0500 Low Voltage on the Battery or Dead Cell in the Battery

Whenever you press the remote transmitter and you get one short beep from the control box, you press the remote and hear a warning buzzer but the arm does not operate, the operator arm stops in the middle of the cycle without reversing, it obstructs more easily, the gate opener is erratic or intermittent, the gate opens but it won’t close, you have to turn the power on and off to operate the gate, or only one arm works on a dual gate opener, you are experiencing a power problem with your gate opener.

1) Check the fuses. If the opener is not working at all, it is possible that the motor got into a strain and caused the fuse to blow. There is a spare fuse inside the control box underneath the battery to the right.
2) Check the condition of the PWR IN light on the left side of the circuit board. If the light is on, it is an indication that the circuit board is getting voltage from the transformer to keep the battery charged. If it is off, it is possible that you lost power at the outlet, the transformer is blown, or something happened to the wire from the transformer to the circuit board.

3) Disconnect the transformer from the Power Input terminal block and check the voltage across the wires. With the transformer wires disconnected from the circuit board, the output of the transformer should be 18 to 22 VAC. Click on the “Buy Online Now” icon to purchase a transformer.
4) The one short beep is an indication of low voltage on the battery. Disconnect the transformer 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 can cause erratic, intermittent operations.

5) If the battery is low, you can 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 the problem is.
6) If the battery is not low, check the connections of the battery leads. Make sure that there is no corrosion around the battery posts. Give the wires a pull test to ensure that they are making good connection. It is sometimes necessary to take a pair of needle nose pliers and crimp the female connector to tighten it up.
7) If the battery is not low and the connections are good, load test the battery. Keep the transformer disconnected from the circuit board. The voltage across the battery should be about 12.5 to 13.5 VDC.

8) 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.
9) 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. Click on the “Buy Online Now” icon to purchase a replacement battery.
10) If the transformer is good and the battery is good, check the charging circuit with the battery and transformer connected to the board. Do a draw on the battery by operating the gate opener. You should see the charging circuit charge the battery to 14.8 VDC in the Fast Charge mode. The Charge LED should be ON solid. Once the voltage is ~ 14.8 VDC, the charging circuit should switch to the Soak Charge mode.
11) In the Soak Charge mode, you should see the charging circuit charge the battery at 14.1 VDC. The Charge LED should be blinking fast. Once the battery is fully charged, the charging circuit should switch to the Float Charge mode.
12) In the Float Charge mode, you should see the charging circuit charge the battery at 13.8 VDC to maintain the charge on the battery. The Charge LED should be blinking slowly. The charging circuit will stay in this mode until the battery is drawn down again.

13) If the battery is good and the transformer is good, and the voltage never increases above the initial battery voltage, the board is not charging the battery.

14) If the battery is good, and the transformer is good, and the voltage charges over 16 VDC without dropping, the circuit board is over charging the battery. Click on the “Buy Online Now” icon to purchase a circuit board.