Welder MFG LLC P.O. Box 28 Kilgore, NE 69216 Phone: 402-966-2251

welkermanufacturing.com Manual for your Welker Cake Feeder Digital Counter Regular (Hard) Wire



# **Mounting Your Caker**

#### **Flatbed Model**

You will need 4 - 3/8" x 1-1/2" Bolts with nuts or 4 - 1/2" x 1-1/2" bolts with nuts. We recommend using 4 large surface washers on the bottom side of the flatbed to prevent your bolts from pulling through your flatbed.

Place your caker on the flatbed to determine placement of your bolt holes.

Mark your hole placement, (you will want the bolt to be on the inside of the cakers angle iron runner).

Drill 4 holes through your caker runner and the flatbed. Drop a bolt in each hole as you go to prevent your caker from moving as you drill.

On the underside of the flatbed, attach your washers and nuts to each bolt and tighten. (Washers and nuts can be tack welded to the flatbed frame to facilitate easy removal andreinstallation of your caker in the future.)

When caker in not on the flatbed leave the bolts in place to keep hole clean and dirt free.

# Mounting your Cake in the Bed of your Pickup

### **Over the Side Caker**

- You will need 4 3/8" x 2" Bolts with washer and nuts or 4 1/2" x 2" bolts with washers and nuts.
- We recommend using 4 large surface washers on the bottom side of the the pickup box to prevent your bolts from pulling through.
- Place your caker in position to determine placement of your bolt holes.
- Drill the 4 holes through your caker runner, the pickup box, and into the pickup frame, drop a bolt in each hole as you go to prevent your caker from moving as you drill.
- On the inside of the pickup frame, attach a washer and nut to each bolt and tighten.
- We encourage you to tack weld the washer and nuts on the underneath side of the box to make it easier to install the next time.



Your new Caker comes with the above wiring and is connected to the caker in all the right spots.

Run your **Red Hot Wire Cord** along the frame of your pickup to the engine compartment, secure inplace.

Attach the short wire bolted to the breaker terminal marked "BAT" to the pickup battery, and then mount the breaker in place under the hood in the engine compartment.

Strip back the end of the **Red-Hot Wire Cord** a 1/4" and solder it into the eyelet that is attached to the breaker, attach the eyelet back onto the breaker terminal marked "AUX"

Run your push button cord and the counter cord through the back of the cab of your truck.

Push Button can lay on the seat and the Counter cord will attach to the back of your little black box.

Plug your little black box into your cigarette light outlet!

#### **Digital Counter**



Our Pierce Digital Counters is a small box with a bracket, that will be mounted in the cab of your pickup, typically on the dash. The digital read out display is simple and easy to read and operate, with an on/off button and a reset button. It includes a power cord that you will attach to the back of the counter box and plugged in to your pickup's power point. The Sensor wire that is included will also plug into the back of your counter box.

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 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 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 theweight of the feed dispensed.
- 6. Divide the weight (pounds) of the feed dispensed by the number displayed on the counter. Theresult 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 poundsof 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 (3pounds) 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 calibrationnumber to be 5. (The feeder dispenses 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 displayedon the counter is 150.

## **Trouble Shooting**

## **Digital Counter**

## The counter monitor will not light up.

- 1. The power cord to 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 off on the other end.

Both ends are replaceable. Call the Office 402-966-2251

- 2. Your Power point may not be getting power Check pickup Fuses.
- **3.** You may have blowen the fuse in the back of the box.

## My Counter Box is fine but will not count.

## Dose your sensor on the cakers side still have a color tip on the end?

Sometimes they get broken off you will need to replace the whole sensor.

## 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.

## Dose 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?

**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.

Possibly a blown fuse in you Little black box.

## I Need a New Belt!

Standard Belt Lengths are 102" 126" 150"

#### What we need to know before we can help you!!!

Do You have a Flatbed Feeder, or an Over the Side Feeder? Do You Have a Square Tube Feeder or A Round Tube Feeder?





Square Tube Flatbed



**Square Tube Belt** 

Belts are 9-7/8" wide.

