## SHARP.

ELECTRONIC CASH REGISTER

## wool <br> ER-A520 ER-A530

## INSTRUCTION MANUAL



The above illustration shows the model ER-A520.

## WARNING

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.
Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## CAUTION

The AC outlet shall be installed near the equipment and shall be easily accessible.

## FOR YOUR RECORDS

Please record below the model number and serial number, for easy reference, in case of loss or theft. These numbers are located on the right side of the unit. Space is provided for further pertinent data.

Model Number $\qquad$
Serial Number $\qquad$
Date of Purchase $\qquad$
Place of Purchase $\qquad$

## INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model ER-A520/A530. Please read this manual carefully before operating your machine to gain a thorough understanding of the functions and features offered by this model ECR.
Please keep this manual for future reference, it may help you if you encounter operational problems.

## IMPORTANT

- Install your register in a location that is not subject to direct radiation, unusual temperature changes, high humidity or exposed to water sources.
Installation in such locations could cause damage to the cabinet and the electrical components.
- The register should not be operated by an individual with wet hands.

The water could seep into the interior of the register and cause component failure.

- When cleaning your register, use a dry, soft cloth. Never use solvents, such as benzine and/or thinner. The use of such chemicals will lead to discoloration or deterioration of the cabinet.
- The register plugs into any standard wall outlet ( $120 \mathrm{~V} \pm 10 \% \mathrm{AC}$ ) which utilizes a dedicated ground circuit.
Please note that other electrical devices on the same electrical circuit could cause the register to malfunction.
- If the register malfunctions, call your local dealer for service - do not try to repair the register yourself.
- For a complete electrical disconnection, the AC power cord must be removed from the wall outlet.
- Never disconnect the peripheral while the register remains plugged into the AC outlet.


## PRECAUTION

This Electronic Cash Register has a built-in memory protection circuit which is supported by rechargeable batteries.

It is important to know that all batteries will, in time, dissipate their charge even if not used. Therefore to insure an adequate charge in the protection circuit, and to prevent any possible loss of memory during or after installation, it is recommended that each unit be allowed to recharge for a period of 24 to 48 hours prior to and during use by the customer.
In order to charge the batteries, the machine must be plugged in. This recharging precaution can prevent unnecessary equipment malfunctions or service calls.

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## EXTERNAL VIEW OF THE ER-A520

## Front view



## Rear view



## EXTERNAL VIEW OF THE ER-A530

Front view


[^0]

## PRINTER

The printer is a receipt/journal dual station type thermal printer which delivers fast, quiet and high quality printing. The average life of the printer is approximately 5 million lines.

When opening the printer cover, unlock the printer cover using the printer cover lock key, and lift up the cover as shown in the diagram to the right.


Your register is shipped with the print head release lever held in the up position by a white shipping retainer. Be sure to remove this retainer (see the figure at the right) and push down the print head release lever before you use the register.


## Print head release lever

The print head can be lifted by the green lever on the right side of the printer. Pulling the lever forward, lifts the print head up. If the paper becomes jammed and you need to move the print head farther forward, you can pull the lever even further toward you and proceed with the removal of the jammed paper.


Note Do not attempt to remove the paper roll with the head in the down position. This may result in damage to the printer and print head.

## KEYBOARD

## 1 ER-A520 standard keyboard layout



| PRICECHANGE |  | AMT | INQ | SHIFT | AUTO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 10 | 15 | 20 | TESD | ${ }_{2}$ |
| 4 | 9 | 14 | 19 | NS | CH1 |
| 3 | 8 | 13 | 18 | CHK | CH2 |
| 2 | 7 | 12 | 17 | $\begin{aligned} & \text { MDSE } \\ & \text { SBTL } \end{aligned}$ | SBTL |
| 1 | 6 | 11 | 16 | CA | AT |

Note
All keys except the receipt paper feed and journal paper feed keys can be re-positioned. If you want to change the layout, please consult your authorized SHARP dealer.

|  | Receipt paper feed key | $\Theta$ | Discount 1 key |
| :---: | :---: | :---: | :---: |
|  | Journal paper feed key | \%1 | Percent 1 and 2 keys |
| 0 | Numeric keys | NC | New check key |
| 00 |  | PBLU | Previous balance key |
|  | Decimal point key | FINAL | Final key |
| CL | Clear key | NS | No-sale key |
| ©/FOR | Multiplication key | $\begin{array}{r} \text { TAX } \\ \text { SHIFT } \end{array}$ | TAX 1 shift key |
| RFND | Refund key | TAX | Manual tax key |
| VOID | Void key | $\begin{gathered} \text { MDSE } \\ \text { SBTL } \end{gathered}$ | Merchandise subtotal key |
| AMT | Amount entry key |  | Department keys |
| $\underset{\#}{\text { CASH }}$ | Cashier code entry key | AUTO 1 | Automatic sequencing 1 and 2 keys |
| Pluvip | PLU/UPC key | RA | Received-on-account 1 key |
| INQ | PLU/UPC inquiry key | po | Paid-out 1 key |
| $\begin{aligned} & \text { PRICE } \\ & \text { CHANGE } \end{aligned}$ | UPC price change key | $\begin{gathered} \mathrm{FS} \\ \mathrm{SHIFT} \\ \hline \end{gathered}$ | Food stamp shift key |


| FS <br> TEND | Food stamp tender key | CA/AT | Cash/amount tendered key |
| :--- | :--- | ---: | :--- |
| CH <br> 1 | CH <br> 2 | Charge 1and 2 keys | Receipt print key |
| CONV | Currency conversion key | SLIP | Slip printer key |

Note The following function keys can optionally be mounted in place of those shown in the figure of the standard keyboard layout. For details, please consult your authorized SHARP dealer.

## Optional keys

| DEPT $\#$ | Dept. number key | TIP | Tip paid key |
| :---: | :---: | :---: | :---: |
| \%3 $\sim 5$ | Percent 3 thru 5 keys | $\underset{1}{\text { EAT IN }} \sim$ | Eat in 1 thru 3 keys |
| $\Theta_{2} \sim \Theta^{5}$ | Discount 2 thru 5 keys | $\begin{aligned} & \text { TAX2 } \\ & \text { SHIFT } \end{aligned} \sim \begin{aligned} & \text { TAX4 } \\ & \text { SHIFT } \end{aligned}$ | Tax 2 thru 4 shift keys |
| $\mathrm{CH} 3^{\sim} \sim \mathrm{CH9}$ | Charge 3 thru 9 keys | DEPO | Deposit key |
| CA2 $\sim$ CA5 | Cash 2 thru 5 keys | $\begin{array}{\|l\|l\|} \hline \text { DEPO } \\ \text { RFND } \end{array}$ | Deposit refund key |
| $\sim$ Conv4 | Currency conversion 2 thru 4 keys | $\underset{\substack{\text { LEVEL } \\ \#}}{ }$ | PLU level shift number key |
| RA2 | Received-on-account 2 key | $\begin{gathered} \text { RP } \\ \text { SEND } \\ \hline \end{gathered}$ | Remote printer send key |
| PO2 | Paid-out 2 key | GRT | Gratuity exempt key |
| $\begin{gathered} \text { AUTO } \\ 3 \end{gathered} \sim \begin{gathered} \text { AUTO } \\ 10 \end{gathered}$ | Automatic sequencing 3 thru 10 keys | $\begin{gathered} \text { OPEN } \\ \text { TARE } \end{gathered}$ | Tare entry key |
| SRVC | Service key | REPEAT | Repeat entry key |
| $\begin{aligned} & \text { TRAY } \\ & \text { SBTL } \\ & \hline \end{aligned}$ | Tray subtotal key | GAS | Gasoline sales subtotal key |
| Return | Return key | $\underset{\text { P-SHIFT }}{\#}$ | Price shift number key |
| СНК2 $\sim$ СНК5 | Check 2 through 5 keys | SCALE | Scale entry key |
| $\begin{gathered} \text { TRANS } \\ \text { OUT } \end{gathered}$ | Transfer out key | $\mathrm{L1} \sim \mathrm{L5}$ | PLU level shift 1 thru 5 keys |
| $\begin{gathered} \text { TRANS } \\ \text { in } \end{gathered}$ | Transfer in key | P1 $\sim$ P6 | Price level shift 1 thru 6 keys |
| CA | Cash tip key | PRINT | Validation print key |
| CH <br> TIP | Charge tip key | CV CNT | Cover count entry key |


