

GARDENERS SUPPLY COMPANY

Standard 2-Tier SunLite® Garden

Our Vermont-made SunLite® Gardens employ the latest in lighting technology to give your plants the ideal quality and intensity of light for optimum growth. You can start plants from seed, grow herbs, houseplants and even orchids.

Our ultra-light fixtures have a slim profile to give plants plenty of headroom. They measure a full 14" wide to ensure even light coverage across each shelf. Inside, there are two T-5 bulbs that produce an abundance of brilliant, full-spectrum light. These bulbs use 45% less energy than standard fluorescent bulbs and provide up to 7,500 hours of use.

Each fixture has its own pull chain for easy height adjustments, plus electronic ballasts to eliminate buzzing. This complete light garden includes frame and fixtures, T-5 bulbs, watertight trays and casters.

With the help of one other person, you can assemble your 2-Tier SunLite® Garden in about an hour. Put the Frame together first, then assemble the Lights and hang them in the frame.

Before you begin, identify and organize all the parts on a flat, clean surface and gather your tools. As you organize the parts, note that most pieces are labeled with a part number. Follow the illustrations closely to be sure the parts are oriented correctly as you put them together. Assembly begins on the next page.

Parts Included

		Qty.
Frame:	S1L Vertical Bars	2
	S1R Vertical Bars	2
	S2 Vertical Bars	2
	S3T Side Bars	2
	S3B Side Bars	2
	A3 Bars	2
	A4 Shelf Bars	4
	Poly Trays	2
Lights:	Light Fixtures	2
	Ballasts	4
	T-5 Light Tubes	4
	6' Electrical Cords	2
	Link Cords	2
	Hardware:	Ball Chains
Chain Connectors		8
Large Split Rings		4
Small Split Rings		4
Chain Grips		4
3/4" Bolts		2
2" Bolts		22
End Plugs		4
Bolt Caps		6
Casters		4
Caster Inserts		4

Tools Required

Phillips screwdriver
Hammer or rubber mallet
Needle-nose pliers
Twist tie, optional

Note: Assembly is easier with two people



Frame Assembly

Step 1. Organize all parts on a flat, clean surface. All frame parts are labeled with a letter and number. See corresponding parts list. Use a hammer or rubber mallet to tap an End Plug into the tops of each S1R (right) and S1L (left) Vertical Bar. **Important note:** The top of the S1R and S1L Bars have bolt holes through 2 sides of the bar. The bottom of the bars have bolt holes in all 4 sides of the bar.

Step 2. Take an S2 Vertical Bar and find the nut insert located inside the end (Figure 1 detail). Using the shorter 3/4" bolt, connect an S3T Bar to the top of the S2 Vertical Bar by screwing the bolt through the S3T bar and into the nut insert (Figure 1 detail). The Bolt will be fully inside the S3T when tightened.

Tip: Make sure the bolt enters the nut insert straight. If the nut insert is off center, use a hammer and a bolt to tap the sides of the nut insert gently until it is level.

Tip: You may need to loosen bolts as you go through the rest of the assembly, so only partially tighten them for now.

Step 3. Using a 2" bolt, attach an S3B Bar to the bottom of the S2 Vertical Bar (Figure 1).

Step 4. Connect an S1L and an S1R Vertical Bar to the ends of the S3B. Insert the bolt through the large hole in the vertical bar first, then the small hole, then the nut, so that your screwdriver is inside the bar when tightening. The head of the bolt will be flush against the inside wall of the S1L and S1R Bars when tightened. Attach the S3T between the S1L and S1R (Figure 1). The first side is complete.

Step 5. Repeat Steps 2 through 4 to assemble the second side frame, then firmly tighten all bolts on both Side Frames, making sure the bars are flush with one another.

Important: Assemble both sides before proceeding.

