ELE
C
AND
SUSPEND
Use chain 18 inches during operation.
IGNITING BURNER

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.

FUEL HOOK-UP
Propane model

1. For propane applications use a propane tank that has been filled to only 80% of it’s 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 make your generator hard to ignite.

2. Carefully thread the regulator flange nut in the tank valve counterclockwise with your fingers until you feel the flange seat. Tighten firmly with adjustable end 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.

Replacement regulators are available at most hardware and home improvement stores. The model used is a standard barbecue type fixture. The rubber hose is a typical fuel line available at welding suppliers.

Natural gas model

1. Turn gas supply off before you begin work. Now connect a gas shut off valve (not included) onto your incoming gas supply line. If needed reduce to 1/2 male nipple to accept enclosed regulator. Note gas flow direction indicator arrow. Use gas compatible pipe compound on all pipe thread fittings and tighten securely. IMPORTANT - Do not use thread tape

2. Connect regulator to shut off valve nipple with compound and tighten.

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

Replacement NG regulator and hose: GAP natural gas CO2 generators use a standard small appliance
type NG regulator such as might be used with a residential stove or water heater. It can be obtained at most hardware or home improvement stores. Original equipment comes with a Harper-Wyman second stage small appliance regulator. It is 1/2 P.S.I.G. (with inlet pressure standard relief spring setting is 7.0" W.C). The outlet uses a 1/4 inch male pipe thread to 1/4 male hose fitting to facilitate a flexible hose connection between the regulator and the generator. The regulator inlet uses a standard 1/2 pipe fitting to connect to the NG supply line. The fuel hose is a typical flammable gas type welding hose such as might be used with an acetylene welding torch. These parts are available at a welding supply store.

AIR COOLED SET-UP

Using the exclusive air cooling feature of this generator offers some significant advantages. Foremost it removes unwanted heat before it becomes an atmospheric concern. Secondly it allows you to use this heat in an adjacent area where additional heat is desirable.

Outside air is drawn in with an in-line duct fan and ducted through the Electra_Air CO2 Generator to be removed. The Heat Collection Tube (optional) is installed above the burner flames and absorbs the heat and transfers it via internal exchanger fins to the air passing through the heat tube. Then this air is ducted out of the enclosure.