

March 20, 2019

Product: Ishida Uni-7 Touch Screen Price Computing Scale with PrinterContents: PK-260x CPU Board Replacement

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## Background

This bulletin provides the step by step procedure to replace a faulty Uni-7 CPU board. This includes backing up and reloading the data if the scale is still functional as well as entering settings that are not transferable.

The following items will be needed to backup the scale data, replace the CPU board, and restore scale operation.

- Replacement CPU board PK-260B, Rice Lake p/n 174108.
- USB Memory Stick: 8 GB or smaller, FAT32 format, USB 3.0 (R.L. p/n 160906)
- Firmware C2032F or another version compatible with CPU board PK-260B
- Phillips screwdriver
- 7 mm nutdriver or socket wrench
- Needle nose pliers
- 30 Lb certified weights

## Overview

The **Procedure** section below lists the process to replace and restore a Uni-7 CPU board in detail. For those familiar with the Uni-7 this is a summary of the steps. Click the underlined steps to jump to that section in the PDF file.

1. [Make a full USB backup of all files.](#)
2. [Document settings that are not saved in a backup.](#)
  - a. Setup menu > Machine No. (Comms): three communication tabs.
  - b. Firmware version.
  - c. Adjust menu > Printer: all four tabs.
3. Power off the scale but leave the power cord connected for grounding purposes.
4. [Disconnect the LAN cable.](#)
5. [Remove the platter, upper cover, and platter support from the scale.](#)
6. [Remove the old PK-260x CPU board.](#)

7. [Move the battery jumper XJ5 to the ON position on the new PK-260B board.](#)
8. [Install the new PK-260B CPU board.](#)
9. [Install the platter support, upper cover, and platter.](#)
10. Reconnect the LAN cable.
11. Power up the scale.
12. Press ENTER at the Date/Time confirm screen.
13. Press OK at 0107-0000, Touchscreen Adjustment Is Not Complete Yet.
14. [Follow the instructions on the screen to calibrate the touchscreen and exit.](#)
15. Press OK at 0110-0000, Machine Setting Is Not Complete.
16. [Set scale model as needed and exit.](#)
17. Press OK at 0116-0000, The Country Has Not Been Selected.
18. [Set the country as USA and exit.](#)
19. Press OK at 0105-0000, Initialization Failed
20. [Perform three standard memory clears: CLEAR, INIT, and SET and exit.](#)
21. Press OK at 0112-0000, Confirm Operation of the Tactile.
22. [Press every hard key on the keyboard including MODE through ESC and exit.](#)
23. Press OK at 0108-000, Clock Setting Is Not Complete Yet
24. [Enter Date and Time in the indicated format and press SET and EXEC.](#)
25. Press OK at 0111-0000, The Display Confirmation Is Not Completed.
26. [Press the "+" and "-" for both displays to set as 25 and exit.](#)
27. Press OK at 0109-0000, Printer 1 Initialization Was Not Done Yet
28. [Press PRINTER INITIAL and EXEC and exit.](#)
29. Exit to the main menu and press the Operation Icon (lower, right).
30. Press ENTER at the Date/Time confirm screen.
31. [Check the firmware version.](#)
32. [Update the firmware as needed.](#)
33. [Clear the scale's memory if the firmware was updated.](#)
34. [Reset the scale to USA if the firmware was updated.](#)
35. [Reload the USB backup files.](#)
36. [Calibrate the scale.](#)
37. [Enter the Machine No. \(Comms\) settings.](#)
38. [Enter and check the Printer settings.](#)

## Procedure

1. If the scale is not functional to make a backup and document various screens proceed to [step 4](#).
2. Make a USB backup of all files.
  - a. Power up the scale and press the green **ENTER** button at the Date/Time confirm screen.
  - b. Raise the scale's left side access panel and insert a standard Memory Stick in to the USB port. [See Figure 1](#).



Figure 1. USB Memory Stick and LAN Port Location

- c. Press the **MODE** key to enter the Main menu.
- d. Enter **495344** and press the **PLU** key to access hidden menu steps.
- e. Press the **SETUP** menu button.
- f. Scroll down to the last page and select **FILE SAVE / LOAD**.
- g. Press the **SCALE > USB** tab. [See Figure 2](#).
- h. Press the **OUTPUT SELECT** button.

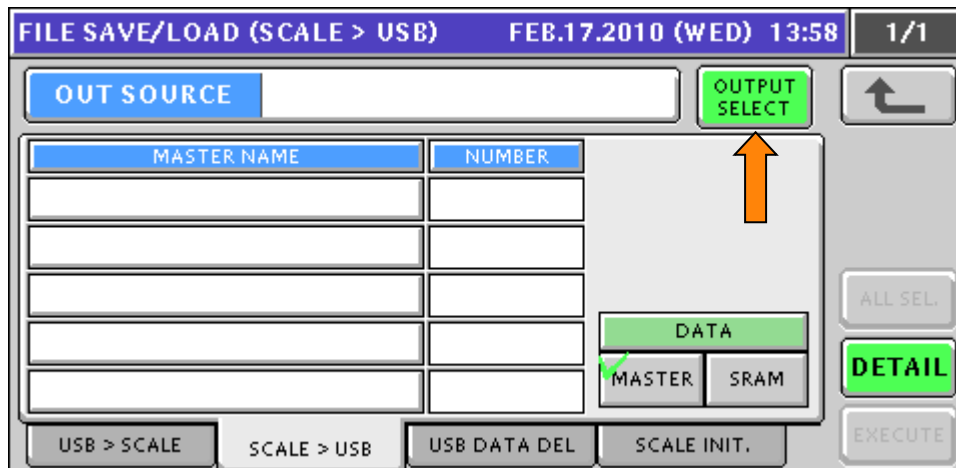


Figure 2. Memory Output to USB Memory Stick

- i. Press an unused file number. It changes to yellow.
- j. Press the **EDIT** button to name the file. See Figure 3.
- k. Enter a short name to describe the file. Including the date is useful.
- l. Press the **RETURN ARROW** (top right) to exit and save the file name. See Figure 3.

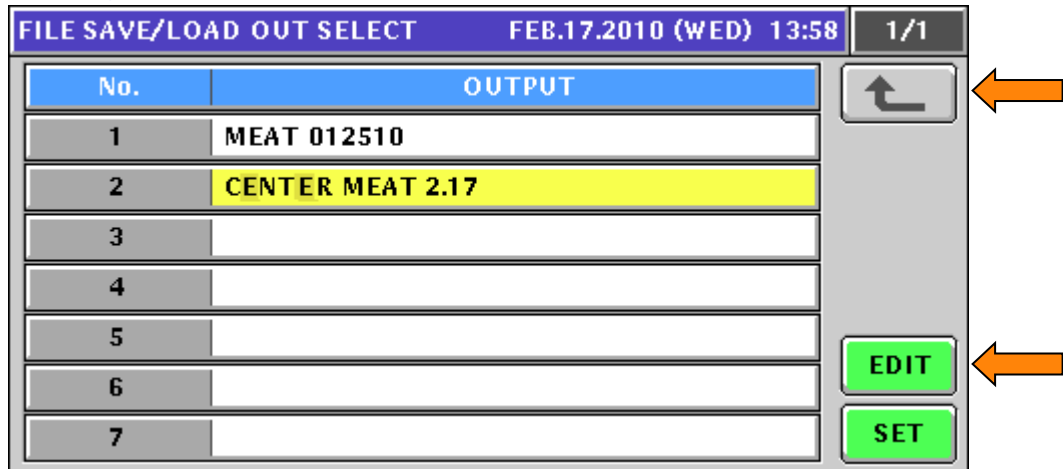


Figure 3. Create Output File

- m. Press the **ALL SEL.** button to select all files for output. See Figure 4.
- n. Press **EXECUTE** and **EXEC** to send the files to the USB Memory Stick.

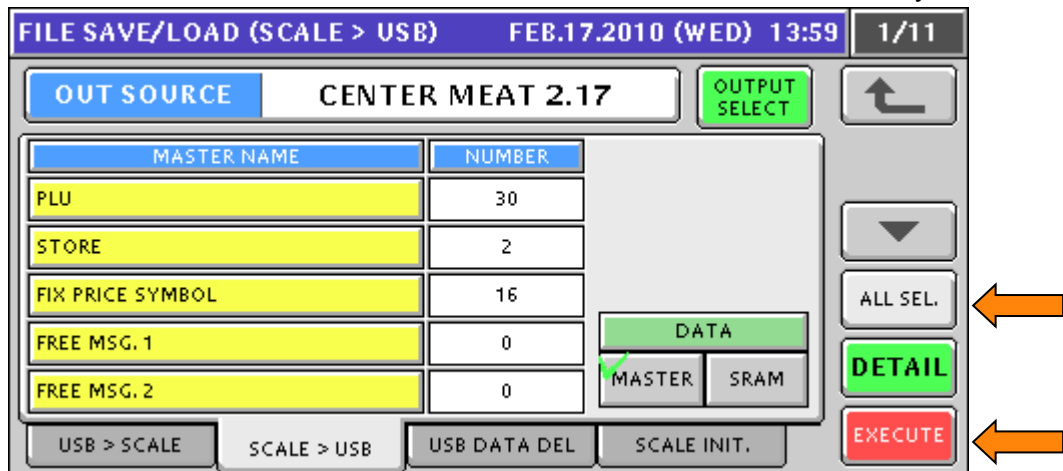


Figure 4. Select All Data for Output

- o. The screen displays the progress of files being copied.
- p. Press **OK** when backup is complete (message 14014-0000). See Figure 5.

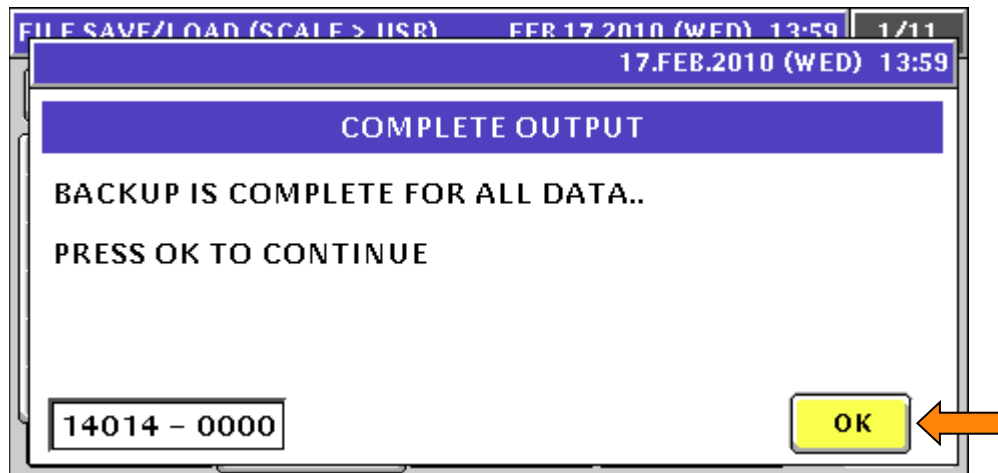


Figure 5. Output to USB Memory Stick Complete Confirmation

- q. Press the **RETURN ARROW** (top right) to exit.
  - r. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.
  - s. Remove the USB Memory Stick.
3. Document the settings that are not saved in a backup.
    - a. Press the **MODE** key to enter the Main menu.
    - b. Enter **495344** and press the **PLU** key to access hidden menu steps.
    - c. Press the **SETUP** menu button.
    - d. Select **Machine No. (Comms)**.
    - e. Take pictures of the settings for the three communication setting sections: *IP ADDR*, *PC COM*, and *WiFi*. See Figures 6, 7, and 8.

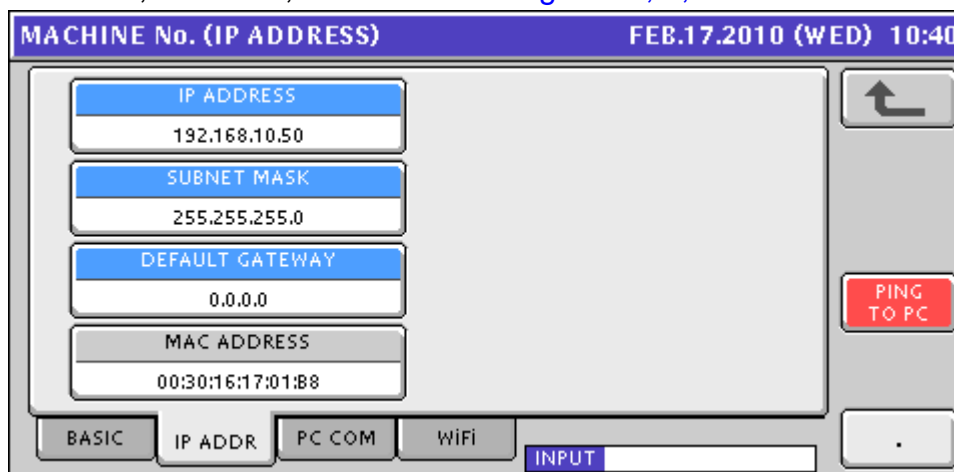


Figure 6. Machine No. (Comms) – IP Address Tab

MACHINE No. (PC COM) FEB.18.2010 (THU) 10:11

PC IP ADDRESS: 192.168.10.214

PC PORT No.: 8071

COM CHECK PERIOD (SEC): 600

COM CHECK TIME OUT (SEC): 2

PRESET FUNC. NAME REFER: COM. DATA

FTP USER:

FTP PASS (MORE THAN 8 CHARS):

PING TO PC

BASIC IP ADDR PC COM WIFI INPUT

Figure 7. Machine No. (Comms) – PC Com Tab

MACHINE No. (WiFi) FEB.17.2010 (WED) 11:05

SECURITY / AUTHENTICATION / ENCRYPTION

NONE WEP64 WEP 128 WEP64 Shared Key WEP 128 ShKey WPA PSK TKIP WPA PSK CCMP WPA2 PSK TKIP WPA2 PSK CCMP

SSID (WIRELESS NETWORK NAME): Scales

KEY TYPE: HEX

WEP KEY INDEX: 1

WEP64 KEY: 1A2B3C4D5E

PING TO PC

BASIC IP ADDR PC COM WIFI INPUT

Figure 8. Machine No. (Comms) – WiFi Tab

- f. Press the **RETURN ARROW** (top right) to exit.
- g. Press the **ADJUST** menu button.
- h. Select **FIRMWARE DETAILS**.
- i. Take a picture of the firmware files. If the firmware version is compatible with the PK-260B CPU board the same firmware can be reinstalled in the new board. See Figures 9.


FIRMWARE DETAILS		MAR.04.2014 (TUE) 16:07
TITLE SOFTWARE	B0674R	
SOFTWARE	VERSION No.	
MAIN	B0675R	
OS	VxWorks5.5.1-1.3/B0611E_SQL	
BOOT ROM	B0663	
KEY BOARD	B0614	
SCALE	J0659	
PRINTER1 (FPGA)	B0612A	
PRINTER2 (PK268*)		

Figure 9. Firmware Details

- j. Press the **RETURN ARROW** (top right) to exit.
- k. Scroll down one page and select **PRINTER**.
- l. Take pictures of the settings for all four sections: *HEAD*, *PEEL SENSOR*, *LABEL TYPE*, and *LABEL FEED*. See Figures 10, 11, 12, and 13.





