

LP-1000

LABEL PRINTING SCALE

OWNER'S MANUAL

MODEL A 1000 PLU
MODEL B 200 PLU / INGREDIENTS
MODEL C 600 PLU / INGREDIENTS



CAS (USA) Corp.

**INSTALLATION, PROGRAMMING
AND
OPERATIONS MANUAL
FOR THE
LP-1000 SERIES PRINTING SCALE
MODEL A, B, & C**

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WARNING!

- 1) Make sure that you leave the scale plugged in an ON for 48 consecutive hours before you begin programming.
- 2) You may also leave the scale ON for 48 hours after programming.

FOR MORE INFORMATION SEE THE NOTE ON PAGE 11.

- 3) Make sure that you plug your scale into the proper power outlet. Most scales use 110VAC 60Hz.

FOR MORE DETAILS SEE PAGE 4.

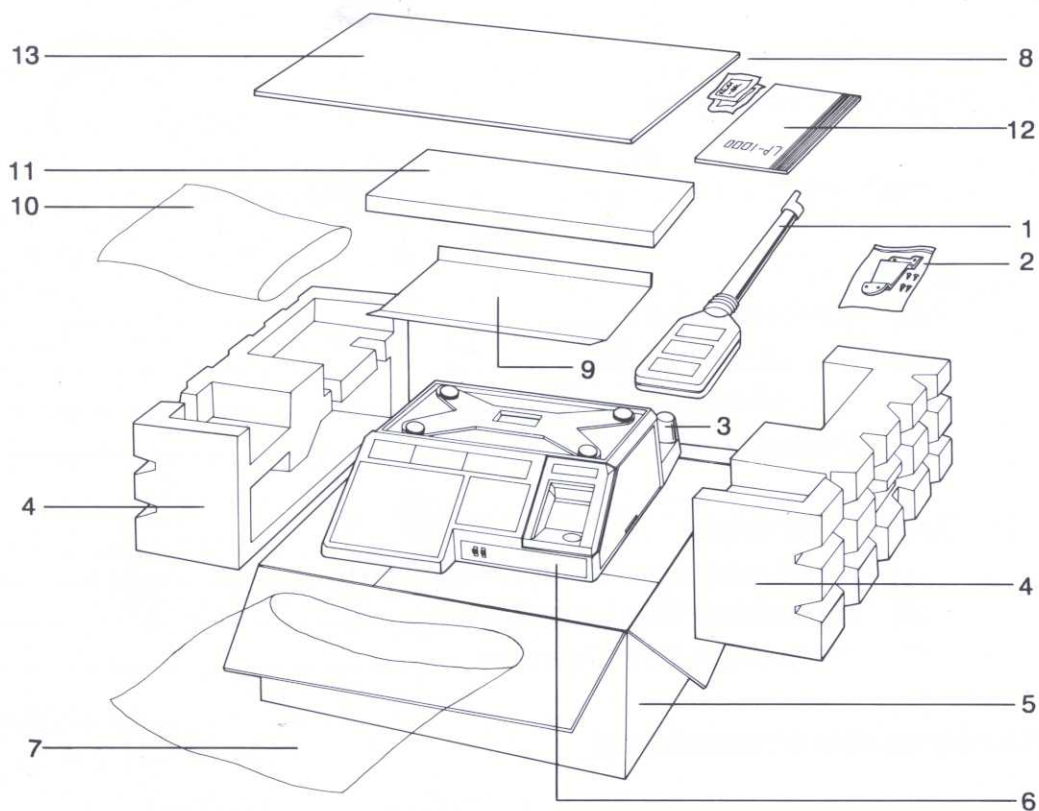
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I. Installation Procedure

1. UNPACKING



No.	PART NUMBER	DESCRIPTION	QTY
1	---	*Pole Display Assembly	1
2	---	*Pole Display Bracket Cover Kit	1
3	1704-A00-0020	*Bracket	1
4	9200-A00-2015	Right / Left Styrofoam	1
5	9100-A00-2015	Packing Box	1
6	LP-1000	LP-1000 Scale	1
7	9050-A00-7550	Poly Bag (Scale)	1
8	9053-A00-0010	Silica Gel Bags	2
9	1002-A00-0070	Platter	1
10	---	Poly Bag (Platter)	1
11	9200-A00-2000	Packing Styrofoam (Platter)	1
12	9000-A00-0099	Owner's Manual	1
13	9120-A00-5448	Packing Lid	1
---	8010	UPC Non-Ingredients Label Roll	1
---	8020(B & C Model Only)	UPC Ingredients Label Roll	1
---	2100-LP0-9999	Spill Proof Overlay	1

* The asterisk means that these items are available only in Display Pole Models ONLY.

I. Installation Procedures

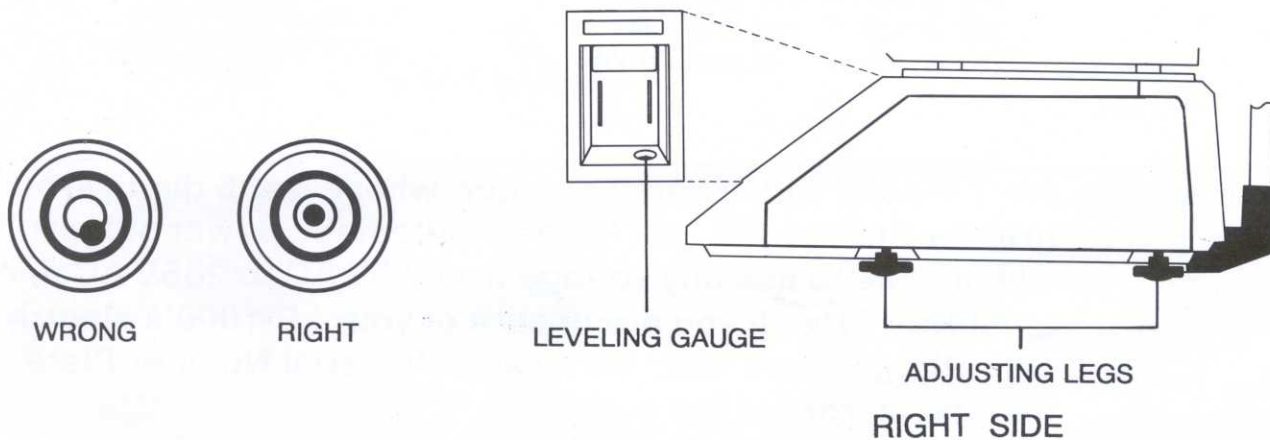
2. CAUTIONS

A) **Environment:** This scale must be installed in a dry and liquid free environment. *However, when the scale is installed in a high humidity or wet type environment be sure to install the *Spill Proof Overlay* onto the face plate of the LP-1000. The Overlay comes standard with the scale. To install it please follow the Overlay Installation instructions. Make sure that you constantly inspect the the Overlay for any perforations or leaks of any type. Please notify your local CAS Dealer for purchasing any new Overlays. We recomend the use of this Overlay regardless of the environment.

B) **Location:** This scale must be placed on a flat and stable surface. Please keep the scale away from oscillating fans, ventilation systems, or drafts as these air disturbances can be picked-up by the scale and may cause incorrect weight readings.

C) **Leveling:** If the scale is not properly level, please adjust the 4 legs at the bottom of the scale (turn legs clockwise or counter-clockwise) so as to center the bubble of the leveling gauge inside the indicated circle. (See Fig.)

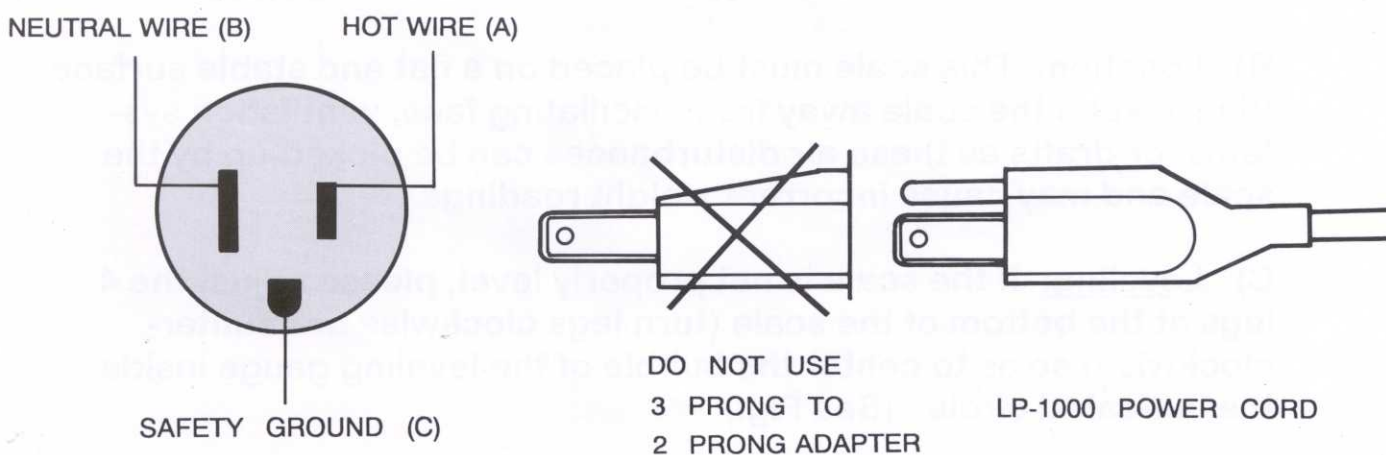
LEVELING GAUGE



*** NOTE: Scale is to be used in-doors ONLY**

D) **Power Outlet:** Your power outlet in which you will plug in the LP-1000 scale should be a dedicated line with no electrical motors or other “noise” producing appliances connected to the same line. Your outlet must be properly grounded and wired in order to insure long and trouble free operation of LP-1000. It is strongly suggested that surge protectors be used with this equipment as with all computer type appliances. Please see that your outlet follows the outlines described below.

E) **The socket-outlet shell be installed near the equipment and shall be easily accessible.**



Voltage Test using a V.O.M. Place probes across the following test points:

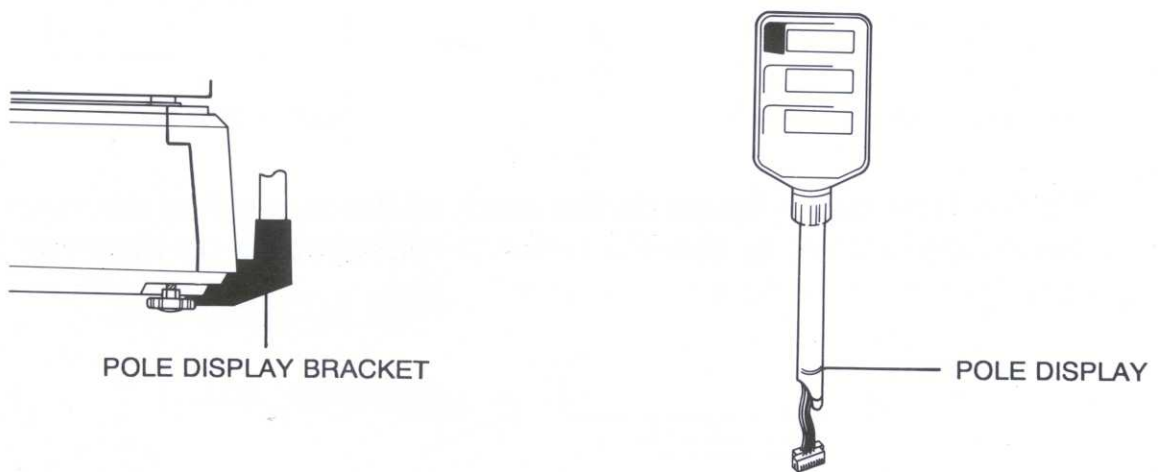
- (A) & (B) = 117 VAC ± 5%
- (A) & (C) = 110 VAC ± 5%
- (B) & (C) = 0 VAC ± 5 VAC

NOTE: Any LP-1000 with a serial number whose last 5 digits are greater than 50000, will have an automatic power supply. It will be able to use any voltage from 85V AC to 265V AC and 50/60Hz ± 3Hz. If you are unsure of your LP-1000's electrical rating, please refer to the scale's Serial Number Plate located in front of the scale.

