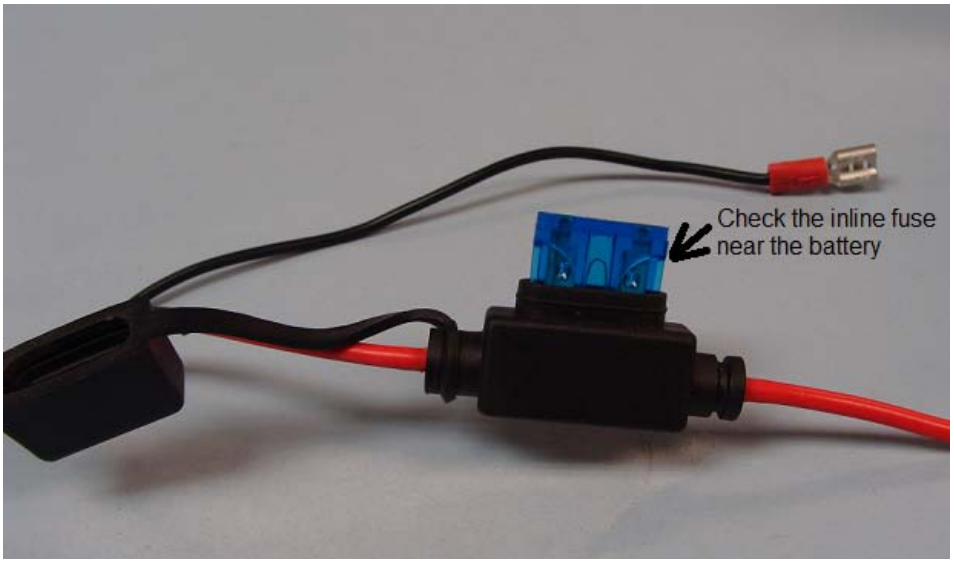
362-D Low Voltage Solar

If you try to operate the gate opener and it gives you one short beep, the warning buzzer sounds but the gate does not operate, the gate opens and won't close, or the opener is operating intermittently, you may be experiencing low voltage on the battery. Try the following.

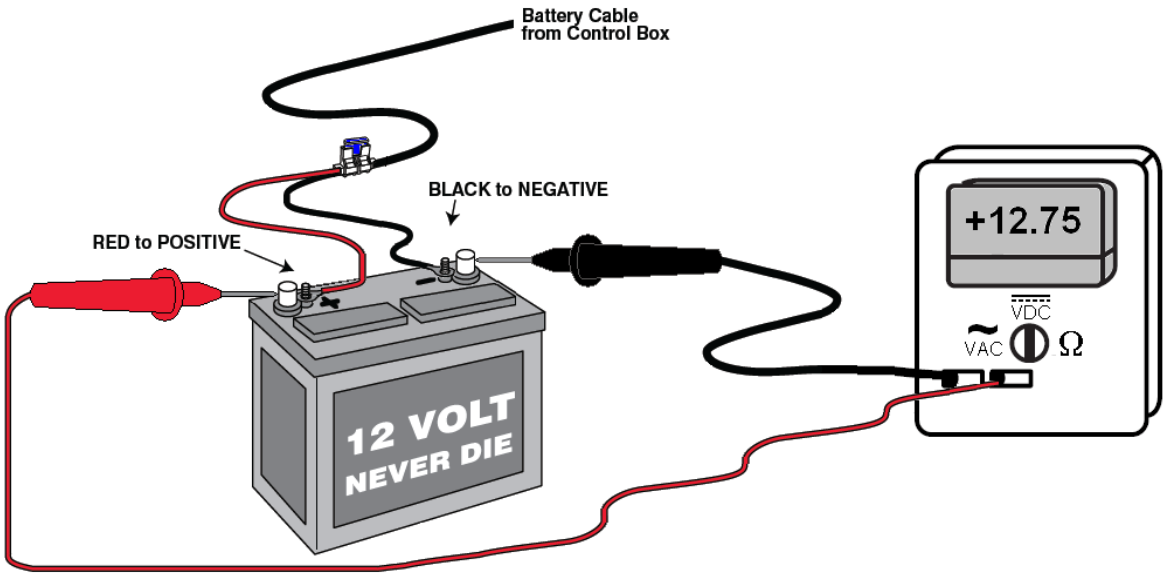
1) Check the fuses. The fuse is located on the battery harness near the battery. If the opener is not working at all, it is possible that the motor got into a strain and caused the fuse to blow.



If the wire is broken, or burned in two, the fuse is bad.

