Avery Weigh-Tronix

LED version ^

LCD version >

WI-125 SST Indicator Service Manual

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Specifications

Dimensions:	8.25" x 6.25" x 4" (210mm x 159mm x 102mm) without mounting bracket 10" x 9" x 5.5" (254mm x 229mm x 140mm) with mounting bracket
Power:	115 volts AC @ 50 mA / 230 volts AC @ 25 mA, 50-60 Hz single phase Optional - 12 VDC (LCD version only)
Display:	8 digits, 7-segment LCD or LED, 0.6 inch high with annunciators and backlighting (LCD only)
Display Averaging:	1 to 10 display periods
Display Rate:	One, two or five times per second
Agencies:	NIST Handbook 44, Class III, IIIL, 10,000 divisions. LCD & LED - Certificate of Conformance #92-167.A4 Consumer and Corporate Affairs, Canada. LCD & LED Approval #AM4868 UL/CUL CSA FCC Class A
Accuracy :	Span: ±5.0 ppm/C Zero: ±.066 uV/C (-10 to 40°C) Span: ±10 ppm/C Zero: ±0.13 uV/C (-30 to 60°C)
Linearity:	±0.005% of capacity, maximum
Repeatability:	±0.005% of capacity, maximum
Hysteresis:	0.005% of capacity, maximum
Weigh bar drive capacity:	Up to eight 350 ohm weigh bars for LCD version. Up to twelve 350 ohm weigh bars for LED version.
Environment:	-10 to 40°C (14 to 104°F) for HB-44 specs 10 to 90% relative humidity
Internal Resolution:	810,000 at 3 mV/V. 1 mV/V = 270,000 counts
A to D conversion rate:	30 times per second (60/second for LED version)
Analog Range:	-0.14 to +3.5 mV/V
Capacity:	0.1 to 999999, programmable to any number between these limits.
Divisions:	.0001 to 20000, programmable to any division size between these limits.
Push Button Zero Range:	0 to ±100% of capacity; programmable independent positive and negative limits; unit will not allow zeroing beyond capacity.
Tare:	The unit may be configured to have pushbutton tare and numeric tare. Tares may tare only positive gross weights up to the capacity of the unit.
Motion Detection Window:	Programmable from 0 to 999999 divisions, decimal entries are accepted.
Automatic Zero Tracking:	Window: Programmable from 0 to 999999 divisions, decimal entries are accepted. Net Mode Tracking: May be enabled or disabled Rate: 0.1 division per second Starting Delay: 2 seconds
Linearity Adjustment:	Second order correction provides smooth curve fit through three points--zero, linearity, span.

VIBRATION COMPENSATION

Analog Low Pass Filter:	Two section with .10 second time constant for low power analog and .06 second time constant for standard analog.
Software Low Pass Filter:	One section with .05 second time constant.

Introduction

This manual is valid for Rev. F or higher software.

This service manual will help you prepare your WI-125SST indicator for use. This manual covers the following:

- Introduction
- Operational Modes
- Sealing the Indicator
- Keyboard
- Configuration Mode

Operation Modes

The WI-125SST operates in three modes:

- operations mode
- test mode
- configuration mode

Operations Mode

Operations mode contains all normal weighing operations. In this mode you can view or set the following parameters if the unit is so configured:

- pushbutton tare
- quick keypad tare entry
- one to ten tare registers (numbered 0-9)
- identification number
- time
- date
- backlight

Any combination of these items can be secured behind a security code. Any items secured by the code number can be viewed but not changed. Operations mode is fully explained in the *User's Manual*.

Test Mode

Use this mode to perform tests on the WI-125SST. The test mode is covered in the *User's Manual*.

Configuration Mode

Use this mode to setup options and program the operation of the scale and indicator. Configuration is explained fully in the *Configuration Mode* section of this manual.

Sealing the Indicator

To seal or unseal an LED version indicator, push the button that is mounted inside the rear panel. The only way to observe the security setting of the switch is to access the configuration menu. It will then tell you "sealed" or "unsealed" before allowing you into the configuration menu.

The WI-125SST can be sealed so no configuration items can be changed in the configuration menu. Seal an LCD version by placing switch S1-1, located inside the unit near the bottom corner of the PC board (see Figure 1), in the OFF position. Unseal the unit by placing S1-1 in the ON position. For both LCD and LED versions of the indicator, while the indicator is powered, the state of the switch can be changed at any time except while in the configuration menu. If you change the state of the switch then, it WILL NOT take affect until you exit the configuration menu.

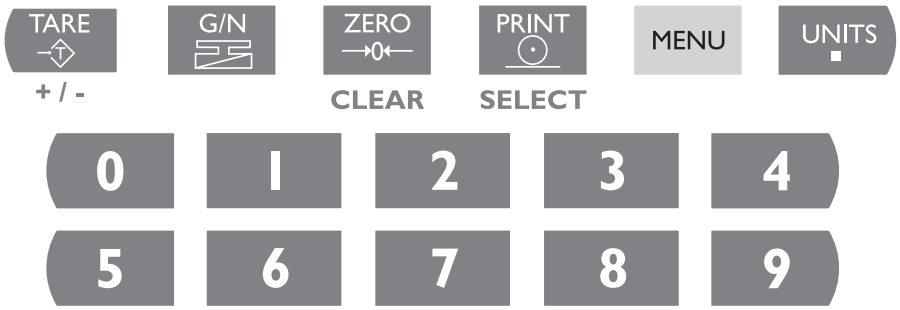
Figure 1

Keyboard

The keyboard consists of 16 keys. Five keys, or buttons, provide all the basic weighing functions:

- Tare
- G/N
- Zero
- Print
- Units

The other keys are used to access the menus for purposes of retrieving information, testing the indicator, and configuring. The keyboard is shown below:



Key Functions

Enters a pushbutton tare in gross/net operation. During data entry this key is used to toggle between positive and negative values. Used to enter a dash (—) in ID numbers.

Accesses the gross weighing mode from any other function and activates the net weighing mode if a tare is active.

Zeros the scale in gross or net weigh mode. This button also clears keyed in digits on the display before they are accepted.

Sends a print command and is used to select menu items.

Used to access menus and move among choices in a menu.

Changes the unit of measure during operations mode. Inserts a decimal point (.) when keying in values.

Error Messages

The following are displays you may see if problems occur or if invalid operations are attempted with your WI-125:

Display	Description
- - - - - -	Overrange weight.
_ _ _ _ _ _	Underrange weight.
- - - - - -	Recovering from lock-up or out of range condition.
Loc' up	A-D converter is not functioning.
Flashing *	Corrupted data in the reset menus. See the *Reset Menu* section later in this manual. (* = RESET, SETUP, or CAL)
Sealed	Displayed while a key is pressed when attempting to modify a sealed selection without edit privileges.
BuSy	Device on serial port is not ready to receive data.
SEcured	User menu item is protected from changes by security code number.

Configuration Mode

Entering the Configuration Mode

This section of the manual explains how to view and set up parameters in the configuration mode. Follow the configuration menu and instructions in Figure 2 to set up the WI-125SST indicator to suit your specific needs. Below are explanations for each section of the menu. The non-bold heading for each section is the pathway you follow on the configuration menu to get to the parameter or parameter options shown in bold text.

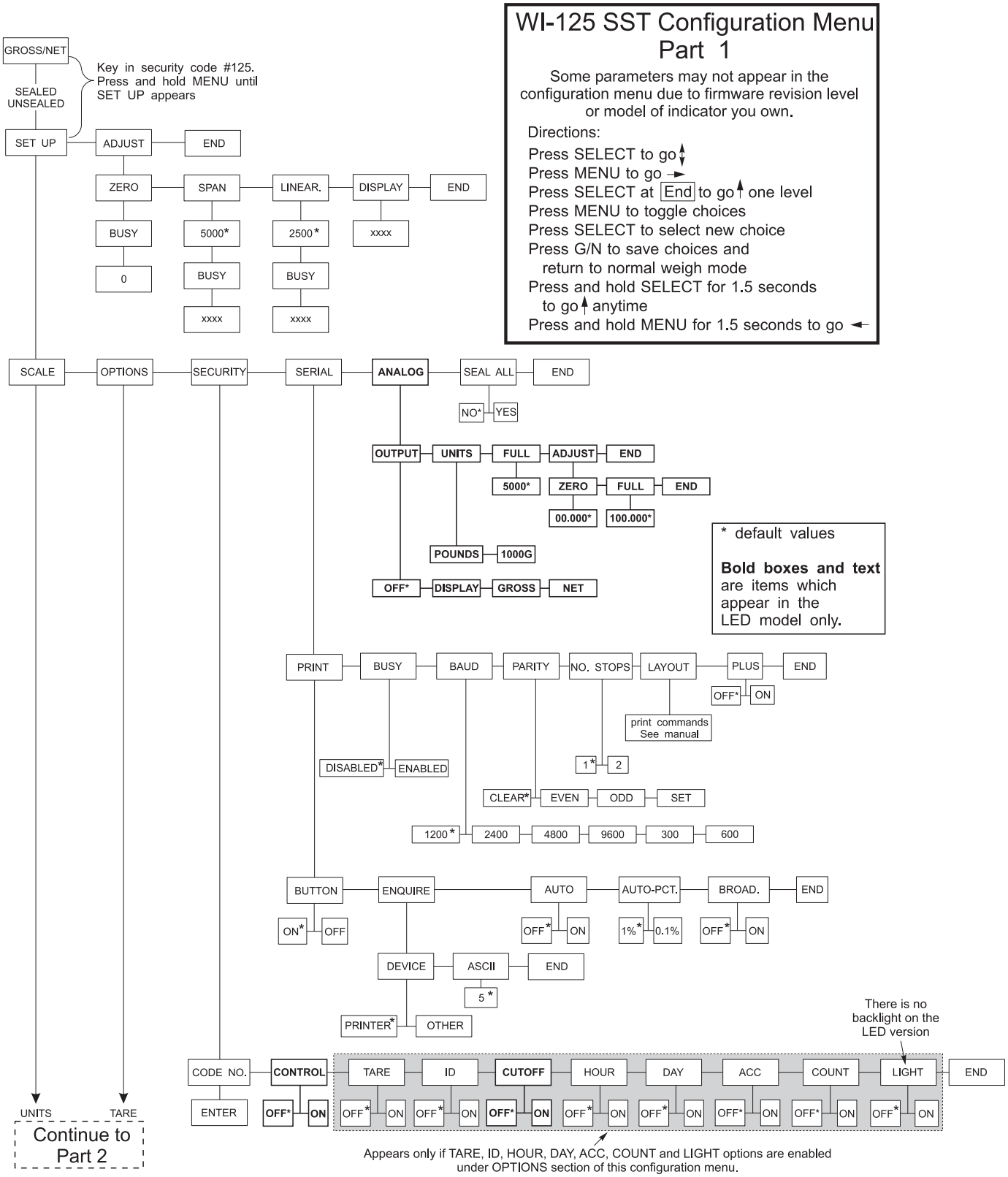
1. While in Gross/Net Weighing Mode, enter the security code number 125.
2. With the number *"125"* displayed, press and hold the **MENU** key until *SET UP* is displayed. **NOTE: DO NOT** let go of the **MENU** key until *SET UP* is displayed or else *TARE* will be displayed. If this occurs, press the **G/N** key to return to Weighing Mode and begin again at Step 1.
3. You are now in the Configuration Menu and may calibrate your system. To move around within the Configuration Menu follow the instructions printed on the following two pages. Details regarding specific parameters are provided on the following pages.

Sidestepping Security Code Entry to Configuration

On an LED version indicator, push the button that is mounted inside the rear panel.

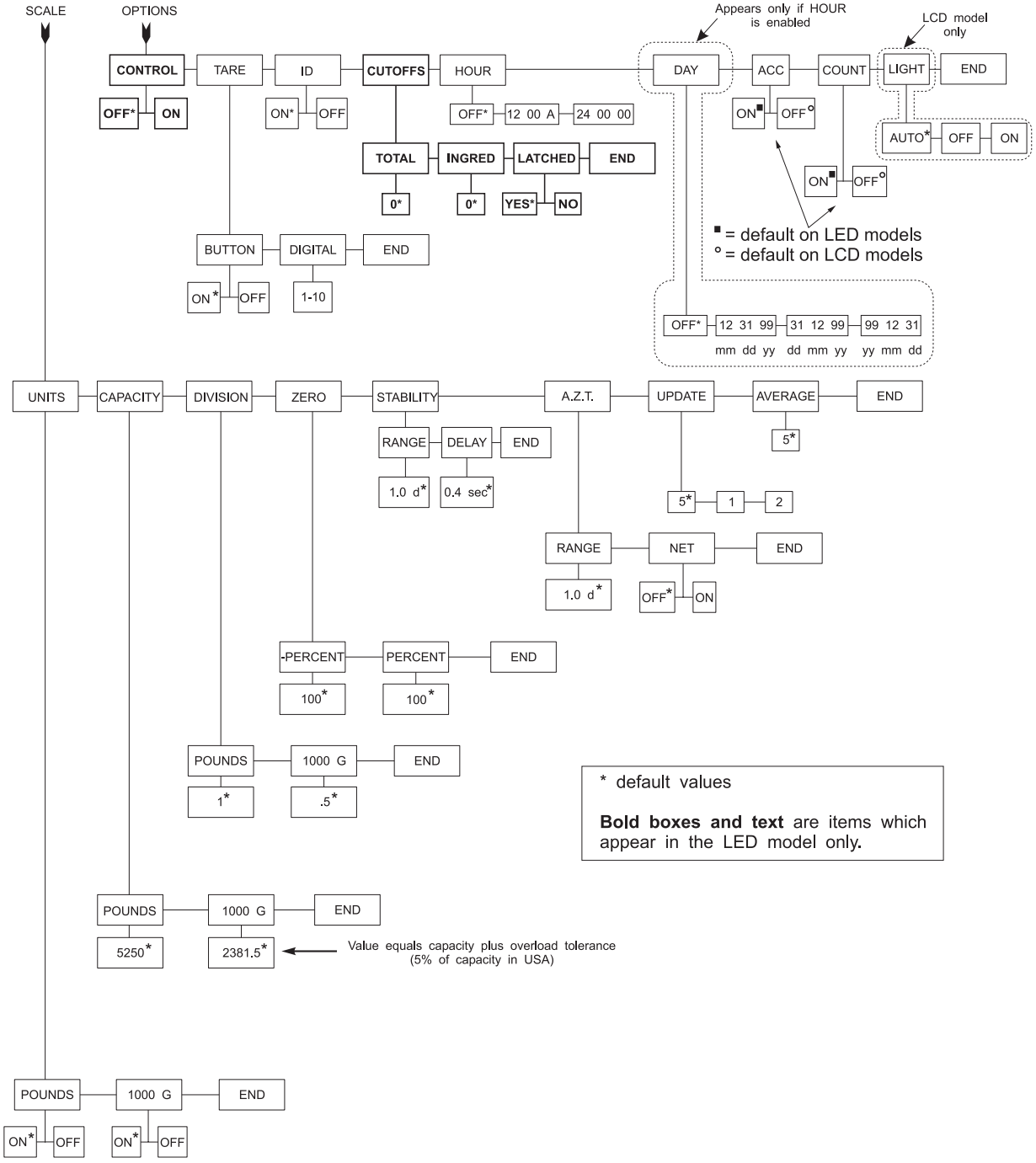
In case you forget the security code or the security code is altered without your knowledge, access the configuration menu as follows: First, flip switch S1-1 OFF (or into the sealed position). Next, enter the default code number, 125. Get into the configuration menu as instructed in the key to Figure 2. When ***CODE NO.*** is displayed in the menu, flip switch S1-1 from OFF to the ON position. Understand that opening the indicator to access the switch unseals the indicator! Then enter a new code number—twice, as the display prompts. Now you have complete access to the configuration menu.

Figure 2
Configuration Menu



Continued from Part 1

Configuration Menu Part 2



Setup, Scale, Units-
Pounds, 1000g

Under each unit of measure you have the option of selecting *ON* or *OFF.* Choosing the *OFF* option under a unit of measure disables that unit of measure. If a unit is disabled, it will not appear in the configuration menu under *CAPACITY* or *DIVISION* nor will you be able to choose it during weighing procedures.

Setup, Scale, Units, Capacity-
Pounds, 1000g

Dashes across the top of the display indicate overload at 105% of capacity as a USA standard.

This menu section lets you set the scale capacity for those units of measure enabled under *UNITS*. This value equals the capacity plus the overload tolerance.

Setup, Scale, Units, Capacity, Division-
Pounds, 1000g

This option lets you set the division size for the units of measure enabled under *UNITS*.

One feature not readily apparent is that the number of displayed leading zeros can be specified. For example; for 10 pound divisions, if you want 5 zeros displayed when no weight is on the scale, key in 00010 for a division size. The display will read 00000 when the scale is empty. If you want two zeros displayed when the scale is empty, key in a division size of 10.

Setup, Scale, Units, Capacity, Division, Zero-
-Percent, Percent

With this option you can set the plus and minus percent of capacity the indicator can zero. For example, if the capacity of the scale is 10000 lb and the zero range is ±2%, key in 2 for both the positive and negative ranges. You may key in decimal values.

Setup, Scale, Units, Capacity, Division, Zero, Stability-
Range, Delay

Range - This option lets you set the size of the motion detection window in divisions. You may enter decimal values less than one or up to 999999 which turns off the motion detection.

Delay - Use this to specify the number of seconds during which the weight must be within range (described above) before a no-motion condition is displayed. Default value is 0.4 seconds.

Setup, Scale, Units, Capacity, Division, Zero, Stability, A.Z.T.-
Range, Net

Range - With this option you can set the ± automatic zero tracking window in scale divisions. To turn off AZT, enter a range of 0.

Net - If an AZT range is set, *NET* will appear in the menu. This option lets you choose to enable AZT during net weighing operations (ON) or disable it (OFF). The gross weight must be zero for AZT to work in net mode.

Setup, Scale, Units, Capacity, Division, Zero, Stability, A.Z.T., Update-
5, 1, 2

Choose the rate at which your display updates information, 1, 2, or 5 times per second. Five is the default value.

Setup, Scale, Units, Capacity, Division, Zero, Stability, A.Z.T., Update-
Average

This option allows you to choose the number of display update period(s) over which the data are internally averaged prior to being displayed. Any number between 1 and 10 may be entered. Five is the default value.

Setup, Scale, Options-
Control (Only on LED model)

Control should be OFF when using the RCU with start and stop buttons.

Choosing ON allows you to "Start" the cutoff outputs from the front panel. OFF disables this function. If cutoff control is disabled, CONTROL will not appear in the SECURITY section of this menu or in the Operations menu. Note that for CONTROL to appear in the Operations Menu, the number of outputs selected under CUTOFFS in the OPTIONS section of this menu must be a nonzero value.

Setup, Scale, Options, Control, Tare-
Button, Digital

Button - Choosing *ON* enables the pushbutton tare. Choosing *OFF* disables the pushbutton tare.

Digital - Select the number of tare registers you want by keying in a number. You can choose 0 through 9 tare registers.

If pushbutton tare is disabled and 0 tare registers are selected, *TARE* will not appear in the User's menu or in the *SECURITY* section of this menu. (See the *User's Manual*)

Setup, Scale, Options, Control, Tare-
ID

Choosing *ON* enables the ID number. *OFF* disables the ID number. If ID is disabled, *ID* will not appear in User's menu or the *SECURITY* section of this menu. (See the *User's Manual*)

Setup, Scale, Options, Control, Tare, ID-
Cutoffs (Only on LED model)

Total— This option lets you choose the number of cutoffs you want by keying in a number. If you choose 0 (zero) cutoffs, *CUTOFFS* will not appear in the *SECURITY* section of this menu or in the Operations Menu. Also, in order for *CONTROL* to appear in the Operations Menu, a nonzero number must be entered.

