8305

PREPACKAGING SYSTEM

Technical Manual and Parts Catalog

INTRODUCTION

This publication is provided solely as a guide for individuals who have received METTLER TOLEDO Technical Training in servicing the METTLER TOLEDO product.

Information regarding METTLER TOLEDO Technical Training may be obtained by writing to:

METTLER TOLEDO
Training Center
P.O. Box 1705
Columbus, Ohio 43216
(614) 438-4400

PRECAUTIONS

- **READ** this manual before operating or servicing this equipment.

- **ALWAYS REMOVE POWER** and wait at least 30 seconds **BEFORE** connecting or disconnecting any internal harnesses. Failure to observe these precautions may result in damage to, or destruction of the equipment.

- **ALWAYS** take proper precautions when handling static sensitive devices.

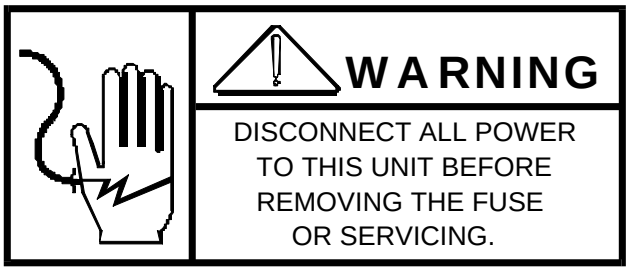
- **DO NOT** connect or disconnect a load cell scale base to the equipment with power connected or damage will result.

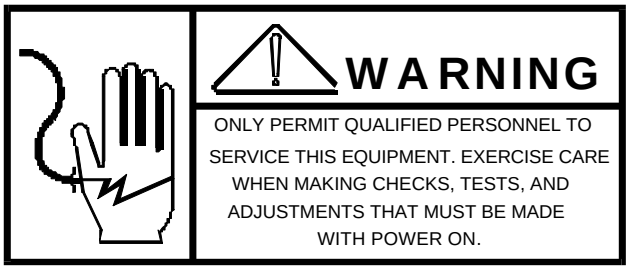
- **SAVE** this manual for future reference.

- **DO NOT** allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

- **ALWAYS DISCONNECT** this equipment from the power source before servicing.

- **CALL** METTLER TOLEDO for parts, information, and service.





1.0 GENERAL DESCRIPTION

The Model 8305, together with the 8213-0101 scale base, form a microprocessor based electronic weighing and pricing system for prepackaged items. When used with the Model 315 printer and the Model 602 or 603 Auto-Labeler, the 8305 system prints and applies labels to these prepackaged items.

The scale system is configured in master and satellite versions where the Master controller contains all the PLU (Price Look Up) information. The master controller includes memory for storage of up to 4000 PLU records and extra text files.

The storage of all scale data in the Master allows the user to input and retrieve data for the complete network at one in-store location. Interconnection between the master and satellite is accomplished through cabling. Each master controller can support up to 24 satellites.

The factory numbers are as follows:

8305-0001	Master Controller
8305-0101	Satellite Controller
8305-2001	Master Controller w/Extra Text
8305-2100	Satellite Controller w/ET
8305-3001	Master Controller w/ET & 603 Interface
8305-3100	Satellite Controller w/ET & 603 Interface
8305-0004	Master Controller 220 V
8305-0104	Satellite Controller 220 V
8213-0101	Scale Base
0901-0269	8305 Remote Panel
8305-3004	Master Controller 220 V w/ET & 603 Interface
8305-3104	Satellite Controller 220 V w/ET & 603 Interface

1.1 FILES

1.1.1 PLU Files

PLU files are stored in the Master Controller only. Each file includes data fields for the PLU number, de partment number, group number, price and modifier, package code, grade, film type, shelf life, tare, action code, eat-by-date, and the description. PLU file information is supplied to each satellite upon re quest. A file may be accessed by its PLU number or its item number. However, when accessing files using the PLU number, (PLU entry mode) only those files that have the same department number as the requesting Satellite can be accessed.

1.1.2 Department File

The Department File consists of the department name, department UPC number, and store address message. This information is stored in the master controller. It may be downloaded to the satellites to be used when the master is not available and backup PLU does not exist. Store address message must be downloaded to appear on the label whether master is on-line or off.

1.1.3 Back Up Files

Each satellite controller has the capability of storing up to 150 back-up PLU files. These files contain the information when PLU file data is not available from the master controller.

1.2 ACCUMULATORS

Each Master controller has three departmental accumulators. These accumulators store the grand totals, hourly totals, and the void totals. The contents of these accumulators may be printed by the report printer upon com-mand. Each PLU file also contains four totals accumulators for tracking the total weight, total price, package count, and the number of runs in the automatic, manual, rewrap, and combination (manual-rewrap) modes. The data in these accumulators is used to generate various managerial reports.

1.3 MESSAGE TABLES

1.3.1 Grade Table

A table of 16 (0-15) grades, each 23 characters long may be stored in the memory. The grade field in a PLU record corresponds to the record number in this table.

1.3.2 Action Code Message Table

A table of 50 message codes are pointed to by the action codes in each PLU record. Entering 0 will default to the programmed department's store address line. The code type indicates what kind of action is to be taken. Three types of action codes exits. They are:

Type 1 - When a type 1 action code is assigned to a PLU, the store address line will be replaced by the message line the action code represents.

Type 2 - When a type 2 action code is assigned to a PLU, the scale will show the action code message on the display when the PLU file is called up.

Type 3 - A type 3 action code is designated for use as a marquee (scrolling) message, models 8422 and 8423 only.

1.4 COMMUNICATIONS

1.4.1 Scale Communications

Communications between Master and satellite controller is via Synchronous Data Link Communication (SDLC) at 345K baud. The maximum line length is 1500 ft. Using RS-485 communications electrical specification, it is implemented as a half-duplex, two wire system with two chassis grounds. A four con ductor, modulator telephone cable is used to connect the controller to a modulator telephone type box. The boxes are connected together in a parallel to form the network.

A four position telephone jack is used for the connection at the controller and a six position telephone jack is used at the network. Pins are as follows:

Pin 1 - Chassis Ground (Black)
Pin 2 - Data A (Red)
Pin 3 - Data B (Green)
Pin 4 - Chassis Ground (Yellow)

1.4.2 Host Communications

Communication between the Master controller and the Host is done using RS 232C electrical specifications. For in-store applications, where the master scale is located more than 100 ft. from the Host Computer, conversion to RS-845 will be necessary. Communication to a host remote from the store is done via telephone modems.

The connection at the Master is a nine pin "D" type female plug. The pins are:

Pin 1 - Not used.
Pin 2 - Data transmitted to the host.
Pin 3 - Data received from the host.
Pin 4 - RTS signal to the host.
Pin 5 - CTS signal from the host.
Pin 6 - Not used.
Pin 7 - Ground.
Pin 8 - Not used.
Pin 9 - Not used.

1.4.3 Alpha-Numeric Keyboard

An alpha-numeric keyboard permits entry of alpha-numeric descriptions and numeric data into the master scale. The interface is RS-422 simplex from the keyboard to the master. Except for the interface and key code sent, the keyboard is identical to the keyboard used on the IBM-PC.

A five pin DIN connector is used to connect the keyboard to the scale. The pins are:

Pin 1 - Data A
Pin 2 - Data B
Pin 3 - Ground
Pin 4 - Chassis Ground
Pin 5 - 5 Volts

1.4.4 Master to Master Download

The RS-485 network link may be used to download the contents of one master to another. This ability provides file maintenance for a standby master. When the primary master is not functioning, the standby master is placed in operation.

2.0 SYSTEM COMPONENTS

2.1 MEMORY PCB

The Memory PCB provides 511,986 bytes of storage for up to 4000 PLU records and a reduced number of PLU's when extra text files are programmed.

Each PLU file entered uses 128 bytes of memory. Each line of text programmed uses up to 42 bytes of memory dependent on the line length selected.

For example:

a) 2000 PLU's = 256,000 bytes (2000 x 128)

b) 200 texts each with 5 lines and 42 character line selected = 44, 000 bytes 200 x [(5 x 42) + 10*] *10 = overhead used for each text record.

c) Total memory = 511, 986 bytes

d) Total memory used (a + b) = 300,000 bytes

e) Memory remaining (c - d) = 211,986 bytes

Use this simple formula to determine memory usage. Printing report <F5> - <8> " No. of PLU RECORDS' will list the number of PLU records programmed into each department and the number of bytes of memory still free. Also, printing the "TEXT SUMMARY" number of bytes of memory still free (at the end of the summary).

System configuration information is stored here as well. The circuitry necessary for the tape recorder, programming keyboard, polling mode and programming switches, and line printer functions are located on this board. It also provides for polling the T-network of the satellites and host computer communication circuitry.

2.2 LOGIC PCB

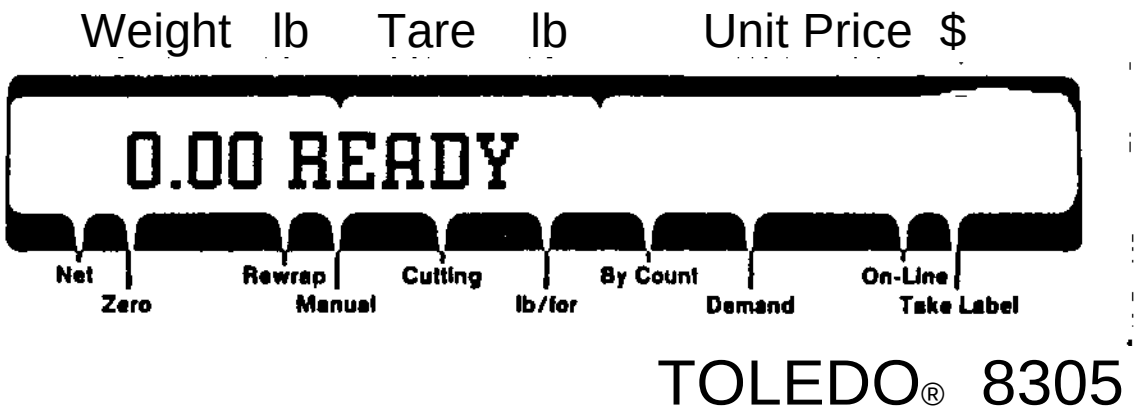
The logic PCB contains the circuitry to:

- Receive and process digital weight information from the 8213-0101 scale.
- Receive and process data from the keyboard and remote keyboard.
- Receive and process data from the preset keyboard.
- Retrieves PLU information from the master controller.
- Provide battery backed RAM for storage of department name, UPC, address lines, grade table, and 150 backup PLU lines.
- Receive and process data for case pulls or corrections from the bar code scanner PCB or from the keyboard.
- Provide the interface for a label printer.
- Receive and store cutting test data.

2.3 DISPLAY

(Shown with maximum values, weight, tare and unit price)

The displays have 19 character positions, each with a decimal point, a comma, and cursor. Each position is a 5 x 7 dot matrix. The size of each character is 0.413 inches high x0.236 inches wide, exclusive of the decimal point, comma, and cursor.

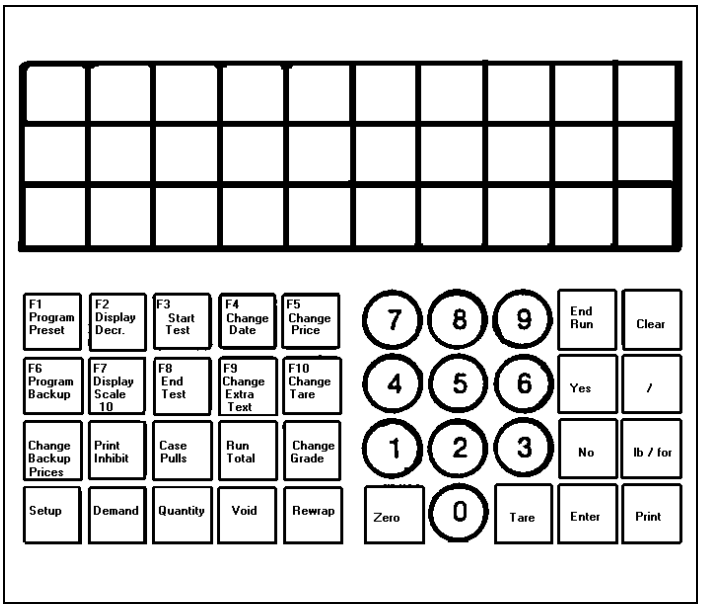


Triangular pointers illuminate above various status legends. Following are the definitions of each legend:

LEGEND	DEFINITION
"NET"	Indicates a tare has been taken and the weight is "Net".
"ZERO"	Indicates scale is centered within the zero increments.
"REWRAP"	Indicates rewrap mode has been selected.
"MANUAL"	Indicates when a "Cutting Test" has been initiated.
"LB/FOR"	Indicates pricing for "Pounds For".
"BY-COUNT"	Indicates pricing "by count".
"DEMAND"	Indicates when "Demand" (continuous) mode of label printing is selected.
"ON-LINE"	Indicates the "Master" is ON LINE with the satellite scale(s) and is polling satellite scale(s) and is supplying/recording PLU (item) data.
"TAKE LABEL"	Indicated a label has been printed and needs to be taken from the label printer (314 or 315).

2.4 KEYBOARD

The 8305 keyboard is mounted in the front cover, below the display. It contains a 4-row by 10-column section, the function/entry keypad, and a 3-row by 10-column section which is the preset keypad section. An optional audible tone signals the closure of each key. The keyboard legends are:



This section provides brief definition of key.

<0> thru <9>	Are used for numeric entry (for entry of PLU (Price Look Up or ITEM numbers, manual entry of price or tare, etc.)
<END RUN>	Terminator key - returns the scale to “READY” mode
<CLEAR>	Used to clear digit entries (from the display) or if a manual price was made, pressing <CLEAR> will return to the programmed price.
<ENTER>	This key is used to “ENTER” digit entry i.e ., time and date, PLU / ITEM num bers, manual price, and tare entries, etc.
< / >	a) Used to indicate “FOR” when manually overriding/entering a by -count price. Example: 4 items “FOR” </> a $1.00 *NOTE: An internal softswitch can be set to disable this feature.* b) Used to advance through and/or enter PLU #’ s on the backup PLU index.
<LB/FOR>	OPTIONAL -This key is used to manually enter or override a “pounds for” price. Example: 4 pounds for $4.00 rather than $1.00 a pound. *NOTE: An internal softswitch can be set to disable this feature.*
<PRINT>	This key is used to manually initiate the printing of the label.
<TARE>	This key is used to manually tare off weight of tray or container on scale platter overriding the programmed tare value. *NOTE: An internal softswitch can be set to prohibit the operator from manually overriding a programmed tare.*
<ZERO>	Should the scale fail to automatically capture zero at power up (“SET ZERO” will display) or should the scale drift off “ZERO”, PRESSING this key will return the scale to “ZERO”.
<PROGRAM PRESET>	When scale is “READY” this key allows the user to enter mode to program pre-set keys.

<PROGRAM BACKUP> *This key is no longer used*.

<CHANGE BACKUP PRICES> If the "Master" is "OFF LINE" ("ON LINE" Cursor OFF) this key allows the user to change prices for PLU's on the backup index.

<SET UP> When the scale is "READY" this key allows the user to select/change:\

- Label Select (Extra Text)
- Change Department Number
- Softswitch Options
- Time and Date
- Print Test Labels

<DISPLAY DESCR> After a PLU is entered, pressing this key allows the user to choose to toggle the display between: Weight/Tare/Unit Price
PLU's Description
Weight/PLU Number*
or
Item Number *
* *Dependent on Initial set up*

<DISPLAY SCALE I.D.> When the scale is "READY", pressing this key will cause the display to momentarily to display "SCALE ID#XX".

<PRINT INHIBIT> Allows inhibition of one or more of the various fields of info. on the printed label, depending on <SET UP> by (Softswitch option this function may be accessed when scale is "READY" or for a temporary change after PLU has been entered).

<DEMAND> After the first label is issued, this key initiates continuous printing of the same label. User has option to choose continuous or entering in a quantity.

<START TEST> When scale is "READY" this key allows the user to start a new cutting test or return to an existing cutting test.

<END TEST> Allows the user to leave the cutting test (option to return & continue (if required).

<CASE PULLS> When scale is "READY", allows the user to clear the case pull file (if desired) & record items pulled from the case. (Either by manually keying in the complete UPC # for the item pulled or by using the wand (optional bar code reader).

<QUANTITY> After a PLU entered, allows the user to enter the quantity of packages for a run. The scale will automatically stop when the quantity is reached.

<CHANGE DATE> After PLU is entered, this key allows user to change Shelf Life or East By date.*

**Date types available are dependent on setup softswitch option.*

<CHANGE EXTRA TEXT> Allows user to change text by inputting new text number.

<RUN TOTAL> Pressing this key during a "RUN" of items will issue a label showing PLU#, mode A = automatic, M = manual price, R= rewrap, C + manual price & rewrap, date, dollars (for the current run).

<VOID> During a "RUN" the <VOID> key allows the user to void a single label or the complete "RUN".

<CHANGE PRICE> After a PLU is entered, this key allows the user to make a manual price entry*. Price change is temporary to this run only. Also an "M" will be printed on the label indicating the item was manually priced.

<CHANGE TARE> After PLU entered, key allows the user to manually enter a tare value*. User must then press <TARE> key to complete entry. Tare change is temporary.

NOTE: Platter must be empty and free of motion.
*Dependent on internal set up manual override of programmed price may be disabled.

<CHANGE GRADE> After a PLU is entered, pressing this key allows the user to assign a new grade number ()-15) to its PLU. This grade change is temporary for this "RUN" only.

<REWRAP> After entering the PLU number for an item(s) being rewrapped, the user should press the <REWRAP> key. This will inhibit this run from being accumulated in the items accumulators (a separate report will show totals for rewrapped items). Also the symbol (F) will be printed on the label flagging the item as a rewrap.

When at the "READY" prompt, pressing the <REWRAP> key will prompt for entry of shelf life days to be added when in the rewrap mode only

NOTE: A "C" will print on the label if the item is manually priced and also a "REWRAP" ("C" for Combination).

2.5 DLC (DIGITAL LOAD CELL) BUFFER PCB

Communication between the controller and the scale base is buffered on both ends by a line driving transceiver. The electronics to perform this task are located on the DLC Buffer PCB, one PCB located is in the 8305, and the other in the 8213-0101 scale base. The DLC Buffer PCB located in the scale base is the transmitter, while the DLC Buffer PCB in the 8305 is the receiver. Both PCB's are identical. The placement of a jumper on the board determines whether the DLC Buffer PCB is a receiver or transmitter.

NOTE: 8305, W1, Short Pins 1 & 2
8213, W!, Short Pins 2 & 3

2.6 THE CONNECTOR BRACKET

The Connector Bracket Assembly of the 8305 provides a means to connect various peripherals to the controller. These devices include a label printer, host computer, line printer, bar code wand, scale base, *remote controller station, *603 Auto-Labeler, and a programming keyboard.

**Rams 0001 and 0101 require upgrade KOP # 0901-0274 (see Section 15.1)*

2.7 KEYSWITCH BRACKET ASSEMBLY

The keyswitch Bracket Assembly provides a means for the mounting of the Polling Mode Select and the Program Mode Select keyswitches. Also included are the connectors for the customer installed peripherals. These devices are a line printer, a tape recorder, and a programming keyboard.

2.8 BAR CODE SCANNER PCB - OPTIONAL

The Bar Code Scanner PCB accepts and processes data from the BAR Code Wand Assembly. After this information is processed, it is then sent to the Logic PCB where it is stored in RAM.

2.9 POWER SUPPLY ASSEMBLY

The Power Supply Assembly consists of a transformer and harnesses that direct the input power from the line filter through the fuse, and transformer, and on to the scale's PCB's. The transformer includes taps that supply:

SUPPLY	LOCATION	ACCEPTABLE RANGE
18 VAC	PJ2 5 & 7	15.3 to 19.8 VAC
10 VAC	PJ2 3 & 8	8.5 to 11.0 VAC
10 VAC	PJ2 13 & 8	8.5 to 11.0 VAC
20 VAC	PJ2 12 & 14	17.0 to 22.0 VAC
40 VAC	PJ2 10 & 14	34.0 to 44.0 VAC

3.0 PHYSICAL DESCRIPTION

3.1 MODEL 8305 ENCLOSURE

The Model 8305 enclosure is constructed of stainless steel. It houses the scale's electronics as well as the connectors for the label printer, line printer, programming keyboard, scanning wand, tape recorder, host computer, and communications network. The dimensions of the 8305 are:

Total height: 12-1/4"
Total length: 12-1/3"
Total width: 6-1/4"

3.2 MODEL 8213-0101 SCALE BASE

The 8213-0101 is constructed of die cast aluminum and houses the load cell assembly and the Buffer PCB. Four adjustable legs support this assembly.

The dimensions of the 8213-101 are (w/standard platter):

Total height: 4.15" (105.4 mm)
Total length: 12.30" (312.4 mm)
Total width: 13.62" (345.9 mm)

4.0 SPECIFICATIONS

4.1 WEIGHT READOUT

The controller will display capacities of 50 x 0.01 lb and 20 kg x 0.005 kg from the Model 8213-0101 scale base.

4.2 TARE

Tare is limited to the full capacity value of the scale.

4.3 SCALE ACCURACY

Canadian scales comply with Canadian W & M Regulations, U.S. Scales meet NIST Handbook 44 Regulations 1989, for a Class III weighing device.

4.4 POWER REQUIREMENTS

The 8305 is designed to operate from 58 to 62 Hz at 102 to 132 VAC. The power is switched by the ON/OFF rocker switch located under the left side of the controller. When the switch is off, power is disconnected from all controller electronics.

Power consumption is approximately 20 W.
The supply is fused by a .5 A slow blow fuse.

5.0 INSTALLATION

5.1 UNPACKING INSPECTION

Unpack the 8305 controller and the 8213-0101 scale base and inspect for damage or loose hardware. Report any damage to the carrier.

5.2 ATTACHING THE SCALE BASE CABLE

5.2.1 Locate the access plate under the Scale Base.(See Figure 1)

Note: Access plate not on units after "XP" (Oct. 88) date code.

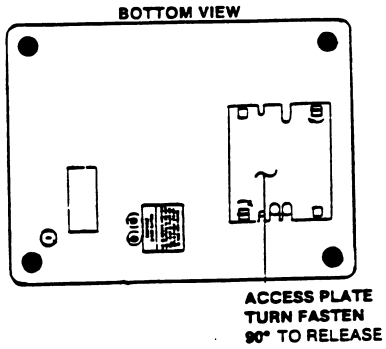


Figure 1

5.2.2 Turn the Access Plate Fasteners 90 degrees to release and remove the plate. (Figure 1)

5.2.3 Remove one of the strain relief plate thumb screws and loosen the other thumbscrew.

5.2.4 Attach one of the scale base cable, part number 12950300A, to the DB-9 connector at the bot tom of scale base and tighten the connector mounting screws.

5.2.5 Route the cable under the strain relief plate.

5.2.6 Install and tighten the strain relief thumbscrews.

5.2.7 Install the Access Plate ad turn the fasteners 90 degrees to secure the plate.

5.3 MANUAL SCALING INSTALLATION

5.3.1 Provide adequate space for the controller and scale base. The exterior dimensions of the Model 8305 controller are : 12.15" high, 12.50" long, and 6.25" deep. The exterior dimensions of the Model 8213-0101 scale base are: 4.15" high, 12.30" long, and 13.62" deep. Area provided for the scale base must be a flat, solid surface.

5.3.2 Remove the scale platter by grasping the scale platter on opposite side and pulling straight up.

5.3.3 Level the scale. Leveling the scale is accomplished by turning the mounting feet and observing the level bubble position. The mounting feet can be adjusted from the top with a slotted screw driver. (See Figure 2). Arrows indicate screwdriver access holes for adjustment of the mounting feet.

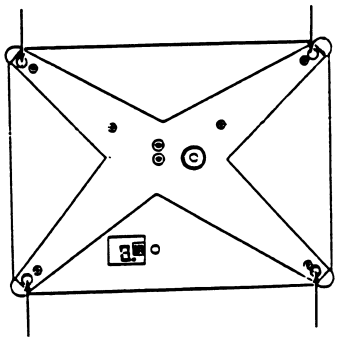


Figure 2

5.3.4 Tighten the lock nuts on the Foot Assemblies against the scale base.

5.3.5 Place controller and Scale Base in its permanent mounting position.

5.3.6 Install the scale platter.

5.3.7 Connect the other end of the Scale Base cable, part number 12950300A, to the DB-9 connector on the Connector Bracket, located under side of the controller, marked “Scale”.

5.3.8 Connect the data cable of the label printer at the DB-9 connector on the Connector Bracket, marked “Label Printer”.

5.3.9 Apply power to the controller and printer by plugging them in a properly grounded 120 VAC source.

5.3.10 Proceed to Section 5 (Scale set up).

5.4 INSTALLATION WITH MODEL 662 STEP-SAVER WRAP STATION

5.4.1 Installation of 8305 Controller to Model 622 Step-Saver Wrap Station.

5.4.1.1 Place the 8305 Controller on the Keyboard/Display Shelf on the 662 Wrap Station.

5.4.1.2 Align the holes in controller mounting brackets to the slotted holes in the Keyboard / Display Shelf.

5.4.1.3 Use the 10-32 screws, #10 lockwashers, and #10 flat washers to secure the controller to the Keyboard/Display Shelf

5.4.2 Installation of 8213-0101 Scale Base to Model 662 Step-Saver Wrap Station.

5.4.2.1 Remove the left front and the right rear Foot Assemblies from the scale base.

5.4.2.2 Remove the lock nuts from each Foot Assembly that you just removed.

5.4.2.3 Locate two new scale base Foot Assemblies, part number 81982700A in the hardware KOP and assemble with a lock nut from the old Foot Assemblies.

