

### **GRANDIO SOLAR FAN**



### **GREENHOUSE USER MANUAL**

© 2015 Grandio Greenhouses, Backyard Living Source Inc. All rights reserved September 15, 2015 Manual Edition Grandio Solar Fan

### **GRANDIO SOLAR FAN** PARTS LIST

The Grandio Solar Fan is the perfect solution for ventilation, air exhaust and cooling your greenhouse. It converts solar energy into electrical energy which powers the fan. The system is controlled by an adjustable thermostat dial and works best when the sun is hitting the solar panel directly.

The Grandio Solar Fan needs to be placed in a location with full direct sunlight year around. This fan is suitable for any greenhouse size, however you may want to use several fans in one building for increased ventilation in larger spaces.

The Grandio Solar Fan is warranted for 1 year if used in accordance with this manual.

### **NEEDED FOR ASSEMBLY**

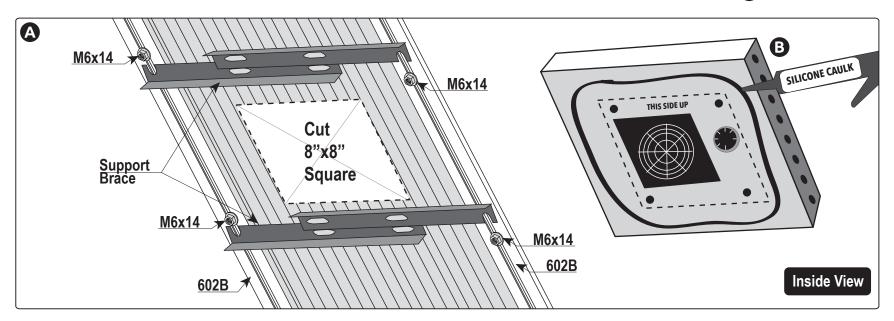
- Tape Measure
- Drill & Drill Bit
- Utility Knife
- Marker
- Silicone

# SFM-F15 Ventilator Fan Support Brace M6x14mm Bolt M6x14mm Bolt M6 Nut M6 Nut 4

**Parts List** 

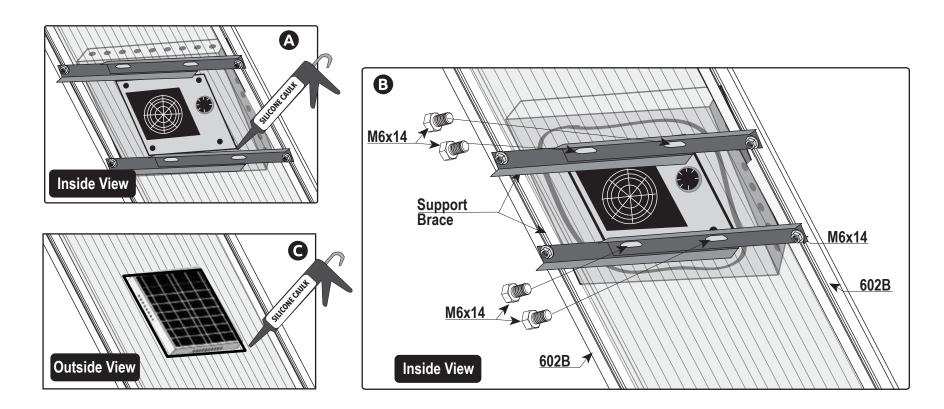
### **GRANDIO SOLAR FAN** INSTALLATION

- 1. Locate the roof panel of your greenhouse that gets the most constant sun and is also perpendicular to the sunlight. There cannot be any shadows or shade on the solar photo voltaic cell panel surface. The **Solar Fan** cannot be installed at a low point to avoid water entering through the air bleed holes. Hold your **Solar Fan** with the panel up to the sun to test that your unit works, turn the thermostat dial until the fan begins to spin.
- 2. Install the (4) **Support Braces** to the **602B's** with the **M6x14mm** nut and bolt combo leaving about a 9" gap between the two **Support Braces**. Locate the center of the panel, and mark an 8" x 8" square in the center of the panel where the **Solar Fan** will fit into place. Double check that the area you have selected to place the fan is going to fit the fan and the threaded holes on the interior fan side of the unit are going to align with the **Support Braces**. Also check that it is in the direct sunlight before you cut the polycarbonate panel, and make sure there are no vent holes on the upper side to prevent water from entering. It is helpful to have a second person to hold the **Solar Fan** into place on the outside, while the person inside confirms placement. See A.
- **3.** Cut the panel with a utility knife then test by placing the **Solar Fan** into the square to confirm the fit. If fit is correct apply silicone caulk liberally around the side with the fan that will face the polycarbonate panel, see **B**.



# **GRANDIO SOLAR FAN INSTALLATION CONTINUED**

- **4.** Set the **Solar Fan** into place and caulk around the interior edges where the square you cut into the polycarbonate panel and the **Solar Fan** meet inside your greenhouse, see **A**. You may need to have someone hold the outside of the solar panel in place while caulking and through step 5.
- **5.** Adjust the **Support Braces** to align with your fan. Install the **M6x14mm** bolt through the **Support Brace** into the back side of your **Solar Fan**. Tighten all nut and bolt combos and screws. See **B**.
- **6.** Apply silicone caulk to the exterior of the polycarbonate panel where the **Solar Fan** and the panel meet to create a water proof barrier, see **C**.



# **GRANDIO SOLAR FAN MAINTENANCE**

### **MAINTENANCE**

1. Clean the surface of the solar photo voltaic cell panel regularly to get better ventilation, air exhaust effect.

### **IMPORTANT WARNINGS**

- **1.** Do not impact or compress with heavy or sharp objects.
- **2.** Do not throw objects into the ventilator, like thread and dust, etc.
- **3.** Do not drop or throw the unit.
- **4.** Keep away from high temperatures and fire.
- **5.** Keep away from corrosive, flammable and explosive goods.

# **COMMON PROBLEMS AND TESTING METHODS**

**SLOW FAN SPEED:** Check that the cell panel is clean and is in full sunlight with nothing covering or shadowing the panel. If panel is shadowed or covered the fan will not run.

**THERMOSTAT CONTROL:** Adjust when the fan turns on or off by turning the temperature dial on the thermostat.

**CONVERT CELSIUS TO FAHRENHEIT QUICK TIP:** Multiply the Celsius temperature by 2 and then add 30 to get Fahrenheit. (Actual formula is multiply by 1.8, add 32)



### **Grandio Solar Fan**

# GREENHOUSE USER MANUAL KEEP IN A SAFE PLACE FOR REFERENCE

CONTACT US IF YOU NEED HELP
OR
HAVE MISSING OR DAMAGED PARTS

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