PRINTER (HEAD)				OCT.09.2010 (SAT) 19:20
PRINTER	< PRN 1 >	CASSETTE 1	HEAD UP ON	   
LABEL	FORMAT	TEST FORMAT(H)	HEAD USAGE	
1	20	110.0mm	0.0km	
TEST PRINT	CHECKER	HEAD TYPE	HEAD RESISTANCE	
< >		< BHE4256 >	960 Ohm	
BACK FEED ADJUST	45mm	60mm	80mm	
	1.0	1.0	1.0	
HEAD	PEEL SENSOR	LABEL TYPE	LABEL FEED	
			INPUT	
			NO YES	

Figure 10. Printer – Head Tab

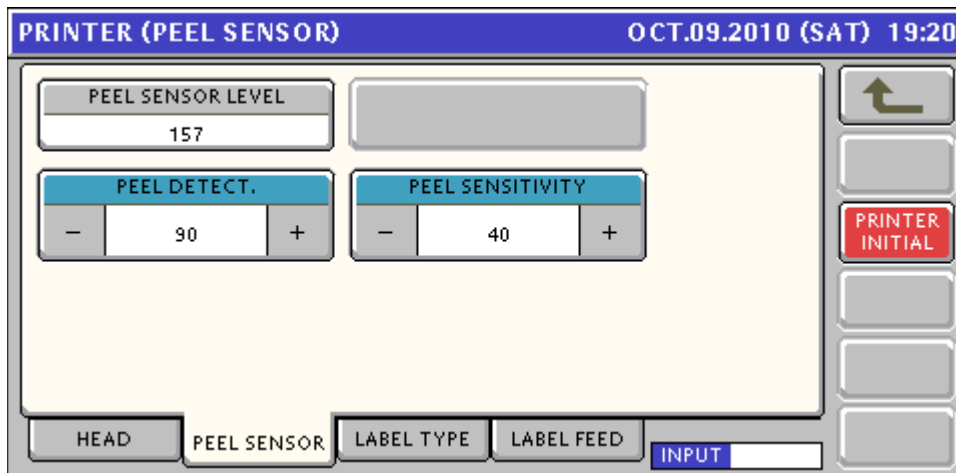


Figure 11. Printer – Peel Sensor Tab

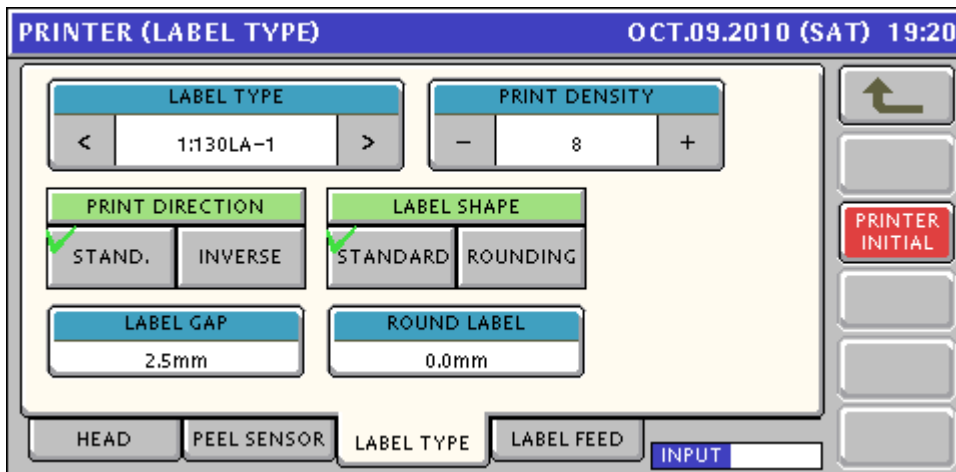


Figure 12. Printer – Label Type Tab

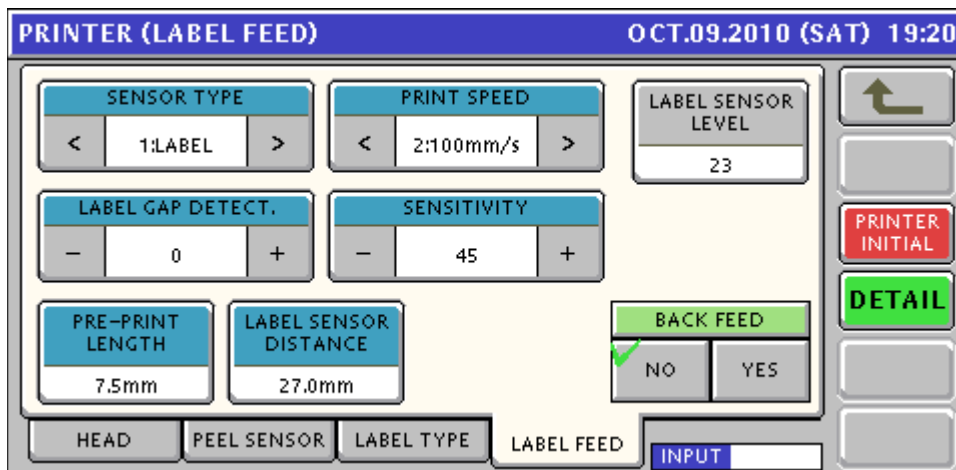


Figure 13. Printer – Label Feed Tab

m. Press the **RETURN ARROW** (top right) to exit.



- n. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.
4. Power off the scale. Leave the power cord connected for grounding purposes.
5. Disconnect Ethernet cable from the LAN port located under the access panel on the left side of the scale. [See Figures 1](#).
6. Remove the platter, upper cover, and platter support from the scale.
  - a. Lift the front side of the platter and pull forward to remove the platter. [See Figures 14](#).



Figure 14. Remove Platter

- b. Remove the cassette from the scale. [See Figures 15](#).

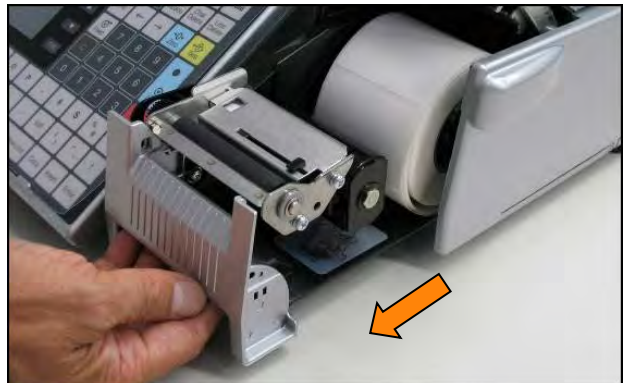


Figure 15. Remove Cassette

- c. Raise the keyboard and remove the screw securing the hinge cover. [See Figures 16](#).

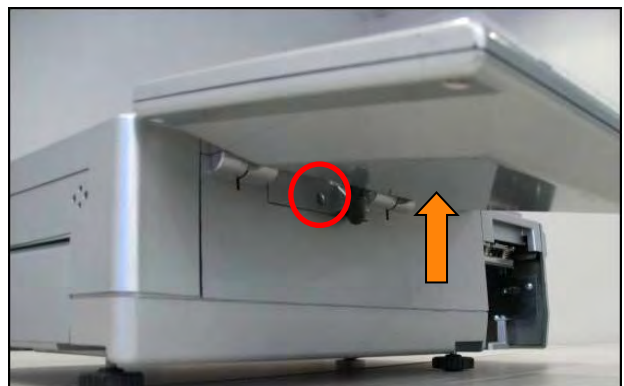


Figure 16. Remove Hinge Cover Screw

- d. Move the keyboard down as far as possible and remove the hinge cover. See Figures 17.

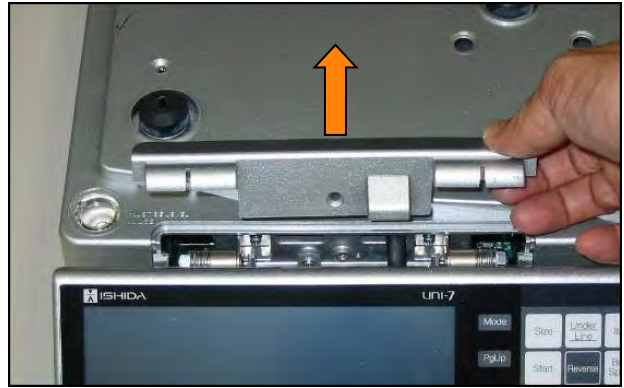


Figure 17. Remove Hinge Cover

- e. Remove the five machine screws (blue), two tapping screws (red), and one TP screw (green). See Figures 18.
- f. Lift up and remove the upper cover.

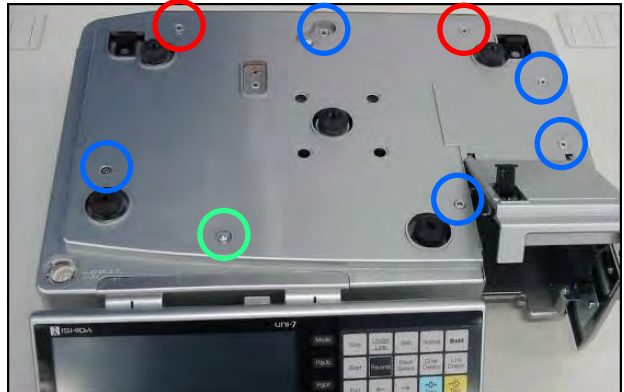


Figure 18. Remove Upper Cover

- g. Remove the four 7 mm bolts securing the platter support. See Figures 19.
- h. Remove the platter support.

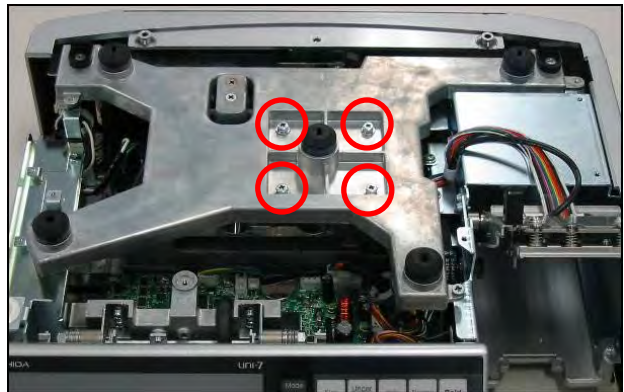


Figure 19. Remove Platter Support

- i. Remove the two screws securing the keyboard hinge bracket. See Figures 20.
- j. Remove the bracket to provide access and clearance to remove the PK-260x CPU board.

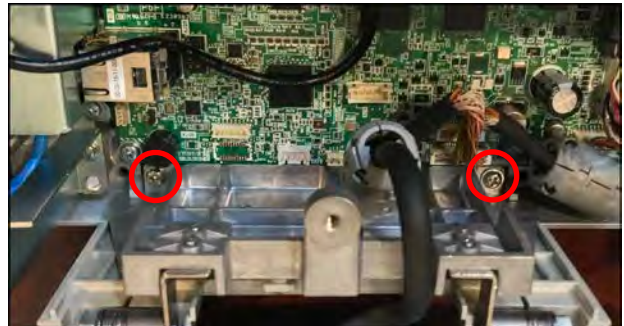


Figure 20. Remove Hinge Bracket

## 7. Remove the old PK-260x CPU board.

- Take a picture of the cable connections for reference when reassembling.
- Disconnect all the cable connections from the CPU board.
- Remove the three screws securing the CPU board (blue). See Figures 21.
- Use a needle nose pliers to squeeze the two plastic spacers and remove the CPU board (red).



Figure 21. Mounting Screws and Spacers

## 8. On the new PK-260B CPU board move the battery XJ5 jumper to the ON position (right two pins). See Figure 22.

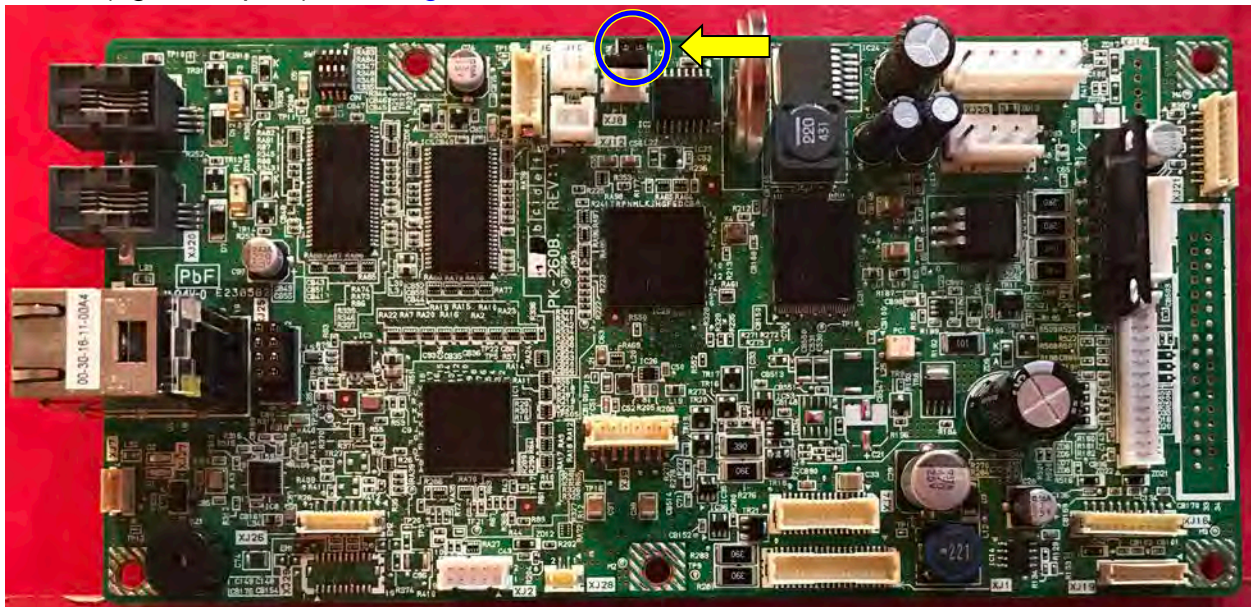


Figure 22. PK-260B CPU Board

- Install the PK-260B CPU board in the reverse order of [step 7](#).
- Install the platter support, upper cover, and the platter in the reverse order of [step 6](#).
- Connect the LAN cable.

