

# The Oreck Manufacturing Company

## Air 16

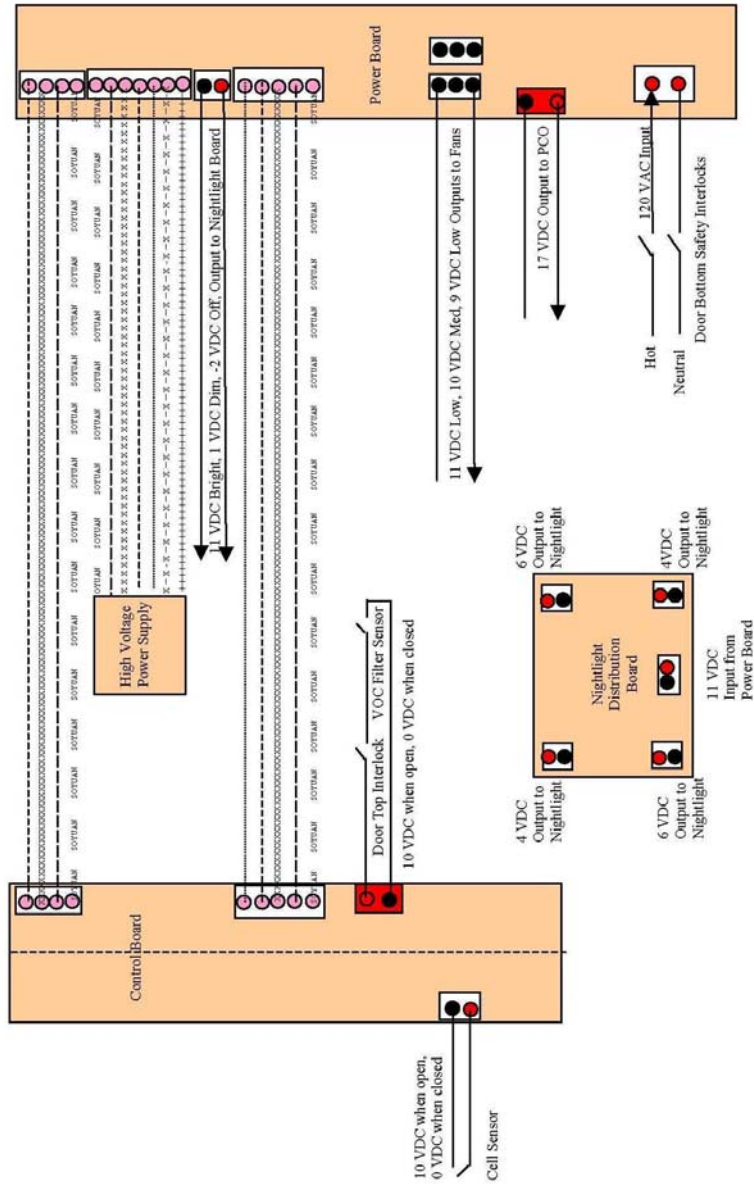
06/21/2011



Compiled by Clark DeNoble

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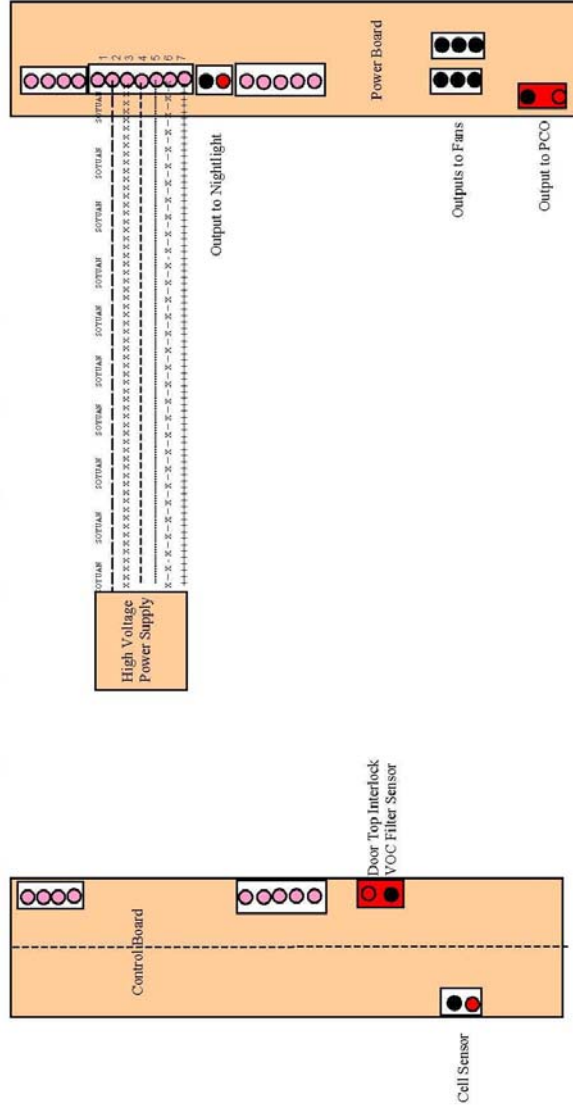
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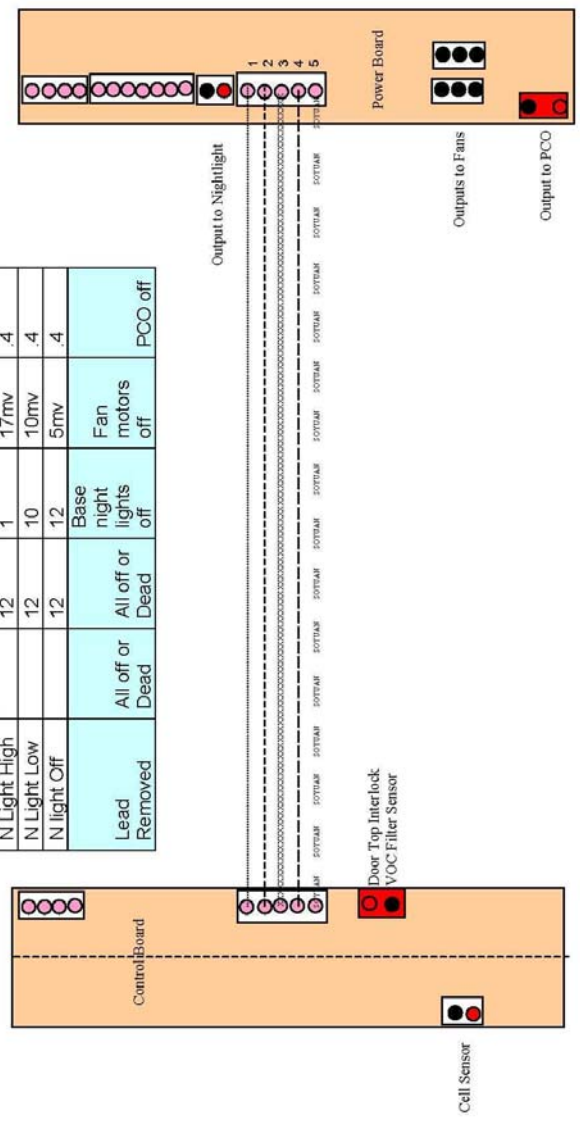
4 Conductor	4	3	2	1
Meter Lead	Black	Red	Red	Red
Off		-12	-12	-12
Low		1.4	-.94	2.7