Round Tube Flatbed



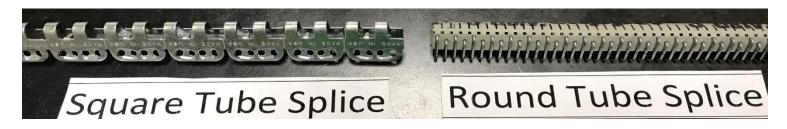
**Round Tube Belt** 

Over the Side.



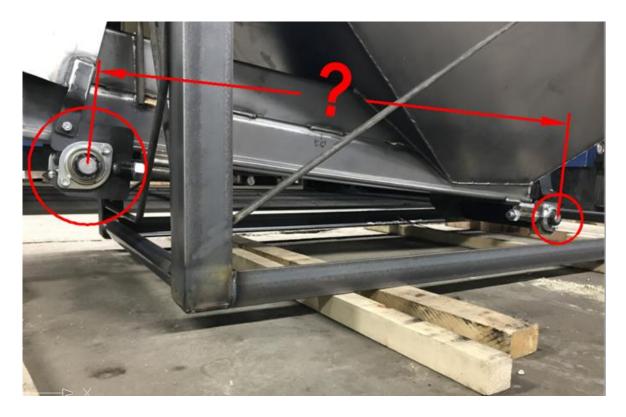
**Over the Side Belt** 

#### **Belt Splicing**



#### What size belt do I need: I need a new belt for my cake feeder

Measure Center of roller bearing in the front to the center of the roller bearing in the back, onthe left side of the feeder. Formula is Distance between roller bearings X 2 plus 6 inches.All Belts are 9-7/8" wide



Chute end

**Motor End** 

#### Can I splice my broken belt?

#### WE do not recommend splicing your belt.

Your belt splice requires a special tool to install it properly. You are likely not going to have enough length after you splice your belt unless you add length into the belt this would require setting 2 New splices.

### My Feeder is full, how can I change or fix a broken belt?

If you can get to the splice point, to the chute end of your feeder, you can try attaching the new belt to the splice point and carefully feed it through to the other side.

#### **Belt Tracking off center!**

Your belt has been aligned correctly at installation.

As you use your feeder, your belt may start to shift to one side.

### Make sure drive roller is clear of any twine or other obstructions to prevent shifting.

Determine which side your belt is moving toward.

The Belt will shift away from tight side.

You may need to loosen or tighten the bearing cages adjustment nuts on opposite sides of your feeder to work your belt back into the center of your tube.

Take a 1 1/8" wrench to the 3/4" ready bolts on the bearing cages, loosen the nut on the bearing cage, on the side the belt is moving toward, and tighten, the nut on the bearing cage, on the side the belt is moving away from. This will cause the belt to travel back into place andyou will be able to shift the belt square again.

#### My Motor is losing power and running slowly and lugging down.

Check your bearings on your rollers, they should be clear of any twine, or wire or dirt.

If they are turning freely, what are you using for a hotwire?

We have found you really do need the Heavy Welding cable that was original to your caker to carry the proper voltage to the motor.

The Diode is an electrical shock absorber. We recommend all Cakers have a diode. This diode is attached to the solenoid.



Installing caker for the season and I can't get it to run.

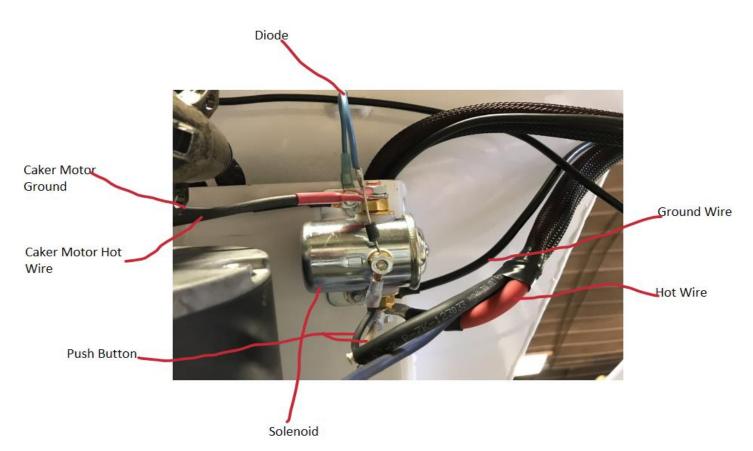
First test to make sure that the motor is in working condition.