Ingred.— This option lets you choose the number of cutoffs you wish to be “ingredient cutoffs” by keying in a number. If you pick 0, *INGRED.* will not appear in the menu and the cutoffs you have will be “setpoint cutoffs.” Cutoffs occur according to weight. The lightest cutoffs occur first,

WI-125 LED Input/Outputs

TB4-6	+Signal	Weigh Bar input
TB4-5	-Signal	
TB4-4	+Sense	
TB4-3	-Sense	
TB4-2	+Exc.	
TB4-1	-Exc.	
TB8-5	DSR/CTS	RS-232 output
TB8-4	DTR	
TB8-3	Receive	
TB8-2	Transmit	
TB8-1	Ground	
TB13-1	Print	Remote button input
TB13-2	Zero	
TB13-3	Tare	
TB13-4	Ground	
TB15-1	Cutoff 0	Cutoff output (option card)
TB15-2	Cutoff 1	
TB15-3	Cutoff2	
TB15-4	Cutoff 3	
TB15-5	Cutoff 4	
TB15-6	Cutoff 5	
TB15-7	Cutoff 6	
TB15-8	Cutoff 7	
TB15-9	Catch Diodes	
TB15-10	Ground	
TB15-11	+12 V	
TB19-1	Voltage out	Analog output (option card)
TB19-2	Current out	
TB19-3	Current Rtn	
TB19-4	Voltage Rtn3	

If you forget your personal code number, see Sidestepping Security Code Entry *section of this manual.*

followed by the heavier ones. See *Entering Cutoff Values Through the Front Panel* in the *User's Manual*. Setting to INGRED allows entry of actual weight vs. having to make each ingredient add on to the last ingredient

Latched— Selecting "yes" means that once a cutoff output is turned off, it is to stay off until control is halted and then started again. Further, once all cutoffs are off, the control is automatically halted. Selecting "no" disables this behavior. *LATCHED* is offered only if *CONTROL* is enabled under *OPTIONS* and the total number of cutoffs is not zero. Default = yes.

Setup, Scale, Options, Control, Tare, ID, Cutoffs-
Hour **(requires optional circuitry)**

With this option you can choose to have the clock disabled (OFF) or the mode of clock you want. You can choose the 12 hour clock display or the 24 hour clock display. If the clock is disabled, HOUR will not appear in the User's menu or in the *SECURITY* section of this menu. (See the *User's Manual*) DAY will not appear in the OPTIONS or SECURITY section of this menu.

Setup, Scale, Options, Control, Tare, ID, Cutoffs, Hour-
Day **(requires optional circuitry)**

This option lets you choose to disable the calendar (OFF) or choose the mode of calendar display you want. You can choose to display the days (**dd**), months (**mm**), and year (**yy**) as **mm dd yy**, or **dd mm yy**, or **yy mm dd**. If DAY is disabled, DAY will not appear in the User's menu or in the *SECURITY* section of this menu. (See the *User's Manual*)

Setup, Scale, Options, Control, Tare, ID, Cutoffs, Hour, Day-
Acc

Choose to turn the accumulator ON or OFF.

LCD version:
OFF*- Backlight does not appear in Security or User manual. (See* User's Manual)

ON*- Backlight maybe enabled or disabled in User Menu. (See* User's Manual)

Auto*- Light in room is sensed driving the backlight brighter in dark rooms and turning off in bright rooms. Backlight may be enabled or disabled in User menu. (See* User's Manual)

Setup, Scale, Options, Control, Tare, ID, Cutoffs, Hour, Day, Acc-
Count

Choose to turn the Count ON or OFF. Count is the number of times you have added to the accumulator.

Setup, Scale, Options, Control, Tare, ID, Cutoffs, Hour, Day, Acc, Count-
Light

For LCD version see note at left. Not applicable for LED version.

Setup, Scale, Options, Security-
Code No.

This option lets you change the configuration access code number to a personalized security code number.

Setup, Scale, Options, Security, Code No.-
Control, Tare, ID, Cutoffs, Hour, Acc, Count, Day, Light

Under each item you have the option of choosing OFF to leave the option unlocked or choosing ON to lock the option behind the security code. If ON is chosen you can view but not change that parameter value in the operations menu (unless the security code is entered). (Control, Cutoffs, Acc, Count are only on the LED model) (Light is only on the LCD model.)

Setup, Scale, Options, Security, Serial, Print-
Button

Choosing OFF disables the front panel **PRINT** button. Choosing ON enables the front panel **PRINT** button.

Setup, Scale, Options, Security, Serial, Print, Button-
Enquire

This sub-menu allows you to choose a printer or other device which will send an enquire code to the indicator. You may select the ASCII code number you wish to recognize as the enquire code number. ASCII decimal 05 is the default value. If a device sends the enquire code number to the indicator, the indicator will recognize the value, then transmit weight data. If a computer sends the enquire code number, the Button, Auto and Broad. selections are overridden and will not function.

Setup, Scale, Options, Security, Serial, Print, Button, Enquire-
Auto

With auto print enabled the indicator automatically transmits weight data when the scale weight stabilizes at greater than 1% of capacity. To print again, scale weight must fall below 1% of capacity and stabilize above 1% of capacity again. OFF disables the auto print feature. ON enables the auto print.

Setup, Scale, Options, Security, Serial, Print, Button, Enquire, Auto-
Auto-Pct.

Auto-Pct stands for auto percent. This allows you to change the auto print reset weight at 0.1% rather than the default of 1%.

Setup, Scale, Options, Security, Serial, Print, Button, Enquire, Auto-
Broad.

Broad. stands for broadcast. If you enable (ON) broadcast, weight data is transmitted at the display rate. Choosing OFF disables the broadcast. If broadcast is enabled, the Button, Enquire, and Auto selections are overridden and will not function.

Setup, Scale, Options, Security, Serial, Print, Busy-
Disabled, Enabled

Disables or enables the hardware ready/busy (CTS/DTR) line. If your printer does not have a ready/busy (CTS/DTR) line, this parameter must be set to disabled. If your printer has a ready/busy (CTS/DTR) line, you can enable this parameter so the indicator will know if the printer is ready or busy (Clear To Send/Data Terminal Ready).

Setup, Scale, Options, Security, Serial, Print, Busy, Baud-
1200, 2400, 4800, 9600, 300, 600

This option lets you choose the baud rate for your printer or peripheral device.

Setup, Scale, Options, Security, Serial, Print, Busy, Baud, Parity-
Clear, Even, Odd, Set

This option lets you choose parity as even, odd, clear (logic 0 or space), or set (logic 1 or mark).

	Data Bits	Stop Bits	Parity
Set (Mark)	7	2	none
Clear (Space)	8	1	none
Mark	7	2	none
Space	8	1	none
Odd	7	1 or 2	odd
Even	7	1 or 2	even

Setup, Scale, Options, Security, Serial, Print, Busy, Baud, Parity, No. Stops-
1, 2

With this option you can set the number of stop bits as 1 or 2.

Layout (Printing)

Setup, Scale, Options, Security, Serial, Print, Busy, Baud, No. Stops-
Layout

Use this print-layout option to customize the physical arrangement of your printed information. This section assumes you have the time/date option card and that the parameters are all enabled. The next several pages deal with the layout of your printed output. **The rest of the documentation on configuration follows this layout section.**

What you can print depends on which indicator you have; LED or LCD. What each can print is presented below.

LCD Serial Output:
- Time
- Date
- Gross weight
- Tare weight
- Net weight
- Displayed weight
- Custom wording you choose
- Status (see note at left) is available only if Broadcast or Other is enabled under Enquire/Device.
- ID

STATUS CODES
These are the most common characters you will see on a terminal:
"0" = Valid weight
"1" = Motion
"2" = Range error (Over/Underlaod)
"4" = A-D error
"8" = Low voltage

*Combinations of these errors can also occur. (e.g., "3" = Range error (2) **plus** Motion (1))*

The commands below are for the WI-125 LED only!

Serial Input Commands

Z Zero
K Go to Kg
P Go to lbs
L toggle lbs/kg
T Tare, PB
N Go to net mode
G Go to gross mode
Enq Print

STATUS CODES

These are the most common characters you will see on a terminal:
"0" = Valid weight
"1" = Motion
"2" = Range error (Over/Underlaod)
"4" = A-D error
"8" = Low voltage

Combinations of these errors can also occur. (e.g., "3" = Range error (2) ***plus*** *Motion (1))*

These are the commands in the LCD model you use to print the listed items:

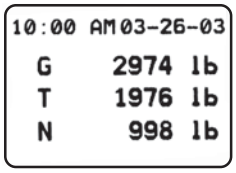
Print Command	Item
HOUR	Time
DAY	Date
GROSS	Gross weight
TARE	Tare weight
NET	Net weight
DISPLAY	Displayed weight
ASCII	Custom digits (ASCII string)
STATUS	Current scale status (stable, motion, etc.)
ID	Prints ID if ID is enabled
DELETE	Deletes a layout item

LED Serial Output:

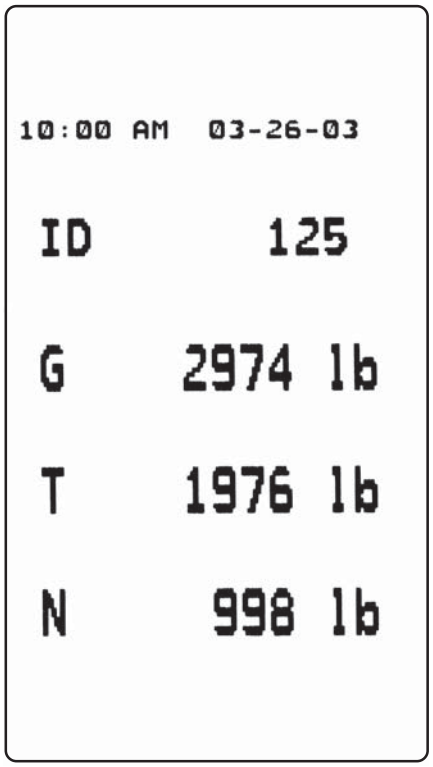
- Time
- Date
- Weight only, no labels
- Gross weight
- Tare weight
- Net weight
- Displayed weight
- Orion1 label (Eltron Orion/Zebra LP2844)
- Orion2 label (Eltron Orion/Zebra LP2844)
- Orion3 label (Eltron Orion/Zebra LP2844)
- Barcode label (Eltron Orion/Zebra LP2844)
- Custom wording you choose
- Number of Accumulations
- Total accumulated weight
- Status (see note at left) is available only if Broadcast or Other is enabled under Enquire/Device.
- Steady
- ID

These are the commands in the LED model you use to print the listed items:

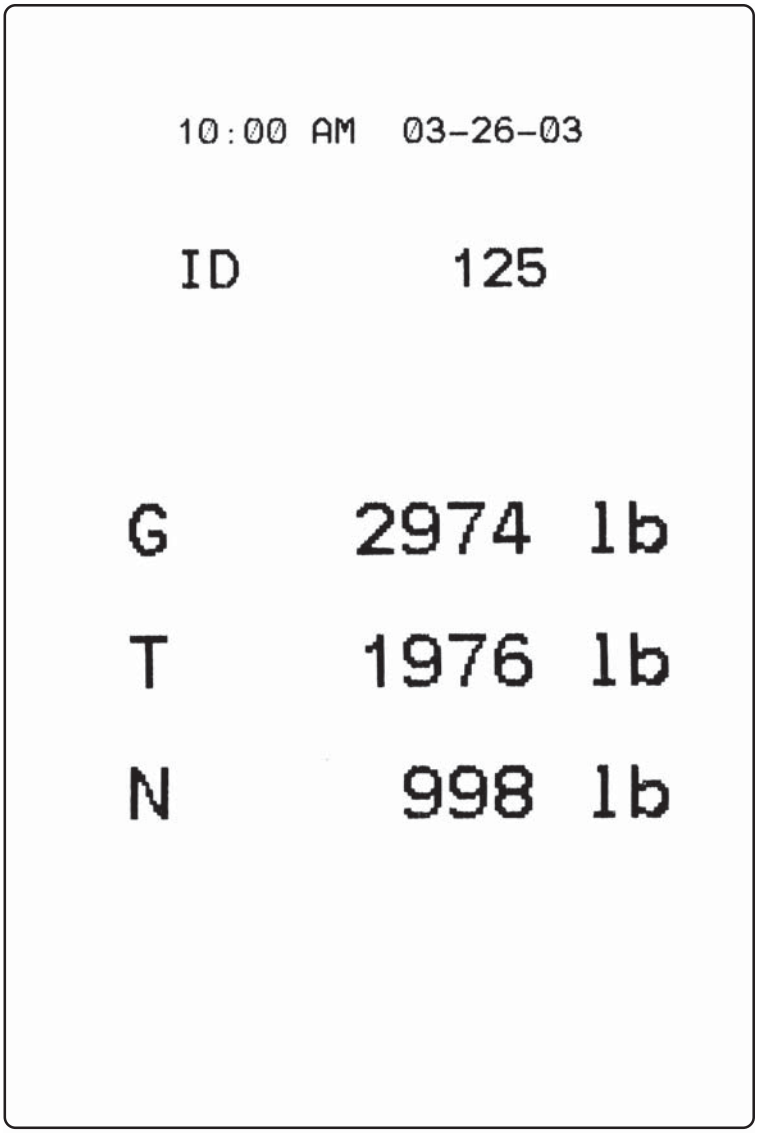
Print Command	Item
HOUR	Time
DAY	Date
BARE	Weight digits without G, T, N, or lb/kg.
GROSS	Gross weight
TARE	Tare weight
NET	Net weight
DISPLAY	Displayed weight
ORION1	Orion 1 Layout (see Sample 1)
ORION2	Orion 2 Layout (see Sample 2)
ORION3	Orion 3 Layout (see Sample 3)
BARCODE	Barcode Layout (see Sample 4)
ASCII	Custom digits (ASCII string)
COUNT	Number of accumulations performed
TOTAL	Total accummulated weight
STATUS	Current scale status (stable, motion, etc.)
STEADY	If stable=prints<sp>. If motion=prints 'M'
ID	Prints ID if ID is enabled
DELETE	Deletes a layout item



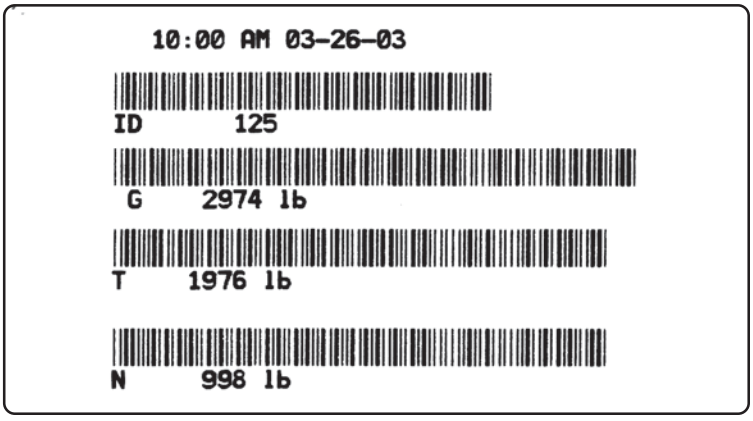
Sample 1
Orion 1 Label



Sample 2
Orion 2 Label

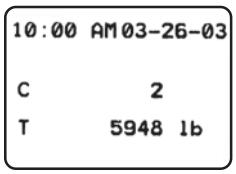


Sample 3
Orion 3 Label

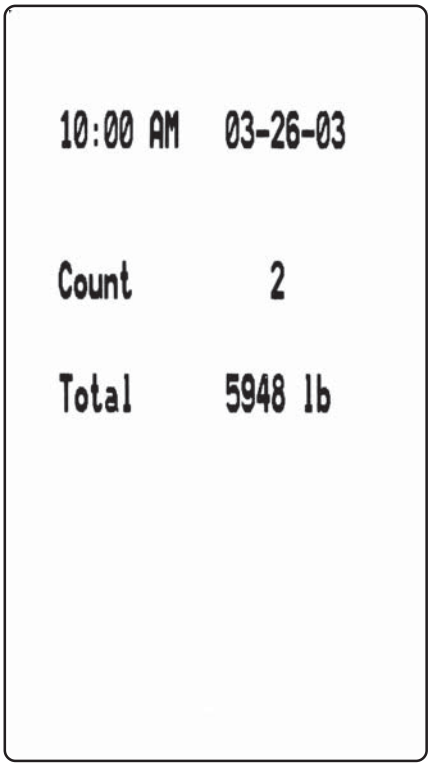


Sample 4
Barcode Label

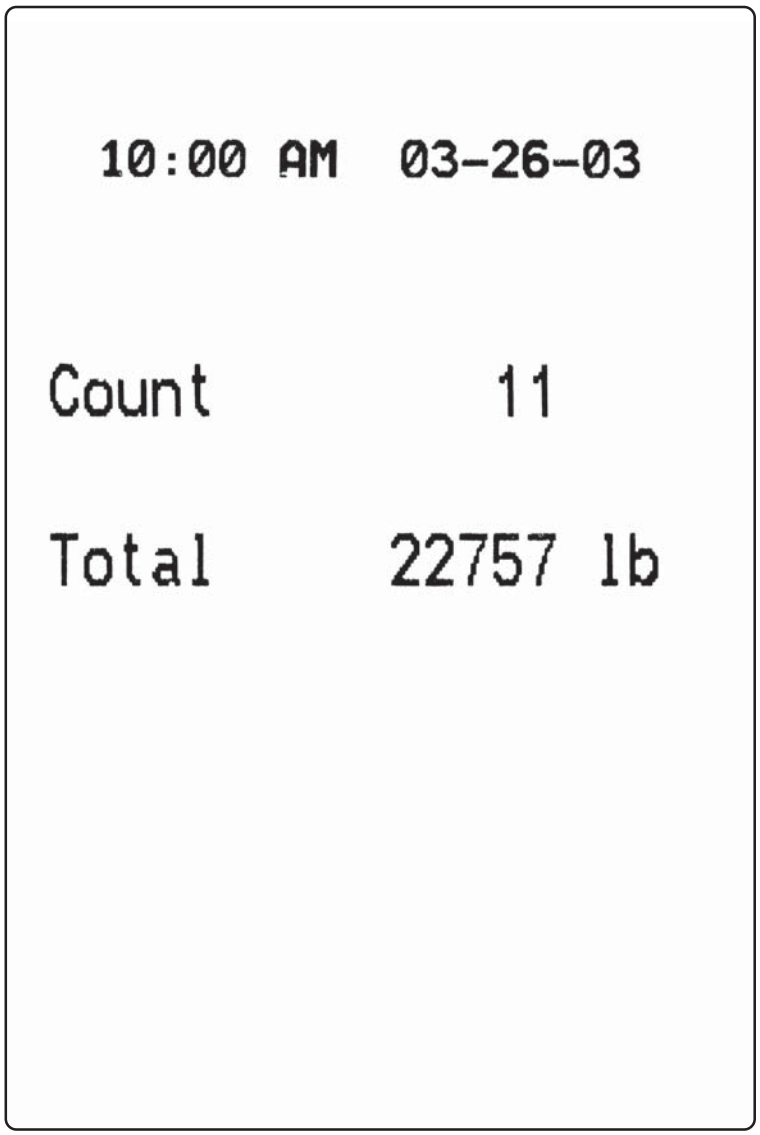
The following label samples show the "Total" label available when using the ACCUM function in the LED version of the WI-125 indicator. See the User's Manual for information on the ACCUM function.



