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**Manual for your Welker Cake Feeder**

**Flatbed - Central City Scales – Plug Kit**



## **Mounting Your Caker On Your Bed**

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

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

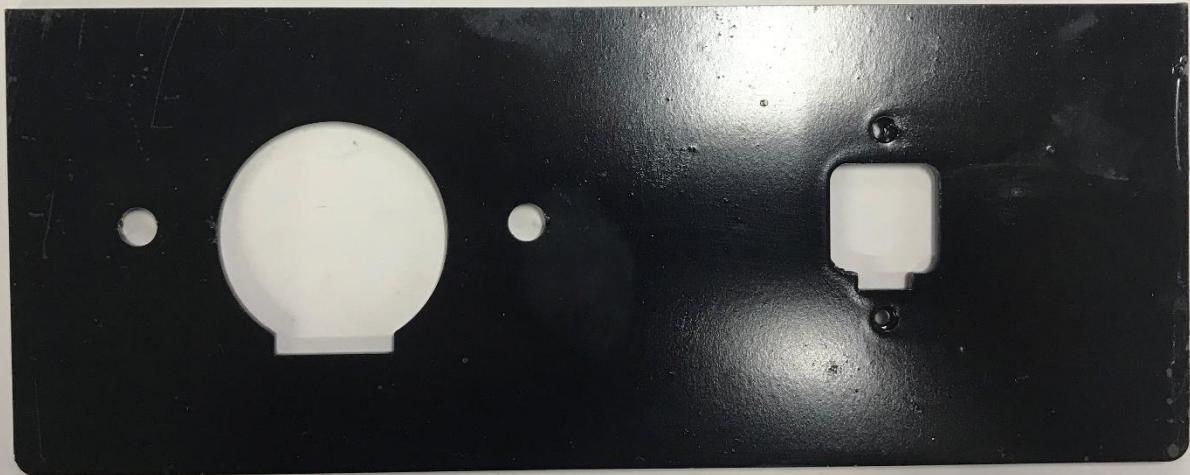
You will want your bolts to be on the inside of the caker's angle-iron runner. Mark hole placement accordingly.

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

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

When the caker is not on the flatbed, leave the bolts in place to keep the holes clean & dirt free.

You will also find included a Plug Mounting Plate which will be used mount your plugs to your headache rack.



## **Pickup Side Wiring Harness**



You will only be wiring the pickup-side wiring when installing the cake feeder. We use Deutsch plugs with the scale wiring instead of trailer plugs, as they are waterproof and have better sensitivity.

Mount the Plug Plate on your headache rack, in the vicinity of the motor-end of your caker where the male ends/trailer plugs on the caker plug will easily reach the plate. The plate can be ether welded or bolted on.

Run the Hot Wire along the frame of your pickup to the engine compartment, then secure it in place. Then strip back the Hot Wire 3/8 of an inch; then solder it to the eyelet that is attached to the breaker. Attach the eyelet back onto the breaker terminal marked "AUX". Proceed to attach the short wire bolted to the breaker terminal marked "BAT" to the pickup battery; mount the breaker in place under the hood in the engine compartment.

Run the push button cord & your scale monitor cord from the front of the pickup cab back to the Plug Mount Plate. Finally; secure the female plugs in your Plug Plate.

## I Need a New Belt!

Standard Belt Lengths are: 102", 126", & 150"

All belts are 9-7/8" wide.

**Here's what we need to know before we can help you!**

**Do You have a Flatbed Feeder or an Over-The-Side (OTS) Feeder?**

**Do You Have a Square Tube Feeder or a Round Tube Feeder?**



Square Tube Feeder



Round Tube Feeder



Over-the-Side (OTS) Feeder

## Belt Splicing



Square Tube Splice

Round Tube Splice

## What size/type of belt do I need?

Do you have a flatbed caker or an over-the-side caker or UTV caker?

Do you have a square tube caker or round tube caker?

Over-the-side Square-tube feeders have a standard 102" belt that is cleated for the incline.

Over-the-Side Round-tube feeder should be a standard 102". But measure anyway (see below).

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

Formula is Distance between Roller Bearings, multiply by 2; & then add 6 inches.



**Chute End**

**to**

**Motor End**

## 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!

Plus; you would likely not have enough length after you splice your belt unless you add length into the belt when adding the new splice. This would require setting two new splices instead of just one.

## My cake feeder is full; how do 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 the new belt through to the other side.

## The Belt is tracking off-center! (not running straight)

Your belt was aligned correctly at installation. However; as you use your feeder, the belt may start to shift to one side or the other.

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 cages adjustment nuts on opposite sides of your feeder to work your belt back into to 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) then tighten the nut on the other bearing cage (on the side the belt is moving away from), this will help the belt travel back into place as well as run straight (if properly adjusted).

## **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. They act as a ground for the electrical system. You will find the Diode attached to the solenoid.

