

Calculator and sensor wire Problem

The Calculator Counter system is a revolution counting system. This system has a calculator that is converted to operate on a signal for 2 magnets located on your caker.

All Calculator Counter systems must have two magnets on the caker side, 1 with wires attached to the sensor wire, and one with no wires attached to the caker sprocket.

You will have a Sensor wire running from the caker, either through a 4-prong plug (plug Kit) or directly (Hard wired) wired into your truck cab.

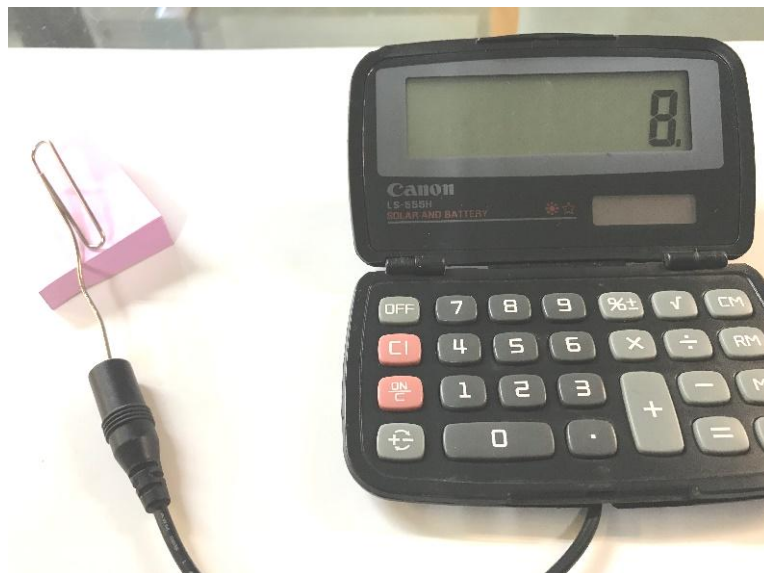
I cannot get my calculator to work, where do I look to find the problem?

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 screwdriver or a small metal object into the female pigtail attached to the calculator.

Wiggle paper clip/ screwdriver/ metal object around, if calculator counts, calculator is good. If it does not count the calculator is bad.



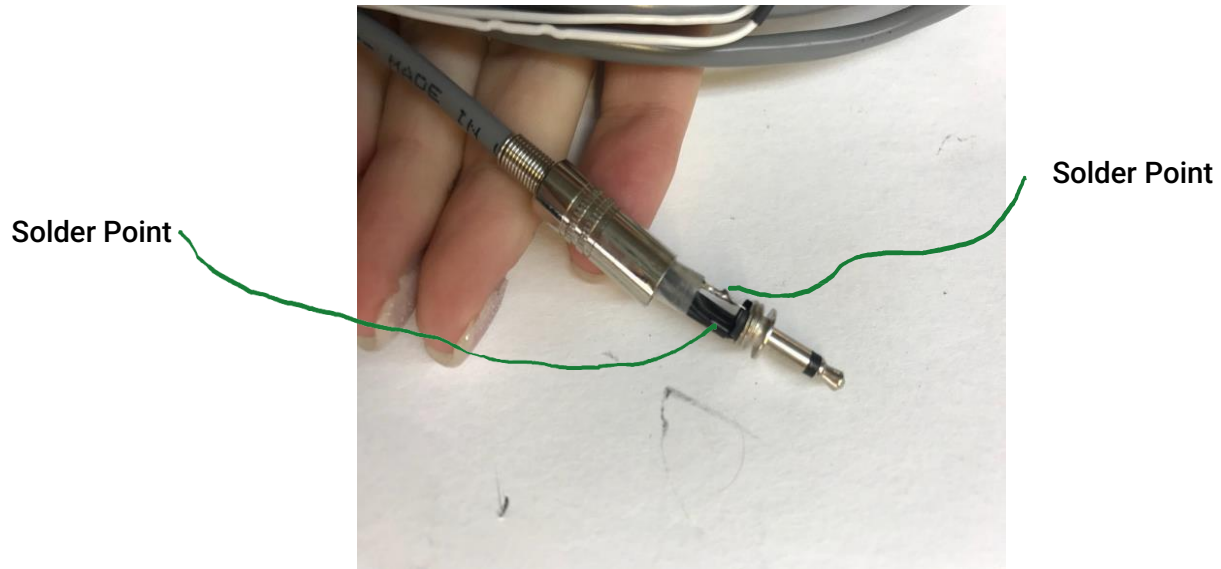
My calculator works fine, where do I look now?

Is your Calculator flashing when you run your caker?