Medium		1.4	-6	3
High		1.2	23mv	4
Lead Removed	Fan Low But No Control	?	No Chk Cell Lights	No HV



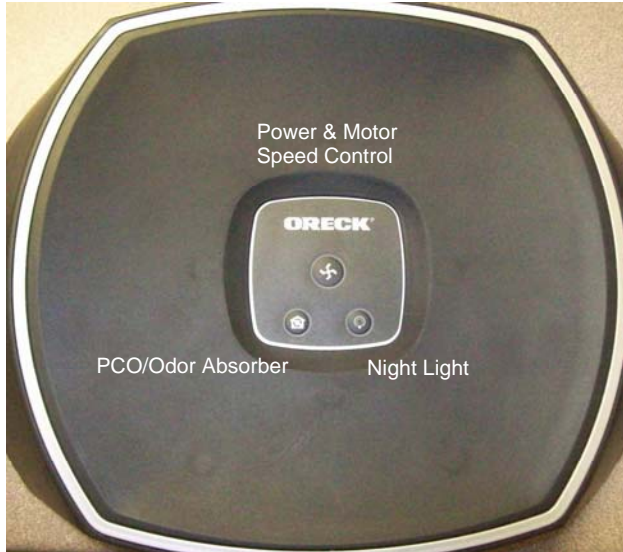
	7	6	5	4	3	2	1
7 Conductor	Red	Red	Red	Red	Red	Red	Black
Meter Lead Off	5mv	5mv	6mv	0	0	0	
Cell Normal	9	9	9	-3	.6	-3	
Cell Shorted	31mv	33mv	34mv	0	0	0	
Lead Removed	Check cell lights on, no HV	Low HV	Check cell lights on, no HV	No HV	?	All lighting weak	HV won't shut down