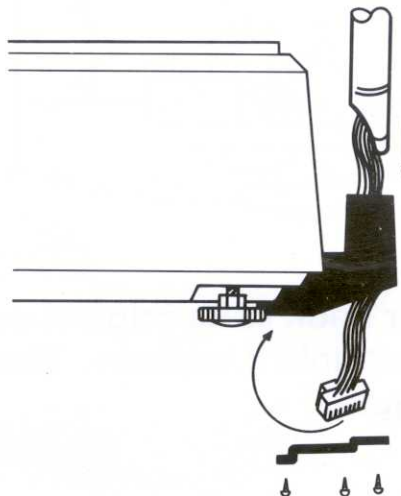
I. Installation Procedures

3. Getting Started

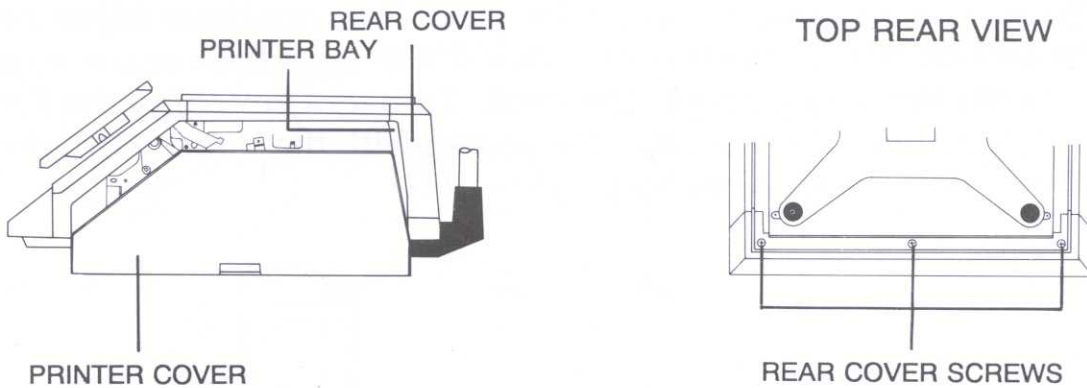
- A) **Assembling the Display Pole:** If your scale is the “Pole” type then you must follow this section and then continue to the next. However, if your scale is the “Non-Pole” type then you may skip this section and go on to the next. To begin installing the Pole display, make sure your scale comes with the display bracket & the pole display. (See fig.)



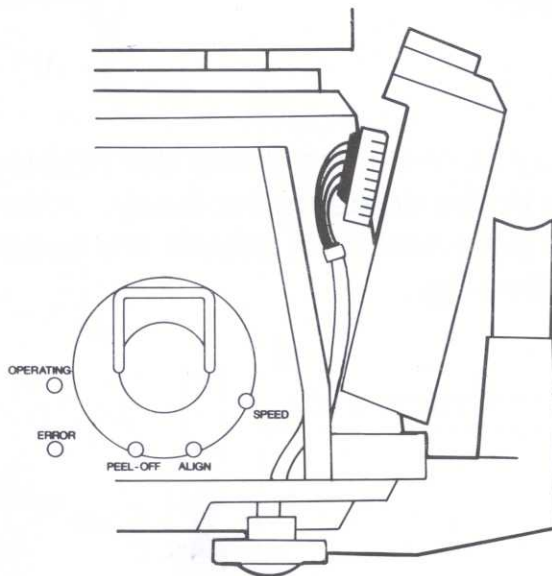
Feed the pole display connectors down the display bracket and up through the hole in the scale under-body. Attach the bracket cover to the display pole and then attach the bracket cover to the bracket itself. (See fig.)



Remove the platter from the platform. Open the printer side-cover and then remove the three rear cover screws. Feed the connectors in through the printer bay into the scale. (See fig.)

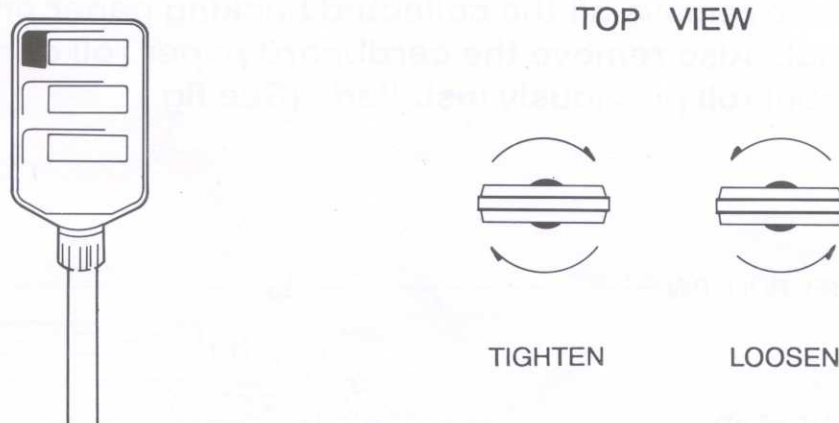


Tilt the rear cover towards the back of the scale and connect the three connectors to their adequate receptacles on the rear Display P.C.B. (See fig.)



Place the rear cover back to its original position and re-attach the three screws that hold it in place. The pole display installation is now complete.

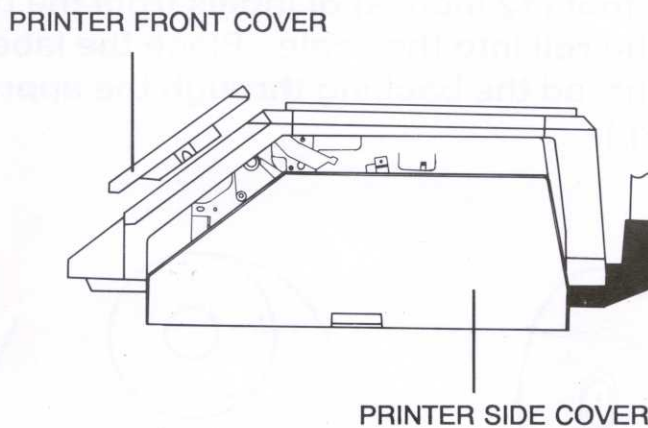
This display can turn about 180°. However, if the display head does not turn freely, please loosen the twist lock nut on the display pole. (See fig.)



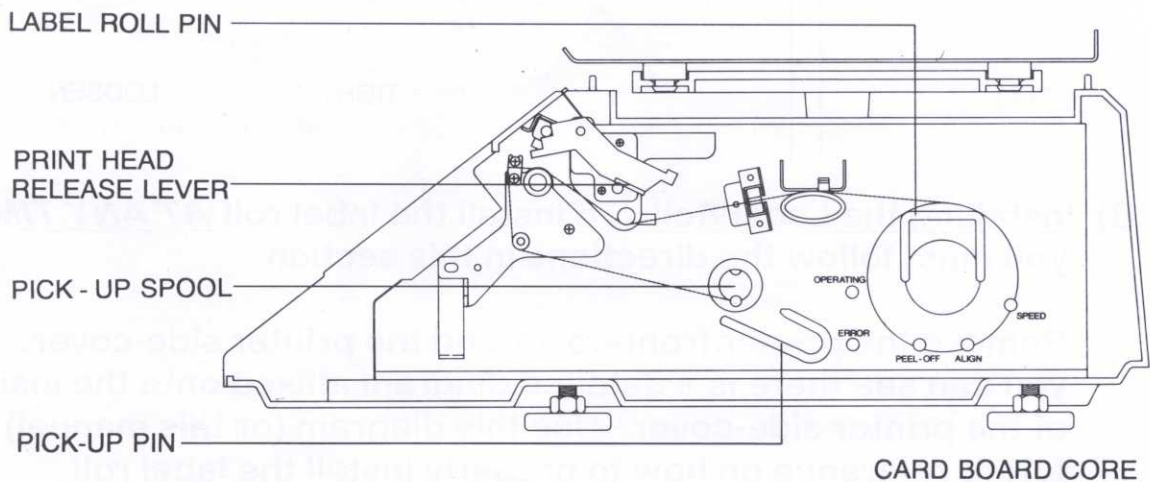
B) Installing the Label Roll: To install the label roll **AT ANY TIME** you must follow the directions in this section.

Remove the printer front-cover and the printer side-cover. As you can see there is a detailed diagram affixed onto the inside of the printer side-cover. Use this diagram (or this manual) for future reference on how to properly install the label roll.

(See fig.)

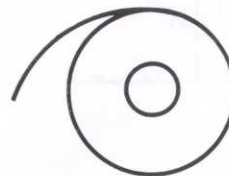
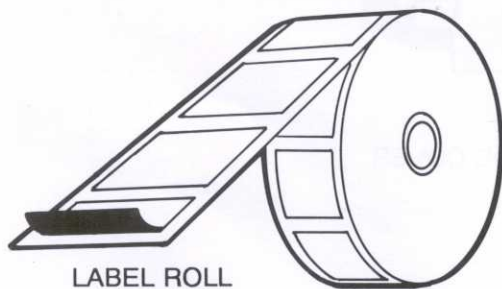


Find and remove the Label Roll Pin and the Pick-up Pin. Also, find the Print Head Release Lever and lift it upwards. Release the Print Head Release Lever and the print head will automatically lift up. If there were any labels previously installed please remove all the collected backing paper on the pick-up spool. Also remove the cardboard paper roll core if there was a label roll previously installed. (See fig.)

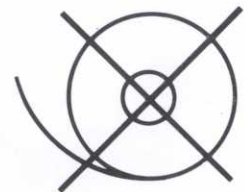


Take the new roll of labels and find the ending. Peel-off and discard about one foot (12 inches) of labels from the backing before installing the roll into the scale. Place the label in the scale as shown and thread the backing through the appropriate places. (See fig.)

|-----1 foot-----|

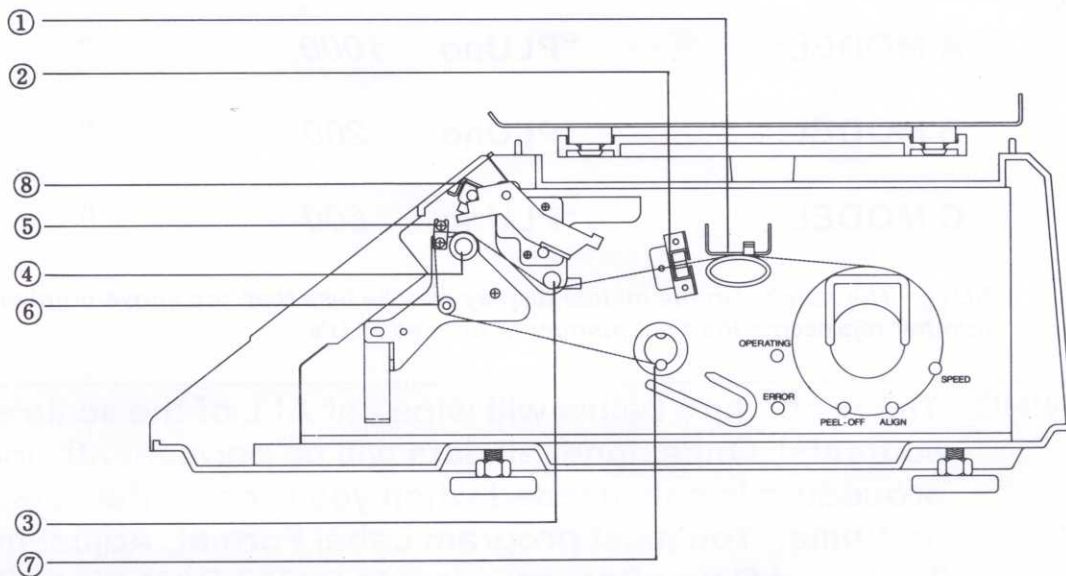


RIGHT WAY



WRONG WAY

Please view the checkpoints on the diagram below as you read these directions to thread the labels. Feed the backing paper over the Paper Pressure Shaft lifting the Pressure Plate in order to place the backing between the two (①); feed the backing paper between the two green Sensor Caps (②); under the Label Guide Roller making sure that the backing paper lies between the two washers on the Label Guide Roller (③); feed the backing over the red Rubber Roller and under the Print Head being careful not to touch the underside of the Print Head (④); over the Peel-off Bar (⑤); under the Return Roller (⑥); feed the backing under and around the Pick Up Spool (⑦). Now attach the Pick Up Spool Pin into the spool and turn it slowly counterclockwise in order to tighten the backing paper. Push the Print Head down in order to lock it back in place (⑧). You will feel and hear it lock in place. Replace the printer covers. You have completed the label roll installation. (See fig.)