If your calculator is flashing when you run your cake feeder you will need to, Cut the heat shrink on the silver male end of the sensor wire, unscrew the tip of the male plug, and check to see if the two soldered points on the inside of the plug are touching. (Some of the soldered points may be wrapped in black electrical tape, like shown below.)

The black tape is there to insulate and protect the solder points from touching and/or rubbing each other or the outer case.

If touching separate and wrap with black electrical tape so they two different points can no longer make contact and have no contact with outer case.



Does your calculator count for a while then throw a bunch of zeros or decimal points?

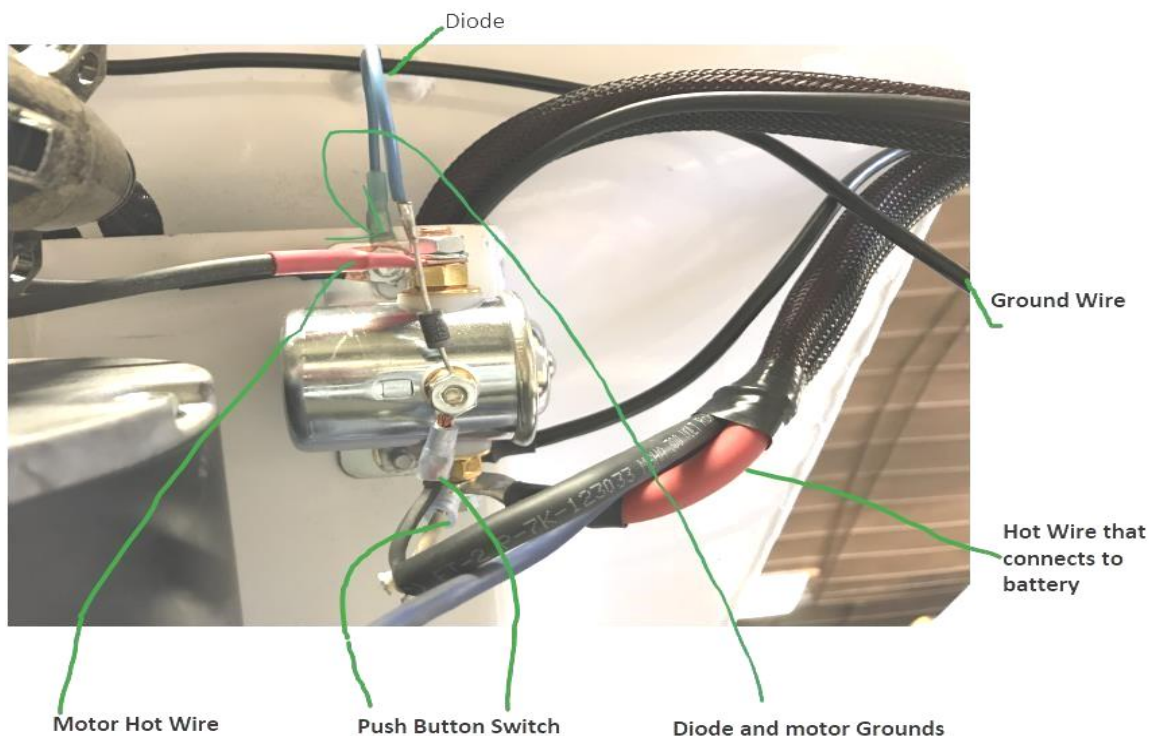
If this is happening to you, you may need a diode on your feeder.



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 to be 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 the picture below to see how the diode is attached to the solenoid.

If you do not have one, you need to put one on your solenoid!



Sensor Wire 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.

Caker Side Test

First, push the push button until the two magnets line up.

Unplug your caker at the headache rack!

Insert your multimeter into the sliver insert and the gold insert directly to the right of the sliver insert on the male 4-prong plug.

If the multimeter beeps this is a closed circuit!

Plug your Caker into the headache rack.

Next

Move the magnets away from each other and test again. If no beep is heard this is an open circuit.

If **Both** test passes, that means, your caker side sensor wire is working properly.



Pickup side Sensor Wire Test

You will need to test the pickup side to find the problem.

To Test the **Pickup side** Sensor wire:

With your caker is still unplugged,

Plug your sensor wire into your calculator, push 1+ on the calculator,

Then on the Female 4-prong plug touch the silver post and a gold post directly to the right of it with pliers or something metal, this should make the calculator count.

If the calculator doesn't count, the problem is on the pickup side sensor wire.

There could also be a moisture problem in your magnets, if all of these tests pass, it could possibly be a magnet problem, or a direct short somewhere in the sensor wires, 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.

It is very important to keep the inside of your 4 prong plugs Clean and Free of dirt, Sometimes the problem can be as simple as dirty plugs.