12. Power up the scale, press the green **ENTER** button at the Date/Time confirm screen. See [Figure 23](#).

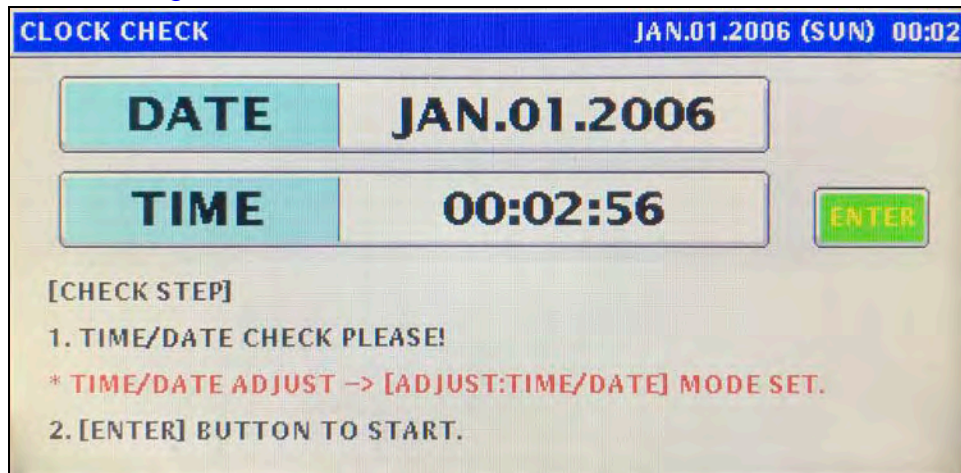


Figure 23. Initial Clock Check Screen

13. Press **OK** at the 0107-0000, Touchscreen Adjustment Is Not Complete Yet screen. See [Figure 24](#).

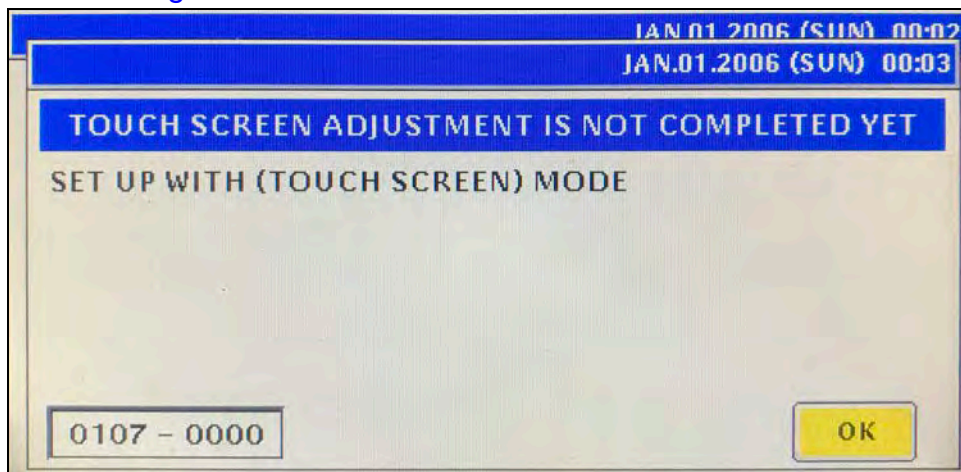


Figure 24. Touch Screen Adjustment Required Prompt

14. Follow the instructions on the screen to calibrate the touchscreen. Use a pen or pencil to accurately press the "+" marks. See [Figure 25](#).
- Press the + in the top left corner.
  - Press the + in the lower right corner.
  - Press the **SET** button to save the calibration.
  - Press the **RETURN ARROW** (top right) to exit.

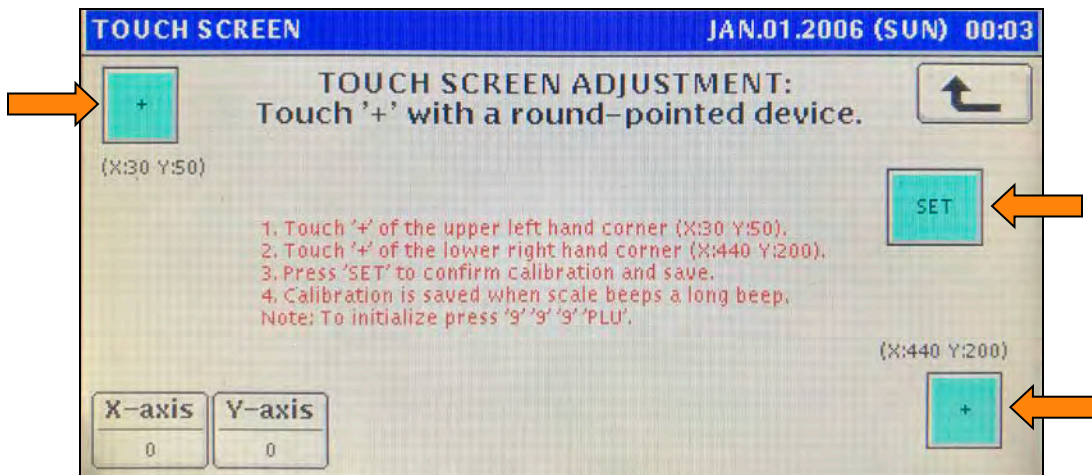


Figure 25. Touch Screen Calibration Screen

15. Press **OK** at the 0110-0000, Machine Setting Is Not Complete screen.  
See Figure 26.

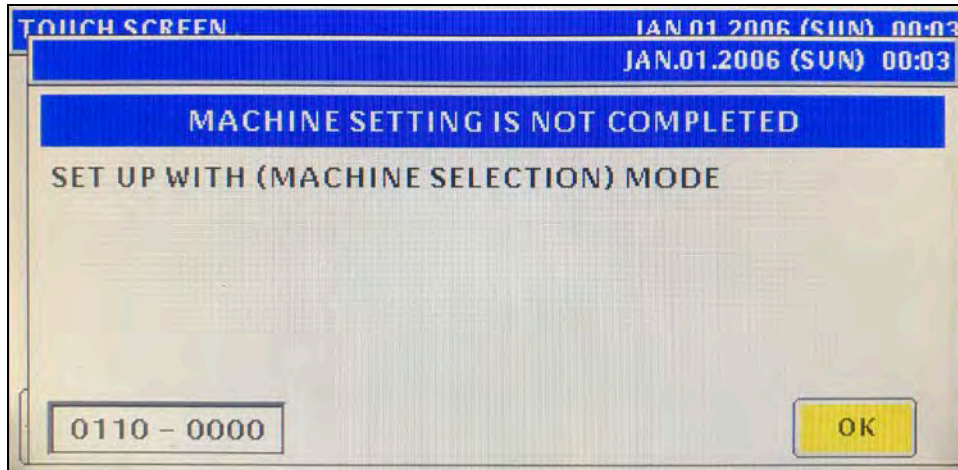
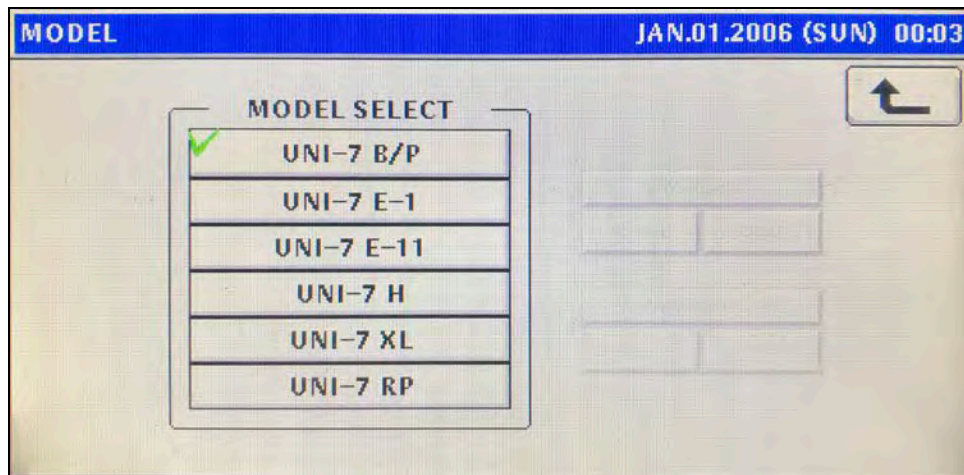


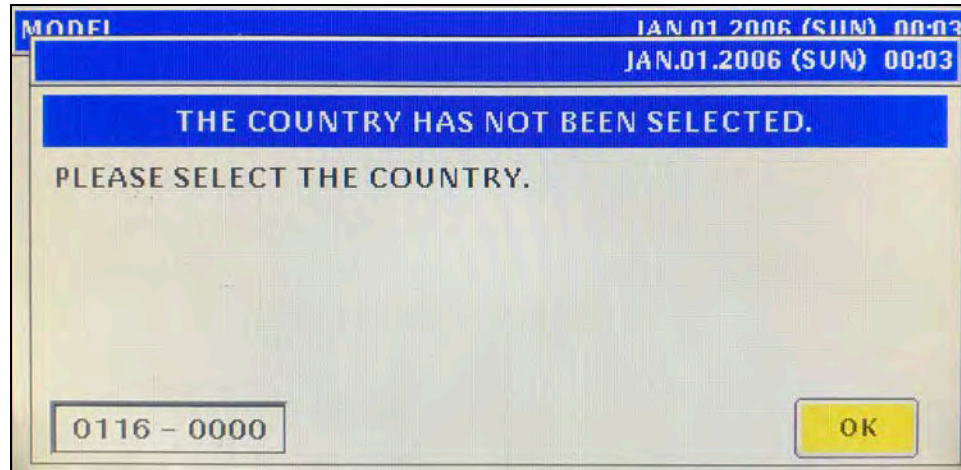
Figure 26. Model Selection Required Prompt

16. Set the scale model as needed. Press the **RETURN ARROW** (top right) to exit.  
See Figure 27.



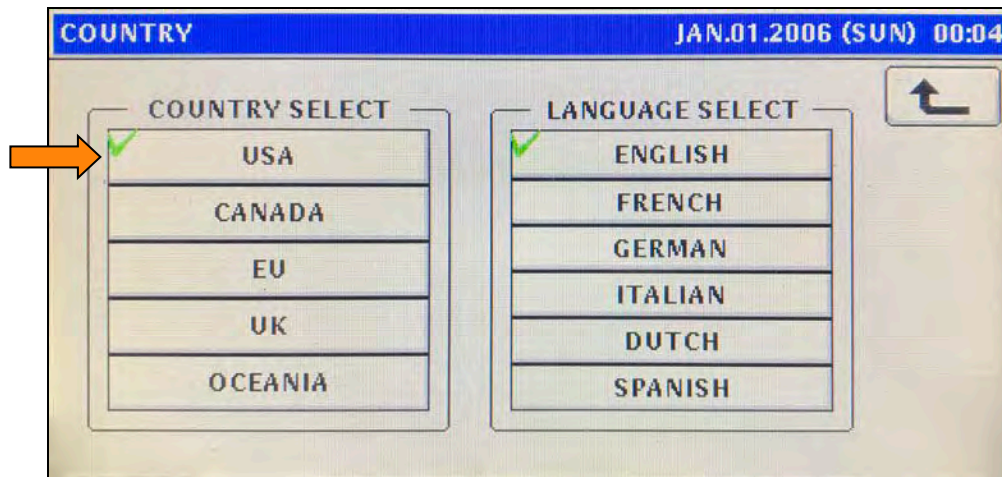
See Figure 27. Model Selection Screen

17. Press **OK** at the 0116-0000, The Country Has Not Been Selected screen.  
See Figure 28.



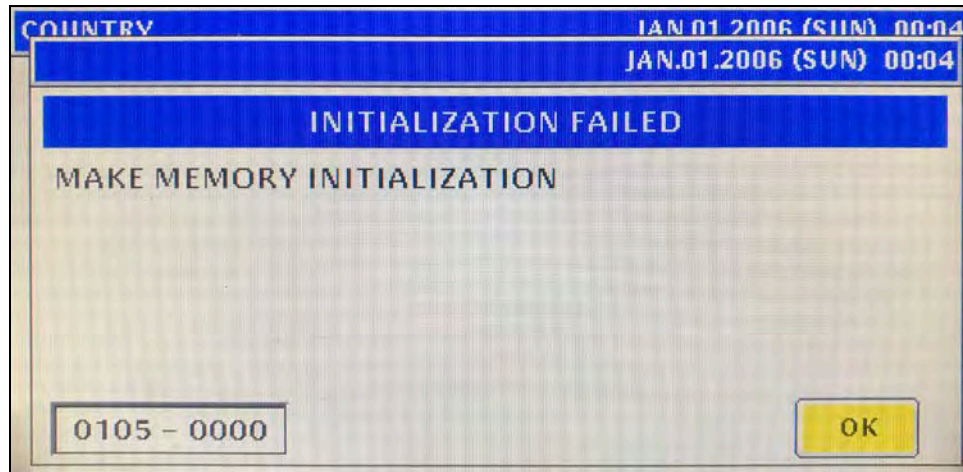
See Figure 28. Country Selection Required Prompt

18. Set the country as **USA**. See Figure 29.
- Enter password **951753** and press the **PLU** key.
  - Select **USA**.
  - Press the **RETURN ARROW** (top right) to exit.



See Figure 29. Country Select Screen

19. Press **OK** at the 0105-0000, Initialization Failed screen. See Figure 30.



See Figure 30. Memory Initialization Required Prompt

20. Perform three standard clears: Master Data Clear, System Data Initialize, and Test Data Set. See Figure 31.
- Press **CLEAR** then press **EXEC**. "OK" is displayed.
  - Press **INIT**. then press **EXEC**. "OK" is displayed.
  - Press **SET** then press **EXEC**. "OK" is displayed.
  - Press the **RETURN ARROW** (top right) to exit.

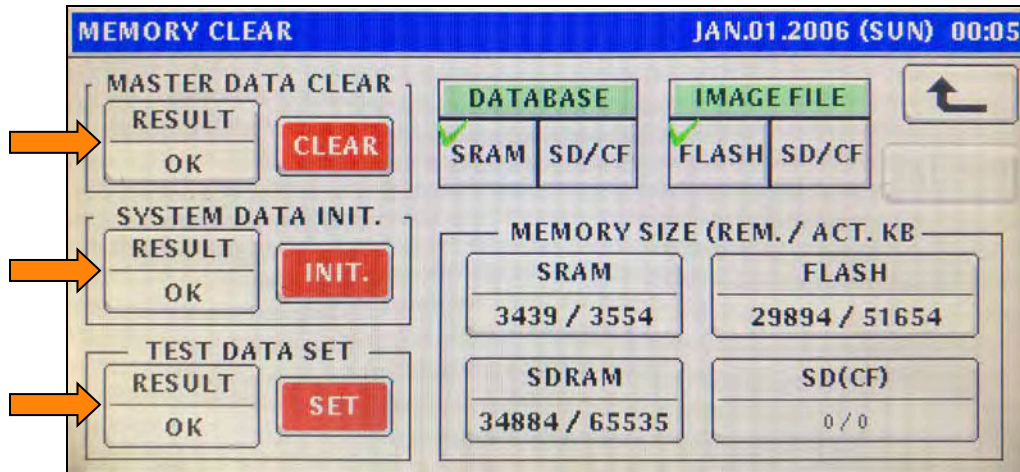


Figure 31. Memory Clear Screen

21. Press **OK** at the 0112-0000, Confirm Operation of the Tactile screen.  
See Figure 32.

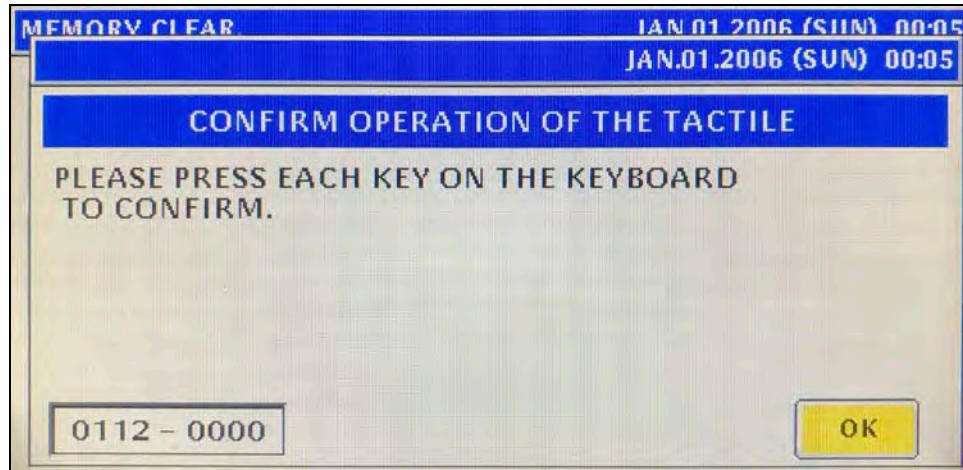


Figure 32. Membrane Keyboard Confirmation Required Prompt

22. Confirm operation of the keyboard. See Figure 33.
- Press every key on the keyboard including **MODE** through **ESC**.  
**Note:** All keys must operate and be highlighted on the screen to complete this step and continue with configuration of the new CPU board.
  - Press the **RETURN ARROW** (top right) to exit.