5.4.2.4 Screw the new Foot Assemblies with lock nuts into the Scale Base.

5.4.2.5 Place the 8213-0101 Scale Base on the scale table of the 662 Wrap Station.

5.4.2.6 Level the scale base.

5.4.2.7 Align the new Fool Assemblies to the slotted holes in the Scale Table.

5.4.2.8 Use a 10-32 x 5/8 screw, #10 lock washer, and #10 flat washer to secure each Foot Assembly to the Scale Table.

5.4.2.9 Install two rubber pads on the scale spider where show in Figure 3.

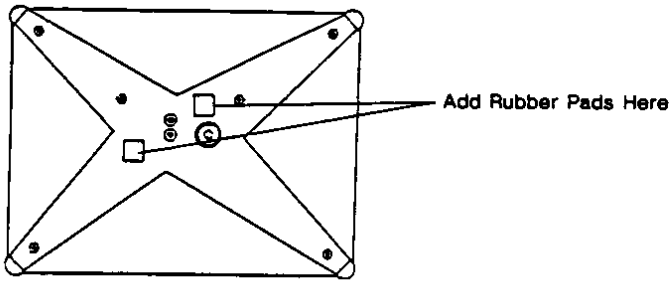


Figure 3

5.4.2.10 Install new platter, part number 81982900A, on the Scale Base.

5.5 INSTALLATION OF CONTROLLER AND SCALE BASE

(WITH MODEL 662 AND 1602 AUTO-LABELERS)

5.5.1 8305 Controller

5.5.1.1 Place the 8305 controller on the Controller Table of the Labeler.

5.5.1.2 Align the holes in the Controller Mounting Brackets to the slotted holes in the Controller Table.

5.5.1.3 Use a 10-32 screw, #10 lock washer, and #10 flat washer to secure the controller to the Controller Table.

5.5.2 8213 Scale Base

5.5.2.1 Remove the left front and right rear Foot Assemblies from the scale base.

5.5.2.2 Remove the lock nuts from each Foot Assembly that you just removed.

5.5.2.3 Locate two new scale base Foot Assemblies, part number 81982700A, in the Hardware KOP and install a lock nut from the old Foot Assemblies.

5.5.2.4 Screw the new Foot Assemblies, with lock nuts, into the Scale Base.

5.5.2.5 Place the 8213-0101 Scale Base on the Scale Table of the 602 or 1602 Auto-labeler.

5.5.2.6 Install the rubber pads part number 1258600A on the spider assembly , Figure 4.

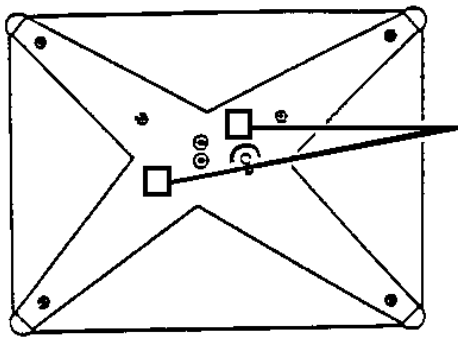


FIGURE 4

5.5.2.7 Locate the roller platter assembly part number 81987800A and install it on the scale base.

5.5.2.8 Adjust the height of the scale base with the four foot assemblies so that the platter rollers are 1/16” below the top of the knurled roller on the Auto-Labeler.

5.5.2.9 Level the scale base.

5.5.2.10 Center the Scale Base between the knurled roller and discharge table top and centered on knurled roller.

5.5.2.11 Use a 10-32 x 5/8 screws, #10 lock washers, and #10 flat washers to secure the Scale Base to the scale table.

5.5.2.12 Tighten the lock nuts on the four foot assemblies to the Scale Base.

6.0 SCALE SET UP

6.1 INITIAL SET UP

6.1.1 Unpack the unit and inspect for damage.
6.1.2 Install the mounting brackets.
6.1.3 Mount the controller in its permanent position.
6.1.4 Connect the scale base cable to the controller.
6.1.5 Place the power (PWR) switch to the OFF position.
6.1.6 Plug controller into a properly grounded 120 VAC outlet.

6.2 POWER UP SEQUENCE

6.2.1 Place the ON/OFF switch (Figure 1, Section 3), to the “ON” position

NOTE: If a line printer is connected, turned on and “On-Line”, it will provide feedback to the user as the Master verified memory (following power up). The printer will indicate when verification is complete. When complete, the Master will begin polling the network (be “On-Line”), and provides access to programming/management functions.

6.2.2 Checker board pattern will flash, verifying the scale’s display segments.

6.2.3 [NNNNNNN00A].. Will flash. “NNNNNN” is the current software number installed in the scale.

NOTE: If, you are not using a line printer, wait at this step until the light illuminates above the “on-line” legend. This should occur in about 20 to 60 seconds, after the Master verifies memory.

6.2.4 [DOWNLOAD PLU FILES?]..

EXPLANATION: This routine causes each scale (Master or Satellite) to request all PLU record files form the memory PCB (Located only in the master) for those PLU numbers programmed into each scales backup PLU index. These PLU’s then reside in each scale’s Logic PCB as a default should the Master fail. The “grade table”, “department name, UPC, and store address line”, will also be downloaded at this time. Refer to your operator manual for procedure on programming the backup PLU table.

6.2.4.1 Press <YES> on 8305 models. Wait...as files transfer.

6.2.4.2 To bypass Step 6.2.7.1, press <NO> on 8305 models.

6.2.5 [0.00 READY]..Scale is now ready for operation.

6.3 SOFTWARE SWITCH FUNCTIONS - EPROM #13097900A

6.3.1 SET UP SWITCHES

Open door on unit. On the logic PCB (mounted to door, place set up switch (SW1 on the Logic PCB) to the "ON" position. Lower right had corner of PCB).

SOFTWARE SWITCH/PROMPT	SETTING	FUNCTION
Expanded Wet.	Yes	Minor increments will display in the total price field.
	No	Major increments will display (switch should be OFF (NO) for scale operations).
Scale Present	Yes	Weighing platform in use.
	No	Weighing platform not in use.
Blank Under 0 (ZERO)	Yes	Weight display will blank under zero.
	No	Will show the actual weight under zero.
In Metric Mode	Yes	Scale weight will be in kilograms.
	No	Scale weight will be in pounds.
Tare Override	Yes	Programmed tare may be manually overridden.
	No	Function disabled.
Price Override	Yes	Programmed price may be overridden
	No	Function disabled
Enable lb/for	Yes	The lb/for key is functional.
	No	The lb/for key is disabled.
Count Override priced in the by-count	Yes	Programmed count may be manually overridden (items priced in the by-count mode).
	No	Function disabled.
Set 100 Gram Default (Metric only, has no affect when controller is set Avoir)	Yes	Pricing will be per 100 grams.
	No	Pricing will be per 1 kilograms.
Ask Dept. Number	Yes	Permits examination/entry of scale department number on power up routine.
	No	Department zero is "hard selected".
Scale ID# in		Program scale ID# (1-25) DO NOT DUPLICATE ID#'S satellites in the same network.
Call by Item Number	Yes	Item number entry Mode. Operator can call any valid item regardless of satellites department number.
	No	PLU Number entry Mode. Operator can only call those PLU's programmed for the department number assigned to their satellite.
Pgm. (Program*) By Item	Yes	Program controller in item mode.
	No	Program controller by department/PLU# entry mode.
	*Programming "Master" via controller keyboard, key switch in "Load remote" position.	
Enable Wrapper	NOT USED, MUST BE "OFF"	

	NOTE:	1. If wrapper is enabled, auto print feature will be automatically disabled. If not used, must be “OFF”. 2. If 602 Auto-Labeler is used, turn switch “OFF”.
ACC A-MODE	Yes	Automatic mode accumulator enabled only when scale is connected to 8422-1001 or 8423-0001 set to “YES”.
	No	All accumulators enabled.
RAM Master PCB	Yes	Master controller has RAM PCB installed.
	No	All accumulators enabled.
RAM Master PCB	Yes	Master controller has RAM PCB installed.
	No	Master controller has Bubble Memory PCB installed.
** No Motion Counts		Normally set at 7 counts regardless of the application.
***Motion Counts		Normally set at 25 counts when used on an Automatic Wrapper or an Auto Labeler. Normally set at 7 counts when used as a free-standing unit or on a Step-Saver Wrap Station.

** If premature label printing exist, decrease the value of the count.
*** If an extra label is being printed, increase the value of the count.

TC - Test Enable	Yes	For factory testing only.
	No	Function disabled.
Calibrate Sci (Scale)	Yes	Controller in calibrate mode.
	No	Controller in normal weighing mode.
Set Up Done		Turn set up switch off.

6.3.2 USER ACCESSED SOFTWARE SWITCHES WITH EPROM #10397900A

On the model 8305 certain software options are accessible to the customer. These options, as well as the procedure to access these options, follow:

DISPLAYED MESSAGE/PROMPT	SETTING	ACTION
W.WW READY		Press <SET UP> key.
CHANGE TIME/DATE?		Press <NO>, <YES> = Option 1 (see 8305 Operator's Manual)
CHANGE SOFTSWITCH?		press <YES>, <NO>, <YES>* advance to the first softswitch. SEE NOTE.

NOTE: This sequence (<YES> <NO> <YES>) is to prevent accidental optional changes by unauthorized personnel. (Any other sequence will return scale to "Ready").

		Press <NO> to advance.
ENABLE BEEPER?	Yes No	To enable keyboard tone. To disable keyboard option.
ENABLE VOIDS?	Yes No	Void key enabled. Void key disabled.
DISPLAY DISCS?	Yes No	Enable display of description when PLU is entered. Disable function.
DESC DSP TIMER?	If "DISPLAY DISC" is "YES" this entry adjusts the amount of time description stays on display.	
		0 = 0.5 second 1 = 1 second 2 = 1.5 second 3 = 2 second Key in digit, display will automatically advance.
ENABLE DEMAND?	Yes No	Enable demand key operation. Disable function.
FORCED TARE ON?	Yes No	The scale will prompt for tare after each PLU entry. Scale will only prompt for forced tare when PLU has tare forcing characters.
PRINT/CLR RTOT?	Yes No	Run totals will reset to zero when run total label is issued. Run totals will not reset when run total label is issued and will continue to accumulate additional items.
CH DATE BY DAYS	Yes No	<CHANGE DATE> key will prompt user for number of days. <CHANGE DATE> key will prompt user for date to be printed.
314 PRINTER	Yes No	For use with 314 or 315 printers. For operation with no printer.

PT 6 DIGIT UPC?	Yes	Will print up to 6 digits of item number in the UPC code if the price check digit is disabled. Prints the 5 least significant digits of the item number in the UPC code if price check is enabled.
	No	Will print the 5 least significant digits (programmed) plus a trailing zero in the UPC code if price check is disabled. Prints the 5 least significant digits of the item number plus the price check digit if price check is enabled.
PRICE CHECK ON?	Yes	Enable price check digit in UPC bar code.
	No	Disable price check digit.
1 RUN PRINT INH?	Yes	Label information inhibited (<PRINT INHIBIT? key) will remain inhibited only for a single run. When run is terminated all fields will return.
	No	Label information inhibited will remain inhibited until operator changes the condition set under the <PRINT INHIBIT> key).

DATE FORMAT? X

0 = MM-DD-YY (02-18-87)
1 = MMM-DD (FEB 18)
2 = YY-MM-DD (87-FE-18)
3 = YY-DD-MM (87-18-FE)
4 = DD-MM-YY (18-FE-87)
5 = DD-MM-YY (18-02-87)

Key digit, display will automatically advance.

LBL LINE 3 FMT? X

Label line three format. Allows user to select pack, eat-by, sell-by date, and trade description printing. These fields of print can be selected in various combination or individually.

0 = Line 3 completely blank*
1 = Grade (23 characters) only
2 = Grade (23 characters) and pack date
3 = Grade (23 chars) and sell-by-date*
4 = Grade (23 chars) and eat-by-date*
5 = Grade (14 chars), pack date and sell-by-date
6 = Grade (14 chars), pack date and eat-by-date
7 = Grade (14 chars), sell-by-date and eat-by-date
8 = Pack date and sell-by-date*
9 = Pack date and eat-by-date*
11 = Pack date only*
12 = Sell-by-date only*
13 = Eat-by-date only*

Key in digit(s), press <ENTER> if entry is single digit.

**For 314/315 printer, valid formats are 0, 1, 2, 3, 4, 8, 9, 10, 11, 12, and 13.*

SOFTWARE SWITCH/PROMPT	SETTING	FUNCTION
[DEPARTMENT NN]		Key in department number (00-09) Press <enter> to accept and advance.
[MEAT DEPARTMENT]		(The name programmed into “MASTER” for this department # will display momentarily).
[W.WW READY]		Scale is ready for operation.

6.4 SOFTWARE SWITCH FUNCTIONS - EPROM #13280100A

6.4.1 Set up of Software Switches

Place set up switch SW1 on the Logic PCB to the “ON” position (lower right hand corner of PCB).

SOFTWARE SWITCH/PROMPT	SETTING	FUNCTION
EXPANDED WGT?	Yes No	Minor increments will display in the total price field. Major increments will display (switch should be OFF (NO) for scale operation).
SCALE PRESENT?	Yes No	Weighing platform in use. Weighing platform not in use.
BLANK UNDER 0 (ZERO)?	Yes No	Weight display will blank under zero. Will show the actual weight under zero.
IN METRIC MODE?	Yes No	Scale weight will be in kilograms. Scale weight will be in pounds.
TARE OVERRIDE?	Yes No	Programmed tare may be manually overridden. Function disabled.
PRICE OVERRIDE?	Yes No	Programmed price may be overridden. Function disabled.
ENABLED LB/FOR?	Yes No	The ib/for key is functional. The ib/for key is disabled.
ENABLE BY-COUNT?	Yes No	By-count pricing mode enabled. Function disabled.
COUNT OVERRIDE?	Yes No	Programmed count may be manually overridden (items priced in the by-count mode). Function disabled.
SET 100 GRAM DEFAULT? (Metric only, has no affect when scale is set Avoir)	Yes No	Pricing will be per 100 g. Pricing will be per 1 kg.
ASK DEPT. NUMBER?	Yes No	Permits examination/entry of scale department number on power up routine. Department number zero is hand selected.
SCALE ID#?	Yes	Program scale ID# (1-25) DO NOT DUPLICATE ID 3’s in satellites in the same network.

SOFTWARE SWITCH/PROMPT	SETTING	FUNCTION

CALL BY ITEM #?	Yes	Item Number entry mode. Operator can call any valid item regardless of satellites department number.
	No	PLU Number entry mode. Operator can only call those PLU's programmed for the department number assigned to their satellite.
PROGRAM BY ITEM#?	Yes	Program scale by Item Number.
	No	Program scale by Department/PLU# entry mode.

NOTE: Only applicable to Master units and is the method of addressing records when keyswitch is in "LOAD REMOTE" position.

ENABLE WRAPPER?		Not used, MUST be set at "NO".
	NOTE: 1.	If wrapper software switch is enabled, auto print feature will be automatically disabled.
	2.	If 602 Auto Labeler is used, turn wrapper software switch "OFF".
ACC A-MODE? (ACCUMULATOR AUTOMATIC MODE ONLY?)	Yes	Automatic mode accumulator enabled only. When scale is connected to 8422-1001 or 8423-0001 set to "YES".
	No	All accumulators enabled.
RAM MASTER PCB?	Yes	Master scale has RAM PCAB installed.
	No	Master scale has Bubble Memory PCB installed
*NO MOTION CNTS?	7	Normally set at 7 counts regardless of the application.
**MOTION CNTS?	7 or 25	Normally set at 25 counts when used on an Automatic Wrapper or an Auto-Labeler. Normally set at 7 counts when used as a free-standing unit or on a Step-Saver Wrap Station.

* If premature label printing exist, decrease the value of the count.
*** If an extra label is being printed, increase the value of the count.

TC-TEST ENABLE?	Yes	For factory testing only.
	No	Function disabled.
CALIBRATE SCL? (SCALE)	Yes	Scale in calibrate mode.
	No	Scale in normal weighing mode.
** SET UP DONE **		Turn set up switch "OFF".

6.4.2 USER ACCESSED SOFTWARE SWITCHES

The model 8305 contains software option that are accessible to the operator. These options, as well as procedures to access these options, follow:

DISPLAYED MESSAGE/PROMPT		ACTION
W.WW READY	. .	Press <SET UP> key.
CHANGE LABEL SIZE?	. .	Press <NO>; <YES>, refer to Section III-A of Addendum to PM008305R00 & OM008305R00 (P/N 1338400A) or OM008305R01.
CHANGE TIME/DATE?	. .	Press <NO>; <YES> = Option 1 (see 8305 Operator's Manual).
CHANGE SOFTSWITCH?	. .	Press <YES>, <NO>, <YES>, advance to the first softswitch. SEE NOTE.

NOTE: This sequence (<YES> <NO> <YES>) is to prevent accidental option changes by unauthorized personnel. (any other sequence will return scale to "Ready").

Press <NO> to advance.

SOFTWARE SWITCH/PROMPT	SETTING	FUNCTION
ENABLE BEEPER	Yes	Enable keyboard tone.
	No	Disable keyboard tone.
ENABLE VOIDS?	Yes	Enable void function.
	No	Disable void function.
DISPLAY DESC (DISPLAY DESCRIPTION)	Yes	Enable display of description when PLU is entered.
	No	Disable display of description when PLU is entered.
DESC DSP TIMER? (DISPLAY TIMER)	. .	ENTER the amount of time description (DESCRIPTION stays on display, display desc prompt must be enabled.
NOTE: Not used when 315-0003 (extra text printer) is selected.		0 = 0.5 seconds 2 = 1.5 seconds 1 = 1.0 second 3 = 2.0 seconds Key in digit, display will automatically advance.

NOTE: When a PLU with Extra Text (315-0003 extra text printer selected) is called, the amount of time the description is displayed is dependent on the time it takes text data to be transmitted to the printer.

ENABLE DEMAND?	Yes	Enable demand function.
	No	Disable demand function.
FORCED TARE ON?	Yes	The scale will prompt for tare after every PLU entry.
	No	Scale will only prompt for forced tare when PLU has tare forcing characters.
PRINT/CLR RTOT? (RUN TOTALS)	Yes	Run totals will reset to zero when run (PRINT/CLEAR total label is issued.
	No	Run totals will not reset when run total label is issued and will continue to accumulate additional items run.

SOFTWARE SWITCH/PROMPT	SETTING	FUNCTION
CH DATE BY DAYS (CHANGE DATE BY DAYS)	Yes	<CHANGE DATE> key will prompt user for number of days
	No	<CHANGE DATE> key will prompt user for date to be printed.
314 PRINTER	Yes	314 or 315-0002 printer in use. (Prompts marked with asterisk will not appear). Proceed to PR 6 DGT. UPC.
	No	Proceed to {Ex Text V1 Ptr?} prompt.
EX TEXT V1 PTR? (EXTRA TEXT VERSION 1 PRINTER)	Yes	315-0003 printer (Extra Text Operation). Proceed to "SP.TYPE O UPC? prompt.
	No	No printer in use. Proceed to "PR 6 DGT UPC".
*S.P. TYPE O UPC? (STANDARD PACK TYPE ZERO UPC)	Yes	Standard pack priced items will use UPC number system zero.
	No	Standard pack priced items will use UPC number system 2 (random weight, total price encoded).
*INH P.D. LEGEND (INHIBIT PACK DATE LEGEND)	Yes	Pack date legend will not be printed on the labels
	No	Pack date legend will be printed (pack date must be selected. See line 3 label format software switch.)
*INH S.B. LEGEND? (INHIBIT SELL BY LEGEND)	Yes	Sell by date legend will not be printed
	No	Sell by date legend will be printed (must be selected. See label line 3 format switch.)
*INH T.P. LEGEND? (INHIBIT TOTAL PRICE LEGEND)	Yes	Total price legend will not be printed on the labels.
	No	Total price legend will be printed.
*INH W.T. (INHIBIT NET WEIGHT/ COUNT LEGEND)	Yes	Net Weight/Count legend will not be printed on the labels.
	No	Net Wt/Count legend will be printed.
*INH U.P. LEGEND? (INHIBIT UNIT PRICE LEGEND)	Yes	Unit price legend will not be printed on the labels.
	No	Unit price legend will be printed.

** WILL DISPLAY ONLY WHEN: "EX TEXT V1 PTR? "Y" APPEARS.*

PR 6 DIGIT UPC? UPC)	Yes	Will price 6 digit of item number in the (PRINT 6 DIGIT UPC code if price check is disabled. Pints the 5 least significant digits of the item number in the UPC code if price check is enabled.
	No	Will print the 5 least significant digits plus a trailing zero in the UPC code if price check is disabled. Prints the 5 least significant digits of the item number plus the price check digit if price check is enabled.
PRICE CHECK ON?	Yes	Price check digit computed and printed in the bar code.
	No	Price check disabled.
B.C. TYPE O UPC? (BY COUNT TYPE ZERO UPC)	Yes	By Count priced items will use UPC number system zero.
	No	By Count priced items will use UPC number system 2 (random weight, total price encoded).

| SOFTWARE SWITCH/PROMPT | SETTING | FUNCTION |

1 RUN PRINT INH? (1 RUN PRINT INHIBIT) When run	Yes	Label information inhibited (<PRINT INHIBIT> key) will remain inhibited only for item being run. is terminated all fields will return.
	No	Fields inhibited will remain inhibited until user manually changes them (again) via the <PRINT INHIBIT> key.
DATE FORMAT? N		0 = MM-DD-YY (02-18-87) 1 = MMM-DD (FEB 18) 2 = YY-MM-DD (87-FE-18) 3 = YY-DD-MM (87-18-FE) 4 = DD-MM-YY (18-FE-87) 5 = DD-MM-YY (18-02-87) Key in digit, display will automatically advance.
LBL LINE 3 FMT? N (LABEL LINE FORMAT) fields of nations or		Label line three format. Allows user to select pack, eat-by date and grade description printing. These print can be selected in various combi- individually. 0 = Line 3 completely blank. 1 = Grade (23 characters) only. 2 = Grade (23 chars) and pack date. 3 = Grade (23 chars) and sell-by-date. 4 = Grade (23 chars) and eat-by-date. 5 = Grade (14 chars) pack date and sell-by-date. 6 = Grade (14 chars) pack date and eat-by-date. 7 = Grade (14 chars) sell-by-date and eat-by-date. 8 = Pack date and sell-by-date. 9 = Pack date and eat-by-date. 10 = Sell-by-date and eat-by-date 11 = Pack date only. 12 = Sell-by-date only. 13 = Eat-by-date only. Key in digit(s), press <ENTER> if entry is single digit.

NOTE: For 314/315 printer, valid formats are 0, 1, 2, 3, 4, 8, 9, 10, 11, 12, and 13. For 2.4" label or longer valid formats are 0, 8, 9, 10, 11 ,12, and 13.

Department number and the department name will appear, then scale will return to "0.00 READY" prompt.

6.5 SOFTWARE SWITCH FUNCTIONS - EPROM #B13281500A

6.5.1 Set Up Software Switches

Place set up switch (SW1 on the Logic PCB) to the “ON” position.

SOFTWARE SWITCH	SETTING	FUNCTION
CLEAR BACKUP PLU?	Yes	Clears backup PLU file.
	No	Backup PLU file, not cleared.
EXPANDED WGT.	Yes	Minor increments will display in the total price field.
	No	Major increments will display (switch should be OFF (NO) for scale operation).
SCALE PRESENT	Yes	Weighing platform in use.
	No	Weighing platform not in use.
BLANK UNDER 0 (ZERO)	Yes	Weight display will blank under zero.
	No	Will show the actual weight under zero.
IN METRIC MODE	Yes	Scale weight will be in kilograms.
	No	Scale weight will be in pounds.
TARE OVERRIDE	Yes	Programmed tare may be manually overridden.
	No	Function disabled.
PRICE OVERRIDE	Yes	Programmed price may be overridden.
	No	Function disabled.
ENABLE LB/FOR	Yes	The ib/for key is functional.
	No	The ib/for key is disabled.
ENABLE BY-COUNT	Yes	Enable by-count pricing mode.
	No	Disable by-count pricing mode.
COUNT OVERRIDE	Yes	Programmed count may be manually overridden (items priced in the by-count mode).
	No	Function disabled.
SET 100 GRAM DEFAULT (Metric only), HAS NO AFFECT WHEN SCALE IS SET AVOIR.	Yes	Pricing will be per 100 g.
	No	Pricing will be per 1 Kg.
ASK DEPT. NUMBER	Yes	Permits examination/entry of scale department number on power up routine.
	No	Scale will be set to department zero, no prompt for department # will appear at power up.
SCALE ID#		Program scale ID# (1-25) DO NOT DUPLICATE ID#’S in satellites in the same network.

