

Welder MFG LLC
PO Box 28
Kilgore, NE 69216
Phone: (402) 966-2251
weldermanufacturing.com

UTV Welker Cake Feeder
Plug Kit with Digital Counter



MOUNTING CAKE FEEDER



- You will need: 4 - 3/8" × 3" eyelets, 4 - 5/16" hook-to-hook turnbuckles, and 8 nuts.
- Locate the tie-down hook points in your ATV box.
- Position the caker in the ATV box.
- Screw the turnbuckles to their maximum length, then attach the turnbuckle to the hook point in the ATV box and determine the height of your eyelet bolt.
- Drill a hole in the leg of the caker.
- Place one nut on the eyelet, place the eyelet through the hole in the caker leg (eyelet loop on the outside), and place a nut on the eyelet to tighten (you will have a sandwich effect on the leg). Hook your turnbuckles in and tighten everything into place.

CAUTION! UTV feeder SHOULD NOT be operated on uneven terrain!

UTV Side Big Plug Digital Counter Kit



You will only be wiring the UTV (female) side of your UTV. When you are finished, you will only need to unplug one plug to remove the cake feeder from your UTV.

Mount the plug plate to the bed of your UTV in the vicinity of the male plug on the feeder. You will want enough space in the box for easy connection and disconnection.

You will be connecting all your wires into the 7-prong plug that is included in the harness.

Run the red hot wire to the battery compartment of the UTV.

Attach the eyelet that is on the inline fuse holder to the positive terminal of your battery (20-amp fuse included!).

Attach the ground wire to the negative terminal of your battery.

Run your push button cord and the counter cord from the plug mount plate through the cab of the UTV, then to the silver plug.

Connect the wires to the silver female 7-prong plug as shown in the wiring diagram provided on the next page.

Digital Counter

7 Prong Plug

Digital Sensor	
Brown	RED 4
Black	YEL 3
Blue	BLK 2
Hot Wire	BLU 7
Push Button	
Black	BRN 6
White	GRN 5
Ground Wire	Biggest insert under groove of Plug (WHT 1)

Digital Counter



Our Pierce Digital Counter is a small box with a bracket that will be mounted in the cab of your pickup, typically on the dash. The digital readout 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 plug into your pickup's power point/cigarette lighter. 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 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 that 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 of 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.

Troubleshooting

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, a wire could be loose on the other end.

Both ends are replaceable. Call the office at 402-966-2251.

2. Your power point may not be getting power.

Check the pickup fuses.

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 the thickness of 2 credit cards.

Does the light on the back of the silver sensor on the caker side light up and blink each time the tab on the sprocket comes around?

1. Constant 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 see the tab but not the sprocket hub.

2. 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 bare wires touching the metal outside case.

Belt



ATV belt is 6" wide x 78" long



Chute End

TO

Motor End

I Need a New Belt. What Size Belt Do I Need?

Measure from the center of the roller bearing in the front to the center of the roller bearing in the back, on the left side of the feeder.

The formula is: distance between roller bearings, multiply by 2, then add 6 inches.

Can I splice my broken belt?

We do not recommend splicing your belt.

Both square-tube and round-tube belt splices take a special tool to install properly!

You will likely not have enough length after you splice your belt unless you add length into the belt, and 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 at the chute end of your feeder, you can try attaching the new belt to the splice point and carefully feed the new belt through to the other side.

Belt Tracking Off Center! (not running straight)

Your belt has been aligned correctly at installation.

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

Make sure the 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 the tight side.

You may need to loosen or tighten the bearing cage 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.

UTV Motor Gear Box Combo



This unit runs on a 1/8 HP 12-volt motor/gearbox combo, connected to the UTV with the hot wire and an inline fuse holder with a 20-amp fuse (provided).

My motor is losing power, running slowly, and lugging down.

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

If they are turning freely, then what are you using for a hot wire?

**The diode is an electrical shock absorber. We recommend all cakers have a diode.
This diode is located back on the solenoid.**



I'm installing the 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.