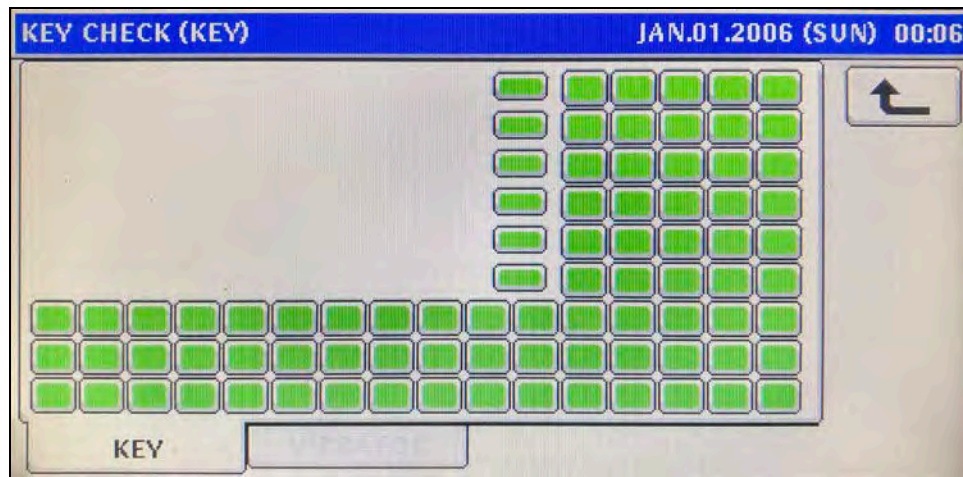


Figure 33. Membrane Key Check Screen after Completion

23. Press **OK** at the 0108-0000, Clock Setting Is Not Complete Yet screen. See Figure 34.

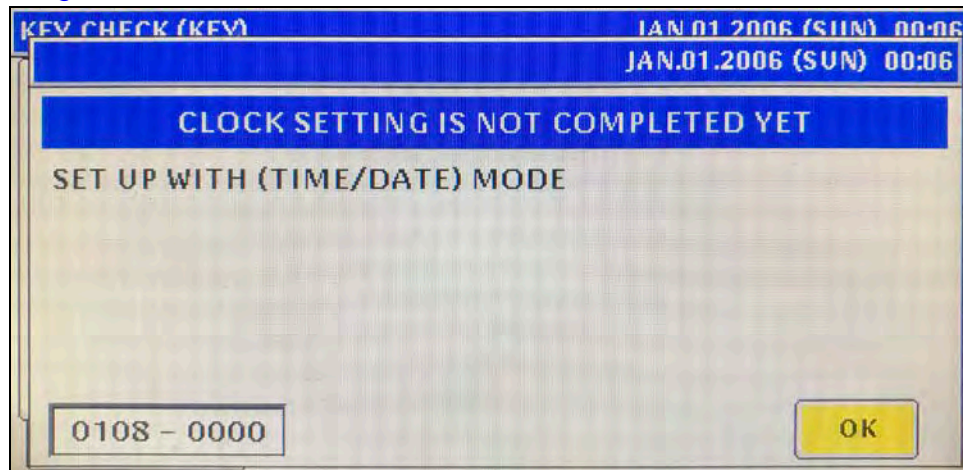


Figure 34. Clock Setting Required Prompt

24. Enter Date and Time values. See Figure 35.
- Enter the date as MMDDYYYY and press the **Date** field.
  - Enter the time as HHMMSS and press the **Time** field.  
**Note:** The time is entered in a 24-hour format.
  - Press **SET** and **EXEC** to save the Date and Time.

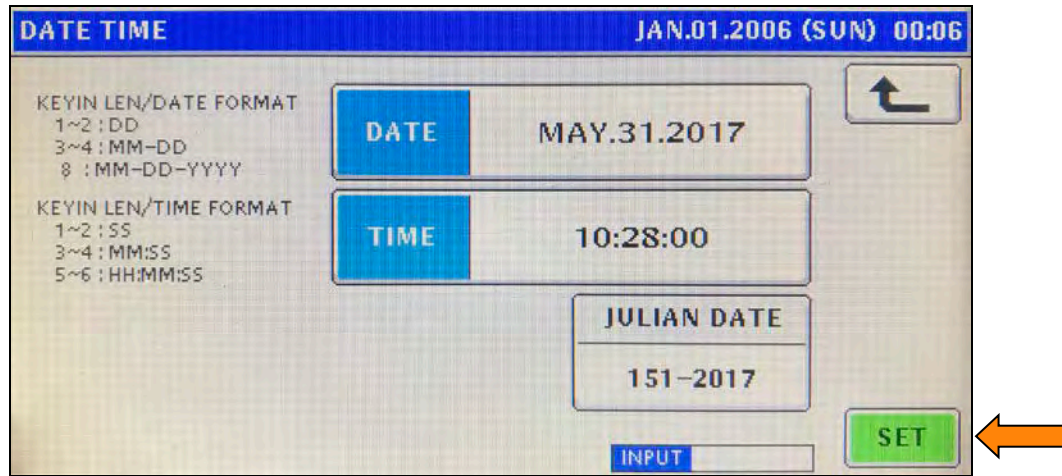


Figure 35. Date and Time Entry Screen

25. Press **OK** at the 0111-0000, The Display Confirmation Is Not Completed screen. See Figure 36.

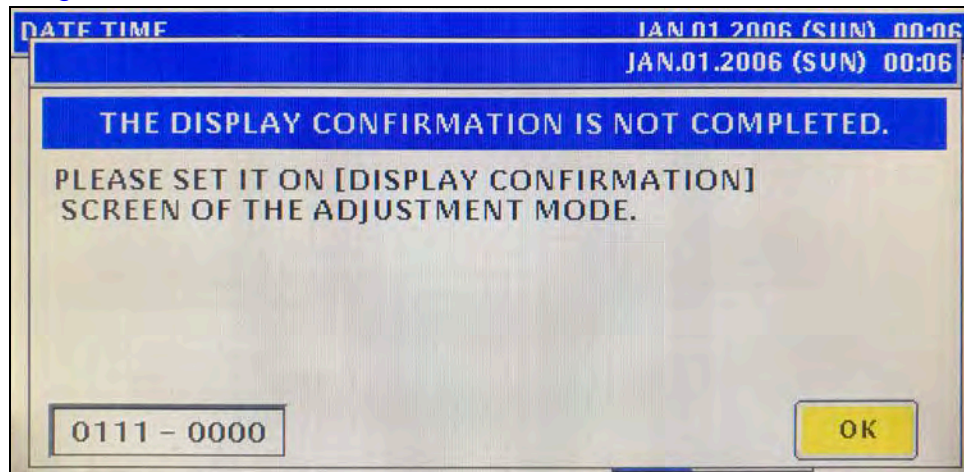


Figure 36. Display Confirmation Required Prompt

26. Press the "+" and "-" for both customer and operator displays to set as 25. Press the **RETURN ARROW** (top right) to exit. See Figure 37.

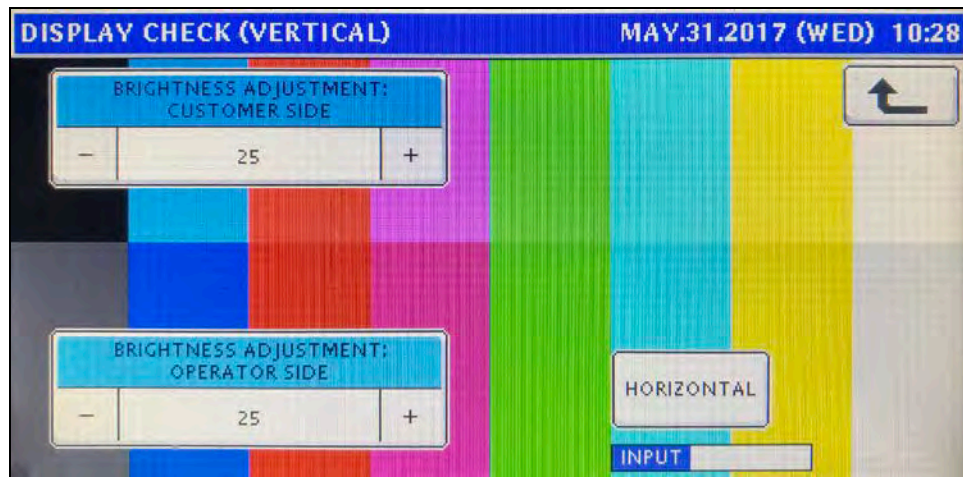


Figure 37. Display Brightness Adjustment Screen

27. Press **OK** at the 0109-0000, Printer 1 Initialization Was Not Done Yet screen.  
See Figure 38.

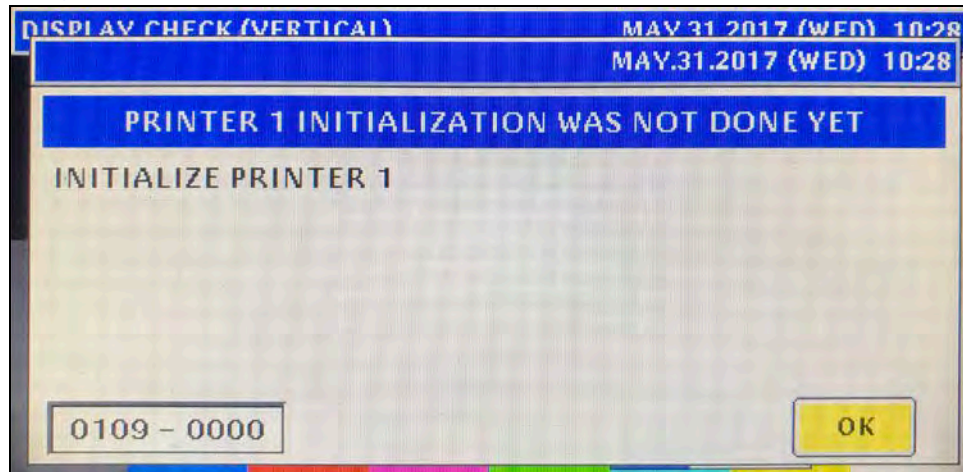


Figure 38. Printer Initialization Required Prompt

28. Initialize the printer. See Figure 39.
- Press **PRINTER INITIAL** and **EXEC**.
  - Press the **RETURN ARROW** (top right) to exit to the main menu.

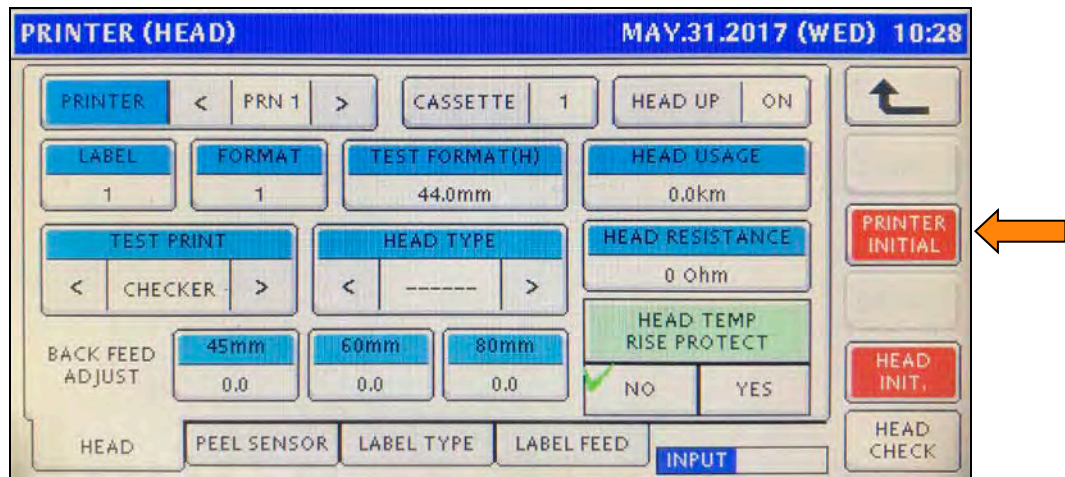


Figure 39. Printer Screen before Initialization

29. Press the **OPERATION ICON** (lower, right) to return to the Clock Check screen.

30. Press **ENTER** to return to the Operation mode.

31. Check the Firmware version in the new CPU board.

- a. Press the **MODE** key to enter the Main menu.
- b. Enter **495344** and press the **PLU** key to access hidden menu steps.
- c. Press the **ADJUST** menu button.
- d. Select **FIRMWARE DETAILS**.
- e. Verify the TITLE SOFTWARE lists the current or desired firmware version.  
*Example: C2032F. See Figure 40.*

**Note:** C2032F is the current Uni-7 firmware version as of March 2019.

- f. Press the **RETURN ARROW** (top right).
- g. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.

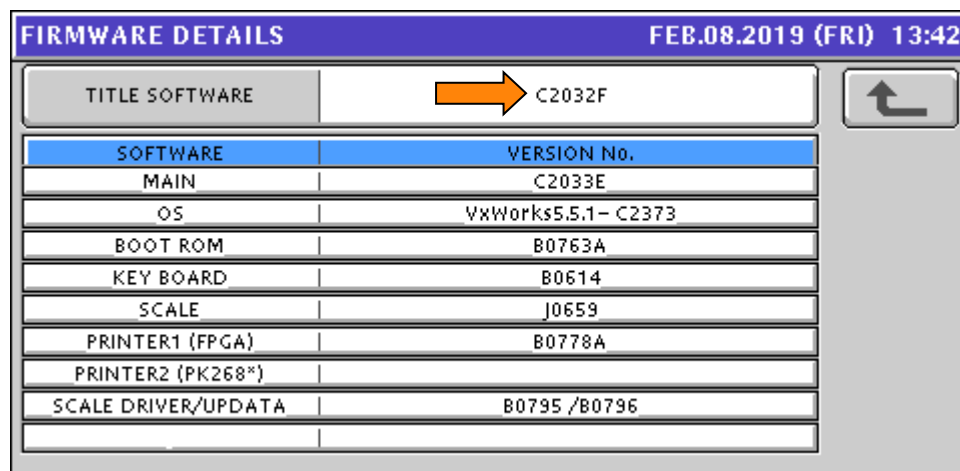


Figure 40. Firmware Details Screen

32. Update the firmware if the installed version is out of date or not the desired version, otherwise proceed to [step 35](#). Firmware files are loaded to the Uni-7 directly from a USB memory stick.

**Note:** Confirm the firmware version is compatible with the PK-260B CPU board. If the firmware is not compatible it will not be displayed on the Download (Main) screen. [See Figure 42](#).


