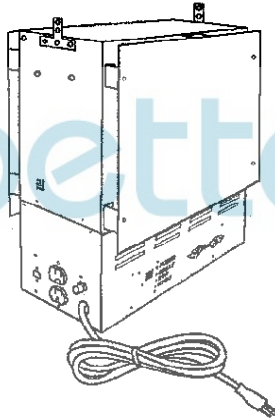


This user guide covers the installation and operating instructions of the four following **Smart CO2 Generators** :

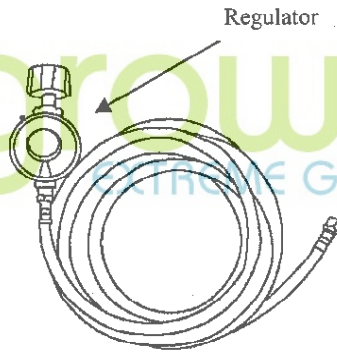
iGS-LP4, 12000 BTU Propane
 iGS-LP8, 24000 BTU Propane
 iGS-NAT4, 12000 BTU Natural Gas
 iGS-NAT8, 24000 BTU Natural Gas

The following parts are included in the box :

The CO2 Generator
 (Gas Burner) itself :

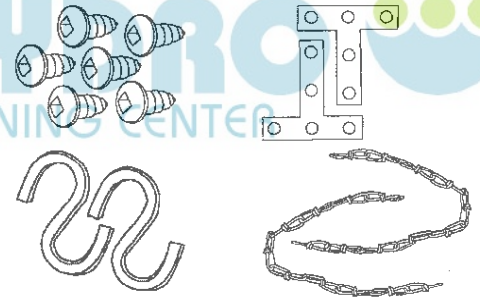


One 15-ft hose with pressure regulator (for propane models, as shown) OR without regulator (for natural gas models) :

