Solar Dolly[™]



Assembly Manual



Components and Hardware



3.

1. Battery Box

- 2. Stabilizer Legs (R,L)
- 3. Uprights (R, L)
- 4. Adjustable Angle Brackets
- 5. Panel Brackets (R,L)
- 6. Controller Mounting Bracket
- 7. Energizer Mounting Brackets

Tools needed for assembly:

- 11 mm wrench
- Large Phillips screwdriver
- Needle nose pliers for
- bending wheel cotter pins
- 1. Handlebar
- 2. Axle
- 3. Semi-Pneumatic Wheels
- 4. Rubber Grips
- 5. Wheel Washers
- 6. 11 mm Bolts- 18
- 7. 11 mm Nuts-18
- 8. Axle Caps
- 9. Compass





(1.

4.

(2.)

Assembly Instructions



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.



<u>Step 2</u>: Attach left and right uprights to the battery box and the stabilizer legs.



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



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 front of 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.

Step 7: Insert the axle into the bottom holes on the uprights. Attach each wheel by sliding onto the axle with the hub facing inward as shown. On the outer side, insert a washer and place cap on the end of the axle to fasten the wheel.





<u>Step 8</u>: Place the handlebar through the top holes in the panel mounting brackets and slide on the rubber grips.





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°, which is the optimal angle for Kencove's Blairsville, PA headquarters.

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 Kencove Solar Dolly[™] is designed for maximum portability, durability and performance and is an excellent choice for portable and rotational grazers. Kencove can outfit your solar dolly with the very best solar panels, energizers and voltage controllers. For more information on components and solar powered fencing, call **1-800-KENCOVE.**

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



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How to Outfit the Solar Dolly[™]



Figure 1a and 1b: 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



Step 2: Attach the controller



To attach the solar controller, run the supplied black 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 2a and 2b: Attach energizer to mounting brackets with supplied white zip ties.





a.

<u>Fig. 2</u>

Step 4: Connect the components

a. <u>Fig. 4</u>



Figures 3a and 3b: If using a Stafix Dual Purpose Energizer, remove of alligator clips (mark positive and negative wires prior to removal). Strip insulation from wire ends.







<u>Fig. 3</u>

Remove

Figures 4a, 4b and 4c: Connect the controller to the battery with the battery cable. Use a small straight screwdriver to loosen the middle pair of screws on the front of the controller so the bare ends of the battery cable can be inserted into the bottom of the controller (**Be sure the battery is already charged**). Be sure the positive/negative wires correspond with the correct slots on the controller. After securing the wires, attach the jumper ends of the cable to the battery terminals. The "Bat" light and the red light in the corner of the controller will show when the connection is made.

Figures 5a and 5b: Connect the solar panel cable to the controller. Install the bare wires in the corresponding slots on the left side of the controller. Once the cable is installed, the "Sun" light will show.

Figures 6a and 6b: Connect the wires from the energizer to the controller by inserting them in the slots on the right side of the controller. After connecting the wires, turn the energizer on to ensure correct connections. Your Solar Dolly[™] electric fencing system is now ready to be connected to the fence.







<u>Fig. 6</u>

b.