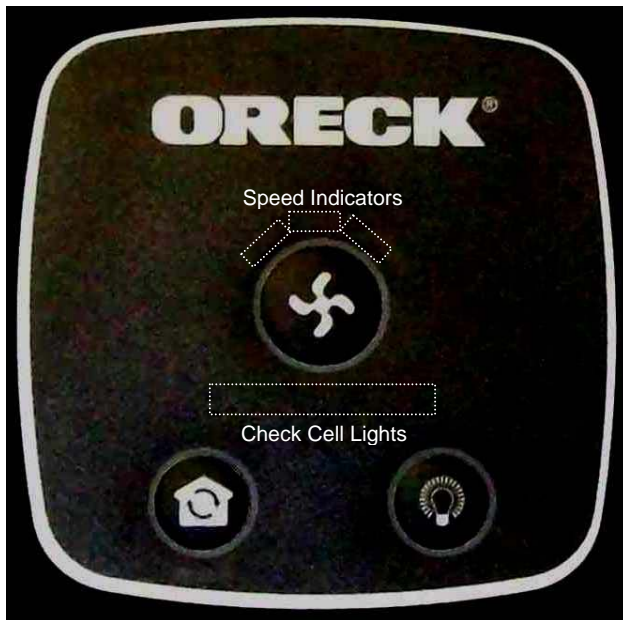
5 Conductor Meter Lead	5	4	3	2	1
Off	Black	Red	Red	Red	Red
Low		12	10	11	21
Medium		12	1	17mv	.4
High		12	1	18mv	.4
PCO On		12	1	19mv	.4
PCO Off		12	1	17mv	.4
N Light High		12	1	13mv	23
N Light Low		12	1	17mv	.4
N Light Off		12	10	10mv	.4
Lead Removed		12	12	5mv	.4
			Base night lights off	Fan motors off	PCO off