- a. Copy the scale firmware "Soft" folder onto an empty USB memory stick.
  - The "Soft" folder must not be zipped.
  - The "Soft" folder must be the only data on the USB memory stick.
- b. With the scale powered OFF raise the left side access panel and insert the Memory Stick in to the USB port. [See Figure 1](#).

- c. Power up the scale and press the green **ENTER** button at the Date/Time confirm screen.

**Note:** Power up may take several minutes depending on the firmware version.

- d. The upper display bar will be red indicating boot up from a USB Memory Stick. [See Figure 41](#).

**Note:** If the upper display bar is not red the USB memory stick was not recognized or the firmware files were not saved properly on the USB memory stick. Confirm the USB memory stick is fully inserted. Repeat the procedure from step a. or try another USB memory stick.

PLU 0					08-02-2019 (FRI) 15:55		TARE kg		0,000			
 Check the weight before operation. Enter PLU No. and press [PLU] key.							ZERO		WEIGHT kg		0,000	
PLU No.	CATEGORY	CATEGORY	CATEGORY					UNIT PRICE €/kg		0,00		
0	MEAT	DELI	FISH					TOTAL PRICE €		0,00		
TOTAL DISPLAY												
OSIS												
KEY LOCK												
<ON>												

[Figure 41](#). Top, Red Bar Indicates Boot Up from USB Memory Stick

- e. A warning message 0114-0000, Data Composition Is Different. Please Initialize the Memory may be displayed if the current and new firmware versions differ greatly. If this message appears press **OK** and skip to step g.
- f. Press the **MODE** key to enter the Main menu.
- g. Enter **495344** and press the **PLU** key to access hidden menu steps.
- h. Press the **ADJUST** menu button.
- i. Scroll down and select **DOWNLOAD** (page 2/3).
- j. At the DOWNLOAD (MAIN) screen select **MAIN (ALL CLR)** and press **EXECUTE**. [See Figure 42](#).

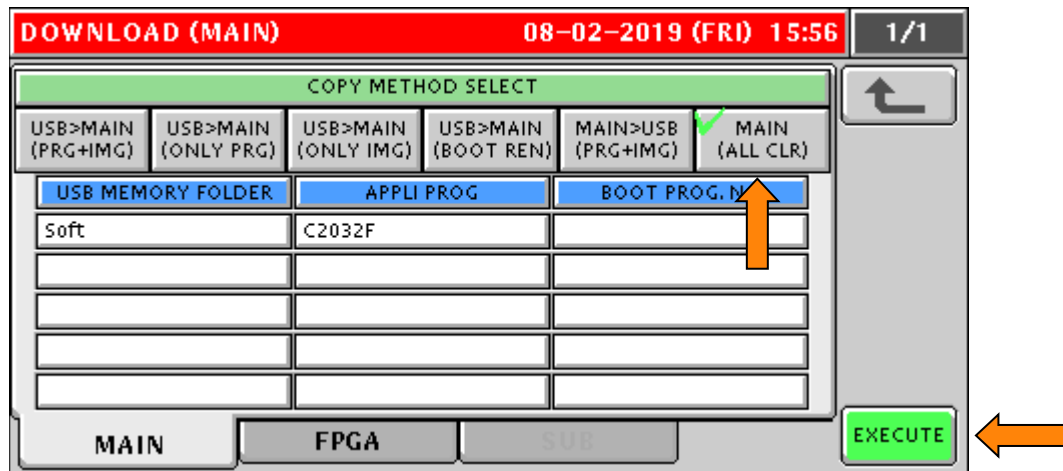


Figure 42. Select **MAIN (ALL CLEAR)** to Erase Old Firmware Files

- k. A warning message 0114-0000, Data Composition Is Different. Please Initialize the Memory may be displayed if the current and new firmware versions differ greatly. If this message appears press **EXEC** to continue.
- l. Press **EXEC** to begin clearing the existing firmware files from Flash ROM memory.
- m. After the Flash ROM is cleared, the display will return to the DOWNLOAD (MAIN) screen.
- n. Select **USB>MAIN (PRG+IMG)**. See Figure 43.
- o. Press the firmware version to be installed. It will be highlighted in yellow. See Figure 43.

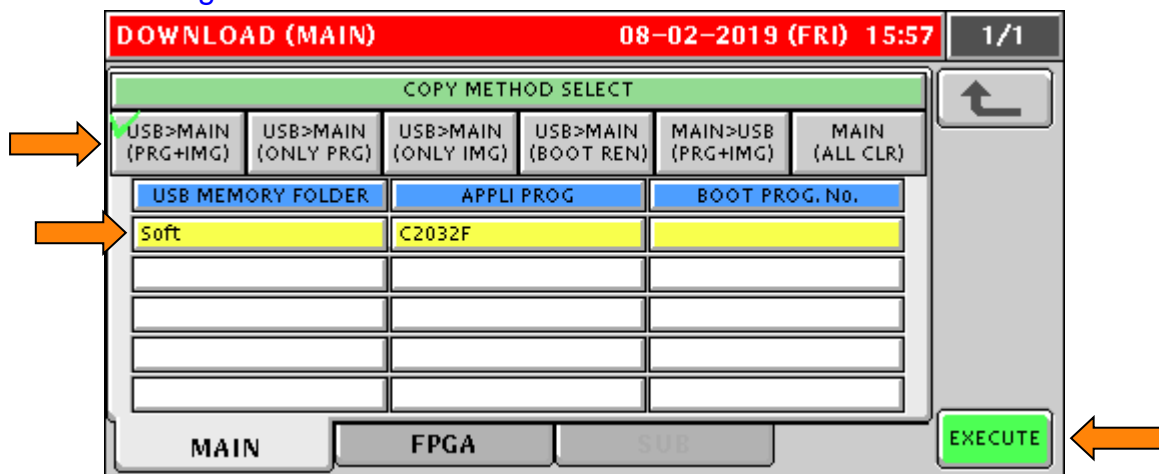


Figure 43. Select **USB>MAIN (PRG+IMG)** and the Firmware File to Install

- p. Press **EXECUTE**.
- q. If the message 15034-0000 "DATABASE VERSION IS DIFFERENT" is displayed press **EXEC** to continue.
- r. Press **EXEC** to begin the firmware download. See Figure 44.

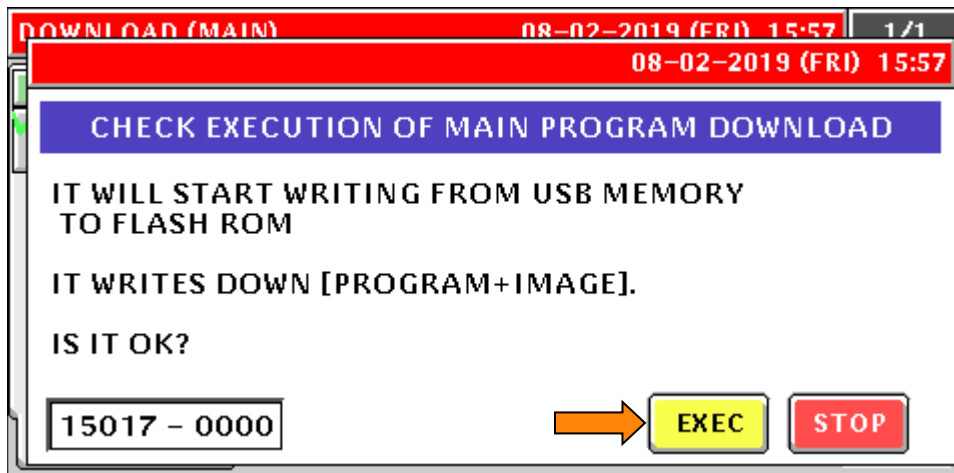


Figure 44. Press **EXEC** to Begin Firmware Download

- s. The screen will show the firmware download progress. [See Figure 45.](#)  
**Note:** The download may take a few minutes to begin and up to 12 minutes to complete. The flashing light on the USB memory stick indicates files are transferring.

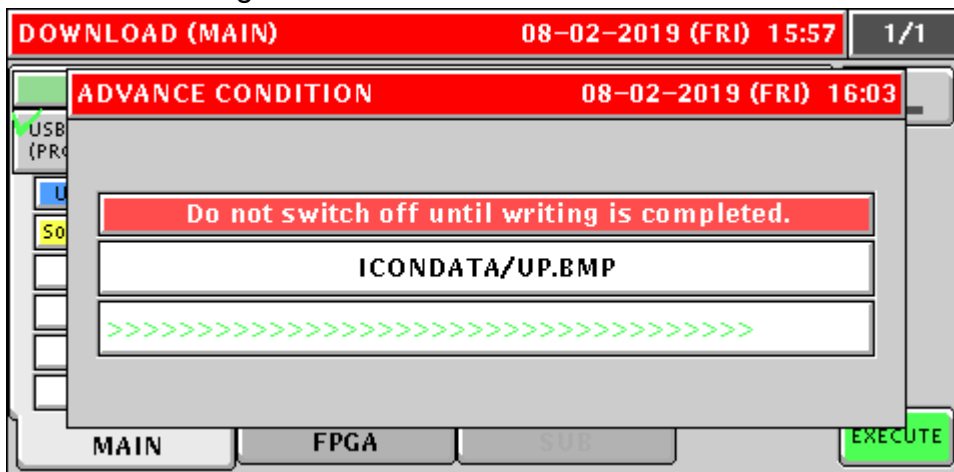


Figure 45. Firmware Download – This May Take Up to 12 Minutes

- t. When message 15029-0000 Re-Boot Check is displayed the firmware download is complete -- power the scale off. [See Figure 46.](#)

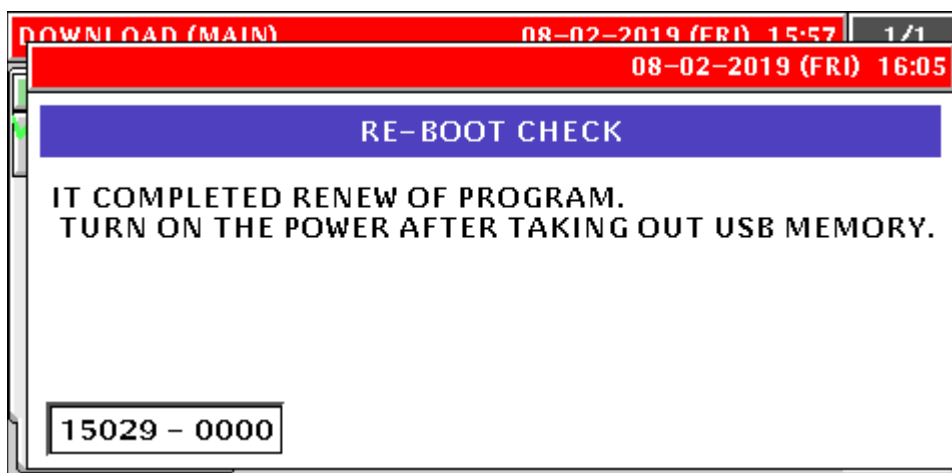


Figure 46. Firmware Download Is Complete

- u. Remove the USB Memory Stick.
- v. Wait five seconds and power up the scale.
- w. Press the green **ENTER** button at the Date/Time confirm screen.
- x. A warning message 0114-0000, Data Composition Is Different. Please Initialize the Memory will be displayed again if the old and new firmware versions differ greatly. If this message appears press **OK** to continue, and move to [step 33](#), step b. to clear the scale's memory.
- y. When the scale reboots the upper display bar will be blue indicating a normal start up from the main CPU board's Flash ROM. [See Figure 47.](#)

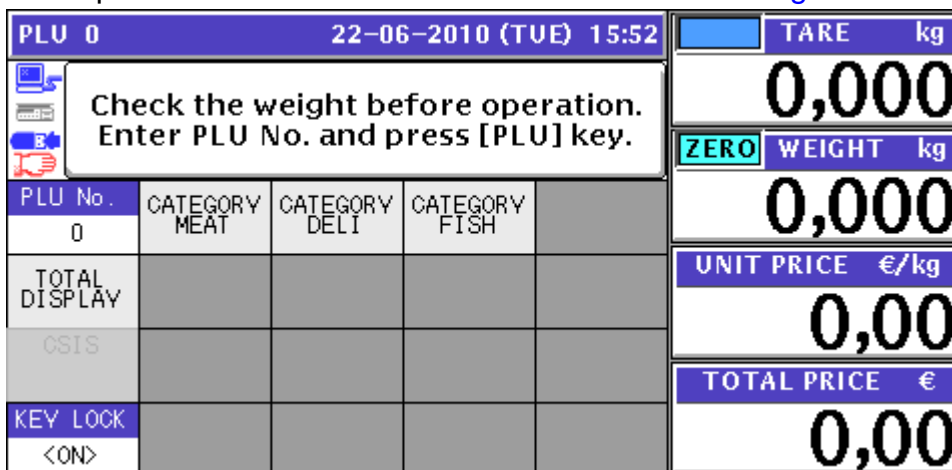


Figure 47. Normal Startup Screen Following Firmware Upgrade

33. If the firmware was updated in step 32 clear the scale's memory. If the firmware was not updated move to [step 35](#).
- a. Press the **MODE** key to enter the Main menu.
  - b. Enter **495344** and press the **PLU** key to access hidden menu steps.
  - c. Press the **ADJUST** menu button.
  - d. Scroll down and select **MEMORY CLEAR** (page 2/3).



- e. Perform three standard clears: Master Data Clear, System Data Initialize, and Test Data Set following the steps below. [See Figure 48.](#)
  - i. Press **CLEAR** then press **EXEC**. "OK" is displayed.
  - ii. Press **INIT.** then press **EXEC**. "OK" is displayed.
  - iii. Press **SET** then press **EXEC**. "OK" is displayed.
  - iv. Press the **RETURN ARROW** (top right) to exit.
  - v. If the Clock Check screen is displayed press **ENTER**.