### **Installing caker for the season & 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.

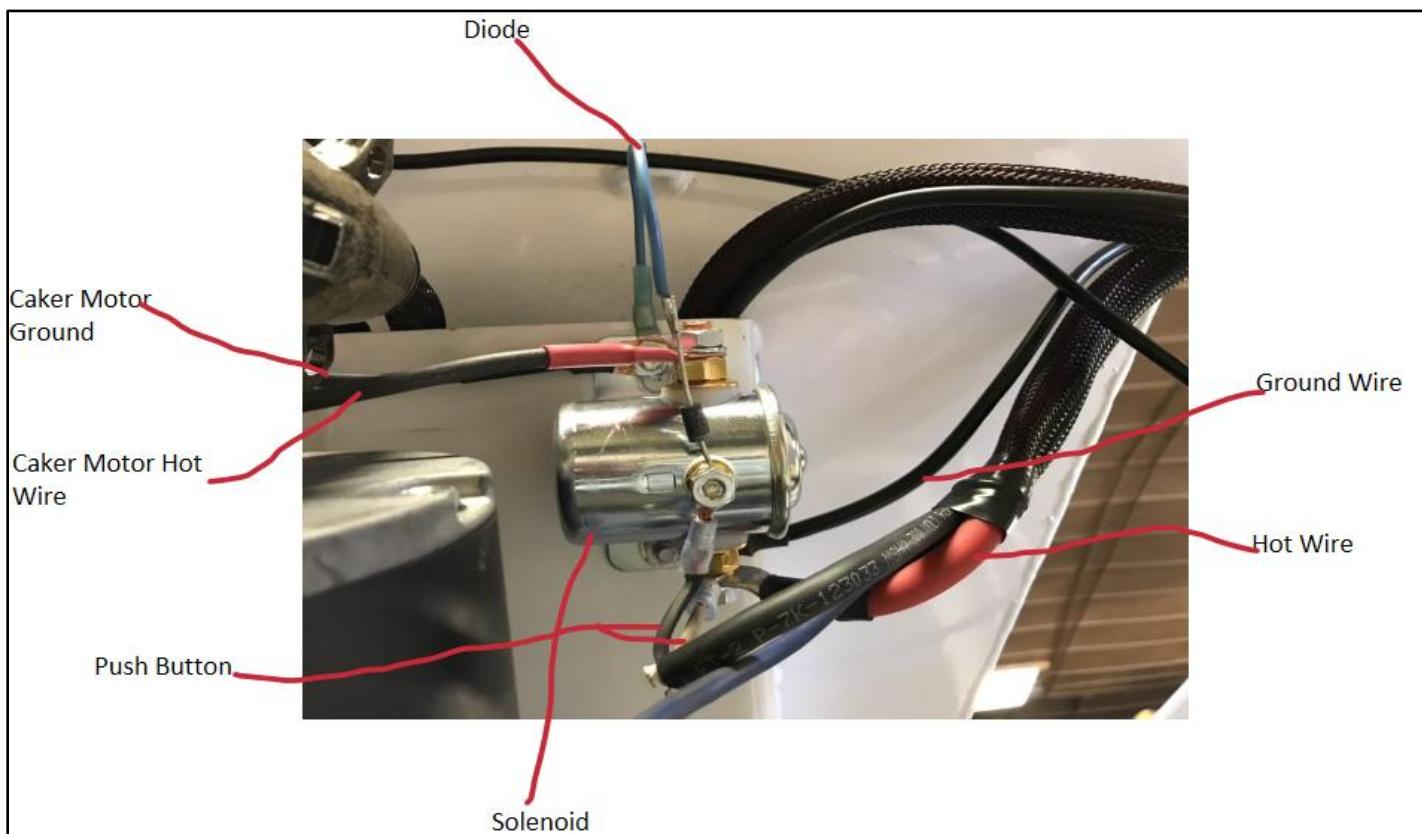
Reconnect the hot wire to its original post.

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 and/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.

