



INSTALLATION, OPERATION & MAINTENANCE MANUAL

CEILING SCRUBBER

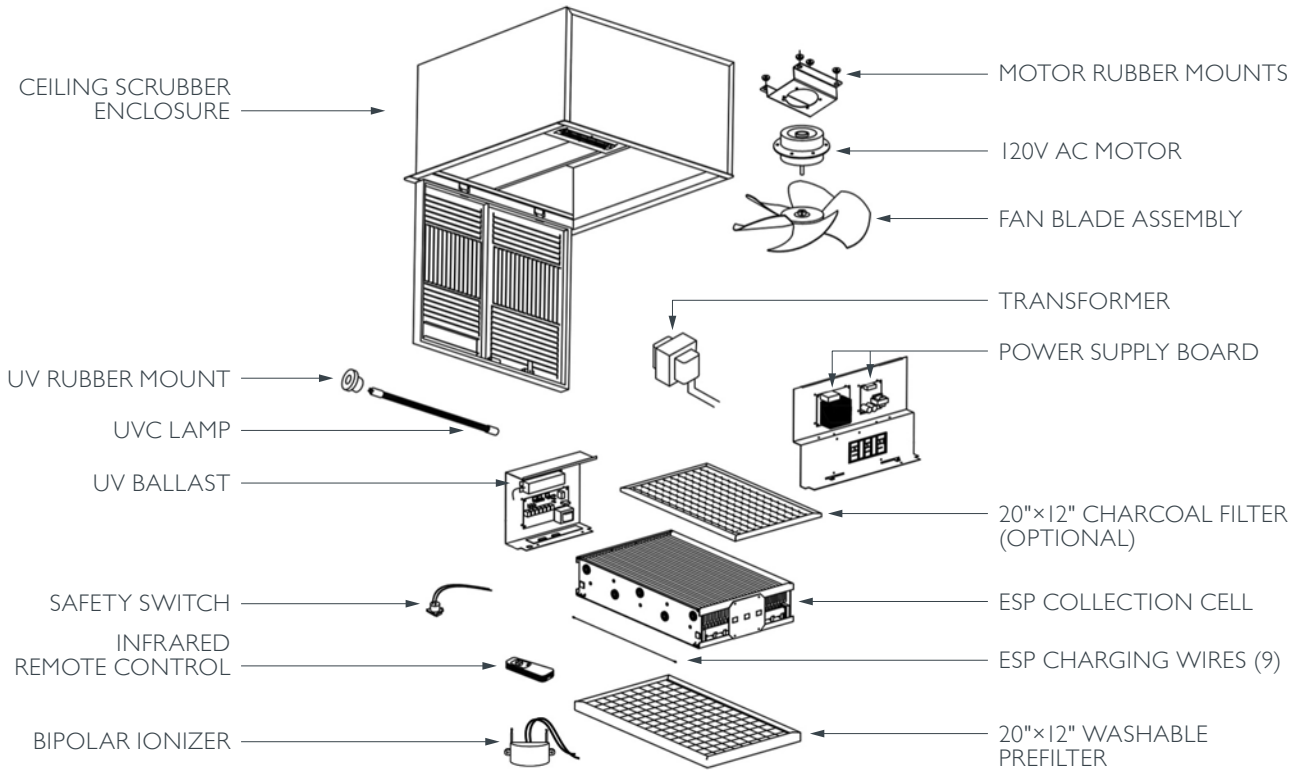
REV 11/2020



INTRODUCTION

The Plasma Air Ceiling Scrubber is a complete air purification system integrating multilayer filtration, air purification, sterilization and air ionization. The unit contains several technologies including a washable pre-filter, electrostatic precipitator, UVC germicidal lamps and bipolar ion generator. The ceiling scrubber is manufactured from galvanized steel with epoxy powder-coated outlet grilles and is designed for flush mounting in hung ceilings. The unit comes with a three-speed fan operating at low sound levels and includes an IR remote control to turn the unit on and off, adjust fan speeds, and turn the ionizer and UVC lamp on and off.

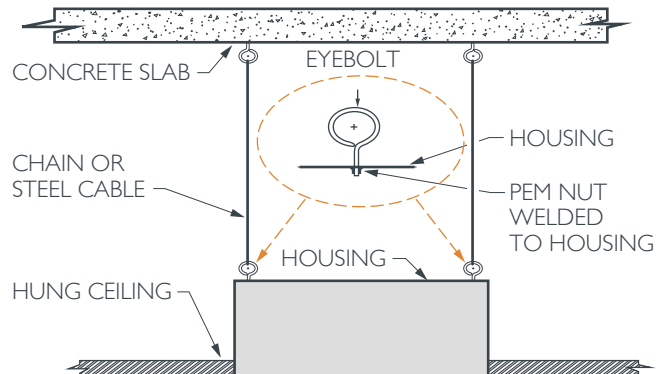
COMPONENTS - EXPLODED VIEW



MECHANICAL AND ELECTRICAL INSTALLATION

Mechanical: Four threaded holes (M6 size) are provided in the top of unit to be used in conjunction with the four factory provided eyebolts. Steel wires or chains, by others, are necessary for final installation into the underside of the concrete floor slab above.

Installing contractor may utilize threaded rod or other hanging method as per authority having jurisdiction. Unit should not be installed too close to exterior doors as any drafts will interfere with unit airflow.