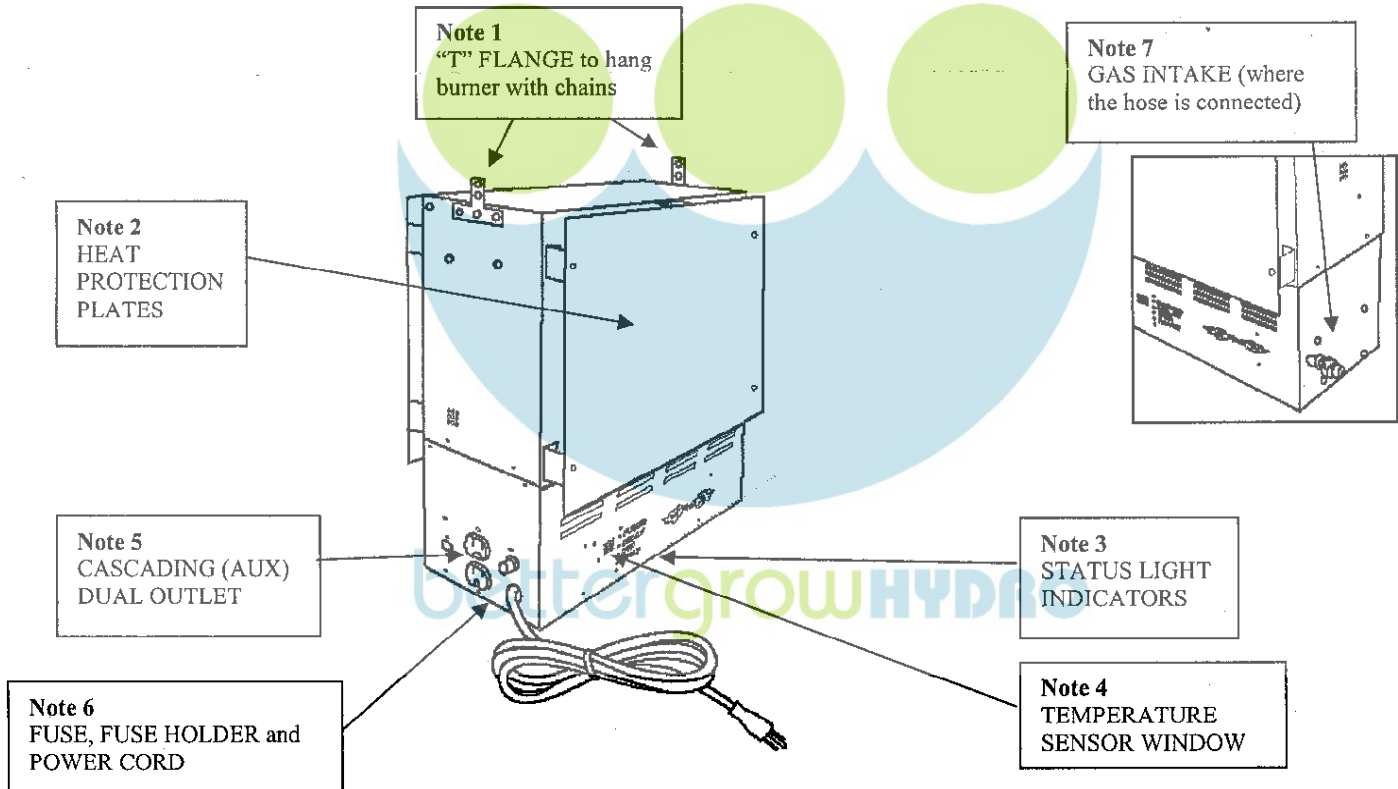


The hardware accessories :

6 x metal screws
 2 x "T" Flanges
 2 x "S" Hooks
 2 x 2-ft chain sections



Burner Description : see Notes on reverse for further details.



Quick Start in four easy steps :

- 1- Connect the hose to the gas intake with a 3/4 inch key. See note 7 on reverse to get safe and leakage free connection.
- 2- Connect the other end of the hose into your propane gas tank or into your home natural gas line. **Open the gas valve.**
- 3- You need to bleed the 15-ft hose off by connecting the unit 4 to 6 times into any power outlet for about 30 sec each time, until the burner lights. It may be required to bleed off the line again if the burner is not used for a long period of time.
- 4- You are now ready to connect the power cord into any CO2 controllers such as **iGS-061** (single output), **iGS-100** (dual output), **iGS-220** (dual output, Temp and RH sensors also), or cycle timers such as the **iGS-010** (single output).

- Note 1 : The four rubber feet at the base of your CO2 generator avoid scratching the floor and damaging the painting of the enclosure when moving the unit around the grow room. For those willing to raise their generator at a more appropriate level, we provide "T" flanges that must be fastened at the top of the enclosure using the six included metal screws (use a square socket screwdriver – red size). The two "S" hooks and two 2-ft chain sections allow you to hang the generator from the ceiling at a safe distance.
- Note 2 : The heat plates may avoid serious burning when touching the generator accidentally while active. At any time, it is not recommended to touch these plates, especially near the top where the hot air is exhausted due to the natural convection from the (cold) bottom to the (hot) top.
- Note 3 : The CO2 generator comprises four light indicators displaying the Operating Status of the unit.
- **POWER** light, green : ON when 120Vac power is supplied to the generator, from a power outlet or CO2 controller. OFF when power is removed or alarm condition is met. See **FAULT** light below.
 - **DELAY** light, red : ON when the electronic pilot is waiting during its ignition smart sequence. OFF when the pilot is trying to ignite the burner or when burner is already ignited.
 - **RUN** light, orange : ON when the main valve is opened and the burner is ignited and generates CO2.
 - **FAULT** light, red : ON only when an over temperature condition is reached (70°C). During a fault condition, the burner is deactivated until the high temperature condition is removed (65°C or less).
- Note 4 : The temperature sensor is located on the electronic board behind the 9-hole grid. See **FAULT** light condition above.
- Note 5 : This auxiliary power outlet allows additional burners to be activated by the same CO2 controller. Power is present on the dual outlet when the power is supplied to the power cord, that is, when the **POWER** light indicator is ON. We recommend not cascading more than 5 burners in a row, to avoid overload at the controller output where the first burner of the series is connected.
- Note 6 : We recommend using a **1A fuse - slow blow** type. The fuse is provided to cut power from the internal electronic controller and valve when an overload or malfunctioning condition is met. The auxiliary dual outlet **IS NOT** internally protected against overload conditions.
- Note 7 : The 15-ft hose must be connected here. Use a 3/4 inch key in order to tighten the female flare connector adequately. Safe gas connection can be checked by applying a soap water around the connector : if bubbles appear, you will need to tighten the hose connector a bit more until the gas leakage is fixed.

Typical connection diagrams :