SOFTWARE SWITCH	SETTING	FUNCTION
CALL BY ITEM #	Yes	Item Number Entry Mode. operator can call any valid item regardless of satellites department number.
	No	PLU Number Entry Mode. Operator can only call those PLU's programmed for the department number assigned to their satellite.
PGM. (PROGRAM*) BY ITEM	Yes	Program scale in item mode.
	No	Program scale in department/PLU# entry mode.
ENABLE WRAPPER	Yes	Controller used with 603 Auto-Labeler.
	No	Controller used with 602,662, or stand-alone
*ENABLE 603 MSG	Yes	Display 603 message is enabled.
	No	Disabled.
*ENABLE RMT KEYBOARD	Yes	Enable remote keyboard.
	No	Disable remote keyboard.

**Prompts will appear only is "Enable Wrapper" softswitch is enabled.*

ACC A-MODE	Yes	Automatic mode accumulator enable only. When scale is connected to 8422-1001 or 8423-0001 set to "YES".
	No	All accumulators enabled.
RAM MASTER PCB	Yes	Master scale has REM PCB installed.
	No	Master scale has Bubble Memory PCB installed.
** NO MOTION COUNTS:	7	Normally set at 7 counts regardless of the application.
*** MOTION COUNTS	7 or 25	Normally set at 25 counts when used on an Automatic Wrapper or an Auto-Labeler. Normally set at 7 counts when used as a free-standing unit or on a Step-Saver Wrap Station.

*** If premature label printing exists, decrease the value of the count.*
****If an extra label is being printed, increase the value of the count.*

TC-TEST ENABLE	Yes	For factory testing only.
	No	Function disabled.
CALIBRATE SCL (SCALE)	Yes	Scale in calibrate mode.
	No	Scale in normal weighing mode.

6.5.2 User Accessed Software Switches, EPROM #B13281500A

On the model 8305, certain software options are accessible to the customer. These options, as well as the procedure to access these options, follows:

DISPLAYED MESSAGE/PROMPT	ACTION
W.WW READY	Press <SETUP> key.
CHANGE LABEL SIZE? Addendum (Only if E.T. Printer option is selected)	Press <NO>; <YES>, refer to Section III-A of to PM008305R00 or OM008305R01.
CHANGE TIME/DATE?	Press <NO>; <YES> = Option 1
DEPARTMENT [DEPT NUMBER:00]	If correct, press <ENTER>. If incorrect (does not correspond to department your PLU's are assigned to), press <CLEAR>. Key in digit (0-9). Press <ENTER>.
CHANGE SOFTSWITCH?	Press <YES> <NO><Yes>*. Advance to the first softswitch. SEE NOTE.

NOTE: This sequence (<YES> <NO> <YES>) is to prevent accidental option changes by unauthorized personnel. (Any other sequence will return scale to "Ready").

Press <NO> to advance.

SOFTWARE SWITCH	SETTING	FUNCTION
ENABLE BEEPER? NO		(Keyboard tone).
	Yes	To enable keyboard beeper.
	No	To disable keyboard beeper. Press <ENTER> to advance to next softswitch.
ENABLE VOIDS?	Yes	Enable void function.
	No	Disable void function.
DISPLAY DSC?	Yes	Enable display of description when PLU is entered (DISPLAY DESCRIPTION)
	No	Disable display of description when PLU is entered.
DESC DSP TIMER? X (DESCRIPTION DISPLAY TIMER)		If "DISPLAY DISC" is "YES" this entry adjusts the amount of time description stays on display. 0 = 0.5 seconds 2 = 1.5 seconds 1 = 1.0 seconds 3 = 2.0 seconds Key in digit, display will automatically advance.

NOTE: Not used when 315-0003 (extra text printer) is selected

NOTE: When a PLU with Extra Text (315-0003 Printer selected) is called, the amount of time the description is displayed is dependent on the time it takes the text date to be transmitted to the printer.

SOFTWARE SWITCH	SETTING	FUNCTION
ENABLE DEMAND?	Yes	Enable demand key.
	No	Disable demand key.
FORCED TARE ON?	Yes	The scale will prompt for tare after every PLU entry.
	No	Scale will only prompt for forced tare when PLU has tare forcing characters.
PRINT/CLR RTOT? (PRINT/CLEAR RUN TOTAL)	Yes	Run totals will reset to zero when run total label is issued.
	No	Run totals will not reset when run total label is issued and will continue to accumulate additional items run.
CH DATE BY DAYS? (CHANGE DATE BY DAYS)	Yes	<CHANGE DATE> key will prompt user for number of days.
	No	<CHANGE DATE> key will prompt user for date to be printed.
314 PRINTER	Yes	314 printer is use. Advance to :Print 6 digit UPC" prompt.
	No	Printer other than 314.
315 PRINTER	Yes	315-0002 printer in use. Scale will prompt for left, center, and right, field enter Code (0-7) for format you desire. Then advance to "Print 6 digit UPC prompt.
	No	314 or 315-0003. Advance to EX TEXT VI PRT prompt.

*LBL LEFT FIELD? (LABEL LEFT FIELD)
*LBL MID FIELD
*LBL RIGHT FIELD

0 = BLANK
1 = PACK DATE
2 = SELL-BY-DATE
3 = EAT-BY-DATE
4 = GRADE (LEFT FIELD ONLY)
5 = TARE (LEFT FIELD ONLY)
6 = JULIAN PACK DATE
7 = TIME (0-24)

*MUST SELECT 315 PRINTER (315-0002)

EX TEXT V1 PTR? (EXTRA TEXT VERSION 1 PRINTER)	Yes	315-0003 Printer (Extra Text option).
	No	Other than 315-0003. Proceed to "PR 6 DGT UPC"

LBL LINE 3 FMT? N (LABEL LINE THREE FORMAT) APPLICABLE ONLY WHEN 314 OR EXTRA TEXT PRINTERS ARE SELECTED

Allows user to select pack, eat-by, sell-by date, and grade description printing. These fields of print can be selected in various combinations or individually.

0 = Line 3 completely blank
1 = Grade (23 characters) only
2 = Grade (23 characters) & pack date
3 = Grade (23 characters) & sell-by-date
4 = Grade (23 characters) & eat-by-date
5 = Grade (14 characters) pack date and sell-by-date
6 = Grade (14 characters) pack date and eat-by-date
7 = Grade (14 characters) sell-by-date and eat-by-date
8 = Pack date and sell-by-date
9 = Pack date and eat-by-date
10 = Sell-by-date and eat-by-date
11 = Pack date only
12 = Sell-by-date only
13 = Eat-by-date only

Key in digit(s), press <ENTER> if entry is single digit.

SOFTWARE SWITCH	SETTING	FUNCTION
**SP TYPE O UPC (STANDARD PACK TYPE ZERO UPC CODE)	Yes	Standard pack priced items will use UPC number system zero.
	No	Standard pack priced items will use UPC number system 2.
**INH P.D. LEGEND? (INHIBIT PACK DATE DATE LEGEND)	Yes	Pack date legend will not be printed on the labels.
	No	Pack date legend will be printed (Pack Date must be selected. See Line 3 label format software switch).
**INH S.B. LEGEND? (INHIBIT SELL BY DATE LEGEND)	Yes	Sell-by-date legend will not be printed on the labels.
	No	Sell-by-date legend will be printed. (Sell-by Date must be selected). See Label Line 3 format software switch.
SELL BY TEXT?	Yes	Sell-by-date will be printed
	No	Sell-by-date will not be printed
**INH T.P. LEGEND? (INHIBIT TOTAL PRICE LEGEND)	Yes	Total price legend will not be printed on the labels.
	No	Total price legend will be printed.
**INH W.T. LEGEND? (INHIBIT NET WEIGHT/ COUNT LEGEND)	Yes	Net Weight/Count legend will not be printed on the labels.
	No	Net Wt/Count legend will be printed.
**INH U.P. LEGEND? (INHIBIT UNIT PRICE LEGEND)	Yes	Unit price legend will not be printed on the labels.
	No	Unit price legend will be printed.
**INH E.B. DATE?	Yes	Eat-by-date will not be printed.
	No	Eat-by date will be printed

*** WILL DISPLAY ONLY WHEN "EX TEXT V1 PTR? Y" APPEARS.*

PRINT 6 DIGIT UPC?	Yes	Up to six (6) digits of Item Number will print.
	No	Up to five (5) digits of Item Number plus a trailing zero.
PRICE CHECK ON?	Yes	Enable price check digit in UPC bar code.
	No	Disable price check digit.
BC TYPE O UPC? (BY COUNT TYPE ZERO UPC CODE.)	Yes	By-count pricing uses UPC number system zero.
	No	By-count pricing uses UPC number system two.
1 RUN PRINT INH? (<PRINT (ONE RUN PRINT INHIBIT) all fields	Yes	Label information inhibited will remain inhibited only for item being run. When run is terminated will return.
	No	Label information inhibited will remain until operator changes the conditions under the <PRINT INHIBIT> key.

SOFTWARE SWITCH	SETTING	FUNCTION
DATE FORMAT N		0 = MM-DD-YY (02-18-87) 1 = MMM-DD (FEB 18) 2 = YY-MM-DD (87-FE-18) 3 = YY-DD-MM (87-18-FE) 4 = DD-MM-YY (18-FE-87) 5 = DD-MM-YY (18-02-87) Key in digit, display will automatically advance.

NOTE: for 314 printer, valid formats are 0, 1, 2, 3, 4, 8, 9, 10, 11, 12, and 13.

For 2.4" label or longer valid formats are 0, 8, 9, 10, 11, 12, and 13.

Department number the Department name will appear, then scale will return to "0.00 READY" prompt.

6.6 CALIBRATION PROCEDURE

NOTE: Allow one hour minimum warm-up time prior to calibration.

6.6.1 Place Set-up Switch to the ON position. (lower right-hand corner of logic PCB).

6.6.2 Press <ENTER> key to cycle the software switches to the calibration mode.

6.6.3 When the display read "Calibrate Scl?", press the <YES> key and the <ENTER> key to get in the calibration mode.

6.6.4 The scale display will now read "empty scale".

6.6.5 With the platter installed, press the <ENTER> key. Two digits in the TOTAL PRICE display will count towards zero.

6.6.6 When complete the display will read "ADD LOAD".

6.6.7 Place the load for the capacity of the scale shown:

LOAD	SCALE CAPACITY
20 lb	50 x .01 lb.
15 kg	20 x .005 kg

6.6.8 Press the <ENTER> key and enter the weight by pressing the digit keys.

6.6.9 Two digits in the TOTAL PRICE display will count towards zero. When complete the display will read "**Setup Done**."

6.6.10 Turn the Set Up Switch to the "OFF" position.

6.7 SHIFT TEST

6.7.1 Place 25 lb of test weight on the scale platter at “A” of figure and note the reading (acceptance tolerance is +/-0.015 lb.

NOTE: Points B,C,D, and E are midway between the center of the platter and the edge.

6.7.2 Move the test weights to “B” and note the reading.

6.7.3 Repeat Step 2 for “C”< and “D”, and “E”.

6.7.4 The weight indications must be within tolerance specified for the test load shown in Figure 4.

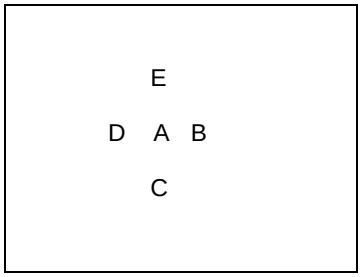


Figure 4

Point	Weight	Handbook 44 Acceptance Tolerance (lb) +/- -0.015
A	25 (lb)	+/- -0.015
B,C,D, & E	25 (lb)	+/- -0.015
B,C,D, & E	25 (lb)	+/- -0.015

NOTE: If the scale should fail to meet the specified shift tolerance, CHECK THE FOLLOWING:

1) Load Cell Overload Stop Screws must be set properly. SEE SECTION 11.2.2

2) Cover must be properly seated to casting, if cover is not properly seated it will interfere with platter travel.

3) Sub-Platter must be properly centered with opening in Load Cell Cover.

If the above conditions are met (No Travel Interference Exists), The load cell is defective; *replace load cell***.**

7.0 MASTER SET UP

7.1 INITIALIZING THE MASTER

To initialize the master, the optional 0952-0024 Programming Keyboard is required. On Honeywell ® keyboards, program SW1 must be ON for the 8422/8423 Masters. Switch 1 is located on the bottom of the keyboard.

WARNING! THIS PROCEDURE WILL CLEAR ALL DATA FROM THE MASTER MEMORY.

Initializing the master will clear the RAM memory on the Master Memory PCB. This must be performed when installing a new master controller or when replacing the Memory PCB. To initialize the memory follow this procedure.

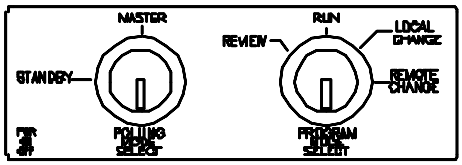


Figure 7.A Program Mode

Connect the 0952-0024 Programming Keyboard to the jack marked ***PROG KYBD*** on the Master I/O

Connector PCB on the front on the unit. (Figure x.x or x.x.)

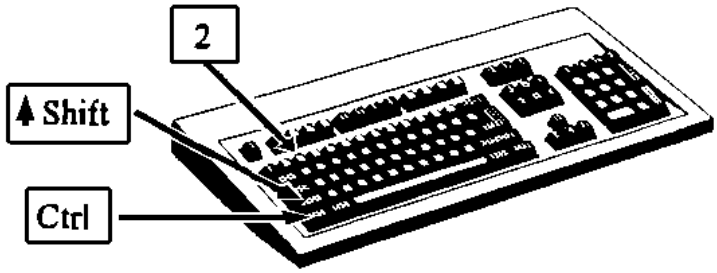


Figure 7.B Resetting ID Number

Turn the Program Mode keyswitch to ***Local Change***. (Figure 7.A)
If the display shows ***SELECT FUNCTION*** skip to the next step. If ***SELECT FUNCTION*** does not display check status of the ***On-Line*** cursor. If it is not illuminated, the Master Memory PCB and Satellite Logic PCB are not communicating. If the cursor is illuminated, first disconnect any remote satellites from the master's TNET port marked ***COMM***. Next with the program keyboard connected and the Program Mode keyswitch in the ***LOCAL CHANGE*** position, press and hold the ***Shift, Ctrl,*** and ***2*** keys for a count of five, then press ***ESC.*** The prompt ***SELECT FUNCTION*** should then display. (Figure 7.B). If not, turn the scale power off and on. This procedure forces the Memory PCB to retrieve the Scale Address Number of the Logic PCB and writes it to RAM. This ID number is then used whenever the keyswitch is turned to ***LOCAL CHANGE***.

When ***SELECT FUNCTION*** displays, press the following keys:

F10 *System/Dept Setup*
3 *Initialize System*
Y Yes to continue

When asked for the password, enter ***8305***. Software numbers *139482/138483 4D (or later) and 140478/140480 6D (or later) will prompt to ***ENTER # RAM BANK***. This corresponds to whether the 1 Meg Memory Expansion PCB is installed in the master. For the standard 512k master enter ***15***,

and for units with the optional 1 Meg Expansion PCB installed, enter ***47***. The display will show ***--- PLEASE WAIT ---*** while the memory is initialized.

After initialization is complete the master will enter into the ***EDIT CONFIGURATION*** menu. Refer to the next section for detailed descriptions of the master softswitches.

7.2 MASTER CONFIGURATION

The master configuration is used to setup the master softswitches. The softswitches include enable / disable prompts, method of calling files, line printer setup, host port setup, etc. After initialization, the master automatically enters into the ***EDIT CONFIGURATION*** menu. To enter into the configuration menu the 0952-0024 Programming Keyboard is required. To enter the configuration menu:

Connect the 0952-0024 Programming Keyboard to the jack marked ***PROG KYBD*** on the Master I/O Connector PCB on the front on the unit. (Figure X.X or X.X.)

Turn the Program Mode keyswitch to ***Local Change***. (Figure 7.A)

If the display shows ***SELECT FUNCTION*** skip to the next step. If ***SELECT FUNCTION*** does not display, check the status of the ***On-Line*** cursor. If it is not illuminated, the Master Memory PCB and Satellite Logic PCB are not communicating. If the cursor is illuminated, first disconnect any remote satellites from the master's TNET port marked ***COMM***. Next plug in the program keyboard and turn Program Mode keyswitch to the ***LOCAL CHANGE*** position. Press and hold the ***Shift, Ctrl,*** and ***2*** keys for a count of five, then press ***ESC.*** The prompt ***SELECT FUNCTION*** should display. (Figure 7.B). If not, turn the power off, then on. This procedure retrieves the Scale Address Number of the Logic PCB and writes it to RAM. This ID number is used whenever the keyswitch is turned to ***LOCAL CHANGE***.

When ***SELECT FUNCTION*** displays, press the following keys:

F10	*System/Dept Setup*
2	*Edit Configuration*
Y	Yes to continue

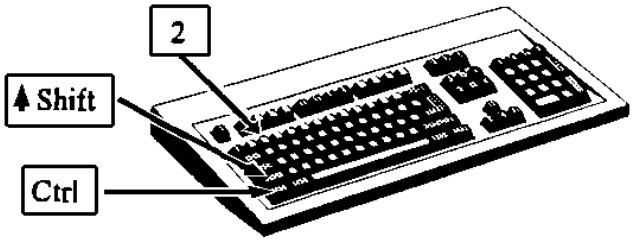


Figure 7.C Resetting ID Number

When asked for the password, enter ***8305***. The number of RAM Banks will display briefly, before the first softswitch. When asked Yes/No questions, press the ***Y/N*** keys or press the ***Space Bar*** to toggle selections.

Master Softswitch	Option	Function
CHG MAST PASSWORD?	YES NO	Change the master access password. The master password allows access to all master functions. No change, or no master password required.
CHG DEPT PASSWORD?	YES NO	Change the Department password. The Dept password allows access only to a specific department. No change, or no Department password required.
DEPT # ALWAYS 0?	YES NO	Only Department 0 will be used. Multiple departments will be used.
GRADE # ALWAYS 0?	YES NO	Grade entry prompt will not display while editing PLU record. Grade will be used.
SHELF LF ALWYS 0?	YES NO	Shelf Life prompt will not display while editing PLU records. Shelf Life will be used.
EATBYDAY ALWYS 0?	YES NO	Eat-By Days prompt will not display while editing PLU records. Eat-By days will be used.
ASK EXTRA TEXT?	YES NO	Extra Text Code prompt will not display while editing PLU records. Extra Text will be used.
CTION # ALWYS 0?	YES NO	Action Number Code prompt will not display while editing PLU records. Action Number will be used.
BYWGT-NO FRAC PR?	YES NO	Only By-Weight pricing is allowed. Prompt for Count/Modifier and Package Code are disabled. By-Weight, By-Count, Standard Pack, and Fractional pricing modes are allowed.
ASK VLABEL PRICE? (Only with SW 13386300A & earlier.)	YES NO	Master will display PLU's unit price and allow used to enter a price that will be encoded in the verification UPC symbol. PLU's unit price will be encoded in the verification label's UPC symbol.
PROGRAM BY ITEM?	YES NO	Master will prompt for Item Number when editing records. When programming by Item Number, no duplicate Item Numbers are allowed. Master will prompt for PLU number when editing records. Duplicate Item Numbers are allowed.
MASTER ID NO:	1-99	Enter ID number that will be used for Standby Master in standby mode and when using the Download 2nd Master function. This number must not be duplicated with any Scale ID numbers on the network.
PRTR BAUD RATE	300 To 19200	Press the ***Space Bar*** key to toggle through the available baud rates for the optional report printer. Selections include: 300, 1200, 2400, 4800, 9600, & 19200 baud. Press ***Enter*** to accept the displayed baud and advance to next SSW.
PRINTER BUSY HI?	YES NO	Yes = Hi for the input polarity of the printer's RTS (Ready To Send) that connects to the CTS line at the Master. Use this setting for an 8840 Printer, or for no printer attached. (Note: if no printer is connected and this setting is not used, the master may appear to be locked up when attempting to make price changes. No = Low for the input polarity of the printer's RTS line to the Master CTS line. Use this setting when using the 8842, 8843, and 8844 printers.
PTR COMPRESS PRINT		This selection is used to enter hex codes for the report printer to switch to compressed print mode. Certain reports printer over 80 characters per line. The compressed print mode allows printing up to 132 characters per line. Press ***Enter*** to continue. When COMMAND CODE IN HEX displays press ***Enter***. To completely clear any previous codes, press the ***Tab*** key, then enter the following: 8840-0001 = 1B37 8840-0002 = 1B5B3477 8842-0001 = ØF 8843-0001 = ØF 8844-0001 = ØF

Master Softswitch	Option	Function
		8845-0001 = ØF (Note: Entries must be in uppercase letters. The Ø is a zero.)
PTR NORMAL PRINT		This selection is used to enter hex codes for the report printer to switch to normal print mode. Press ***Enter*** to continue. When COMMAND CODE IN HEX displays press ***Enter***. To completely clear any previous codes, press the ***Tab*** key, then enter the following: 8840-0001 = 1B36 8840-0002 = 12 8842-0001 = 12 8843-0001 = 12 8844-0001 = 12 8845-0001 = 12 (Note: Entries must be in capital letters.)
HOST ID NO:	01-99	Enter the Host ID number that will be used by a host computer to communicate with the master.
HOST BAUD RATE	300 to 19200	Press the ***Space Bar*** to toggle through the baud rate selections to be used on the RS232 Host Port on the Master. Available selections are: 300, 1200, 2400, 9600, and 19200 baud. Press ***Enter*** to accept displayed baud rate and advance to next SSW. (Note: SW *13386300A and earlier has a max baud of 9600.)
HOST PARITY	EVEN	This selection sets the Parity Bit for the Host Port. Available selections are: Even, Odd, Mark, and None. Use Even parity when using DataBack, PCS, or Intelli-Net (all Mettler Toledo Host Software unless specified otherwise.)
INH HST VD T > 9?	YES NO	Inhibit Host Void Totals Greater than 9. This SSW is provided for compatibility with older host software. If the master is connected to a host that does not support 16 departments, select YES. Allows up to 16 departments.
INH RECS VERIFY?	YES NO	Inhibit Records Verification. Power up records verification is disabled. The master will perform records verification on power-up.
AUTO COMPRESS @2?	N/A	This function disabled in NF and Exp Master SW.
REM PRICE CHG?	YES NO	Allows remote price change from 8427 (non-NF only.) Disables remote price change.
STORE NAME:		This entry is used only for report headings. Up to two lines of 32 characters can be entered. Always first press the ***TAB*** key to completely clear the line when programming a new Store Name.
SELECT FUNCTION		End of master Edit Configuration will redisplay this prompt.

Table 7.X Master Softswitch Functions In Edit Configuration

7.3 TRANSFERRING / LOADING PLU AND TEXT FILES TO / FROM CASSETTE TAPE

NOTE: While files are being transferred to tape the Master will be "off line". Transfer/load can take over 30 minutes, depending on size of the programs.

7.3.1 TRANSFERRING THE PLU FILE TO CASSETTE TAPE

7.3.1.1 Connect the recorder to the "tape" connector on the Master.

7.3.1.2 Place the key lock switch to the "Local Change" position.

7.3.1.3 [SELECT FUNCTION KEY] ... Will display (data in brackets "[ ]" = the scale display. Data in brackets "< >" = key to press.

7.3.1.4 Press <F10>. [SYSTEM/DEPT SETUP] ... Press <6>.

7.3.1.5 [DUMP PLU TO TAPE?] ... Press <Y>. Press <N> or <Esc> to abort.

7.3.1.6 [START RECORDER Y/N] ... Install a quality high bias 60 minute cassette in the recorder.

Start the recorder (Press Play and Record). Allow recorder to run long enough to get past

leader on tape. Press <Y>, after conditions at step 7.3.1.6 are met.

[PRESS ENTER] ... Press <Return>.

7.3.1.7 {TRANSMITTING> TAPE] ... Tone should sound from recorder as files are transferred.

7.3.1.8 [TOTAL #PLU: 1250] ... The total number of PLU transferred will display when transfer is complete. Stop the recorder. Press <Esc>.

{SELECT FUNCTION KEY[... Will display.

7.3.2 TRANSFERRING THE PLU FILE FROM CASSETTE TAPE TO THE MASTER

7.3.2.1 Connect the recorder to the “tape” connector on the Master. Install program cassette in the recorder.

7.3.2.2 Place the key lock to the “Local Change” position.

7.3.2.3 [SELECT FUNCTION KEY] ... Will display (data in brackets “[ ]” = the scale display. Data in brackets “< >“ = key to press).

7.3.2.4 Press <f10>. [SYSTEM/DEPT SETUP] ... Press <7>.

7.3.2.5 [LOAD PLU FROM TAPE] ... Press <Y>. Press <N> or <Esc> to abort. [PRESS ENTER] ... Press <Return>.

7.3.2.6 [RECEIVING FROM TAPE] ... Rewind tape to starting location of program. Start the recorder (Press Play). Tone should sound from recorder as files are transferred.

[DUPLICATES CHECK] ... If the tape is loaded into a machine that has not been initialized, only new files will be accepted. Stop the recorder.

7.3.2.7 [TOTAL #PLU: 1250] ... The total number of PLU’s transferred transfer is complete. Press <Esc>.

[SELECT FUNCTION KEY] ... Will display.