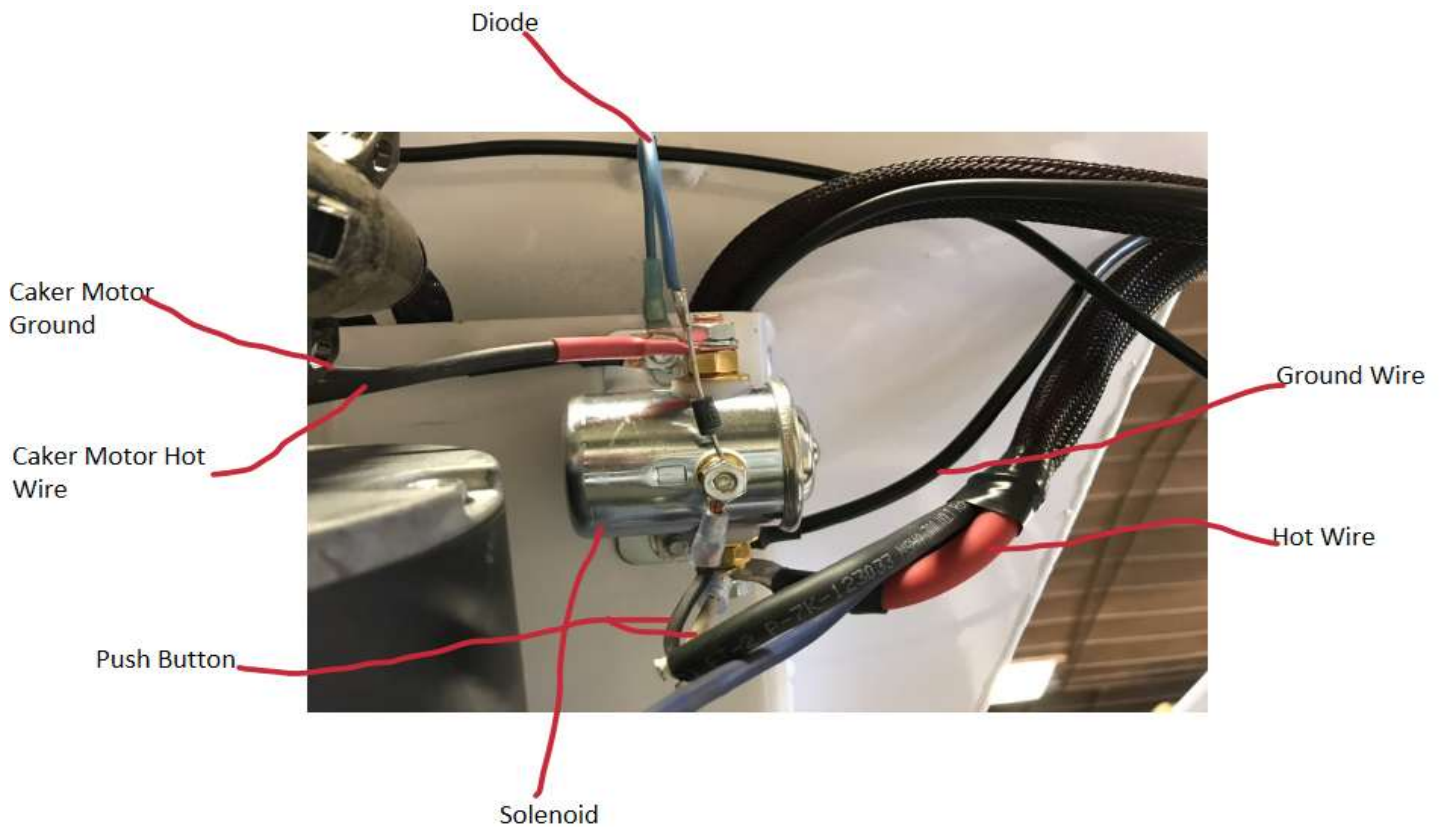
Reconnect the hot wire to its original post.

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 runs — Bad push button, or damaged push button cord

Solenoid clicks — Bad ground

Nothing happens — Bad solenoid, or no ground



Cake feeder won't start; my solenoid only clicks!

You most likely have an incomplete or bad ground.

Test this by taking a set of jumper cables, then finding 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 jumper cables to your pickup frame. If your caker then begins to work 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, 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 connect 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.

Connect the solenoid to the caker with 2¼" bolts.

1. To the top 5/16" bolt on the solenoid, connect the caker motor hot wire (red heat shrink on eyelet).

To the bottom 5/16" bolt on the solenoid, connect the heavy red wire coming from the gold plug and the 5/16" eyelet from the push button wire.

To the small ¼" connection on the solenoid, connect the wire end of the diode and the small eyelet from the push button.

2. To the top solenoid frame bolt, connect the diode eyelet and the caker motor ground wire (black heat shrink).

Frequent Q/A:

These feeders are not painted inside.

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

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

Thank you all for your business with our small-town operation! We work HARD for you!

www.welkermanufacturing.com