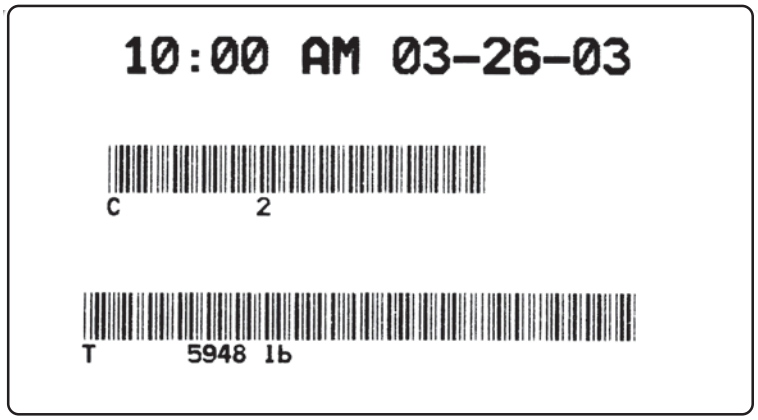
Sample 5
Orion 1 "Total" Label



Sample 6
Orion 2 "Total" Label



Sample 7
Orion 3 "Total" Label



Sample 8
Barcode "Total" Label

Serial Input Commands

Z	*Zero*
K	*Go to Kg*
P	*Go to Lbs*
L	*Toggle lbs/kg*
T	*Tare, PB*
N	*Go to net mode*
G	*Go to gross mode*
ENQ	*Print*

Figure 3 shows a sample of the default printout generated when you press the **PRINT** key on a new indicator. Figure 4 shows a possible print configuration. The layout menu in Figure 5 shows the order of print commands for the items used in Figure 4.

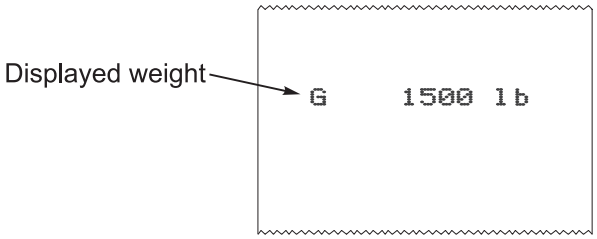


Figure 3
Default Printout As Configured on a New Indicator

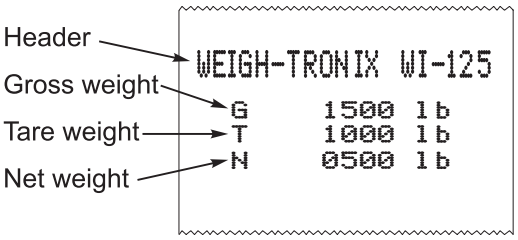


Figure 4
Possible Print Configuration

Remember, press **SELECT** *to move up or down a level in the menu structure, and press* **MENU** *to move left or right.*

Figure 5
Layout Menu for Figure 4

Customizing the Layout Menu

The default layout menu can be changed to suit your needs. Any of the items can be deleted, added, or rearranged to accomplish this customization.

The **SELECT** key opens up the next level of the menu under **LAYOUT**.

This information may be one of two types of items:

- an ASCII string or (user defined)
- a layout submenu (factory defined)

ASCII Strings

ASCII strings are stored under the ASCII layout print commands, such as Nos. 1, 3, 5, 7, etc. (see Figure 4). An ASCII string is a sequence of ASCII code numbers. Each code number is preceded on the indicator display by a sequence number. See Figure 5. You view these sequence numbers and ASCII code numbers by repeatedly pressing **MENU**. These ASCII strings contain the codes for your custom wording.

Figure 6 shows the ASCII string under the *1 ASCII* layout print command shown in Figure 5 . Table 1 shows the relationship between this sequence of codes and the output of the printer. You can change the ASCII string or delete it entirely to suit your needs. To delete an ASCII layout print command from the layout menu you first need to delete the entire sequence of ASCII code numbers which are stored in that ASCII layout print command.

*ASCII is an acronym for **A**merican **S**tandard **C**ode for **I**nformation **I**nterchange. ASCII codes are just numbers a computer can translate into letters, numbers and instructions. See Table 2.*

As you enter ASCII code numbers, the display may read *FULL* when you try to enter a code number. This means the memory allocated to the print layout is full. You must rearrange or delete some of the items you want printed for your customized printout.

Find complete instructions for these procedures in the section *Examples and Step by Step Instructions*.

Layout Submenu

Under each non-ASCII layout print command (*GROSS, TARE*, etc.) is a layout submenu. The layout submenu contains all seven layout print commands and a *DELETE* command. From this submenu you select what you want printed and in what order. The same submenu is available in every case, but the currently selected item is always offered first. See Figure 7.

To delete a layout print command: With the layout print command you wish to delete on the display, press **CLEAR**.

Find complete instructions for these procedures in the section *Examples and Step by Step Instructions*.

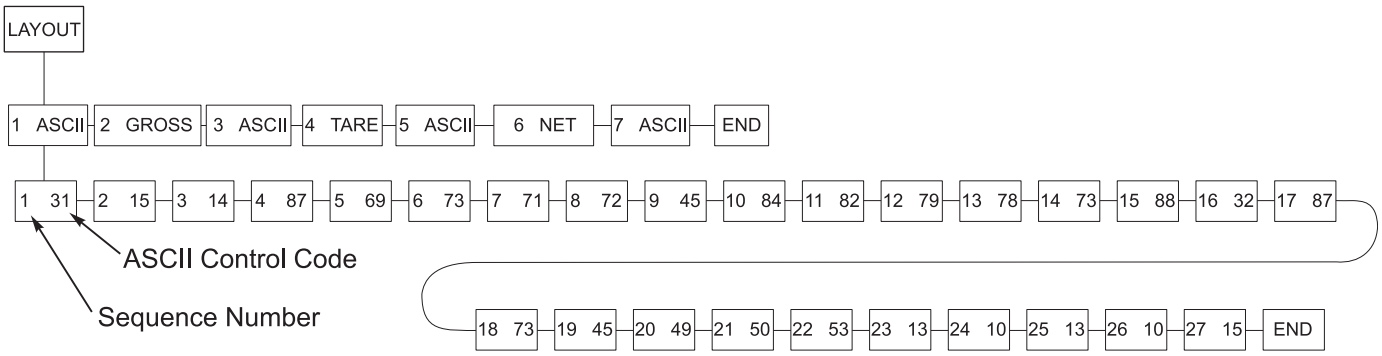


Figure 6
ASCII Control Code under the Print Command, 1 ASCII

In Figure 6, the **MENU** key advances you through the ASCII control-character displays. The **SELECT** key returns you to the *1 ASCII* display. (See Table 1 below.)

#31-	Sets IMP printer to 40 column print mode	#73-	I
#15-	Makes double wide characters until a carriage return	#88-	X
		#32-	Space
#14-	Makes double high characters until a carriage return	#87-	W
		#73-	I
#87-	W	#45-	–
#69-	E	#49-	1
#73-	I	#50-	2
#71-	G	#53-	5
#72-	H	#13-	Carriage return (CR)
#45-	–	#10-	Line feed (LF)
#84-	T	#13-	Carriage return (CR)
#82-	R	#10-	Line feed (LF)
#79-	O	#15-	Sets next line's characters to double wide
#78-	N		

Table 1
ASCII Control Characters under the Print Command, 1 ASCII

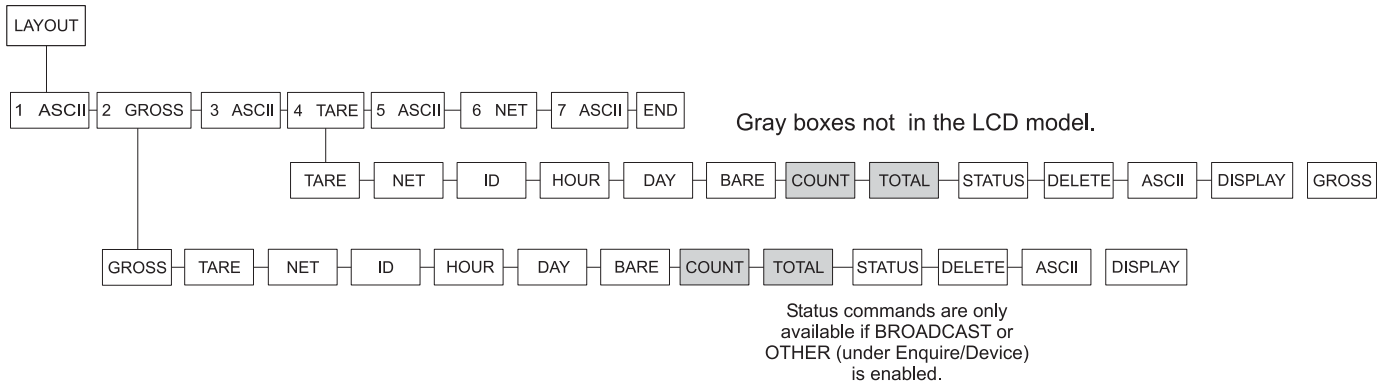


Figure 7
Layout Submenu, 2 GROSS or 4 TARE

Figure 7 represents alternate choices of preformatted data.

Examples and Step by Step Instructions

Example A: If you want to change the second print command in Figure 5 from *2 GROSS* to *2 HOUR:* with *2 GROSS* displayed, press **SELECT**. Now scroll to the *HOUR* print command in the submenu and press **SELECT** to select it. The print command *2 GROSS* is now changed to *2 HOUR.*

Example B: If you want to delete the second print command (*2 GROSS)* in Figure 5: with *2 GROSS* displayed, press **CLEAR**. This deletes the *2 GROSS* print command from the layout and *3 ASCII* becomes *2 ASCII, 4* becomes *3,* etc.

Below is a list of procedures to customize your layout. The steps for each procedure are explained below the list. Use the appropriate procedure or procedures to customize your layout to your liking. These step by step instructions relate to the layout shown in Figure 5.

- Deleting one ASCII code number from an ASCII string
- Deleting all the ASCII code numbers in an ASCII string
- Deleting an ASCII print command after the ASCII code numbers are deleted
- Deleting a non-ASCII layout print command from the layout menu
- Inserting a non-ASCII print command in the layout menu
- Adding ASCII code numbers to an ASCII string

Deleting one ASCII code number from an ASCII string

For example, to delete the hyphen in WEIGH-TRONIX you need to delete the ASCII control code number for the hyphen. In Table 1 you can see that this is #45. In Figure 6, the 9th ASCII control code is code #45.

With *9 45* displayed, press **CLEAR** then **+/-** . . .

CLEAR deletes the value and deletes that step in the string. When you delete #9, #10 becomes #9, etc.

Deleting all the ASCII code numbers in an ASCII string

For example, to delete the entire line of text at the top of the printout shown in Figure 4 you need to delete all the ASCII control code numbers under the *1 ASCII* display shown in Figure 6.

With the first ASCII control code number of the string displayed *(1 31)*, press **CLEAR** and **+/-** repeatedly until *END* is displayed. When *END* is displayed press **SELECT** . . . .

1 ASCII is displayed. All the control characters under it are now gone.

Deleting an ASCII layout print command after the ASCII code numbers are cleared

With *1 ASCII* displayed, press **CLEAR** . . . .

The item is removed from the layout menu and all the following items move up one number value on the menu. What was item 2 becomes item 1, etc.

Deleting a non-ASCII layout print command from the layout menu

For example, to delete *2 GROSS* from the menu, display *2 GROSS*, then press **CLEAR** . .

The item is removed from the layout menu and all the following items move up one number value on the menu. What was item 2 becomes item 1, etc.

Inserting a non-ASCII print command in the layout menu

Inserting any layout print command in the layout menu works in the same way.

For example, let's reinsert *GROSS* in the #2 position. The display shows *2 ASCII,* the layout menu item currently in the #2 position. Press **+/-** . . .

The layout submenu shown in Figure 7 appears. Scroll through the layout submenu by pressing **MENU**. When *GROSS* is displayed press **SELECT**. *2 GROSS* is displayed showing that it has been inserted in the second position. *2 ASCII* becomes *3 ASCII, etc.*

Adding characters to an ASCII string

For example, let's say you've just created a new ASCII layout print command in the #1 position in the layout menu *(1 ASCII).* To insert new codes, display *1 ASCII*, then press **SELECT**. . .

1 _ is displayed.

Key in the ASCII control code number you want and press **MENU**. . .

2 _ is displayed prompting you for the 2nd ASCII control code number in the ASCII string.

Repeat this step until you have entered all the ASCII control code numbers you want or the indicator tells you the memory is full, then press **SELECT**. . .

1 ASCII is displayed in this example.

Inserting code numbers in an existing ASCII string

You may insert new code numbers in an existing ASCII string. Display the code number you want the new code number to precede and press **+/-**. A cursor appears and you may enter the new code number. All the following code numbers move down one position in the sequence.

Repeating a code number in an ASCII string

To repeat any ASCII code number, instead of entering it multiple times, enter the code number, then a decimal, then the number of times you want that code number repeated.

For example: To enter seven carriage returns, enter 13.7.
To enter two capital letter Os in a row, enter 79.2.

Setup, Scale, Options, Security, Serial, Print, Busy, Baud, No. Stops, Layout-

Plus

Use this to enable or disable a plus sign (+) before a positive weight value in printouts. Choose ON to enable the plus sign. Choose OFF (default) to preceed a weight with a space.

Table 2 ASCII Control Codes

Code #	Control Character	Code #	Control Character	Code #	Control Character	Code #	Control Character
0	NUL	33	!	66	B	99	c
1	SOH	34	"	67	C	100	d
2	STX	35	#	68	D	101	e
3	ETX	36	$	69	E	102	f
4	EOT	37	%	70	F	103	g
5	ENQ	38	&	71	G	104	h
6	ACK	39	'	72	H	105	i
7	BEL	40	(	73	I	106	j
8	BS	41	)	74	J	107	k
9	HT	42	*	75	K	108	l
10	Line Feed	43	+	76	L	109	m
11	VT	44	,	77	M	110	n
12	Form Feed	45	-	78	N	111	o
13	Carriage Return	46	.	79	O	112	p
14	S0	47	/	80	P	113	q
15	S1	48	0	81	Q	114	r
16	DLE	49	1	82	R	115	s
17	DC1	50	2	83	S	116	t
18	DC2	51	3	84	T	117	u
19	DC3	52	4	85	U	118	v
20	DC4	53	5	86	V	119	w
21	NAK	54	6	87	W	120	x
22	SYN	55	7	88	X	121	y
23	ETB	56	8	89	Y	122	z
24	CAN	57	9	90	Z	123	{
25	EM	58	:	91	[	124	|
26	SUB	59	;	92	\	125	}
27	ESC	60	<	93	]	126	~
28	FS	61	=	94	^	127	Delete
29	GS	62	>	95	_		
30	RS	63	?	96	`		
31	US	64	@	97	a		
32	Space	65	A	98	b		

NOTE: Refer to your printer or computer's User's Manual for special control codes that your printer or computer responds to.

Setup, Scale, Options, Security, Serial, Analog-
Output

This lets you specify which weight the analog output will follow. Choices are: off, displayed weight, gross weight, or net weight.

Setup, Scale, Options, Security, Serial, Analog, Output-
Units

Analog output is independent of the unit of measure selected for the display. This menu lets you specify which unit of measure is used for the analog output. Choices are: pounds, 1000 g, or gallons.

Setup, Scale, Options, Security, Serial, Analog, Output, Units-
Full

When selected, the indicator will display the last value used or the default value. You enter the full capacity of the analog output which may be less than or greater than the capacity of the scale. For example, the capacity of the indicator may be 5000 lb, but it may be desirable to have 3000 lb as the full capacity of the analog output. In any case, the analog output has nominal under range and over range limits of 20%.

Setup, Scale, Options, Security, Serial, Analog, Output, Units, Full-
Zero, Full, End

These menu items cause the option card to simulate output, as if weight was being placed on or off the scale platform.

The choices present under *ADJUST* allow the zero and the span of the analog outputs to be adjusted without actually putting weights on and off the scale.

Selecting *ZERO* lets you adjust the zero of the analog output for a zero weight reading. This is done by pressing the 0, 1, 2, 3, or 4 key to increase the output and by pressing the 5, 6, 7, 8, or 9 key to decrease the output. The number on the display gives a visual representation of the zero setting, with 00.000 being the nominal value. The zero adjustment has a ±10% range, -10.000 to +10.000 on the display.

Selecting *FULL* lets the operator adjust the span of the analog output for the full capacity weight reading. The keys and the number on the display function like the zero adjustment above, with 100.000 as the nominal full capacity value. The span has a +/- 10% range, 90.000 to 110.00 on the display. Weight does not have to be on the scale to perform this task.

When *ZERO*, *FULL*, or *END* are displayed, the analog output follows the value selected under *OUTPUT* and *UNITS*. The only time the value is not output is while actually adjusting zero or full.

On an LED version indicator, push the button that is mounted inside the rear panel.

Setup, Scale, Options, Security, Serial-
Seal All

If you choose the YES option, all items under configuration are sealed when switch S1-1 is in the OFF position (LCD version) or the button is pushed in the LED version. If NO is selected, units, capacity, division, zero range, stability, AZT, tare, layout, zero, span, linearity, and seal all are sealed.

Setup, Adjust-
Zero, Span, Linear., Display

This option lets you calibrate the indicator by setting the zero, span, and linearity. Below are specific instructions for setting these parameters.

Calibration Procedures

Attention

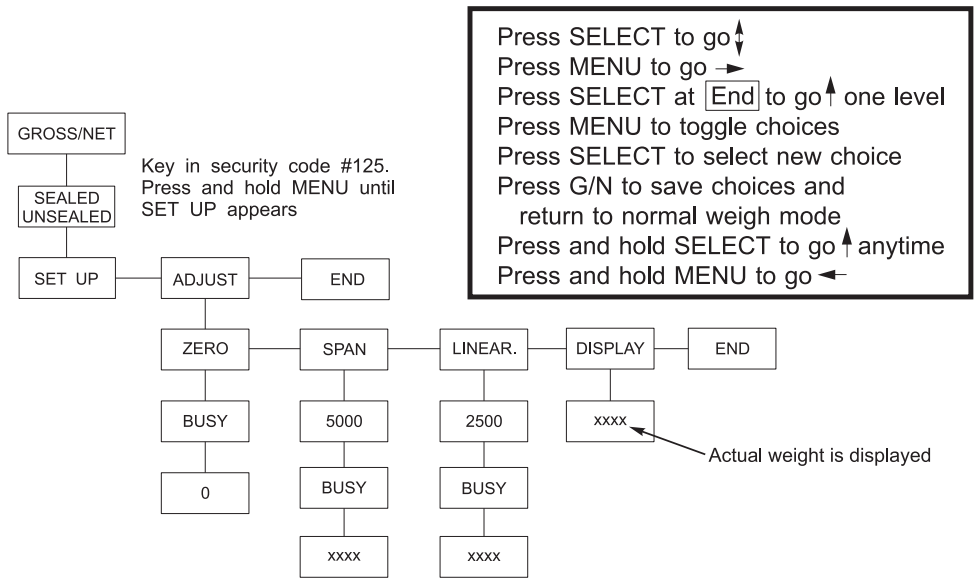
Make sure your test weights match the selected unit of measure on your indicator.

To calibrate your WI-125 SST, you must enter the Configuration Menu outlined below. If you are already in the Configuration Menu, go directly to the procedures for setting Zero & Span and Linearity and viewing Display which are continued on the next page.

To enter the Configuration Mode:

1. While in Gross/Net Weighing Mode, enter the security code number 125.
2. With the number *"125"* displayed, press and hold the **MENU** key until *SET UP* is displayed.

   DO NOT let go of the **MENU** key until *SET UP* is displayed or else *TARE* will be displayed. If this occurs, press the **G/N** key to return to Weighing Mode and begin again at Step 1.
3. Press **MENU** to display *ADJUST*.
4. Press **SELECT** to display *ZERO*.
5. You are now in the Configuration Menu and may calibrate your system. To move around within the Configuration Menu follow the instructions printed in the box below. Specific instructions for setting Zero & Span and Linearity and viewing Display are provided on the next page.



