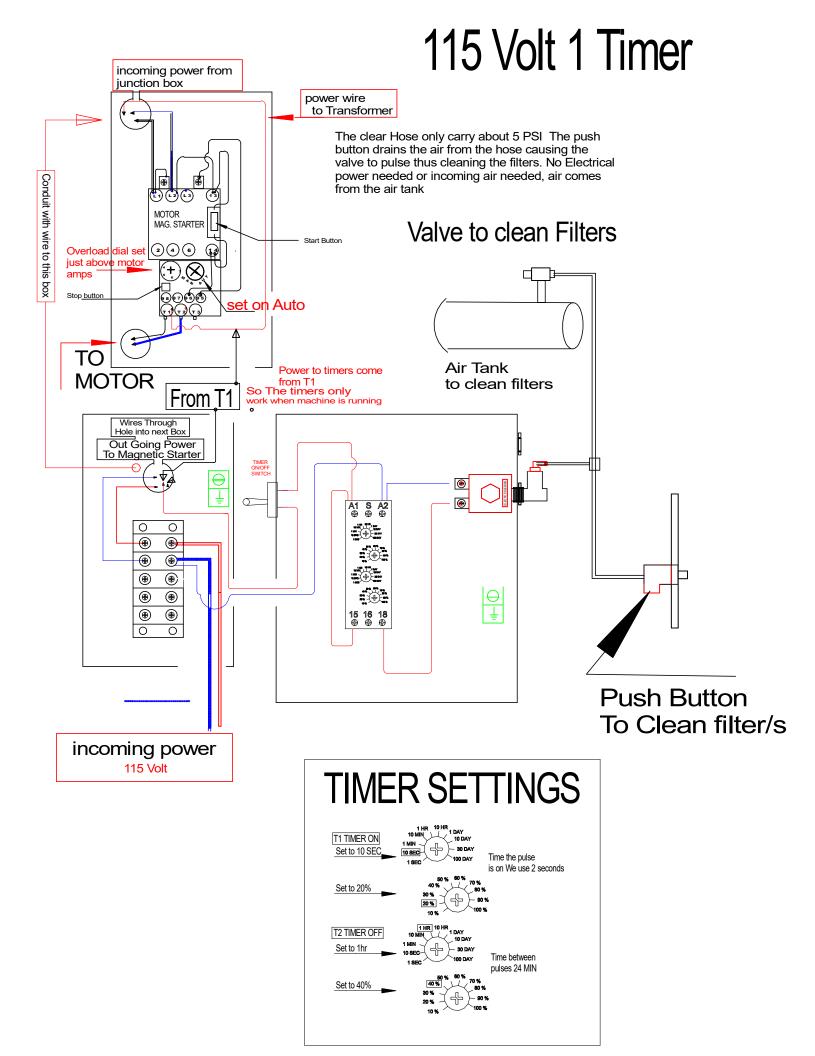


## Air Tank View (Generic)

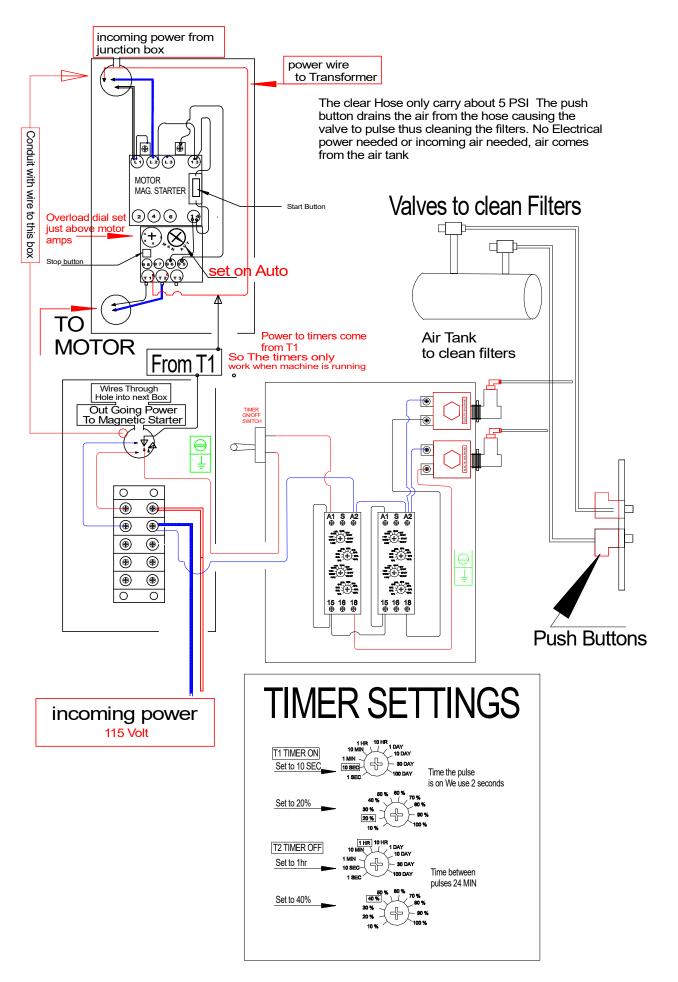


## 115/220 Volt 1 phase

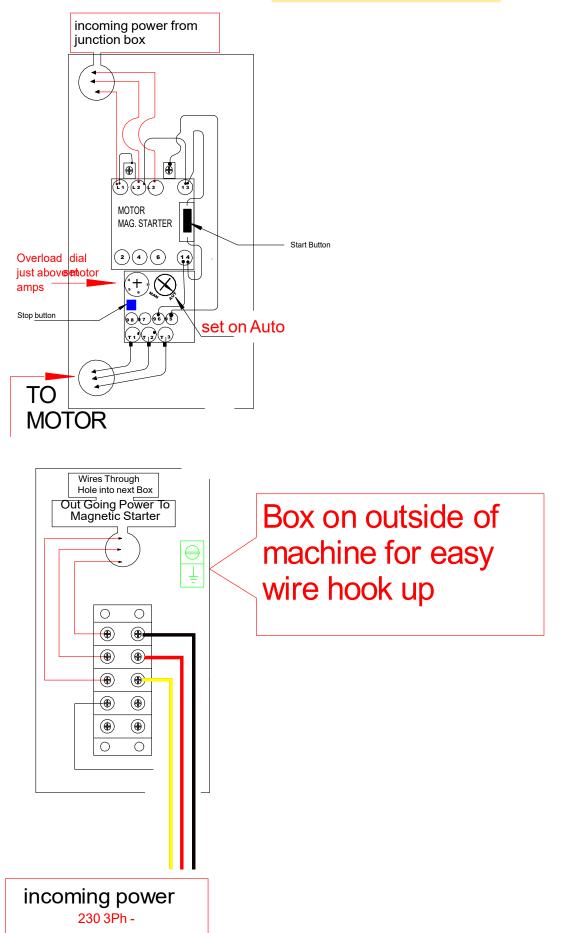


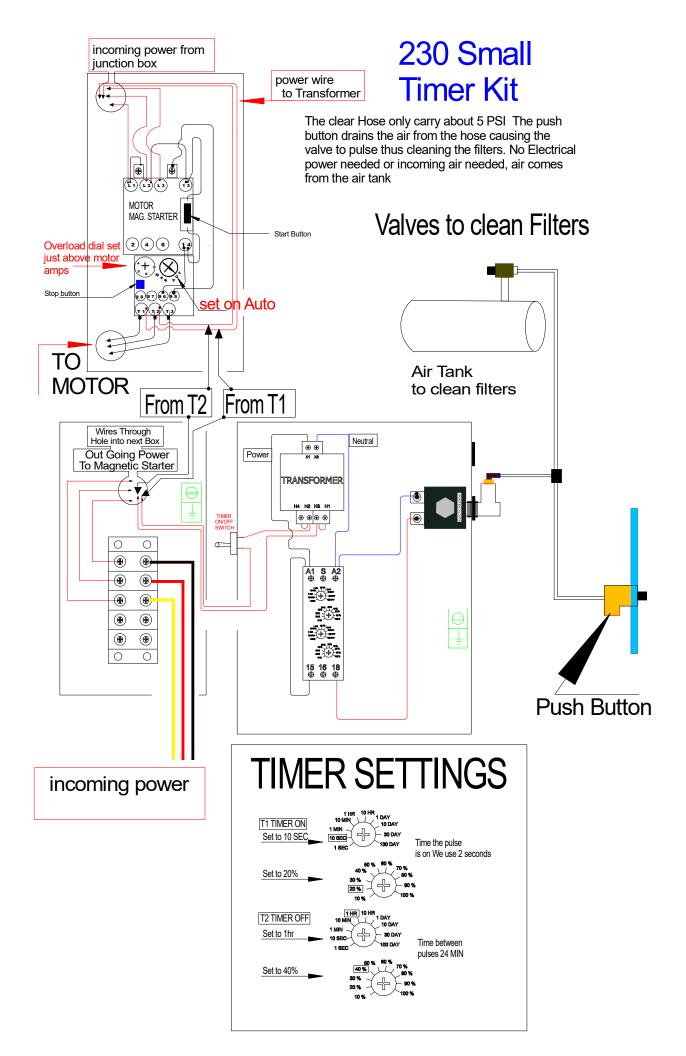


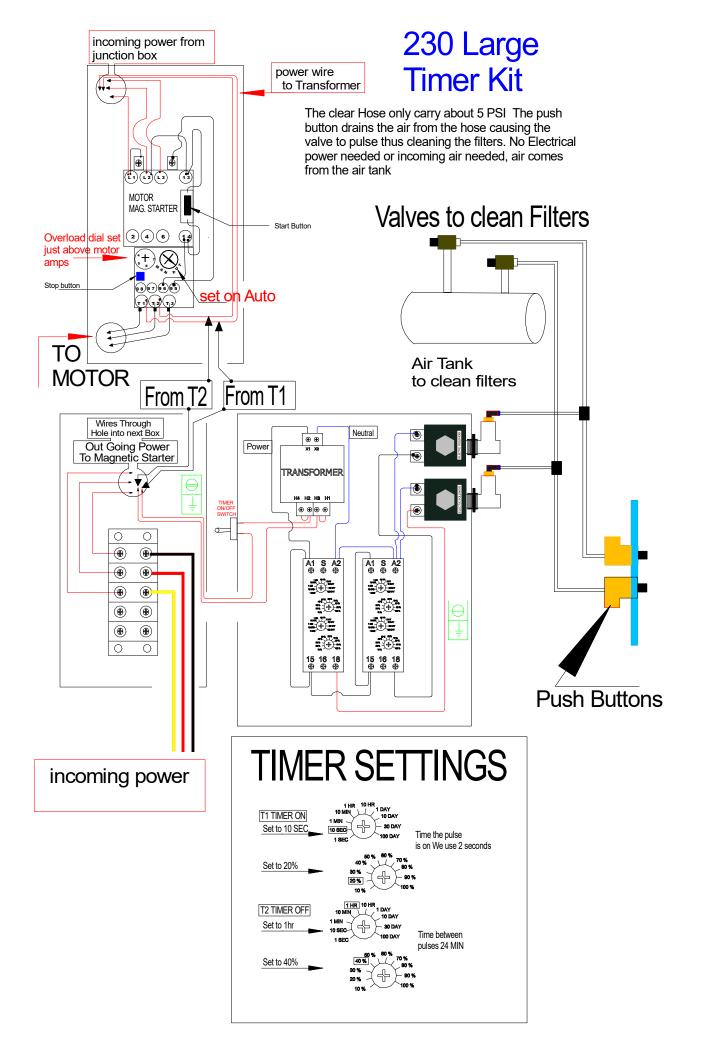