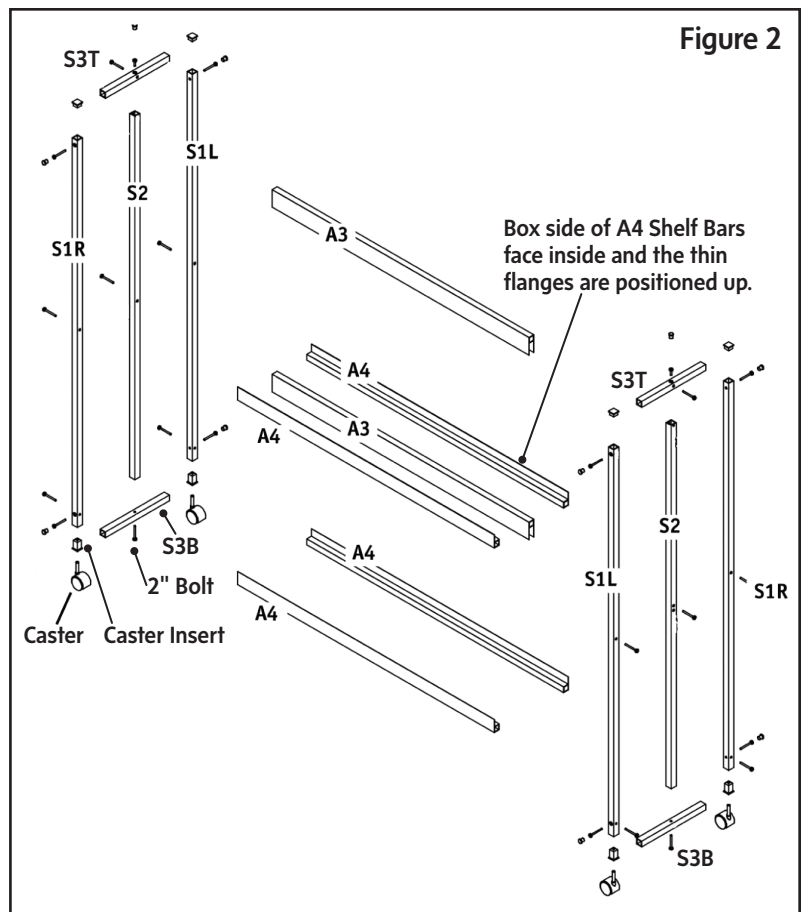
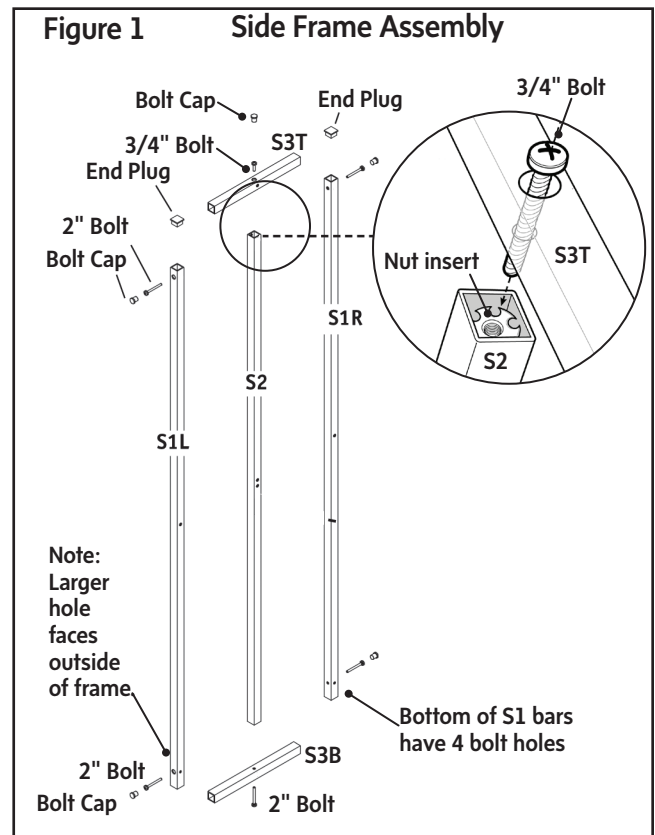
Step 6. Connect the ends of an A3 Bar between the top S3T Bars (Figure 2). The open track of the A3 Bar should face toward the ground. Insert the bolt through the predrilled hole above each Guide Hole, then screw the bolt into the end of the A3 Bar on both ends (Figure 2). Connect the remaining A3 Bar to the S2 Vertical Bars at the lower tier.

Step 7. Connect the A4 Shelf Bars to the S1L and S1R Vertical Bars at each tier (Figure 2). Each A4 Shelf Bar is box-shaped with a thin flange. Make sure the wide flat side of the flange is flush with the outside of the S1 Bars on each side and pointing toward the top of the unit. The box-shaped portion of the Shelf Bars are positioned inside to hold the Poly Trays (Figure 2).

Step 8. You may now tighten all bolts on the frame, holding the bars in place as you tighten. With the frame upright, make sure all outside edges of the bars are flush and secure. Adjust the bars as necessary.

Step 9. Gently lay the entire frame on its side. Place a Caster Insert into the bottom of all four S1 Vertical Bars. Firmly push a Caster into each insert until it clicks into place (Figure 2).