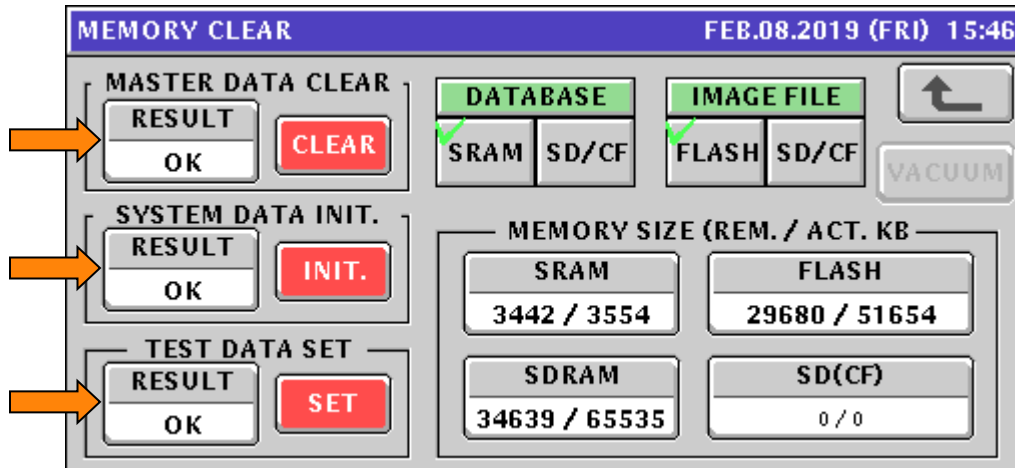


Figure 48. Memory Clear Screen Results

34. If the firmware was updated in step 32 reset the scale to USA and confirm the date and time settings. If the firmware was not updated move to [step 35.](#)
  - a. Press the **MODE** key to enter the Main menu.
  - b. Enter **495344** and press the **PLU** key to access hidden menu steps.
  - c. Press the **SETUP** menu button.
  - d. Scroll down and select **COUNTRY** (page 5/6).
  - e. Confirm **ENGLISH** is selected. [See Figure 49.](#)
  - f. Enter **951753** and press the **PLU** key to access **COUNTRY SELECT**.
  - g. Select **USA**. [See Figure 49.](#)

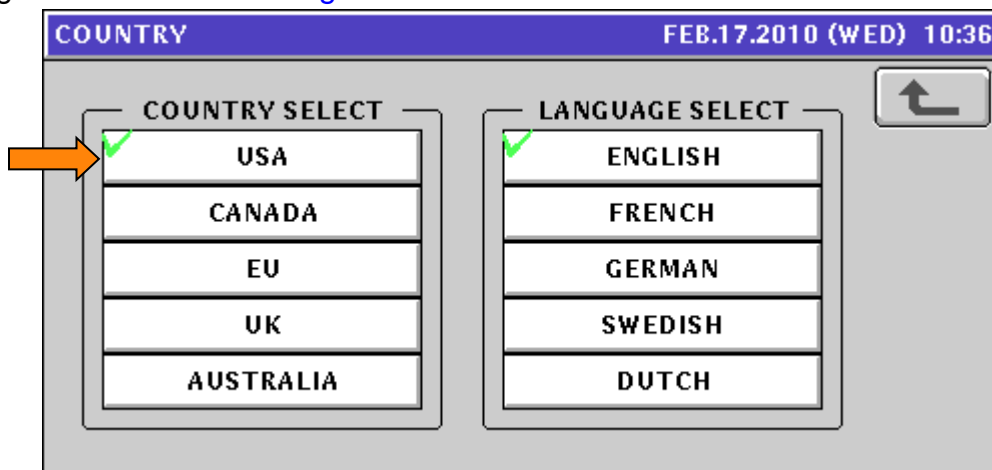


Figure 49. Country Select: USA

- h. Press the **RETURN ARROW** (top right).
- i. Press the **ADJUST** menu button.
- j. Select **DATE TIME**.
- k. Check the Date and Time and update as needed. Enter the values in the formats noted on the display.

**Note:** The Time is entered in a 24-hour format. See [Figure 50](#).

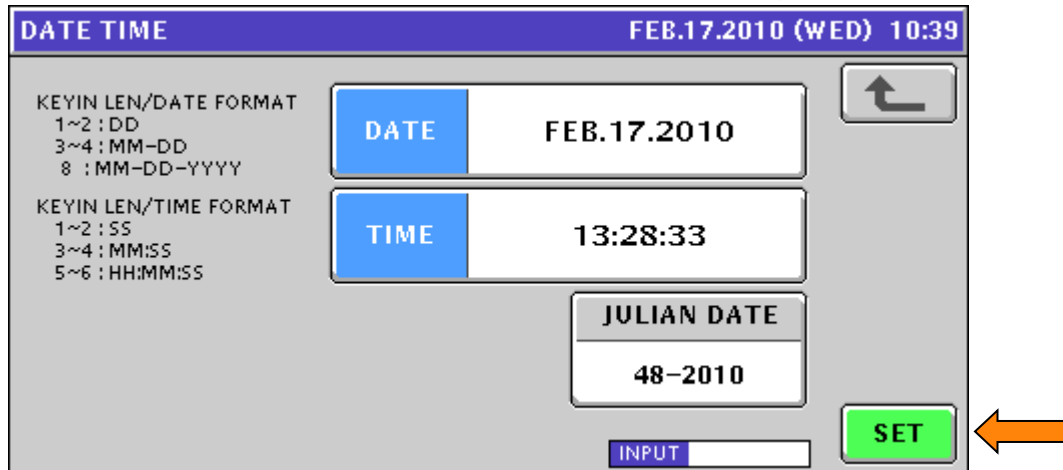


Figure 50. Date and Time

- l. Press **SET** and **EXEC** to save the Date and Time.
  - m. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.
35. Reload the USB backup files backup in step 2.
- a. With the scale powered up, raise the scale's left side access panel and insert the USB Memory Stick containing the backup files into the USB Port. See [Figure 1](#).
  - b. Press the **MODE** key to enter the Main menu.
  - c. Enter **495344** and press the **PLU** key to access hidden menu steps.
  - d. Press the **SETUP** menu button.
  - e. Scroll down to the last page and select **FILE SAVE / LOAD**.
  - f. Press the **USB > SCALE** tab. See [Figure 51](#).
  - g. Press the **INPUT SELECT** button. Depending on the size of the files it may take up to 15 seconds to display a list.

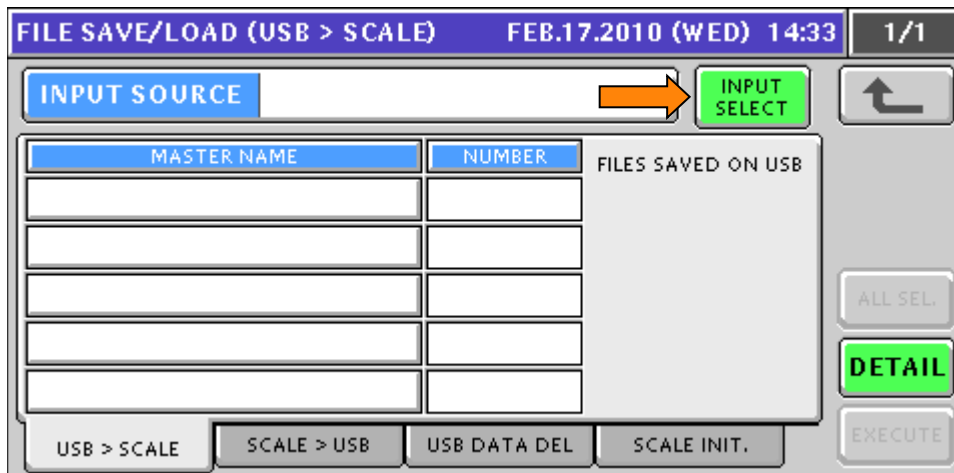


Figure 51. USB Memory Stick Input to Scale Memory

- h. Press the desired file number. It changes to yellow.
- i. Press **SET** to select the file and return. See Figure 52.

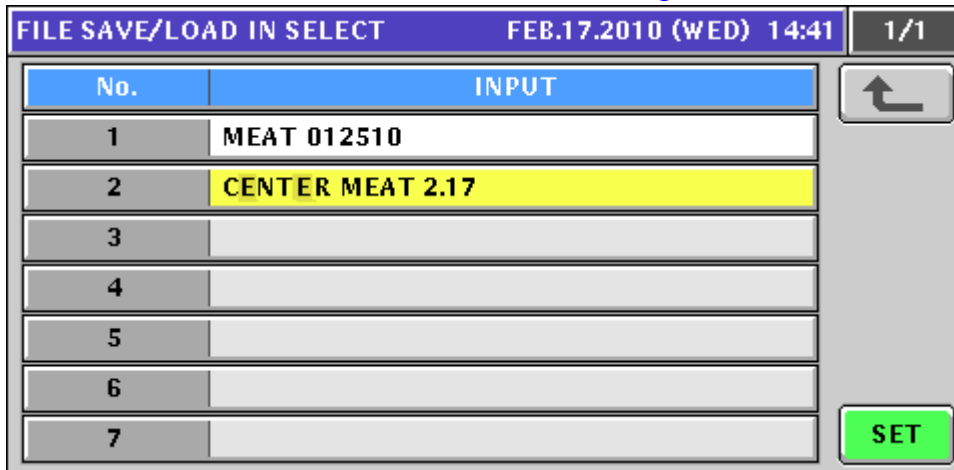


Figure 52. Select Input File

- j. Press the **ALL SEL.** button to select all files for input or press individual files. The selected files are highlighted yellow. See Figure 53.
- k. Press **EXECUTE** and **EXEC** to receive the files from the USB Memory Stick.

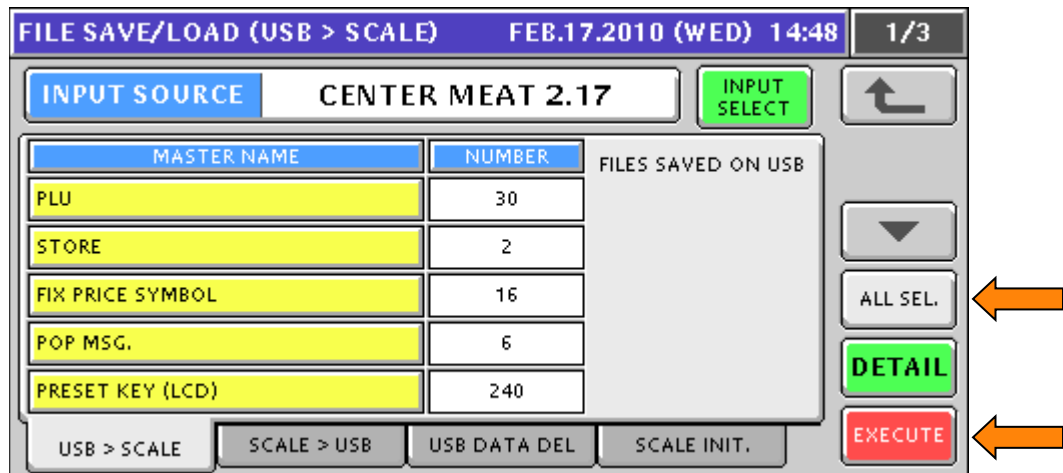


Figure 53. Select Files for Input

- l. The screen displays the progress of files being copied.
- m. Press **OK** when backup is complete (message 14013-0000). See Figure 54.

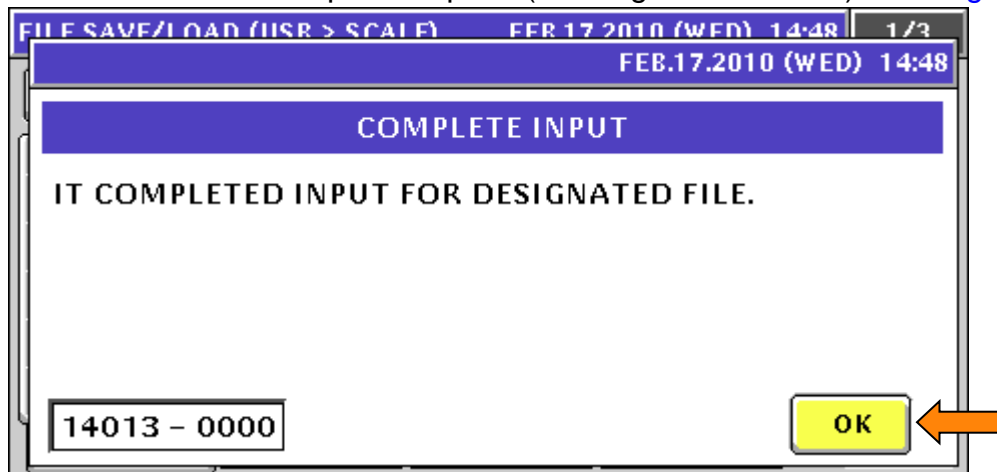


Figure 54. Input from USB Memory Stick Complete Confirmation

- n. Press the **RETURN ARROW** (top right) to exit.
  - o. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.
  - p. Remove the USB Memory Stick.
36. Calibrate the scale.
- a. Press the **MODE** key to enter the Main menu.
  - b. Enter **495344** and press the **PLU** key to access hidden menu steps.
  - c. Press the **ADJUST** menu button.
  - d. Scroll down and select **CALIBRATION** (page 2/3). See Figure 55.

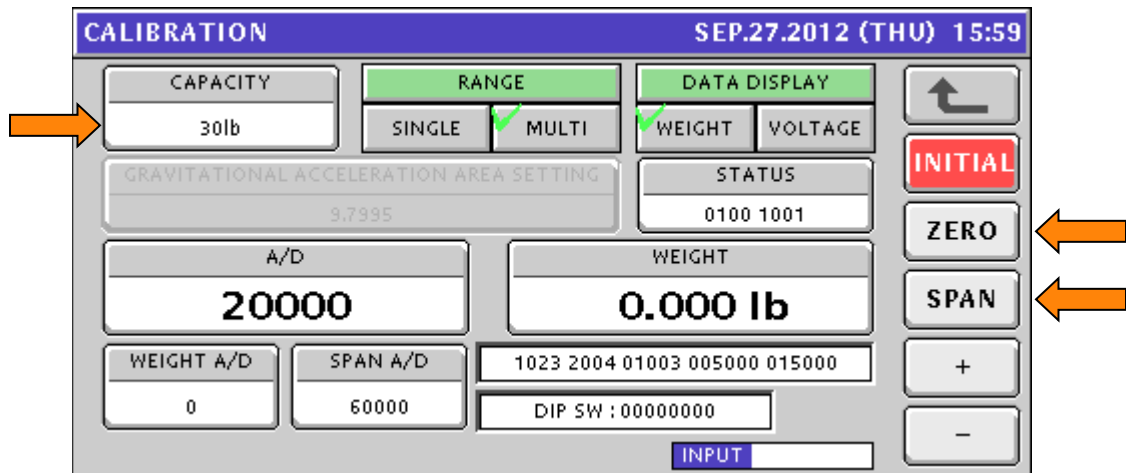


Figure 55. Calibration Screen

- e. Confirm the capacity and resolution are correct - typically 30 lb and 0.005 lb. If either are incorrect enter **495344** and press **SINGLE** or **MULTI** as needed to reset.
- f. To set the scale Range enter **495344** and press **SINGLE** or **MULTI** as needed. For a 30 Lb scale, Single will fix the resolution at 0.01 Lb from zero to full capacity.
- g. Press **ZERO** with no weight on the platter. The A/D counts should be 20000.
- h. Place full capacity on the scale.
- i. Press **SPAN**. The A/D counts should be 80000.
- j. Remove the weight and confirm the A/D counts return to 20000. If not, repeat steps g. to i.
- k. Press the Calibration Save button in the scale. The best tool to press the Button is the ink tube from a disassembled pen. The plastic tube will fit through the access hole and is non-conductive. The location of the button varies by model. Refer to the appropriate instructions below.

#### Bench and Pole

- The Calibration Button is located under the weigh platter. See Figure 56.
- Remove the front screw located in the small rectangular cutout to access the button.



Figure 56. Calibration Access

Hanging

- The Calibration Button is located on top of the scale body near the mounting pole bracket. See Figure 57.
- Remove the outside screw to access the button.



Figure 57. Calibration Access

 Remote Platform

- The Calibration Button is located under the weigh platter in the scale base.
- Remove the small plastic rectangular cover and the seal bolt and metal cover to access the button. See Figure 58.