## 115 Volt 2 Timers



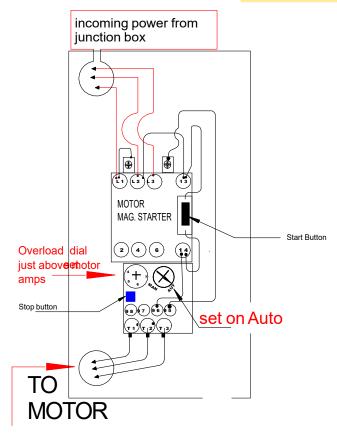
## 230 Volt 3 phase

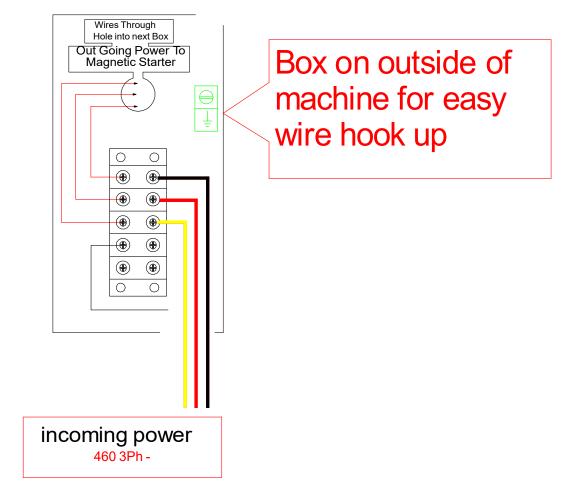


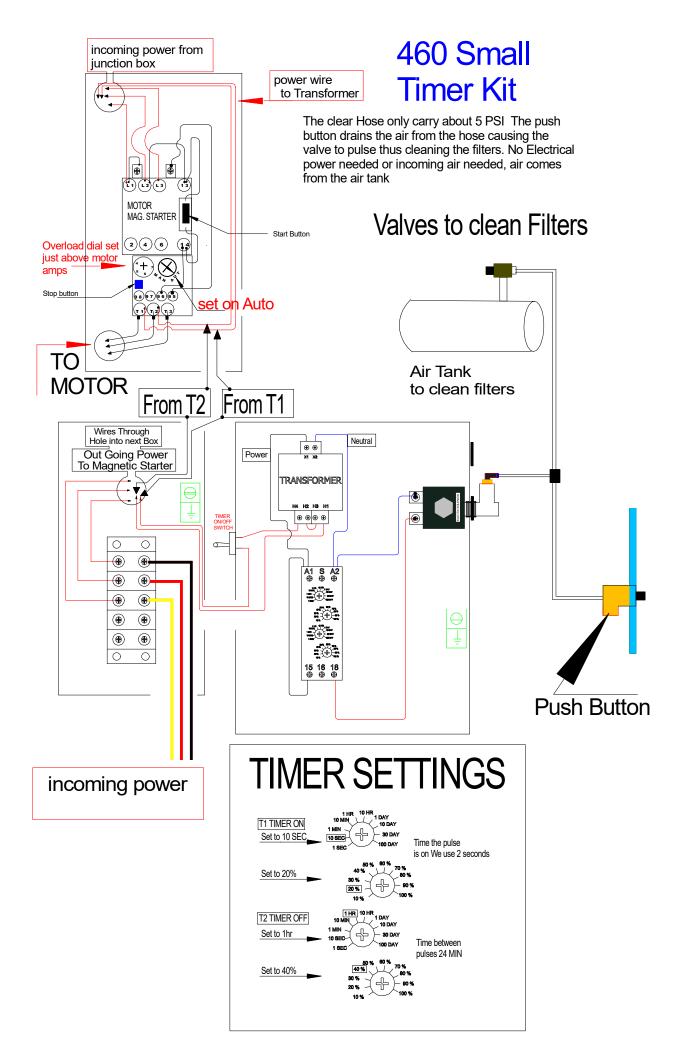


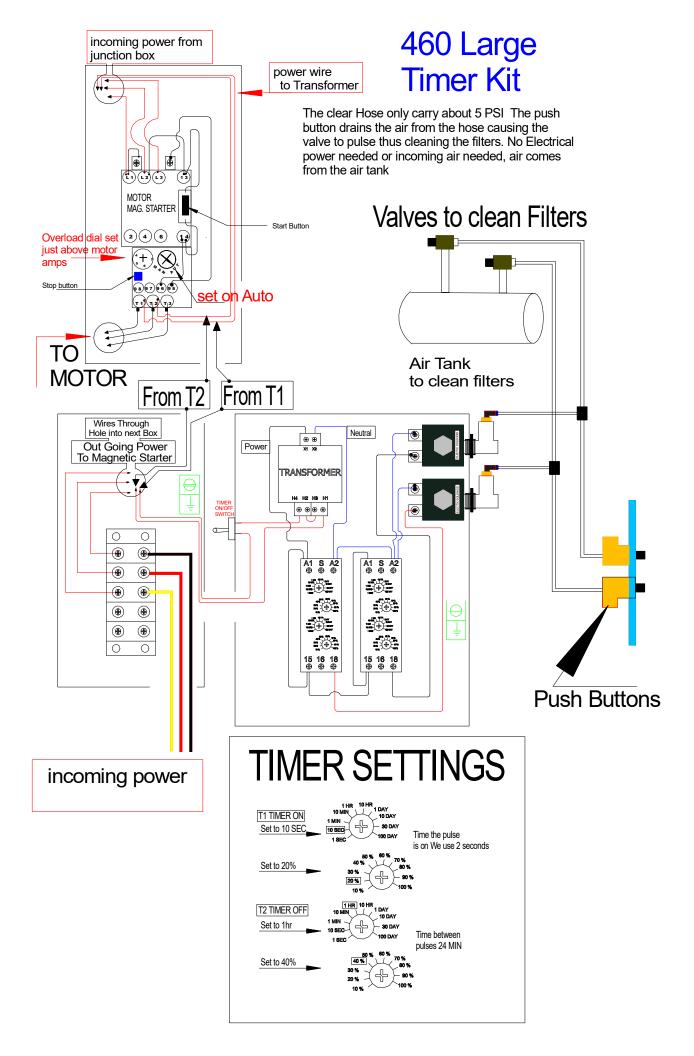


## 460 Volt 3 phase





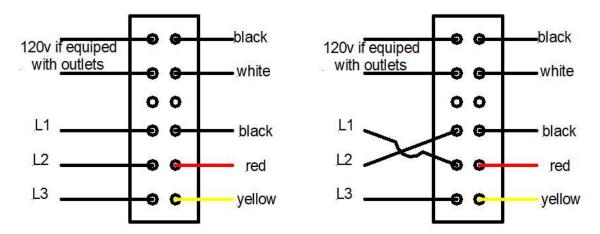