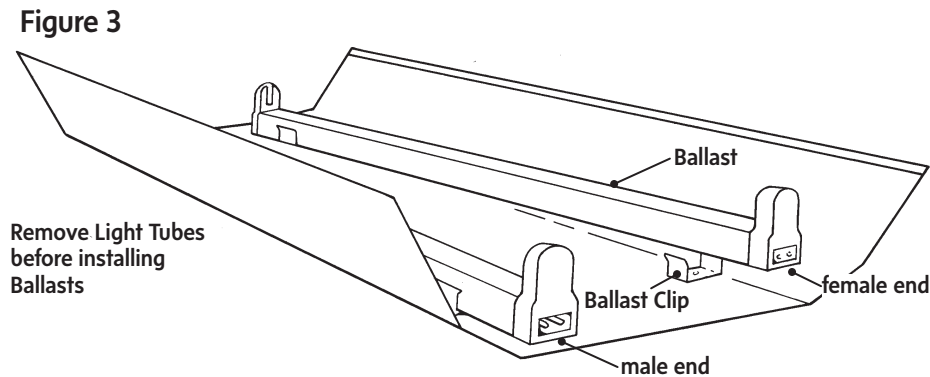
Step 10. Stand the unit upright. Cover all the bolt holes with Bolt Caps. Place Poly Trays on the A4 Shelf Crossbars. The frame assembly is finished.



Light Fixture Assembly

Step 1. Place a Light Fixture Hood upside down on a level surface. This will reveal the Ballast Clips inside (Figure 3). **Important:** Remove the Light Tubes to prevent breakage during assembly (Figure 4). Reinstall them when the light fixture assembly is complete.

Step 2. Locate the Ballasts and note that each end of the Ballast has an open pin (female) and closed pin (male) socket. **Important:** Place the Ballasts into the Hood so that each end of the Light Fixture has a male and female end, exactly as shown in Figure 3. Push a Ballast into each set of Clips, making sure to center the Ballasts in place (Figure 3). Repeat for both Light Fixtures.



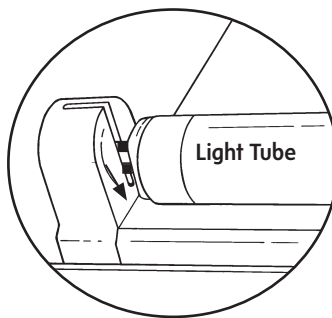
Step 3. Plug the Electrical Cord into the male end of one Ballast.

Step 4. On the opposite end of the Light Fixture, use a Link Cord to connect the two Ballasts. Snap it firmly into place. (The Link Cord is specifically molded to fit only one way on the end of each Ballast. If it does not fit, make sure the Ballasts are positioned with one male and one female socket at each end of the Light fixture.). Repeat Steps 3 through 5 for the other fixture.

Step 5. To install the Light Tubes, slide the pins on the Light Tube into the Ballast sockets, then gently twist the tube 90 degrees until it "locks" into place (Figure 4). Installing the Tubes correctly ensures that they will produce the optimum amount of light. Do not force the Tubes into place. Repeat to install all Light Tubes. Place one Light Fixture on each Poly Tray in the assembled Frame. Turn them over so that the Tubes are facing down and the Power Cords are on the same end of the Frame. Remove the protective plastic film from the black side of the Light Fixture Hoods.

Figure 4

Twist 90 degrees until Tube "locks" into place. Reverse to remove Tube.



Fluorescent Bulb Care and Disposal

To ensure maximum light output, clean the fluorescent tubes monthly with a soft dry cloth.

The light intensity of fluorescent bulbs diminishes over time. When it's time to replace your bulbs, please dispose of them safely at your recycling center.

T-5 Fluorescent Bulbs contain Mercury and must be disposed in accordance with Disposal Laws. See www.lamprecycle.org or call 1-800-427-3363 for disposal information.

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Ball Chain Assembly

Step 1. Attach a Chain Connector to each Large Split Ring (Figure 5). If necessary, use needle-nose pliers to pry and hold open the Split Rings.

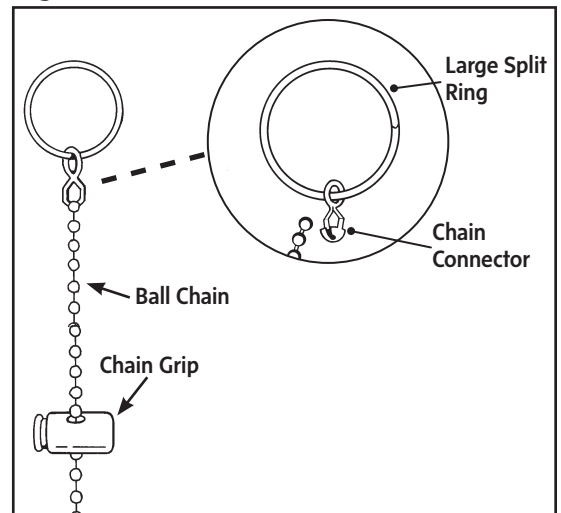
Step 2. Connect one end of each Ball Chain to a Chain Connector on the Large Split Rings. The last ball of each chain will “snap” onto the connector (Figure 5).