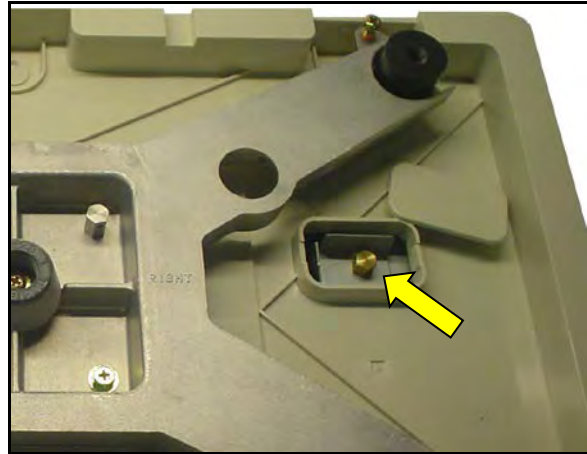


Figure 58. Calibration Access

- I. Seal the scale as required by local regulations.
    - i. Place a tamper-evident decal over the Calibration Button to cover the recessed screw.
    - ii. Use a crimp seal to secure the sealing bolt over the Calibration Button.
  - m. For the Bench, Pole, and Remote Platform models place the platter on the scale.
  - n. Press the **RETURN ARROW** (top right).
  - o. Press **OK** at the Check Platter prompt.
  - p. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.
  - q. Check calibration.
37. Enter the Ethernet address settings recorded in step 3.
    - a. Press the **MODE** key to enter the Main menu.
    - b. Enter **495344** and press the **PLU** key to access hidden menu steps.
    - c. Press the **SETUP** menu button.
    - d. Select **Machine No. (Comms)**.
    - e. Select the **IP ADDR** tab.
    - f. Enter and press the scale's **IP ADDRESS, SUBNET MASK, DEFAULT GATEWAY**. See Figure 59.

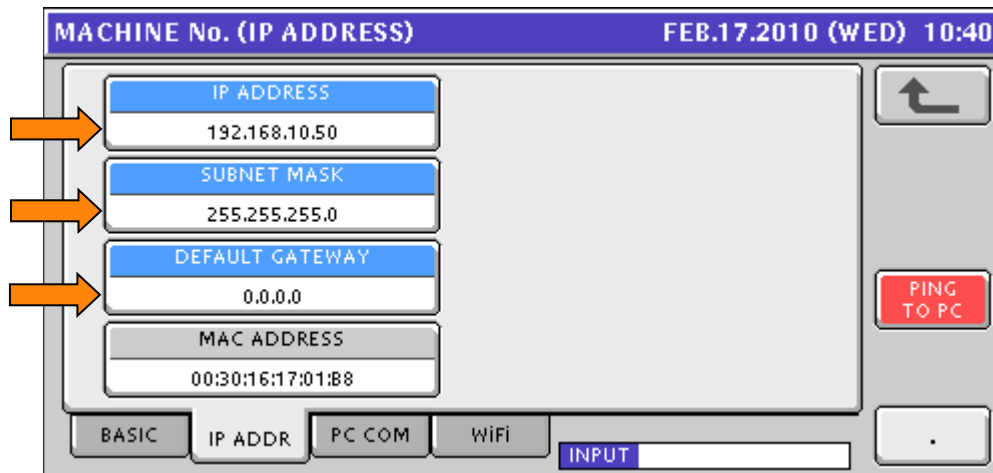


Figure 59. Enter IP Address, Subnet, and Gateway

- g. Select the **PC COM** tab.
- h. Enter and press the **PC IP ADDRESS** and **COM CHECK PERIOD**.  
See Figure 60.
- i. Do not change the Port Number unless it is different from the default "8071".  
Do not change the Comm Check Time Out (2 seconds).

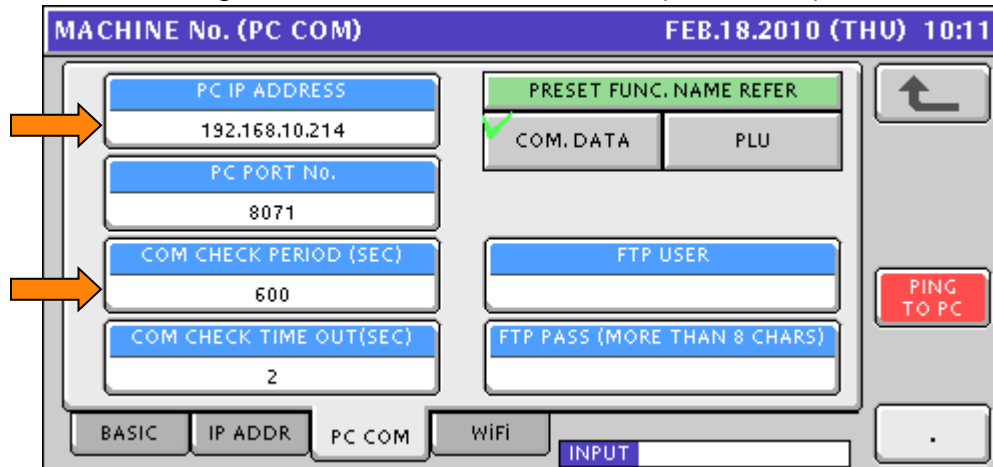


Figure 60. Enter the Computer's IP Address and the Comms Check Period



Do not proceed to the WiFi tab to configure the wireless option. The scale must reboot to save the standard Ethernet settings before continuing. If the wireless settings are entered without rebooting, the scale will not communicate.

- j. Press the **RETURN ARROW** (top right).
- k. Press **EXEC** at the 14034-0000 Re-Boot Check message.  
See Figure 61.

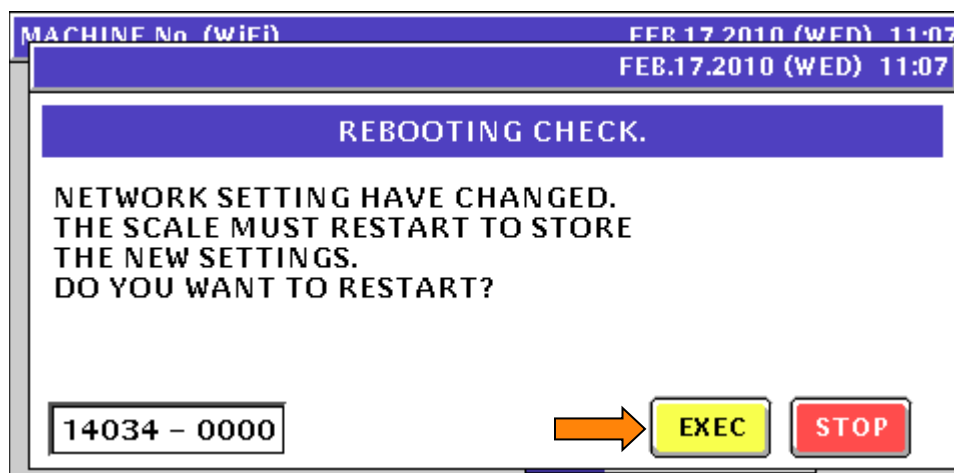


Figure 61. Reboot the Scale to Save the Ethernet Settings

- l. At the 15029-0000 Re-Boot Check message, power the scale off.
  - m. Wait five seconds and power up the scale.
  - n. Press the green **ENTER** button at the Date/Time confirm screen.
38. If the scale is configured for wireless communication enter the settings recorded in step 3. Otherwise, proceed to [step 39](#).
- a. Press the **MODE** key to enter the Main menu.
  - b. Enter **495344** and press the **PLU** key to access hidden menu steps.
  - c. Press the **SETUP** menu button.
  - d. Select **MACHINE No. (COMMS)** (page 1).
  - e. Select the **WiFi** tab. [See Figure 62](#).
  - f. Press the **SSID (Wireless Network Name)** field. [See Figure 62](#).

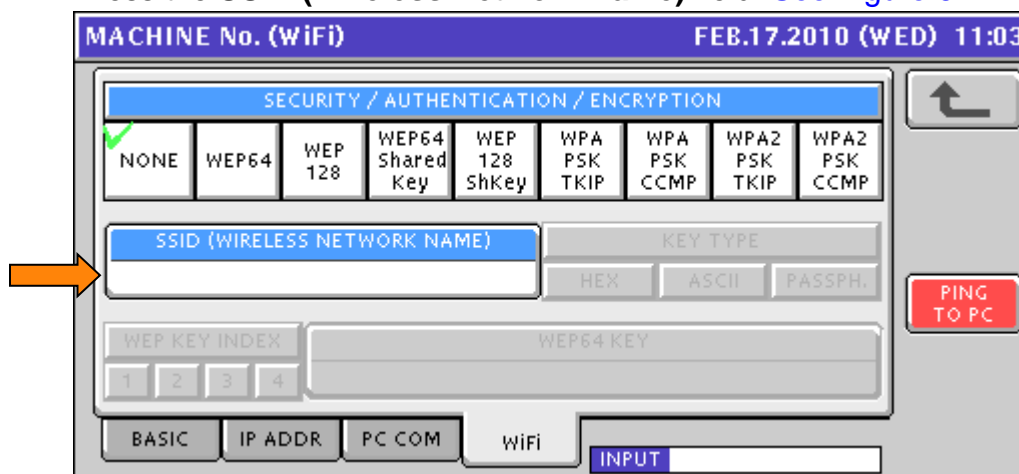


Figure 62. Initial WiFi (Wireless) Configuration Screen

- g. Enter the Network Name assigned to the Access Point(s) or Wireless Router(s). [See Figure 63](#).

**Note:** The Network Name is always case sensitive. Example: *Scales*



- h. Press the **RETURN ARROW** (top right).

The screenshot shows the 'SSID EDIT' screen with a purple header bar containing 'SSID EDIT' on the left and 'FEB.17.2010 (WED) 11:04' on the right. Below the header is a large text input field containing the word 'Scales'. To the right of this field is a return arrow button. Below the input field is a virtual keyboard with letters q through z, numbers, and function keys. At the bottom, there is a status bar with 'No.' (1), 'CHAR' (006), and 'REMAIN' (026). There are also 'INPUT' and 'ERASE' buttons.

Figure 63. Enter the SSID Wireless Network Name (Case Sensitive)

- i. Press **SAVE** to save the new settings.  
 j. The new SSID Network Name is displayed. See Figure 64.

The screenshot shows the 'MACHINE No. (WiFi)' screen with a purple header bar containing 'MACHINE No. (WiFi)' on the left and 'FEB.17.2010 (WED) 11:05' on the right. Below the header is a section titled 'SECURITY / AUTHENTICATION / ENCRYPTION' with a grid of options: NONE (checked with a green checkmark), WEP64, WEP 128, WEP64 Shared Key, WEP 128 ShKey, WPA PSK TKIP, WPA PSK CCMP, WPA2 PSK TKIP, and WPA2 PSK CCMP. Below this is a section for 'SSID (WIRELESS NETWORK NAME)' with a text field containing 'Scales' and 'KEY TYPE' options: HEX, ASCII, and PASSPH. Below that are 'WEP KEY INDEX' (1-4) and 'WEP64 KEY' fields. At the bottom are 'BASIC', 'IP ADDR', 'PC COM', and 'wifi' tabs, and an 'INPUT' button. An orange arrow points to the SSID field.

Figure 64. SSID Wireless Network Name Entered

- k. Select the appropriate **SECURITY / AUTHENTICATION / ENCRYPTION** type.  
*Example: WEP64. See Figure 65.*  
**Note:** If no encryption will be used select **NONE** and proceed to step s.  
 l. Select the appropriate encryption **KEY TYPE**: HEX, ASCII, or PassPhrase.  
 See Figure 65.  
 m. For WEP Encryption select the desired **WEP KEY INDEX**. Standard selection is "1". See Figure 65.

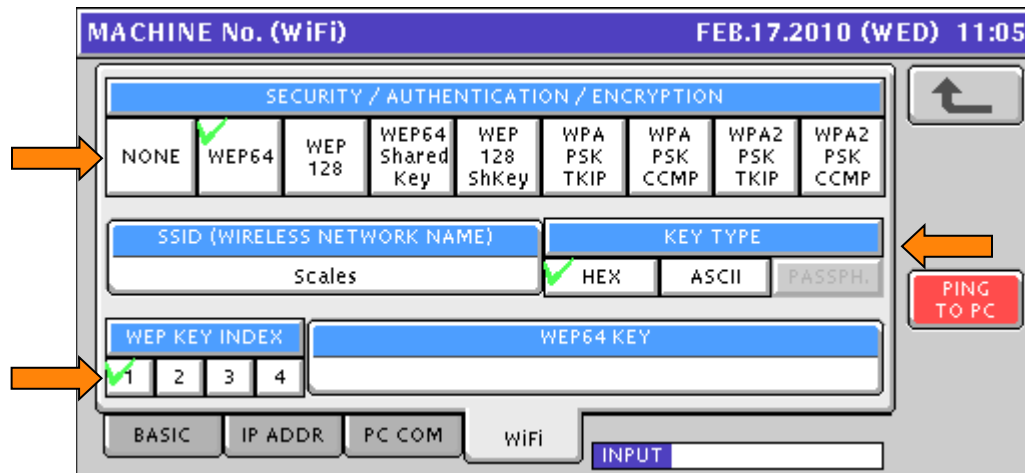


Figure 65. Select Encryption Settings

- n. Press the **Encryption Key** field. Note that the title of this field changes based on the **SECURITY / AUTHENTICATION / ENCRYPTION** type selected in step k. above.
- o. Enter the appropriate encryption key value. [See Figure 66.](#)  
**Note:** The encryption key is case sensitive.

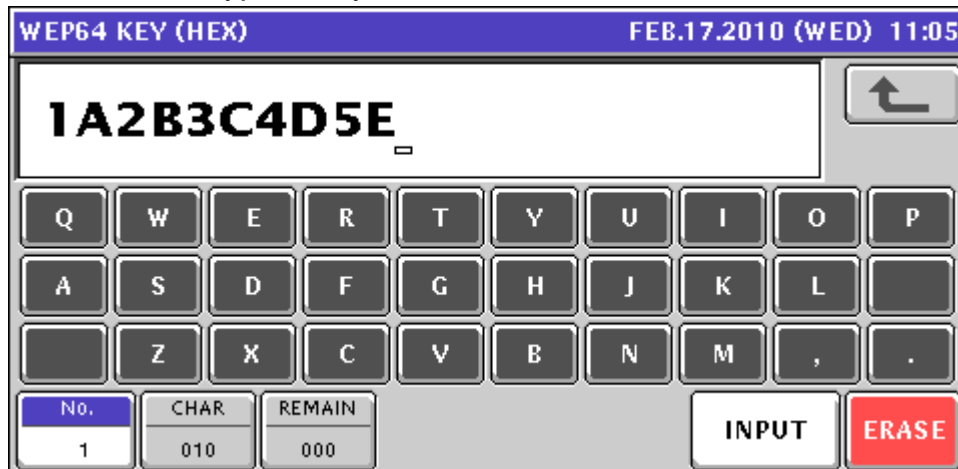


Figure 66. Enter the Appropriate Encryption Key (Case Sensitive)

- p. Press the **RETURN ARROW** (top right).
- q. Press **SAVE** to save the new settings.
- r. Wireless settings are now complete. [See Figure 67.](#)

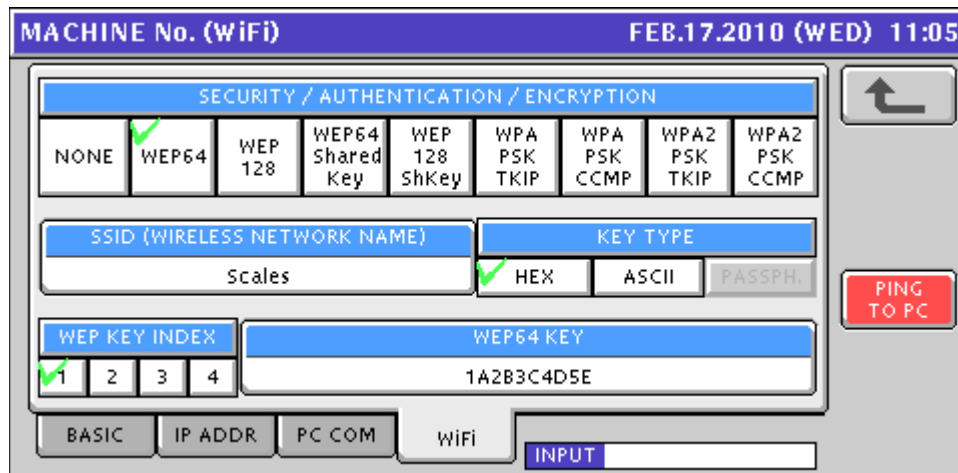


Figure 67. Confirm Complete WiFi Settings before Exit and Save

- s. Press the **RETURN ARROW** (top right) to exit and save the WiFi settings.
- t. Press **EXEC** to save and change the WiFi settings (message 14038-0009).
- u. Press **OK** at the "Wait 30 Seconds" prompt (message 14038-0010).  
See Figure 68.