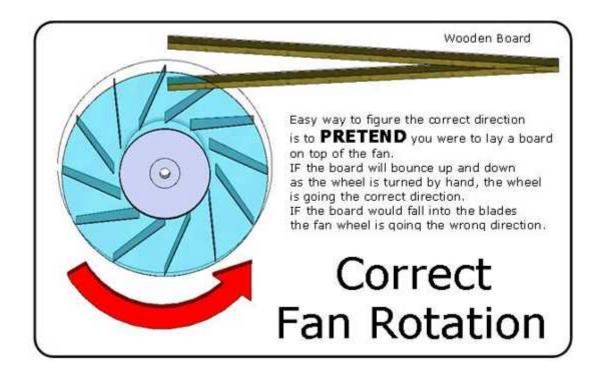
# CHECK FAN ROTATION

#### WARNING DISCONNECT ALL POWER BEFORE SERVICING

TO CHECK THE MOTOR ROTATION. OPEN MOTOR DOOR AND SEE IF THE FAN IS ROTATING THE SAME DIRECTION AS THE ARROW ON THE BACK OF THE MOTOR. IF IT IS GOING THE OPPOSITE DIRECTION OF THE ARROW SWITCH L1 AND L2 ON THE TERMINAL BLOCK



## When the fan is going the wrong direction you can loose up to 50% of the suction.



#### **IF FAN IS ROTATING BACKWARDS**

#### WARNING DISCONNECT ALL POWER BEFORE SERVICING

TO CHECK THE MOTOR ROTATION. OPEN MOTOR DOOR AND SEE IF THE FAN IS ROTATING THE SAME DIRECTION AS THE ARROW ON THE BACK OF THE MOTOR. IF IT IS GOING THE OPPOSITE DIRECTION OF THE ARROW SWITCH L1 AND L2 ON THE TERMINAL BLOCK