- C) Installing the Overlay: Take the overlay and peel off the backing strips so as to expose the contact glue. Place the overlay over the face of the LP-1000 and press firmly around the perimeter of the overlay making sure that the contact glue properly bonds to the face of the scale.

II. Fundamental Procedures

1. Default Settings

- A) Power ON and Clearing RAM: The Power switch is located on the left side of the scale. Make sure that the power switch is OFF. Plug the scale into an AC socket and make sure that the socket's power is within the scale's operating range. Turn the power switch ON. You will hear a beep and the displays will all light up with "1's" across all the displays. The scale will then count up: "2's", "3's", and so on until "9's". Then the scale will read "0.00" in all three displays. This is called the ZERO state. You will notice that when the scale is in this state an arrowhead light will be lit and point to ZERO on the *WEIGHT* display. Set the **System Control Switch** to **PGM** position. "PLU" will be displayed in the *WEIGHT DISPLAY*. Press the **PRT/*** key and the displays will read:

Fig. A

A MODEL:	"PLUno 1000	"
B MODEL:	"PLUno 200	"
C MODEL:	"PLUno 600	"

NOTE: The number in the middle display may be less than the above numbers. This number represents the total number of unused PLU's.

WARNING: The procedure below will wipe out ALL of the scale's memory contents! Once done, all data will be permanently lost. This procedure is only needed when you receive the scale for the first time. You must program Label Format, Adjust number, Time, and Date after you execute 22757 RAM Clear Code.

Type the following number on the *Numeric Keypad* to clear all of RAM. Press **2 2 7 5 7 PRT/*** The displays will read: "PLUno init ALL" and remain this way for about 45 seconds and then return to display the above (Fig. A) condition.

Set the **System Control Switch** to **REG** position and then press the **PRT/*** key. All the displays will read "0.00". You have cleared all of RAM.

NOTE: This scale uses a rechargeable battery to retain programmed information. While the scale is ON or in use it keeps the battery charged. The battery must be fully charged before turning the power OFF or memory contents can be lost. It takes approximately 48 hours to fully charge the battery from complete discharge. Even though the scale's battery will most likely not be completely discharged when you receive the scale, you should still charge it for 48 hours. Once fully charged, the battery can retain programmed information for at least 6 months with power OFF. To ensure memory contents do one of the following:

① Leave power ON for at least 2 days before programming.

OR

② Do not turn OFF power for at least 2 days after programming.

B) **Setting Label Format and Adjust Number:** Label Format is a six digit number that tells the scale what type of label is being used in the scale and what to print on it. The Adjust number is a two digit number (16 is normal) that tells the sale how high up or low to print the data on the labels. The higher the number, the higher it will print. For a detailed explanation of Label Format and Adjust number see *SECTION II Part II: C) Programming Adjust Number*.

Set the **System Control Switch** to **PGM** position. Press ↓ key three times and the **WEIGHT** display should read "LAbEL". Press the **PRT/*** and the displays will read:

MODEL A:	"LAbEL	EntEr	141111"
MODEL B/C:	"LAbEL	EntEr	143111"

Please look at the following sample labels and determine which is the label installed in your scale:

101110 (#8000)

PACKED ON	SELL BY	WT./LBS.	PRICE	TOTAL PRICE

141111 (#8010)

			PACKED ON	SELL BY	NET WT. LBS.
					PRICE PER LB.
					TOTAL \$ PRICE

143111 (#8020)

			PACKED ON
		SELL BY	WEIGHT
			UNIT PRICE
			TOTAL PRICE

141311 (#8040)

			PACKED ON	SELL BY	NET WT. LBS.				
					PRICE PER LB.				
					TOTAL \$ PRICE				
<p>SAFE HANDLING INSTRUCTIONS <small>THIS PRODUCT WAS PREPARED FROM INSPECTED AND PASSED MEAT AND/OR POULTRY. SOME FOOD PRODUCTS MAY CONTAIN BACTERIA THAT COULD CAUSE ILLNESS IF THE PRODUCT IS MISHANDLED OR COOKED IMPROPERLY FOR YOUR PROTECTION, FOLLOW THESE SAFE HANDLING INSTRUCTIONS.</small></p> <table border="0"> <tr> <td>KEEP REFRIGERATED OR FROZEN. THAW IN REFRIGERATOR OR MICROWAVE.</td> <td>COOK THOROUGHLY.</td> </tr> <tr> <td>KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY.</td> <td>KEEP HOT FOODS HOT. REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.</td> </tr> </table>						KEEP REFRIGERATED OR FROZEN. THAW IN REFRIGERATOR OR MICROWAVE.	COOK THOROUGHLY.	KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY.	KEEP HOT FOODS HOT. REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.
KEEP REFRIGERATED OR FROZEN. THAW IN REFRIGERATOR OR MICROWAVE.	COOK THOROUGHLY.								
KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY.	KEEP HOT FOODS HOT. REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.								

101310 (#8030)

PACKED ON	SELL BY	NET WT. LBS.	PRICE PER LB.	TOTAL \$ PRICE				
<p>SAFE HANDLING INSTRUCTIONS <small>THIS PRODUCT WAS PREPARED FROM INSPECTED AND PASSED MEAT AND/OR POULTRY. SOME FOOD PRODUCTS MAY CONTAIN BACTERIA THAT COULD CAUSE ILLNESS IF THE PRODUCT IS MISHANDLED OR COOKED IMPROPERLY FOR YOUR PROTECTION, FOLLOW THESE SAFE HANDLING INSTRUCTIONS.</small></p> <table border="0"> <tr> <td>KEEP REFRIGERATED OR FROZEN. THAW IN REFRIGERATOR OR MICROWAVE.</td> <td>COOK THOROUGHLY.</td> </tr> <tr> <td>KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY.</td> <td>KEEP HOT FOODS HOT. REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.</td> </tr> </table>					KEEP REFRIGERATED OR FROZEN. THAW IN REFRIGERATOR OR MICROWAVE.	COOK THOROUGHLY.	KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY.	KEEP HOT FOODS HOT. REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.
KEEP REFRIGERATED OR FROZEN. THAW IN REFRIGERATOR OR MICROWAVE.	COOK THOROUGHLY.							
KEEP RAW MEAT AND POULTRY SEPARATE FROM OTHER FOODS. WASH WORKING SURFACES (INCLUDING CUTTING BOARDS), UTENSILS, AND HANDS AFTER TOUCHING RAW MEAT OR POULTRY.	KEEP HOT FOODS HOT. REFRIGERATE LEFTOVERS IMMEDIATELY OR DISCARD.							

On top of each label you will see a six digit Label Format and, to the right of it, that label's stock number.

Type in the six digit number above the corresponding label that you have selected. Make sure that you use the *Numeric Keypad* to type the number in. Press the **PRT/*** key. The scale has now accepted the new Label Format. The *WEIGHT* display should now read: "AdJSt". Press the **PRT/*** key and the displays should read: "AdJSt EntEr 16". The number in the *TOTAL PRICE* display may be different. Press the **1** key and then the **6** key. The *TOTAL PRICE* display should now read: " 16". Place the **System Control Switch** to the **REG** position and then press the **PRT/*** key. The displays should all read "0.00". You have now programmed Label Format and Adjust number.

- C) Setting the Time and Date: Place the **System Control Switch** to the **PGM** position. Press the ↓ key five times and the *WEIGHT* display should read "dAtE". Press the **PRT/*** key and the displays should read: "E dAt 03.15.95". The *TOTAL PRICE* display will of course show whatever date was programmed previously. Now type in the date using the *Numeric Keypad* with the format *MONTH / DAY / YEAR*. Remember to type in two digits for each month, day, and year. For example, to enter the date March 2, 1995, you must press the following keys: **0 3 0 2 9 5**. After you enter the date the *WEIGHT* display should read "timE". Press the **PRT/*** key and the displays should read: "E tim 15.50.35". The *TOTAL PRICE* display will of course show whatever time was previously programmed. Now type in the time using the *Numeric Keypad* with the format *HOUR : MINUTES : SECONDS*. Be sure to use military time and to type in two digits for each hour, minutes, seconds. For example, to enter the time 4:04 PM, press the following keys: **1 6 0 4 0 0**. After you enter the time the *WEIGHT* display should read "SHoP". Place the **System Control Switch** to the **REG** position. Press the **DATE / TIME** key and look at the displays. Press the **C** key when done.

II. Fundamental Procedures

2. Scale Basic Operations

- A) Weighing: Set the **System Control Switch** to the **REG** position. All the displays should read "0.00". The **ZERO** lamp should be on. (See fig.)



The ▼ symbol represents the lamps on the displays above. If the lamp is not on, press the **ZERO** key. Place an item on the platter. See the weight being displayed on the **WEIGHT** display. Remove item from the platter.

WARNING: Avoid leaving **ANY** item or items on the platter for prolonged periods of time.

- B) TARE Key and Taring: Tare is the weight of a container being used for an item which you wish to calculate the total price of. The **TARE** key subtracts the weight of the container. This scale can tare from 0.01 pounds to 30.00 pounds.

Known Tare: If you know the weight of the container you may use this method to enter the tare. Make sure the **NET** lamp is off and the **ZERO** lamp is on. Type the weight of the container using the **Numeric Keypad** and then press the **TARE** key. For example, if the weight of the container is 0.10 pounds, press the following keys: **1 0 TARE**. The displays should read: "- 0.10 0.00 0.00". The **ZERO** and the **NET** lamps should both be lit.

Unknown Tare: If you do not know the weight of the container you may use this method instead of the Known Tare method. Make sure that the *ZERO* lamp is on and the *NET* lamp is off. Place the container on the platter and wait for the weight to stabilize. Press the **TARE** key and the displays will read the following: “ 0.00 0.00 0.00”. The *ZERO* and the *NET* lamps will both be on.

Releasing the Tare: To release the tare, remove all items from the platter and then press the **TARE** key. All displays should show “0.00” and only the *ZERO* lamp should be lit. If this method does not work, turn the scale OFF and then ON again.

- C) Unit Pricing: You can enter any unit price using the *Numeric* keypad as long as the price is from \$ 0.01 to \$99.99. You may also use the $\frac{1}{2}$ and $\frac{1}{4}$ keys to double or quadruple the unit price respectively.

III. Trouble Shooting

PROBLEMS	REMARKS
<ul style="list-style-type: none">• Scale does not work at all.• No light on the displays & the power switch is ON.	<ul style="list-style-type: none">• Check the fuse located to the left of the power switch.• Try plugging scale into a different electrical socket.
<ul style="list-style-type: none">• Scale counts up to 9's & then goes blank.• Scale counts up to 9's & then shows: "Zero rAnGE Error"	<ul style="list-style-type: none">• Remove everything from the platter. Turn scale OFF and then ON.• Make sure platter is properly installed and nothing is obstructing the platter from underneath.• Call your CAS Dealer for SPAN calibration.
<ul style="list-style-type: none">• Scale does not accept Tare	<ul style="list-style-type: none">• Make sure that the Tare being entered is within 0.01 ~ 30.00 Lbs.• Make sure that the <i>NET</i> lamp is off before trying to enter a Tare.
<ul style="list-style-type: none">• In spite of pressing the TARE key, the Tare does not clear.	<ul style="list-style-type: none">• Make sure all items are removed from the platter & then try again.• Remove all items from the platter and then turn scale OFF & ON.