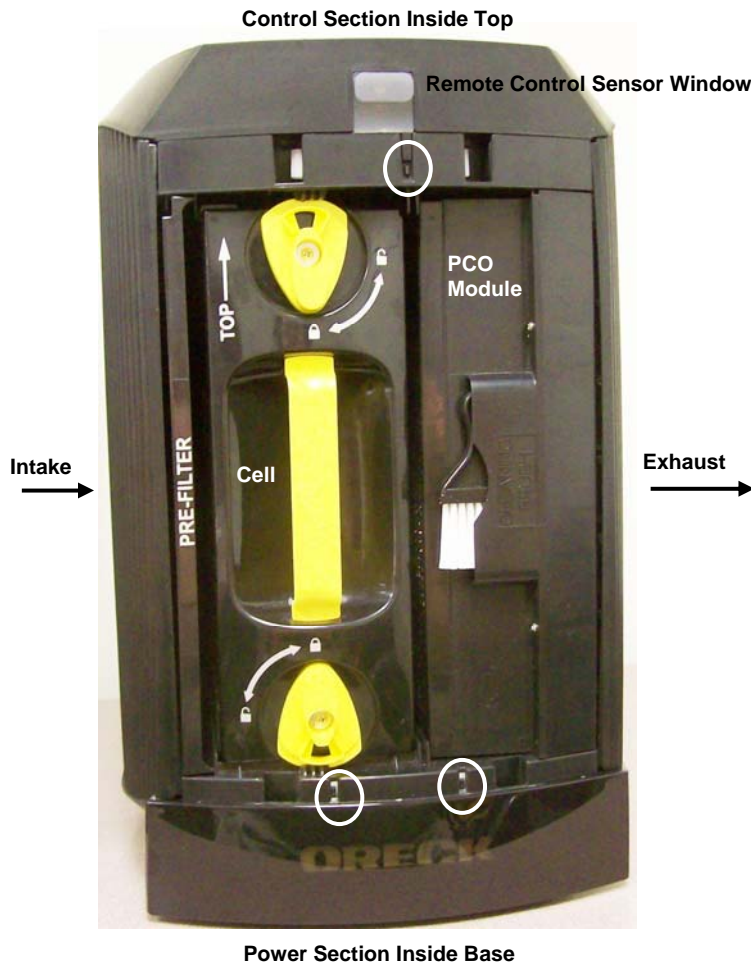
## Tune-Up



Revitalizer, Power/Speed & Nightlight Buttons



1. Plug in the unit
2. Press the Power button: The fan should start up fast then slow to Silence and the On and Silence indicators should light up.
3. Press the Power button for Medium and High function: The speed should increase and the applicable indicator should light up.
4. Press the Revitalizer button: The Revitalizer indicator should light up.
5. Press the Night Light button: The Night Light indicator should light as well as the base lights
6. The Check Collector Cell is not normally lit.
  - a. Check/clean Collector Cell
7. To check the Front Cover Safety Interlock Switch function:
  - a. With the unit On, grab the top corners of the front cover and pull back. The Front Cover should pop loose and the unit should turn Off.
  - b. Remove the Front Cover.
8. Remove the Prefilter & Collector cell and install the front cover:
  - a. The unit should turn back On with the cell absent.
9. PCO Module Safety Interlock:
  - a. Remove the Front Cover. The PCO Module is held in place by two small screws (one above & one below the brush holder).
  - b. Remove the screws and pull out the PCO Module.
  - c. Install the front cover.
  - d. The unit should NOT power up with the PCO module absent.
10. This is a good time to clean the inside of the unit. **Be sure to unplug the unit while cleaning.** When finished cleaning:
  - a. Install the PCO Module with two screws.
  - b. Install the Collector Cell and lock in place.
  - c. Install the Prefilter.
  - d. Install the Front Cover.
  - e. The unit should power up.
  - f. Check that all controls function as needed.



All Safety Interlock Switches are circled except the PCO Module Sense Switch.

The Cell Sense Switch is not a safety switch.

## Disassembly

Remember to start with a clean bench and a tray to put the screws in.

**Be sure the unit is NOT plugged in while servicing except to test functions.**

The unit is constructed so that once the front cover, prefilter, cell and PCO module are removed (you've already done this one during the Tune-up), the back, control section and power section can be worked on individually.

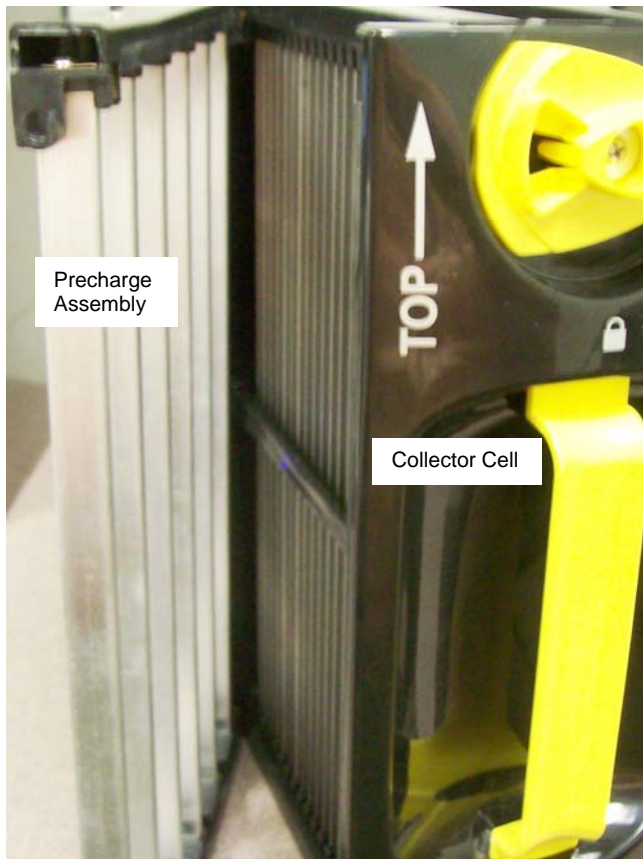
To remove either Intake or Exhaust Grills, the Control Section and Power Section must be removed to access the grill screws.