**IMPORTANT:** Wait 30 seconds after pressing the **OK** button.

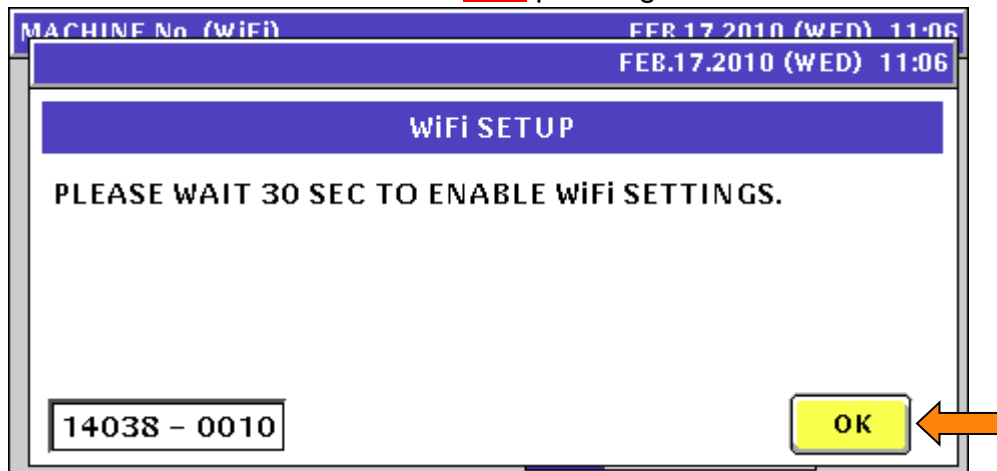


Figure 68. Press **OK** then Wait at Least 30 Seconds

- v. After pressing **OK** and waiting at least 30 seconds for the new WiFi settings to download and store in the wireless card, press the **RETURN ARROW** (top right).
- Note:** The new wireless settings will not be stored if sufficient time is not provided.
- w. Press **EXEC** at the Re-Boot Check screen (message 14034-0000).
- x. At the Re-Boot Check screen (message 15029-0001) power the scale off.
- y. Wait five seconds and power up the scale.
- z. Wireless Ethernet configuration is complete. Check comms as needed.

39. Enter and check the Printer settings recorded in step 3. Since there was no change to the printer components the original setting should work with no further adjustments required. If the CPU board was not functioning the most common steps requiring adjustment are list below.
- Press the **MODE** key to enter the Main menu.
  - Enter **495344** and press the **PLU** key to access hidden menu steps.
  - Press the **ADJUST** menu button.
  - Scroll down and select **PRINTER** (page 2/3).
  - Select the **HEAD** tab.
  - If the values are known enter them as needed. If not, set the **HEAD RESISTANCE**. See Figure 69.
    - Remove the label cassette to read the resistance value (ohm) on the decal affixed to the underside of the thermal print head. If there is no decal the resistance is fixed at 1100 ohms.
    - Enter the resistance value and press the **HEAD RESISTANCE** field.

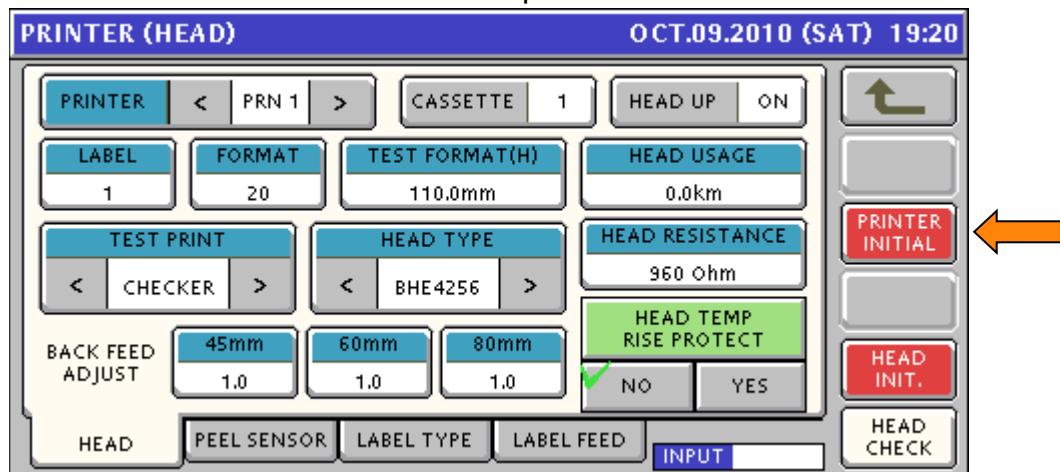


Figure 69. Printer – Head Section Settings

- Select the **PEEL SENSOR** tab.
- If the values are known enter them as needed. If not, check the **PEEL SENSOR LEVEL** readings and adjust the **PEEL SENSITIVITY** value. See Figure 70.
  - With nothing blocking the sensors across the front of the peel bar the reading should be more than 130.
  - Press **FEED** to issue a label and leave it on the peel bar.
  - With a label blocking the peel sensor the reading should be less than 20.
  - Adjust the **PEEL SENSITIVITY** as needed if the readings do not fall within the necessary range.

**Note:** It is seldom necessary to change the **PEEL DETECT** value. If the blocked and unblocked do not differ by at least 100 counts set the value halfway between the two readings.

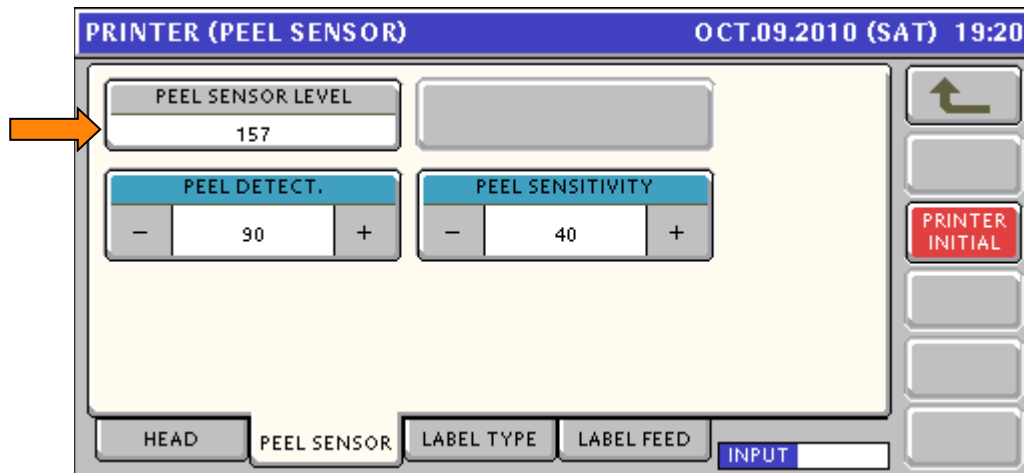


Figure 70. Printer – Peel Sensor Section Settings

- i. Select the **LABEL TYPE** tab.
- j. If the values are known enter them as needed. If not, check and adjust the **PRINT DENSITY** and **LABEL GAP** settings. See Figure 71.
  - i. Print a label and adjust the **PRINT DENSITY** as needed to darken the print.
  - ii. If using die cut labels, measure the space between each label and enter the **LABEL GAP** value. The standard gap for Ishida labels is 2.5mm.

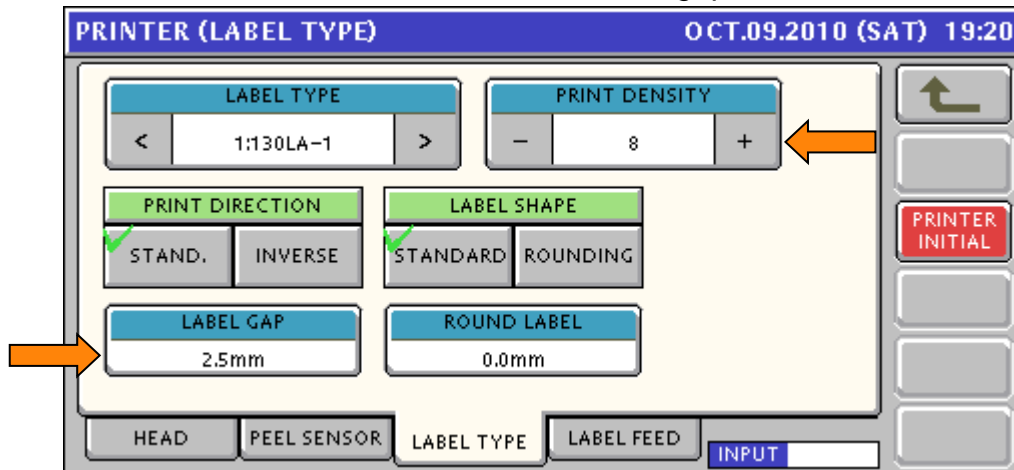


Figure 71. Printer – Label Type Section Settings

- k. Select the **LABEL FEED** tab.
- l. If the values are known enter them as needed. If not, check and adjust the Label Gap **SENSITIVITY**, **BACK FEED** and **LABEL SENSOR DISTANCE**. See Figure 72.

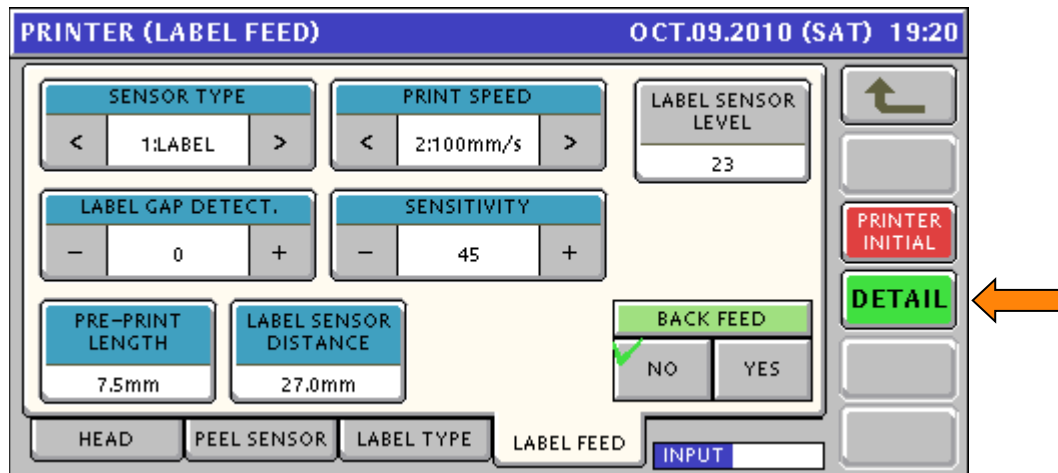


Figure 72. Printer – Label Feed Section Settings

- i. If using die cut labels, print a label and press the **DETAIL** button.
- ii. The graph should resemble the image shown below. The horizontal line along the bottom may or not be visible. The spike represents the space between the labels. See Figure 73.

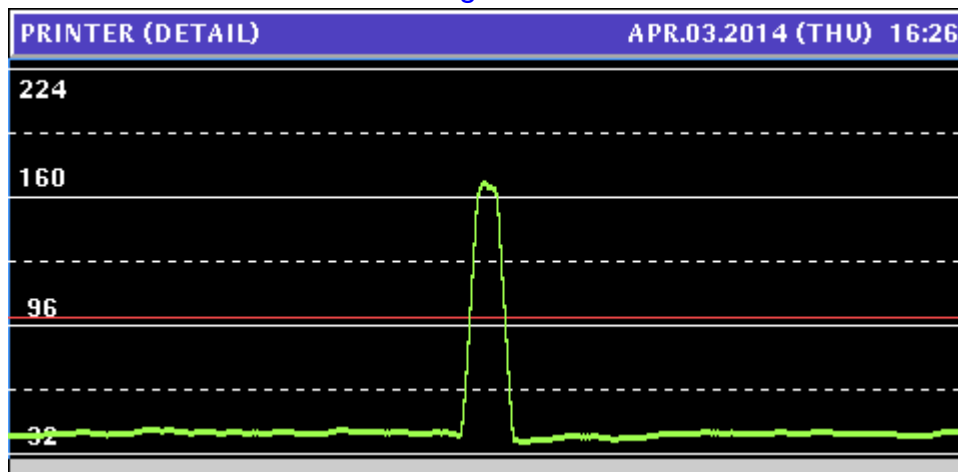


Figure 73. Label Gap Sensor Graph

- iii. The top of the spike should be between the 160 line and dashed line above it. If not, press **ESC** and adjust the **SENSITIVITY** value as needed.
- iv. Print another label and recheck the graph. Repeat the process until the top of the spike is consistently between the 160 line and dashed line above it.
- v. If the label has a preprinted logo on the left side the graph may show a third level below the bottom horizontal line which may confuse the scale. In this case, a **LABEL GAP DETECT** value should be entered.
- vi. On the graph the **LABEL GAP DETECT** value is shown as a red horizontal line. Set the line approximately one-third of the way up the spike starting from the main horizontal line.

- vii. If variable information rather than the store name and address is printed at the bottom of the label set the **BACK FEED** as YES.
- viii. Adjust the **LABEL SENSOR DISTANCE** as needed to adjust the print alignment up and down.
- m. Press the **RETURN ARROW** (top right).
- n. Press the **OPERATION ICON** (lower right) to return to Normal Operation mode.

## Notes

The Uni-7 may display a "Not Authentication" message after replacing and configuring the CPU board. This is usually due to missing calibration data. Press the **ESC** key to access the Adjust menu and calibrate the scale. Don't worry if the scale is stuck in Kg. After calibration is complete and the "Not Authentication" message is resolved the Country setting can be checked and normal calibration performed.

If the "Not Authentication" message remains after calibration, copy the scale firmware folder "Soft" onto an empty USB memory stick. With the scale powered OFF, raise the left side access panel and insert the Memory Stick in to the USB port. Power on the scale and perform the following one at a time.

1. Check the Country - set as USA as needed.
2. Recalibrate the scale.
3. Reload the firmware.

## Reference

- Uni-7 Service Manual
- Ishida Uni-7 & Uni-5 Series Setup Manual



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