7.3.3 TRANSFERRING THE TEXT FILE TO CASSETTE TAPE

7.3.3.1 Connect the recorder to the “tape” connector on the Master.

7.3.3.2 Place the key lock switch to the “Local Change” position.

7.3.3.3 [SELECT FUNCTION KEY] ... Will display (data in brackets “[ ]” = the scale display. Data in brackets “< >“ = key to press).

7.3.3.4 Press <f9>. [SYSTEM/DEPT SETUP] ... Press <6>.

7.3.3.5 [DUMP TEXT TO TAPE?] ... Press <Y>, Press <N> or <Esc> to abort.

[EXPAND CHAIN TEXT?] ... If this text file is going to be loaded into Master’s using software numbers; 132466 and 132467, press <Y>. If this text file is going to be loaded into Master’s using software numbers; 133863 and 133864 press <N>.

7.3.3.6 {START RECORDER Y/N?] ... Install a quality high bias 60 minute cassette in the recorder. Start the recorder (Press Play and Record). Allow recorder to run long enough

to get past leader on tape.
Press <Y>. [PRESS ENTER] ... Press <return>.

7.3.3.7 [TRANSMITTING > TAPE] ... Tone should sound from recorder as files are transferred

7.3.3.8 [TOTAL # TEXT: 250] ...The total number of texts transferred will display when transfer is complete. Stop the recorder. Press <Esc>,[SELECT FUNCTION KEY] ...Will display.

7.3.4 TRANSFERRING THE TEXT FILE FROM CASSETTE TAPE TO THE MASTER

7.3.4.1 Connect the recorder to the “tape” connector on the Master. Install cassette in the recorder.

7.3.4.2 Place the key lock switch to the “Local change” position.

7.3.4.3 [SELECT FUNCTION KEY] ... Will display (data in brackets “[ ]” = the scale display. Data in brackets “< >“ = key to press).
[PRESS ENTER] ... Press <Return>.

7.3.4.4 Press <F9>. [SYSTEM/DEPT SETUP] ... Press <7>.

7.3.4.5 [LOAD TEXT FROM TAPE?] ... Press <Y>. Press <N> or <Esc> to abort.
[PRESS ENTER] ... Press <Return>.

7.3.4.6 {RECEIVING FROM TAPE] ...Rewind tape to starting location of program. Start the recorder (Press play). Tone should sound from recorder as files are transferred.

[DUPLICATES CHECK] ... If the tape is loaded into a machine that has not been initialized (Section 5.1), only new files will be accepted. NOTE: For Masters using software numbers 132466 and 132467 old text files will be overwritten. No duplicates check will take place.

7.3.4.7 {TOTAL # TEXT: 250] ... The total number of texts transferred will display when transfer is complete. Stop the recorder. Press <Esc>. [SELECT FUNCTION KEY] ...Will display.

7.4 DOWNLOAD TO SECOND “MASTER” ROUTINE

Record data may be downloaded from one “Master” to a second “standby Master” on the same network. To download a second master:

7.4.1 Make sure second Master’s polling mode and program mode switches are at “Standby” and “RUN” positions, respectively.

7.4.2 Set programmed “Master’s Polling Mode Switch” to “Master” position. Set “Program Mode Switch” to the “Local Change Position.”

7.4.3 Using the QWERTY keyboard press <F10> <4>.
Connect the recorder to the “tape” connector on the Master.

NOTE: 8305-0001 cannot download to Masters containing 1700 PLU memory PCB (Bubble Memory).

Press <RETURN> to initiate download.

8.0 SYSTEM INSTALLATION

8.1 MATERIAL REQUIRED

MATERIAL	APPROVED VENDOR	TOLEDO NO.	QUANTITY

8.1.1	Wall mount phone jack	Allen Tel. Prod., Inc. #AT468-4		12716300A	(1) for each scale

(SEE FIGURE 5)

8.1.2	Telephone Cable	Siecor #92-630-30		_	As required

(SEE FIGURE 6)

NOTICE: If cable is to be run through a plenum area, check your local electrical/fire codes. Special non-flammable/non-smoking cable may be required.

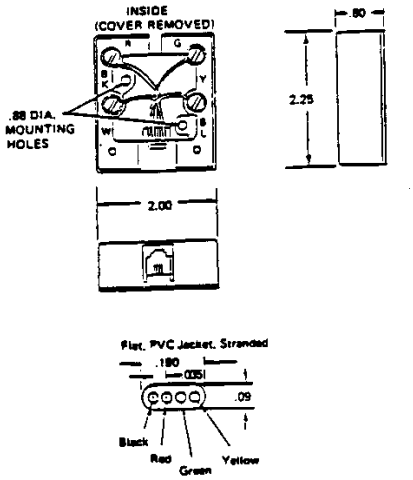


Figure 6

8.2 WIRING - SCALE NETWORK

A sufficient amount of telephone cable must be available to run between all scales in the network. The cable is normally run around the store (from each scale location to the nearest scale location) uncut. Once the cable is routed it must be cut and terminated at the wall mount phone jack required at each scale location. Each scale comes with a 25ft cable (T/N 12716500A) which runs between the scale and the wall mount jack. So, the wall mount jack should be within 25 feet from the scale location. See Figure 7. Please note that the 6 conductor connector of the 25-ft cable mates with the wall mount jack, the 4 conductor connector mates to the scale.

8305/8423/8422 SCALE NETWORK INTERCONNECTION

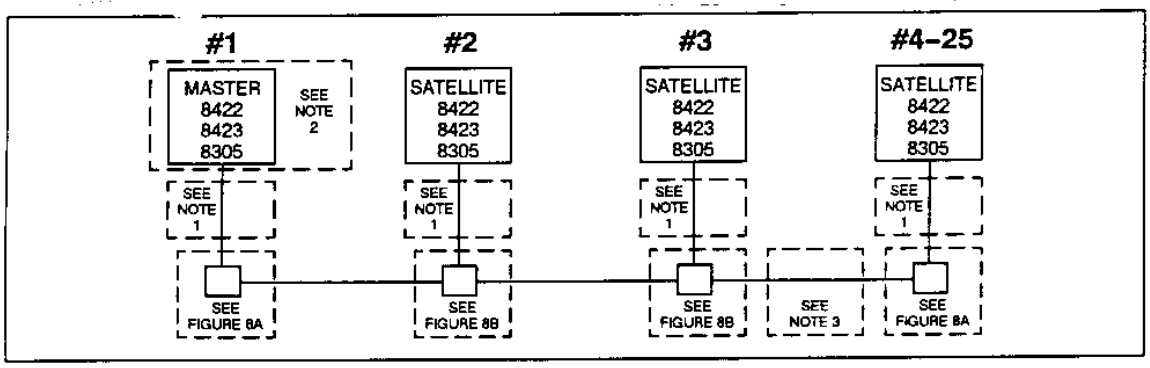


Figure 7

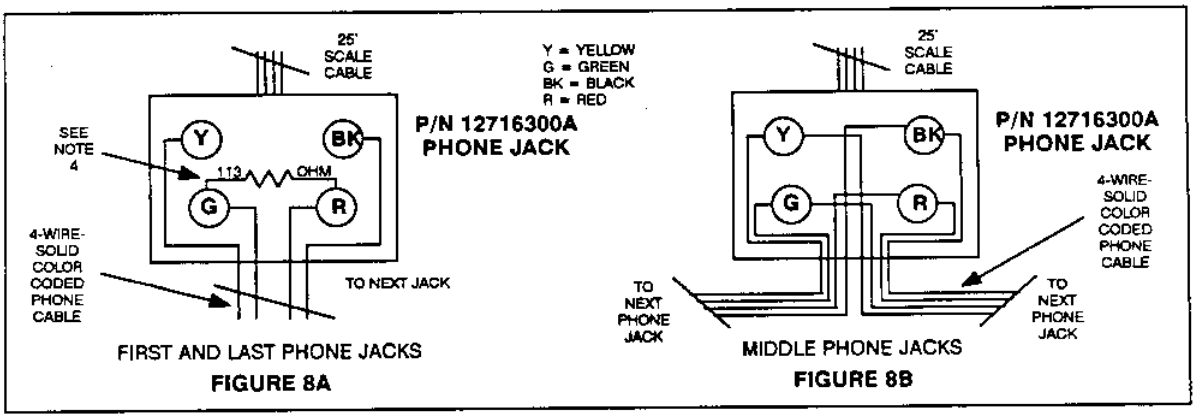


Figure 8
Phone Jack Wiring

INTERCONNECTION DIAGRAM

NOTE1: The 25' Communication Cable, P/N 12716500A, is supplied with each scale. The four-position connector plugs into the scale "Comm" port, and the six-position connector plugs into the wall mount phone jack, also supplied with each scale.

NOTE 2: The Master Unit can be installed at any location on the network. The network will support up to 25 devices, a Master Scale = 2 devices when second Master is in network, polling switch must be in "Standby" mode position, and a Satellite Scale = 1 device.

NOTE 3: All of the phone jacks must be installed on the main data line which runs to each location. This data line must not branch off into multiple lines from one phone jack, (see Figures 9 and 10). the total cable length including the scale communication cables must not exceed 1500 feet. Standard 4-wire color-coded telephone cable can be used, however, it must meet the local building code requirements, and meet NFPA requirements. See WARNING below.

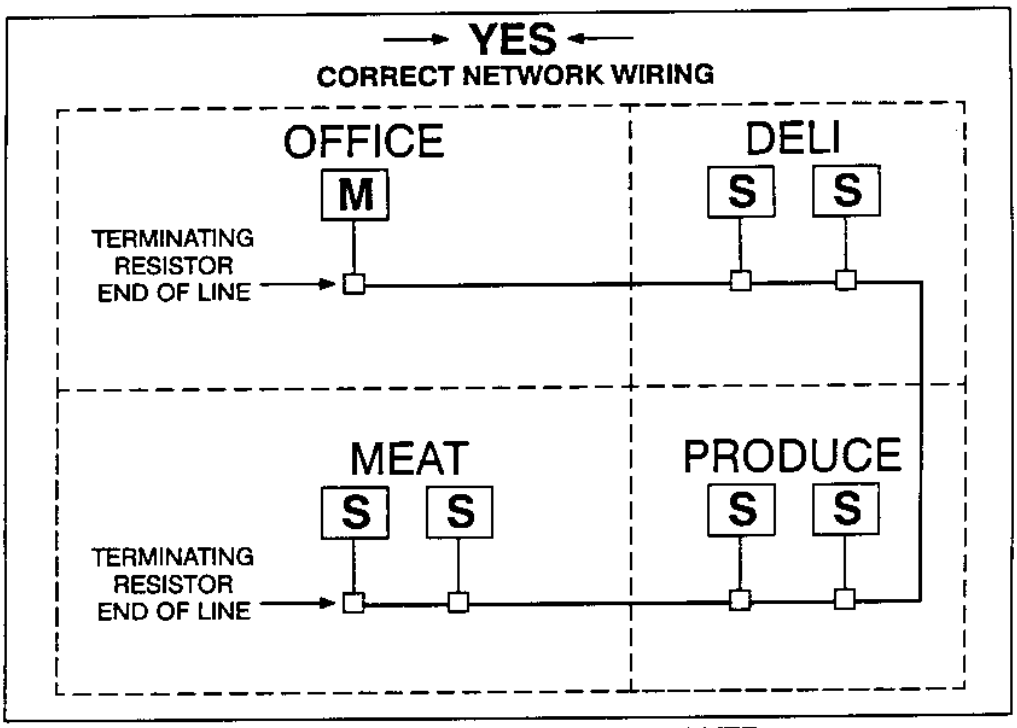
NOTE 4: The 113 ohm resistor must be installed at the first and last phone jack on the network, as shown in Figure 8A.

WARNING

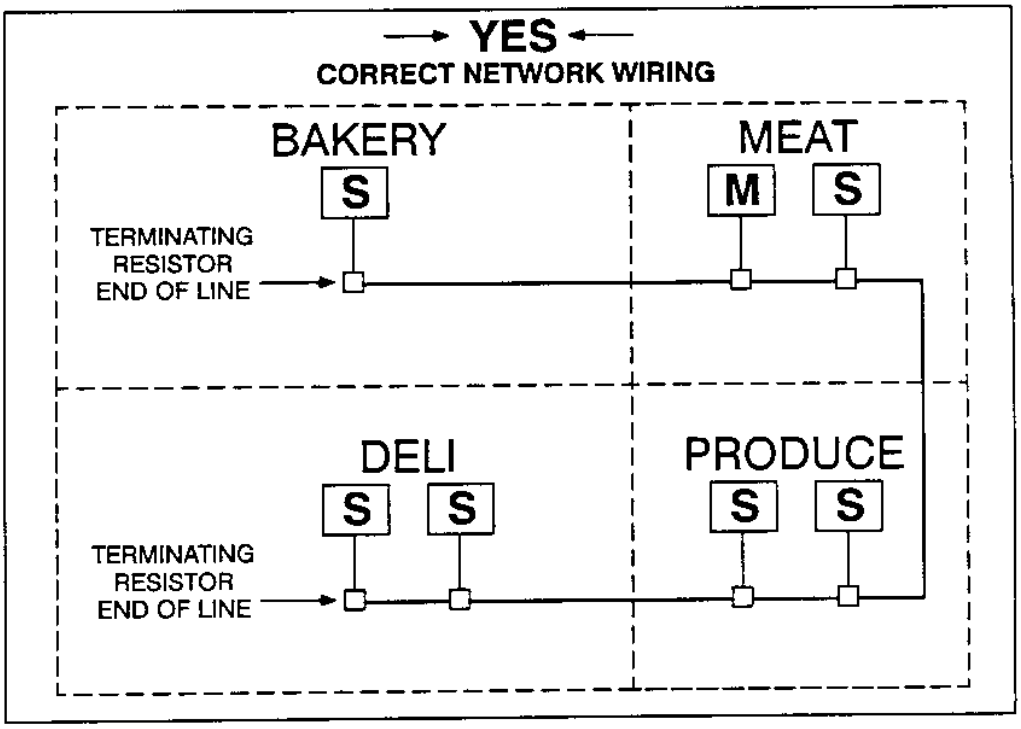
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) standards require that data cable be subject to local regulations governing such installation. Data cable must be installed in conformance with applicable local, state, and national codes (NATIONAL ELECTRICAL CODE, NEC). Check with the local organization (e.g., Building Inspector/Fire Marshall) for local requirements

- DO NOT route data cable in conduit with A-C lines.
- DO NOT route data cable adjacent to high voltage radiating power lines.
- DO NOT route more than one data cable line into or out of a single phone jack.
- DO NOT route data cable over sharp edges.
- DO NOT route unprotected data cable across walkways where the cable could become a safety hazard or become damaged.''
- DO NOT mount the phone jacks in wet or damp areas.Refer to the Scale Network Interconnection Dia gram for instructions on connecting the data cable, phone jacks, and scales to the network

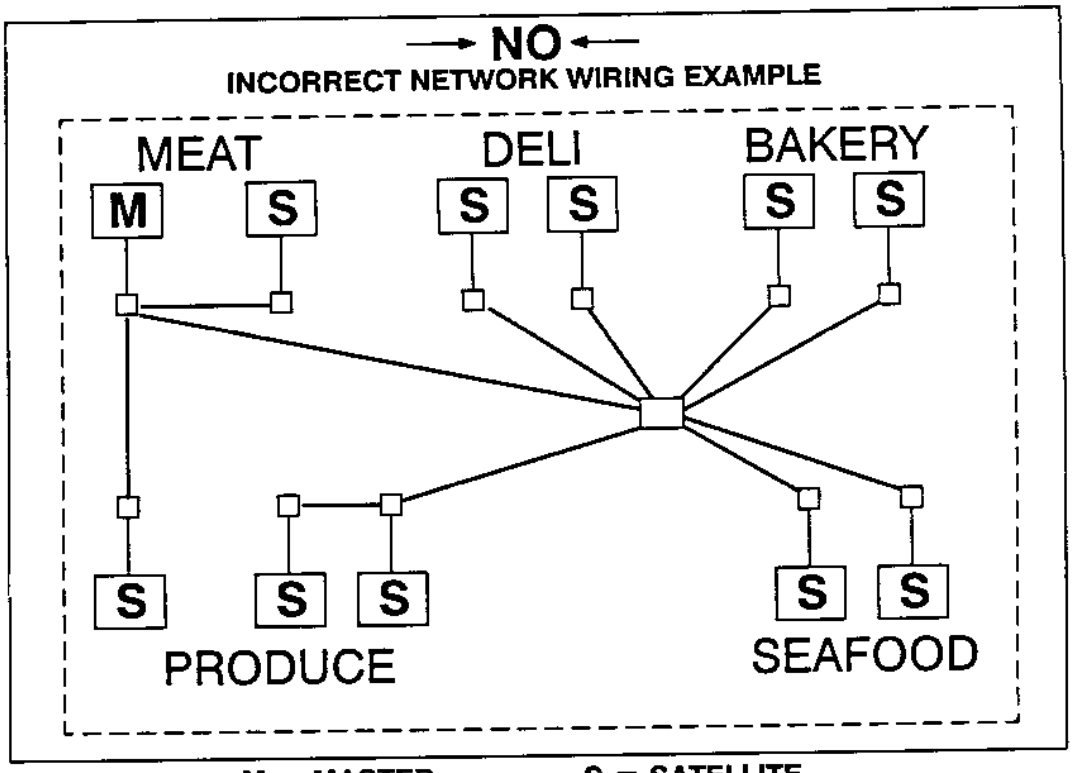
EXAMPLES OF CORRECT NETWORK WIRING



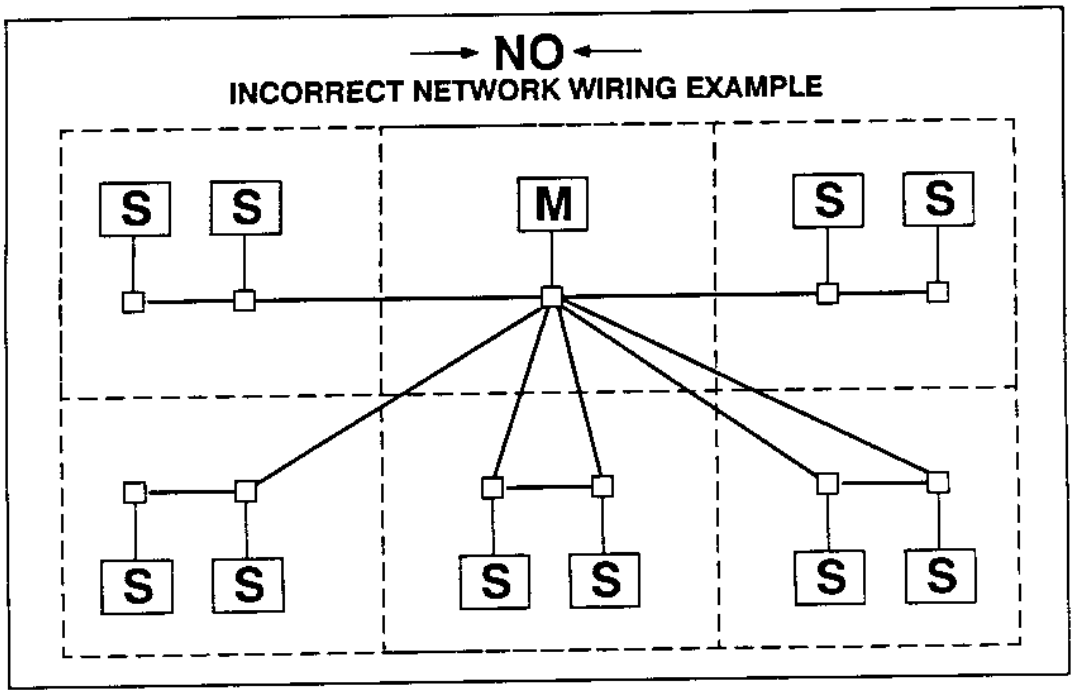
M = MASTER S = SATELLITE



EXAMPLES OF INCORRECT NETWORK WIRING



M = MASTER S = SATELLITE



8.3 POWER REQUIREMENTS

Each controller (including label printer) requires ONE GROUNDED 120 VAC outlet on an ISOLATED 15 AMP CIRCUIT.

Each controller comes with a 6 foot AC line cord.

NOTE: If the report printer is used an additional outlet will be required. Also note that the printer can be remote (up to 25 feet) from the Master controller. The outlet for the printer may not be at the Master's location.

8.4 SET-UP CHECK LIST

8.4.1 Follow power-up sequence (Section 6.1).

8.4.2 Set Softswitch options and calibrate scales (Section 6.3 through 6.7).
NOTES:
a. Read and understand all softswitch options.
b. Do Not duplicate scale ID numbers.
c. The (softswitch) ID number for the "Master" controller should be "01".

8.4.3 Initialize and configure Master controller (Section 7.1 & 7.2).

8.4.4 Program Department Names, UPC Codes and store address lines.

8.4.5 Program Grade Table (*).

8.4.6 Program Action Table (*).

8.4.7 Program Record File (*).

8.4.8 Repeat power-up sequence and perform "DOWNLOAD PLU files?" routine.

(*) REFER TO THE 8305 SUPERVISOR PROGRAMMING MANUAL.

9.0 ERROR MESSAGES

9.1 ERROR MESSAGES (DISPLAY) ON MASTER

9.1.1	INVALID PRICE MODE	Incorrect entry found in modifier or package code during price changes.
9.1.2	INVALID ENTRY	Incorrect entry found when making an adjustment; adjustment value is larger than the current value.
9.1.3	PLU NO NOT FOUND	PLU number wanted is not found.
9.1.4	ITEM NO NOT FOUND	Item number wanted is not found.
9.1.5	FILE WRITE ERROR	Error found during file write operation.
9.1.6	FILE READ ERROR	Error found during file read operation.
9.1.7	COMMUNICATION ERROR	T-net is down.
9.1.8	PLU MEMORY IS FULL	PLU memory space is full.
9.1.9	GET NEXT REC ERROR	Error found during get next PLU record operation.
9.1.10	GET PLU REC ERROR	Error found during get PLU record operation.
9.1.11	SUBSTITUTE ERROR	Error found during substitute PLU record operation.
9.1.12	ADD RECORD ERROR	Error found during add PLU record operation.
9.1.13	DELETE RECORD ERROR	Error found during delete PLU record operation.
9.1.14	DUPLICATE ITM FOUND	Duplicate item number found in the PLU file.
9.1.15	DUPLICATE PLU FOUND	Duplicate PLU number found in the PLU file.
9.1.16	DUMP GRADE TBL ERR	Error found when sending/receiving Dept. Table to/from tape recorder.
9.1.17	DUMP DEPT TBL ERROR	Error found when sending/receiving Action Number Table to/from tape recorder.
9.1.18	DUMP ACT TBL ERROR	Error found when sending/receiving Action Number Table to/from tape recorder.
9.1.19	DUMP EXTRA TEXT ERR	Error found when sending/receiving Extra Text File to/from tape recorder.
9.1.20	DUMP PLU REC ERROR	Error found when sending/receiving PLU file to/from tape recorder.
9.1.21	TEXT FILE TOO LARGE	Extra Text File is too big; not enough memory space.
9.1.22	NUTRIFACT NO FOUND	Extra Text number wanted is not found.

9.2 ERROR MESSAGES (PRINTED)

The following table of error messages are printed out by the report printer. These messages would occur in the event of a failure during power up of a RAM master. these messages are printed out due to the fact that the satellite (scale) portion of the “Master” is in control of the displays at power-up.

Should one of these messages be printed: power the unit down and then up. If the problem persists, the RAM memory PCB may have failed.

9.2.1	SYSTEM CONFIGURATION ERROR	Error found running system configuration at power-up.
9.2.2	ROM CHECK ERROR	EPROM check sum error.
9.2.3	INTERNAL RAM CHECK ERROR	Error found during internal RAM check at power-up.
9.2.4	EXTERNAL RAM (A29) CHECK ERROR	Error found during external RAM check at I>C> location A29.
9.2.5	DUART 2681 (A13) ERROR	Bad Uart at I.C. location A13.
9.2.6	BAD RAM A17 BAD RAM A18 BAD RAM A19 BAD RAM A20 BAD RAM A25 BAD RAM A26 BAD RAM A27 BAD RAM A28 BAD RAM A30 BAD RAM A31 BAD RAM A32 BAD TAM A33 BAD RAM A38 BAD RAM A39 BAD RAM A40 BAD RAM A41	Error found during external check at a given I.C. location.
9.2.7	BAD RECORD NO: XXXX	Check sum error found on the given record number.