If you remove either grill keep in mind that when reinstalling, the end with the deep ribs is down and the end with the shallow ribs is up.

If you remove either the Top or Base make sure the wires are not laying across a screw boss when reassembling.



## Filtration Compartment



2. Unlock and remove the **Collector Cell** Assembly
3. Lift up the Precharge Assembly and remove from Collector Cell

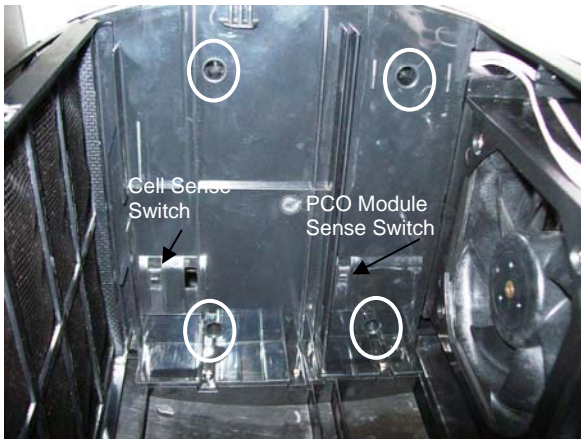


3. Remove the two screws indicated and pull out **PCO Module**.



1. To access the **Fan Assembly** for removal, the Exhaust Grill must be removed.

In order to remove the Exhaust Grill the **Control** and **Power Sections** must be removed.



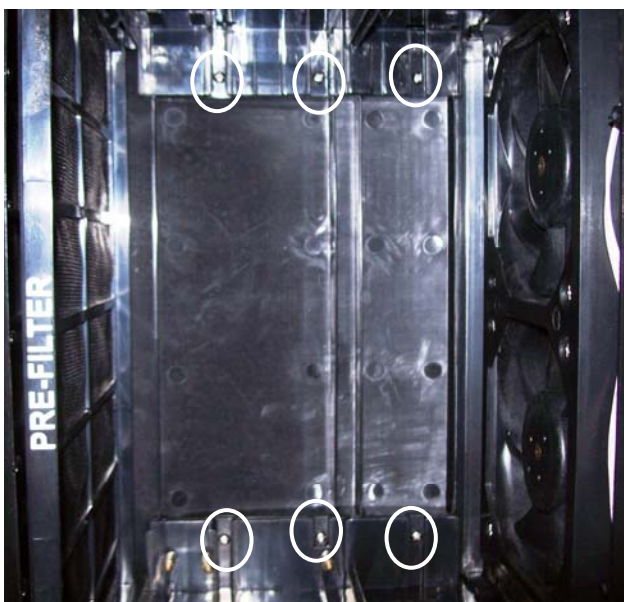
2. **Control Section removal** 4 screws accessed from the inside of the unit must be removed. This may be easier if you flip the unit over on its Top. This position will also make the Power Section more accessible.



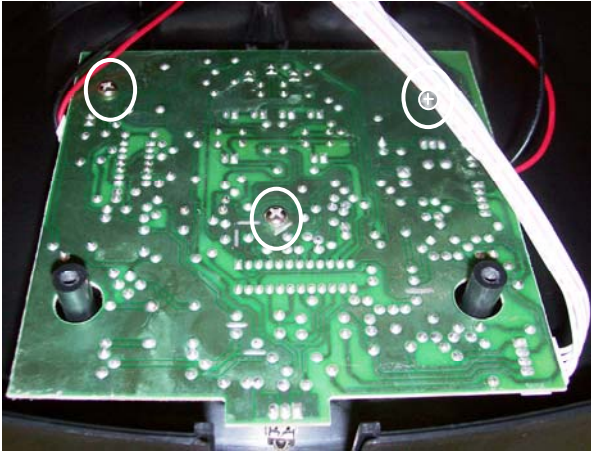
3. **Power Section removal**-Remove the 4 screws indicated.

4. **Grill removal**-With the Control and Power Sections removed the Grill attachment screws are Available for removal: 4 screws per grill, 2 at the top and 2 at the bottom.