Setting ZERO and SPAN (Calibration)

1. When *ZERO* is displayed, remove all weight from scale. Wait till the scale is stable and press **SELECT**. . .	*BUSY* is displayed briefly, then *0.*
2. Press **SELECT**. . .	*ZERO* is displayed.
3. Press **MENU**. . .	*SPAN* is displayed.
4. Set test weight on scale and let the scale stabilize. Press **SELECT**. . .	A number is displayed.
5. Key in the amount of the test weight on the scale and press **SELECT**. . .	Display shows *BUSY* briefly, then the weight. You may exit to the normal Weighing Mode by pressing **G/N**, or continue to Step 6...

Setting LINEAR.

Make sure you have the proper amount of weight keyed in and the proper amount of weight on the scale when setting LINEAR., or SPAN

You may stop calibration after setting ZERO and SPAN or continue on to set LINEAR. if necessary for your application.

6. Press **SELECT** to return to the *SPAN* display, then press **MENU** to advance to the *LINEAR* display.	
7. Place approximately half the span test weight on the scale. Press **SELECT**. . .	A number is displayed.
8. Key in the weight now on the scale and press **SELECT**. . .	*BUSY* is displayed briefly and then the weight. You may exit to the normal Weighing Mode by pressing **G/N**, or continue to Step 9...

Viewing DISPLAY

Use this mode to do a build-up test or to check linearity.

9. Press **MENU** twice to advance to *DISPLAY*.	
10. Press **SELECT** to see the displayed weight without exiting the configuration menu.	You may exit to normal Weighing Mode by pressing **G/N**.

Reset Menu and Master Clear

Warning

Do not reset anything unless it is absolutely necessary. If you reset ADJUST, this may mean you have to bring in a weight truck to re-calibrate your system.

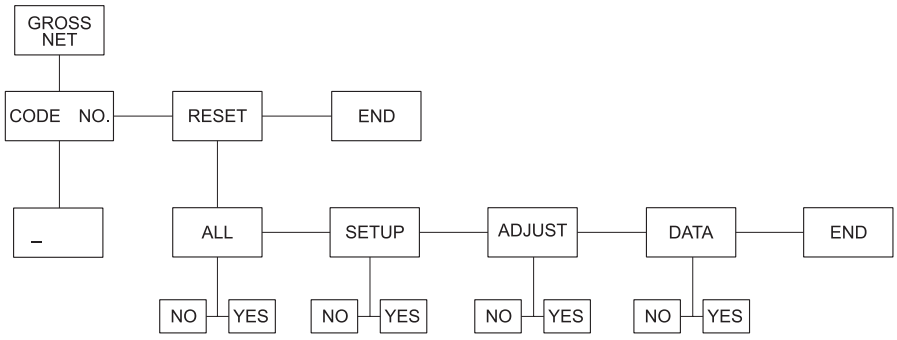
If the indicator's memory, calibration or other data becomes corrupted, a reset menu will become active. *RESET* will be displayed telling you there has been a problem. You may also choose to perform a Master Clear to reset the setup, adjust or data values to default values. Performing a master clear gives you access to the first reset menu shown below. If the indicator found a problem with itself, you will see the second menu. In either case, you must turn switch S1-1 on before you can reset setup or adjust items. **NOTE:** The only items active for a reset or master clear are those items that are **not** set to the factory defaults.

To perform a master clear follow these steps:

1. Turn the unit off, hold the **TARE** and **ZERO** keys down as you turn on the unit. . .	*CODE NO.* is displayed.
2. Press **SELECT**. . .	__ is displayed.
3. Key in your security code number, then press **SELECT**. . .	*CODE NO.* is displayed. You must enter the security code number before you can reset any items.
4. Press **MENU**. . .	*RESET* is displayed. From here you access the rest of the menu items the same as you do for all the other menus.

Master Clear Menu

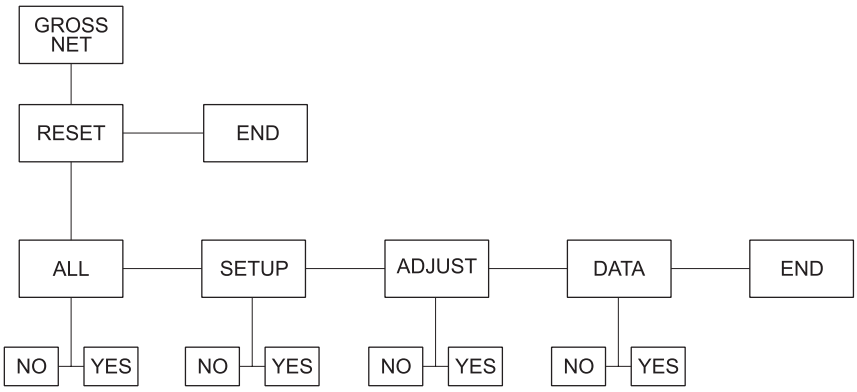
ALL - Includes Setup, Adjust, and Data
SET UP - Configuration selections
ADJUST - Calibration settings
DATA - User entered information



If *SETUP, ADJUST,* or *DATA* are set to defaults, they will not appear in the menu.

If *SETUP, ADJUST,* or *DATA* appear, you have the option to reset one, two, or all three of them to default values.

Reset Menu



If *SETUP, ADJUST,* or *DATA* appears and it is flashing, the indicator is telling you that it is corrupted and must be reset to default values.

If *ALL* appears, you have the option to reset all values to their default settings simultaneously.

If *ALL* is flashing, the indicator is telling you that *SETUP, ADJUST*, and *DATA* are all corrupted and you must reset them all to default values.

If you choose *ALL*, the unit returns automatically to weighing mode. All factory defaults are now in place, **including calibration values**.

To reset any of the choices, use the **MENU** key to toggle between the choices. When the correct choice is displayed, press **SELECT**, then press **G/N** to save.

If you choose to reset some choices, but not all, the unit will return to weighing mode when you press **G/N**. If nothing is corrupted (no choices are flashing) you can return to weighing mode by pressing **SELECT** while *END* (after *RESET*) is displayed.

Instructions for moving around within the Configuration Menu

Press SELECT to go ↕
Press MENU to go →
Press SELECT at [End] to go ↑ one level
Press MENU to toggle choices
Press SELECT to select new choice
Press G/N to save choices and
return to normal weigh mode
Press and hold SELECT to go ↑ anytime
Press and hold MENU to go ←

Test Mode

The test mode is used to test various functions of the WI-125. The test menu is shown in Figure 4. Instructions for using the test menu are found below.

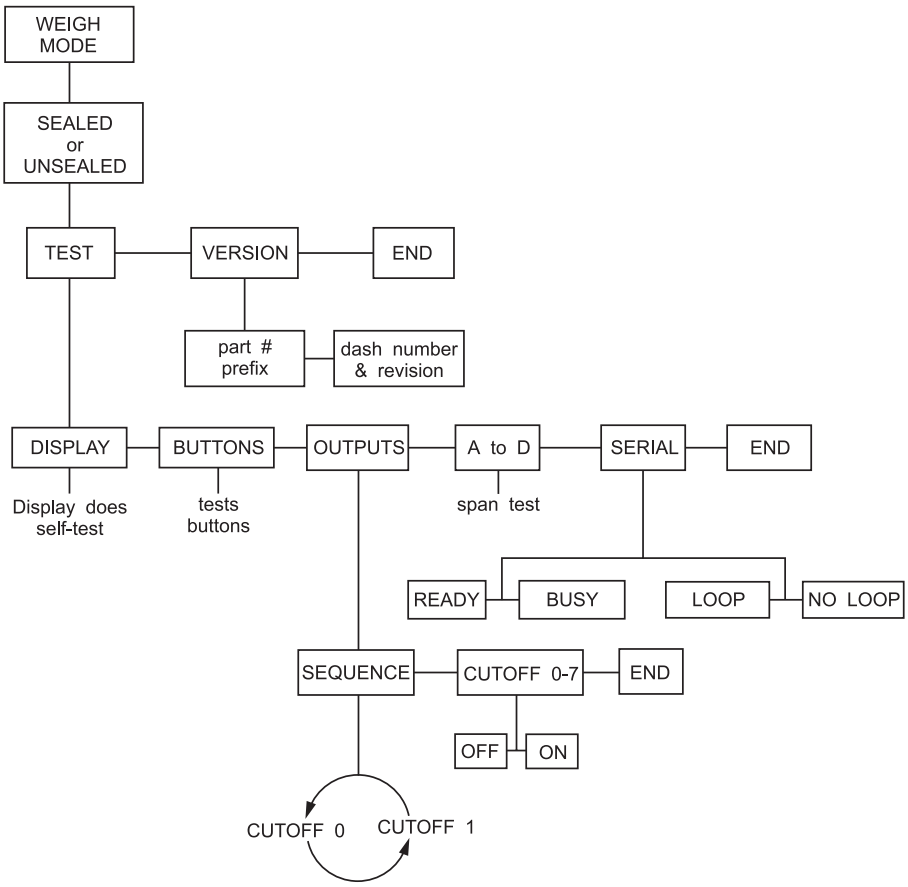


Figure 4
Test Menu

Press **MENU** to move → in the diagram

Press and hold **MENU** for 1.5 seconds to move ← in the diagram

Press **PRINT/SELECT** to move ↓ in the diagram

Press **PRINT/SELECT** for 1.5 seconds to select new choice and move ↑ in the diagram

Press **G/N** at any time to save changes and return to gross/net weighing mode

1. Enter the test mode from gross/net operation by pressing and holding the **MENU** key until ***tESt*** is displayed. ***SEALEd*** or ***unSEALEd*** is displayed briefly while you hold the key. If you release the **MENU** key too soon, press **G/N** to return to normal weigh mode and begin again.
2. Move to the right through the menu selections by pressing **MENU** briefly. Move to the left through the menu selections by pressing **MENU** for 1.5 seconds or hold down for continuous scrolling.

3. To move down a level in the hierarchy, press **SELECT**. Anytime you wish to get to the next higher level in the hierarchy, press and hold **SELECT** for approximately 1.5 seconds or press **SELECT** whenever ***End*** is displayed.
4. Press **MENU** to toggle between choices.
5. Press **G/N** to return to gross weighing operation at any time.

Below are the specific directions and explanations for the items you see in the test menu.

VERSION — Under *VErSIOn* are the Weigh-Tronix part number and revision number for the software found in your machine. Weigh-Tronix part numbers are divided into two parts: the prefix and the dash number. With *VErSIOn* displayed, press **SELECT** to view the prefix, then push **MENU** to view the dash number. Press SELECT to return to *VErSIOn*.

DISPLAY — With *diSPLAY* displayed, press **SELECT** and the bottom row of annunciators turns on. Press **SELECT** again and a dynamic test is run. Press **MENU** to stop the dynamic test or consecutively press **MENU** to step through the display test routine. Press **SELECT** when the dynamic test is active to return the unit to *diSPLAY*.

BUTTONS — With *buttonS* displayed, press **SELECT** and an underscore will appear on the screen. Press any key except **MENU** to check for proper key functioning. After testing the buttons, press **MENU** to return to the display.

OUTPUTS — These tests allow you to turn the cutoffs on and off automatically in sequence, under *SEQUENCE*, or individually, under *CUTOFF 0-7*. When you exit the outputs test, the cutoffs revert to their proper condition according to the weight on the scale.

A to D — Displays the analog to digital counts. The span is normally 20000 counts per millivolt per volt. With a calibrator at zero millivolts per volt, the displayed value should be between -200 and +200. Press **SELECT** to return to A to D.

SERIAL — Tells you if the serial output is ready or busy. A jumper connecting pins DTR to CTS of the serial port will cause *REAdY* to be displayed. Pressing the **MENU** key puts *no LOOP* on the display. With pins XMITT to RECV connected, *LOOP* is displayed. With them disconnected, *no LOOP* is displayed. Press **SELECT** to return to *SErIAL*.

Disassembly and Reassembly

Warning

Be sure the unit is unplugged before attempting any repair.

Follow the steps in this section to disassemble and reassemble your WI-125 indicator.

1. Remove the tilt knobs as shown in Figure 8.

Figure 8
Removing the tilt knobs

2. Remove the screws holding the base to the indicator case. See Figure 9.

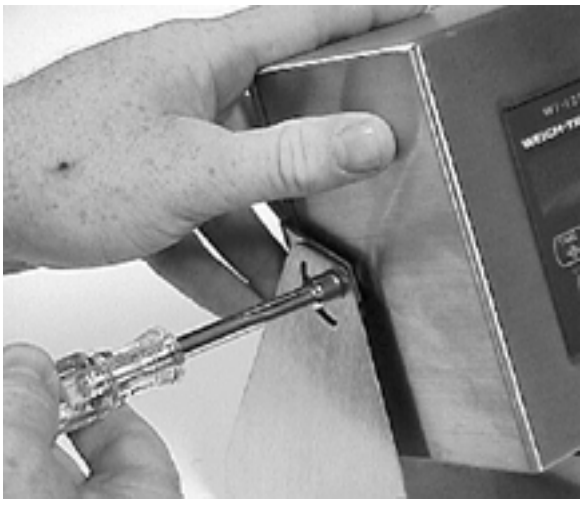


Figure 9
Removing stand screws

3. Place the indicator face down and remove the acorn nuts from the back of the indicator. See Figure 10.

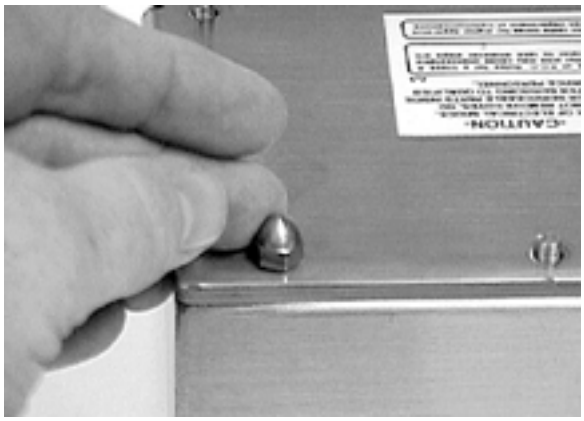


Figure 10
Removing acorn nuts

4. Lift the back of the indicator off, being careful of the connecting wires. See Figure 11.

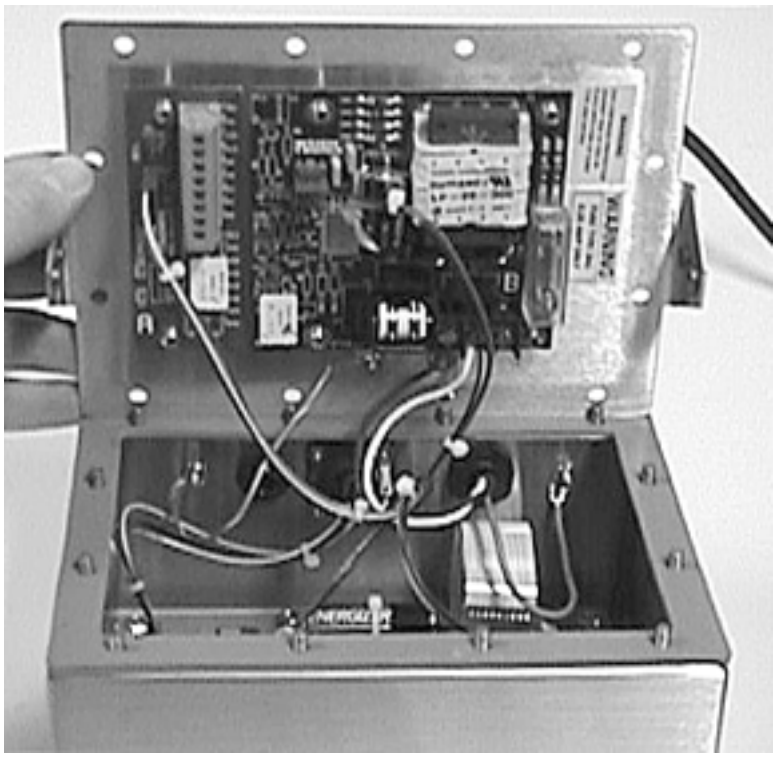


Figure 11
Back removed

5. Disconnect the wires from their attachment points.
6. Figure 12 shows the main pc board inside the front of the enclosure. Remove this board by removing the screws pointed out in Figure 12 and lifting it off the display board underneath. Outlined in white is the optional time and date card. Pull this card up from the main board once the screw holding it down is removed.

The illustrations show the inside of the LCD version of the WI-125. The LED version will differ slightly.

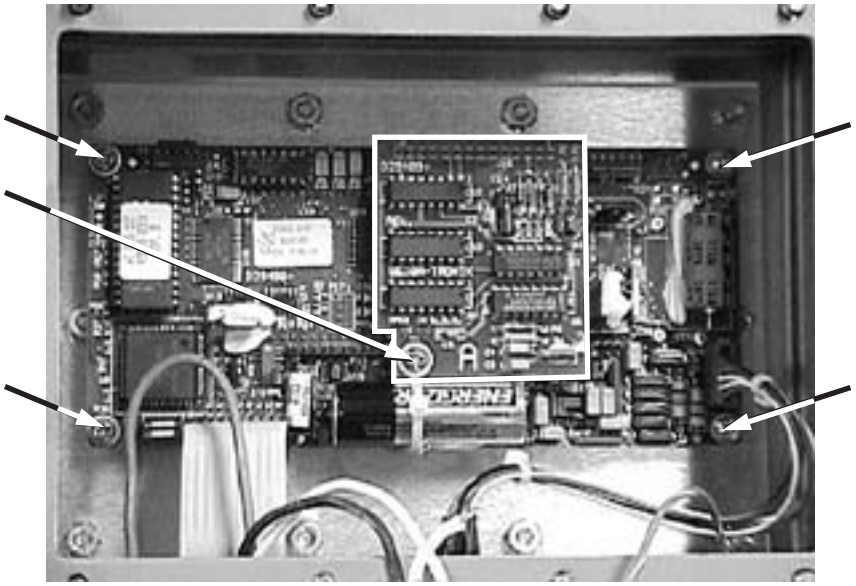


Figure 12
Screws holding down the main pc board

7. There are two boards attached to the back of the indicator. The one on the left in Figure 13 is the RS-232 terminal block. The one on the right is the power supply board. Remove these by removing the screws pointed out by the arrows.

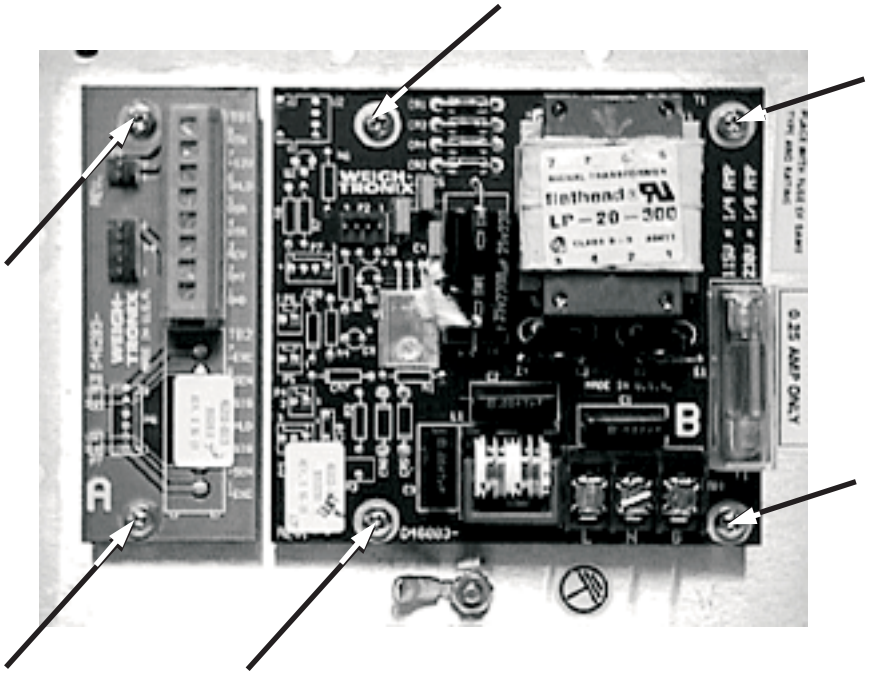


Figure 13
RS-232 terminal and power supply board.