| NO DEL | No delete key | C $\begin{gathered}\text { C } \\ \text { NEXT }\end{gathered}$ | Condiment next key |
| :---: | :---: | :---: | :---: |
| BS | Bill separation key | C ${ }_{\text {CANCEL }}$ | Condiment cancel key |
| BT | Bill totalize/Bill transfer key (CHECK-ADD) | EDITEDIP | Edit tip key |
| BIRTH | Birthday entry key | $\begin{gathered} \mathrm{GLU} \\ \mathrm{RECALL} \end{gathered}$ | Table\# recall key |
| $\begin{aligned} & \text { RFND } \\ & \text { SALES } \end{aligned}$ | Refund sales key | 000 | Numeric key |
| WASTE | Waste mode key |  |  |

Note
The department and direct PLU keys may be expanded. If you require expansion of the department or direct PLU keys, please contact your dealer.

## 2 ER-A530 standard keyboard layout

|  |  | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | L1 | L2 | L3 | ${ }_{1}^{\text {AUTO }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | RCPT | \% | $\Theta$ | ${ }_{\text {AUTO }}$ |
| 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | Void | INQ | RP | $\begin{array}{\|c} \text { AUTO } \\ 3 \end{array}$ |
| 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | SERV | RFND | $\begin{aligned} & \text { PLUI } \\ & \text { SUB } \end{aligned}$ | NC | CONV |
| 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | $\text { © } / \mathrm{FOR}$ | - | CL | PBAL | CH |
| 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 7 | 8 | 9 | SRVC | CH2 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 4 | 5 | 6 | FINAL | CH3 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 1 | 2 | 3 | MDSE | CHK |
|  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 0 | 00 | 000 | SBTL | CAAT |

## Note

- All keys except the receipt paper feed and journal paper feed keys may be re-positioned.

If you want to change the keyboard layout, please consult your dealer.

- Please note that the price lookup/subdepartment/UPC key (요er ) and the previous balance key


| $\boldsymbol{\wedge}_{\text {RECEIPT }}$ | Receipt paper feed key | @/FOR | Multiplication key |
| :---: | :---: | :---: | :---: |
| $\underset{\text { JOURNAL }}{\boldsymbol{N}}$ | Journal paper feed key | RCPT | Receipt print key |
| 0 |  | RFND | Refund key |
| 00 |  | VOID | Void key |
|  | Decimal point key | PLU/ <br> SUB | Price lookup/subdepartment/ UPC key |
| L | Clear key | 1 | Direct price lookup keys |


| L1 | L3 | PLU level shift 1 thru 3 keys | AUTO <br> 1 | $\sim$ |
| :--- | :--- | :--- | :--- | :--- |

Note The following function keys can optionally be added in place of those shown in the figure of the standard keyboard layout. For details, please consult your authorized SHARP dealer.

## Optional keys



| LEVEL $\#$ | PLU level shift number key | REPEAT | Repeat entry key |
| :---: | :---: | :---: | :---: |
| L4 | PLU level shift 4 and 5 keys | AMT | Amount entry key |
| P-SHIFT $\#$ | Price shift number key | $\begin{aligned} & \text { PRICE } \\ & \text { CHANGE } \end{aligned}$ | UPC price change key |
| P1 | Price level shift 1 thru 6 keys | BIRTH | Birthday entry key |
| PRINT | Validation print key | RFND SALES | Refund sales key |
| $\begin{gathered} \mathrm{CV} \\ \mathrm{CNT} \end{gathered}$ | Cover count entry key | WASTE | Waste mode key |
| SLIP | Slip printer key | C | Condiment next key |
| BS | Bill separation key | CAC | Condiment cancel key |
| BT | Bill totalize/Bill transfer key (CHECK-ADD) | EDIT <br> TIP | Edit tip key |
| NO DEL | No delete key | $\begin{gathered} \text { GLU } \\ \text { RECALL } \end{gathered}$ | Table\# recall key |
| $\begin{gathered} \text { GRT } \\ \text { EXEMPT } \end{gathered}$ | Gratuity exempt key | $\begin{gathered} \mathrm{FS} \\ \mathrm{SHIFT} \end{gathered}$ | Food stamp shift key |
| $\begin{aligned} & \text { OPEN } \\ & \text { TARE } \end{aligned}$ | Tare entry key | $\begin{gathered} \text { FS } \\ \text { TEND } \end{gathered}$ | Food stamp tender key |

Note
Department and direct PLU keys can be expanded. If you require expansion of the department or direct PLU keys, please contact your authorized SHARP dealer.

## 3 Standard key number layout

These key numbers are used for positioning of department keys and direct PLU keys. For further details with positioning departments and PLU keys, please refer to pages 109 and 130.
This layout can be changed by your dealer.

## For ER-A520



|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 005 | 010 | 015 | 020 |
| 004 | 009 | 014 | 019 |
| 003 | 008 | 013 | 018 |
| 002 | 007 | 012 | 017 |
| 001 | 006 | 011 | 016 |



For ER-A530


## 4 Installing the keyboard sheet (ER-A530)

Insert the keyboard sheet between the keyboard cover and the cabinet as illustrated below. Then press the claws at the top of the keyboard cover into the slots in the cabinet.


- Do not spread the keyboard cover too far to avoid tearing the tabs.
- Replace the keyboard sheet with a new one if by chance it gets wet. Use of a wet keyboard sheet may cause problems.
- Be sure to use only SHARP-supplied keyboard sheets. Thick or hard sheets can make key operations difficult.
- Place the keyboard sheet evenly under the keyboard cover.
- If you require a new keyboard sheet, please contact your dealer.
- The keyboard cover will eventually wear out. If your keyboard cover is dirty or broken, replace the cover with a new one. For details, please contact your authorized SHARP dealer.


## KEYS AND SWITCHES

## 1 Mode switch and mode keys

The mode switch can be operated by inserting one of the three supplied mode keys - manager (MA), submanager (SM), and operator (OP) keys. These keys can be inserted or removed only when the switch is in the "REG" or "OFF" position.


