



TURBO GROW®

Instructions

With Tips & Recommendations



www.SupernaturalBrand.com

SAFETY PRECAUTIONS

When using electrical appliances, especially when children are present, basic safety precautions should always be followed, including the following: **READ ALL INSTRUCTIONS BEFORE USING. KEEP AWAY FROM WATER. DANGER:** As with most electrical appliances, electrical parts are electrically live even when the switch is off. To reduce the risk of electric shock:

- Do not reach for an appliance that has fallen into water. Unplug it immediately.
- Do not use in wet locations.
- Do not place or drop into water or other liquid.
- Do not place or store this appliance where it can be pulled into a tray, reservoir, or sink.
- Always unplug this appliance from the electrical outlet when not in use.
- This appliance is for household use only.
- Close supervision is necessary when this appliance is used by, on, or near children or persons with special needs.
- Use this appliance only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
- Keep the cord away from heated surfaces.
- Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or if it has been dropped into water.
- Never drop or insert any object into any of the appliance's openings.
- Do not use outdoors or operate where flammable (spray) products are being used, or where oxygen is being administered.
- Always store this appliance and cord in a moisture-free area.
- Do not plug or unplug this appliance when your hands are wet.
- Do not use in countries with 220/240 volt electrical systems; use only with 110/120 volt electrical systems.
- Connect this appliance to a properly grounded outlet only.
- A GFCI is always recommended. GFCIs are generally installed where electrical circuits may accidentally come into contact with water. They are most often found in kitchens, bath and laundry rooms, grow rooms, out-of-doors or in the garage where electric power tools might be used.

ALCI Safety Device: This blower is provided with an appliance leakage circuit interrupter (ALCI) safety device built into the plug. This device is designed to make the unit inoperable under some abnormal conditions, such as accidental immersion in water. The ALCI safety device is equipped with a test button so that its operation can be checked.

This unit should be tested before each use to confirm that the safety device is operational. To test: After plugging in.

1. Press the reset button on the ALCI device.
2. Press the test button. The reset button will pop out. This verifies that the safety device is operating properly.
3. Press the reset button to reactivate your ALCI safety device.
4. Your blower is now ready for use.
Note: This unit may automatically trip when unplugged. If so, the unit must be reset after it is plugged in.
5. Should the ALCI safety device trip (i.e., reset button pops out) during use, press the reset button. Never operate this appliance if it has been dropped in water.
6. The blower is designed to work on ordinary household current only, 125 volts A.C., 60 Hz. It is not intended for commercial use.
7. This appliance has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not attempt to defeat this safety feature.
8. Always remove the blower motor from the manifold/injector before attaching or disconnecting the manifold/injector from the Turbo Grow. Never fill the manifold/injector with liquid or turn the manifold/injector upside down with the blower motor attached as liquid from the Turbo Grow may enter the blower motor.

PARTS LIST

1. Manifold/Injector.
2. Shuttle Valve.
3. 5 x ¾ inch Rubber Grommets (one spare).
4. Drain Hose and Valve.
5. Blower Adapter Fitting.
6. Nutrient Cap.
7. 1 x 1-inch Rubber Grommet.
8. ¾ inch 90° Angled Barbed Fitting.
9. Safety Cord.
10. ¾ inch Straight Barbed Fitting.
11. Filter/Diffuser.
12. 1 Measuring Scoop (30 mL for 38 L Turbo Grow) & (60 mL for 165 L Turbo Grow)
13. Blower with ALCI.
14. Super Boost, Gro Terra, Bloom Terra.
 - a. Super Boost 11-49-9, for rooting and transplanting, 14.1 OZ (400 g)
 - b. Gro Terra 20-20-20, for the vegetative growth stage, 14.1 OZ (400 g)
 - c. Bloom Terra 15-31-14, for the flowering stage, 14.1 OZ (400 g)



1. Air Escape Ports.
2. Nutrient Cap.
3. Safety Cord.
4. Diffuser/Filter.
5. Tray.
6. Aqueduct.
7. Manifold/Blower Adapter.
8. Air Blower.
9. 1:100 Injector Reservoir
10. 120v ALCI Protected Plug.
11. 90° Barbed Fitting.
12. Drain Valve.
13. Flex Drain Hose.
14. ¾ inch Top Hat Rubber Grommet.
15. Manifold/Injector.
16. Shuttle Valve.
17. Main Reservoir
18. Communication Apertures.



SIMPLE SET UP

- 1 Place system on a smooth, level surface that can support the distributed weight of Turbo Grow.
 - 38 L Turbo Grow - 70 kg
 - 160 L Turbo Grow - 325 kg



- 2 Insert a ¾ inch rubber grommet into the pre-drilled ⅝ inch hole on the tray surface, (a bit of dish soap helps). Push and twist in the smaller end of the shuttle valve ½ inch into the grommet. Face the holes at top of the shuttle valve toward center of tray.



- 3 Insert the manifold/injector into the Turbo Grow as shown by placing a ¾ inch rubber grommet into the tray's drain hole. Next place a ¾ inch rubber grommet into the ⅝ inch manifold/injector hole (located at the bottom on the opposite side of the blower). A bit of dish soap applied to both rubber grommets helps insertion. Press the ¾ inch straight barbed fitting into the manifold/injector. Hook the manifold/injector over the top edge of the tray, then press the manifold/injector into the system's drain hole grommet. Press until both sides go in all the way.



EASY OPERATION

- 4 Insert the 1 inch rubber grommet into the 1½ inch hole located near the top of the manifold/injector. Insert the blower adapter, then secure blower as shown with the supplied safety cord.



- 5 Insert the drain hose with shutoff valve into the manifold/injector reservoir by connecting with a ¾ inch rubber grommet and a 90° angled barbed fitting.