8. Reassemble the unit by reversing the disassembly procedure.

Appendix 1: Earlier Versions of WI-125

All versions of the WI-125 LCD indicators, beginning with serial number 36898, have a new main board and firmware. The microprocessor has been changed to its most current revision. This means the board layout changed, along with a different EPROM and its stored firmware. EPROMs from the former board will not work in this new board.

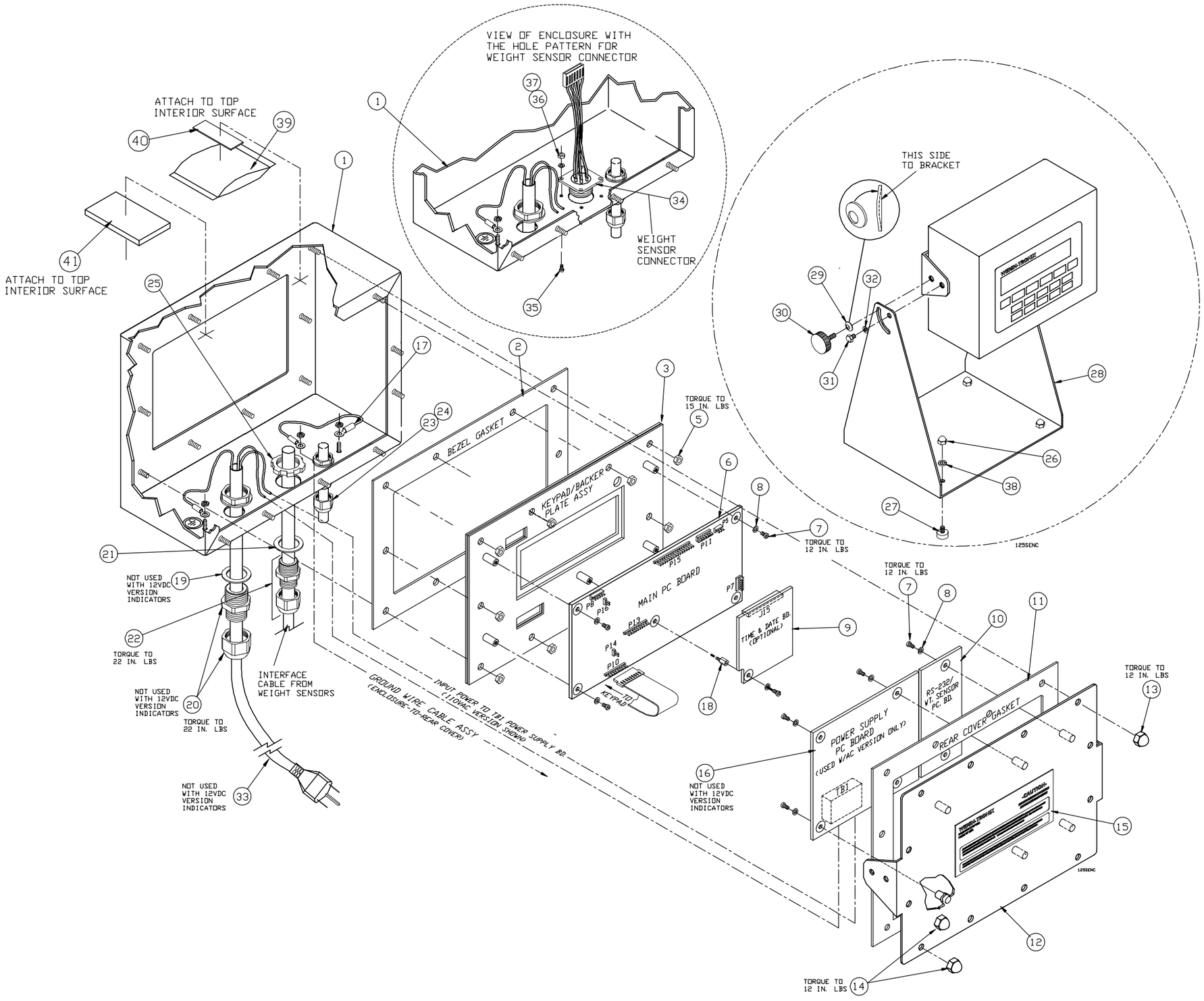
Previous models of WI-125 LCD indicators required an optional, special software feature to add single channel accumulation and transaction count. The enhanced WI-125 LCD configuration includes the choice to enable single channel accumulation and transaction count.

Below is a chart referencing the model/part numbers for the old and new board/EPROM:

Description	Old P/N board & software	New P/N board & software
WI-125 SST	29400-0179	53042-1056

WI-125SST INDICATOR *(LCD VERSION)*

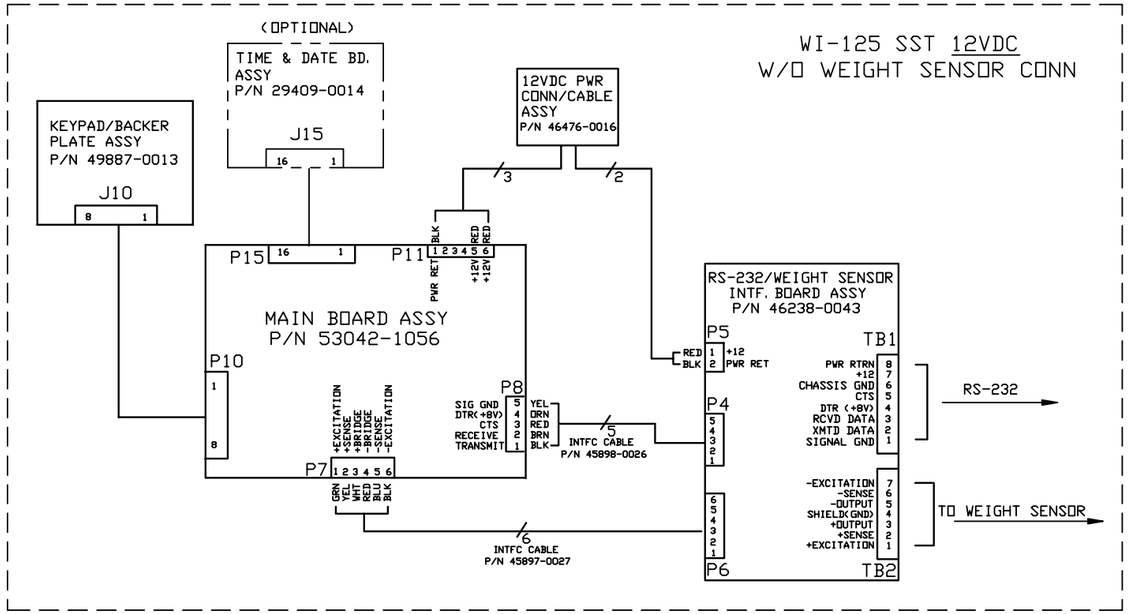
(115/230VAC & 12VDC)
PARTS and ASSEMBLY



ITEM NO.	DESCRIPTION	W-T P/N	QTY
1	Enclosure *(AC, hole pattern for wt sens strain relief)*	48721-0015	1
	Encl. *(AC, hole pattern for wt. sens. connector)*	48721-0023	1
	Encl. *(DC, hole pattern for wt. sens. strain relief)*	48721-0031	1
2	Bezel Gasket	48723-0013	1
3	Keypad/Backer Plate Assy	49887-0013	1
5	Kep Nut,#8-32	1025-00125	12
6	Main Board Assy w/ E-PROM	53042-1056	1
	Main Board Assy w/o E-PROM	53042-0033	1
	Programmed E-Prom, SST, LCD version *(Not Shown, Ref. main board assy page.)*	49518-0010	1
7	Screw, #6-32 X .31" L	14473-0231	11
8	Lock Washer, #6	14474-0032	7
9	Time And Date Pc Bd Assy *(Optional)*	29409-0014	1
10	Serial/Wght. Sens. Bd *(VAC,w/o wt sens conn)*	46283-0035	1
	Serial/Wght. Sens. Bd *(VAC,w/ wt sens conn)*	46283-0019	1
	Serial/Wght. Sens. Bd *(VDC,w/o wt sens conn)*	46283-0043	1
11	Rear Cover Gasket	48187-0012	1
12	Rear Cover	48186-0039	1
13	Cap Nut,#10-32	15786-0016	10
14	Cap Nut,Modified,#10-32	26513-0013	2
15	Compliance Label *(115vac)*	45891-0015	1
	Compliance Label *(230vac)*	45890-0016	1
16	Power Supply Pc Bd Assy *(used w/ 115 VAC only)*	46003-0018	1
	Power Supply Pc Bd Assy *(used w/ 230VAC only)*	46003-0075	1
17	Ground Wire Assy	48712-0024	1
18	Standoff *(Used W/Time & Date Bd Option)*	15437-5018	1
19	Neoprene Washer, *(Used W/ Pwr Cord)*	26357-0038	1
20	Strain Relief *(Used W/ Pw Cord)*	15257-0040	1
21	Neoprene Washer, *(Used W/Weight Sens Ca.)*	26357-0053	1
22	Strain Relief *(Use W/Weight Sens Ca.)*	15257-0057	1
23	Neoprene Washer, *(Used W/Serial Ca.)*	26357-0046	1
24	Strain Relief *(Used W/Serial Ca.)*	15257-0024	1
25	Lock Nut	17777-0021	1
26	Cap Nut, #8	15771-0021	4
27	Rubber Bumper	15349-0024	4
28	Stand Bracket	48724-0012	1
29	Belleville Washer,.190" Id x .375" Od	1033-13294	2
30	Knob	1091-14144	2
31	Machine Screw,Hex Hd,#10-32 X .25"L	14505-0019	2
32	Washer,#10-Internal Tooth	15698-0054	2
33	Power Cord W/ Plug End *(Input AC only)*	15318-0013	1
	Power Connector/Cable assy *(Input 12VDC only)*	46476-0016	1
34	Weight Sensor Interface Connector	19572-0107	1
35	Screw #4-40 x .38"L	14473-0124	4
36	Lock Washer, #4	14474-0024	4
37	Hex Nut, #4-40	14471-0027	4
38	Lock Washer, #8	14474-0040	4
39	Dessicant Bag	1088-12126	1
40	Foam Tape, 2-side sticky ½"w x 1"L *(use w/ item 39)*	1045-05982	1
41	VCI Emitter	48680-0014	1

WI-125SST INDICATOR *(LCD VERSION)*

(115/230VAC & 12VDC)
SYSTEM BLOCK DIAGRAM

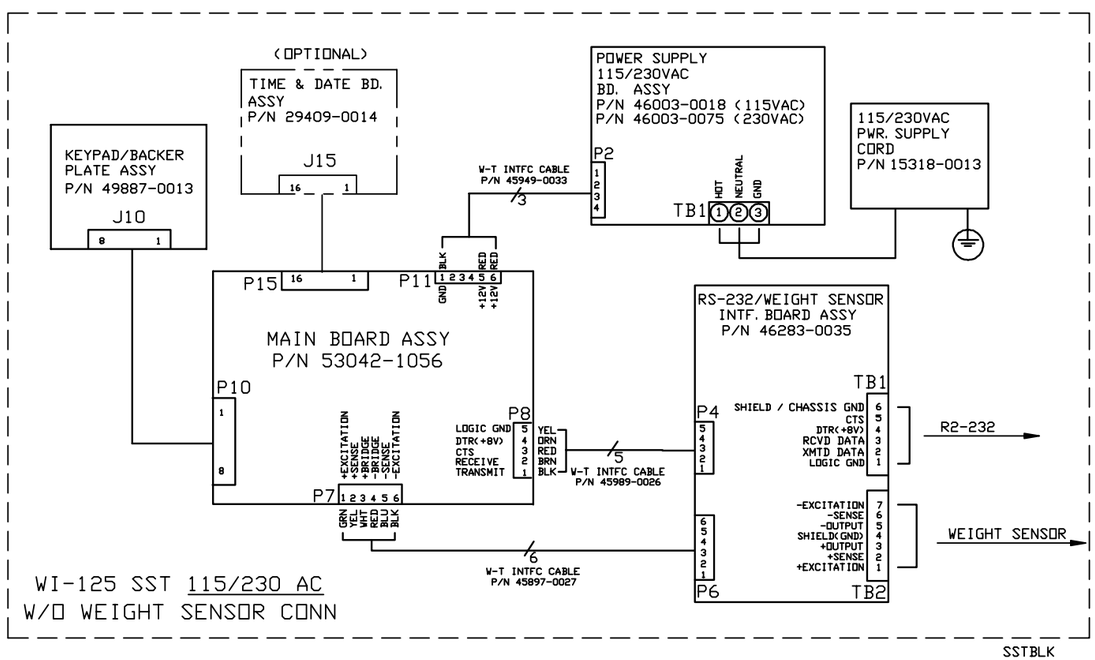


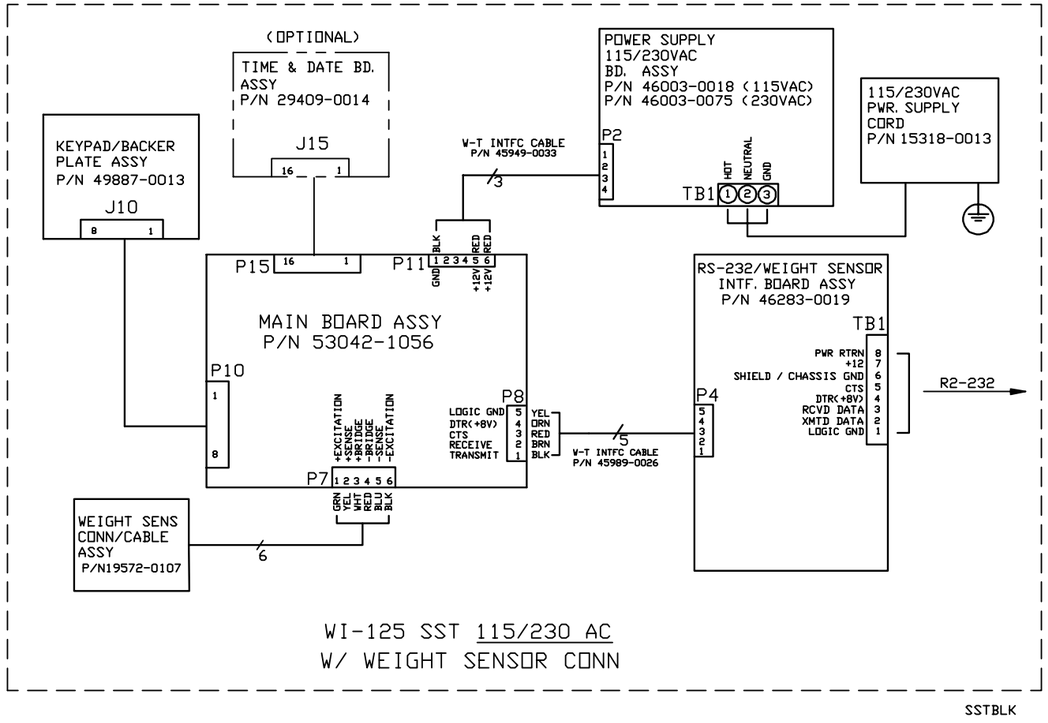
NOTE:
All versions of the WI-125 LCD indicators, beginning with serial no. 36898, have a new main board and firmware. The microprocessor has been changed to it's most current revision. This means the board layout changed, along with a different EPROM and it's stored firmware. *EPROMS from the former board will not work in this new board.*

Previous models of the WI-125 LCD indicators required an optional special software feature to add single channel accumulation and transaction count. The enhanced WI-125 LCD configuration includes the choice to enable single channel accumulation and transaction count.

Below is a chart referencing the model/part numbers for the old and new board EPROM.

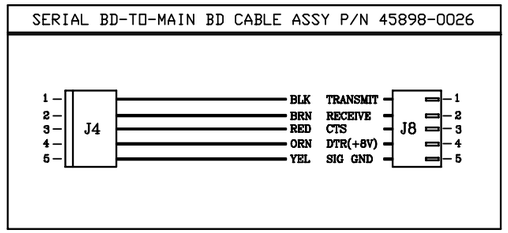
Description	Old P/N Board & Software	New P/N Board & Software
WI-125 SST	29400-0179	53042-1056

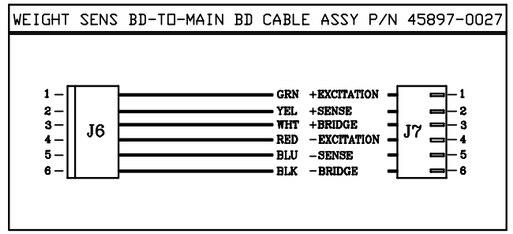


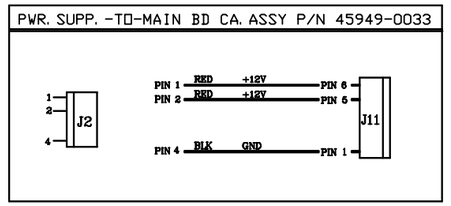


WI-125SST INDICATOR *(LCD VERSION)*

(115/230VAC) W/O WEIGHT SENSOR CONNECTOR
PC BOARD/CABLE IDENTIFICATION

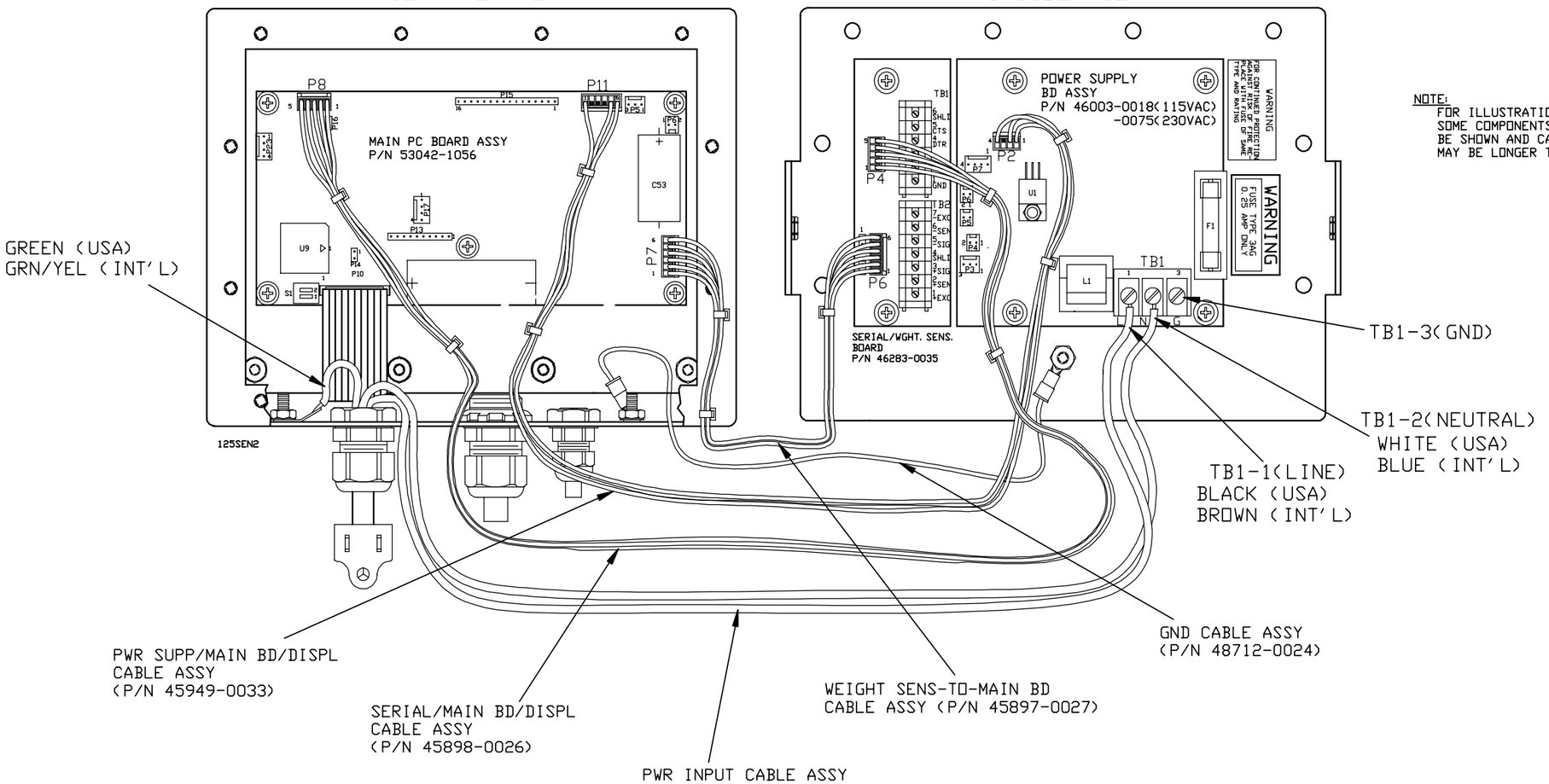






FRONT ENCLOSURE
(VIEW FROM REAR)

REAR COVER
(INSIDE VIEW)



NOTE:
FOR ILLUSTRATION REASONS SOME COMPONENTS MAY NOT BE SHOWN AND CABLE LENGTHS MAY BE LONGER THAN NORMAL.