9.3 ERROR MESSAGES (DISPLAYED ON SATELLITE)

9.3.1	2681 UART ERROR	Bads 2681 UART chip.
9.3.2	INT RAM ERR	Internal RAM error.
9.3.3	PROM SUM ERR	EPROM checksum error.
9.3.4	NVRAM ERR	XICOR NVRAM fatal error.
9.3.5	NVROM SUM ER	XICOR NVMEM checksum error.
9.3.6	RAM ! ERR	External RAM 1 Error (location 0-1FFH).
9.3.7	RAM 2 ERR	External RAM 2 error (location 2000H-3FFFH).
9.3.8	OVER READY	Scale at over capacity.
9.3.9	BELOW READY	Scale at under capacity.
9.3.10	E2	Insufficient test weight at calibration.
9.3.11	E3	Loadcell behind zero at calibration.
9.3.12	KBD/DSP ERROR	Failure to reset 8742 chip.
9.3.13	**DOWNLOAD ERROR	Download PLU error.
9.3.14	SCALE REQUEST ERROR	Master is not responding during programming via scale keyboard.
9.3.15	ITEM NOT FND	Requested item number not found at Master.
9.3.16	PLU NOT FOUND	Requested PLU number not found at Master.
9.2.17	COMMUNICATION ERROR	T-net is down; off line.
9.2.18	RECEIVE INVALID PLU	PLU record contains invalid data.
9.3.19	LOCAL PLU BCC ERROR	Bad local PLU record found.
9.3.20	FILE WRITE ERROR	Error found during file write operation.
9.3.21	FILE READ ERROR	Error found during file read operation.
9.3.22	NO LABELS	Printer is running out of labels.
9.3.23	*TOO MANY NUMBER”	Too many digits entered for unit count.
9.3.24	*LOADCELL ERR	Bad loadcell.
9.3.25	INVALID TARE	Invalid tare entry.
9.3.26	INVALID PRICE MODE	Invalid date found in modifier or package code field during price change.
9.3.27	TOTALS$$> $999.99	Total dollars is too large to print.
9.3.28	NO PRINTER COMM	Printer communication error.
9.3.29	BAD PRINTER COMM	Printer does not acknowledge data sent.
9.3.30	PULL FILL FULL!!	Case Pulls file is currently full.
9.3.31	NO EXTRA TEXT FOUND	Extra Text number wanted not found.
9.3.32	WRONG PLU RECEIVED	Received wrong PLU record from Master.
9.3.33	WRONG ITEM RECEIVED	Received wrong item record from Master.
9.3.34	CODE XX NOT FOUND	Action number wanted not found or wrong action type.

10.0 TROUBLESHOOTING

10.1 TRANSFORMER VOLTAGES

10.1.1 Disconnected power.

10.1.2 Disconnected PJ2 (harness from transformer) on the Logic PCB.

10.1.3 Connect Power and turn power switch “ON”.

10.1.4 Check these voltage test points:

TURN POWER ON.

VOLTAGE	TEST POINT	ACCEPTABLE RANGE
18 VAC	PJ2-5 TO PJ2-7	15.3 TO 19.8 VAC
10 VAC	PJ2-3 TO PJ2--8	8.5 TO 11.0 VAC
10 VAC	PJ2-13 TO PJ2-8	8.5 TO 11.0 VAC
20 VAC	PJ2-12 TO PJ2-14	17.0 TO 22.0 VAC
30 VAC	PJ2-10 TO PJ2-14	25.5 TO 33.0 VAC

10.1.5 If all transformer secondary voltages are 0 VAC, check the fuse. If any of the transformer voltages is outside of the acceptable range, replace the transformer. (Make sure that the A-C power source is in the acceptable range, -15% and +10%). Reconnect all connectors after completing voltage checks.

10.2 LOGIC PCB VOLTAGES

The scale power supply is located on the Logic PCB. Check the following voltage test points.

VOLTAGE	TEST POINT	ACCEPTABLE RANGE
+5 VDC	Across C2 or J14-3 to J14-2	4.75 to 5.25 VDC
+10 VDC	Across C5 or J14-1 to J14-2	8.0 to 11.5 VDC
-10 VDC	J2-4 to J2-8	-7 to -15 VDC
+20 VDC	Across R1 (w/loadcell connected)	18 to 25 VDC
+60 VDC	Across R5	52 to 69 VDC
Battery	Anode of CR15 to Log. GND (With Power Off)	2.4 to 2.7 VDC

10.3 MEMORY PCB

10.3.1 RAM MEMORY PCB

VOLTAGE	TEST POINT	ACCEPTABLE RANGE
10 VAC	J1-2 TO J1-5	8.5 TO 11.0 VAC
10 VAC	J1-7 TO J1-5	8.5 TO 11.0 VAC
+10 VAC	POSITIVE TERMINAL CR2	8.0 TO 11.5 VDC
-10 VAC	NEGATIVE TERMINAL CR2	-8.0 TO 11.5 VDC
+5 VDC	ACROSS C30	4.75 TO 5.25 VDC
BATTERY	J8-2 TO J8-5 (POWER OFF)	2.4 TO 2.7 VDC

10.4 SYSTEM TROUBLESHOOTING

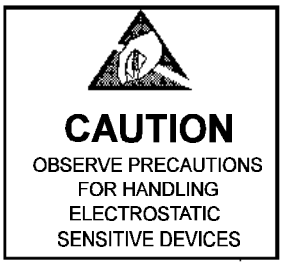
	PROBLEM	CAUSE	RECOMMENDED CORRECTION
10.4.1	Scale loses time and date when turned "OFF".	Defective battery or charging circuit.	Install Battery KOP #13394300A or replace Logic PCB
10.4.2	Display locks up when making price changes (report printer in use).	Report printer is "OFF-LINE, turned off, or out of paper.	Turn printer "ON", install paper, or press "ON-LINE" switch on printer.
10.4.3	Display locks up when making price changes (report printer not in use).	Controller/Scale is waiting for a report to print.	Set Busy Line prompt at "Yes" (Controller / Scale Configuration).
10.4.4	"No Printer Comm" error code on display of Scale/ Controller (325-0001 or 315-0002.	Scale/Controller is unable to communicate with the label printer, due to set up for improper printer, an open in printer cable or label sensor blocked.	Scale Configure/Controller for the proper printer repair open in Scale / Controller to printer circuitry. Remove label blocking label taken sensor.
10.4.5	"Bad Printer Comm" error message on display of Scale/ Controller.	Scale/Controller has detected an error in date received from the printer	Perform "Download PLU routine.
10.4.6	Scale Won't Zero.	Scale out of calibration.	Calibrate scale.
10.4.7	Scale Won't Calibrate.	Defective Logic PCB	Replace Logic PCB
10.4.8	PLU Not Found .	Department # not set	Re-enter Department #

		in Scale/Controller.	
		No files in the memory (memory lost) or errors at power up.	Check battery voltage (Memory PCB) or check battery jumper for open.
10.4.9	Download PLU error.	Scale Off line.	Check scale ID#, no duplicate #'s on the network allowed.
		Open in T-network	Repair T-network
10.4.10	"Select Function" doesn't appear when key is turned.	Scale ID # Changed in Master unit on Logic PCB.	Disconnect Master from T-net and turn keylock to "Local Change".. Press "Shift", "CTRL', "2" keys, then ESC key.
10.4.11	"No Printer Comm" or printer does not print (no error displayed) scale/printer converted for Extra Text printing.	Incorrect software in scale and/or printer.	Install correct software.
		Extra Test printer not selected.	Select E.T. V1 printer (Software switch).
		Scale/Printer adapter harness not installed or defective.	Install scale & printer adapter harness or replace harness.
		Incorr communication mode selected.	Move jumper J2 to J1 in the printer.
10.4.12	Master is sluggish during price edits (no line printer in use.	Line printer configuration set for 300 baud.	Set at 4800 buad.
10.4.13	Network goes "OFF" line and Master does not function properly as soon as tape recorder is connected (should go "OFF-LINE" when dumping to tape and loading from tape only.)	Improperly wired A-C outlets at satellites on the T-network.	Correct AC outlets.

11.0 PARTS REPLACEMENT AND ADJUSTMENTS

11.1 LOGIC/MEMORY/DISPLAY/KEYBOARD AND SCANNER PCB REPLACEMENT (MODEL 8305)

NOTE: Before replacing the Memory PCB, PLU files must be backed up on cassette tape, on a personal computer or another Master Controller. After memory PCB replacement is complete, the controller must be reprogrammed.



TOOLS: 1 - #1 Phillips Screw Driver
1 - Flat Blade Screw Driver

11.1.1 Remove the power from the scale by unplugging the line cord.

11.1.2 Open the scale from the door to gain access to the scale's printed circuit boards.

11.1.3 Disconnect the appropriate harnessing before removing the part.

WARNING

BEFORE DISCONNECTING ANY HARNESS FROM THE PRINTED CIRCUIT BOARDS, YOU MUST WAIT AT LEAST 30 SECONDS AFTER REMOVING THE LINE POWER FROM THE UNIT. FAILURE TO WAIT MAY RESULT IN DAMAGE TO THE PRINTED CIRCUIT BOARDS.

11.1.4 Remove the printed circuit board's mounting screws and remove the board.

11.1.5 Reverse order for installation.

11.1.6 Refer to "Program Switch Summary" section of this manual for the proper switch and jumper settings.

11.2 LOADCELL REPLACEMENT MODEL 8213-0101

11.2.1.1 Remove power from the scale by unplugging the power cord on the 8305 or 8423.

11.2.1.1 Remove the power from the scale by unplugging the power cord on the 8305 or 8423.

11.2.1.2 Remove the platter.

11.2.1.3 Remove the Spider. It is retained by two Hex Head Screws.

11.2.1.4 Remove the Loadcell Mounting Screws. It is retained by two Hex Head Screws located under the scale base.

11.2.1.5 Disconnect the Loadcell Harness and remove the loadcell.

11.2.1.6 Reverse order for installation.

NOTE: The Loadcell Mounting Screws and Spider Mounting Screws must be torque to 75 to 85 inch-pounds.

11.2.2 OVERLOAD STOPS SCREWS, MODEL 8213-0101

TOOLS: .059 GAP GAUGE
.080 GAP GAUGE
.020 GAP GAUGE
3/16 HEX WRENCH
.029 GAP GAUGE
.67 GAP GAUGE
.095 GAP GAUGE

Normally no adjustment is required, overload stop screws are pre-set at the factory.

Should the spider require replacement the Overload Hex Screws will require adjustments for the proper gap. Refer to the drawing below for gap tolerance at their respective points.

12.0 CARE AND MAINTENANCE

12.1 CLEANING INSTRUCTIONS: MODEL 8305 INSTALLED WITH AN AUTO-LABELER

WARNING

IF THE CONTROLLER IS BEING USED WITH AUTO-LABELER, DISCONNECT THE AUTO-LABELER AND THE CONTROLLER FROM THE POWER SUPPLY BEFORE CLEANING.

CAUTION: DO NOT USE SCOURING CLEANSERS, SOLVENTS OR CHEMICALS

CAUTION: DO NOT SPRAY CLEANING FLUID OR WATER DIRECTLY ON THIS SCALE.

WARNING

DISCONNECT THE CONTROLLER FROM THE POWER SUPPLY BEFORE CLEANING.

12.1.1 Clean the Platter and Rollers, and the scale covers with a clean damp cloth.

12.1.2 To clean the area under the platter, grasp the platter on both sides and gently pull up to remove the platter.

12.1.3 To re-install the platter, align the platter corners with the spider assembly and gently press downward.

12.2 CLEANING INSTRUCTIONS: 8305 INSTALLED IN STEP-SAVERS OR CONTROLLERS USED FOR MANUAL SCALING

WARNING

DISCONNECT THE SCALE FROM THE POWER SUPPLY BEFORE CLEANING THE SCALE.

12.2.1 Remove power from the scale by unplugging it.

12.2.2 Use a clean damp cloth to wipe exterior surfaces.

12.2.3 DO NOT use solvents or other chemicals to clean scale surfaces.

12.3 RECOMMENDED SERVICE PARTS:

The following is a recommended list of parts to properly service the Model 8305 Controller.

QUANTITY	PART NUMBER	DESCRIPTION
1	13106000A	PCB ASS'Y, LOGIC WO/EPROM
1	13455500A	EPROM KOP, (8305 LOGIC)
1	12895400A	PCB ASS'Y, MEMORY (RAM)
1	13099800A	KEYBOARD ASS'Y 8305
1	12423200A	DISPLAY PCB
1	12718800A	DLC BUFFER PCB
5	11214500A	FUSE, .5A S.B.
1	13386200A	EPROM KOP, MEMORY PCB

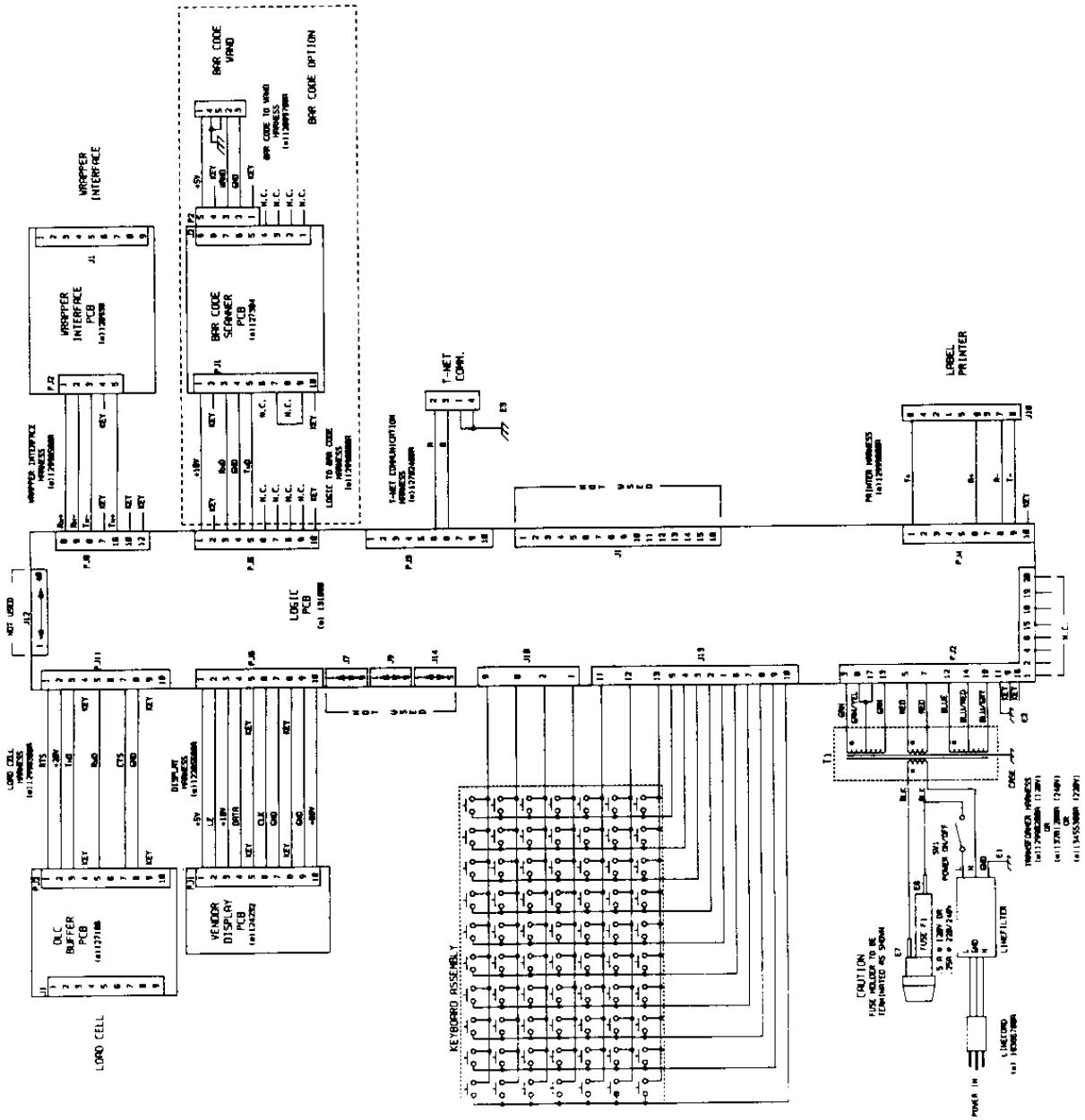
12.4 SPECIAL TOOLS

The following items are recommended for proper maintenance and repairs: (Common hand tools are also required)

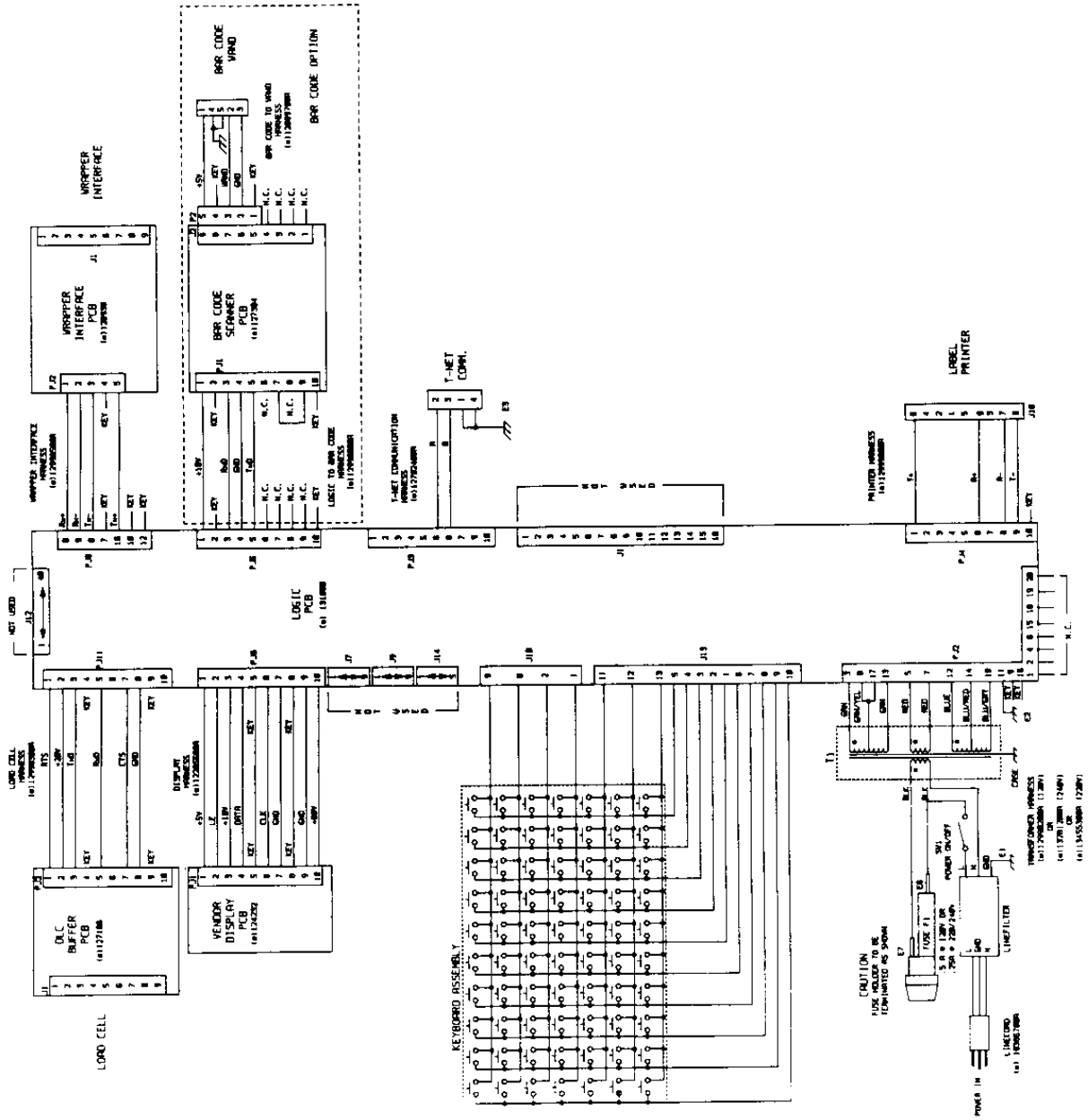
Feeler Gauges
Torque Wrench (In-Lbs)
3.16" Hex Bit and Holder
Digital Multimeter
IC Insertion Tool
IC Extraction Tool
Static Kit
Tape Recorder (0916-0030)
Recorder Adapter Cable (Toledo #11867500A)
Programming Keyboard (09952-0024)
Blank Cassette Tape (0906-0032
Report Printer (8842)