"CAUTION"

Danger of explosion if battery is incorrectly replaced. replace only with the same or equivalent type recommended by the manufacturer. dispose of used batteries according to the manufacturer instructions

IV Specifications

	Model A	Model B	Model C
CAPACITY x RESOLUTION	30.00 Lbs x 0.01 Lbs (15.000 Kg x 0.005 Kg)		
TARE	-30.00 Lbs ~ -0.01 Lbs (- 5.99 Kg ~ -0.005 Kg)		
WEIGHT DISPLAY UNIT PRICE DISPLAY TOTAL PRICE DISPLAY	4 DIGITS (USA) 4 DIGITS (USA) 5 DIGITS (USA)	5 DIGITS (EX-USA) 6 DIGITS (EX-USA) 7 DIGITS (EX-USA)	
CONDITIONS: TEMPERATURE RANGE POWER	23°F ~ 95°F (-5°C ~ 35°C) 85 VAC ~ 265 VAC 50 / 60 Hz ± 3Hz		
MEMORY CAPACITY	A	B	C
	1000 PLU	200 PLU	600 PLU
INGREDIENT DATA	NOT AVAILABLE	400 CHARACTER	250 CHARACTER
LABEL TYPES	58 X 30 mm (#8000) 58 X 40 mm (#8010) 58 X 50 mm (#8030) 58 X 60 mm (#8040)	58 X 30 mm (#8000) 58 X 40 mm (#8010) 58 X 60 mm (#8020)* 58 X 50 mm (#8030) 58 X 60 mm (#8040)	58 X 30 mm (#8000) 58 X 40 mm (#8010) 58 X 60 mm (#8020)* 58 X 50 mm (#8030) 58 X 60 mm (#8040)
COMMODITY NAME	2 LINES OF 28 CHARACTERS EACH = 56 CHARACTERS PER COMMODITY		
DIRECT PLU KEYS	54 PRESET KEYS		
DATA TRANSFER	SCALE TO SCALE: ALL DATA TRANSFER PC TO SCALE / SCALE TO PC: PARTIAL DATA TRANSFER		

* **NOTE:** #8020 Label is used to print ingredient data.

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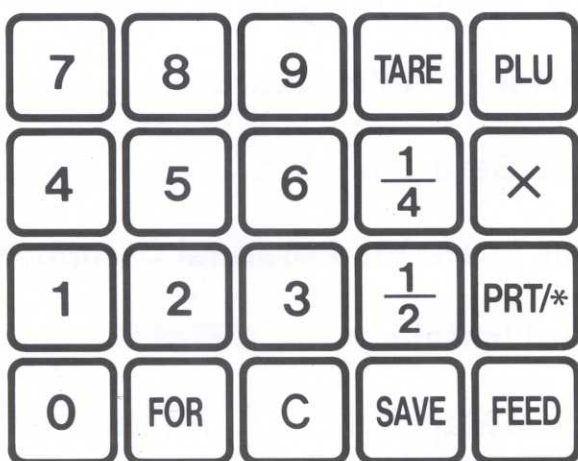
V. System Maps

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I. Nomenclature

1. Keypads

- A) **Numeric Keypad:** The *Numeric Keypad* is used to enter all numerical data in **PGM** Mode. In **REG** Mode, the *Numeric Keypad* is used to enter prices, quantities, and counts. Here is a sample of the *Numeric Keypad* and an explanation of what each key is used for. (See fig.)



KEY DEFINITIONS

0 to 9 Numeric keys used to enter numerical data.

C Clear key used to clear Error conditions and bring displays to their initial state (0.00).

FOR Used to enter by piece sales, i.e. 3 Pieces FOR \$1.00.

TARE Used to clear Tare entries and to enter Tare weight.

1/4 Quarter key. This key allows the sale of items by unit price per quarter pound. This function quadruples the price per pound.

1/2 Half key. This key allows the sale of items by unit price per half pound. This function doubles the price per pound.

SAVE When ON, this function will not let the unit price or tare weight of a PLU automatically clear even after you remove the item from the platter. This function acts like a toggle switch: you will know the function is ON by the indicator lamp in the *Unit Price* display. This function is similar to Pre-Pack.

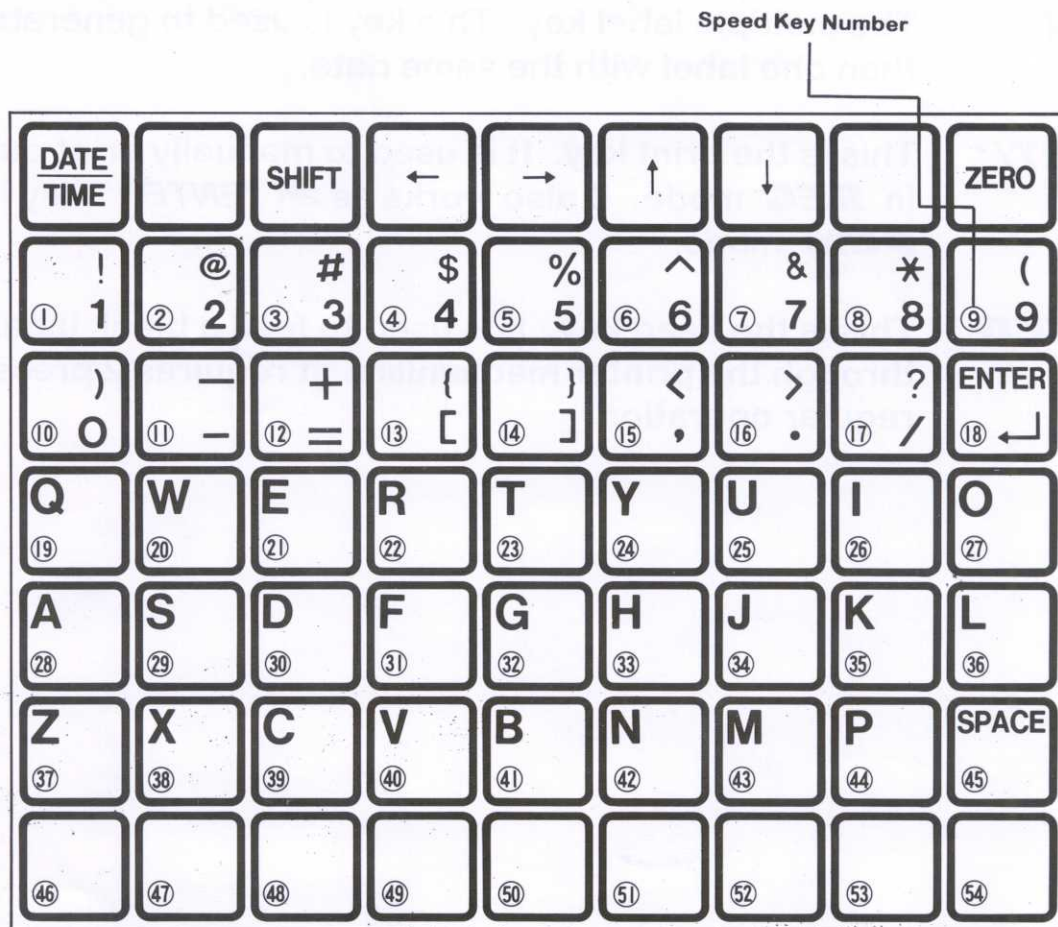
PLU Price Look Up key. This key is used to “call-up” PLU’s by their numbers (1 to 9999).

X The multiple label key. This key is used to generate more than one label with the same data.

PRT/* This is the print key. It is used to manually print out a label in **REG** mode. It also works as an “ENTER” key in **PGM** mode.

FEED This is the Feed key. It is used to feed a blank label through the printer mechanism. It requires 2 presses in regular operation.

B) **PLU Keypad:** The *PLU Keypad* is used to enter alphanumeric data. To use the keypad for programming you must remove the pull-out sheet. To use the *PLU Keypad* in **REG** mode, you can write the name and number of the PLU's on the corresponding speed keys on the pull-out sheet. All commodity names, message data, and store name and address are typed using this keypad in **PGM** mode. The *PLU Keypad* doubles as a preset PLU key keypad. You can quickly reference 54 PLU's using these keys. The scale automatically programs the *PLU Keypad* to be PLU 1 to 54. A speed key's number is shown circled on the lower left-hand side of each key.



TAB FOR PULL OUT SHEET

KEY DEFINITIONS

***DATE
TIME***

This key displays the time and date in **REG** mode.

SHIFT

This key works like a Caps Lock key on a computer. It is used to type capital letters. You can tell if the **SHIFT** function is active by an indicator lamp in the **UNIT PRICE** display.



This is the Left Arrow Key. It is used to scroll the cursor to the left when programming alpha-numeric data.



This is the Right Arrow Key. It is used to scroll the cursor to the right when programming alpha-numeric data.



This is the Up Arrow Key. It is used to scroll from Line to Line when programming commodity names, message data, or store name and address. It is also used to move up the System Maps.



This is the Down Arrow Key. It is used to scroll from Line to Line when programming commodity names, message data, or store name and address. It is also used to move down the System Maps.

ZERO

This key is used to set the Zero Point to 0.00.

1 to 0

These keys are used to enter numbers as "text" for a commodity name, message data, or store name and address. The Symbol keys are also used to type text.

Q to P

These are the Letter Keys. They are used to type in text.

SPACE

This is the Space Key. It functions the same as a space bar on a computer keyboard.

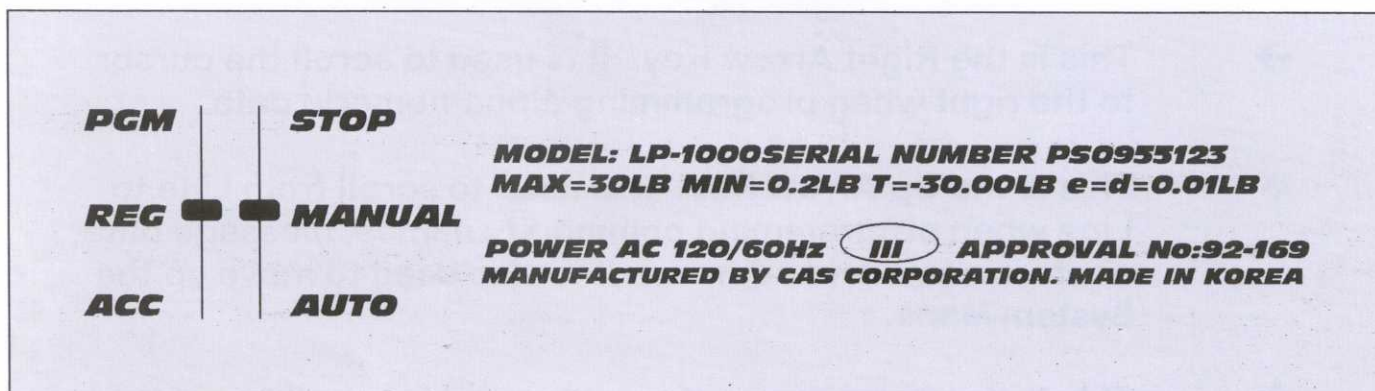
ENTER



This key is the Enter Key. It functions just like an enter key on a computer. It is used to go to Line 2 or the next Line after typing some text.

2. **Mode Switches**

There are two mode switches: **System Control Switch** and **Mode Control Switch**. The mode switches are located in the front of the scale below the *Numeric Keypad*. (See fig.)



- A) **System Control Switch:** This mode switch controls the three functions of the scale. **PGM** mode is used to set all of the scale's functions and PLU's. **REG** mode is used for operating the scale. **ACC** is used to generate sales reports.
- B) **Mode Control Switch:** This mode switch controls the functioning of the printer. It has three modes also. The **STOP** mode inhibits all printing. **MANUAL** mode allows issuing of a label when the **PRT/*** key is pressed. In **AUTO** mode, labels are issued when the weight is stabilized and greater than zero. The use of the **PRT/*** key will also generate a label.

3. Displays

- A) Weight Display: The *WEIGHT* display shows the weight of an item on the platter whether it be positive or negative and within the range of the scale. The *WEIGHT* display also indicates if the scale is at *ZERO* or if there is a tare entered into the scale by way of a *ZERO* and *NET* lamps. (See Fig.)



- B) Unit Price Display: The *UNIT PRICE* display shows the price per pound of an item to be weighed. It also indicates whether the *SAVE* function is active by way of the indicator lamp. The *UNIT PRICE* display, in program mode only, indicates the condition of the *SHIFT* lamp. If the *SHIFT* lamp is ON, you can type in capital letters, but if the *SHIFT* lamp is OFF, you can only type lowercase letters. Finally, the *UNIT PRICE* display also indicates if the scale is in **AUTO** mode by way of an indicator lamp. (See fig.)



- C) **Total Price Display:** The *TOTAL PRICE* display shows the unit price multiplied by the weight to give the total price.

NOTE: On scales with a FOREIGN character set, the *TOTAL PRICE* display also indicates when it is in FOREIGN typing mode by way of an indicator lamp. (See Fig.)