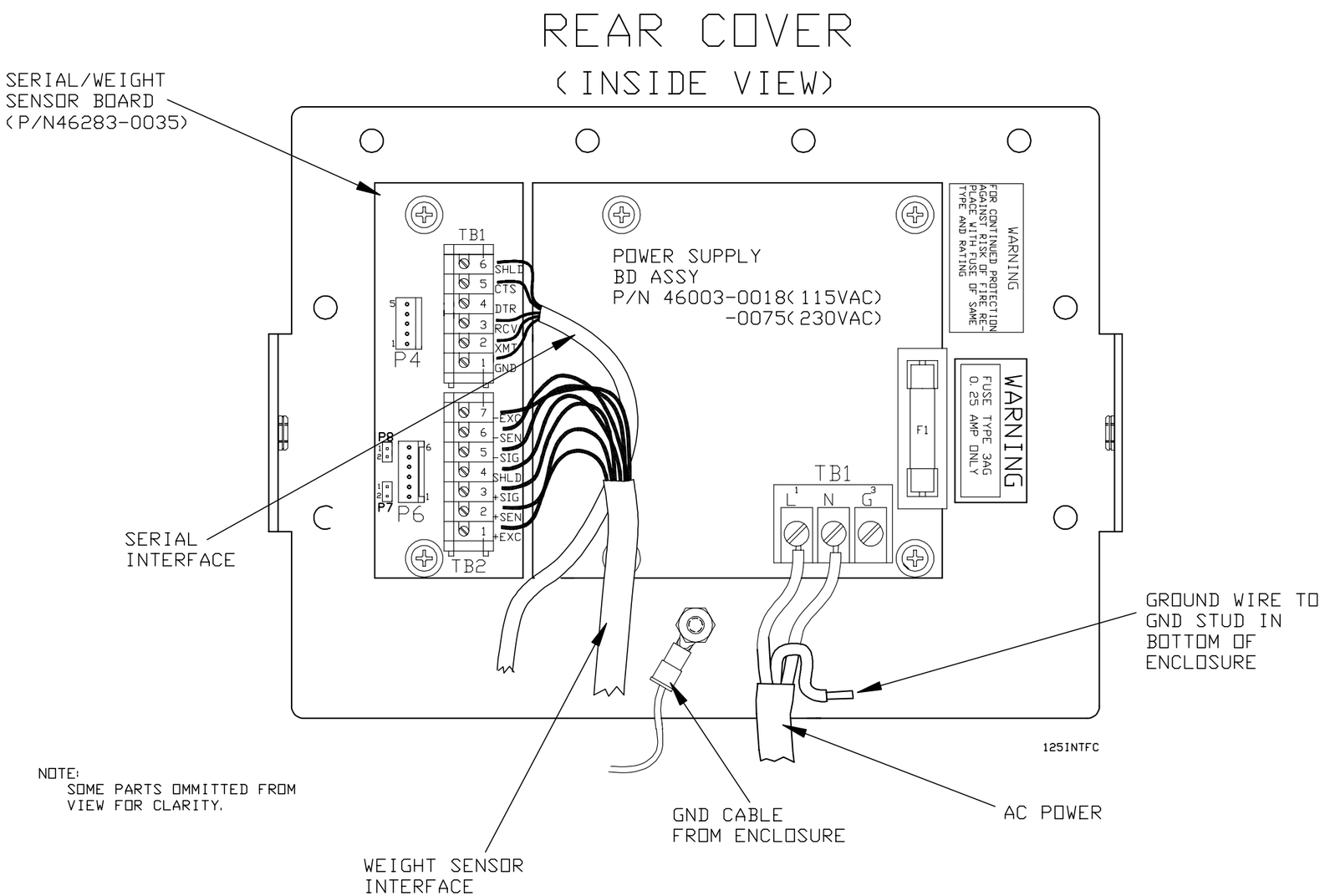
WI-125SST INDICATOR *(LCD VERSION)*

(115/230VAC)
W/O WEIGHT SENSOR CONNECTOR
EXTERNAL INTERFACE CONNECTIONS

NOTE:
On systems using remote sense (7 wires), store jumper on a single pin of P7 & P8. On systems not using remote sense (5 wires), jumper P7-1 to P7-2 and P8-1 to P8-2 with jumper.

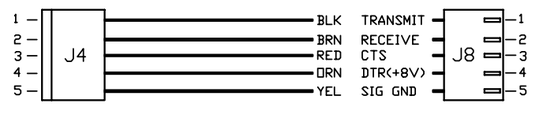
Weight Sensor Interface Connections		
Terminal Board	**Signal**	**W-T Wire Color**
TB2-1	+Excitation	Green
TB2-2	+Sense	Yellow
TB2-3	+Output	White
TB2-4	Shield (Gnd)	White/Orange
TB2-5	-Output	Red
TB2-6	-Sense	Blue
TB2-7	-Excitation	Black

RS-232 Interface Connections	
Terminal Board	**Signal**
TB1-1	Signal Ground
TB1-2	Transmit Data
TB1-3	Receive Data
TB1-4	Data Terminal Ready
TB1-5	Clear To Send
TB1-6	Chassis Ground

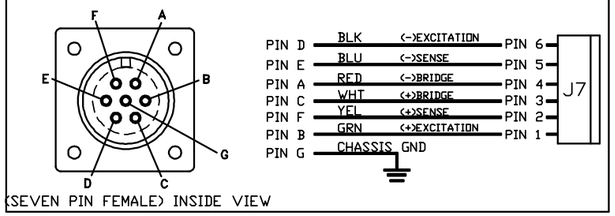


WI-125SST INDICATOR *(LCD VERSION)*
(115/230VAC)
W/ WEIGHT SENSOR CONNECTOR
PC BOARD/CABLE IDENTIFICATION

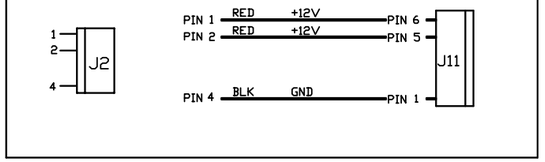
SERIAL BD-TO-MAIN BD CABLE ASSY P/N 45898-0026



WEIGHT SENSOR CONN / CABLE ASSY P/N 19572-0107

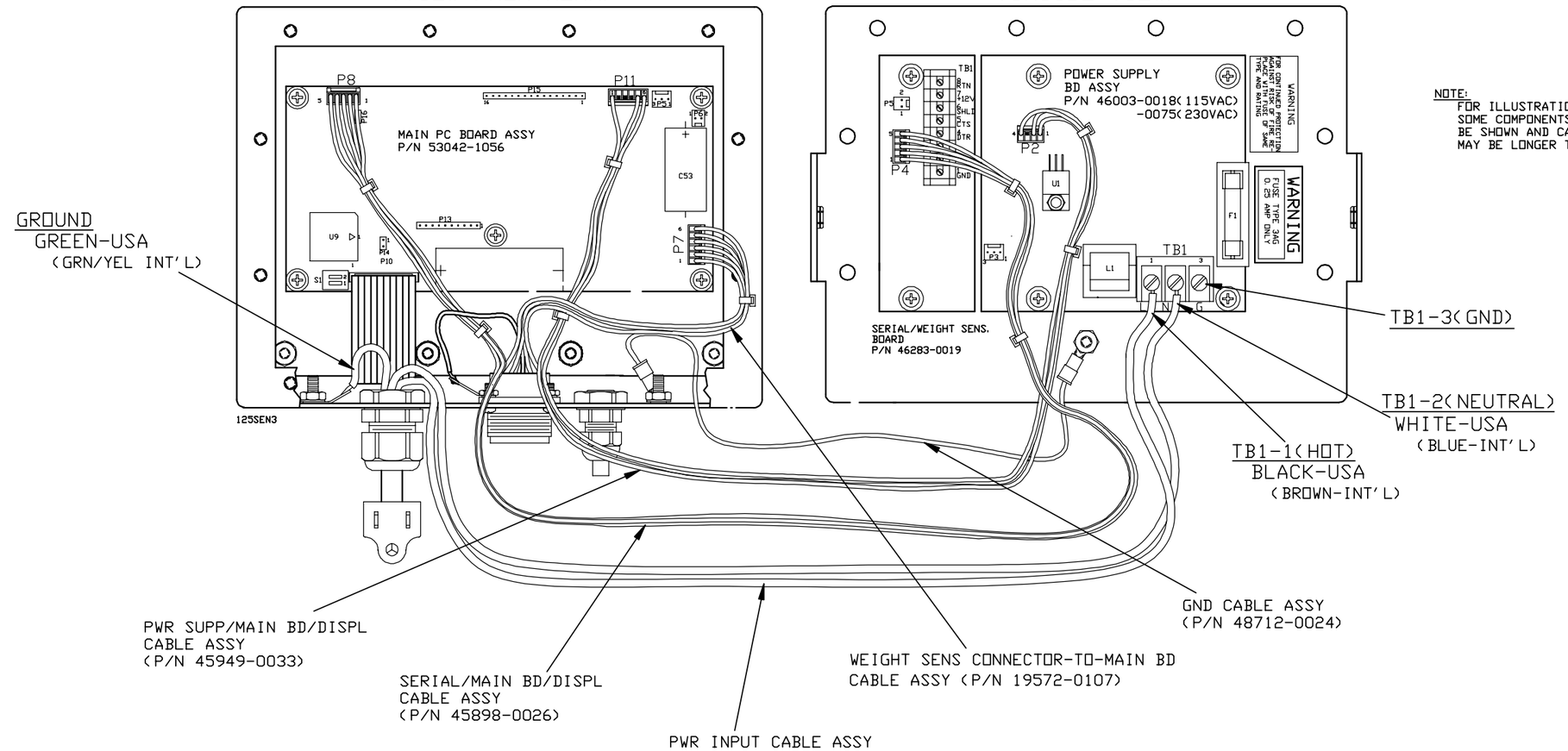


PWR. SUPP. -TO-MAIN BD CA. ASSY P/N 45949-0033



FRONT ENCLOSURE
(VIEW FROM REAR)

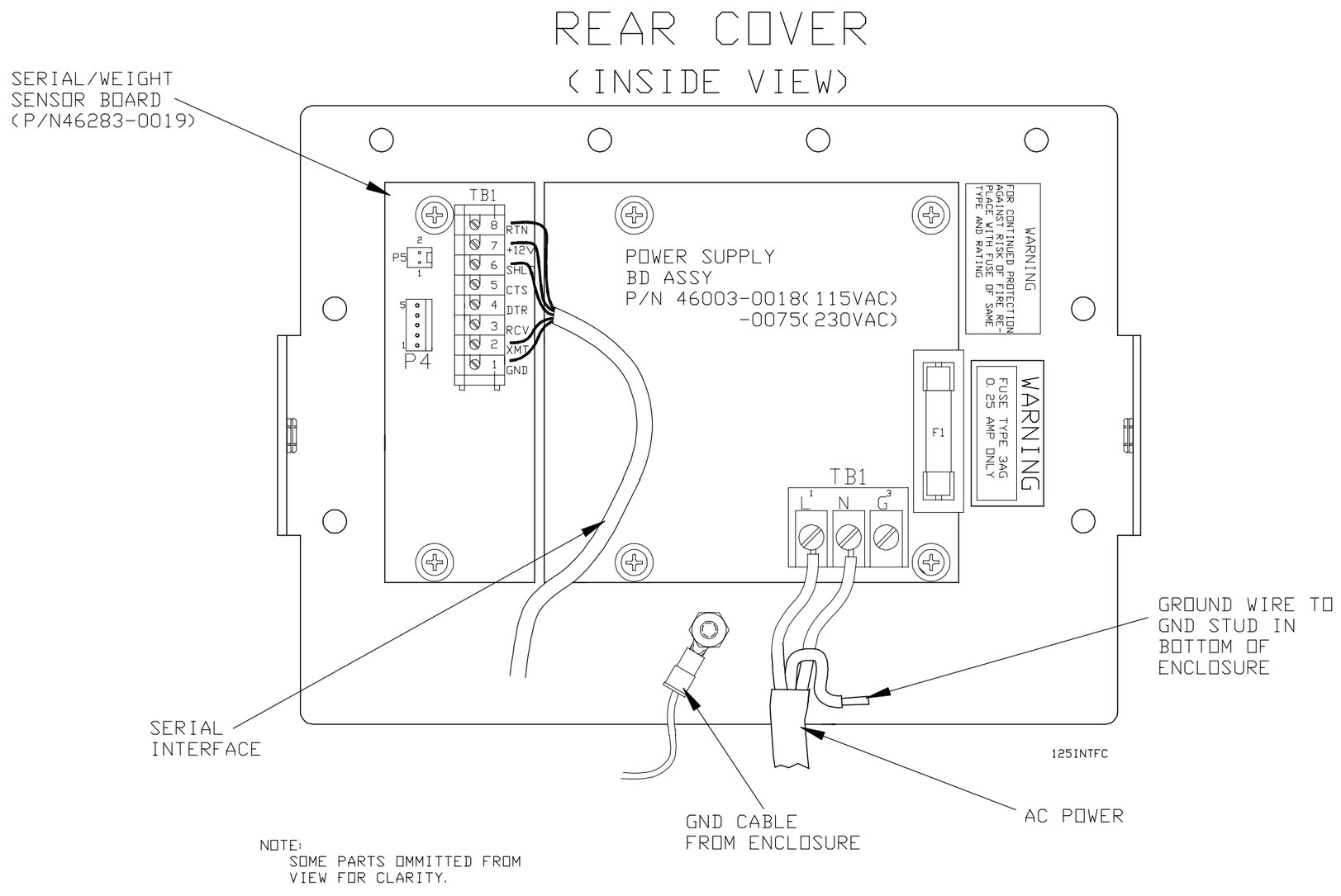
REAR COVER
(INSIDE VIEW)



NOTE:
FOR ILLUSTRATION REASONS SOME COMPONENTS MAY NOT BE SHOWN AND CABLE LENGTHS MAY BE LONGER THAN NORMAL.

(LCD VERSION)
(115/230VAC)
W/ WEIGHT SENSOR CONNECTOR
EXTERNAL INTERFACE CONNECTIONS

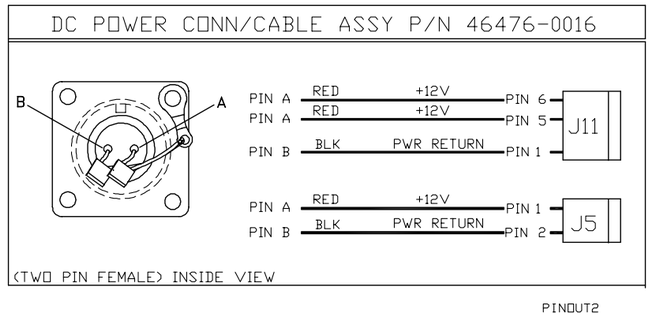
RS-232 Interface Connections	
Terminal Board	**Signal**
TB1-1	Signal Ground
TB1-2	Transmit Data
TB1-3	Receive Data
TB1-4	Data Terminal Ready
TB1-5	Clear To Send
TB1-6	Chassis Ground
TB1-7	+12 VDC
TB1-8	Power Return

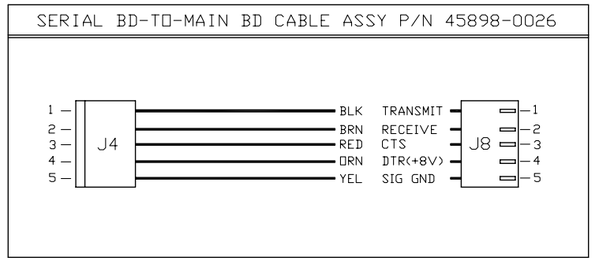


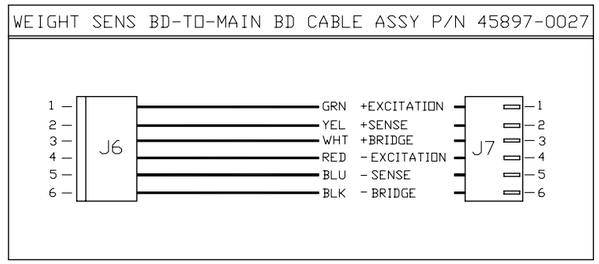
NOTE:
SOME PARTS OMMITTED FROM
VIEW FOR CLARITY.

WI-125SST INDICATOR *(LCD VERSION)*

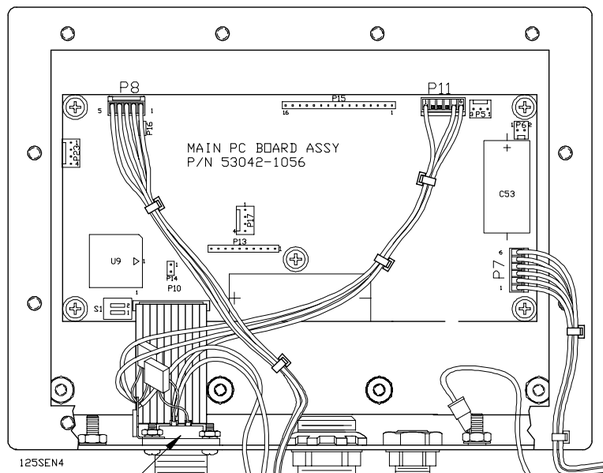
(115/230VAC)
W/ WEIGHT SENSOR CONNECTOR
PC BOARD/CABLE CONNECTIONS



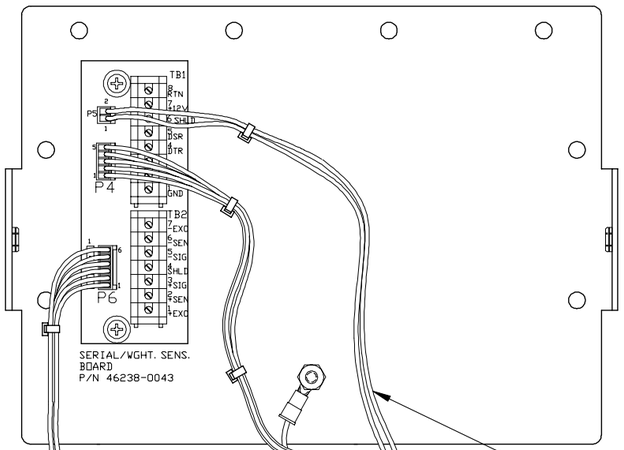




FRONT ENCLOSURE
(VIEW FROM REAR)



REAR COVER
(INSIDE VIEW)



NOTE:
FOR ILLUSTRATION REASONS SOME COMPONENTS MAY NOT BE SHOWN AND CABLE LENGTHS MAY BE LONGER THAN NORMAL.