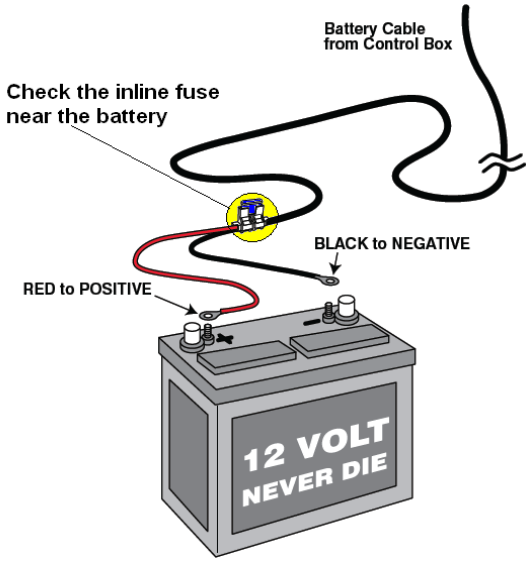
If the wire is intact, the fuse is good.

2) Disconnect the solar panel and check the voltage across the posts on the battery. Put the red meter lead on the red post and the black meter lead on the black post. The circuit board needs between 12.5 VDC and 13.5 VDC on the battery to function properly. 12 VDC or lower is too low and will cause intermittent erratic operation.



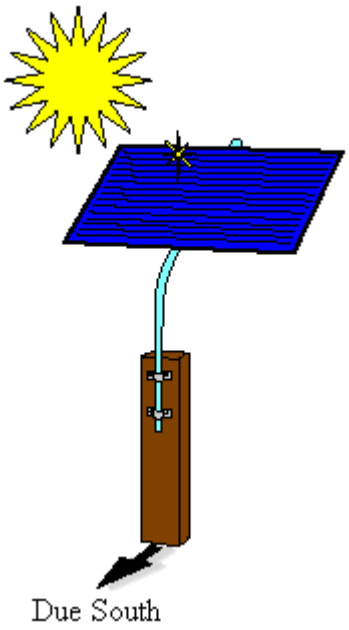
3) If the battery is low, charge the battery with a trickle charger on a setting of 12 VDC and 2 amps or less for about three to four hours. Once the battery is charged, we can troubleshoot to find out what your problem is.

4) Check the connections of the battery leads. Make sure that there is no corrosion around the battery posts.

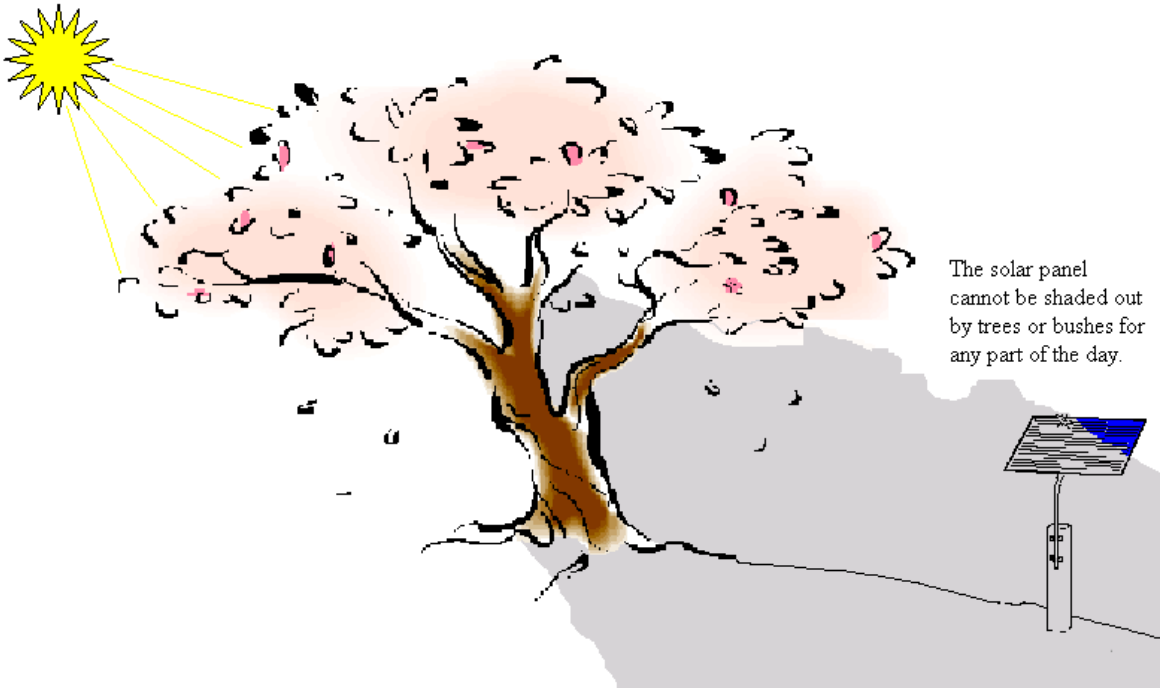


5) If the connections are good, test your solar panel.