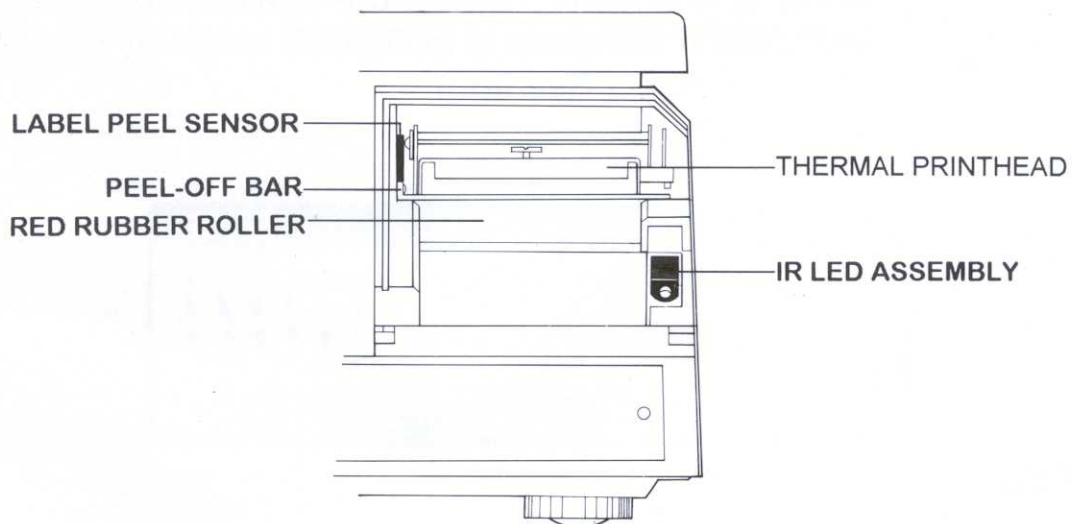


FOREIGN TYPING MODE LAMP

4. PRINTER MECHANISM

It is very important that you be familiar with the printer mechanism. Every time your labels run out you will be required to install the label roll and you will need to know the general parts of the printer.

- A) **Front View:** (With Printer Front Cover removed)



A) Front View: (Continued)

LABEL PEEL SENSOR: This sensor is used in conjunction with IR LED to detect if there is a printed label waiting to be taken.

THERMAL PRINTHEAD: The Thermal Printhead is the part that does the actual printing. The printhead is VERY sensitive! Please keep water and other liquids AWAY from the printhead. **DO NOT TOUCH** the underside of the printhead. If labels become jammed and stuck to the printhead, please call a qualified CAS Dealer to solve this problem. When finished installing labels, it is necessary to push down on the TOP of the printhead to lock it in place.

RED RUBBER ROLLER: This is the part that the printhead press the labels against in order to print. Please do not scratch or harm in any way this roller. Any damage to the roller can result in bad print or lower quality print.

PEEL-OFF BAR: This part causes the labels to peel-off their backing paper when the paper slides over it. Always install the labels OVER the Peel-Off Bar.

IR LED: This part is used in conjunction with the Label Peel Sensor to detect if there is a printed label waiting to be taken. (Infra-Red Light Emmiting Diode)

B) Side View: (See pages 8 and 9 for complete details)

NOTE: Always replace the Printer Side Cover and the Printer Front Cover to ensure proper operation of the scale. Failure to do so can result in printer failure. Also, failure to comply with any or all of the guidelines for proper maintenance can adversely affect your scales warrantee.

WARNING! You are about to begin programming the scale. Please follow the directions properly. If you get *stuck* in **PGM** mode, please follow the System Maps (see CONTENTS).
DO NOT TURN OFF SCALE IN *PGM* MODE!!!
Doing so will cause your PLU data file to become corrupt and may cause other unpredictable effects.

II. Programming your scale via scale keypads

1. Programming System Control Data

- A) Programming the Department Number: The department number is used to control the first two barcode digits. This number should always be set to 2.

- EXAMPLE:
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ two times.
 - 3) The *WEIGHT* display should read “dPtno”.
 - 4) Press the **PRT/*** key.
The displays should read: “dPtno EntEr 2”. The number in the *TOTAL PRICE* display is what the department number is currently programmed to.
 - 5) Press the **C** key and then the **2** key.
 - 6) Press the **PRT/*** key.
 - 7) Place the *System Control Switch* into **REG** mode.
- You have successfully programmed the department number.
-

- B) Programming the Label Format: The label format is a six digit number that controls the label functions. It controls the type and format of the UPC, the type of labels, printing suppression, and control of functions.

- EXAMPLE:
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ three times.
 - 3) The *WEIGHT* display should read “LAbEL”.
 - 4) Press the **PRT/*** key.
The displays should read: “LAbEL EntEr 141111”. The number in the *TOTAL PRICE* display is what the department number is currently programmed to.

5) Now look at the table below and determine the label format number you want. Type the number on the *Numeric* keypad.

6) Press the **PRT/*** key and place the *System Control Switch* to the **REG** position. (Six digit format below is for LST #8010.)

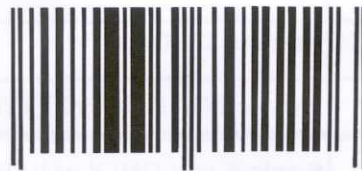
1
4
1
1
1
1

Digit #1 Digit #2 Digit #3 Digit #4 Digit #5 Digit #6

DIGIT #	DIGIT DESCRIPTION	SETTING AND DESCRIPTION			
Digit #1	(For Future Use)	1	This setting is always set to 1		
Digit #2	UPC & Print control	0	Packed On Date Print	Sell By Date	Non-UPC Label
		1	Packed On Date NOT Print	Print	LST#8000
		2	Packed On Date Print	Sell By Date	OR
		3	Packed On Date NOT Print	NOT Print	LST#8030
		4	Packed On Date Print	Sell By Date	UPC Label
		5	Packed On Date NOT Print	Print	LST#8010, LST#8020
		6	Packed On Date Print	Sell By Date	OR
		7	Packed On Date NOT Print	NOT Print	LST#8040
Digit #3	Commodity Name Size NOTE: If Digit #3 is set to 0 or 2, then you MUST program the commodity name on line 2 of the Name field in PLU Programming ONLY!	0	Prints 1 line ONLY of LARGE PLU commodity name.	For Labels LST#8000, LST#8010, LST#8030, And LST#8040 ONLY! (Non - Ingredients)	
		1	Prints 2 lines of Smaller PLU commodity name.		
		2	Prints 1 line ONLY of LARGE PLU commodity name.	(MODEL B ONLY!) LST#8020 LABELS ONLY! (Ingredients Label)	
		3	Prints 2 lines of Smaller PLU commodity name.		
Digit #4	Shop Name and Address suppression	0	Suppress Shop Name printing and Address at bottom of label.	For Labels LST#8000, LST#8010, AND LST#8020 ONLY! (Non Safe Handling)	
		1	Allow printing of Shop Name & Address at the bottom of label.		
		2	Suppress Shop Name printing and Address at bottom of label.	For Labels LST#8030, OR And LST#8040 ONLY! (Safe Handling Labels)	
		3	Allow printing of Shop Name & Address at the bottom of label.		

Digit #5	PLU price change	0	To DISALLOW PLU price change in REG mode.
		1	To ENABLE PLU price change in REG mode.
Digit #6	UPC Barcode format	0	SUPPRESS printing of the UPC Bar Code.
		1	Barcode format number 1 (See Fig. below)
		2	Barcode format number 2 (See Fig. below)
		3	Barcode format number 3 (See Fig. below)
		4	Barcode format number 4 (See Fig. below)
		5	Barcode format number 5 (See Fig. below)
		6	Barcode format number 6 (See Fig. below)
		7	Barcode format number 7 (See Fig. below)

BARCODE FORMAT BREAKDOWN



0 212334 702226

BARCODE FORMAT NUMBER	Barcode Digit Positions												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	D1	D2	I1	I2	I3	I4	I5	S	P1	P2	P3	P4	C
2	D1	D2	I1	I2	I3	S	P1	P2	P2	P3	P4	P5	C
3	D1	D2	I1	I2	I3	I4	I5	I6	P1	P2	P3	P4	C
4	D1	D2	I1	I2	I3	I4	I5	P1	P2	P3	P4	P5	C
5	D1	D2	I1	I2	I3	I4	P1	P2	P3	P4	P5	P6	C
6	D1	D2	I1	I2	I3	P1	P2	P3	P4	P5	P6	P7	C
7	D1	D2	I1	I2	I3	I4	I5	W1	W2	W3	W4	W5	C

BARCODE DEFINITION (SUPPORTS UPC, EAN, JAN, & KAN CODES)

D1, D2 = Department Number (Always 02)

I1, I2, I3, I4, I5, I6 = Item Code

S = Check Sum Digit for Price

P1, P2, P3, P4, P5, P6, P7 = Price

W1, W2, W3, W4, W5 = Weight

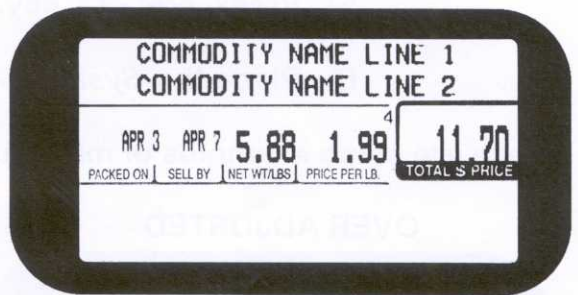
C = Check Sum Digit for all Characters

Here are some Label Format samples:

140111



101010



101310



143110



- C) Programming the Adjust Number: The adjust number is a number that controls the printing position of the text on the label. The higher the number the higher the text will print on the label. The lower the number the lower the text will print on the label. Left to right printing position is FIXED. 14 is the default number.

- EXAMPLE:**
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press ↓ key four times. The display should read: “ AdJSt ”
 - 3) Press the **PRT/*** key. The displays should read: “AdJSt EntEr 16”
 - 4) Now type the new adjust number from 12 to 22 on the *Numeric keypad*. IF YOU NEED TO USE AN ADJUST NUMBER OUTSIDE THE RANGE, PLEASE SEE “YOUR” AUTHORIZED CAS DEALER.
 - 5) Press **PRT/*** key.
 - 6) Place the *System Control Switch* to **REG** mode.

Here are some examples of misadjusted labels:

OVER ADJUSTED



UNDER ADJUSTED



Here are some samples of properly adjusted labels:

OK



OK



- D) Programming the Date: The date is used by the scale to calculate the Packed On and Sell By on the labels it prints. It also uses the date to figure out sales data. If the time is set properly, the scale will automatically advance the date.

- EXAMPLE:
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ key five times. The display should read: "dAtE".
 - 3) Press the **PRT/*** key. The displays should read: "E dAt 04.03.95". The numbers in the *TOTAL PRICE* display may vary because they represent the date.
 - 4) Now type in the date in *MONTH / DAY / YEAR* format. Please, do not forget to type leading zeros. For example, July 4, 1995, would be entered as follows: **0 7 0 4 9 5**.
 - 5) Place the *System Control Switch* to **REG** mode.
-

- E) Programming the Time: The scale uses the time in order to change the date properly and maintain sales data.

- EXAMPLE:
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ key six times. The display should read: "timE".
 - 3) Press the **PRT/*** key. The displays should read: "E tim 17.03.00". The numbers in the *TOTAL PRICE* display may vary because they represent the time.
 - 4) Now type in the time in *HOURS / MINUTES / SECONDS* format. Please, do not forget to type leading zeros and to enter the hour in military time. For example, 4:30:00 PM, would be entered as follows: **1 6 3 0 0 0**.
 - 5) Place the *System Control Switch* to **REG** mode.
-

- F) Programming the Shop Data: The shop data is the 2 lines of text that get printed on the bottom of the label *when it is not suppressed by the label format*. You can use these two lines to print the name and address of the store or anything else you wish the scale to print at the bottom. Each line contains 28 characters of text.

- EXAMPLE:**
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ key seven times. The display should read: "SHoP".
 - 3) Press the **PRT/*** key. The displays should read: "E SHoP 01.01". The numbers in the *UNIT PRICE* display represent the line number and character number on which your cursor is at. The number to the left of the decimal is the line number you are on (01 to 02). The number to the right is the number of the character position on which you are about to type (01 to 28).