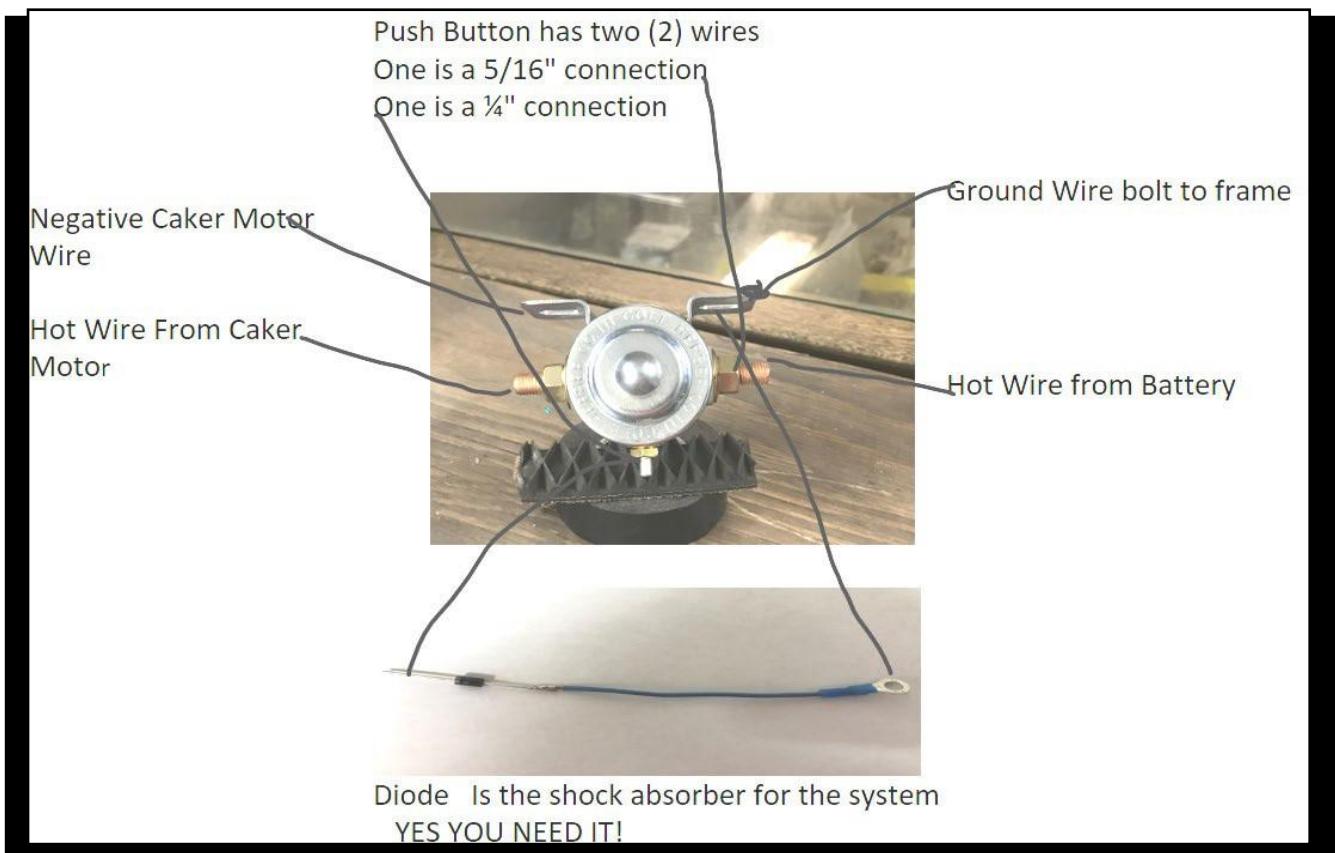
Check to ensure that your plugs are bolted securely where you have chosen to mount them.

If the plugs are not secure, an incomplete ground can & will 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!



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

All the power for your system is going through your push button. Below is the correct way to connect the wires.

1. Connect the Solenoid to the caker with two 1/4" 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 1/4" 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 Ground Wire (**Black Heat Shrink**).

## **My Breaker keeps tripping!**

This could mean you have a bare wire somewhere, in either the pickup wiring or in the caker wiring. We use a 100AMP breaker for these feeders. We can send you the breaker itself, or the breaker including the 24" of wiring, eyelets included.

**This is the Breaker we feel works the best!**

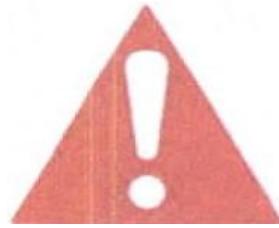




# TI - 500

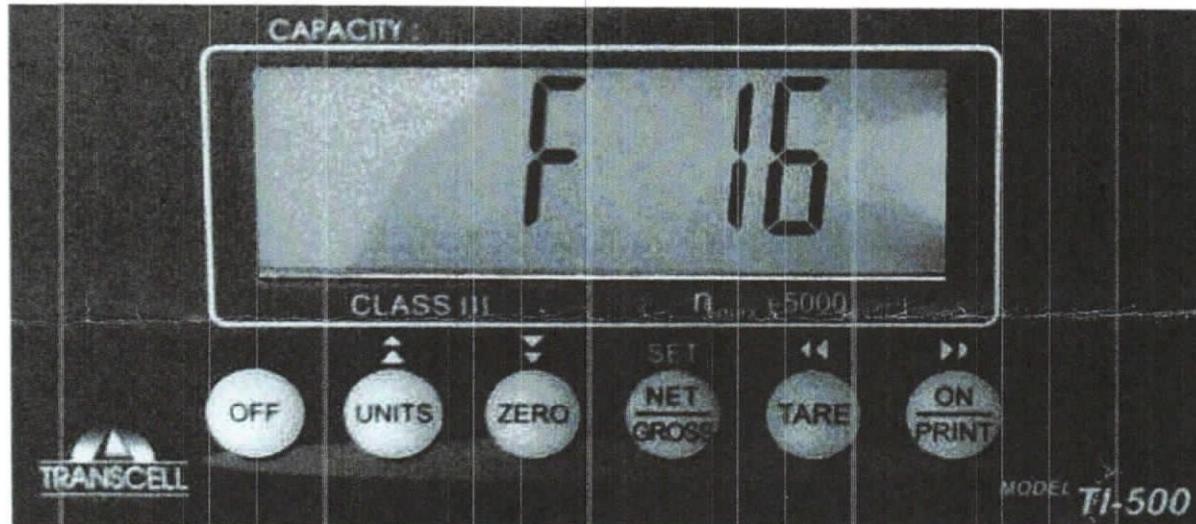
## Digital Weight Indicator Setup / Operation Manual