PWR INPUT CABLE ASSY

12VDC PWR INPUT
CABLE ASSY
(P/N 46476-0016)

GND CABLE ASSY
(P/N 48712-0024)

SERIAL/MAIN BD/DISPL
CABLE ASSY
(P/N 45898-0026)

WEIGHT SENS-TO-MAIN BD
CABLE ASSY (P/N 45897-0027)

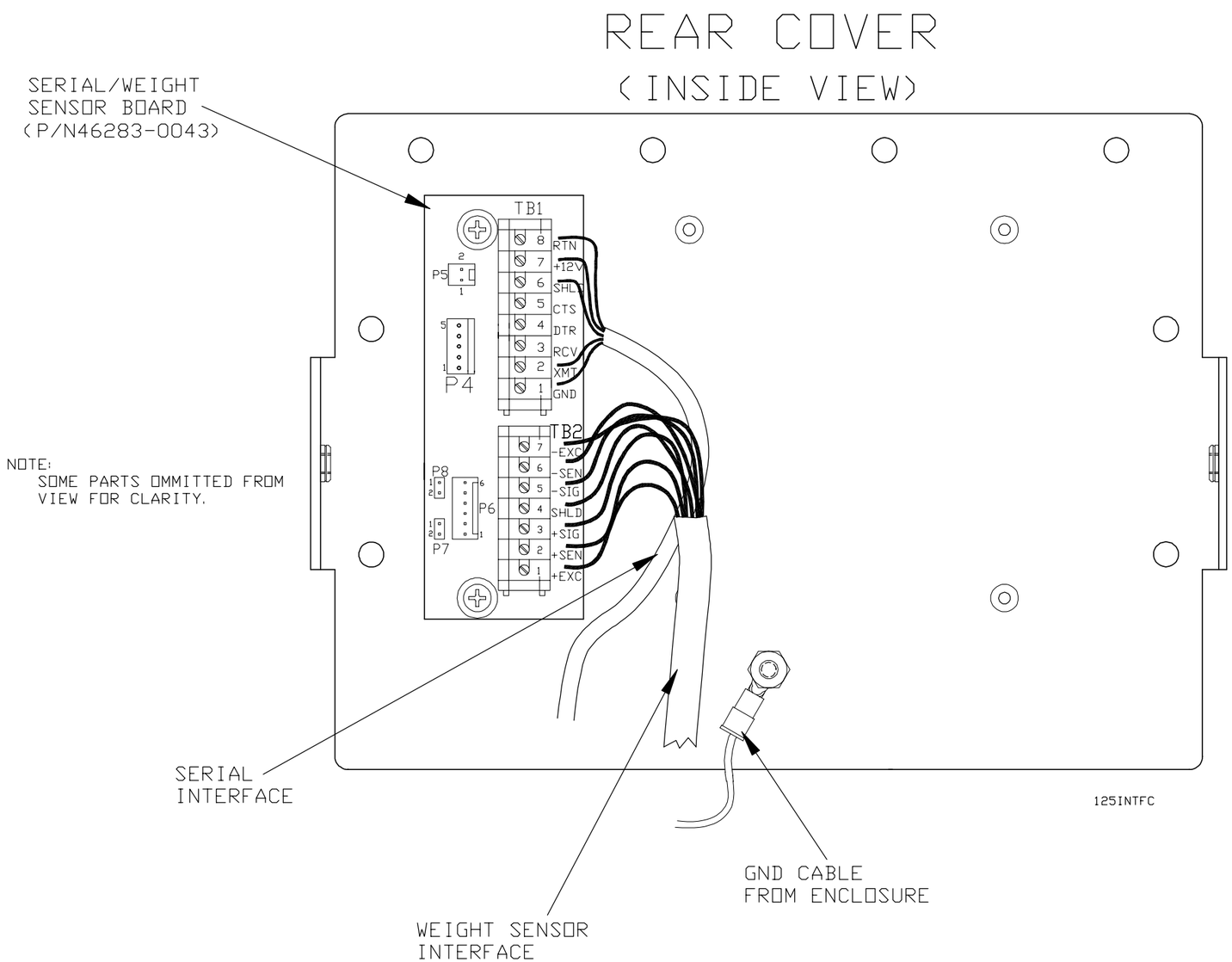
WI-125SST INDICATOR *(LCD VERSION)*

(12VDC)
W/O WEIGHT SENSOR CONNECTOR
EXTERNAL INTERFACE CONNECTIONS

NOTE:
On systems using remote sense (7 wires), store jumper on a single pin of P7 & P8. On systems not using remote sense (5 wires), jumper P7-1 to P7-2 and P8-1 to P8-2 with jumper.

Weight Sensor Interface Connections		
Terminal Board	**Signal**	**W-T Wire Color**
TB2-1	+Excitation	Green
TB2-2	+Sense	Yellow
TB2-3	+Output	White
TB2-4	Shield (Gnd)	White/Orange
TB2-5	-Output	Red
TB2-6	-Sense	Blue
TB2-7	-Excitation	Black

RS-232 Interface Connections	
Terminal Board	**Signal**
TB1-1	Signal Ground
TB1-2	Transmit Data
TB1-3	Receive Data
TB1-4	Data Terminal Ready
TB1-5	Clear To Send
TB1-6	Chassis Ground
TB1-7	+12 VDC
TB1-8	Power Return

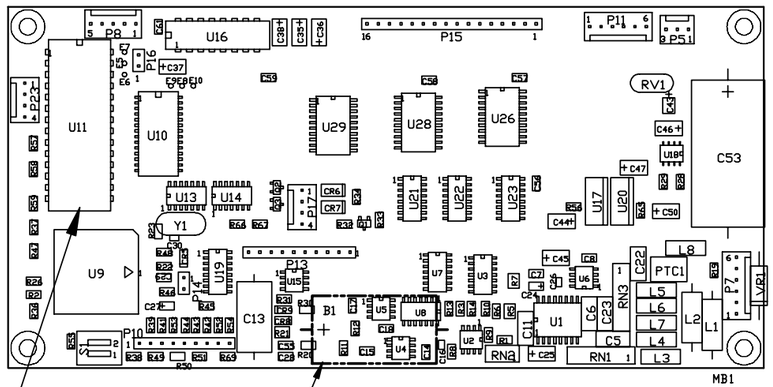


CAUTION !

Failure to observe proper polarity when replacing battery (B1) may cause an explosion. Replace battery only with the same –or- equivalent type recommended by manufacturer. Dispose of used batteries according to manufacturer's instructions.

WI-125SST INDICATOR MAIN BOARD ASSY

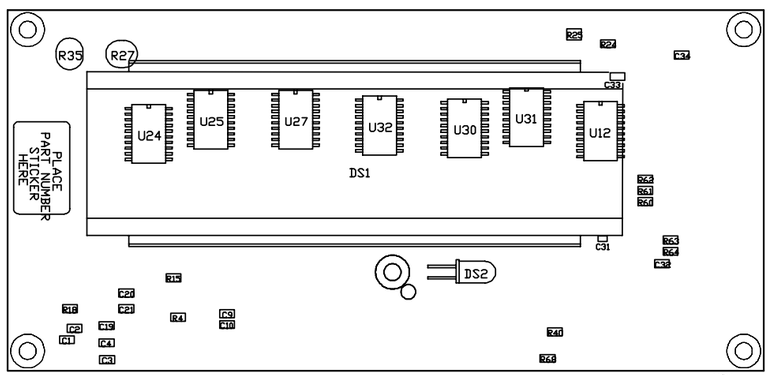
(BOARD w/ E-PROM P/N 53042-1056), (BOARD w/o E-PROM P/N 53042-0033)



COMPONENT SIDE

E-PROM P/N 53662-0016

B1 (BATTERY) P/N 23957-0021



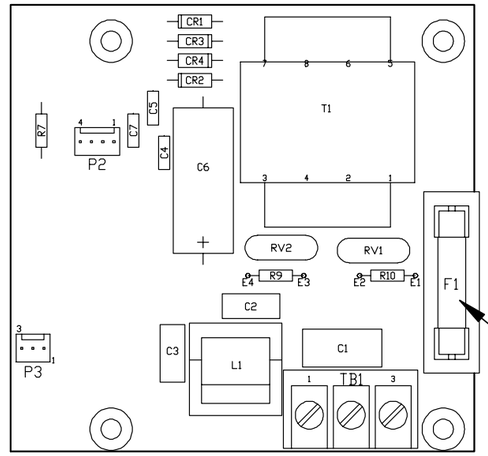
BACK SIDE

SSTMBPS

POWER SUPPLY BOARD

P/N 46003-0018(115VAC)

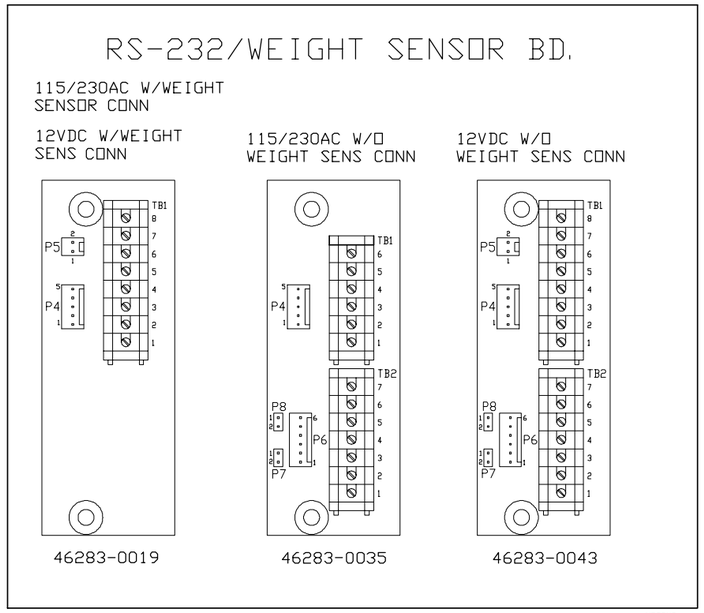
P/N 46003-0075(230VAC)

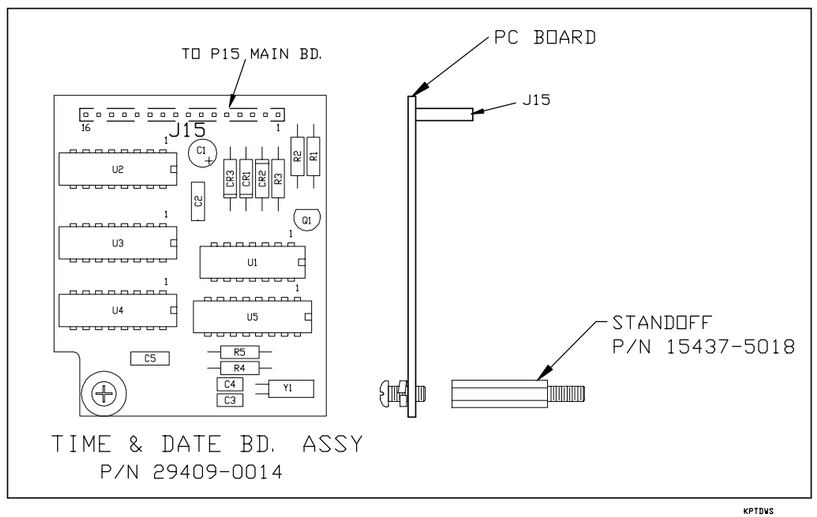


FUSE, 115VAC, 1/4 AMP P/N 15453-0067
FUSE, 230VAC, 1/8 AMP P/N 15453-0091

SSTMBPS

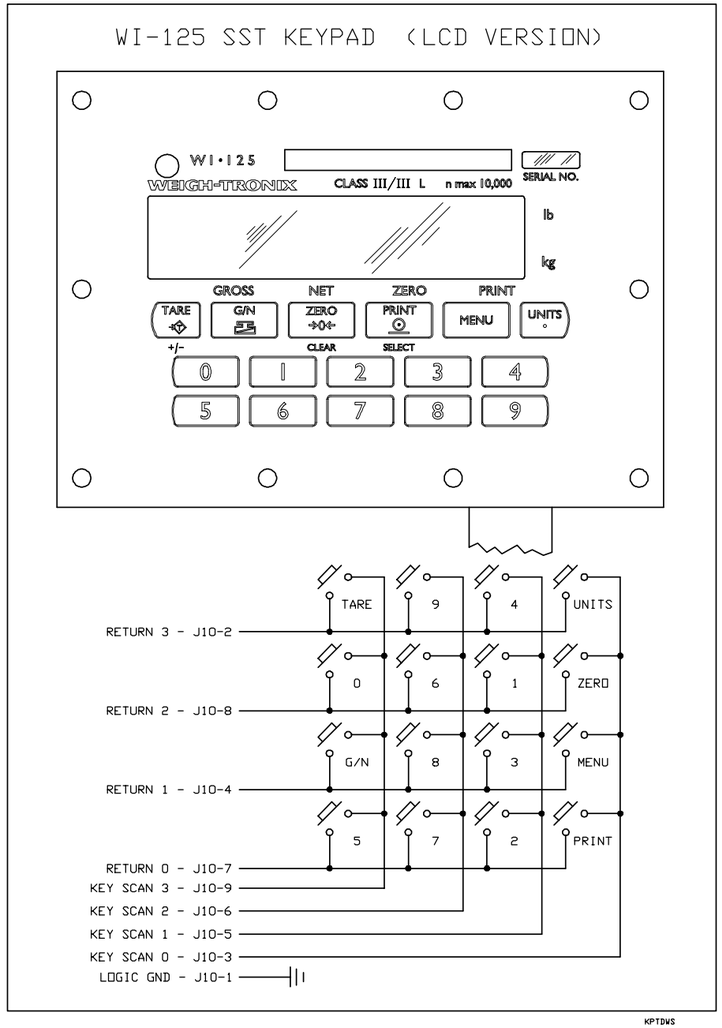
NOTE:
On systems using remote sense (7 wires), store jumper on a single pin of P7 & P8. On systems not using remote sense (5 wires), jumper P7-1 to P7-2 and P8-1 to P8-2 with jumper.





