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Solar Powered Animal Waterers



Components of your Buggy

The buggy is built of 10 gauge steel
The solar mounts hoops are 2 3/8 pipe
14 inch guard rail
The buggy frame and guard rail are powder coated Red or Green
It has a 5000 pound axel with 20 inch tires
320 watt solar panel
24 Volt MPPT solar controller
Four 6 volt deep cycle batteries
An on / off float switch
A Rule 24 volt bilge pump
50 ft. or 100 ft. of 1 1/2 suction hose and solar wire
Two 1 inch ratchet tie downs
100 ft. of 3/8 rope

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Setting up your clear Fab Solar Water Buggy

The water buggy can easily be moved from location to location using a 2" ball hitch

- 1) Find a relatively level spot as close to your water source as possible and back the buggy up to it.
- 2) Next use the jack and mechanical height adjuster to unhook the buggy. (Have the buggy lean back slightly)
- 3) Use the guard rail as a fence to deter livestock traffic from passing around behind the buggy. (Have it extend into the water if possible)
- 4) Using the 100 ft. rope for a tow out and anchor, pull the bilge pump out into the water source. Secure it to keep it from floating back towards the bank. (The blue float should be on top)
- 5) Use the Zip ties or pieces of wire to secure the suction hose and solar wire to the guard rail. (Double check the connection on hookups)
- 6) The on / off switch, mounted under the battery box will activate the pump once the water has reached a certain level. Double check this now. (The float switch will be half submerged when it kicks off, adjust as necessary)
- 7) Inside the battery box you will find your MPPT Solar Controller. Pressing the "Never" button ONCE will activate or deactivate the entire system. Press this button to activate your pump now.
- 8) Double check all connections to hoses and wire.
- 9) Double check float switch height setting.
- 10) Secure all loose wire using zip ties.

Winterizing Your Solar Water Buggy

Do not park the buggy in a dark cold area for the winter! The system needs sunlight to trickle charge all winter and keep the battery charged and active.

- 1) press the ENTER button ONCE on your MPPT solar controller to deactivate the system.
- 2) Unplug the solar pump wire inside the battery box.
- 3) Drain the water from your buggy, the hoses and pump. Store the hose, pump and wire in a dry, warm place.
- 4) Tilt the solar panel so that any snow will slide off during the winter. Brush snow from the panel after a heavy snowfall.
- 5) The MPPT solar controller will trickle charge the batteries all winter.

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Spring Start up

- 1) It's a good idea to always double check the battery voltage first thing in the spring.
- 2) unhook all wire from each battery
- 3) Check each battery separately using a multimeter
- 4) Charge batteries as necessary
- 5) Top up with de-mineralized water if necessary
- 6) The normal digital voltage display on the back of the battery box should read anywhere from 23 to 28 volts.
- 7) Clean the top side of the solar panel using a nonabrasive sponge and water.
- 8) Check all connections and hose hookups. Tighten and reconnect as necessary.
- 9) Reconnect the pump wire inside the battery box.
- 10) Your buggy is ready for another season