To do this you need to disconnect the **Hot Wire** on the caker from the solenoid and touch it to the Hot wire post on the motor.

If the motor runs the motor is fine, it could be the solenoid or the push button. Reconnect the hot wire to its original post.

Next test the **Push Button** by creating a jumper wire from the smallest post on the **Solenoid**, to the post on the **Solenoid** where the **hot wire** from the battery connects.

Motor runsBad Push Button or Push Button CordSolenoid ClicksBad GroundNothing happensBad solenoid, Or no Ground



#### Cake Feeder won't start solenoid only Clicks

You most likely have an incomplete or bad ground.

Test this by taking a set of jumper cables, find a clean, rust and paint- free spot on the Caker connect both clamps from one end of the cables here, and then connect the opposite end of the cables to your pickup frame. If your caker begins working normally, you have a bad ground.

Check to ensure that your plugs are bolted securely where you have chosen to mount them. If the plugs are not secure, an incomplete ground can occur.

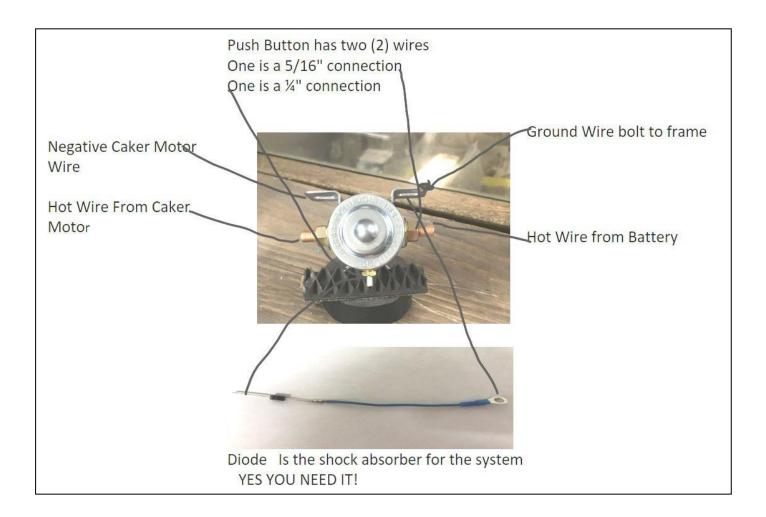
Check for any ice or mud, or rust build-up that could be impeding the ground.

To alleviate your bad ground issue, you can install a quick jumper wire on your female gold plug, if you have a plug kit. Simply put a new ground on with an eyelet and bolt it with the mounted plug, and the other end of the wire to your pickup frame. Your plugs, when connected, will ground back to your pickup.

#### My Push Button gets hot when I use it:

### All the power for your system is going through your push button!

#### You have your solenoid Wired wrong.



- 1. Connect the Solenoid to the caker 2 ¼" bolts.
- 2. To the top 5/16" bolt on the solenoid connect the caker motor hot wire (**RED HEAT SHRINK ON EYELET**).
- 3. To the bottom 5/16" bolt on the solenoid connect **Heavy Red Wire** coming from the **Gold plug and the 5/16" eyelet from the push button wire.**
- 4. To the small ¼" connection on the Solenoid connect the **wire end of the Diode** and the **small eyelet from the push button.**
- 5. To the top Solenoid frame bolt connect the **Diode Eyelet** and the Caker Motor GroundWire **(Black Heat Shrink).**

#### My Breaker keeps tripping!

This could mean you have a bare wire somewhere, in your pickup wiring or your caker wiring.

We use a 100AMP breaker for these feeders. We can send you the breaker itself, or the breaker including its 24" of wiring, eyelets included.

This Breaker we feel works the best



#### Frequent Q/A:

These feeders are not painted inside.

Feeders run off a 3/4 HP 12-volt motor. We have them in stock, brushes, springs, etc.

Ohio Motor will pull 67 Amps from your pickup system.

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

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

See more of our trouble shooting and parts pictures on our website: www.welkermanufacturing.com

## Thank you all for your business with our small-town operation! We workHARD for you!

