

NATIONAL GARDENING ASSOCIATION'S

GrowLab[®]

Economy 2-Tier Indoor Garden

#10-1113



National Gardening Association

***Gardening With Kids* Catalog**

1100 Dorset Street, South Burlington, Vermont 05403

Phone: 800-538-7476 • Fax: 802-864-6889

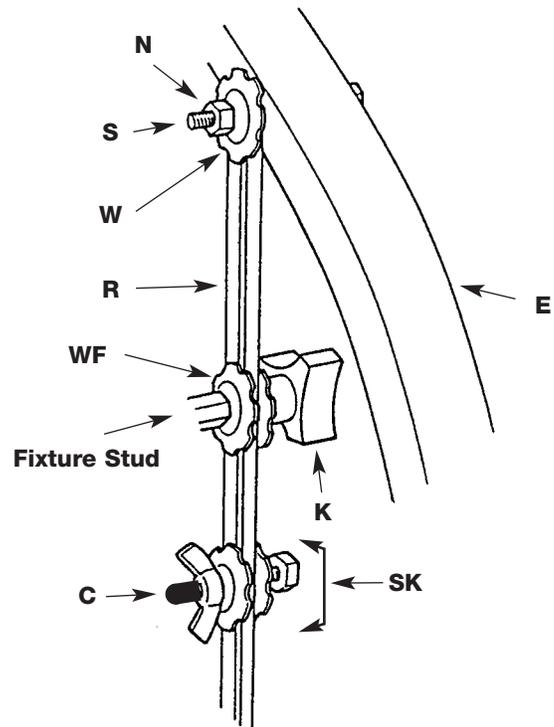
Web: www.kidsgardening.org • E-mail: sales@kidsgardening.com

Congratulations on your purchase of a new GrowLab® Indoor Light Garden! This unit is easily assembled by two people using a flat-head screwdriver and an adjustable wrench. Before discarding any packing materials, be sure to check for stray parts or pieces.

Parts List

Code	Description	Quantity
Frame & Accessories		
SE	Short End Support	4
E	U-shaped End Frame	2
L	Long Shelf Support	4
T	Top Support	1
CW	Caster Wheel	4
I	Wheel Insert	4
R	Slide Rod	4
P	Plant Tray	8
MG	Moisture Grid	4
GT	Grounded Timer	1
PS	Power Strip	1
CT	Climate Control Tent (not shown)	1
10-4009	<i>GrowLab®: A Complete Guide to Gardening in the Classroom</i> book	1
Hardware		
C	Screw Cover	16
N	Nut	12
S	Machine Screw	30
W	Domed Washer	12
Light Fixture		
F	Fixture with Fluorescent Tubes	2
WF	Domed Washer (Located on Fixture)	8
K	Knob (Located on Fixture)	4
SK	Stop Kit, Set of 2 (Package with Fixture)	2

Inset: Detail showing slide rod, fixture stud, and stop kit assembly.



Assembly

U-shaped End Frames

- Short End Supports.** Attach a short end support (SE) to the middle and the bottom of each U shaped end frame (E) using machine screws (S). Make sure the holes in the short end supports are all oriented outside to inside — not up and down.
- Slide Rods 1.** Insert machine screws through the two outer sets of holes at the top of each U shaped end frame. Place a slide rod (R) over each screw and secure to the frame by placing a domed washer (W) on each screw with the indented side of the domed washer facing the slide rod. Screw on a nut (N) and tighten. Place a screw cover (C) on the end of each machine screw
- Slide Rods 2.** Place a machine screw through each hole in each short end support and through the middle of each slide rod. Secure each slide rod by placing a domed washer on each machine screw, with indented side facing the slide rod, and twist on a nut (see inset above). Place a screw cover on the end of each machine screw.
- Caster Wheels.** Push wheel inserts (I) firmly into the openings at the bottom of each U shaped end frame. Insert caster wheels (CW) and lock in place.

