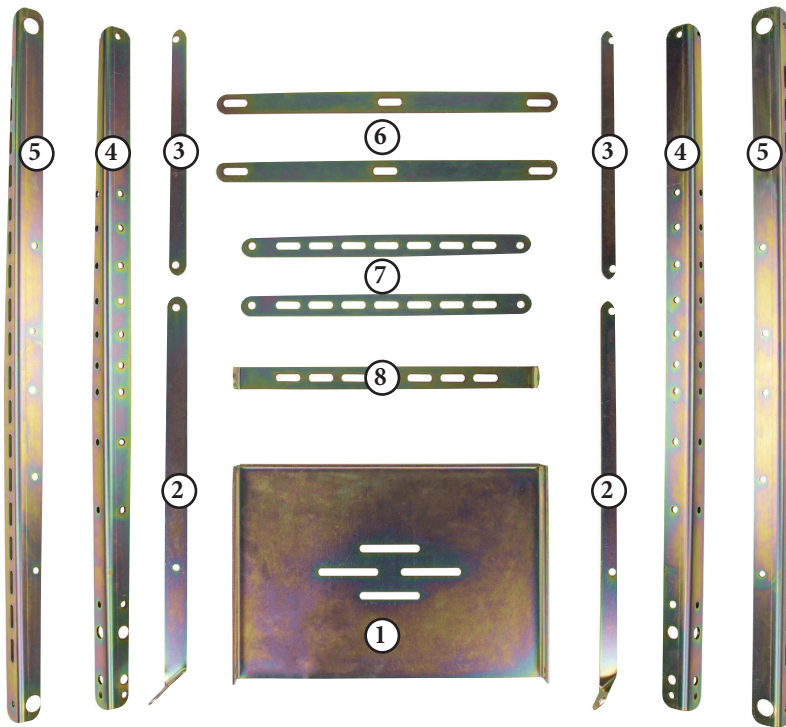


Solar Dolly™



Assembly Manual

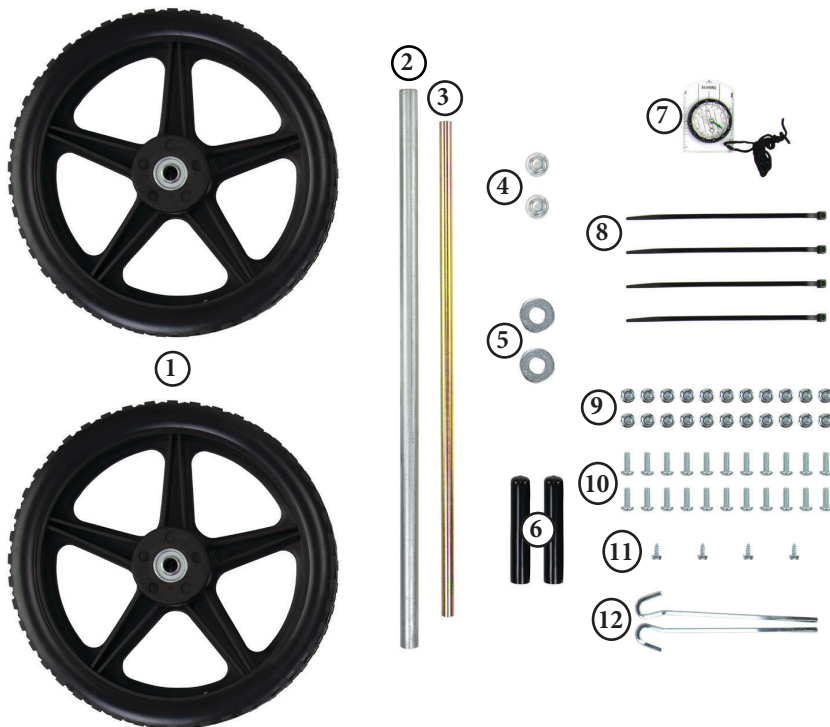
Components and Hardware



1. Battery Box (1)
2. Stabilizer Legs (2)
3. Adjustable Angle Brackets (2)
4. Uprights (2)
5. Panel Brackets (2)
6. Cross Brace (2)
7. Energizer Mounting Brackets (2)
8. Controller Mounting Bracket (1)