6) Make sure that the solar panel is pointing due south. This way, the solar panel will be exposed to the maximum amount of sun throughout the day.



7) Make sure that there are no trees, bushes, etc. that are shading out the solar panel for any part of the day.

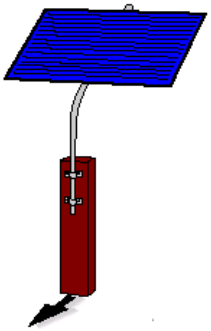


The solar panel cannot be shaded out by trees or bushes for any part of the day.

8) Make sure that you are testing the solar panel in the middle part of the day between the hours of 10:00am and 2:00pm when the sun is the most intense.

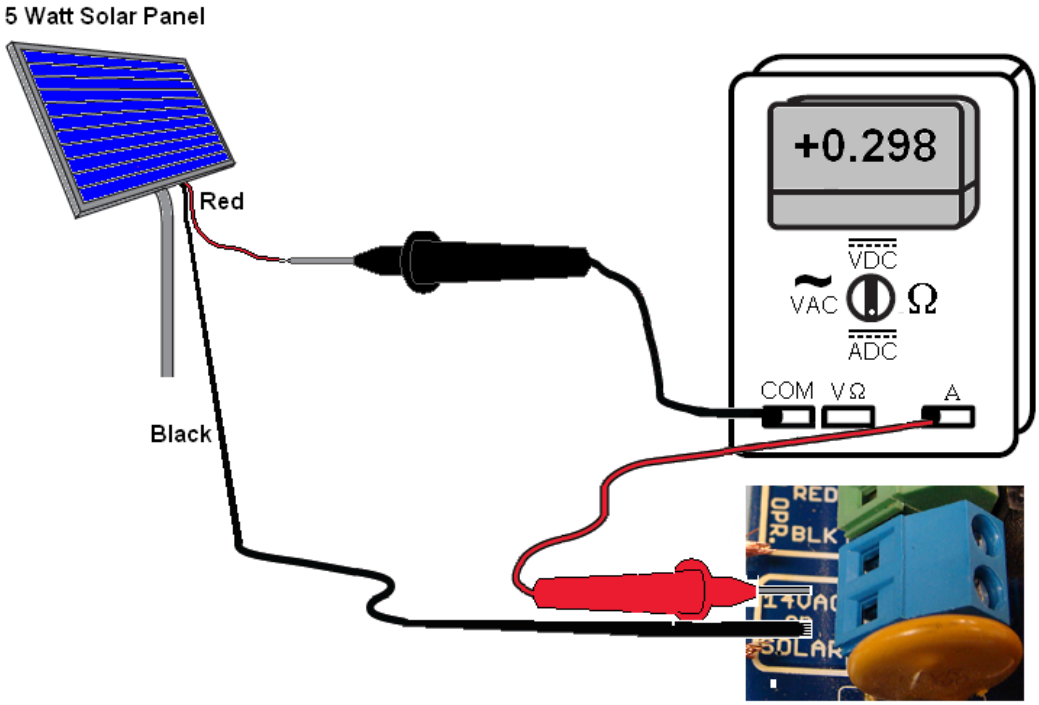
9) Be sure to test the solar panel in direct sunlight. The solar panel will not give you a full output if it is cloudy or hazy. You actually have to see the sun in the sky.

Rainy weather, cloudy weather, hazy days foggy mornings, etc. will keep the solar panel from charging the battery. The battery normally lasts about 2 or 3 days without being charged in most applications