Frame Assembly

- Power Strip.** Mount the power strip to the outside of one U-shaped end frame. Choose a side that will be located closest to an electrical outlet. Working from the outside to the inside, insert a machine screw through the hole in the top of the power strip

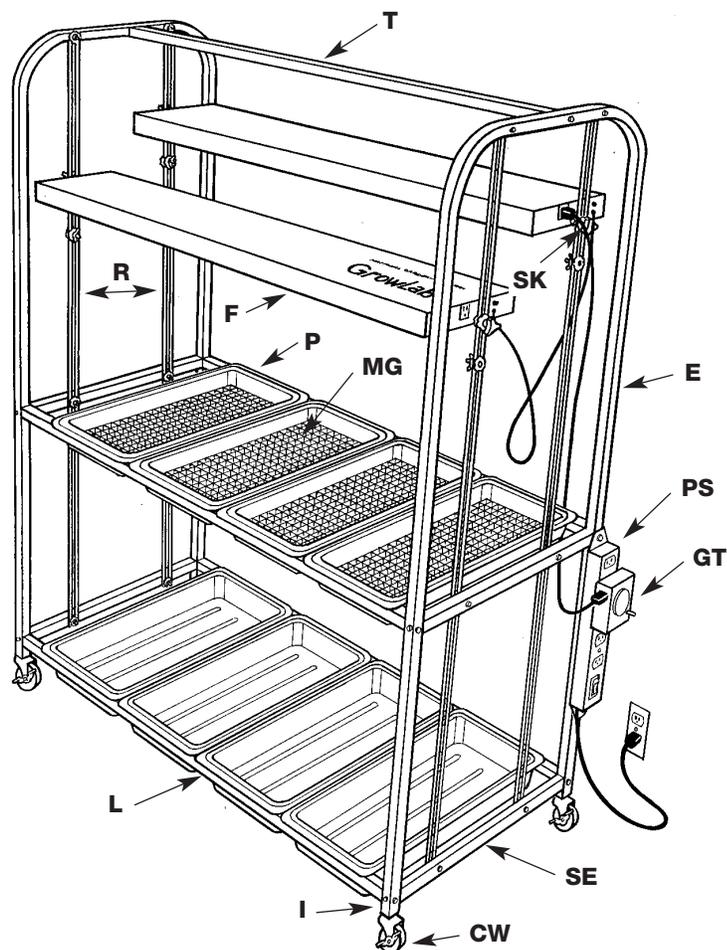
and then through the holes on the U-shaped end frame and a long shelf support (L). Tighten the connection. Insert the plastic locking tab through the two small holes at the bottom of the power strip and secure by cinching tightly around the U-shaped end frame.

2. **Shelf Supports.** Attach the remaining long shelf supports and top support (T) by positioning the U-shaped end frames parallel to each other with the slide rods facing in. Working from the outside to the inside, place machine screws through the remaining holes on each U shaped end frame, and into an end of each long shelf support and top support. Tighten connections with a screwdriver.

Fixture Installation

1. **Tubes.** Install tubes according to instructions supplied with fixtures. Be careful not to bend pins on tubes.
2. **Plant Trays.** Place plant trays (P) on the shelves of the GrowLab® to provide support for installing fixtures. Place a moisture grid inside each plant tray.
3. **Fixtures, Placing.** Remove knob (K) and one domed washer (WF) from each fixture end. Position remaining domed washer on each end so indented side faces slide rod. (See inset, page 2.) Rest the fixture on trays, and slide ends of fixture studs through center of slide rods.
4. **Fixtures, Securing.** Add a domed washer to one fixture stud with the indented side of the domed washer facing the slide rod, then place a knob (K) on the fixture stud. (See inset, page 2.) Tighten knob **FIRMLY**, but do not overtighten. Repeat this step on the other end of the fixture. Repeat process for remaining light fixtures. **HINT:** When installing each fixture, make sure all outlets and switches are on the same side as the power strip.
5. **Fixtures, Adjusting.** Adjust the fixture to desired height and tighten knobs securely. (Important: Adjusting fixtures more than 6" per side at once may damage the fixture.)
6. **Stop Kits.** Attach a stop kit (SK) to the slide rod below each fixture stud. (See inset, page 2.) **HINT:** When placing domed washers on machine screw on either side of slide rod, make sure the indented sides of the domed washers face the slide rod for maximum grip. Tighten securely with a wingnut (packaged with stop kit). Place a screw cover on the end of each machine screw.