Tools needed for assembly:

- 7/16" Wrench
- Large Phillips Screwdriver
- Hammer



1. Wheels (2)
2. Handlebar (1)
3. Axle (1)
4. Axle Caps (2)
5. Wheel Washers (2)
6. Rubber Grips (2)
7. Compass (1)
8. Zip-ties (4)
9. 1/4-20 Nuts (22)
10. 1/4-20 Bolts (22)
11. Screws (4)
12. Stakes (2)



Assembly Instructions

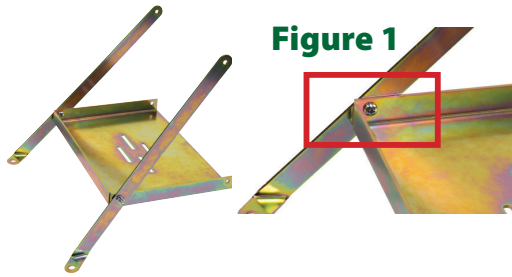


Figure 1

Step 1: Attach left and right stabilizer legs to battery box. Be sure to face the bolts outward as shown in Fig. 1. Note: This is the only attachment where bolts should face outward.



Step 2: Attach left and right uprights to the battery box and the stabilizer legs. The Uprights are placed inside the tray



Step 3: Attach adjustable angle brackets using the holes on the side of the uprights. The holes used to mount these brackets are dependent upon geographic location. See **page 3** for more details.

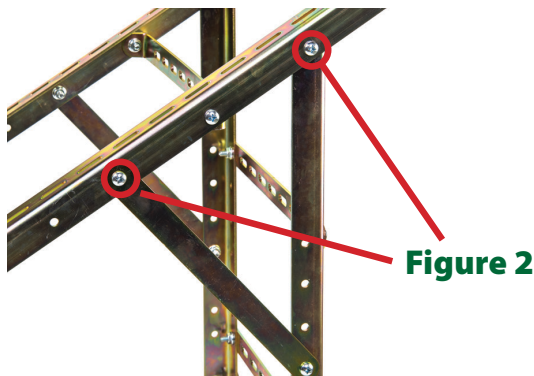
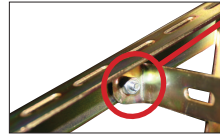


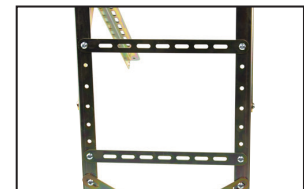
Figure 2

Step 4: Attach the panel brackets. Use the first and third bolt holes to attach the brackets to the uprights and adjustable angle brackets (**Fig. 2**). The middle hole is used for the controller mounting bracket.

Step 5: Attach controller mounting bracket using the middle holes on the panel brackets. The ends should point toward the front of the dolly as shown below.



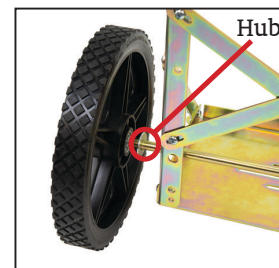
Step 6: Attach energizer mounting brackets via the holes on the backside of the uprights. Note: Spacing of the energizer brackets depends on size of the energizer.



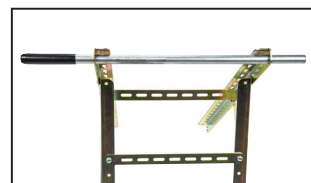
Install stability braces as shown.



Step 7: Install the axle cap on one end, followed by the wheel (hub facing inward as shown below), and then the washer before sliding the axle into the bottom holes in the uprights. On the opposite side, do the reverse: The washer, the wheel, then the axle cap to fasten the wheel.



Step 8: Place the handlebar through the top holes of the panel mounting brackets and slide on the rubber grips. Vaseline can be used for installation.



