

# 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 environment.

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 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 test weight on the weighing platform.
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 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 (damaged) load cell.

## VIEW CALIBRATION VALUES (F18)

**Note:** The values displayed in this procedure are valid only after a successful calibration has been performed using F16 and F17.

1. While in the Setup mode, scroll to **"F 18"**, then scroll down once using the ZERO key to enter View calibration menu.
2. The display will show the information listed in Table 2. The code will display briefly followed by the value. It is recommended that you record each value in the table below. Press any key to continue down the list. At the completion of the list, the indicator reverts back up to F18.

ZERO CALIBRATION VALUE (C0)	SPAN CALIBRATION VALUE (C1)

**Table 2: Calibration Value Table**

## 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. A valid span calibration value, 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 indicator will prompt you to enter the CAL 1 span calibration data from Table 2.
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.