**To prevent damage, please do not hook up external power to TI-500 Scale Head IF batteries are in the TI500 Scale Head.**

**Run on one or the other BUT NOT BOTH.**



## How to zero your TI-500

1. Begin with the indicator turned off. Push and hold the NET/GROSS and ON/PRINT keys until the display reads F1. (This takes about 10 seconds)
2. Push the ON/PRINT key repeatedly until the display reads F16.
3. Push the ZERO key the weight that needs to be zeroed will be displayed. Push the ZERO key again and 0 will be displayed.
4. Push the NET/GROSS key F16 will be displayed.
5. turn the TI-500 indicator off. Turn it back on and the weight should now be zero

## INTRODUCTION

The TI-500 Digital Indicator is a general purpose, industrial grade weight indicator. One model is currently available, characterized by display type, enclosure type and power supply. Table 1 shows the TI-500 product details.

This model can readout up to 50,000 display divisions and can supply enough current for up to 4-350 load cells. All setup parameters may be entered via the front panel keys, including calibration.

If your Model TI-500 Digital Indicator is part of a complete floor scale or has already been installed for you, you may skip to the operating instructions. Prior to using the indicator, please read this chapter carefully and completely. Store the manual in a safe and convenient place so it will be available if you have questions concerning the operation of the scale.

MODEL	DISPLAY TYPE	ENCLOSURE TYPE	POWER SOURCE
TI-500	LCD	Mild Steel/ABS	AC adapter - 6 VDC, 300 mA or 4-AA batteries

TABLE 1: TI-500 Product Matrix

### FCC Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Subpart J of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Any precision instrument requires a suitable environment in which to operate as intended. Please review each of the following prior to installation:

### Electrical Power

The TI-500 indicators have been designed to operate from 4-AA alkaline/rechargeable batteries **OR** a 12Volt Cord. The unit ships with the appropriate power plug for its area of intended use.

To avoid electrical noise interference and/or stray AC electrical transients, try to operate the indicator from a circuit separate from any equipment containing inductive devices such as a contactor coil, solenoid, relay coil, or motor. Be sure to use shielded cables for the load cell connections (ground shieldwire at indicator) and run these cables away from your AC/DC power cables if possible.

In extreme cases, it may be necessary to install surge suppressors, line conditioners or even UPS (Uninterruptible Power Supplies) systems (not included).

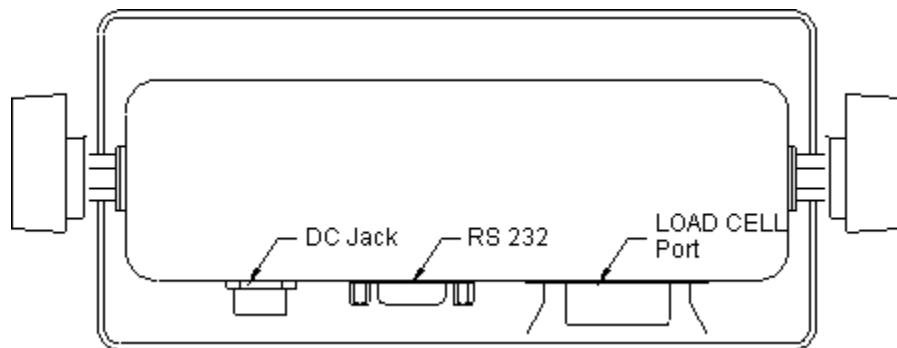
### Environment

- Avoid installing the indicator in areas of direct sunlight or high humidity!
- Avoid sudden temperature change – if this is unavoidable allow equipment to 'soak' at a constant temperature for at least three hours before use!
- Ensure that steady, clean AC power is available to the unit!

**Remember that the installer is ultimately responsible to assure that a particular installation will be and remain safe and operable under the specific conditions encountered.**

### **CONNECTIONS**

For the TI-500 model, the rear panel contains all connectors necessary to make the appropriate connections to the weigh platform, printer, remote display and power supply.



## OPERATION

### DISPLAY

This model utilizes a 6-digit LCD (Liquid Crystal Display). Table 3 summarizes the display annunciators.