**If you remove either grill keep in mind that when reinstalling, the end of the grill with the deep ribs is down and the end with the shallow ribs is up.**



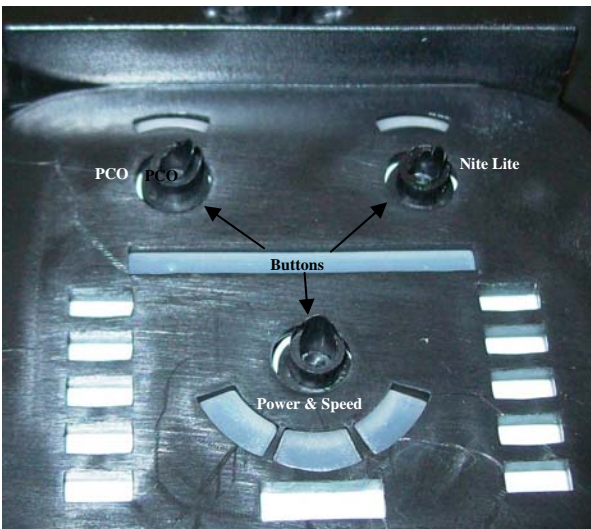
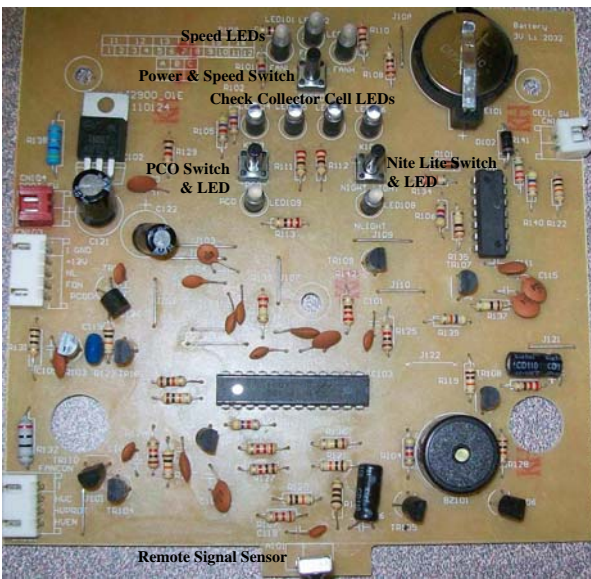
5. **Back Cover removal**-Normally the back cover will not need to be removed. If removal is necessary then remove the 6 screws indicated.



