

# Digital Counter Plug Kit Upgrade Kit

From A Calculator Counter to A Digital Counter



Locate and disconnect the **Gray Calculator Sensor Wire** on from both the caker and your pickup. Remove the silver trailer 4-Prong Plugs from both the caker-side wiring harness and the pickup side plug plate.

**Remove the magnet from the sprocket and remove the sensor magnet from the post on the gear box.**  
**ALL OF THE MAGNETS AND THE GLUE MUST BE REMOVED FROM THE SPROCKET!**



Mount the sensor with the included brackets around the post that you removed the magnet sensor from.

Place the silver sensor in the mounting bracket placing one nut in the front of the bracket and one nut behind. When placing your sensor, it will need to be least an 1/8" to 1/4" from the sprocket tab.



Run the new sensor wire in both the caker-side wiring harness & the pickup cab.

Wire up your new 6-prong plugs according to the table below if you have a plug kit.

<b>Brown</b>	<b>TM -OR- T</b>
<b>BLACK</b>	<b>GD -OR- G</b>
<b>BLUE</b>	<b>LT -OR- L</b>
<b>PUSH BUTTON</b>	<b>Black on AS -OR- S</b> <b>White on RT -OR- R</b>

Place your Pierce Digital Counter Monitor on the dash in cab of the vehicle. Then connect the power cord and sensor wire to the back of the box and test.



This counter will only count revolutions, so you will need to calibrate it to your feed output.

### **CALIBRATING THE COUNTER**

Press the button to run the caker until the feed begins to run down the spout.

1. Press the “reset” button on the counter. (Counter should read zero.)
2. Determine the empty weight of a 5-gallon bucket, or a similar container.
3. Place the bucket/container so the cake feeder will dispense feed into it.
4. Press the button which runs the feeder and hold it until your bucket/container is full.
5. Weigh the bucket/container, then subtract the empty weight of the container to determine the weight of the feed dispensed.
6. Divide the weight (pounds) of the feed dispensed by the number displayed on the counter. The result will be the pounds of feed dispensed for every revolution of the counting mechanism.

For example: You have 300 head of cows you wish to feed 2.5 pounds per head. (A total of 750 pounds feed) You have a 5-gallon bucket that weighs 3 pounds empty. After filling the bucket, you weigh it and determine the weight of the bucket to be 38 pounds. You subtract the empty weight of the bucket (3 pounds) and determine there are 35 pounds of feed in the bucket. The number displayed on the counter (the number of revolutions it took to fill the bucket) is 7. You divide 35 by 7 and determine the calibration number to be 5. (The feeder is dispensing at 5 pounds of feed per revolution.) Therefore, to feed 750 pounds of feed, you will have to reset your counter to zero and run the caker until the number displayed on the counter is 150.

# **Trouble Shooting**

## **Digital Counter**

### **The Counter Monitor Will Not Light Up.**

1. The power cord to the monitor might have a wire pulled loose.  
Open the silver connection on the cord to look for a loose wire,  
If this end is ok the wire could be pulled loose on the other end.  
Both ends are replaceable. Call the Office 402-966-2251
2. Your Power point may not be getting power Check your pickup fuses.
3. You may have blown the fuse in the back of the box.

### **My Counter Box is Fine but Will Not Count.**

The Sensor needs to see the tab on the sprocket. The distance from the end of the sensor to the tab should be no more than 2 credit card thickness away. Does the Light on the back of the Sliver sensor on the caker side light and blink each time the tab on the sprocket comes around? This is what it should do. If not, see the following troubleshooting below.

**Constate Light:** Means it is reading the sprocket instead of the tab on the Sprocket. Adjust the Sensor mount bracket out toward the end of the sprocket so the sensor can only see's the tab but not the sprocket hub.

**No Light:** Means it is not getting power. Take the silver plugs apart and make sure they are clean and free of dirt and cobwebs. Verify all your wires are connected. Make sure you have no wire(s) touching the metal-outside case.

### Frequent Q/A:

Our Cake Feeders are not painted on the inside.

Welker Cake Feeders run off a 3/4 HP 12-volt motor. **Older models can run off the smaller winch motors.** They are no longer available you will need to convert your caker to the Ohio motor and gearbox.

We keep sirens on hand in the office. Please follow the suggested on/off intermittence in order to avoid burning your siren up.

For any questions you may have, give us a call. Keep up with our website and Facebook page for details, deals, and other products we stock.

See more of our trouble shooting and parts pictures on our website:

[www.welkermanufacturing.com](http://www.welkermanufacturing.com)

**Thank you all for your business with our small-town operation!**

**We work HARD for you!**