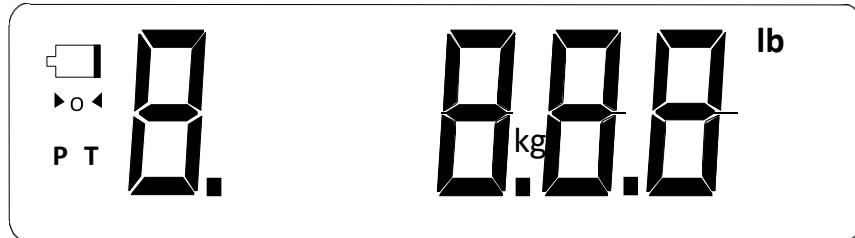


TABLE 3: TI-500 Annunciator Definitions

LCD Annunciator	MEANING
0	Better known as the "Center of Zero" annunciator, this light is active whenever the displayed weight is within $\pm$ 0.25 divisions of true zero.
N	Indicates that the indicator is displaying net weight.
G	Indicates that the indicator is displaying gross weight.
T	Indicates that a tare weight has been established in the system.
lb, kg	Indicates the unit of the displayed weight.
◀ ▶	This light is on whenever the scale is stable.
■	Starts flashing when the battery voltage is too low for normal operation. See Appendix C for more information.

## KEYBOARD

The keyboard is composed of five function keys shown below.



## FUNCTION KEYS

**Off** – These key switches off the indicator.

**Units** – These key toggles the indicator among the available weight units if enabled in the User ("A")menu. Available weight units include lb and kg.

**Zero** - This key sets the indicator to display zero provided the following conditions are met:

1. The indicator is displaying Gross weight.
2. The displayed weight is within the zero-reset range that is programmed in F4 of the Setup ("F")Menu.
3. The scale is not in motion.
4. The scale is not in overload (see Appendix D for error codes).

**Net/Gross** - These key toggles the indicator between Gross weight and Net weight only if a Tare hasbeen established.

**Tare** - This key is used to establish a Tare provided the following conditions are met:

1. The indicator is not at or below Gross zero.
2. The scale is not in motion.
3. The scale is not overloaded (see Appendix D for error codes).

**On/Print** - This key is used switch the indicator on; it can also send weight information out to theserial port provided the following conditions are met:

1. The scale is not in motion.
2. The scale is not in overload (see Appendix D for error codes).

## GENERAL SCALE OPERATION

### WEIGHING AN ITEM

1. Select the desired weighing unit by pressing the UNITS key until that unit is indicated on the display.
2. If necessary, press the ZERO key to obtain a weight reading of zero.
3. If weighing an item in a container, place the empty container on the scale's platter and, after allowing the weight indication to stabilize, press the TARE key. The display shows zero weight and turns the NET annunciator on
4. Place the object to be weighed on the scale's platter and allow the weight indication to stabilize. If the item weight exceeds the scale's weight capacity, it displays "oooooo".
5. Read the weight shown on the display. If you have established a tare, you may toggle between the gross weight and the net weight by pressing the NET/GROSS key.

### Overview

The indicator contains two main configuration menus:

The Setup ("F") menu, which configures the indicator to your weigh platform.

The User ("A") menu, which configures the serial communication port and enables some user options.

The Setup and User menus consist of several menu selections, each with its own sub-menu of selections or programming procedures. To configure the indicator, you must first enter the appropriate menu mode. Once there, four of the front panel keys become directional navigators to move around in the menus, and one key is used to save or SET the selections.

### ACCESSING THE MENUS

To access the Setup ("F") menu:

1. Power off the indicator.
2. Press and hold the "SET" (Net Gross) key while Holding the (On/Print) Key Until your display shows " F 1" to indicate that you are in Setup Menu mode.
3. Use the navigation keys shown in the below to move through the menu.
4. Unit Key Up, Zero Key Down Tare Key Left, Print Key Right



## To access the User (A) Menu:

1. Enter the StepUp (F) Menu.
2. Use the right or left directional keys shown above to move right or left in the Setup (F) menu until the indicator shows A1.

## MENU STRUCTURE

All menus consist of a top level (heading) and a secondary level. The top level contains the code (e.g., F1) for the parameter to be configured. The secondary level contains the selection list or allows access to a programming sequence.

Use the directional keys to move around in the Menu Structure shown below.

## Numeric Entry

1. To move to a new heading, use the TARE (left) or PRINT (right) key to move right or left in the Menu.
2. To move to the selection or programming level, press the ZERO (down) key once. The currently saved selection is shown.
3. To view the available selections for the current heading, use the TARE (left) or PRINT (right) key to move through the selection field.
4. To save a new selection, press the NET/GROSS (Set) key. To exit without saving, press the UNITS (up) key to return to the current heading.
5. Repeat Steps 2 through 5 until the Menu is programmed.
6. selection is shown.
7. To view the available selections for the current heading, use the TARE (left) or PRINT (right) key to move through the selection field.
8. To save a new selection, press the NET/GROSS (Set) key. To exit without saving, press the UNITS (up) key to return to the current heading.
9. Repeat Steps 2 through 5 until the Menu is programmed.

## SETUP MENU DESCRIPTIONS

This section provides more detailed descriptions of the selections found in the Setup Menu Chart. Factory-set defaults are shown in bold with a checkmark; (v).