GrowLab® Economy 2-Tier Indoor Garden Model #10-1113



Grounded 24-Hour Timer

1. **Timers, Placement.** Plug the timer (GT) into the power strip. Follow instructions on timer for use.
2. **Fixtures, Connecting to Timers.** Take the plug from the front light fixture and plug into the back light fixture. Take the plug from the back light fixture and plug into the timer.
3. **Extension Cord, Use Of.** If the power strip cord is not long enough to reach an outlet, a grounded 3 prong extension cord may be used. Connect all plugs securely. **DO NOT USE AN ELECTRICAL ADAPTOR OF ANY KIND.**

Climate Control Tent

1. Carefully unfold the climate control tent (CT). To prevent tearing, make sure the tent is at room temperature before

pulling it over the top and sides of the GrowLab®. Align the seams on the tent with the U-shaped end frames on the GrowLab®, and position the tent so the open end faces the front of the GrowLab®.

2. In 2-tier GrowLabs®, the climate control tent only covers the upper shelf to prevent water from condensing on the plastic and dripping into the power strip. This creates two climate zones within the GrowLab®. The top shelf can be used for plants that prefer a warm moist environment, while the bottom shelf can be used for plants that prefer a cooler less humid environment.

Maintaining Your GrowLab®

- Place your GrowLab® on a level surface, out of drafts, where light fixtures and timers are protected from jostling. Engage locks on all four casters when the unit is stationary.
- Make sure that screws are tightened firmly and cords are securely plugged in at all times.
- **USE EXTRA CARE** when adjusting light fixtures. We recommend that students adjust light fixtures with teacher supervision. Tighten knobs securely after adjustment to prevent slipping. **NOTE:** Adjusting fixtures more than 6" per side at one time may damage the fixture.
- Each GrowLab® fixture includes two GRO-LUX 40 Watt Wide Spectrum Tubes. Though actual life may vary, the tubes should last for two to three school years.
- When the GrowLab® is empty between growing projects, wash and disinfect all trays and moisture grids with a 10% bleach solution, and wipe down the climate control tent. This will help insure a healthy environment for the next growing project.

Horticultural Tips

- Use professional seed starting mix (not potting or garden soil) for starting seeds and transplanting seedlings. This mix is available from National Gardening Association or garden supply centers.
- Control light duration by using the timers. Most plants thrive with 14 to 16 hours of "daylight" per day.
- When watering your plants, fill each tray no higher than the top of the moisture grid. Plants grown in pots in the GrowLab® may eventually stretch their roots into the water. The moisture grids provide additional humidity within the GrowLab® and allow for more even watering of plants.
- Adjust light fixtures and stops as plants grow, placing stops 2"-4" below each fixture. Keep lights 2"-4" above the plants for best growth. For maximum light exposure, rotate plants within trays as they grow.
- Use the horticultural guide included with your GrowLab®, *GrowLab®: A Complete Guide to Gardening in the Classroom*, for more tips on cultivating a successful indoor garden.

National Gardening Association Resources

Kidsgardening Web Site: www.kidsgardening.org

NGA's Kidsgardening Web site is an interactive hub where teachers, parents, and others who garden with kids find inspiration, advice, and opportunities for exchange. It features an extensive article library of classroom stories and activities; monthly thematic features; youth gardening grants and awards, plant-based curricula, and free e-newsletters; online plant science courses for K-8 educators; a national School Garden Registry; the Gardening with Kids store; and more. Visitors may participate in NGA's Adopt a School Garden™ program or become NGA Supporters, earning discounts at our online stores.

Gardening with Kids Catalog

NGA's catalog offers educational materials that use plants and gardens as living laboratories and engage kids in active learning. Products include indoor and outdoor gardening equipment, GrowLab® accessories and replacement parts, greenhouses, plant-based curricula, horticultural information, thematic resources, and general items sized for young gardeners or designed to solve gardening challenges. View the complete catalog online at www.kidsgardening.org, or request a copy by contacting us at: *Gardening with Kids* Catalog, National Gardening Association, 1100 Dorset Street, South Burlington, VT 05403; phone: 800-538-7476; fax: 802-864-6889; e-mail: sales@kidsgardening.com.