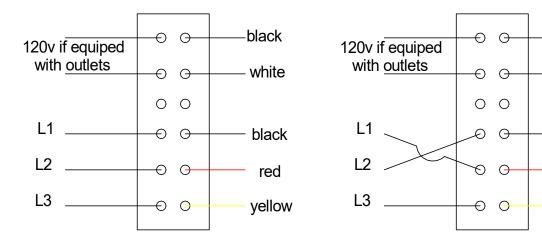
black

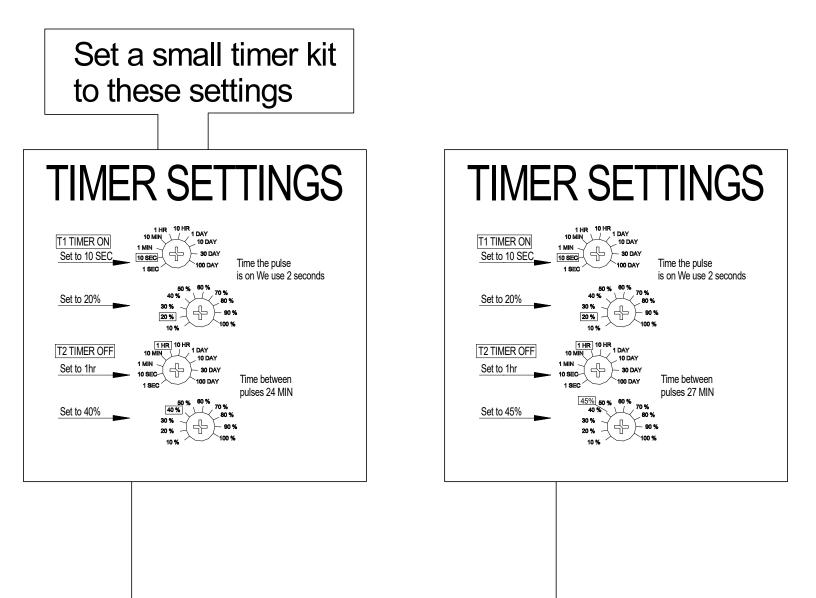
white

black

red

yellow





For a double timer kit set second timer to pulse 3 minutes after the 1st. To allow the air tank to refill.

#### **TROUBLE SHOOTING**

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

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.
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.	
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	
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	
If on switch closes mag starter and motor does not run.	FIRST take tester and check proper voltage at botto	
If proper voltage is at bottom of starter	Check to see wiring at moto hooked together	r is properly
Mag starter works and motor only hums	Check for proper voltage check all wire connections to check wiring diagram and m	
Motor runs for a few minutes and shuts off	Turn the amp dial on overloa number. Increase only 1 amp Never increase more than 2 full load amps	o at a time
Filter Cleaning valve will not pulse	Check the three 1 amp fuse top of the transformer in the switch box.	es on
Fuses OK	Check wiring in front of and I	behind the fuses
Fuses and wiring checks out OK	With it being quiet activate th to hear a clicking sound from	
You hear it clicking	Make sure air is hooked up t	o tank
Air is hooked up and it still clicks	Call Denray Replace valve	
	The above checks OK Motor runs when center post is held in, but not by the switches 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. If on switch closes mag starter and motor does not run. If proper voltage is at bottom of starter Mag starter works and motor only hums Motor runs for a few minutes and shuts off Filter Cleaning valve will not pulse Fuses OK Fuses and wiring checks out OK You hear it clicking Air is hooked up	Motor not runningwires are in and secured and proper voltage is thereThe above checks OKIn center of the contactor is a hooked to coil below. With se if motor will run. If motor will with the push buttons, That aMotor runs when center post is held in, but not by the switchesMake sure every wire is secu- still no results call Denray forIf 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 replaceIf on switch closes mag starter and motor does not run.FIRST take tester and check proper voltage at botton hooked togetherMag starter works and motor only humsCheck to see wiring at moto hooked togetherMotor runs for a few minutes and shuts offTurn the amp dial on overloa number. Increase only 1 amp Never increase more than 2 full load ampsFilter Cleaning valve will not pulseCheck the three 1 amp fuse top of the transformer in the switch box.Fuses OKCheck wiring in front of and to hear a clicking sound from You hear it clickingAir is hooked upCall 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		