13.0 SCHEMATICS

13.1 8305 MASTER

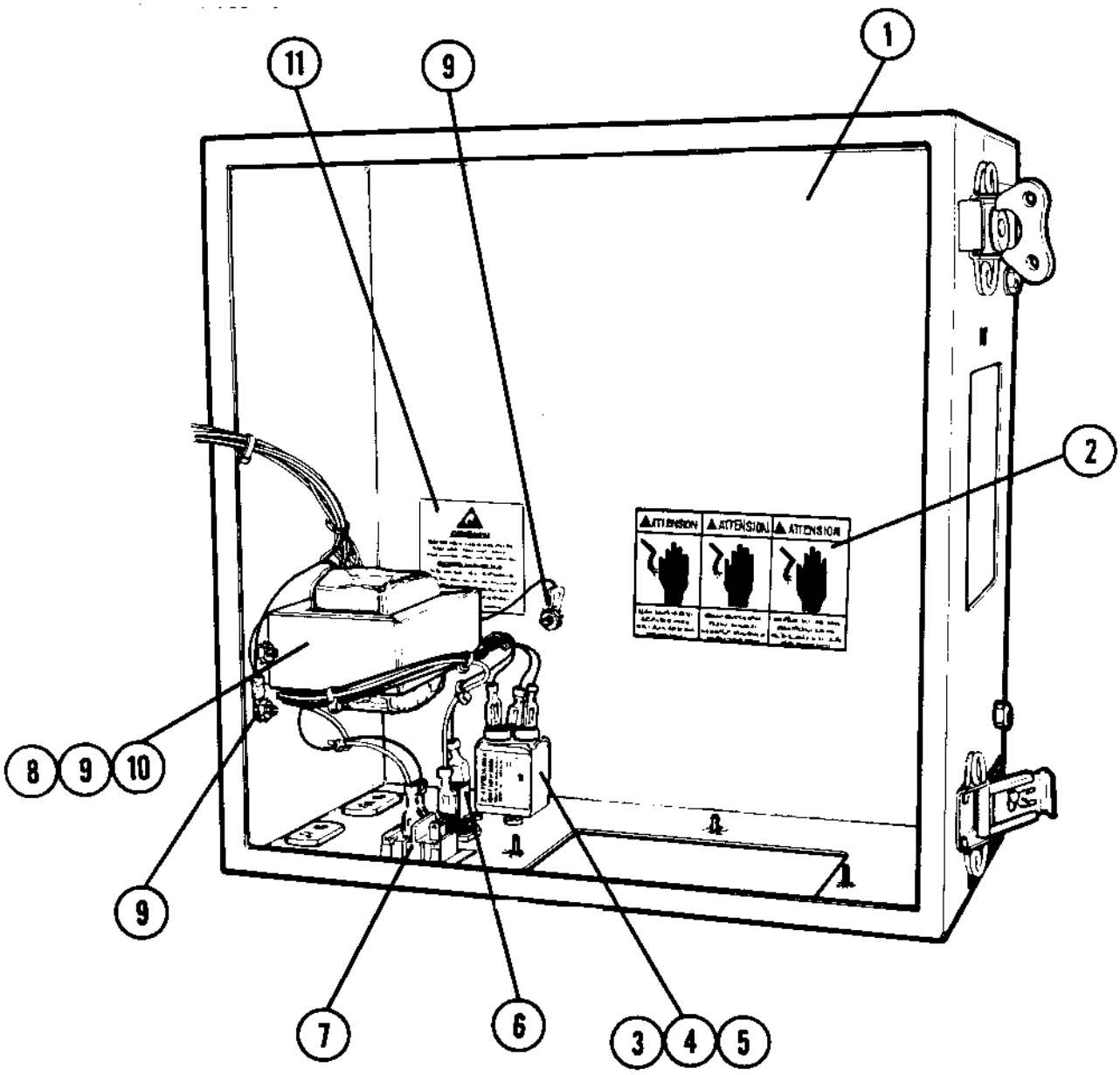


13.2 8305 SATELLITE



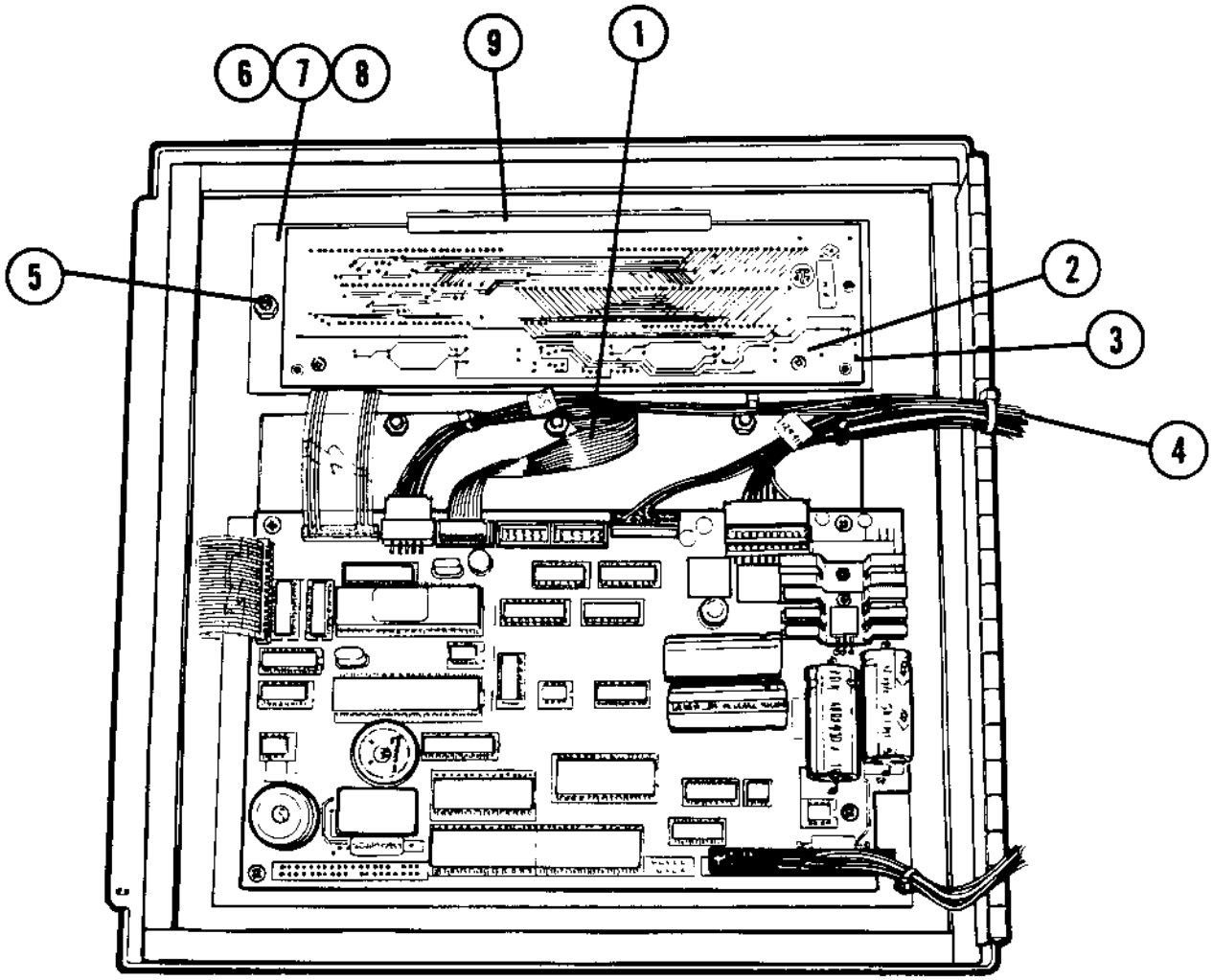
14.0 PARTS CATALOG

14.1 POWER SUPPLY



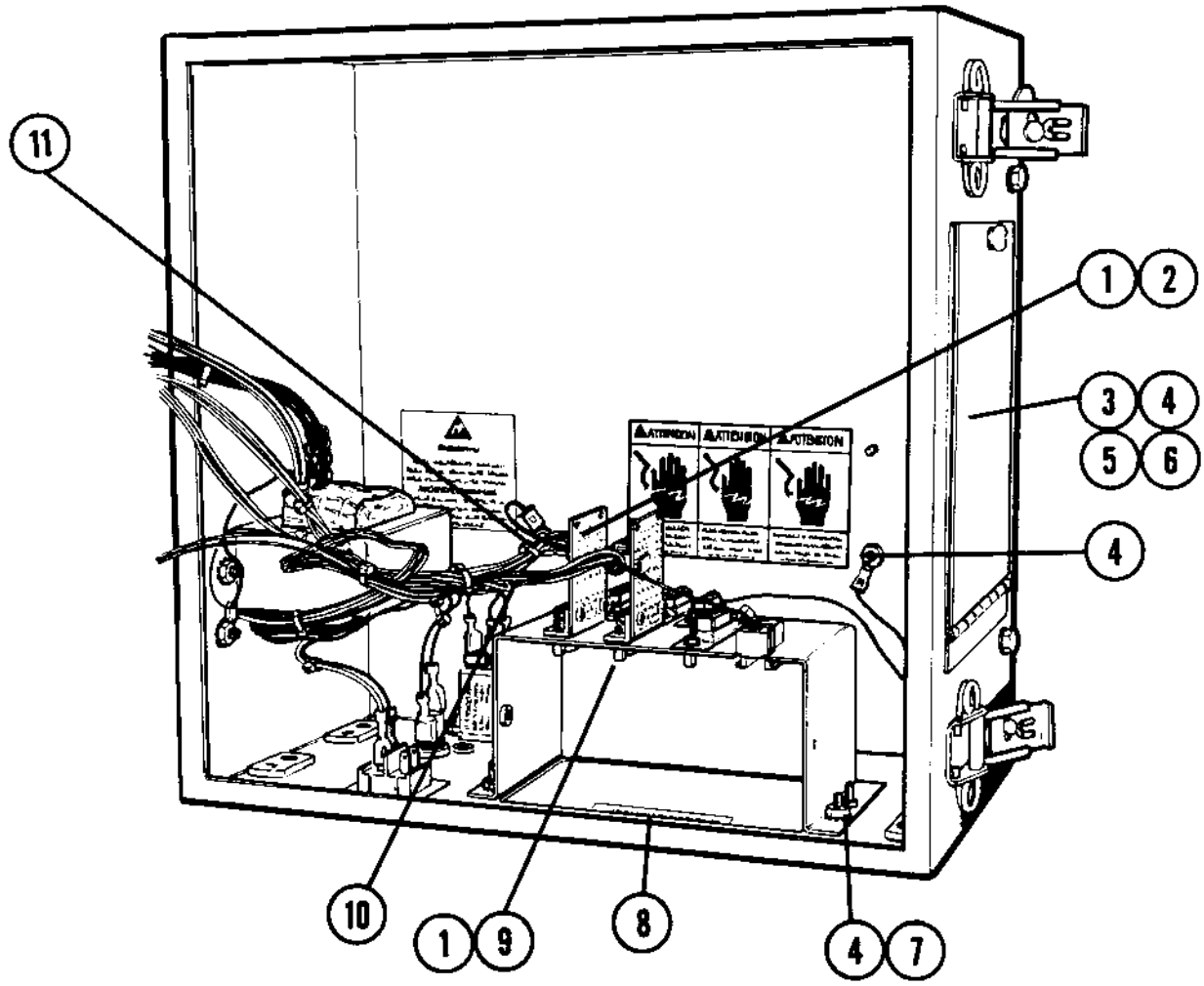
REF	PART NUMBER	DESCRIPTION	QTY
1	129964 00A	Enclosure Assembly	1
2	A118792 00A	Label, Warning-Disconnect Power	1
3	115521 00A	Line Filter	1
4	R02977 00A	Screw, 4-40 x 1/2” PH. RD. HD. SS.	2
5	R03638 00A	Nut, Hex, 4-40 W/Lockwasher	2
6	124801 00A	Fuseholder	1
7	119133 00A	Switch, Rocker, Black	1
8	130980 00A	Insulator, Transformer	1
9	R03298 00A	Nut, Hex, 8-32 W?Lockwasher	4
10	129982 00A	Transformer & Harness - 120 VAC	1
11	116033 00A	Label, Caution, Static	1

14.2 FRONT DOOR
(INTERIOR)



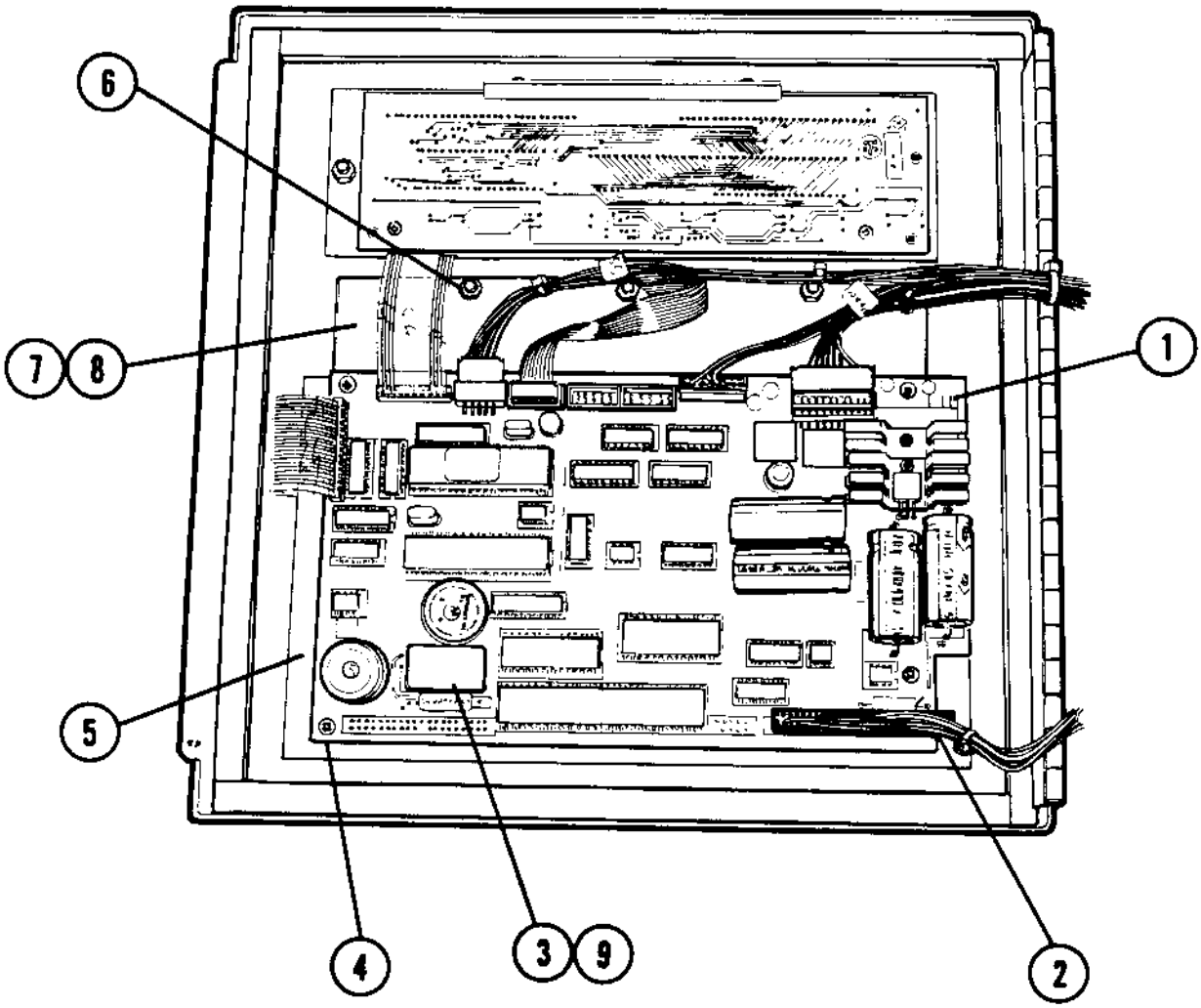
REF	PART NUMBER	DESCRIPTION	QTY
1	122655 00A	Harness, Display	1
2	R02247 00A	Screw, 6-32 X 9/16” PH. RD. HD.	2
3	124232 00A	PCB Assembly, Display	1
4	095915 00A	Cable Tie or Equivalent	1
5	R03298 00A	Nut, Hex, 8-32 W/Lockwasher	6
6	127314 00A	Clamp Plate, Lens	1
7	127316 00A	Mounting Bracket, PCB	1
8	127319 00A	Gasket Lens	1
9	112385 00A	Car Guide	1

14.3 CONNECTOR BRACKET
(SATELLITE CONTROLLER)



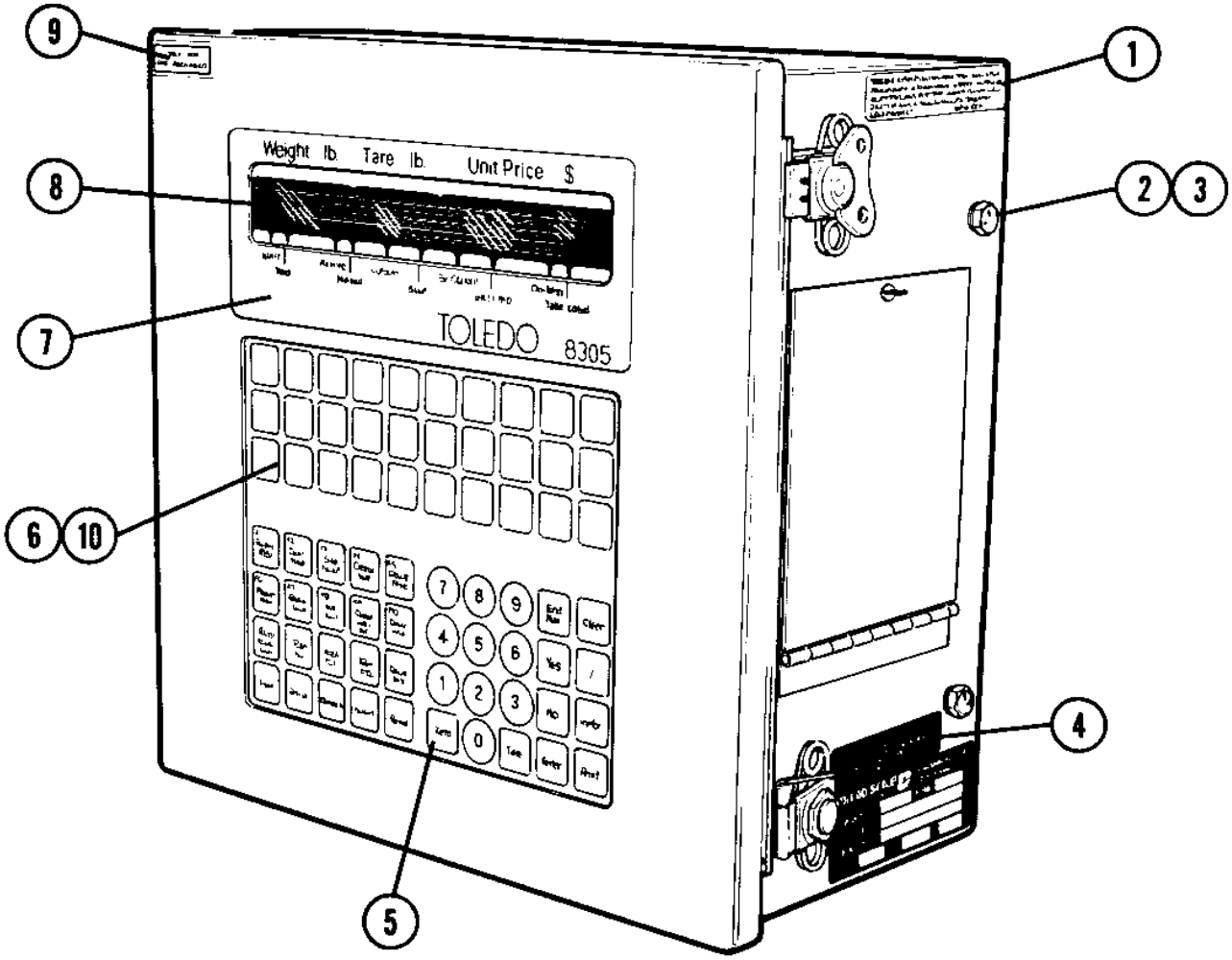
REF	PART NUMBER	DESCRIPTION	QTY
1	108568 00A	Screw Lock Kit 4-40	2
2	127188 00A	PCB Assembly, Loadcell Buffer	1
3	R02814 00A	Washer, Flat #8 (RAM 0101)	1
4	R03298 00A	Nut, Hex, 8-32 W/Lockwasher (RAM 0101)	3
4	R03298 00A	Nut, Hex, 8-32 W/Lockwasher	4
5	129966 00A	Cover Plate, Side	1
6	129999 00A	Gasket, Door (RAM 101)	1
7	127309 00A	Bracket, Bottom Connector	1
8	130980 00A	Insulator, Transformer	1
9	134303 00A	PCB Assembly, Wrapper Interface (RAM 3001 and 3100)	
10	134351 00A	Harness, Wrapper Interface PCB	1
11	129983 00A	Harness, Loadcell	1

14.4 LOGIC PCB & HARNESS (MASTER CONTROLLER)



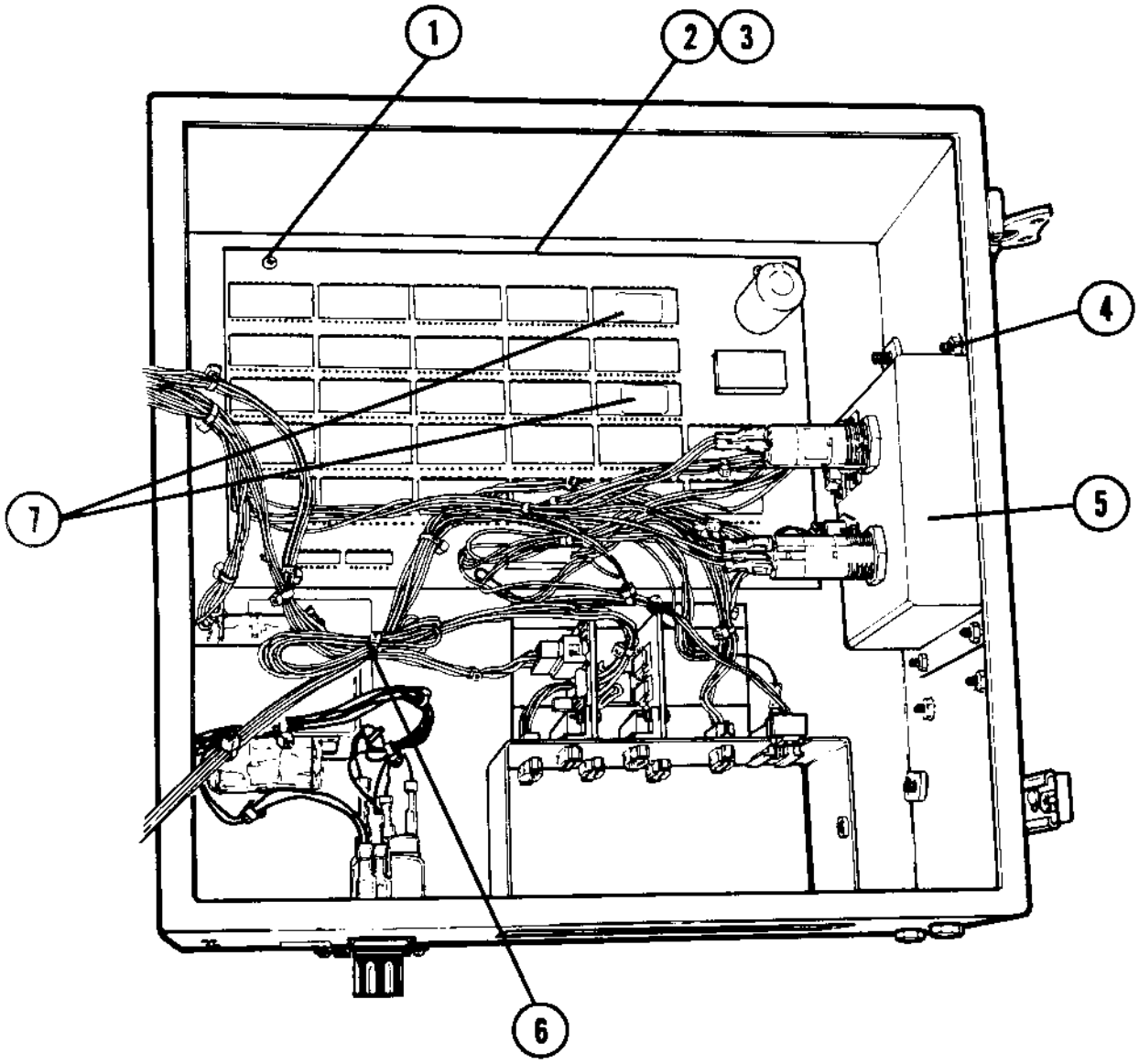
REF	PART NUMBER	DESCRIPTION	QTY
1	131060 00A	PCB Assembly, Logic Board	1
2	129984 00A	Harness, Logic (RAM 0002, 3100)	1
3	130990 00A	EPROM K.O.P. (A15) (RAM 0001, 0101)	1
4	R00844 130	Screw, 8-32 x 3/8” PH. RD. HD.	4
5	129993 00A	Insulator PCB	1
6	R03298 00A	Nut, Hex, 8-32 W/Lockwasher	10
7	130998 00A	Keyboard Assembly (Includes Gasket)	1
8	127320 00A	Gasket Keyboard	1
9	134555 00A	EPROM K.O.P. (A15) (RAM 3001, 3100, 3004, 3104)	1

14.5 DISPLAY / KEYBOARD



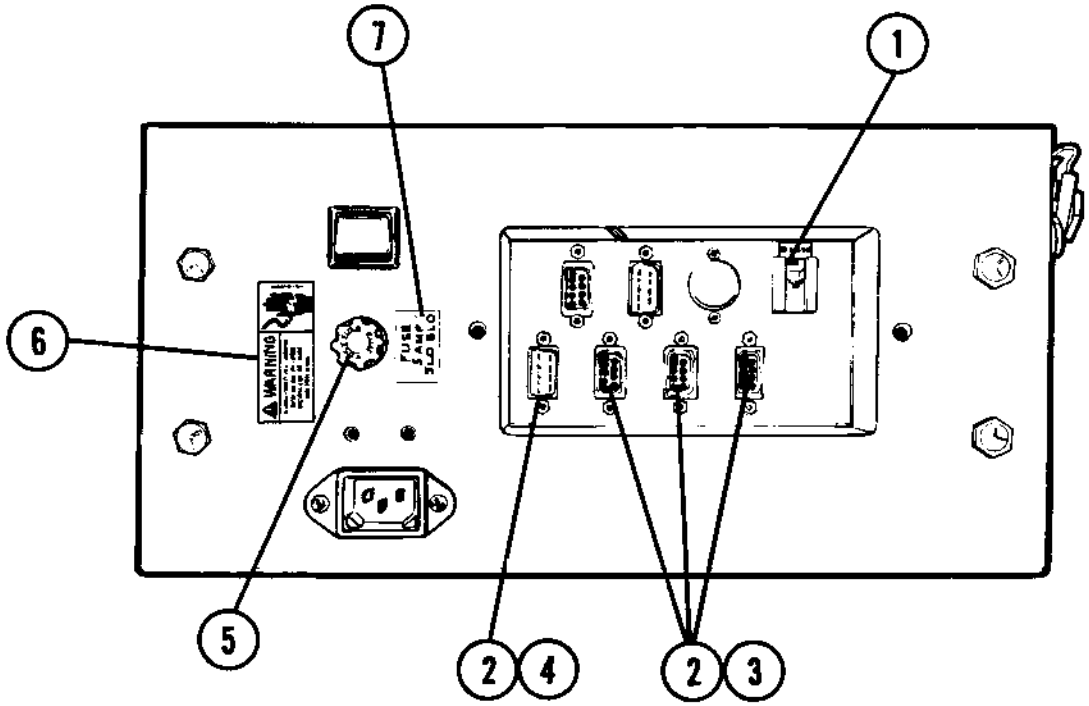
REF	PART NUMBER	DESCRIPTION	QTY
1	126440 00A	Label, Patent	1
2	R02072 020	Screw, 1/4-20 X 3/8” HEX. HD. SS	2
3	R03727 00A	Lockwasher 1/4” SS	2
4	B118540 00A	Label, FCC	1
5	130998 00A	Keyboard Assembly	1
6	129965 00A	Shield, Preset Keyboard	1
7	127347 00A	Decorative Bezel	1
8	127315 00A	Lens, Display	1
9	107560 00A	Label, PrepacK	1
10	127350 00A	Overlay, Preset Keyboard	1