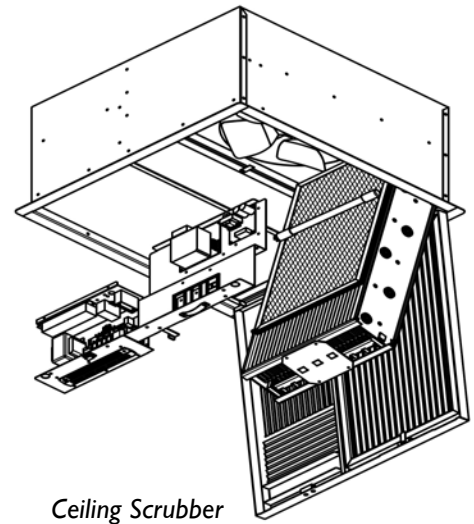
Scrubber Installation Schematic

Electrical: Ceiling scrubber is provided with a standard five foot 120VAC wire leads.

Unit wiring shall be completed by a certified electrician as per AHJ.

OPERATION

- Using the remote control, press the on/off switch to turn the unit on. The fan speed will start at medium, and the UV lamp and bipolar ion generator are automatically energized. Toggling the fan speed button sets the desired speed.
- The timer can be set to operate the unit in hourly increments. Pressing the button once will have the unit run for 1 hour, twice for 2 hours, 3 times for 3 hours and 4 times for 4 hours. The default is 4 hours. Pressing the button 5 times will have the unit run continuously.
- There are buttons to turn the UV light and bipolar ion generator on and off as desired.
- A green LED indicates that the Electronic Air Cleaner is operating properly.
- A red LED indicates that the cells are dirty or the unit has a fault.
- All functions can also be controlled with the buttons on the display panel of the unit.



Function of Operations table

Hard wire mode	Standby mode (Default)	UV Manual	UV Auto (Default)	Function of Operations
Selection of Switching Position				
	X		X	<p>(Factory Default) Upon Power Up:</p> <ol style="list-style-type: none"> 1) Unit on Standby Mode. Use Hand Held Remote Control to turn on/off the unit and it shall operate at 2nd speed (medium). The UVC lamp and Plasma Air Ionizer shall also be operational. 2) Selection of all functions can be also be performed with the Hand Held Remote Control, e.g. adjusting of fan speed; turning on or off UVC lamp or Plasma Air Ionizer. Refer to page 5 on how to use the timer. <p>Note: The above functions can also be performed by pressing the Display Panel on the unit if the Hand Held Remote Control is not available, not working or missing.</p>
	X	X		<p>Upon Power Up:</p> <ol style="list-style-type: none"> 1) Unit on standby mode. Can use either Hand Held Remote Control or Display Panel to turn the unit on. The unit will operate as in Factory Default Model except the UVC lamp which must be turned on via the Hand Held Remote Control or Display Panel.
X			X	<p>Upon Power Up:</p> <ol style="list-style-type: none"> 1) Automatically turn on unit and all functions (except timer). The fan speed is automatically set at 2nd speed. 2) Functions can be adjusted by using the Hand Held Remote Control or the Display Panel.
X		X		<p>Upon Power Up:</p> <ol style="list-style-type: none"> 1) Automatically turn on unit at 2nd speed and the Plasma Air Ionizer but not the UVC lamp, which needs to be turned on manually either via the Hand Held Remote Control or via the Display Panel.

MAINTENANCE

The main collection ESP cells and pre-filter should be washed regularly, depending on usage, or when the Fault indicator comes on. These 2 components should be soaked in soapy water.

A water jet spray may be used to help remove the contaminants from the plates and pre-filter. Remove them, rinse and let it drip dry.

NOTE: Do not use any brush or device to clean the plates or wires. Doing so may cause damage to the cells. Charcoal Filters, if used should be replaced every 3-4 months depending on usage. Failure to clean the ESP cells for an extended period of time may result in them being damaged. The UVC lamp is located between the fan and the charcoal filter. UV lights have a life span of 9000 hours.

SAFETY/WARNINGS

Ensure that all safety precautions are followed when using this electrical appliance. This IOM describes the safety precautions to be observed during operation to prevent injuries to yourself and others or damage to the device.

- To prevent electric shock, do not dismantle, repair or modify this product in any way. Maintenance and cleaning procedures shall be followed as described in this manual. In the case of unit's malfunction, contact Plasma Air or our local manufacturer's representative.
- Do not use in locations where flammable or explosive materials are stored.
- Do not subject the device to direct sunlight or high temperatures internal temperature rise in serious cases may cause fire and in mild cases may cause deformation of the outer casing. Stop operation when ambient temperature exceeds 110°F.
- Do not allow foreign objects into the device. High voltage components inside the device may cause electric shock. Children should not be allowed to touch or play near the device.
- To prevent fire or electric shock hazard, do not place the unit in wet places or where water may enter the unit.
- Do not use fabrics or other materials to cover this device. Obstructed air inlets and outlets will result in abnormal operation and may lead to fire or other accidents.
- To prevent electro-magnetic interference the device should be placed at least 3 feet away from computer, television or radio.
- For safety reasons and to prevent fire or electric shock, disconnect the power under the following conditions:
 1. When you are not going to use the device for an extended period of time.
 2. When cleaning or servicing the device.
 3. When you move the device.

TROUBLESHOOTING

- If the unit does not power on when you press the On/Off button on the remote control, check to make sure the batteries in the remote control are new and the door switch inside the filter panel is operable. If the unit still does not power on, check that the power cord is inserted fully into the outlet if these actions do not power the unit on, please contact Plasma Air or our local representative for further help.
- If the LEDs on the front panel illuminate, but the unit appears to not be functioning properly, turn the unit off, then depress the On/Off button for 5 seconds. This should reset the unit. If this does not solve the problem, contact Plasma Air or our local representative for further help.