The mode switch has these settings:
OFF: This mode locks all register operation.
No change occurs to register data.
OP X/Z: This setting allows cashiers to take $X$ or $Z$ reports for their sales

- Submanager key (SM)
 information. It can also be used for displaying the date/time and printing the employee's arrival/departure times. And it can be used to toggle receipt state "ON" and "OFF" by pressing the ®COTF key. (This setting may be used only when your register has been programmed for "OP X/Z mode available" in the PGM2 mode.)
REG: For entering sales
PGM1: To program those items that need to be changed often: e.g., unit prices of departments, PLUs or UPCs, and percentages.
PGM2: To program all PGM1 programs and those items that do not require frequent changes: e.g., date, time, or a variety of register functions.
MGR: For manager's and submanager's entries The manager can use this mode to make entries that are not permitted to be made by cashiers - for example, after-transaction voiding and override entries.
$\mathbf{X 1 / Z 1 : ~ T o ~ t a k e ~ t h e ~} X / Z$ report for various daily totals.
$\mathbf{X 2} / \mathbf{Z} 2$ : To take the X/Z report for various periodic (weekly or monthly) consolidation of totals.


## 2 Drawer lock key

This key locks and unlocks the drawer. To lock it, turn 90 degrees counterclockwise. To unlock it, turn 90 degrees clockwise.


## 3 Printer cover lock key

This key locks and unlocks the printer cover. To lock it, turn 90 degrees counterclockwise. To unlock, turn 90 degrees clockwise.


## 4 Cashier/Server code entry key

The ER-A520 provides a cashier system and the ER-A530 provides a server system. The cashier/server codes are available in two variants: Variant 1, the codes are displayed ("0000" to " 9999 "), and Variant 2, the codes are not displayed (always "****").
When the cashier/server code is assigned by Variant 2 (codes not displayed), the register prints $* * * *$ as the cashier/server code and the cashier/server name are printed both on the receipt and journal for every transaction.

## Procedure

■ Sign-on


Sign-off
Variant 1 / Variant 2 :


Note
All settings depend on how the register has been programmed. For the available selection of these settings, please consult your authorized SHARP dealer.

## 5 Receipt ON/OFF function

You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the RCPT key in the OP X/Z position. This key toggles the receipt printing status ON and OFF. To check the receipt printing status, turn the mode switch to the OP $X / Z$ position or press the $C L$ key in the REG mode. When the function is in the OFF status, the receipt off indicator "_" illuminates.

Note
Your register will print reports regardless of the receipt status. This means that the receipt roll must be installed even when the receipt state is "OFF" when taking reports.

## DISPLAYS

## 1 Operator display

The operator display consists of a two-line dot-matrix display (16 characters/line).


## - Cashier/server code or mode name

The mode you are in is displayed. When a cashier/server is assigned, the cashier/server code is displayed in the REG or OP X/Z mode. For example, "0001" is displayed when cashier/server 0001 is assigned.

## - Repeat

The number of repeats is displayed, starting at " 2 " and increments with each repeat. When you have registered an item ten times, the display will show " 0 ". ( $2 \rightarrow 3 \ldots . . .9 \rightarrow 0 \rightarrow 1 \rightarrow 2 \ldots$...)

## - Sentinel mark

When amounts in the drawer reaches the amount you preprogrammed, the sentinel mark " $X$ " is displayed to advice you to remove the money to a safe place.

- Power save mark

When the cash register goes into the power save mode, the power save mark (decimal point) is displayed.

- Stock alarm indicator

When the stock counter of the PLU or UPC which you entered is zero or negative, the alarm indicator (decimal point) is displayed.

- Function message display area

Item labels of departments and PLU/subdepartments/UPC and function text you use, such as \%1, (-) and CASH are displayed here. For the details of function texts, please refer to pages 146 to 149. When an amount is to be entered or entered, "AMOUNT" is displayed: When an amount is to be entered, ------ - is displayed in the numeric entry display area with "AMOUNT". When a preset price has been set, the price is displayed in the numeric entry display area with "AMOUNT".

- Numeric entry display area

Numbers entered using numeric keys are displayed here.

## Date and time display

Date and time appear on the display in the OP X/Z, REG, or MGR mode. In the REG or MGR mode, press the (in key to display the date and time.

## Error messages

When an error occurs, the corresponding error message is displayed in the function message display area. For the details of error messages, please refer to the "Error message table" on page 223.

## 2 Customer display (Pop-up type)



## PRIOR TO ENTRIES

## 1 Preparations for entries

Before registrations, insert the operator key into the mode switch and turn it to the REG position and check the following items:

## ■ Receipt and journal paper rolls

If the receipt and journal paper rolls are not set in the machine or there are low rolls, install new ones according to section "4. Installing and removing the paper rolls" under "OPERATOR MAINTENANCE."

## Receipt ON/OFF function

You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the RCCF key in the OP X/Z position. This key toggles the receipt printing status ON and OFF. To check the receipt printing status, turn the mode switch to the OP X/Z position or press the CL key in the REG mode. When the function is in the OFF status, the receipt off indicator "_" illuminates.

## Note

Your register will print reports regardless of the receipt state. This means that the receipt roll must be installed even when the receipt state is "OFF" when taking reports.

## Cashier/Server assignment

The ER-A520 requires a cashier to be assigned prior to operational item entries. The ER-A530 enforces that a server must enter their code into the register. Depending on register settings, it is possible to keep the same cashier/server code assigned when the same cashier/server is to be used for all transactions within a set period. As previously mentioned, there are two variants to consider for the display and print of the cashier/server codes.


## Procedure

$\square$ Sign-on


Sign-off
Variant 1 / Variant 2 :


## Note

- If you want to enter a cashier/server code before every transaction, please consult your authorized SHARP dealer.
- For the display type selection of the cashier/server code, "Variant 1" has been preset. For the selection of the "Variant 2", consult your authorized SHARP dealer.
- The cashier/server can be changed during a transaction. Please consult your authorized SHARP dealer.


## 2 Power save mode

The register will enter into the power save mode when no entries are performed based on the pre-programmed time limit (by default, 30 minutes).
When the register goes to the power save mode, the operator and customer displays will turn off. This is indicated by a decimal point at the left most position of the lower line. The register will return to normal operation mode when any key is pressed or a mode is changed with the mode key. Please note when the register is recovered by any key entry the initial key entry is ignored. After the recovery, you may start the key entries from the beginning.

## 3 Error warning

In the following examples, your register will go into an error state accompanied with a warning beep and a corresponding error message. Clear the error state by pressing the $C L$ key and take proper action. Please refer to the error message table on page 223.

- When you enter an over 32-digit number (entry limit overflow): Cancel the entry and re-enter a valid number.
- When you make an error in key operation: Clear the error and continue entries.
- When you make an entry beyond a programmed amount entry limit: Check to see if the entered amount is correct. If it is correct, it be possible to make the entry in the MGR mode. Contact your manager.
- When an including-tax subtotal exceeds eight digits: Clear the subtotal by pressing the CL key and press the CAAT, CA2 thru CA5, CHK, CHK2 thru CHK5, or CH1 thru CH 9 key to finalize the transaction.


## ENTRIES

## Note

The example entries provided within this manual describe the function key labeled Pupl which is used for the model ER-A520. For the model ER-A530, please substitute the (Puvi key with the $\begin{aligned} & \text { Puul } \\ & \text { SuB }\end{aligned}$ function key.

## 1 Item entries

## Single item entries

## Procedure

## Department entries (direct department entries)

Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.
When using a programmed unit price

*Less than the programmed upper limit amounts

Note When those departments for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.

## Department entries (indirect department entries)


*Less than the programmed upper limit amounts

## PLU entries (indirect PLU entries)

Enter a PLU code and press the $\begin{aligned} & \text { PLUU } \\ & \text { UPC } \\ & \text { key }\end{aligned}$


Note
When those PLU's for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.

