FIVE YEAR LIMITED WARRANTY

Green Air Products guarantees that this equipment will perform as implied for the purpose it is intended. Green Air Products warrants the original equipment against defects in material and workmanship for a period of 5 years for Architectural and 7 years for Commercial use. The definitive warranty period is dependent on the specific description of the product and the date of purchase. If the equipment is designed for Architectural use, the warranty period is 5 years from the date of installation. If the equipment is designed for Commercial use, the warranty period is 7 years from the date of installation.

For all warranty claims, the equipment must be returned to the factory or an authorized repair facility. The cost of transportation and handling will be borne by the customer. Any repair or replacement parts will be provided by Green Air Products. The warranty does not cover damage caused by misuse, abuse, or negligence.

Green Air Products also warrants the CO2 generator and CO2 Grow Light System for a period of 2 years from the date of purchase. The warranty does not cover damage caused by misuse, abuse, or negligence.

The warranty is void if the equipment is modified or altered in any way.

Installation and Operation Manual

Electra-Air 2010
Air Cooled Thermal Sink
Carbon Dioxide Generator
Generator Installation

Use chain, eyebolts and ceiling hooks found in hardware pack. Hang the generator from a sturdy overhead location at least 18 inches from ceiling. The unit must operate in level upright position. CAUTION! Should unit become in operation during fire may result.

Propane Connection

1. For propane applications use a propane tank that has been filled to only 80% of its capacity. This is very important. An overfilled tank can release fuel from the pressure release valve when placed in a warm room. It is recommended to keep the tank outside the growing enclosure. Failure to observe this common rule could be hazardous and may make your generator hard to ignite.

2. Carefully thread the regulator flange nut in the tank valve counter-clockwise with your fingers until you feel the flange seat. Tighten firmly with adjustable wrench. DO NOT USE PLIERS! Fasten hose between regulator and generator gas inlet in same fashion.

3. Turn the propane tank valve half open in the “ON” position.

4. Check for gas leaks. A solution of 25% hand dish soap and 75% water in a spray bottle will work well for detecting gas leaks. Apply solution to all previously connected fittings. Bubbles will occur around loose connections. Always use two wrenches when tightening multiple fittings.

Control Diagrams

This example shows the simplest method of CO2 generator control. Set the Cyclostat-4P for short intervals according to the minutes determined in the size and timing chart. We cannot choose for you how often to cycle the generator because that depends on your enclosure and ventilation conditions. Once every hour is a very general schedule. Cyclostat will limit operation during light hours only.

For an exhaust synchronized CO2 system see the diagram below.

The Ultimate CO2 Control System

This system is the ultimate in precise automated CO2 control. The SPC-1 CO2 Set Point Controller continuously determines atmospheric CO2 values. The controller interprets these values and provides flexible set point adjustments to sequence CO2 equipment functions. The SPC-1 has a built-in photo sensor to disable CO2 production during darkness. The CT-DH-3 temperature and humidity controller detects CO2 production during exhaust functions. The CO2 generator (or emitter system) and the monitor are plugged into the CT-DH-3 as shown. The power to the generator will be interrupted whenever the temperature or humidity conditions constitute an exhaust function. CO2 production will resume immediately after exhaust cycle is completed. CO2 levels will be maintained precisely and automatically.

Also see our website for information on the CDSC-6 Carbon Dioxide Monitor Controller for highly specialized enrichment control.

Igniting Burners

1. Plug the transformer into a 110 volt outlet, timer, CO2 controller, or other power source. Make certain power is on.

2. Turn gas supply on. Push the red on-off switch to the “ON” position. The igniter will begin to spark. It may take a moment to clear the air from the hose. Fuel will pass through the solenoid valve and the burners will ignited.

3. The spark igniter will automatically cycle three attempts to light the burners. If a flame is not present it will cease to spark. Check for fuel, wait 60 seconds for excess fuel to clear from housing and reset on-off switch to cycle igniter electrode again. You will see a rapid visible spark between the igniter electrodes or to the burner tube itself.

TROUBLE SHOOTING TIPS

BURNER FAILS TO IGNITE:
Make sure propane tank has fuel and valve is open. For natural gas generators make sure gas supply to “ON” and shut off valve is open. Make sure propane tank has not been overfilled. If so, take tank outdoors and open valve to release gas for a few seconds and reconnect. Be sure all taxpayers have been cleaned from the hose and gas is present. Check that transformer is plugged into a working power source. Make sure power indicator switch is in “ON” position. Check to see that wire is not disconnected with igniter probe. It may be necessary to adjust location of the igniter to the burner. The spark probe should be 1/8 inch above the burner and approximately 1/4 inch in front of the slat of the burner slot.

BURNER WON'T STAY LIT:
Check that gas supply valve is open enough to support a strong minimum flame. Check timer and power source operation.

FLAME BURNS IRREGULAR:
Dirt or residue could clog burner orifices. Low fuel pressure due to depleted or contaminated fuel supply. Lack of oxygen content in room due to inadequate air supply. Generator not reading potassium. The flame should be a strong blue color about 1/2 inch high. Tip of burner is brown. Yellow cracks indicate improper burner. Contact Green Air Products service department for solutions.

AUTOMATIC PROpane CHANGE-OVER VALVE - L-PDV (optional accessory)

This handy valve will keep you from running out of fuel and interrupting CO2 enrichment. When fuel is depleted in main tank the valve switches to the alternate tank and indicator shows red. Disconnect spent tank and refill at your convenience.