- OR
- 4)* Now type in the first line of text using the *Alphanumeric* keypad, on the left side. Don't forget to remove the pull-out sheet.
 - 4) If you do not wish to have a first line of text, please press the ↓ key and proceed to step 6.

- 5) Press the **ENTER** key.
- 6) The displays should read: "E Sho 02.01". Type in the second line of shop name using the *Alphanumeric* keypad. If you do not wish to have a second line of shop name, go to the step 7.
- 7) Press the **PRT/*** key. Place the *System Control Switch* in **REG** mode.

-
- G) **Programming Head Data:** The Header or *Head* data is the one line commodity name that appears on a label when you generate a Non-PLU label. You can use this as your miscellaneous item, in order to keep a more accurate account of your sales.

- EXAMPLE:**
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ key eight times. The display should read: "HEAd".
 - 3) Press the **PRT/*** key. The displays should read: "E Hd 01.01". The numbers in the *UNIT PRICE* display represent the line number and character number on which your cursor is at. The number to the left of the decimal is the line number you are on (01 to 01). The number to the right is the number of the character position on which you are (01 to 28).

4) Type in the Non-PLU commodity name using the *Alphanumeric* keypad, on the left side. Don't forget to remove the pull-out sheet. If you do not wish to have a first line of text, please proceed to step 5.

5) Press the **PRT/*** key.

H) Programming the Auto Print Function: The auto print function is used to determine when an automatic buffered label should be printed or buffered. The number stored in auto print is a weight value which is equal to the amount of stabilized positive weight variance needed to print or buffer a label. For example, if the auto print value is set to "0.10", then the scale will automatically print a label when the weight changes by ± 0.10 lbs. and stabilizes. Remember: the scale only prints automatically in **AUTO** mode and it will only print for weights greater than or equal to 0 lbs..

EXAMPLE: 1) Place the *System Control Switch* in **PGM** mode.

2) * Press the \downarrow key nine times. The display should read: "AUtoP" (Model A).

* If the display reads "MSG", then press the \downarrow key once more (Models B & C).

3) Press the **PRT/*** key. The displays should read: "AUtoP EntEr 0.10". The number in the *TOTAL PRICE* display represents the weight sensitivity number by which your scale calculates auto print. The default is "0.10". Please set the number by pressing **1** key and then **0** key.

4) Press the **PRT/*** key. Place the *System Control Switch* in **REG** mode.

2. Programming PLU and Ingredient Data:

Throughout this manual you will see the words "message" and "ingredients" used interchangeably. The abbreviation "MSG" is also used to mean "message number". Every time you finish programming a PLU, PLU Price Change, or MSG the scale will issue a verification label if the *Mode Control Switch* is in the **MANUAL** or **AUTO** modes. If you wish not to print a verification label, place the *Mode Control Switch* in **STOP** mode before you begin programming.

NOTE: If you wish to erase the entire MSG file before you begin programming it, follow the directions below. Once you execute the MSG clear function, you cannot retrieve the data; it is permanently lost.

MSG ALL Clear:

- 1) Place the *System Control Switch* in **PGM** mode.
- 2) Then press the **PRT/*** key. The displays should read:
Model B: "PLUno 200 "
Model C: "PLUno 600 "
The number in the *UNIT PRICE* display may vary depending upon how many PLUs you have programmed.
- 3) Type the following numbers on the *Numeric* keypad:
2 2 7 5 5.
- 4) Press the **PRT/*** key. The displays will read:
"PLUno init MSG ". The display will remain in this state for about 20 seconds. Once done, the scale displays will read the same as in step 2.
- 5) Press the **PRT/*** key and then place the *System Control Switch* in to **REG** mode.

-
- A) **Message (Ingredients) Programming:** The LP-1000 Model A scale does not have this feature. Only Models B and C have the ability to print ingredients. All programming in this section will refer to Models B & C ONLY!

MSG Number 200: This message is automatically printed with Non-PLU labels. That is, when you use Non-PLU sales MSG number 200 is printed.

Model B has 200 PLUs and 200 Messages. Each message (or MSG) has 8 lines of text. Each line contains 50 characters (characters = letters, numbers, symbols, etc.). Each MSG is numbered from 1 to 200. When you want a particular PLU to be printed with a specific MSG, you must put that MSG's number in the "MSGno" field when programming a PLU. Of course, you must program the message first. This process is called a link: you have linked PLU number 1 with MSG number 10, for example. Of course, the best method for linking is to make sure that the MSG number you are linking to the PLU is the same as that PLU's number. For example, PLU number 1 linked with MSG number 1, PLU number 2 linked with MSG number 2, etc., but you are free to program as you please.

Model C has 600 PLUs and 200 Messages. Each message (or MSG) has 5 lines of text. Each line contains 50 characters (characters = letters, numbers, symbols, etc.). Each MSG is numbered from 1 to 200. When you want a particular PLU to be printed with a specific MSG, you must put that MSG's number in the "MSGno" field when programming a PLU. Of course, you must program the message first. This process is called a link: you have linked PLU number 1 with MSG number 10, for example. Of course, the best method for linking is to make sure that the MSG number you are linking to the PLU is the same as that PLU's number. For example, PLU number 1 linked with MSG number 1, PLU number 2 linked with MSG number 2, etc., but you are free to program as you please.

- EXAMPLE:**
- 1) Place the *System Control Switch* in **PGM** mode.
 - 2) Press the ↓ key nine times. The displays should read:
"MSG ".
 - 3) Press the **PRT/*** key. The displays should read:
"MSGno EntEr ".
 - 4) Now type the number of the MSG you wish to program or edit using the *Numeric* keypad. Remember, the number can only be from 1 to 200. If you make any mistakes, press the **C** key and repeat step 4.
 - 5) Press the **PRT/*** key. The displays should now read:
"MSGno 01.01 ". You may now begin typing your MSG data using your *Alphanumeric* keypad. After you type each line, press **ENTER** key when you are done typing a line. If you wish to skip a line, press the ↓ key. If you want to go up a line, press the ↑ key. Press the ← key or the → key to scroll left or right on a line of text. As you type you will see the text scroll in the *TOTAL PRICE* display. The display can only show 7 characters at a time.
 - 6) Press the **PRT/*** key when your done. The scale will issue a verification label if the *Mode Control Switch* is in **MANUAL** or **AUTO** mode.
 - 7)* If you wish to program another MSG, go back to step 4.
 - 7) If you wish to finish MSG programming, press the **PRT/*** key.
 - 8) Set the *System Control Switch* to **REG** mode.

OR

NOTE: If you wish to erase the entire PLU file before you begin programming it, follow the directions below. *Once you execute the PLU clear function, you cannot retrieve the data; it is permanently lost.*

PLU ALL Clear:

- 1) Place the *System Control Switch* in **PGM** mode.
- 2) Then press the **PRT/*** key. The displays should read:
Model B: "PLUno 200 "
Model C: "PLUno 600 "
The number in the *UNIT PRICE* display may vary depending upon how many PLUs you have programmed.
- 3) Type the following numbers on the *Numeric* keypad:
2 2 7 5 6.
- 4) Press the **PRT/*** key. The displays will read:
"PLUno init PLU ". The display will remain in this state for about 20 seconds. Once done, the scale displays will read the same as in step 2.
- 5) Press the **PRT/*** key and then place the *System Control Switch* in to **REG** mode.

-
- B) **PLU Programming:** PLU means *Price Look Up*. PLUs are used to store the price, name, and other data of items being sold. Every PLU on a Model A has 6 data fields: ①Item Code, ②Name, ③Unit Price, ④Shelf Life, ⑤Tare, ⑥Group Code. Every PLU on a Model B or C has 7 data fields: ①Item Code, ②Name, ③MSG, ④Unit Price, ⑤Shelf Life, ⑥Tare, ⑦Group Code.

Item Code: The item code field is a 3 to 6 digit number that is printed in the barcode. This number is used by the scanning device in order to reference the PLU. In most cases, the item code is programmed to be the same as the PLU number. (See page 30)

Name: The name field is composed of 2 lines of text. Each line can contain up to 28 characters. Name is commonly referred to as commodity or commodity name.

MSGno: (For Model B & C ONLY!) The message number is the number of the message to be printed with the PLU you are programming.

Price: The price field is where the scale stores the unit price of the PLU.

Life: The life field is where the PLU's shelf life is stored. The number in this field will represent the amount of days this commodity can be left on the shelf. It can be from 0 to 366.

Tare: Tare is used to store the weight of the container to be used with this PLU. The tare is subtracted from the gross weight of the item at the time of weighing.

Group Code: The group code is a number from 0 to 99 that is printed on the label. It can be used to group PLUs in to sections, for example: all beef PLUs are group code 10, all poultry PLUs are group code 20, all fish PLUs are group code 30, etc..

EXAMPLE: 1) Place the *System Control Switch* into **PGM** mode and then press the **PRT/*** key.

2) The displays should read:

Model A: "PLUno 1000 "

Model B: "PLUno 200 "

Model C: "PLUno 600 "

The number in the *UNIT PRICE* display indicates the amount of empty PLUs ready to be programmed. The number may vary (may be same as shown or less) depending upon the number of PLUs already in memory.

3) Type a PLU number, on the *Numeric* keypad, you wish to program or edit. Remember, this number must be between 1 and 9999.

4) Press the **PRT/*** key. The display should read: "iCodE "

OR → 5)* If you do NOT wish to program item code, press the ↓ key and go to step 7.

→ 5) If you wish to program an item code, press the **PRT/*** key. The displays should read: "iCodE EntEr 0". The number in the *TOTAL PRICE* display may vary if this PLU was previously programmed.

6) Type the item code number using the *Numeric* keypad. The item code can be from 1 to 999999. If you enter a 0, then item code will not be printed on the label. Press the **PRT/*** key when your done.

7) The display should read: "nAmE "

OR → 8)* If you do NOT wish to program name, press the ↓ key and go to step 13.

→ 8) Press the **PRT/*** key. The displays should read: "nAmE 01.01 ". The numbers in the *UNIT PRICE* display represent the line number and character number on which your cursor is at. The number to the left of the decimal is the line number you are on (01 to 02). The number to the right is the number of the character position on which you are about to type (01 to 28).

- OR → 9)* If you do NOT wish to have a first line of text, please press ↓ key and go to step 10.
- OR → 9) Now type in the first line of text using the *Alphanumeric* keypad, on the left side. Don't forget to remove the pull-out sheet. Press the **ENTER** key.

10) The displays should read: "nAmE 02.01".

- OR → 11)* If you do NOT wish to have a second line of name, press the **PRT/*** and go to step 13.
- OR → 11) Type in the second line of the name using the *Alphanu meric* keypad.

12) Press the **PRT/*** key.

13) The displays should read as follows:

Model A "PriCE "
Model B "MSGno "
Model C "MSGno ".

- OR → 14)* If you have a Model A LP-1000, please go to step 17.
- OR → 14) If you have a Model B or Model C, do steps 15 and 16.

MODEL B AND C ONLY

- OR → 15)* If you do NOT wish to program MSG number, press the ↓ key and go to step 17.
- OR → 15) If you wish to program a MSG number, press the **PRT/*** key. The displays should read: "MSGno EntEr 0". The number in the *TOTAL PRICE* display may vary if this PLU was previously programmed.

16) Type the MSG number using the *Numeric* keypad. The MSG number can be from 1 to 200. If you enter a 0, then this PLU will be printed without a message. Press the **PRT/*** key when your done.

17) The display should read: "PriCE".

- OR → 18)* If you do NOT wish to program the price, press the ↓ key and go to step 20.
- OR → 18) If you wish to program a price, press the **PRT/*** key. The displays should read: "PriCE EntEr 0.00". The number in the *TOTAL PRICE* display may vary if this PLU was previously programmed.

- 6) Type the number of the PLU you wish to assign to that preset key. Use the *Numeric* keypad to type the PLU number. Press the **PRT/*** key when done.

*If the *TOTAL PRICE* display reads: "invALid" it means that the PLU you were trying to assign does not exist.

*To get out of this error condition, press the **C** key and go back to step 5.

- OR
- 7)* If you want to program another preset key, go back to step 4.
 - 7) If you wish to finish preset key programming, press the **PRT/*** key and place the *System Control Switch* in to **REG** mode.