Subdepartment (open PLU, open and preset PLU) entries

*Less than the programmed upper limit amounts

## PLU entries (direct PLU entries)

When using a programmed unit price


## UPC entries



## Repeat entries

You can use this function for entering a sale of two or more same items.


## Example

Key operation
Print

| Repeated department entry (direct) | 200 | 8 |
| :---: | :---: | :---: |
| Repeated department entry (indirect) |  |  |
| Repeated PLU entry (indirect) | 10 |  |
| Repeated PLU entry (direct) |  | 51 |
| Repeated subdepartment entry | 60 500 |  |
| Repeated UPC entry | 5012345678900 |  |
| Repeated department entry (direct) using the repeat key | 600 |  |


| DPI. 08 | \$2.00 |
| :---: | :---: |
| DPI. 08 | \$2.00 |
| DPI. 08 | \$2.00 |
| DPI. 05 | \$6.80 |
| DPT. 05 | \$6.80 |
| PLU00010 | 87.15 |
| PLU00010 | \$7.15 |
| PLU00010 | \$7.15 |
| PLU00051 | \$2.85 |
| PLu00051 | \$2.85 |
| PLU00060 | \$5.00 |
| PLU00060 | \$5.00 |
| 5012345678900\# |  |
| APPLE | \$2.50 |
| 5012345678900\# |  |
| ${ }^{\text {APPLE }}$ | \$2.50 |
| DPI. O 2 | \$6.00 |
| DPI. 02 | \$6.00 |
| DPI. 02 | \$6.00 |
| CASH | \$79. 75 |

## ■ Multiplication entries

Use this feature when you need to enter two or more same items.
This feature helps when you sell a large quantity of items or need to enter quantities that contain decimals.

## Procedure



- After scanning a UPC code or pressing the PUWC key, when the item does not exist in the file, the display will show "NO RECORD". Enter the unit price using the AMT key and department no. with the
- Q'ty: Up to four digits integer + three digits decimal
- Unit price: Less than a programmed upper limit
- Q'ty $\times$ unit price: Up to seven digits


## Example

Key operation

| Department entry (direct) |  |
| :---: | :---: |
| Department | $2 \square$ |
| entry | 5 (\%EPT |
| (indirect) | 250 DEPT |
| PLU entry | 15 ¢0, |
| (indirect) | 13 (exu) |
| PLU entry (direct) | $8 \square 250$ |
|  | $3 \stackrel{+1}{\square 08}$ |
| Subdepartment | 60 P0\% |
|  | 100 (Ru) |
|  | 5 ¢ов |
| UPC entry | 5012345678900 ¢ PVC) |
|  | CAAT |

Print

|  |  |
| :--- | ---: |
| DPT. O8 | $7.500 @ \$ 1.65$ |
| DPT. O5 | $2 @ \$ 2.50$ |
| PLU00013 | $15 @ \$ 5.100$ |
| PLU00058 | $8.250 @ \$ 3.50$ |
| PLU00060 | $3 @ \$ 4.75$ |
| $5012345678900 \#$ | $5 @ \$ 2.50$ |
| APPLE | $\$ 12.50$ |
| CASH | $\mathbf{\$ 8 9 . 1 3}$ |

## ■ Successive multiplication entries

This function may be desired when you enter a sale of items sold by area (square feet).

## Procedure



- After scanning a UPC code or pressing the PUWC key, when the item does not exist in the file, the display will show "NO RECORD". Enter the unit price using the AMT key and department no. with the
- Length or width: Up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: Less than a programmed upper limit
- Length $\times$ Width $\times$ Unit price: Up to seven digits

Note

- For actual use of this function, please consult your dealer.
- You must use a decimal point $(\bullet)$ key when entering quantities that are fractional.


## Example

Key operation


Print


## Split-pricing entries

You may use this function when your customer wants to purchase items normally sold in bulk.

## Procedure


 show "NO RECORD". Enter the unit price using the AMTT key and department no. with the ${ }^{\left[{ }^{[E P T T}\right]}$ key.

- Selling quantity: Up to four digits integer + three digits decimal
- Base quantity: Up to two digits (integer)


## Example

Key operation

| Department entry |  |
| :---: | :---: |
|  | 8 \%or |
| PLU entry | 5 FOR |
|  | 35 |
|  | $5 \stackrel{108}{9}$ |
| UPC entry | $6 \stackrel{1}{60}$ |
|  | 5045678912304 |

Print

| DPT. 07 | $7 \text { O } 10 / \$ 6.00$ |
| :---: | :---: |
|  | 885/93.00 |
| PLU00035 | \$ $\$ 4.80$ |
| 5045678912304\# | $5067 \$ 2.50$ |
| CUP_A | \$2.09 |
| CASH | \$11.09 |

## Note

 You must use the decimal point $(\bullet)$ key when entering selling quantities that are fractional.
## ■ Single item cash sale (SICS)/single item finalize (SIF) entries

## SICS entries

- This function is useful when a sale is for only one item and is for cash; such as a pack of cigarettes. This function is applicable only to those departments that have been set for SICS or to their associated PLUs, subdepartments or UPCs.
- The transaction is finalized and the drawer opens as soon as you press the department key, AMT key, 四渑 key, the direct PLU key or scanning a UPC code.


## Example

Key operation
Print
For finishing
the transaction

| Print |  |
| :--- | ---: |
| DPI.O9 | $\$ 2.50$ |
| CASH | $\$ 2.50$ |

If an entry to a department, PLU/subdepartment or UPC set for SICS follows entries to departments, PLUs/subdepartments or UPC not set for SICS, it does not finalize and results in a normal sale.

## SIF entries

- If an entry to a department, PLU/subdepartment or UPC set for SIF follows entries to departments, PLUs/subdepartments or UPC not set for SIF, the transaction is finalized immediately as a cash sale.
- Like the SICS function, this function is available for single-item cash settlement.


## Example

Key operation

| For finishing |
| :--- |
| the transaction |
| 1745 <br> 1500 |

Print

| DPI.08 | $\$ 17.45$ |
| :--- | ---: |
| DPT.09 | $\$ 15.00$ |
| CASH | $\$ 32.45$ |

## Scale entries

For making entries for weighed items, a scale may be connected where by the weight is automatically read from the scale. To make refund or return entries, the weight is entered manually while the scale platter is empty and reads zero.

## i) Auto scale entries



- Open tare weight: Up to 5 digits (integer + decimal)
- Net weight: Up to 5 digits (integer + decimal)
- Base weight: Up to 2 digits (integer)

Note - The register can be programmed with up to nine tare tables and allows different tares to be assigned to them.

- When the scale key is pressed, the weight is automatically read from the connected scale (option) and the net weight appears in the register display.
- When the item is programmed for "Scale compulsory", it is not necessary to press the SCALE key.