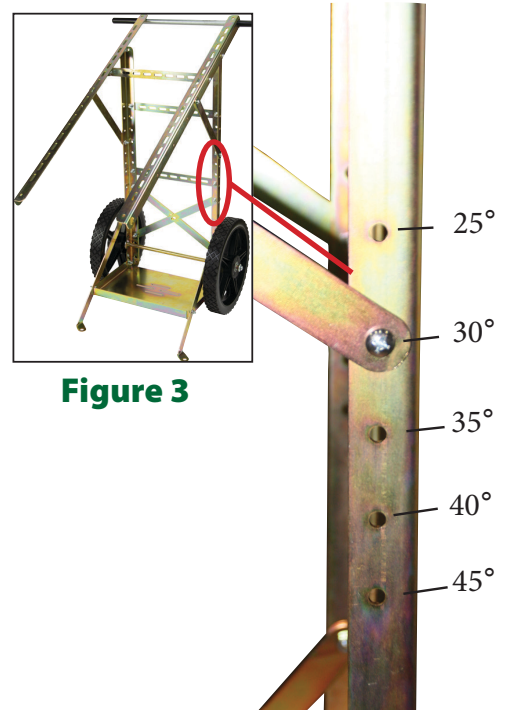
Properly Adjusting the Angle Brackets

To determine proper angle of the adjustable angle brackets in Step 3, you must determine which angle will provide optimal sunlight. This differs according to geographic location and season. An easy way to calculate an optimal year-round angle for your solar panel is the following formula:

Latitude x 0.76 + 3.1 = Optimum panel mounting angle

The photo in Fig. 3 shows the holes in the uprights of the dolly for proper mounting of the angle adjustment brackets in Step 3. (Fig. 3 shows 30° as an example.)

The included compass allows you to maintain proper orientation of your solar panel. Panels should always face true south if you are located in the Northern Hemisphere, or true north if in the Southern Hemisphere.



Outfitting the Solar Dolly™

The Solar Dolly™ is designed for maximum portability, durability and performance and is an excellent choice for portable and rotational grazers.

The solar dolly at right is outfitted with a 30-watt panel, 3 Joule Dual-Purpose Energizer, 5 amp controller and a deep cycle marine battery (recommended). All components sold separately.

The Battery tray is approximately 12½" x 8½"

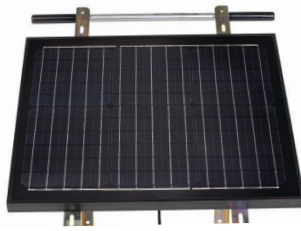


Outfitting the Solar Dolly™

Panel Brackets



Battery Box



Solar Panel



Solar Controller

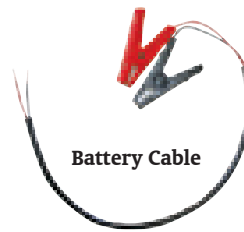
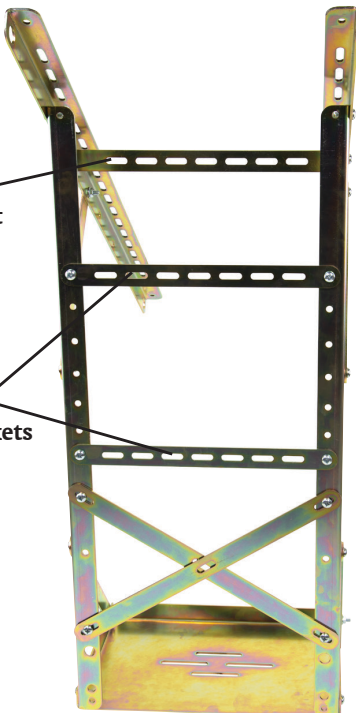


12 v Energizer



Controller Mounting Bracket

Energizer Mounting Brackets



Battery Cable



Deep Cycle Marine Battery

Prior to initial assembly, be sure battery is fully charged.