Step 3. Take the loose end of one Ball Chain and thread it through the Chain Grip (Figure 5 detail) then through the Guide Hole in the side and near the top of the S2 Bar (Figure 6). Direct the loose end of the chain over the spacer inside the A3 Bar (Figure 6). If this proves difficult, attach a twist-tie to the end of the chain to help lead the chain over the Spacer. Repeat this step to install the Ball Chains on both sides and at each tier of the Frame.

Step 4. Attach a Chain Connector and Small Split Ring to the end of each Ball Chain (Figure 6). Repeat this step for all Light Fixtures.

Step 5. Find the two slots with the “T”-shaped tabs in the top of each Light Fixture. Hook each hanging Small Split Ring around the “T”-shaped tabs (Figure 7). **Tip:** Angle the ring around one side of the T, then the other.

Figure 5



Adjusting the Fixtures

Step 1. Check the Ball Chains to make sure they are correctly positioned and move freely through the Chain Grips when pinched. **Important:** Support the Light Fixture with one hand when pinching the Chain Grips.

Step 2. Adjust the height of the Light Fixture one side at a time by pulling the chain out of the Chain Grip with the least amount of resistance, as shown in Figure 8. **Important:** While supporting the Fixture with one hand, be sure the Chain Grip firmly catches the chain before removing your support.

Fixture Use and Safety

- Use the power cord only with a properly grounded electrical outlet or power strip. If water is spilled near the power source, unplug the unit before you wipe up the water.
- Do not put objects on top of the Frame or on Light Fixture.
- Always turn off the power to the Light Fixtures when inserting, adjusting or removing Light Tubes. If you insert a Light Tube when the power is on, it may trigger an auto safety mechanism, resulting in the light shutting off. If this happens, turn off the Fixture; make sure the Light Tubes are fully seated in the tube sockets; wait for thirty (30) seconds, then turn the Fixture on again. This will reset the Light Fixture so the lights operate normally.
- For best results, attach a timer to your lights to control the length of time the lights are on and to be sure your plants get adequate light.

For articles and tips on seed starting and growing under lights, plus seed-starting systems and supplies, please visit us at www.gardeners.com.

Figure 6

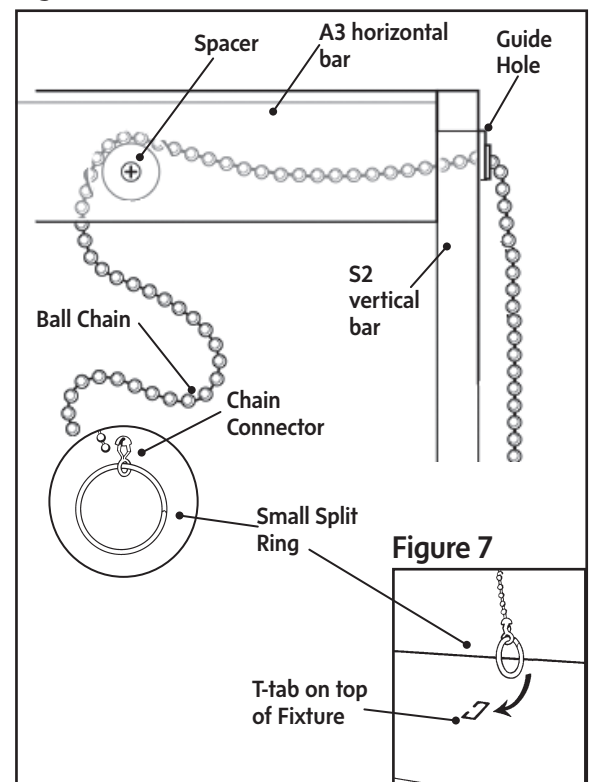


Figure 7

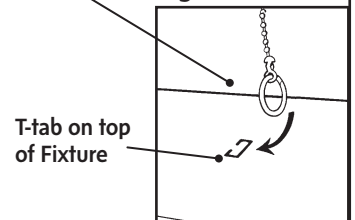


Figure 8