**NOTES:** 1) Some selections are subject to local legal metrology regulations  
2) Not shown is F25 which allows you to exit the Setup Menu without powering off the unit

CODE/NAME	DESCRIPTION	SELECTION LIST
<b>F1</b> Graduations	Specifies number of full-scale graduations, i.e. capacity / division. Value should be consistent with legal regulations and environmental limits on the useful system resolution.	500 1,000 1,500 2,000 2,500 3,000 4,000 <b>5,000</b> 6,000 8,000 10,000 12,000 20,000 30,000 40,000 50,000
<b>F3</b> Zero Track Band	Selects the range within which the scale will automatically zero. Note that the scale must be in standstill to automatically zero. Selections are in display divisions (d).	0d <b>0.5d</b> 1d 3d 5d
<b>F4</b> Zero Range	Selects the range (expressed as a percentage of full scale capacity) within which the scale may be zeroed. Note that the indicator must be in standstill to zero the scale.	<b>100%</b> 1.9%
<b>F5</b> Motion Band	Sets the level at which motion is detected. If motion is not detected, the scale can process a Print or Zero command. Maximum value varies depending on local regulations. Expressed as scale divisions per second (d/s).	<b>1d</b> 3d 5d 10d
<b>F6</b> Digital Filter	Averages weight readings to produce higher stability. Choose the speed that works best for your application. "FAST" = Fast      "nnEd" = Medium      "SLo" = Slow	FAST <b>nnEd</b> SLo
<b>F7</b> Overload Limit	Selects the desired formula which determines the point at which the indicator shows overload. All selections are based on the primary unit selected in F8. "FS" = Full scale capacity.	FS <b>FS + 2%FS +</b> 1d FS + 9d
<b>F8</b> Calib. Unit	Selects the primary base unit to be used in the calibration process. Also the default unit for normal operation. "1" = primary unit is lb.      "2" = primary unit is in kg.	<b>1</b> 2
<b>F9</b> Display Divisions	Determines the desired weight increments. Value should be consistent with legal requirements.	<b>1</b> 2 5
<b>F10</b> Decimal Pt.	Determines location of the decimal point.	0      0.0 0.00      0.000 0.0000      00
<b>F16</b> Zero Calibration	Places indicator into the zero calibration routine. Scrolling down with the ZERO key one level begins the procedure.	Press <b>ZERO</b> key to begin sequence
<b>F17</b> Span Calibration	Places indicator into the span calibration routine. Scrolling down with the ZERO key one level begins the procedure.	Press <b>ZERO</b> key to begin sequence

<b>F18</b> View Calibration	Actuates the function that allows you to view both the zero and span calibration value. The values displayed in this function are valid only after Calibration (F16 & F17) has been successfully completed. Scrolling down with the ZERO key one level begins the procedure. Multi-point cal	Press <b>ZERO</b> key to begin sequence
<b>F19</b> Key-in Zero	Allows you to key-in known zero calibration value in case of memory loss in the field. Scrolling down with the ZERO key one level begins the procedure.	Press <b>ZERO</b> key to begin sequence
<b>F20</b> Key-in Span	Allows you to key-in a known span calibration value in case of memory loss in the field. Scrolling down with the ZERO key one level begins the procedure.	Press <b>ZERO</b> key to begin sequence
<b>F21</b> Factory Reset	This sub-menu will reset all parameters in the "F" and "A" menu to the default settings. USE WITH CAUTION!	Press the <b>ZERO</b> key twice to execute

## CALIBRATION

### CALIBRATION OVERVIEW

If your indicator was shipped as a complete scale, then calibration is not necessary. Please check with your installer or supplier if you are unsure. Transcell recommends having your weighing equipment checked by a qualified scale technician at least once a year depending on its intended use and working

The indicator requires two types of calibration: zero and span. Zero calibration (F16) requires the scale to be empty (nothing on scale) and the span calibration (F17) requires known test weights. After a successful calibration, you should record all calibration values in Table 2 using the F18 View Calibration procedure.

In the unlikely event that any calibration value is lost, the setup menu makes provisions for re-entering these values via F19 and F20; thus eliminating the need for re-calibration with test weights.

**NOTE:** This section assumes that the indicator is in Setup ("F") Menu mode. If the indicator is not in Setup Menu mode, refer to previous section for instructions.

#### ZERO CALIBRATION (F16)

1. While in the Setup mode, scroll to "F 16", then scroll down once using the ZERO key to enter zero calibration menu. The display will momentarily show "C 0" followed by a value. This value is the internal A/D count and can prove useful when trying to troubleshoot setup problems.
2. After making sure that there are no test weights on the platform, press the ZERO key again to zero out the displayed value.
3. Press the NET/GROSS key to save the zero-point value. The display will show "EndC0" momentarily, and then revert back up to F16. At this time, proceed to the F17 span calibration to complete indicator calibration.

#### SPAN CALIBRATION (F17)

1. While in the Setup mode, scroll to "F 17", then scroll down once using the ZERO key to enter span calibration menu. The display will momentarily show "C 1" for the first span calibration point, followed by a value with one flashing digit. This value will be zero with the Decimal Point parameter selected in F10.
2. Place the first test weight on the weighing mechanism.
3. Use the four directional keys to adjust the displayed value to the actual test weight value. Increase the flashing digit by pressing the UNITS key. Decrease the flashing digit by pressing the ZERO key. Pressing the PRINT key or the TARE key will change the position of the flashing digit.
4. After entering the exact value, press the NET/GROSS key to save the value. If the C1 calibration was successful, the display will show "EndC1" momentarily, and then revert back up to F17.
5. At this time, it is suggested that the calibration values be recorded for future use (see next section).