14.6 SIDE CONNECTOR BRACKET AND MEMORY PCB



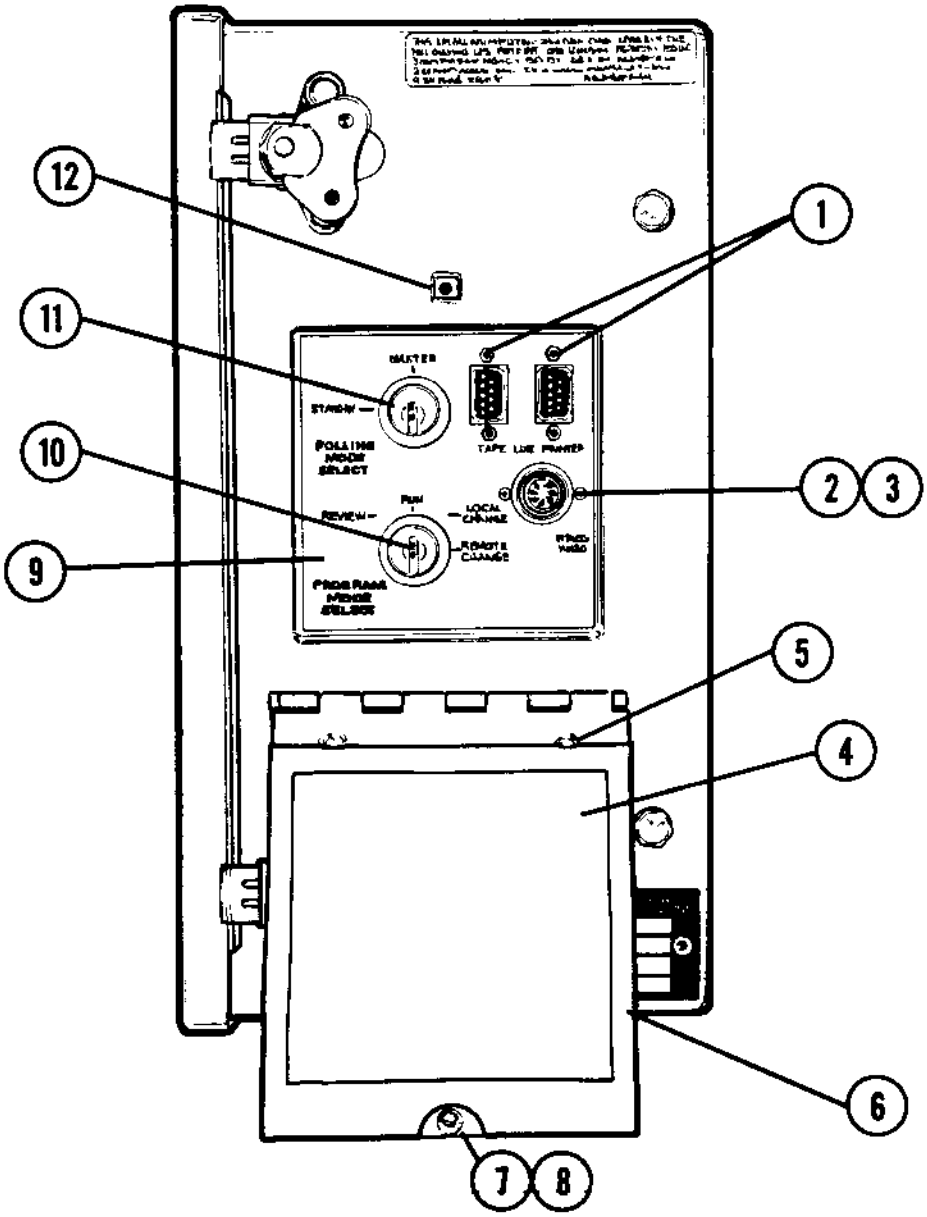
REF	PART NUMBER	DESCRIPTION	QTY
1	R00844 130	Screw, 8-32 x 3/8" PH. RD. HD (RAM 0001, 2001, 3001)	4
2	129993 00A	Insulator, PCB	1
3	128954 00A	PCB Assembly, Memory Board (RAM 0001, 2001, 3001)	1
4	R03298 00A	Nut, Hex, 8-32 W/ Lockwasher	4
5	127311 00A	Bracket, Side Connect (RAM 001, 2001, 3001)	1
6	095915 00A	Cable Tie or Equivalent	1
7	132793 00A	EPROM KOP, Memory PCB (RAM 0001)	1
	A133862 00A	EPROM KOP, Memory PCB (RAM 2001), (3001, (3004)	1

14.7 CONNECTOR BRACKET ASSEMBLY



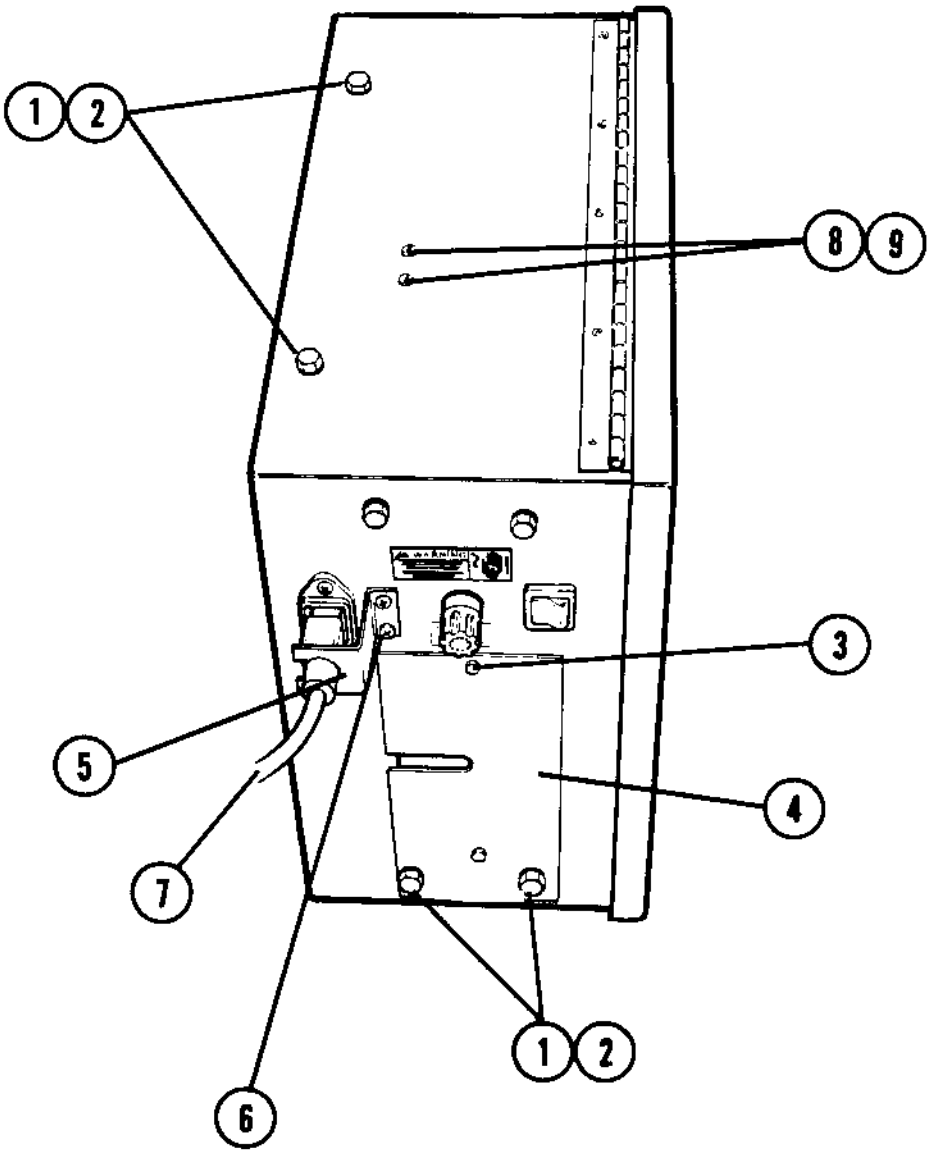
REF	PART NUMBER	DESCRIPTION	QTY
1	A127024 00A	Harness, T-Net (RAM 0101, 2100, 3100)	1
2	108568 00A	Screw Lock Kit 4-40 (RAM 0001, 2001, 3001)	3
2	108568 00A	Screw Lock Kit 4-40	1
3	129988 00A	Harness, Memory (RAM 0001, 2001, 3001)	1
4	129996 00A	Harness, Printer (RAM 0101, 2100, 3100)	1
5	112145 00A	Fuse, .5 Amp Slo Blo	1
6	126997 00A	Label, Warning - Disconnect Power	1
7	112147 00A	Fuse Label .5 Amp Slo Blo	1

14.8 SIDE CONNECTOR BRACKET (EXTERIOR)



REF	PART NUMBER	DESCRIPTION	QTY
1	108568 00A	Screw Lock Kit 4-40	2
2	R02101 050	Screw, 4-40 X 3/8" PH. RD. HD.	2
3	R03638 00A	Nut, Hex, 4-40 W/Lockwasher	2
4	127312 00A	Side Door Assembly	1
5	R03298 00A	Nut, Hex, 8-32 W/Lockwasher	2
6	127346 00A	Gasket Door	1
7	118450 00A	Retainer, Wing Screw	1
8	129968 00A	Wing Screw	1
9	127318 00A	Label, Side Connector Legend	1
10	129990 00A	Harness, Keyswitch 4 Position	1
11	127015 00A	Switch, 2 Position Keylock	1
12	118451 00A	Receptacle, 1/4 Turn Wing Nut	1
13	082373 020	Spare Key KOP	1

14.9 ENCLOSURE (BOTTOM)



REF	PART NUMBER	DESCRIPTION	QTY
1	R02072 020	Screw, 1/4-20 X 3/8” HEX. HD. SS	6
2	R03727 00A	Lockwasher, 1/4” SS	6
3	R02356 00A	Screw, 8-32 X 1/2” HEX. HD. SS	2
4	127310 00A	Plate, Bottom Connector Cover	1
5	129772 00A	Bracket, Linecord Relief	1
6	R03779 00A	Screw, 8-32 X 1/4” PH. RD. HD. SS	2
7	103867 00A	Linecord	1
8	R03283 00A	Nut, Hex 6-32 W/Lockwasher	2
9	R03434 00A	Screw, 6-32 X 3/8 SL. HD. SS	2
10	129773 00A	Indicator Mounting Angle (Not Shown)	1
11	130984 00A	Mounting Bracket - RH (Not Shown)	1
12	130986 00A	Mounting Bracket - LH (Not Shown)	1

14.10 COMMODITY RACK ASSEMBLY (130992 00A)

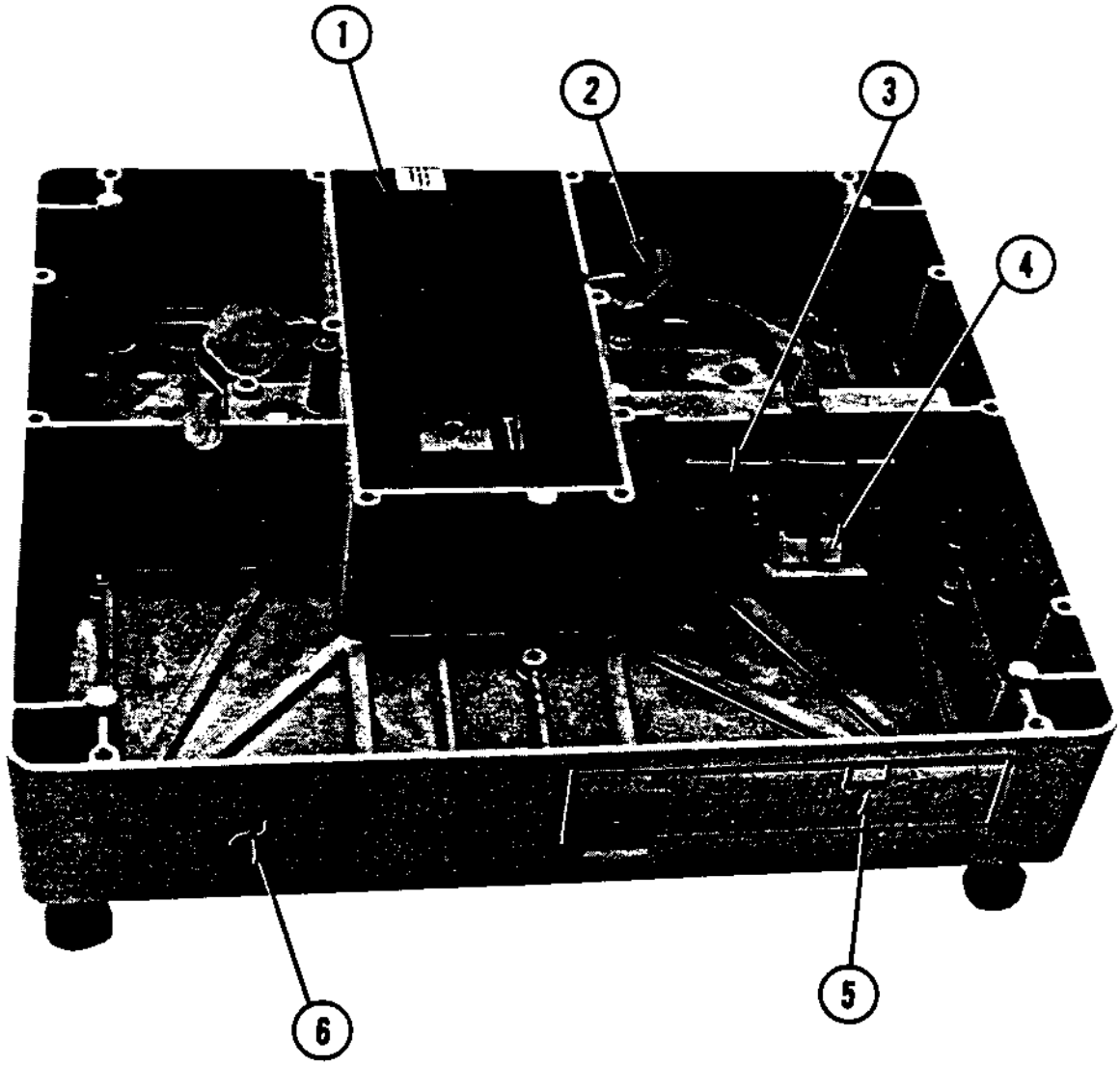
QTY.	PART NUMBER	DESCRIPTION
2	111191 00A	Bag, Plastic
13	118461 00A	Insert
15	121512 00A	Rod
1	121513 00A	Cover, Plate
15	121515 00A	Panel, Commodity Small
1	130991 00A	Commodity Rack, 8305
2	R02502 00A	Screw, 8-32 X 1/4” Truss
4	R03142 00A	Screw, 6-32 X 5/8” PRH
6	A109007 00A	Strip, Index (Beef)
1	A109008 00A	Strip, Index (Cheese)
6	A109009 00A	Strip, Index (Fish)
3	A109010 00A	Strip, Index (Lch Meat)
3	A109012 00A	Strip, Index (Poultry)
6	A109013 00A	Strip, Index (Prk, Ham)
3	A109014 00A	Strip, Index (Vel. Lamb)
2	A109027 00A	Wire Form
4	A109046 00A	Strip, Index (Opr Inst.)
1	A111140 00A	Shipping Container
1	B109006 00A	Mtg. Block, Hot Stamp
1	B109006 00B	Mtg. Block, Mold
3	B109011 00A	Strip, INDX (Prod. MIS)
	116303	Comm. Rack Ass’y. Ins.

14.11 8305 ACCESSORIES

PART NUMBER	DESCRIPTION	SALES NUMBER
127163 00A	Phone Jack, Wall Mt.	0901-0200
127165 00A	Cable, Communication 25’	0900-0211
131420 00A	Label, Keyboard Layout Chart (QWERTY)	
127164 00A	Cable, 8840 to 8422 (10’)	0900-0209
127177 00A	Cable, 8840 to 8422 (25’)	0900-0213
127013 00A	Programming Keyboard	0952-0024
	Bar Code Reader (Wander) KOP	0901-0247
129503 00A	Cable, 8213 to 8305 (6’)	0900-0229
129513 00A	Cables, 8305/8423 to 314-0001	0900-0233
129512 00A	Cables, 8305/8423 to 314-1001	0900-0232
A108952 00A	Tape Recorder	0916-0030
118675 00A	Tape Recorder Adapter Cable	0900-0100
130992 00A	Commodity Rack Assembly	0916-0047
127350 00A	Preset Overlay	
132807 00A	Wall Mount KOP	0901-0265
132803 00A	Harness, 8305-8213, 20 Ft.	0900-0259
132804 00A	Harness, 8305-315, 20 Ft.	0900-0260

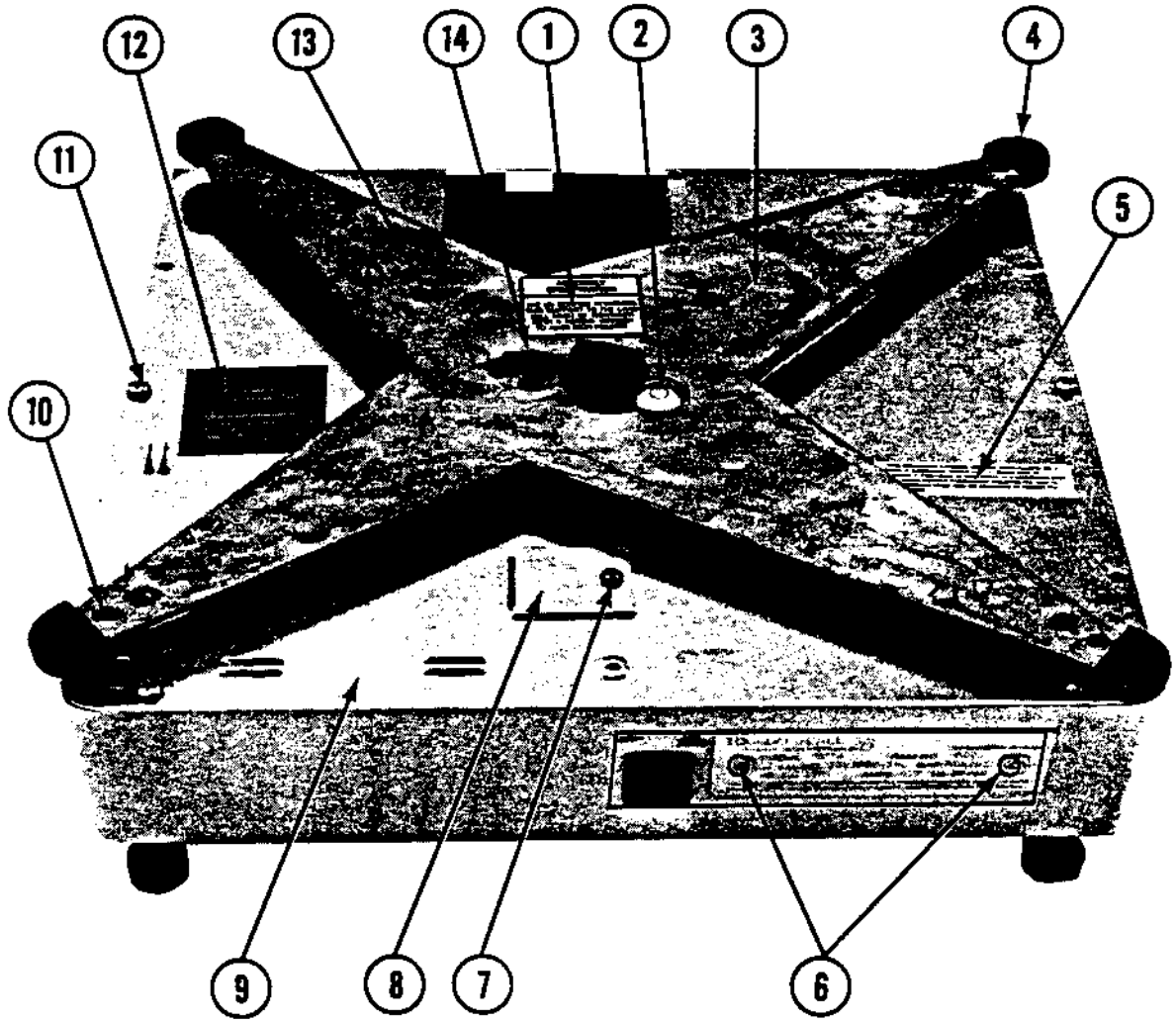
15.0 8213-0101 PARTS CATALOG

15.1 SCALE BASE
(INTERIOR)



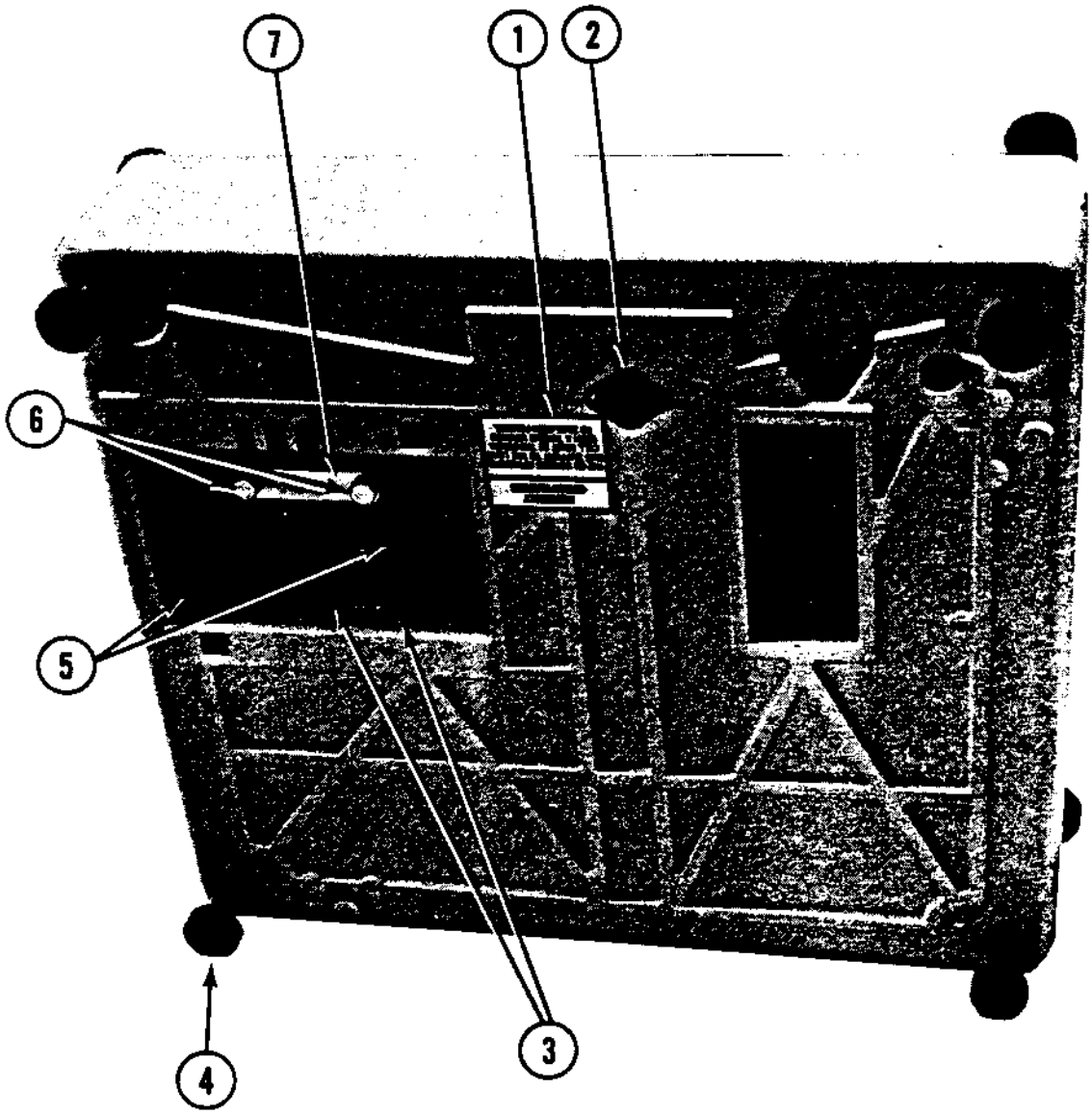
REF	PART NUMBER	DESCRIPTION	QTY
1	128805 00A	Loadcell, 30 kg (Low Res.)	1
2	126354 00A	Load Cell Harness	1
3	B120560 00A	Interface Bracket	1
4	127188 00A	PCB Ass'y. DLC Buffer	1
5	127352 00A	Label, Class III	1
6	B120574 00J	Base Ass'y. W/O Display	1

15.2 SPIDER COVER ASSEMBLY

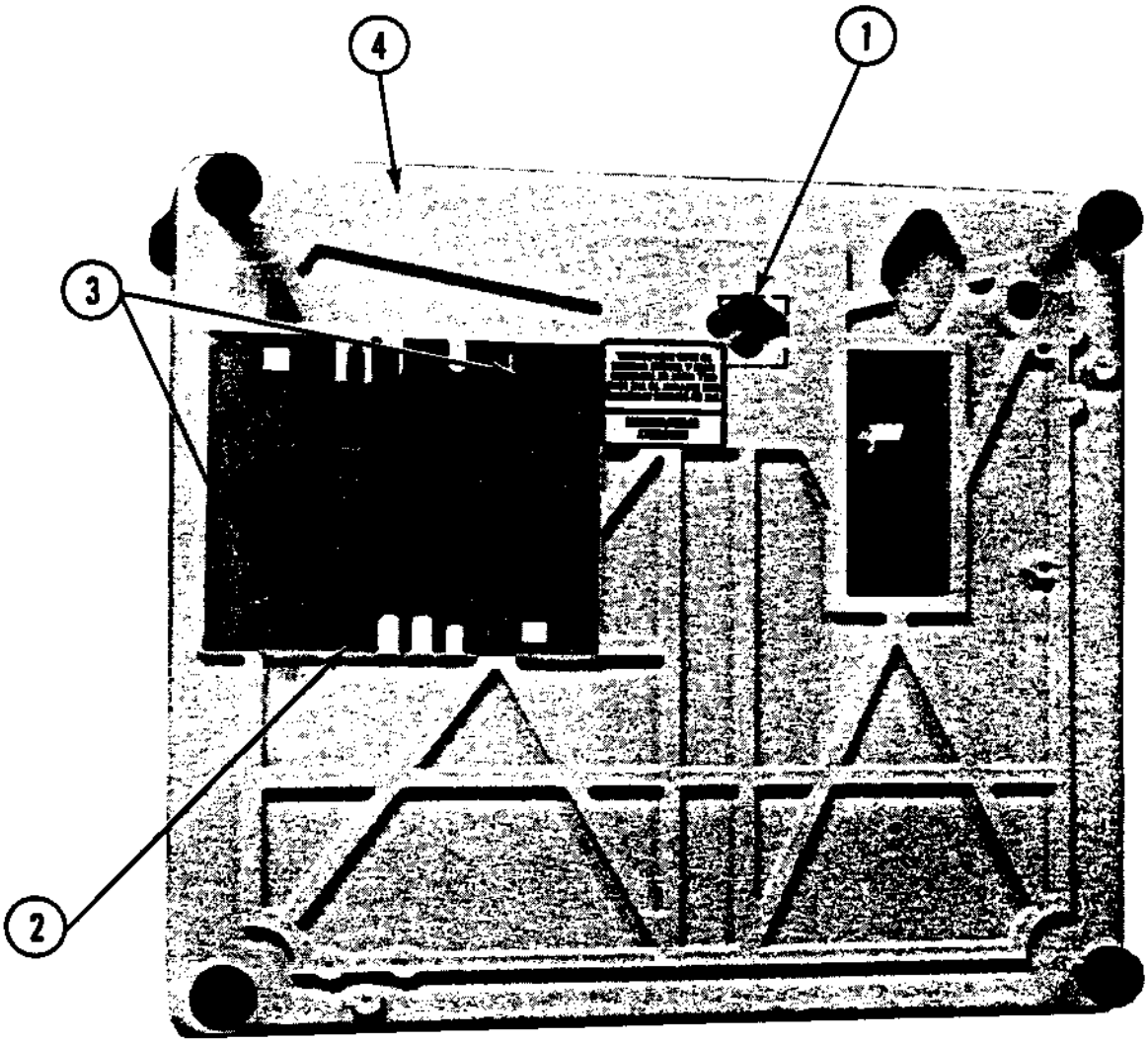


REF	PART NUMBER	DESCRIPTION	QTY
	819878 00A	Platter Assy., Roller	N.S.
	819829 00A	Platter Assy., Large	N.S.
1	119859 00A	Label, L/C Ass'y Specification	1
2	102689 00A	Level	1
3	C120514 00B	Spider, 30 kg. Machined	1
4	120509 00A	Bumper Tip	4
5	B113971 00A	Label, FCC	1
6	R02459 00A	Blind Rivet, Plastic	2
7	R00844 130	Screw, 8-32 X 3/8" PH. HD.	1
8	A120503 00A	Access Plate	1
9	A120502 00A	Top Cover	1
10	R03646 00A	Screw, 1/4-28 X1/2" Set	4
11	R02180 050	Screw, 8-32 X 3/8" PH. TT.	6
12	116033 00A	Label, Static Caution	1
13	R03575 00A	Screw, 3/8-24 X 1/2" Set	2
14	R03507 00A	Screw, 1/4-28 X 1" Cap. Soc.	2