IV. Programming Your Scale Via Personal Computer

1. Unpacking and Installing the **DBMS** Option

DBMS means: Data Base Management System. This is the LP-1000 PC software package used for programming PLU data and Message data ONLY. Unlike Scale to Scale data transfer, **DBMS** cannot transfer control data or sales data.

Your optional software package should come with a cable and the **DBMS** diskette. Follow the directions below.

- 1) After you start your IBM or IBM compatible PC, place the diskette in the A: drive.
- 2) Type *c:* and press **ENTER** on the PC. Now create a CAS directory by typing *md cas* and then press **ENTER** on the PC.
- 3) Type *cd cas* and press **ENTER** on the PC.
- 4) Then type *copy a:*.* c:\cas*.** and press **ENTER** on the PC.
- 5) Once the computer is done copying the files, remove the diskette from drive A:\ and store it in a safe place.
- 6) Connect the interface cable to the scale and then to the PC. Make sure the scale is OFF.
- 7) Turn scale ON. On the PC type *lp1000* and press **ENTER**. The **DBMS** is now up and running.

2. **DBMS** System Map

- A) Scale Type Menu: The *Scale Type Menu* is the first thing you'll see once you start the **DBMS**. From this menu you have the option of selecting which of the three LP-1000 Models you have: A, B, or C. All the directions to use the software package are usually on the screen at the time you are using the software.
- B) Main Menu: This menu is divided into three sections: *PLU Menu*, *Ingredients Menu*, and *Exit*. Of course, the Model A LP-1000 will not have an *Ingredients Menu*. The *PLU Menu* has five options: ① *PLU Data Entry*, ② *PC to Scale PLU Entry*, ③ *Scale to PC PLU Entry*, ④ *Display Scale's PLU*, and ⑤ *Delete PLU Data*.

PLU Menu

PLU Data Entry: This is the data base where you can create, view, edit, merge, and print your entire PLU file.

PC to Scale PLU Data: This option allows you to transfer a file you have created or edited on the computer to your scale. If you wish the scale to contain only the PLUs you are transferring from the PC, then you must RAM Clear the scale first. Once you pick PC to Scale option you will see the *COM Port Selection* menu.

Scale to PC PLU Data: This option allows you to upload a PLU file that you have in your scale from the scale to the computer. Once you pick this option you will see the *COM Port Selection* menu.

Display Scale's PLU: This option allows you to view what your three scale displays (*WEIGHT, UNIT PRICE, TOTAL PRICE*) are indicating once you press the **ENTER** key on the computer. This option is very useful in testing the cable link from your PC to your Scale.

Delete PLU Data: This option is used to delete a PLU data file in the computer.

Ingredients Menu

Ingredients Entry: This is the data base where you can create, view, edit, and print your entire MSG file.

PC to Scale Ingredients Data: This option allows you to transfer a file you have created or edited on the computer to your scale. If you wish the scale to contain only the MSGs you are transferring from the PC, then you must Clear MSG file in the scale first. Once you pick PC to Scale option you will see the *COM Port Selection* menu.

Scale to PC Ingredients Data: This option allows you to upload a MSG file that you have in your scale from the scale to the computer. Once you pick this option you will see the *COM Port Selection* menu.

Delete Ingredient Data: This option deletes a MSG file from your computer.

3. Exiting the **DBMS:**

EXIT Option: This option terminates the **DBMS.**

V. SYSTEM MAPS

1. Helpful Hints:

HELPFUL HINTS

You can press the ↓ key or ↑ key to go up and down the *Main Menu* in **PGM** mode ONLY if the *UNIT PRICE* and *TOTAL PRICE* displays are **BLANK!** The same rule applies in **ACC** mode.

* If you want to use the ↓ key or the ↑ key to go up and down a menu and the *UNIT PRICE* and *TOTAL PRICE* displays are NOT blank, you must first press the **PRT/*** key. After the *UNIT PRICE* and *TOTAL PRICE* displays are blank, you can use the ↑ or ↓ keys.

If you are in *Text Typing Mode* you can use ALL the arrow keys. You can tell if you are in *Text Typing* mode if the *UNIT PRICE* display reads: " 01.01 ". Remember, the numbers to the left and right of the decimal point in example " 01.01 " may vary depending upon what text line number you are on and the character position you are on.

2. **PGM** Mode Map For Models B and C:

Display Says...	I Press...	Display Changes To...
"PLU "	↓	"PrSEt "
"PrSEt "	↓	"dPtno "
"dPtno "	↓	"LAbEL "
"LAbEL "	↓	"AdJSt "
"AdJSt "	↓	"dAtE "
"dAtE "	↓	"timE "
"timE "	↓	"SHoP "
"SHoP "	↓	"HEAd "
"HEAd "	↓	"MSG "
"MSG "	↓	"AUtoP "
"AUtoP "	↓	"AUtoP "
"AUtoP "	↑	"MSG "
"MSG "	↑	"HEAd "
"HEAd "	↑	"SHoP "
"SHoP "	↑	"timE "
"timE "	↑	"dAtE "
"dAtE "	↑	"AdJSt "
"AdJSt "	↑	"LAbEL "
"LAbEL "	↑	"dPtno "
"dPtno "	↑	"PrSEt "
"PrSEt "	↑	"PLU "
"PLU "	↑	"PLU "

3. **PGM** Mode Map For Models A:

Display Says...	I Press...	Display Changes To...
"PLU "	↓	"PrSEt "
"PrSEt "	↓	"dPtno "
"dPtno "	↓	"LAbEL "
"LAbEL "	↓	"AdJSt "
"AdJSt "	↓	"dAtE "
"dAtE "	↓	"timE "
"timE "	↓	"SHoP "
"SHoP "	↓	"HEAd "
"HEAd "	↓	"AUtoP "
"AUtoP "	↓	"AUtoP "
<hr/>		
"AUtoP "	↑	"HEAd "
"HEAd "	↑	"SHoP "
"SHoP "	↑	"timE "
"timE "	↑	"dAtE "
"dAtE "	↑	"AdJSt "
"AdJSt "	↑	"LAbEL "
"LAbEL "	↑	"dPtno "
"dPtno "	↑	"PrSEt "
"PrSEt "	↑	"PLU "
"PLU "	↑	"PLU "

4. **PLU** Mode Map For Models B and C:

Display Says...	I Press...	Display Changes To...
"iCodE "	↓	"nAmE "
"nAmE "	↓	"mSG "
"mSG "	↓	"PriCE "
"PriCE "	↓	"LiFE "
"LiFE "	↓	"tArE "
"tArE "	↓	"GCodE "
"GCodE "	↓	"SAvE "
"SAvE "	↓	"ErASE "
"ErASE "	↓	"ErASE "
<hr/>		
"ErASE "	↑	"SAvE "
"SAvE "	↑	"GCodE "
"GCodE "	↑	"tArE "
"tArE "	↑	"LiFE "
"LiFE "	↑	"PriCE "
"PriCE "	↑	"mSGno "
"mSGno "	↑	"nAmE "
"nAmE "	↑	"iCodE "
"iCodE "	↑	"iCodE "

5. PLU Mode Map For Model A:

Display Says...	I Press...	Display Changes To...
"iCodE "	↓	"nAmE "
"nAmE "	↓	"PriCE "
"PriCE "	↓	"LiFE "
"LiFE "	↓	"tArE "
"tArE "	↓	"GCodE "
"GCodE "	↓	"SAvE "
"SAvE "	↓	"ErASE "
"ErASE "	↓	"ErASE "
<hr/>		
"ErASE "	↑	"SAvE "
"SAvE "	↑	"GCodE "
"GCodE "	↑	"tArE "
"tArE "	↑	"LiFE "
"LiFE "	↑	"PriCE "
"PriCE "	↑	"nAmE "
"nAmE "	↑	"iCodE "
"iCodE "	↑	"iCodE "

6. **ACC** Mode Map:

Display Says...	I Press...	Display Changes To...
"Print "	↓	"CLEAr "
"CLEAr "	↓	"CHESS "
"CHESS "	↓	"trAnS "
"trAnS "	↓	"trAnS "
<hr/>		
"trAnS "	↑	"CHESS "
"CHESS "	↑	"CLEAr "
"CLEAr "	↑	"Print "
"Print "	↑	"Print "

SECTION III

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I. **REG** Mode Operations

1. Mode Switches and Their Functions:

REG mode is used for ALL sales. You can generate all types of sales from this mode.

ACC mode is used for accessing sales totals, clearing all sales totals, printhead check, and Scale to Scale data transfer.

- A) Prepack: Used for labeling more than one package of the same commodity. To use the scale in this manner, just press the **SAVE** key before you call the PLU. See the Operations Flow Chart. You will know when this function is active when the **SAVE** lamp is lit. Prepack works by making **UNIT PRICE**, **TARE**, and **PLU** to NOT automatically clear after a commodity is removed from the platter.
- B) Tare Override: To call up a PLU with a preset tare and override the preset tare, you must first enter the override tare and then call up the PLU. If you want use a PLU that already has a tare but you want to use it without a tare, call up the PLU and then press the **TARE** key. See the Operations Flow Chart.
- C) Commodities: PLUs and Non-PLU: There are two types of sales you can generate: PLU sales and Non-PLU sales. PLU sales are sales based on a programmed PLU whereas Non-PLU sales are sales you generate without calling up a PLU. See the Operations Flow Chart.

To call up a PLU:

simply type the PLU's number on the *Numeric* keypad and then press the **PLU** key. Another way to call up a PLU is by simply pressing 1 of 54 preset keys which are set to a particular PLU.

To use Non-PLU:

simply enter a unit price and place the commodity on the platter and then press the **PRT/*** key.

Pricing: Price Override, By Count, **1/2**, **1/4**:

*If you want to use another price with a PLU other than what is programmed, you need to use price override. To use price override simply call up the PLU and then type the new price. See the Operations Flow Chart.

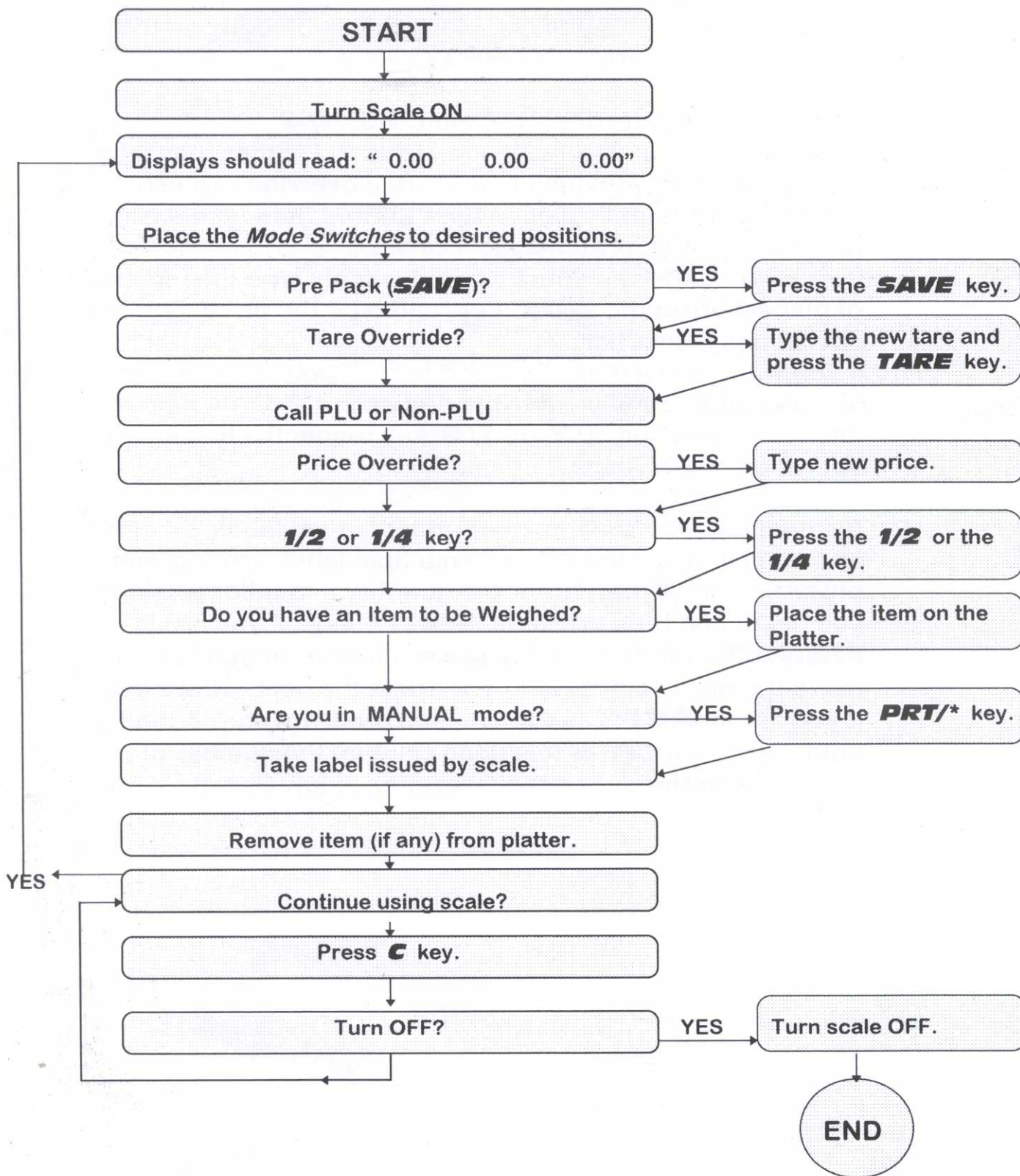
*If you want to sell an item by count, simply type the number of pieces, press the **FOR** key, and type the price. See the Operations Flow Chart.

