3:47 PM

## **Calculator and sensor wire Problems**

- 1. All calculator systems have to have two magnets, 1 with wires attached to the sensor wire, and one with no wires attached to the caker sprocket.
- 2. If on a plug kit make sure all points inside each plug are clean and free from any and all corrosion.

## ? I cannot get my calculator to work, where do I look to find the problem?

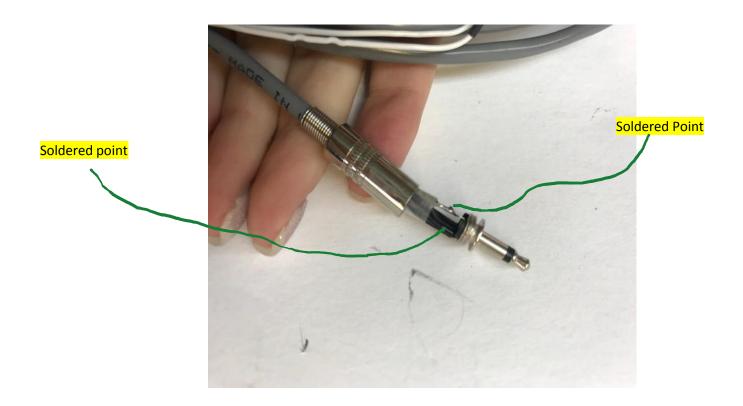
First we will need you to test your calculator to make sure the problem isn't the calculator itself. To do this you will need to unplug your calculator from your sensor wire and clear out any numbers that happen to be displayed on the screen. Next push 1 + and insert a small paper clip or screw driver or a small metal object into the female pigtail attached to the calculator. Wiggle paper clip/ screw driver/ metal object around, if calculator counts, calculator is good. If it does not count the calculator is bad.





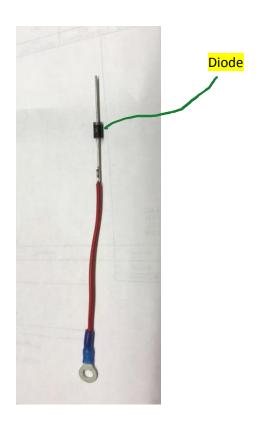
- So my calculator works fine, where do I look now?
  - Is your Calculator flashing when you run your caker?

    If your calculator is flashing when your run your cake feeder you will need to unscrew the male plug on the grey sensor wire, and check to see if the two soldered points on the inside of the plug are touching. (Some of the soldered points maybe wrapped in black electrical tape, like shown below.) If touching separate and wrap with black electrical tape so they two different points can no longer make contact.



Poes your calculator count for a while then throw a bunch of zeros or decimal points?
If this is happening to you, you will need a diode on your feeder.

Depending on how old your feeder is, it may not have a diode, or if it does have a diode it may not be functioning properly and will need replaced. The purpose of the diode is to break up the electric magnetic current that the solenoid throws out when the feeder is turned on and off (causing the zeros). See below picture to see how the diode is attached to the solenoid.



Diode attached to the small front post of the solenoid and a ground bolt.





## \* 4 Prong Plug Diagnosing

Have you determined the problem is with the sensor wire?

You can easily determine which end of your sensor wire has the problem by testing with a multimeter. First, push the push button until the two magnets line up. Insert your multimeter into the sliver insert and the gold insert directly to the right of the sliver insert on the male gold plug. If the multimeter beeps this is a closed circuit. Now move the magnets away from each other and test again. If no beep is heard this is an open circuit.

If the above test fails, that tells you there is a short somewhere in your caker side sensor wire. If it passes the test, that means you will need to test the pickup side to find the problem.

While your caker is still unplugged, push 1+ on the calculator, while it is plugged into the sensor wire. Then touch the sliver prong and a gold one right next to it, with pliers or something metal, to make the calculator count. If calculator doesn't count problem is on the pickup side sensor wire.

There could also be a moisture problem in your magnets, if all of these tests test out, it could possibly be a magnet problem, or a direct short somewhere in the wire that is only triggered while the pickup is running or moving. With these other issues it is much easier just to replace the whole sensor wire.