Due South

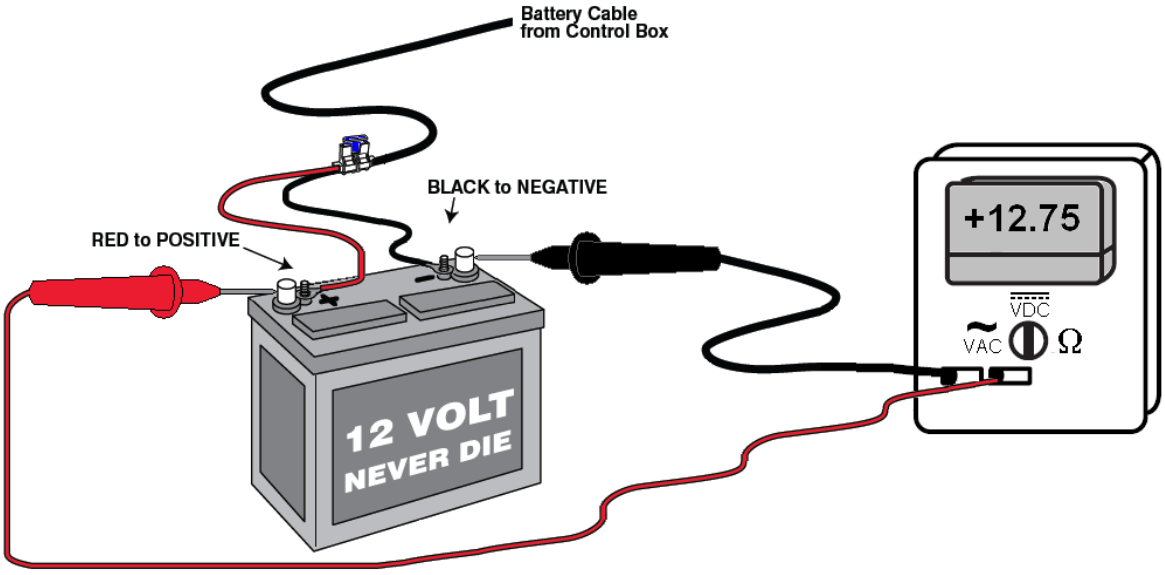
10) Wire a meter in series with the red solar panel wire and check the amperage output of the solar panel.



Disconnect the red solar panel wire from the circuit board and connect your meter in series as shown. The amperage output should be 300 ma on a 5 watt panel and 600 ma on a 10 watt panel.

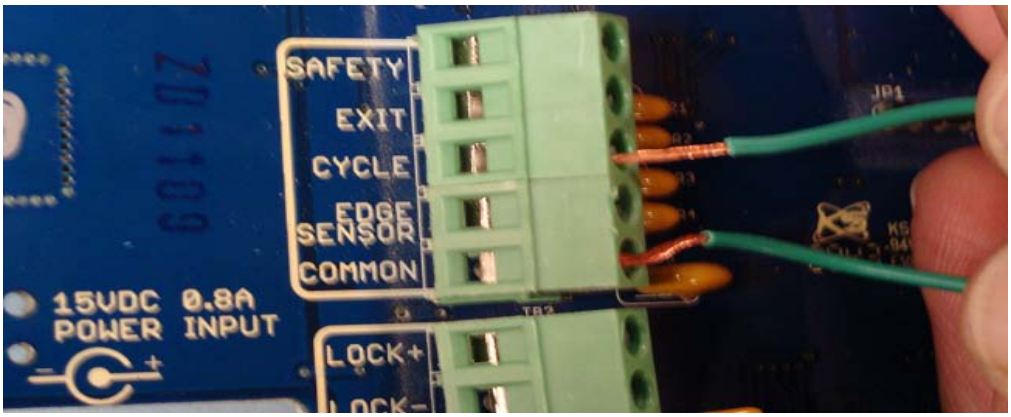
11) The output of a 5 watt solar panel should be 18 to 22 VDC and 300mADC. A 10 watt solar panel should have 18 to 22 VDC and 300mADC.

12) If the solar panel is good, we need to load test the battery. With the solar panel disconnected from the circuit board, the voltage across the battery should be about 12.5 to 13.5 VDC. If the voltage is more than 12 VDC, try to activate the opener with your transmitter or by shorting the Cycle and COM terminals on the Control Inputs terminal block. The voltage should not drop more than 1 VDC. For instance, if the battery is charged to 13 VDC, the voltage should not drop more than 12 VDC. If the voltage does drop more than 1VDC, then you have a dead or weak cell in the battery and it needs to be replaced.



13) If the solar panel is good and the battery is good, check the charging circuit on the board. Disconnect the wires from the 14 VAC or Solar terminals and check the voltage on your battery. Place your voltage meter on VDC and check the battery voltage at the BATT (+) and BATT (-). You should be reading approximately 12.5 to 13.5 VDC.

14) Operate the gate with the remote/keypad or jumping between com and cycle.



15) After the gate has stopped operating wait 1 minute and plug the solar panel wires back into the 14 VAC / SOLAR terminals and keeping your voltage meter on the BATT (+) and BATT (-) you should see the battery voltage increase. If the battery is good, and the solar panel checks good and you do not see the voltage begin to increase on the battery then I would say the board needs to be replaced.