## Example

Key operation


Print

| 32.85 lb |  |
| :---: | :---: |
| DPT. 01 <br> 37. 25 lb | \$65.70 |
| © $15 / \$ 7.15 / \mathrm{lb}$ PLUOOOO1 | \$17.76 |
| CASH | . 46 |

## ii) Manual scale entries of refunded items



- Net weight: Up to 5 digits (integer + decimal) which is from the customer's receipt.
- Base weight: Up to 2 digits (integer)


## Example

Key operation
$32-85$ RAND SCALE 2001 $37-25$ RFND SCALE 1

Print

| MAN HT 32.85 lb |  |  |
| :---: | :---: | :---: |
| DPT. 01 R-65.70 "RETURNED FOR CREDIT" |  |  |
| MAN WT |  |  |
| 37.25 lb |  |  |
|  |  |  |
| PLU00001 R-17.76 |  |  |
| "RETURNED FOR CREDIt" |  |  |
| CHANGE |  | 3. 46 |

## ■ PLU level shift (for direct PLU)

This shift function can allow access to PLUs on your register without adding additional direct PLU keys. You can use direct PLUs in five levels by utilizing PLU level shift keys $L 1$ thru L5. The level shift key shifts the PLU level from the other four to the required level. (The normal level is level 1.) You can also shift PLU level by entering a level number and pressing the PLU level shift number key,

You must program your machine in the PGM2 mode to select one of the two PLU level shift modes - automatic return mode* and lock shift mode** - and decide whether to allow PLU level shift in both the REG and MGR modes or in the MGR mode alone.

* The automatic return mode automatically shifts the PLU level back to level 1 after a direct PLU key is pressed. You can select whether the PLU level should return each time you enter one item or each time you finalize one transaction.
** The lock shift mode holds the current PLU level until a PLU level shift key is pressed.


## Automatic return mode (for PLU levels)

If you shift the PLU level while in the automatic return mode, press the desired PLU level shift key before numeric entries.

## Procedure

- each item

- each transaction



## Lock shift mode (for PLU levels)

If you shift the PLU level while in the lock shift mode, press the desired PLU level shift key before numeric entries.

## Procedure

To shift the level of another PLU


## Example

Direct PLU1: PLU code 1 (PLU level 1), PLU code 65 (PLU level 2)
Direct PLU2: PLU code 2 (PLU level 1), PLU code 66 (PLU level 2)

- When your machine has been programmed for the automatic return mode:

- When your machine has been programmed for the lock shift mode:

Key operation


Print

| PLU00001 | $\$ 1.25$ |
| :--- | ---: |
| PLU00065 | $\$ 12.00$ |
| PLU00066 | $\$ 30.00$ |
| PLU00065 | $\$ 12.00$ |
| CASH | $\$ 55.25$ |

## PLU/UPC price level shift

Six different price level shifts can be programmed for each PLU or UPC.
The price levels can be changed for PLU or UPC registrations.
You can change a PLU/UPC price among six prices by utilizing the price level shift keys P1 thru P6 , the level shift key shifts the price level from the other five to the required level. (The normal level is level 1.) You can


You must program the price level shift mode (i.e. automatic return mode* or lock shift mode**) and the operating mode to be used for the price level shift (i.e. both REG/MGR modes or MGR mode alone).

* The automatic return mode automatically shifts the PLU/UPC price level back to level 1 after a PLU/UPC shift entry. You can select whether the price level should return each time you enter one item or each time you finalize one transaction.
** The lock shift mode holds the current PLU/UPC price level until pressing the price level shift key.


## Automatic return mode (for price levels)

If your register has been programmed for the price level shift in the automatic return mode, press a desired price level shift key before a numeric type entry.

## Procedure

(each item)

(each transaction)


## Lock shift mode (for price levels)

If your register has been programmed for the price level shift in the lock shift mode, press a desired price level shift key before a numeric type entry.

## Procedure



Note

- If you select the automatic return mode, it is not necessary to use the P 1 key on the keyboard, but if you select the lock shift mode, it is necessary to use the key.
- You can program "printing of the price level text. Please refer to "Programming for optional feature selection" described in the "PROGRAMMING" section of this manual.


## Example

PLU price level 1: PLU 1 (\$1.91), PLU 2 (\$0.79)
PLU price level 2: PLU 1 (\$2.00), PLU 2 (\$0.99)

- When your register has been programmed for the automatic return mode (by one item):

| Key operation | Print |  |
| :---: | :---: | :---: |
|  | IEVEL 1 |  |
| P2 1 PLUC | PLU00001 | \$1.91 |
| 2 (tum | LEVEL 2 | \$2.00 |
| CAAT | LEVEL 1 |  |
|  | PLU00002 | \$0.79 |
|  | CASH | \$4. 70 |

- When your register has been programmed for the lock shift mode:

Key operation


Print

|  |  |
| :--- | ---: |
| LEVEL 1 |  |
| PLUVO001 | $\$ 1.91$ |
| LELUL 2 | $\$ 2.00$ |
| PLUOOOO1 | $\$ 0.99$ |
| LEVEL 2 |  |
| PLUOOOO2 | $\$ 4.90$ |
| CASH |  |

## Set PLU entries

Operations are the same as normal PLU's.
When a set PLU is entered, an entered or preset amount is printed as the unit price and then those PLUs linked to the set PLU are printed automatically.

## Example

Key operation


Print

| PLU00020 |
| :---: | ---: |
| PLLU0201 |
| PLU00202 |$\quad \$ 2.50$

Note
The unit price of the set PLU (ex. PLU 20) is the registered amount of the set PLU. The tied PLU's memory is updated only by the entered quantity.

## ■ Link PLU/UPC entries

The operation is the same as normal PLU's/UPC's. When this PLU/UPC is entered, the linked PLU's amount is included and the linked PLU's label is printed automatically. Only the 1st PLU is affected by the status shift keys ( (SAlily ,

## Example

When PLU 21 is linking PLU 25,26,27 as follows

| Key operation | Print |  |
| :---: | :---: | :---: |
| 21 |  |  |
| CAAT | PLL000021 PLU00025 | $\$ 3.50$ $\$ 3.00$ |
|  | PLU00026 | \$2.00 |
|  | PLLU00027 | \$8.00 |
|  | CASH | \$16.50 |

## Age verification (Birthday entry)

The age verification function is used for prohibiting the sale of goods (departments, PLUs or UPCs) for certain aged persons based on a registered birthday.
When a department/PLU/UPC for which a figure other than zero (01 to 99 ) has been programmed as the age limitation is entered, a birthday entry must be completed.

## Procedure



Birthday (five or six digits)

## Note <br> - A birthday entry can be performed two or more times at any point during a transaction, however

 the last entered birthday remains in effect.- You can enter the date as far back as 98 years.
[Ex.] When the current year is 2005 : you can enter the year 1907-2005.


## Example <br> Oct. 2, 1985 (When dept. 7 is programmed as the age limitation " 17 ".)

Key operation
100285 BIRTH
$300 \frac{7}{\text { CAAT }}$

Print


When birthday printing is allowed, through programming (Job no. 2616), the birthday date is printed.

## Mix-and-match entries

This function is convenient for matching several PLU/UPC items and selling them in a lump (e.g. bundle sale, multi-packed sale, etc.). The matching q'ty and adjusted amount are assigned to a mix-and-match table. All items that are programmed into the same table are treated as if they belong to one group.

## Example

Selling on a mix-and-match basis the following items in table no. 1 to which the matching q'ty " 3 " and the adjusted amount " $\$ 10.00$ " are assigned:

- PLU 40 (Unit price: \$5.00)
- PLU 41 (Unit price: \$3.00)
- PLU 42 (Unit price: \$2.50)

Key operation
Treated as $\$ 5.00$ item $\rightarrow 40$
Treated as $\$ 3.00$ item $\rightarrow 41$
Treated as $\$ 2.00$ item $\rightarrow 42$

Print

| PLU00040 | $\$ 5.00$ |
| :--- | ---: |
| PLLU000041 | $\$ 3.00$ |
| PLU00042 | $\$ 2.00$ |
| CASH | $\mathbf{\$ 1 0 . 0 0}$ |

## - Condiment entries (for PLUs)

Your register may be programmed for prompting condiment and preparatory instructions for a menu-item PLU.