If the calibration was *not* successful, one of the error messages below will appear. Take the indicated action to correct the problem, and then perform a new calibration.

**"Err0"** - The calibration test weight or the keyed-in weight is larger than the full capacity of the scale. Change the calibration test weight or check the input data.

**"Err1"** - The calibration test weight or the keyed-in weight is smaller than 1% of the full capacity of the scale. Change the calibration test weight or check the input data.

**"Err2"** - There is not enough signal from the load cells to establish a proper calibration. Most common causes include incorrect load cell wiring, a mechanical obstruction, or a faulty load cell.

## **VIEW CALIBRATION VALUES (F18)**

### **KEY-IN ZERO CALIBRATION VALUE (F19)**

**Note:** This procedure is intended for emergency use only in the case of non-volatile memory loss. A valid zero calibration value, obtained from a successful F16 calibration procedure, must be used.

1. While in the Setup mode, scroll to "F 19", and then scroll down once using the ZERO key. The display will momentarily show " CAL 0", followed by a value of zero.
2. Use the four directional keys to enter in the actual zero calibration value.
3. After entering the exact value, press the NET/GROSS key to save the value. The display will show " E CAL 0" momentarily, and then revert back up to F19.

### **KEY-IN SPAN CALIBRATION VALUE (F20)**

**Note:** This procedure is intended for emergency use only in the case of non-volatile memory loss. Valid span calibration values, obtained from a successful F17 calibration procedure, must be used.

1. While in the Setup mode, scroll to "F 20", and then scroll down once using the ZERO key. The display will momentarily show "CAL 1", followed by a flashing zero.
2. Use the four directional keys to enter in the actual span calibration value!
3. After setting the exact value, press the NET/GROSS key to save the value.
4. If the entered values are entered successfully, the display will show "E CAL 1" momentarily  
**LEGAL FOR TRADE SEALING**

## DISPLAYED ERROR CODES

CODE	MODE	MEANING / POSSIBLE SOLUTION
██████████	Normal OperatingMode	Gross Overload. A weight greater than the rated capacity has been applied to the scale. Remove the weight from the platter or try recalibrating the scale. Otherwise, check for a bad load cell connection or possible load cell damage due to overloading.
Err 0	Span Calibration Mode (F17)	Keyed-in weight value is larger than full-scale capacity. Use a smaller testweight or check keyed-in value.
Err 1	Span Calibration Mode (F17)	Keyed-in weight value is less than 1% of full-scale capacity. Use a largertest weight or check keyed-in value.
Err 2	Span Calibration Mode (F17)	There is not enough load cell signal to produce the internal counts necessary to properly calibrate the scale. First check all load connections. Use F16 mode to view internal counts.
Err 3	All Modes	Non-volatile memory read error. One or more setup parameters have been lost.
Err 4	All Modes	Non-volatile memory write error. Indicator needs service.
Err 9	Normal OperatingMode	Span calibration value has been lost. Re-calibrate the scale.
Slowly Flashing	Normal OperatingMode	Indicates that the battery voltage is becoming too low for normal operation. Batteries should be replaced soon.
Quickly Flashing	Normal OperatingMode	Indicates that the battery voltage has become too low for normal operation. Batteries should be replaced now.
Flashes "bAtt"	Normal OperatingMode	Indicates that the battery voltage has become too low for normal operation; <u>indicator will shut off automatically after 20 seconds.</u> Batteries should be replaced now.

## EXITING THE MENUS

Exit any configuration menu by simply switching off the indicator or pressing the ZERO key while in F25.

## USER MENU PROCEDURES

This section provides instructions for all of the User Menu procedures.ID

### Number Entry (A8)

1. While in the User Menu mode, scroll to "A 8", then scroll down once using the ZERO key to enter the ID Number menu.
2. The display will momentarily show "ID NO", followed by a value with one flashing digit. This value will be the current ID number value.
3. Use the four directional keys (shown below) to adjust the displayed value to the actual ID Number value. Increase the flashing digit by pressing the UNITS key. Decrease the flashing digit by pressing the ZERO key. Pressing the PRINT key or the TARE key will change the position of the flashing digit.
4. After setting the exact value, press the NET/GROSS key to save the ID Number value. The display will show "SET" momentarily, and then revert back up to A8.



### LF (Line Feeds) Number Entry (A9)

2. While in the User Menu mode, scroll to "A 9", and then scroll down once using the ZERO key to enter the Line Feeds menu.
3. The display will momentarily show "LF", followed by the current line feeds value.
4. Use the four directional keys shown in Figure 11 to adjust the displayed value to the actual line feeds value. Increase the flashing digit by pressing the UNITS key. Decrease the flashing digit by pressing the ZERO key. Pressing the PRINT key or the TARE key will change the position of the flashing digit.
5. After setting the exact value, press the NET/GROSS key to save the line feeds value. The display will show "SET" momentarily, and then revert back up to A9.