15.3 SCALE BASE, BOTTOM

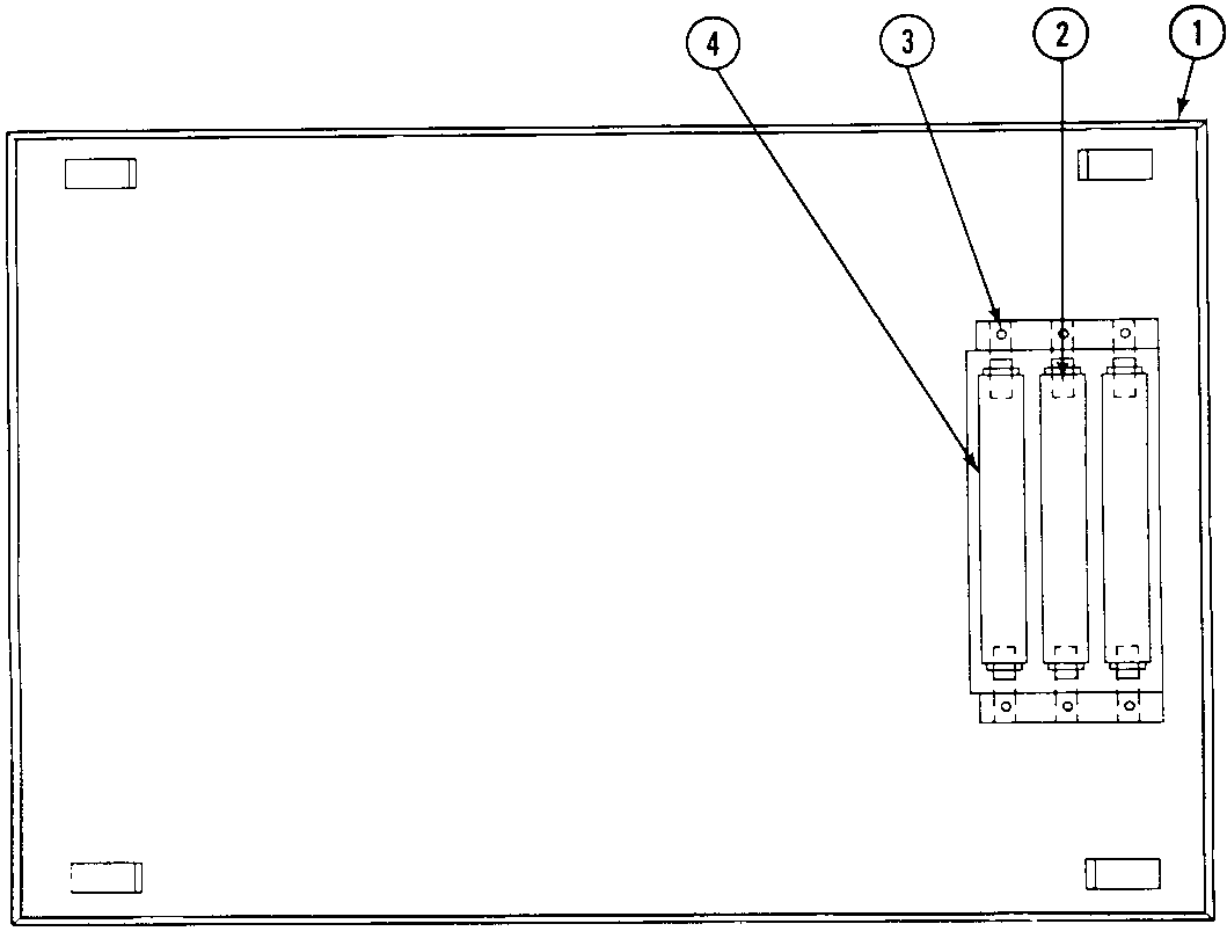


REF	PART NUMBER	DESCRIPTION	QTY
1	119859 00A	Label, L/C Ass'y. Specification	1
2	R03507 00A	Screw 1/4-28 X 1" Cap. Soc.	2
3	108568 00A	Screw Lock Assembly	1
4	114339 00A	Foot Assembly	4
5	R02180 050	Screw 8-32 X 3/8" PH. TT.	2
6	122603 00A	Thumb Screw	2
7	120512 00A	Strain Relief Plate	1



REF	PART NUMBER	DESCRIPTION	QTY
1	122590 00A	Load Cell Spacer	1
2	A120504 00A	Access Cover, I/O (not on some units)	1
3	120513 00A	Fastener, 1/4” Turn	2
4	126440 00A	Label, Patent	1

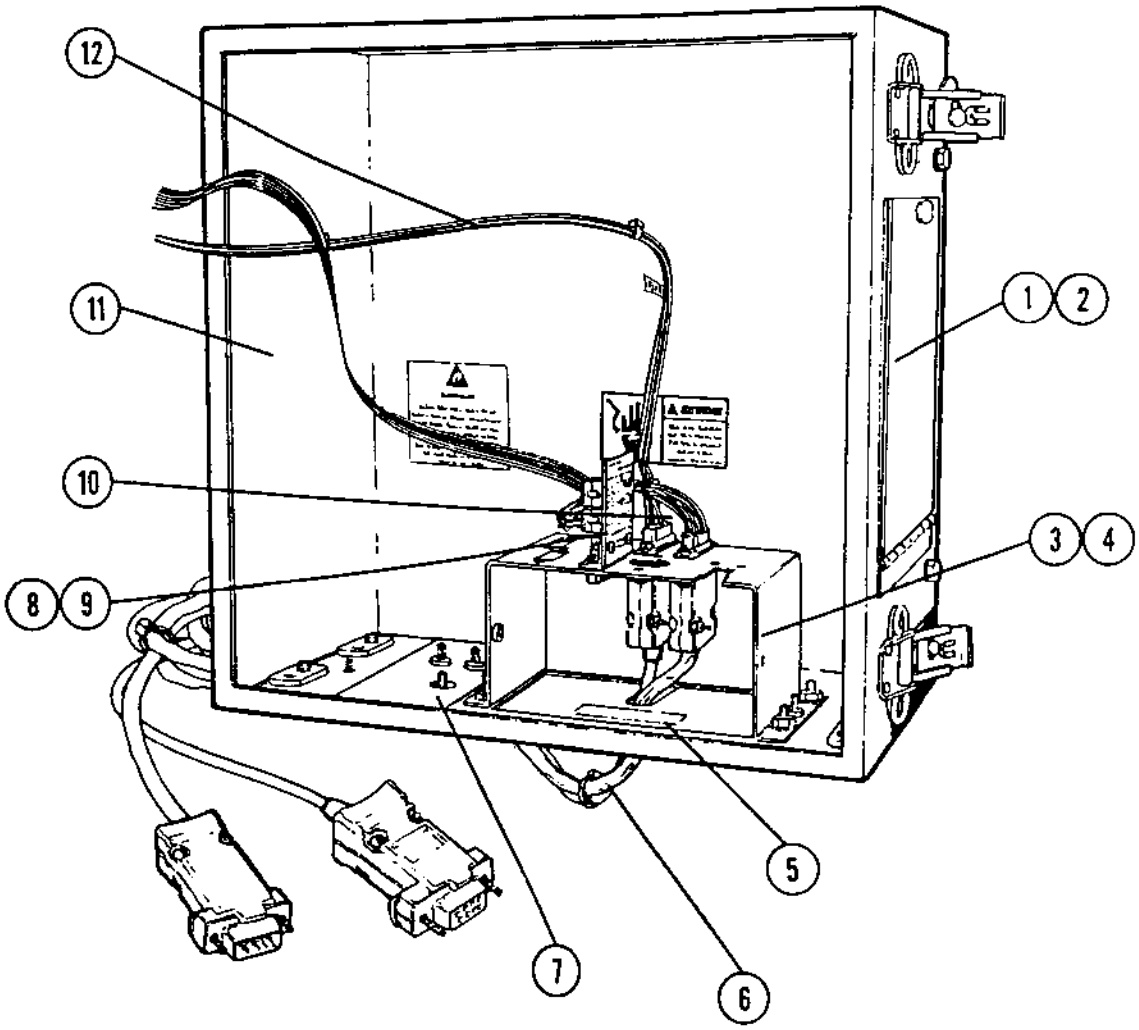
15.4 ROLLER PLATTER



REF	PART NUMBER	DESCRIPTION	QTY
1	819878 00A	Roller Platter Ass'y.	1
2	819808 00A	Roller Shaft	6
3	R03328 00A	Screw - 8-32 X 3/16" Soc. Head Set	6
4	819807 00A	Roller	3
5	819829 00A	Platter (Step-Savor)	1

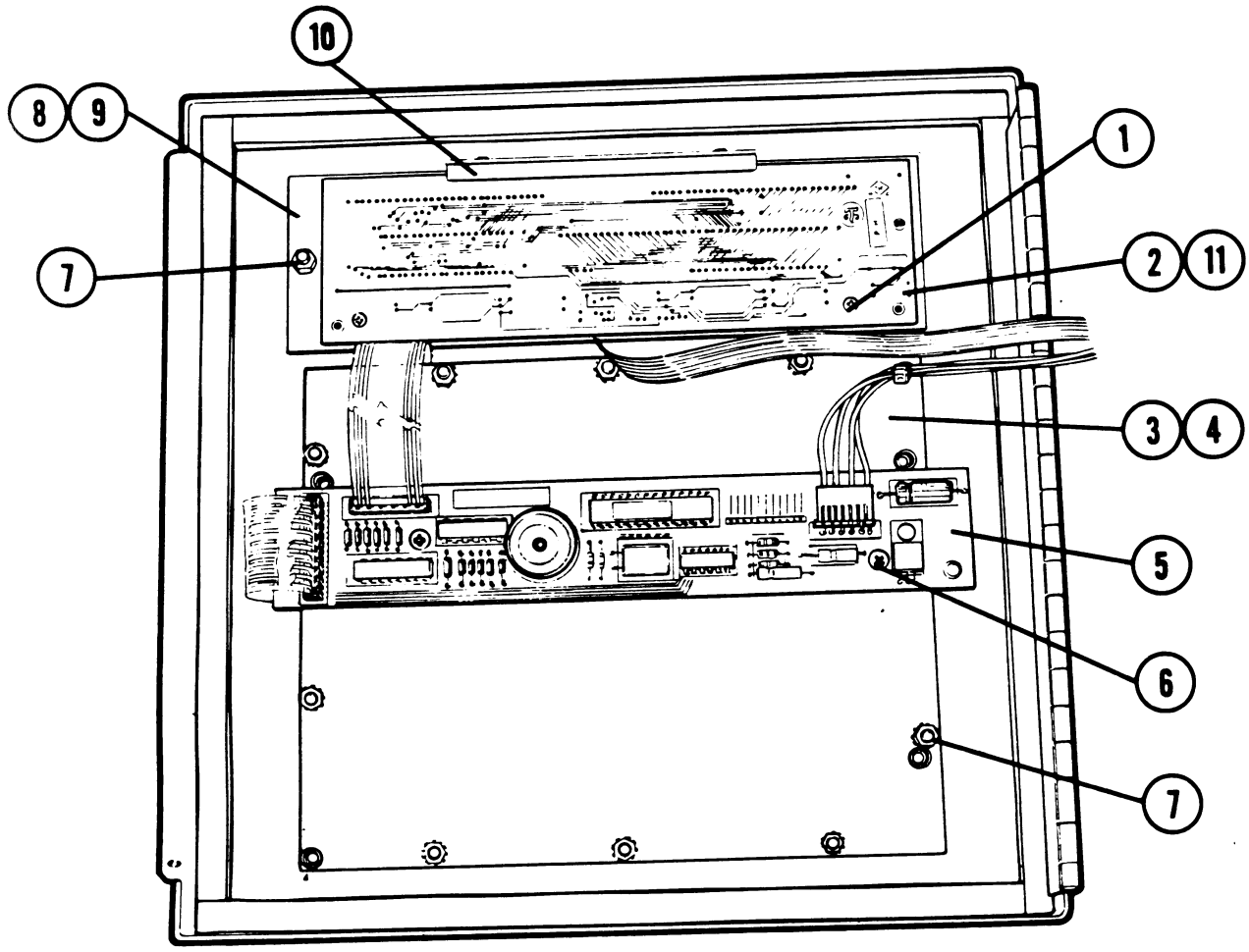
16.0 8305 REMOTE STATION (0901-0269)

16.1 ENCLOSURE INTERIOR



REF	PART NUMBER	DESCRIPTION	QTY
1	129966 00A	Cover Plate, Side	1
2	129999 00A	Gasket,Door	1
3	A127309 00A	Bracket, Bottom Connector	1
4	R03298 00A	Nut, Hex, 8-32 W/Lockwasher	4
5	129980 00A	Label, Inside Door	1
6	134325 00A	Cable Interconnect	1
	CONSISTS OF		
	134323 00A	Harness, Keyboard	1
	132324 00A	Harness, Display	1
	095915 00A	Cable Tie	20
7	134333 00A	Cover Plate	1
8	134303 00A	PCB Ass'y., Interface	1
9	108568 00A	Screw Lock Kit 4-40	1
10	134327 00A	Harness, Output	1
11	B129964 00A	Enclosure Ass'y.	1
12	134331 00A	Harness, Remote Keyboard	1

16.2 FRONT DOOR



REF	PART NUMBER	DESCRIPTION	QTY
1	R02247 00A	Screw, 6-32 X 9/16" PH. RD. HD.	2
2	124232 00A	PCB Assembly Display	1
3	130998 00A	Keyboard Assembly	1
4	127320 00A	Keyboard Bracket	1
5	134321 00A	Remote Preset PCB Assembly	1
6	R00844 130	8-32 X3/8 PH. RD. HD. Screw	2
7	R03298 00A	Nut, Hex, 8-32 W/Lockwasher	16
8	A 127314 00A	Clamp Plate, Lens	1
9	127319 00A	Gasket, Lens	1
10	112385 00A	Card Guide	1
11	127316 00A	Mtg. Bracket, PCB	1

17.0 ADDENDUMS

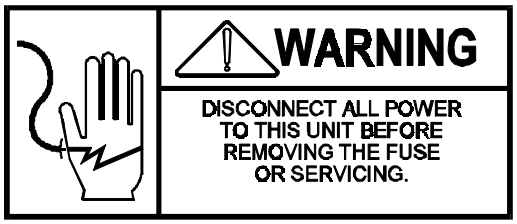
17.1 INSTALLATION INSTRUCTION: INTERFACE KOP MODEL 603/606 TO 8305 (0901-0274)

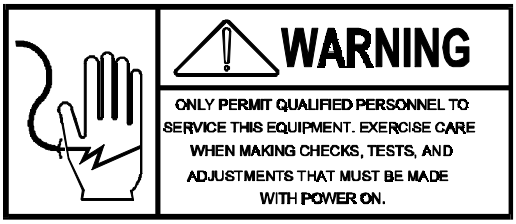
17.1.2 INTRODUCTION

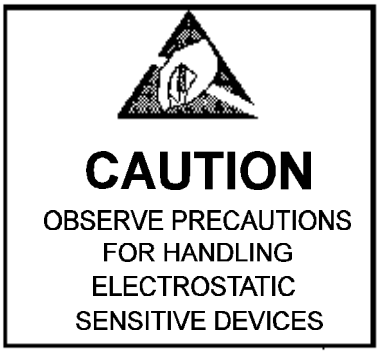
This bulletin contains the installation instructions to convert Model 8305-001 and 8305-0101 for use with the 603 Auto Labeler or the 0901-0269 Remote Station. After this kit is installed, the set up section tells what options are available and how to set up the controller.

KIT CONTAINS:

QTY.	PART NUMBER	DESCRIPTION
1	(*) 10856800A	SCREW LOCK KIT
1	(*) 13281500A	EPROM
1	(*) 13430300A	BUFFER PCB
1	(*) 13456000A	INSTALLATION
1	(*) 13473800A	HARNESS, WRAPPER







17.1.3 INSTALLATION INSTRUCTIONS:

17.1.3.1 Remove power from the 8305 controller.

17.1.3.2 Open the front door of the controller.

17.1.3.3 Remove the Wrapper PCB, (P/N(*)12893800A) and harness from the Connector Bracket (P/N(*)12370900A). (Some units may not have a Wrapper PCB).

17.1.3.4 Install the new Buffer PCB (P/N(*)13473800A) on the Connector Bracket in the position marked “Wrapper”. Secure with Screw Lock Kit (P/N(*)10856800A).

17.1.3.5 Install harness, P/N 13473800A between J6 on the Logic PCB and J2 on the Buffer PCB.

17.1.3.6 Install EPROM, (P/N(*)13281500A) at A15 on the Logic PCB.

(*) MAY HAVE LETTER REVISION

17.1.3.7 If a model 603 is to be connected, install cable (not supplied in this kit) from the connector Bracket marked “Wrapper” to the DB-9 connector on

the back of the 603/606 Labeler J-Box.

17.1.3.7.1 If an 0901-0269 Remote Operator Station is to be installed, refer to the instructions in that kit to complete installation.

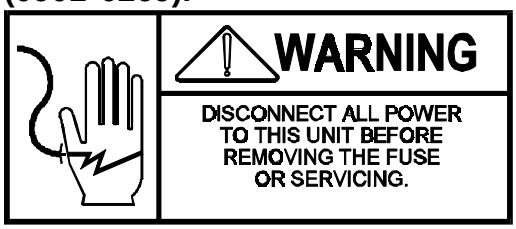
17.1.3.8 Close controller door and apply power. Refer to Technical Manual TM008305R00 for controller setup instruction.

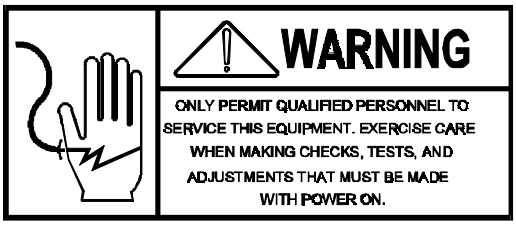
17.1.3.8.1 If an 0901-0269 Remote Operator Station is to be installed, refer to the instructions in that kit to complete installation.

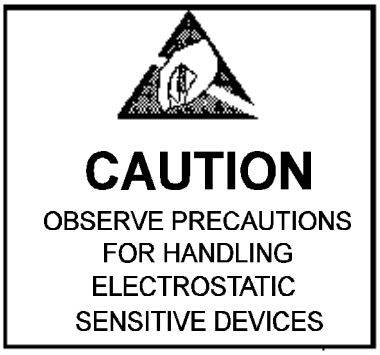
17.1.3.9 Refer to the attached soft switch menu to set switches for your customer's application.

NOTE: Wrapper Enable Software Switch must be "ON" when used with 603/606.

17.2 INSTALLATION INSTRUCTIONS FOR MODEL 8305 REMOTE STATION OPTION (0901-0269).







17.2.1 KIT CONTAINS:

QTY,	PART NUMBER	DESCRIPTION
3	(*) 10856800A	SCREW LOCK KIT
1	(*) 13432500A	CABLE, INTERCONNECT
1	(*) 13432600A	HARNESS, INPUT DISPLAY
1	(*) 13432700A	HARNESS, OUTPUT DISPLAY
1	(*) 13433000A	HARNESS, REMOTE KEYBOARD
1	(*) 13474400A	INSTALLATION INSTRUCTION

17.2.2 INSTALLATION INSTRUCTIONS:

NOTE: When this remote station is installed with 8305-0001 or 8305-0101, Kit 0901-0274 must be installed into the 8305 b e-fore proceeding.

17.2.2.1 Remove power from the 8305 controller.

17.2.2.2 Open the front door of the controller.

17.2.2.3 For the Master Controller (8305-0001), remove the DB9 Connector for the CRT and Line Printer from the Connector Bracket Assembly.

17.2.2.4 Install harness (P/N(*) 13432700A) at the position marked “LINE PRINTER” on the Connector Bracket Assembly.

17.2.2.5 Connect other end of harness (P/N(*) 1343300A) at J% on the Logic PCB.

17.2.2.6 Install harness, (P/N(*) 13432700A) at J4 on Buffer PCB, (*) 13430300A, located on the Connector Bracket Assembly.

(*) MAY HAVE LETTER PREFIX

17.2.2.8 Install harness, P/N 13232600A between either J7, J8 or J9 on the Logic PCB and J3 on the Buffer PCB.

17.2.2.9 Mount the controller in its permanent position.

17.2.2.10 Install cable P/N(*) 13432500A between the Controller and the Remote Station at the Connector on the Connector Bracket Assembly marked “LINE PRINTER” and “CRT”.

17.2.2.11 Close controller door and apply power. Refer to Technical Manual, TM008305R00 for controller setup instructions.

17.2.2.12 Refer to the attached soft switch menu to set switches for your customer’s application.

17.3 INSTALLATION INSTRUCTIONS BAR CODE OPTION KIT 0901-0247 FOR MODEL 8305 CONTROLLER.

17.3.1 KIT CONTAINS:

QTY.	PART NUMBER	DESCRIPTION
1	(*) 12730400A	PCB ASSEMBLY BAR CODE
1	(*) 12996700A	WAND BRACKET
1	(*) 13552300A	BAR CODE SCANNER
1	(*) 12998600A	HARNESS, LOGIC/SCANNER
1	(*) 12998700A	HARNESS, WAND/SCANNER
1	(*) 12999200A	INSULATOR, BAR CODE PCB
8	R01611050	NUT, HEX 8-32
2	R02101050	SCREW 4-40 X 3/8 PR. HD
2	R0363800A	NUT, 4-40 W/LOCKWASHER
1	13454800A	INSTALLATION INSTRUCTIONS

(*) MAY HAVE LETTER PREFIX

17.3.2 INSTALLATION INSTRUCTIONS:

17.3.2.1 Remove Power from the controller by unplugging it from the power source.

17.3.2.2 Open the front door of the controller.

17.3.2.3 Locate and remove the two screws and two nuts in the left side of the controller.

17.3.2.4 Using the screws & nuts removed in Step 3, mount the Wand Bracket on the outside of the controller. The larger hole of the bracket is mounted facing up.

17.3.2.5 Locate the PCB mounting posts on the left side of the controller.

17.3.2.6 Install one 8-32 hex nut on each mounting post.

17.3.2.7 Install the PCB Insulator.

17.3.2.8 Install the Bar Code PCB Assembly.

17.3.2.9 Install one 8-32 hex nut on each mounting post.

17.3.2.10 Install the Wand/Scanner Harness Connector on the bottom Connector Bracket using two 4-40 x 3/8 PR HD screws and two 4-40 w/Lockwasher nuts.

17.3.2.11 Connect the other end of the Wand/Scanner Harness at J2 on the Bar Code Scanner PCB.

17.3.2.12 Connect one end of the Logic/Scanner Harness at J5 on the Logic PCB and the other end at J1 on the Bar Code Scanner PCB.

17.3.2.13 Connect the Bar Code Wand at the Connector in the Bottom Connector Bracket and place the wand in the bracket.

17.3.2.14 Close the controller front door.

17.3.2.15 Apply power to the controller. Check the operation of the Bar Code Opti KOP. Refer to the operator manual, OM008305R00 for operator instructions.