## Example:

When you enter a menu-item PLU, a prompting message such as "HOWCOOK?" will appear. You must specify a PLU such as "RARE" to meet a special order of the guest.
In an example of the condiment table show below, it is assumed the condiment table \#1 and \#4 is assigned to PLU 210 (item label: STEAK/unit price: \$13:00).
When you enter PLU 210, the message "HOWCOOK?" will appear. You are allowed to enter one of the PLU code, 221, 222 and 223. When you enter PLU 221, "RARE" is registered and the next message "POTATO?" will appear. When you enter PLU 226, "P.CHIPS" is registered. Then press the CAAT key to end this entry.

| Table number | PLU codes for condiment entry (programmed text, price) |  |  |  | Next table no. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{gathered} 220 \\ \text { (HOWCOOK?) } \end{gathered}$ | $\begin{gathered} 221 \\ \text { (RARE 0.00) } \end{gathered}$ | $\begin{gathered} 222 \\ \text { (MED.RARE } 0.00 \text { ) } \end{gathered}$ | $\stackrel{223}{(\text { WELLDONE 0.00) }}$ | 4 |
| 4 | $\begin{gathered} 225 \\ \text { (POTATO?) } \end{gathered}$ | $\begin{gathered} 226 \\ \text { (P. CHIPS } 0.60 \text { ) } \end{gathered}$ | $\begin{array}{cc} 227 \\ \text { (MASHED.P } & 0.60 \text { ) } \end{array}$ | $\begin{gathered} 228 \\ \text { (BAKED.P } 0.50 \text { ) } \end{gathered}$ |  |
|  |  |  |  |  |  |



- Your register will continue to prompt for the condiment entry until you finish the entire condiment entry programmed for the PLU. During the condiment entry, if you enter a normal PLU, which is not in the condiment table, an error message will appear in case the condiment entry is compulsory.
- When the $\underset{N \in \mathrm{Ex}}{\substack{\text { a }}}$ key is pressed, the entry skips to the next table which is programmed.
- When the caces key is pressed, its condiment entry is canceled in the programmed mode (REG/MGR or MGR).
- When you enter a PLU priced at " 0.00 ," only the text will be printed on the receipt.
- No refund entry is possible for any condiment entries. When you perform a refund entry with a menu-item PLU and the condiment PLUs assigned to the menu-item PLU are automatically registered as a refund entry.
- You may omit the compulsory condiment entry by pressing the $\underset{N \in \mathbb{T}}{\infty}$ key.


## Price inquiry (view) function (for PLU/UPCs)

You can use this function when you want to know the unit price of the PLU/UPC item during sales transactions while in the REG/MGR mode.

## Procedure


*1: Press the $C L$ key to cancel the inquiring (view) mode.
*2: Press the AMT key when you want to register the unit price of the PLU/UPC displayed.
*3: You can change the unit price temporarily in the MGR mode. The unit price which is programmed in PGM mode is not changed (Price override entry).

Note For the repeat entry, use the $\operatorname{ArPEEAT}$ key.

## Example

Key operation


Print

| PLU00005 | $\$ 2.00$ |
| :--- | ---: |
| 5089123456708\# | $\$ 5.20$ |
| GRAPE | $\mathbf{\$ 7 . 2 0}$ |
| CASH |  |

## ■ UPC learning function

When you enter or scan an undefined code, you are required to enter the unit price "amount" and the associated department. The UPC code, unit price and the department entered are stored in the dynamic UPC file (if opened, and if not opened, in the PLU/UPC file) and is used for future sales entries.

Note - When there is no capacity remaining in the file, the data is not stored in the file.

- The text of the entered department is applied to the entered UPC code.
- You can use the UPC learning function in the training mode. This may be convenient to practice when installing the scanning system.


## Procedure

"NO RECORD" is displayed and the beep sound occurs three times. Then, "PRICE -> DEPT" is displayed to guide you to enter unit price and associated department code.


* Press the $\underset{\substack { \text { Nom } \\ \begin{subarray}{c}{\text { Lilet }{ \text { Nom } \\ \begin{subarray} { c } { \text { Lilet } } } \\{k}\end{subarray}}{\text { key }}$ when you want to exempt the UPC code entered from the non-accessed UPC delete function (deletion occurs by executing \#105 in Z1 mode).

Note For the repeat entry, use the $\operatorname{A\in PEAG}$ key.

| Example Key operation | Print |  |
| :---: | :---: | :---: |
| "NO RECORD", "PRICE -> $\longrightarrow 5056789123404$ (evUl | 5056789123404\# |  |
| DEPT" are displayed. 750 | DPI. 05 | \$7.50 |
| $\underbrace{5}_{\text {CAAT }}$ | CASH | \$7. 50 |

## - Price change function (for PLU/UPCs)

You can use this function when you need to change the unit price or associated department of a PLU/UPC item in REG/MGR mode.
There are two methods for price changes:

1. Price change mode

You can change the preset price and/or the associated department of a PLU/UPC item without entering PGM mode.
2. Changing a price during a transaction

When a wrong PLU/UPC price and/or associated department is found during transaction, you can correct them at the time of the transaction. With the entry of a new price and/or associated department, the preset price and/or associated department is automatically changed to the new price and/or associated department.

Note
For the Non-PLU type price embedded UPC-A codes, the prices in the codes have the priority over the preset prices. So, for these codes, a changed price is valid only when the price change is executed.

## Procedure

## Price change mode



Changing a price during a transaction


## Example

- Price change mode

- Changing a price during a transaction


Note - When an undefined code is entered in the price change mode, the register results in an error.
 depression of the $\stackrel{\text { PRICE }}{\text { Panc }}$ key, then you are allowed to enter a correct price and/or associated department.

- In case the item label of the UPC is the same as the associated department, the item label is changed to the item label of the new associated department when the associated department is changed.
- For the repeat entry, use the सAREAT key.


## 2 Displaying and printing subtotals

Your register provides these five types of subtotals:

## Merchandise subtotal

Press the $\underset{\substack{\text { MOSEE }}}{\operatorname{sBr}} \mathfrak{k}$ key at any point during a transaction. The net sale subtotal - not including tax - will appear in the display.

## Taxable subtotal

Taxable 1 subtotal
 taxable 1 items will appear in the display.
Taxable 2 subtotal
Press the $\underset{\substack{\text { TAAK } \\ \text { SHIT }}}{\substack{\text { SBTL }}}$ and keys in this order at any point during a transaction. The sale subtotal of taxable 2 items will appear in the display.
Taxable 3 subtotal
Press the ${ }_{\substack{\text { SAAlHIT }}}^{\text {TAX }}$ and SBTL items will appear in the display.
Taxable 4 subtotal
Press the $\underset{\substack{\text { TAxA } \\ \text { ShlT }}}{ }$ and sBTL keys in this order at any point during a transaction. The sale subtotal of taxable 4 items will appear in the display.

## Including-tax subtotal (full subtotal)

Press the sвіL key at any point during a transaction. The sale subtotal including tax will appear in the display.

## Food stamp-eligible subtotal

Press the TESN key at any point during a transaction. The sale subtotal of items eligible for food stamp payment will appear in the display.