Step 1: Attach the solar panel

Figure 4a and 4b: To install panel, flip the dolly upside down as shown. Orient the panel lengthwise across the panel mounting brackets. Center the panel and make sure to leave roughly four inches between the panel and the handlebars for adequate handling of the dolly. Attach panel via the underside of the panel using a power drill and the four self-tapping screws included with the dolly.

***Do not use pre drilled holes on panel**

***Use self-tapping screws to attach panel**

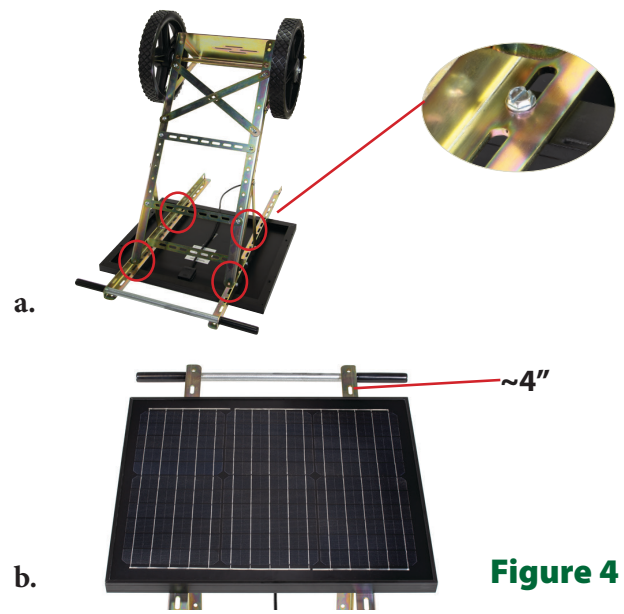
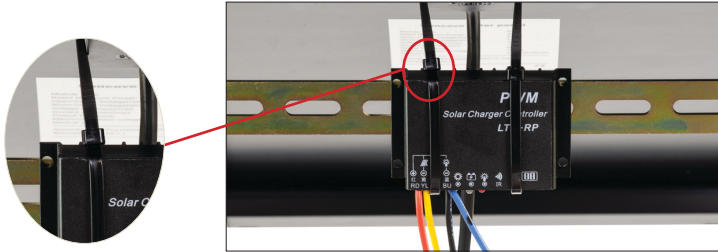


Figure 4

Step 2: Attach the controller

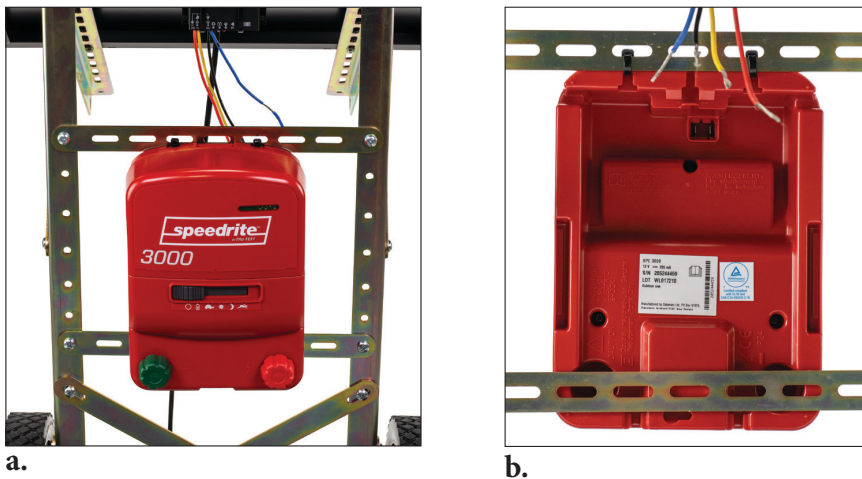


To attach the solar controller, run the supplied zip ties through the holes in the top of the controller and then through the slots on the controller mounting bracket. Secure the zip ties.

Step 3: Attach the energizer

Figures 5a and 5b: Attach energizer to mounting brackets with supplied zip ties.

Figure 5



WARNING: Cancer and reproductive harm. www.P65Warnings.ca.gov