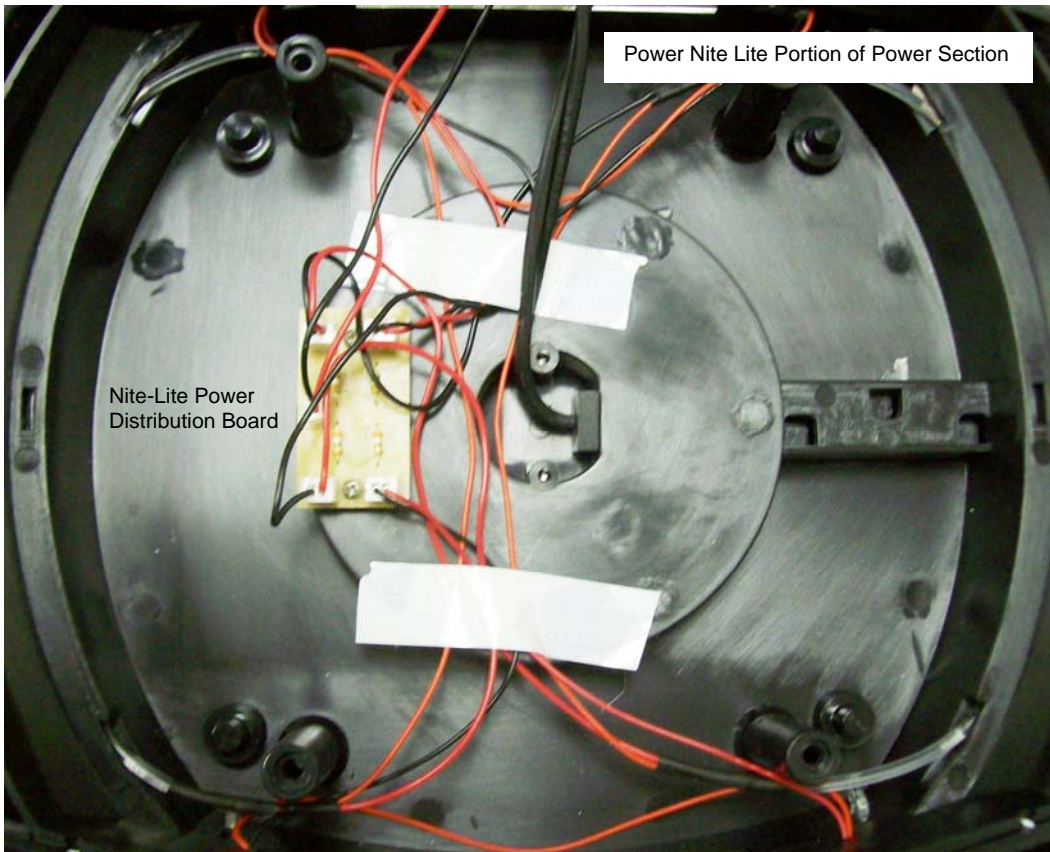
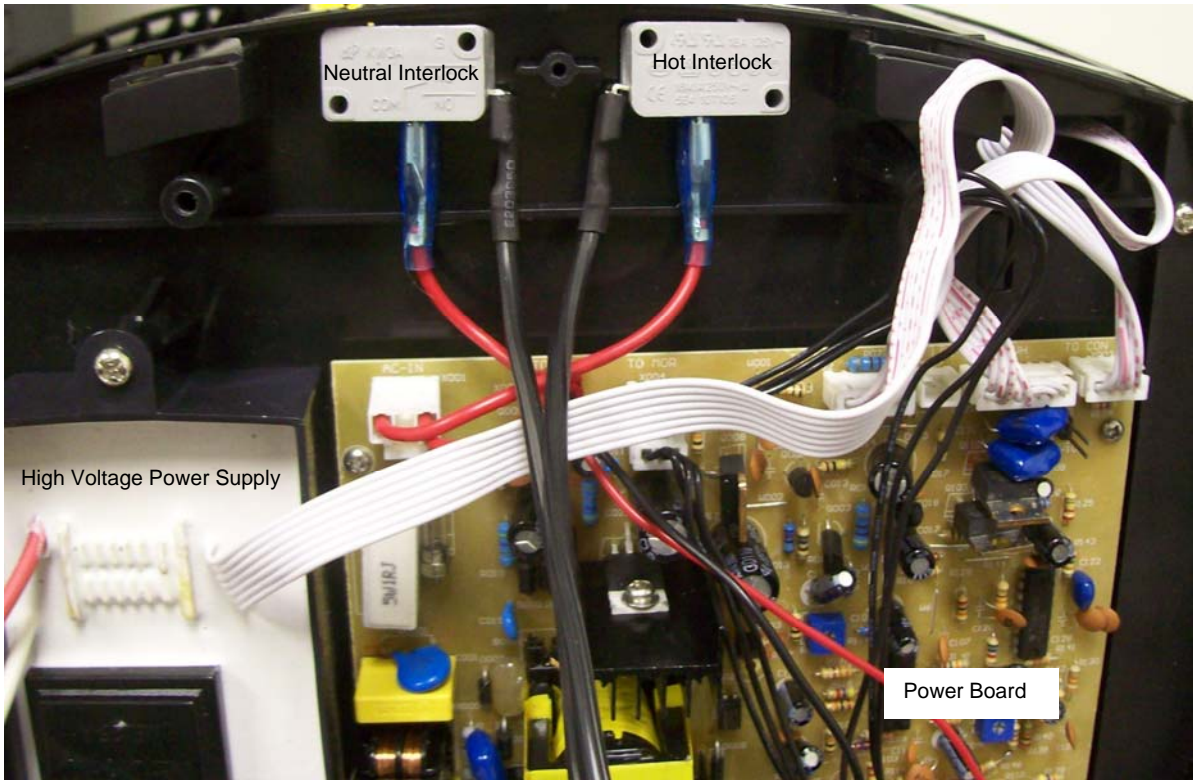
6. Control Section-Control Board

Before removing this board see the picture at the bottom of this page and make note of the 3 black buttons. These are loose and easy to lose. The switch actuators fit into these when reassembled.

Unfasten the 3 screws indicated to remove.



7. Power Section-Pretty straight forward so I won't complicate it with a lot of verbiage.



End of Disassembly Section