## ■ Tray subtotal

Press the $\xlongequal[\substack { \text { TRAV } \\ \begin{subarray}{c}{\text { BTL }{ \text { TRAV } \\ \begin{subarray} { c } { \text { BTL } } } \\{k}\end{subarray}]{\text { key during a transaction in the REG or MGR mode. }}$
The contents of the tray total itemizer which include tax are printed and displayed.

## Eat-in subtotal

You may press an eat-in key prior to entering a payment. Your register will calculate a subtotal according to the programmed tax exemption status and display the subtotal, the symbol "EAT IN," and a corresponding caption ("EAT IN 1," "EAT IN 2," or "EAT IN 3").
For the transaction with the eat-in subtotal, you must finalize the transaction by making a payment entry. Just after pressing the eat-in key, however, you can cancel the entry of that key by pressing the CL key or another eat-in function key.

## ■ Gasoline discount subtotal

Use the following procedure to get a gasoline discount subtotal; amount after gas discount amount is deducted. The gasoline discount subtotal will appear in the display.


## 3 Finalization of transaction

## - Cash or Check tendering

Press the sBTL key to get an including-tax subtotal, enter the amount tendered by your customer, then press the CAAT or one of the CA2 thru CA5 keys if it is a cash tender or press the CHK or one of the ${ }^{\text {CHK } 2}$ thru CHK5 key if it is a check tender. When the amount tendered is greater than the amount of the sale, your register will show the change due amount and the text "CHANGE". Otherwise your register will show the text "DUE" and a deficit. Make a correct tender entry.

Example Your customer pays $\$ 10.00$ for an including-tax subtotal of $\$ 7.35$.

## Cash tendering



## Check tendering



Mixed tendering (check + cash)

## Example

Your customer pays $\$ 10.00$ by check and $\$ 5.00$ in cash for an including-tax subtotal of $\$ 14.56$.
$\qquad$
Key operation


Print


## ■ Cash or Check sale that does not need any tender entry

Enter items and press the CAAT] or one of the CA2 thru CA5 keys if it is a cash sale or press the CHK or one of the CHK2 thru CHK5 keys if it is a check sale. Your register will display the total sale amount.

## Example

Selling a $\$ 3.00$ item (dept. 6) and another $\$ 7.15$ item (PLU 10) for cash


## ■ Charge (credit) sale

Enter items and press the corresponding charge keys ( CH 1 thru $\mathrm{CH9}$ ).

## Example

Selling a $\$ 25.00$ item (dept. 5) and a $\$ 32.50$ item (dept. 6) and accepting the payment by charge 1 account

| Key operation |
| ---: |
| 25005 |
| 32506 |


| Print |  |
| :--- | ---: |
| DPI.O5 | $\$ 25.00$ |
| DPI.O6 | $\$ 32.50$ |
| CHARGE1 | $\$ 57.50$ |

Amount tendering operations (i.e., change calculations) can be achieved by the CHH thru $\mathrm{CH}+{ }^{\text {a }}$ key when it has been preset in PGM2 job \#2320.

## Mixed-tender sale (cash or check tendering + charge tendering)

## Example

Your customer pays $\$ 9.50$ in cash and $\$ 40.00$ by charge 1 for an including-tax subtotal of $\$ 49.50$.


## 4 Food stamp calculations

## Food stamp tendering

If your customer makes payment (or tendering) in food stamps, obtain the food stamp-eligible subtotal* by pressing the TEND key and make a food stamp tender entry before entering a cash or check tender.

## Note

The food stamp-eligible subtotal* depends upon how your register is programmed based on the food stamp-eligibility of the automatic tax on a sale of items eligible for food stamp payment, or whether your register is programmed to allow the automatic tax to be paid with food stamps or not or to exempt taxation. The example below presupposes that your register has been programmed to exempt taxation.

When the amount tendered in food stamps is greater than the food stamp-eligible subtotal:
Your register shows two change due amounts in its display.
The food stamp change due appears at the left of the display in dollars and the cash change at the right in cents.

- When you enter only items eligible for food stamp payment.

Example Your customer purchases a $\$ 4.25$ item (dept.4, taxable 1, eligible for food stamp payment) and another \$4.00 item (PLU 34, taxable 2, eligible for food stamp payment) and tenders $\$ 10.00$ food stamps for them.



- Mixed sale of an item eligible for food stamps and another item not eligible for food stamps


## Example <br> Your customer purchases a $\$ 2.48$ item (dept. 5, taxable 1, eligible for food stamps) and another $\$ 5.42$ item (dept. 8, nontaxable, ineligible for food stamps) and pays $\$ 5.00$ in food stamps and $\$ 5.00$ in cash.



## When the food stamp tender is smaller than the food stamp-eligible subtotal:

- Accept the remainder in food stamps or in cash or check. If your register is programmed to exempt taxation, additional food stamp tender is not allowed.


## Example

Your customer buys a $\$ 3.18$ item (dept. 5, taxable 1, eligible for food stamps) and another $\$ 1.24$ item (dept.7, taxable 2, eligible for food stamps) and pays $\$ 4.00$ in food stamps and the remainder - $\$ 1.00$ in cash.
$\qquad$ To enter the
cash tendering
of the remainder

Print

| DPT. O5 |  |
| :--- | ---: |
| DPI.O7 | $\$ \$ 3.18$ |
| MDSE ST | $\$ \$ 1.24$ |
| TAK2 | $\$ 4.42$ |
|  | $\$ 0.02$ |
| ***TOTAL. | $\$ 4.44$ |
| FS SI | $\$ 4.42$ |
| FS TEND | $\$ 4.00$ |
| CASH | $\$ 1.00$ |
| CHANGE | $\$ 0.56$ |

## Food stamp status shift

Your machine allows you to shift the programmed food-stamp status of each department, PLU/UPC or $\Theta$ thru ©5, percent key by pressing the stirit key prior to those keys. After each entry is completed, the programmed food stamp status is resumed.

## Example

You sell a $\$ 2.32$ item of dept. 2 (food-stamp eligible) as a food-stamp ineligible item and another $\$ 3.18$ item of PLU 86 (food-stamp ineligible) as a food-stamp eligible item and accept $\$ 4.00$ in food stamps and $\$ 2.00$ in cash.

Key operation


Print

| OPI. 02 | $\$ 2.32$ |
| :--- | ---: |
| PLLU00086 | $\$ \$ 3.18$ |
| ***TOTAL | $\$ 5.50$ |
| FS ST | $\$ 3.18$ |
| FS EEND | $\$ 4.00$ |
| FS CG | $\$ 0.00$ |
| CASH | $\$ 8.00$ |
| CHANGE | $\$ 0.50$ |

5 Tax calculations

## - Automatic tax

When your register is programmed with a tax table (or tax rate) and the tax status of an individual department and PLU/UPC is set for taxable, it computes the automatic tax on any item that is entered directly into the department or indirectly via a related PLU/UPC.

## Example

Selling five $\$ 6.70$ items (dept. 1, taxable 1) and one $\$ 7.15$ item (PLU 85, taxable 2) for cash

| Key operation | Print |  |
| :---: | :---: | :---: |
| 5 \% 1 |  | $50 \$ 670$ |
| 6701 | DPT. 01 | T1 $\$ 33.50$ |
| 85 | PLU00085 | T $2 \$ 7.15$ |
| 85 UPC | MDSE ST | \$40.65 |
| CAAT | TAK1 | \$2.01 |
|  | Tak2 | \$0.29 |
|  | CASH | \$42. 95 |

## Manual tax

Your machine allows you to enter tax manually after item entries.