CODE/NAME		SELECTION LIST
<b>A1</b> Baud Rate	Selects the baud rate for data transmission through the serial port.	1200      2400 4800      9600 19200
<b>A2</b> Data Bits and Parity	Selects the number of data bits and parity of serial transmission. "8n" = 8 data bits with no parity bit and one stop bit "7O" = 7 data bits with odd parity bit and one stop bit "7E" = 7 data bits with even parity bit and one stop bit "7n" = 7 data bits with no parity bit and two stop bits	8n 7O 7E 7n
<b>A3</b> Serial PortMode	Selects when data will be sent out of the serial port to a printer or computer: "C" = Continuous mode; send data continuously "d" = Demand mode; send data when a PRINT command is issued from the printer, computer, or indicator.	C d
<b>A4</b> Display Check	Actuates the function that illuminates all digit segments, decimal points, and LCD annunciators in a test sequence. Pressing the <b>ZERO</b> key to scroll down one level begins the test sequence.	Press <b>ZERO</b> key to begin sequence
<b>A5</b> Disable the lb/kg Key	Allows the lb/kg key to be disabled so that an operator cannot accidentally press the key and change the displayed units.  "0" = Disable the lb/kg key                    "1" = Enable the lb/kg key	0 1
<b>A6</b> Serial PortMode	Selects the mode of the RS-232 serial port: Refer to Appendix B for more information. "0" = Full Duplex Mode "1" = Print Ticket Mode	0 1
<b>A7</b> ID No. Enable	Allows the ID number to be disabled in the Print Ticket mode. Valid only when <b>A6</b> is set to "1". "0" = Disable the ID No.                    "1" = Enable the ID No.	0 1
<b>A8</b> ID No. Entry	Actuates the function that allows entry of a new ID No. Valid only when <b>A6</b> is set to "1". Pressing the <b>ZERO</b> key to scroll down one level begins the sequence.	0 – 199999 <b>123456</b>
<b>A9</b> No. of LineFeeds	Actuates the function that allows entry of the desired number of line feeds to be printed in Print Ticket Mode. Valid only when <b>A6</b> is set to "1". Pressing the <b>ZERO</b> key to scroll down one level begins the sequence.	0 - 99 <b>8</b>
<b>A10</b> Backlight Enable	Allows you to permanently disable the backlight feature for outdoor use. "0" = Always OFF    "1" = Always ON                    "2" = automatic	0    1    2
<b>A12</b> Print Header	Tells MP-20 printer to print the header information. Valid only when <b>A6</b> is set to "1". "0" = Do NOT Print Header                    "1" = Print Header	0 1
<b>A13</b> Auto Power Off Period	Selects the auto off time period in minutes: "Off" = Disabled (Always ON)	Off 3 10 30                    5 20

## CONNECTING THE WEIGH PLATFORM

The TI-500 ships with a 15 ft shielded load cell cable for connection to weigh platform's load cell(s) or junction box.

1. Plug the cable's 14-pin parallel interface connector into the load cell port on the rear panel of the indicator.
2. Wire the bare wires and shield to the weigh platform's load cell(s) or junction box using the color codes shown below.

### 4-wire cable

<u>Color</u>	<u>Wire Name</u>
Red	+ Excitation
Black	- Excitation
Green	+ Signal
White	- Signal

### Optional 6-wire cable

<u>Color</u>	<u>Wire Name</u>
Red	+Excitation
Black	-Excitation
Green	+Signal
Yellow	- Signal
Orange	+ Sense
Brown	- Sense

## CONNECTING THE SERIAL, I/O DEVICE

The TI-500 model comes standard with one full duplex RS-232 serial port, designed for connection to a computer or a serial printer. The same port may be also used as a simplex, RS-232 port designed for connection to a remote display.

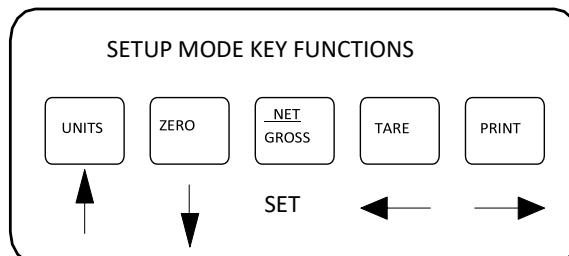
### DSUB9 Connector

<u>Pin No.</u>	<u>Wire Name</u>
2	RXD
3	TXD
5	Ground

## CONNECTING THE POWER SUPPLY

The TI-500 indicator ships standard with an external AC adapter.

1. Simply plug the AC adapter into the indicator's DC Power Jack first, and then plug into a standard wall outlet. **Make sure that the AC voltage appearing at the wall outlet matches the input voltage marked on the AC adapter.**



**Frequent Q/A:**

Our Cake Feeders are not painted on the inside.

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 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!**