*If you want to sell items by *price per 1/2 pound* or *price per 1/4 pound*, simply enter the price per 1/2 or 1/4 pound and then press the **1/2** or **1/4** key respectively. See the Operations Flow Chart.

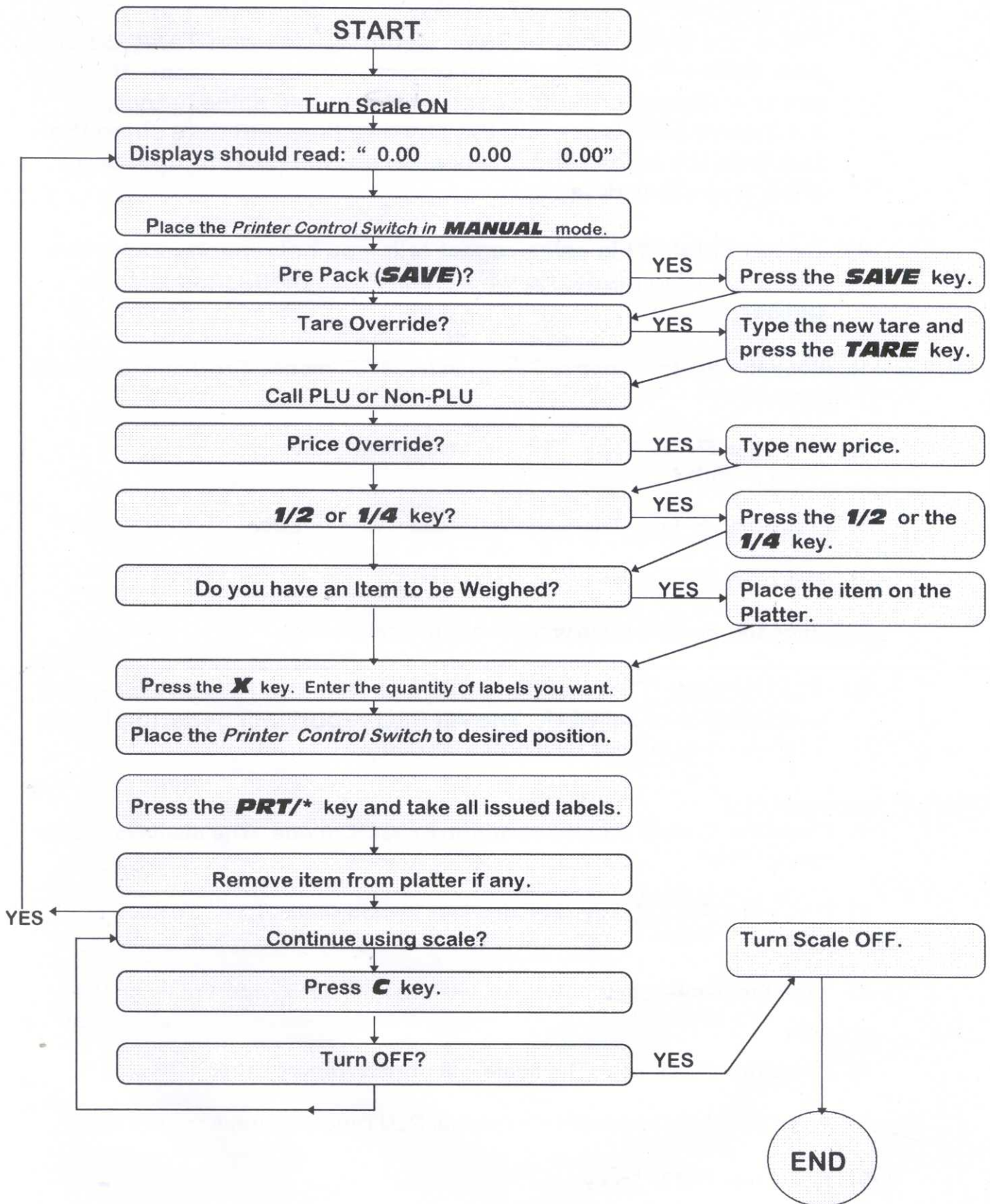
- E) Multiple Labels: You can generate identical labels by using multiple label printing. To use multiple label printing, simply press the **X** key, enter the quantity of duplicate labels you need, and then press the **PRT/*** key. If you are in **MANUAL** mode, then the scale will wait for you to remove the printed label before it prints the next. However, if you are in **AUTO** mode, the scale will not stop printing until you turn it OFF or it is done printing the number of labels you entered. See the Operations Flow Chart.

2. Operations Flow Chart:

A) For Non-Multiple Labels:



A) For Multiple Labels:



EXAMPLE: All PLU

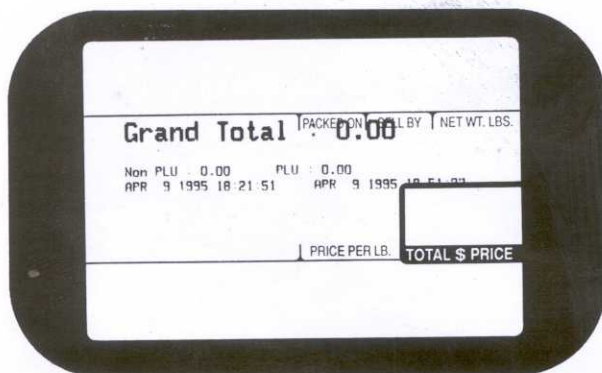
- 1) Place the *System Control Switch* in to **ACC** mode. The displays should read: "Print ".
- 2) Press the **PRT/*** key. The displays should read: "Print EntEr ".
- 3) Press the → key.
- 4) The scale will print *Report Labels* of all the PLUs with sales activity.
- 5) Press the **PRT/*** key.
- 6) Place the *System Control Switch* in to **REG** mode.

C) Non-PLU Report: This report allows you to see how much and items were sold under the Non-PLU item descriptor.

EXAMPLE: All PLU

- 1) Place the *System Control Switch* in to **ACC** mode. The displays should read: "Print ".
- 2) Press the **PRT/*** key. The displays should read: "Print EntEr ".
- 3) Press the ↑ key.
- 4) The scale will print a *Report Label* of Non-PLU item.
- 5) Press the **PRT/*** key.
- 6) Place the *System Control Switch* in to **REG** mode.

Here are some sample *Report Labels*:



2. Clearing Sales Data:

Use this function after you have already printed the sales data you needed. **THIS FUNCTION DOES NOT PRINT ANY LABELS!** You can only clear the sales data with this function.

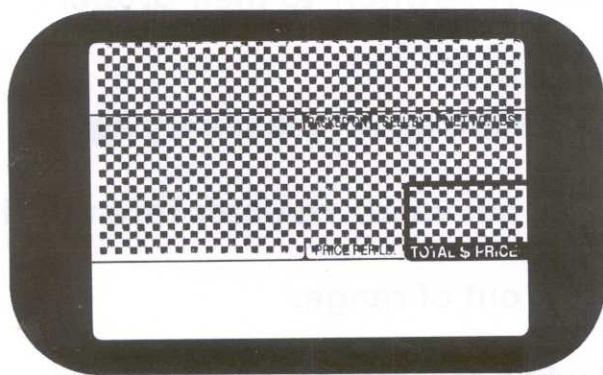
- EXAMPLE:
- 1) Place the *System Control Switch* in to **ACC** mode.
 - 2) Press the ↓ key. The displays should read:
“CLEAR”.
 - 3) Press the **PRT/*** key. The displays should read:
“wAit A momEnt”.
 - 4) Place the *System Control Switch* in to **REG** mode.

3. Printhead Check:

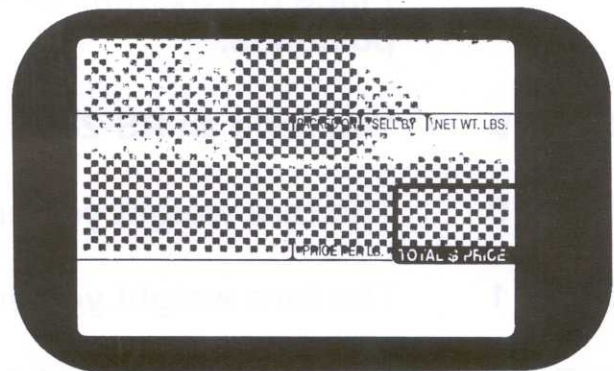
Use this function to check the quality of print and if there are any scratches or burns on the printhead. This function produces a “chess board” pattern on the label which you can use to determine the condition of the printhead.

- EXAMPLE:
- 1) Place the *System Control Switch* in to **ACC** mode.
 - 2) Press the ↓ key two times. The displays should read: “CHESS ”.
 - 3) Press the **PRT/*** key. The scale will issue a label.
 - 4) Generate a 4 to 5 labels and then compare them to the samples below to determine the condition of your printhead.
 - 5) Place the *System Control Switch* in to **REG** mode.

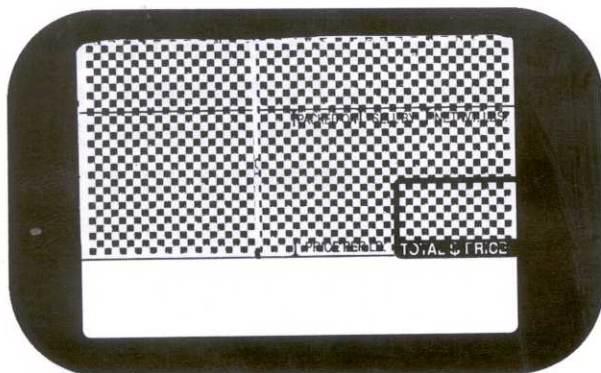
GOOD



NEEDS ADJUSTMENT



DAMAGED PRINTHEAD



If you have any one of these two labels, please take your scale to a CAS Authorized Dealer for servicing.

III. Error Messages

- ERROR 1 The PLU number you have called up does not exist.
- ERROR 2 The PLU number you have called up is out of range.
- ERROR 3 The weight on the platter is not stable or you have pressed the keys before the weight became stable.
- ERROR 5 PLU data is corrupted or broken. Backup RAM, initialize the scale, re-enter the bad data, and load new data into scale.
- ERROR 6 You have pressed the **PRT/*** key while the *Printer Control Switch* was in **STOP** mode.
- ERROR 7 The RS-232C cable that you are using is not wired properly, possible break in the cable, or communications error.
- ERROR 8 You attempted to use RS-232C in an illegal mode position. Place the *System* or *Printer Control Switch* to their proper positions.
- ERROR 9 You have an RS-232C communication error, please try again.
- ERROR 10 The tare weight you entered was not valid: re-enter tare weight.
- ERROR 11 The tare weight you entered was out of range.
- ERROR 12 You are trying to print a label while the weight on the platter is less than zero.
- “broKE n dAtA” You may get this error message while in PLU programming mode. This means that one or more of your PLUs might contain scrambled data. To correct this problem turn scale OFF and turn scale ON. While the displays are counting up, press the **C** key once.