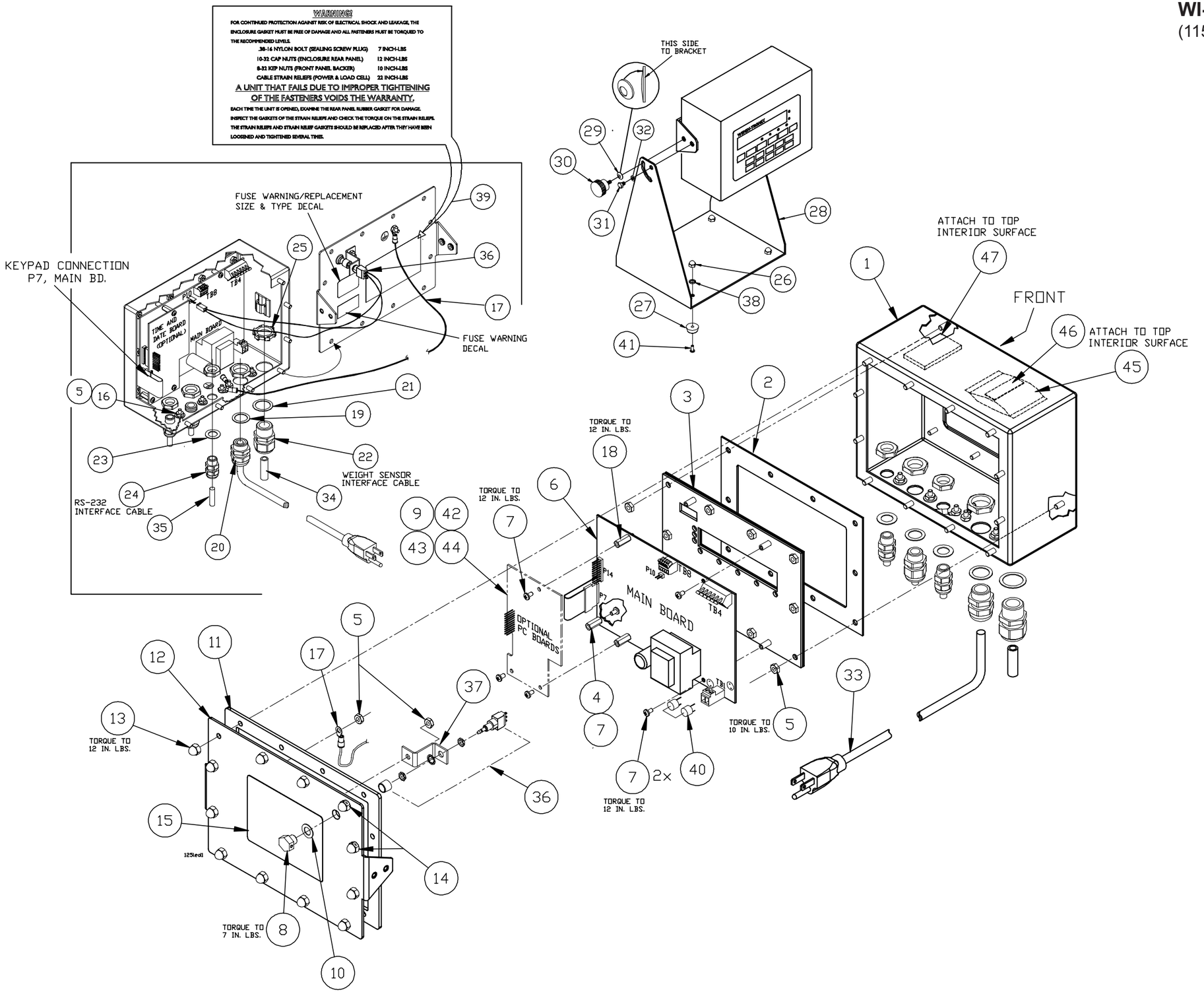
WI-125SST INDICATOR *(LCD VERSION)*

(115/230VAC & 12VDC)
KEYPAD & SCHEMATIC,
SERIAL / WEIGHT SENSOR BOARDS,
TIME & DATE BOARD *(OPTIONAL)*



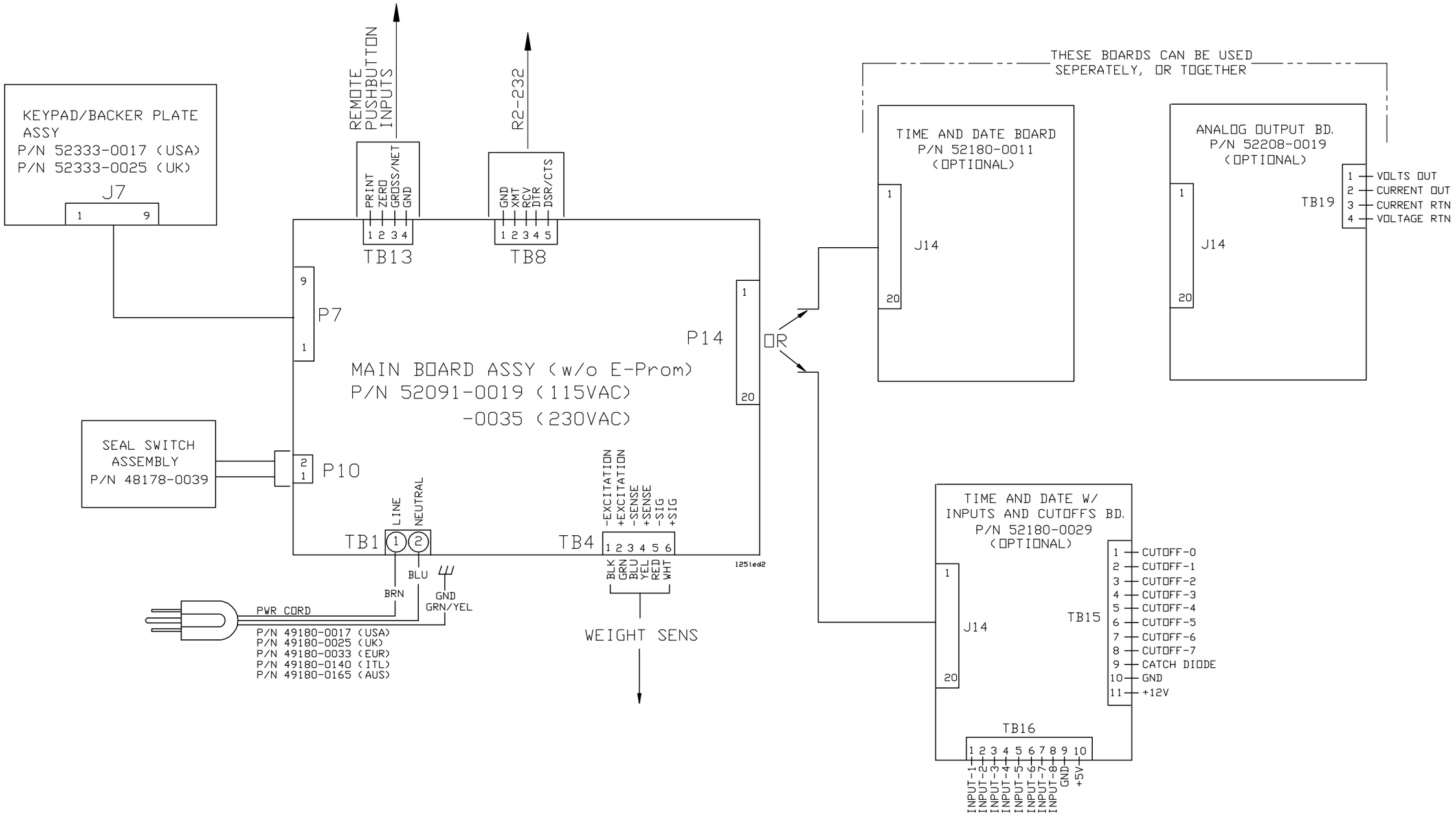
WI-125SST INDICATOR *(LED VERSION)*

(115/230VAC) PARTS AND ASSEMBLY



ITEM NO.	DESCRIPTION	W-T P/N	QTY
1	Enclosure	52263-0011	1
2	Front Bezel Gasket	48723-0013	1
3	Keypad / Backerplate Assy (USA) Keypad / Backerplate Assy (EURO)	52333-0017 52333-0025	1 1
4	Standoff, #6 x 5/8"L, F-F, (used w/ time & date bd.)	14510-0772	1
5	Kep Nut,#8-32	1025-00125	17
6	Main Pc Board Assy (115VAC) w/o E-Prom Main Pc Board Assy (230VAC) w/o E-Prom Programmed E-Prom for above boards	52091-0019 52091-0035 52260-0014	1 1 1
7	Screw, #6-32 X 1/4" L (washer incl)	26380-0021	6
8	Seal Switch Access Plug	1019-11926	1
9	Time And Date Pc Bd Assy (Optional)	52180-0011	1
10	Flat Washer	1030-12680	1
11	Rear Cover Gasket	48187-0012	1
12	Rear Cover	52265-0019	1
13	Cap Nut,#10-32	15786-0016	10
14	Cap Nut,Modified,#10-32	26513-0013	2
15	Model/Compliance Label (115vac) Model/Compliance Label (230vac)	49849-0093 49849-0101	1 1
16	Flat Washer. #8	14475-0049	3
17	Ground Wire Assy	48712-0032	1
18	Standoff, m-f, #6 x 5/8" L (Used W/Time & Date Bd)	15437-0456	2
19	Neoprene Washer, (Used W/ Pwr Cord)	26357-0038	1
20	Strain Relief (Used W/ Pw Cord)	15257-0057	1
21	Neoprene Washer, (Used W/Weight Sens Ca.)	26357-0053	1
22	Strain Relief (Use W/Weight Sens Ca.)	15257-0057	1
23	Neoprene Washer, (Used W/Serial Ca.)	26357-0046	1
24	Strain Relief (Used W/Serial Ca.)	15257-0024	1
25	Lock Nut	17777-0021	1
26	Cap Nut, #8	15771-0039	4
27	Rubber Bumper	15349-0024	4
28	Stand Bracket	48724-0012	1
29	Belleville Washer,.190 Id X .375 Od	1033-13294	2
30	Knob	1091-14144	2
31	Machine Screw,Hex Hd,#10-32 X .25l	14505-0019	2
32	Washer,#10-Internal Tooth	15698-0054	2
33	Power Cord Kit, AC (USA) Power Cord Kit, AC (UK) Power Cord Kit, AC (EUR) Power Cord Kit, AC (ITL) Power Cord Kit, AC (AUS)	49180-0017 49180-0025 49180-0033 49180-0140 49180-0165	1 1 1 1 1
34	Strain Relief/Cable Spacer Sleeve	45098-0017	1
35	Strain Relief Plug	27429-0014	3
36	Seal Switch Assy (includes cable)	48178-0039	1
37	Seal Switch Bracket	48179-0020	1
38	Lock Washer, #8	14474-0040	4
39	Torque Spec Decal	48933-0019	1
40	Fuse, 1/2A (115V) Fuse, 1/4A (230V)	48561-0117 48561-0083	2 2
41	Screw, #8 x 7/16" L	14473-0363	4
42	Time & Date pc Board w/ Cutoffs (optional)	52180-0029	1
43	Time & Date pc Board w/ Cutoffs & Inputs (optional)	52180-0037	1
44	Analog Output pc Board (optional)	52208-0019	1
45	Dessicant Bag	1088-12126	1
46	Foam Tape, 2-side sticky ½"w x 1"L (use w/ item 45)	1045-05982	1
47	VCI Emitter	48680-0014	1

WI-125SST INDICATOR ***(LED VERSION)***
(115/230VAC)
SYSTEM BLOCK DIAGRAM

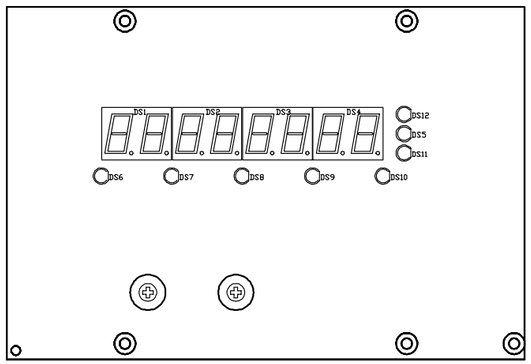


WI-125SST INDICATOR *(LED VERSION)*

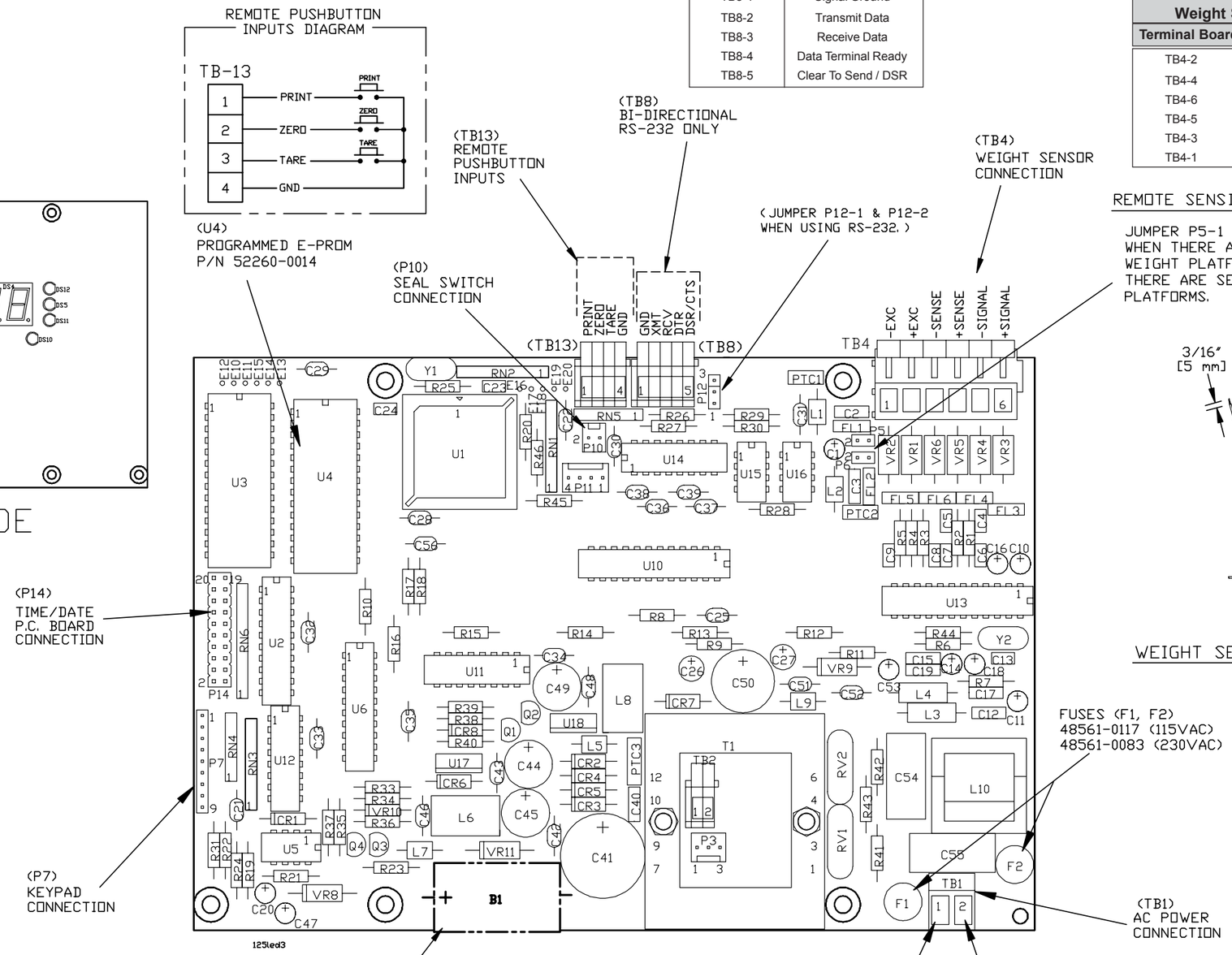
MAIN BOARD ASSY IDENTIFICATION
P/N 52091-0019 (115VAC (w/o E-Prom)
52091-0035 (230VAC) (w/o E-Prom)

RS-232 Interface Connections	
Terminal Board	**Signal**
TB8-1	Signal Ground
TB8-2	Transmit Data
TB8-3	Receive Data
TB8-4	Data Terminal Ready
TB8-5	Clear To Send / DSR

Weight Sensor Interface Connections		
Terminal Board	**Signal**	**W-T Wire Color**
TB4-2	+Excitation	Green
TB4-4	+Sense	Yellow
TB4-6	+Output	White
TB4-5	-Output	Red
TB4-3	-Sense	Blue
TB4-1	-Excitation	Black



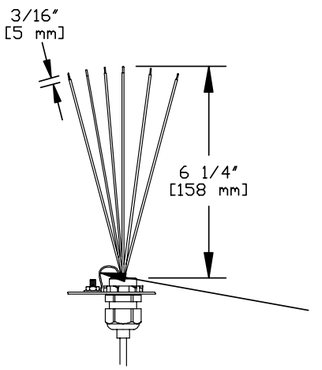
BACK SIDE



COMPONENT SIDE

REMOTE SENSING

JUMPER P5-1 TO P5-2 AND P6-1 TO P6-2 WHEN THERE ARE NO SENSE LINES FROM WEIGHT PLATFORMS, UNJUMPERED WHEN THERE ARE SENSE LINES FROM WEIGHT PLATFORMS.



NOTE:
SHIELD WIRE MUST BE TRIMMED AS SHORT AS POSSIBLE TO MINIMIZE SUSCEPTIBILITY TO "EMI".

WEIGHT SENSOR INTFC. CABLE

FUSES (F1, F2)
48561-0117 (115VAC)
48561-0083 (230VAC)

(TB1)
AC POWER
CONNECTION

NEUTRAL
(BLU)

LINE
(BRN)

B1 (BATTERY)
P/N 23957-0021

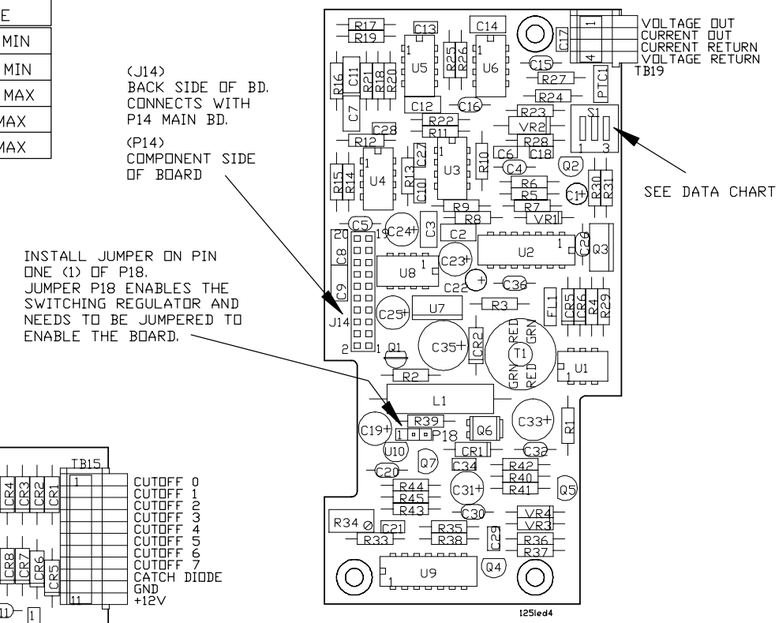
CAUTION !
Failure to observe proper polarity when replacing battery (B1) may cause an explosion. Replace battery only with the same –or- equivalent type recommended by manufacturer. Dispose of used batteries according to manufacturer's instructions.

WI-125SST INDICATOR *(LED VERSION)*

(115/230VAC)

KEYPAD, OPTIONAL P.C. BOARDS

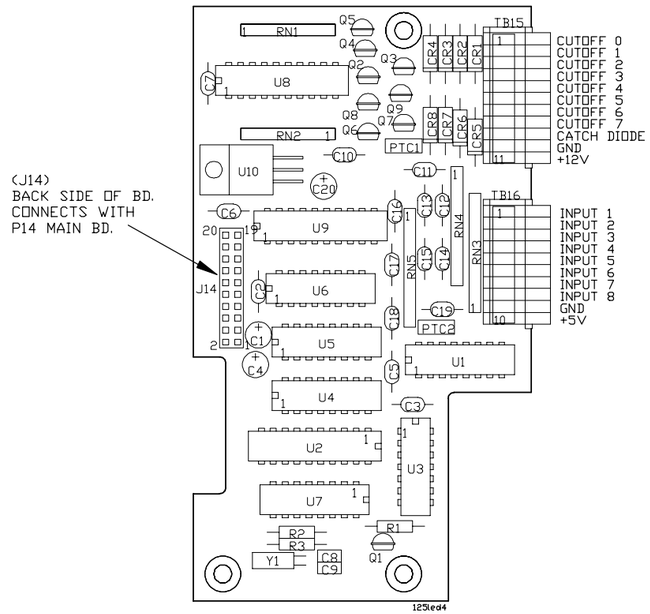
	ANALOG OUTPUT BOARD "S1" DATA CHART				
	S1 1 2 3		OUTPUT	RETURN	LOAD RESISTANCE
0 to +5V	1	0	0	TB19-1	TB19-4	1670 OHMS MIN
0 to +10V	0	0	0	TB19-1	TB19-4	3300 OHMS MIN
1 to 5mA	0	0	0	TB19-2	TB19-3	3900 OHMS MAX
4 to 20mA	0	1	0	TB19-2	TB19-3	470 OHMS MAX
10 to 50mA	0	1	1	TB19-2	TB19-3	390 OHMS MAX



ANALOG OUTPUT PC BOARD

P/N 52208-0019

(COMPONENT SIDE SHOWN)



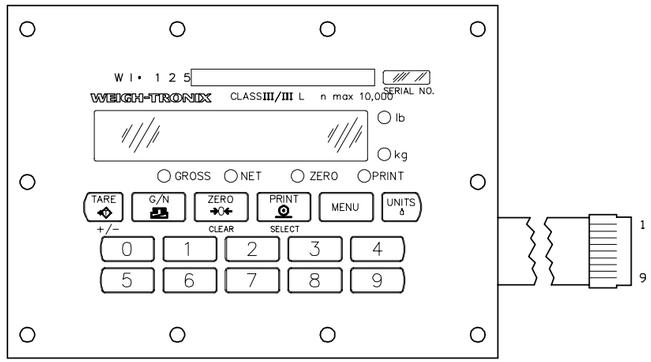
TIME AND DATE PC BOARD

P/N 52180-0011 (TIME & DATE)

-0029 (TIME & DATE w/ CUTOFFS)

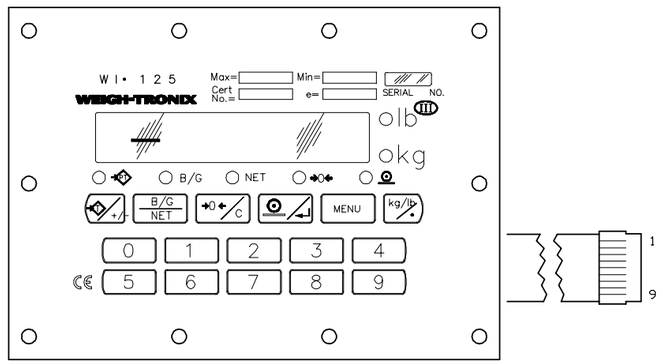
-0037 (TIME & DATE w/ I/O)

(COMPONENT SIDE SHOWN)



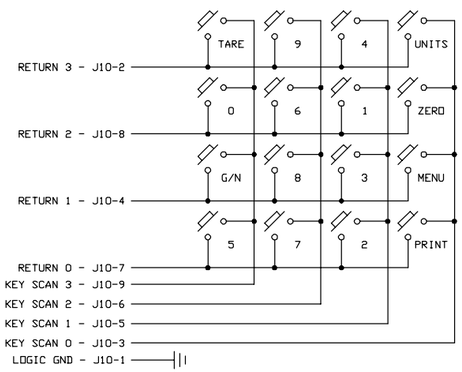
KEYPAD/BACKER PLATE ASSY (USA)

P/N 52333-0017



KEYPAD/BACKER PLATE ASSY (EURO)

P/N 52333-0025



KEYPAD MATRIX

Avery Weigh-Tronix

Declaration of Conformance to SMA Standard
Year of Declaration 2002
Production Meets Type

® *

We the manufacturer of

Model	Type	Certificate and Number	Issued by
WI-125	Electronic Indicator	NTEP CC 92-167A4	NCWM

Declare in our responsibility the conformance of the above listed models and types to the mentioned certificates and the requirements of the SMA standard.

This declaration becomes valid when the SMA Conformance Logo, having our name or trademark is applied to the device or its accompanying documentation.

* SMA PRODUCTION MEETS TYPE DEVICE MANUFACTURER Conformance Logo and Design are a registered trademark of the Scale Manufacturers Association

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06/23/04 125SST_S.P65 PN 29632-0013G e15 Printed in USA