- 6 Insert filter/diffuser into the middle of the aqueduct as shown.



- 7 If using an appliance timer turn the blower unit's switch to the on position, and then plug the blower's ALCI plug into a timer.



1. **Fill pots** ¾ full with growth medium (both sold separately).
2. **Rinse soil** before planting, and weekly, by gently adding water from the top. Do this by filling each Perfect Pot with water and letting it drain through the pot to waste. Rinse each pot twice. Tip: Lift the pots to feel their weight right after rinsing and letting drain. When feeding, use a one-minute cycle at required intervals to maintain approximately ¾ of this fully saturated weight throughout the growth cycle.
3. **Plant** seeds, seedlings, cuttings or transplants. Top feed gently by hand after planting with ¼ tsp Super Boost/gallon of water. Continue to top feed until plants are well rooted, (about 3-5 days). Tip: Always feed plants according to the weight of the pot. Be careful not to overwater plants, especially during early root development.
4. **Fill Turbo Grow.**
 - a. Fill Turbo Grow by closing the drain valve and filling the reservoir by adding water into Turbo Grow's aqueduct.
 - b. Fill until water level settles approximately ½ inch below the tray surface.
5. **Follow the feeding guide below.**
 - a. Following the feeding guide below, use the supplied measuring scoop to add plant food into a minimum of 300 mL of hot water for 38 L Turbo Grow and 600 mL for 160 L Turbo Grow, shake until dissolved. When dissolved, remove fertilizer cap from Turbo Grow and add the mixture into the top of the manifold/injector, then securely replace the fertilizer cap.
 - b. Place planted pots in Turbo Grow.
6. **Feed plants.** The next day, switch on the blower motor manually or set an appliance timer to come on for 1-2, one-minute cycles per day when using high-performance Supernatural Brand soils. Other soils and soil less mixes may have longer times between feedings such as 1-2, one-minute flood cycles every 2-3 days. When using a timer be sure that the switch on the air blower is set to the, "ON" position. Tip: For maximum plant growth, maintain the pot's moisture level so that the pot's weight is approximately equal to ¾ of its fully saturated weight. Add or subtract the number of one-minute flood cycles to achieve this optimum moisture content 24/7.
7. **System Maintenance.** Once per week, drain nutrient reservoir, flush plants with water as in (Step 2). Replenish nutrient solution as in Step 4 (a and b) and Step 5 (a). Tip: If the nutrient solution runs too low to flood the plants before the next scheduled nutrient change, top up the Turbo Grow by adding water into the aqueduct.

FEEDING GUIDE

38 L Turbo Grow Plant Food Guide (Scoop = 30 mL)

Rooting Growth Stage – Super Boost:

Transplanting: Mix ¼ tsp into one gallon of water. Top feed gently for 3-5 days until rooted.

Vegetative Growth Stage - Gro Terra:

Small Plants: rooted cuttings, seedlings. Add 2 scoops, (60 mL) into 300 mL of hot water, (shake until dissolved) then add to Turbo Grow.

Medium Plants: Add 3 scoops, (90 mL) into 300 mL of hot water, (shake until dissolved) then add to Turbo Grow.

Large Plants: Add 3½ scoops, (105 mL) into 300 mL of hot water, (shake until dissolved) then add to Turbo Grow.

Flowering Growth Stage - Bloom Terra:

Add 3 scoops (90 mL) into 300 mL of hot water, (shake until dissolved) then add to Turbo Grow.

160 L Turbo Grow Plant Food Guide (Scoop = 60 mL)

Rooting Growth Stage – Super Boost:

Transplanting: Mix ¼ tsp into one gallon of water. Top feed gently for 3-5 days until rooted.

Vegetative Growth Stage - Gro Terra:

Small Plants: rooted cuttings, seedlings. Add 2 scoops, (120 mL) into 600 mL of hot water, (shake until dissolved) then add to Turbo Grow. Repeat once.

Medium Plants: Add 3 scoops, (180 mL) into 600 mL of hot water, (shake until dissolved) then add to Turbo Grow. Repeat once.

Large Plants: Add 3½ scoops, (210 mL) into 600 mL of hot water, (shake until dissolved) then add to Turbo Grow. Repeat once.

Flowering Growth Stage - Bloom Terra:

Add 3 scoops (180 mL) into 600 mL of hot water, (shake until dissolved) then add to Turbo Grow. Repeat once.

Turbo Grow Tips

Watering: Turbo Grow's unique design and technique completely eliminate the most common problem in horticulture, over and under watering. Before planting, rinse the medium twice through the top. Doing so lowers the natural concentration of dissolved solids and sets up the medium's granular gradation to promote superior root structure leading to optimal oxygen, water, and nutrient absorption.

Young Plants: Do not oversaturate plants. Feed gently from the top until plants are well rooted, (3-5 days) then begin bottom feeding. Always keep the weight of the plant pots on the medium side.

Established Plants: A good starting guide is to feed using 1-2, one-minute cycles every 24 hours. This rate will vary depending on atmospheric conditions, plant and pot size, and growth rate. Always keep the air moving. Regularly check the pot's weight. When they start to feel light, give the plants a feeding. Between scheduled nutrient replenishments, it may be necessary to top up the nutrient reservoir. Simply add water into the tray.

Flowering Stage: Keep the atmospheric humidity low to promote heavy glandular production and to ward off mildew.

To facilitate drainage, the tray can be propped up a couple of inches by placing an object underneath the tray at the end opposite to the drain.

Periodically, the tray surface and the aqueduct can be wiped down with a microfiber cloth. The cloth will act like a magnet to pick up any debris. Rinse any debris off the cloth, by spraying each side with water under high pressure.