## Example

Selling an $\$ 8.00$ item (dept. 7) for cash with 50 cents as tax

Key operation
8007
50 Tax

Print

| DPT. 07 | $\$ 8.00$ |
| :--- | ---: |
| M-TAX | $\$ 0.50$ |
| CASH | $\$ 8.50$ |

## - Automatic-tax delete

You can delete the automatic tax on the taxable 1, taxable 2, taxable 3 and taxable 4 subtotal of each transaction by pressing the TAX key after the subtotal is displayed.

Example Selling a $\$ 7.25$ item (dept. 1, taxable 1) and another $\$ 5.15$ item (dept. 3, taxable 2) for cash and entering the sale as a non-taxable one
$\qquad$

| Print |  |
| :--- | ---: |
| DPT. O1 | IT $\$ 7.25$ |
| DPT. O3 | $12 \$ 5.15$ |
| TAX1 SI | $\$ 0.00$ |
| TAX2 ST | $\$ 0.00$ |
| CASH | $\$ 12.40$ |

for ER-A530


If any of the media keys (i.e. cash, check or charge 1 thru charge 5) are programmed as tax delete in PGM2 mode, the tax can be deleted without using the procedures above. In this case, depressing a corresponding media key alone will always cause the programmed tax to be deleted.

Example When the $\mathrm{CA}_{2}$ key is programmed as tax delete for the same case with the above example

Key operation
7251
5153
CA2

Print

|  |  |
| :--- | ---: |
| DPI.O1 | $1 \$ 7.25$ |
| DPI.O3 | $2 \$ 5.15$ |
| MDSE ST | $\$ 12.40$ |
| TAK1 | $\$ 0.00$ |
| TAK2 | $\$ 0.00$ |
| CASH2 | $\$ 12.40$ |

## - Tax status shift

Your machine allows you to shift the programmed tax status of each department, $\Theta$ thru $\Theta 4$, percent key or
 completed, the programmed tax status of each key is resumed.

## Example <br> Selling the following items for cash with their programmed tax status reversed

- One $\$ 13.45$ item of dept. 7 (non-taxable) as a taxable 1 item
- One $\$ 7.00$ item of dept. 2 (non-taxable) as a taxable 1 and 2 item
- One $\$ 4.00$ item of dept. 3 (taxable 2) as a non-taxable item
- Two $\$ 10.50$ items of dept. 1 (taxable 1) as taxable 2 items


Print

| DPP. 07 | 11 113.45 |
| :---: | :---: |
| DPI. 02 | ${ }_{12} 87.00$ |
| DPT. 03 | \$4.00 |
| DPT. 01 | 11810.50 |
| DPT. 01 | 12.510 .50 |
| HISE ST | \$45.45 |
| TAX1 | \$1.23 |
| TAK2 | \$1. 12 |
| CASH | \$47. 80 |

Note The entry of a multi-taxable item for PST or GST will be prohibited as follows (for Canada).

In case of; Tax 1: PST, Tax 2: PST, Tax 3: PST, Tax 4: GST
Taxable 1 and 2 item ......... prohibited
Taxable 1 and 3 item ......... prohibited
Taxable 2 and 3 item ......... prohibited
Taxable 1 and 4 item ............. allowed
Taxable 2 and 4 item ............. allowed
Taxable 3 and 4 item ............. allowed

In case of; Tax 1: PST, Tax 2: PST,
Tax 3: GST, Tax 4: GST
Taxable 1 and 2 item ......... prohibited
Taxable 1 and 3 item ............. allowed
Taxable 2 and 3 item ............. allowed
Taxable 1 and 4 item ............. allowed
Taxable 2 and 4 item ............. allowed
Taxable 3 and 4 item ......... prohibited

## 6 Guest Check (GLU/PBLU)

Note


Two different guest check entry systems are available: the GLU system and previous balance lookup (PBLU) system. It depends on how your register has been programmed which of these is used. Please contact your authorized SHARP dealer for more information about this selection.
GLU system: If this system is selected, the balance due and the details of the order are placed in the guest check file. The information can be automatically recalled by pressing the alemul key, or enteringa GLU code when additional ordering or finalization is required.
PBLU system: If this system is selected, the previous balance is stored in the previous balance lookup file (PB lookup file). The information can be automatically recalled by entering a previous balance lookup code (a PBLU code) when additional ordering occurs.

## GLU/PBLU system

## New guest

For a new guest;

## Procedure

For automatic GLU/PBLU
code generation


- The GLU/PBLU code refers to a number/code that will be used whenever the guest check must be accessed for re-ordering or final payment.
- The available range of GLU or PBLU codes can be programmed for each chashier/server.
- Your register can be programmed to generate GLU/PBLU codes in a sequential fashion. If your register has not been programmed to do so, each GLU/PBLU code can be entered manually.
- The cover count refers to the number of people in the party. When the cover count entry is compulsory, you must enter the cover count (max. 2 digits). When cover count is not compulsory, enter the cover count and press the $\begin{gathered}\text { Gv } \\ \text { Nut } \\ \text { key. }\end{gathered}$
- When the ssivg key is pressed, the tax is not calculated.
- You can temporarily finalize a guest check by pressing the EmNL key. In the GLU system the check will show the current balance including tax while the tax amount is not added to the GLU/PBLU file, and when an additional order is made, the tax amount is recalculated. In the PBLU system, the check will show the current balance including tax and the tax amount is added to the GLU/PBLU file (charge posting), while the guest check is still open.


## Example

| Key operation | Print |  |
| :---: | :---: | :---: |
| 111 NC | 08/27/2004 | 123456 BILL\#0141 |
| $2{ }^{\text {CV }}$ | \#1258 | 4:10PM DICK 1111 |
| 35002 |  | TBL\#0111 |
| 27003 | ***PBAL | TBL\#O \$0.00 |
| FNML | COVER CT 2 DPI. OZ | 11\$35.00 |
|  | DPT. 03 | \% 1 \$27.00 |
|  | BAL FHD | \$62.00 |
|  | MDSE ST | $\$ 62.00$ $\$ 3.88$ |
|  | ***TOTAL | \$65. 88 |
|  | Not print pressed | ed when the SSRIC key is instead of the FNMAL key |

## GLU recall

Each cashier/server can recall their GLU/PBLUs for reorder or settlement by pressing the $\underset{\text { GECALL }}{G e y . ~ T h e ~ r e g i s t e r ~}$ display GLU/PBLUs from the smallest GLU/PBLU number. Follow the procedure to recall GLUs and select a desired GLU/PBLU code.

## Procedure



* When the largest opened GLU/PBLU number is displayed, the smallest GLU/PBLU number is displayed when



## Example

Opened GLU: \#111/\#112/\#113
Selecting GLU\#113 and making sales entry of two dept. 7 items (\$3.00 and \#5.00)


## Reorder entries

For making additional guest check entries, use the following procedure:

## Procedure



## Example

Key operation


Print

|  | TBL\#O 111 $\$ 65.88$ $\$ 14.00$ $\$ 16.00$ $\$ 30.00$ |
| :---: | :---: |
| ***TOTAL ***RA CASH ***TOTAL | $\begin{array}{r} \$ 95.88 \\ \$ 30.00 \\ \$ 30.00 \\ \$ 65.88 \end{array}$ |

## Settlement

Use the following procedure:

## Procedure



## Example

Key operation
111 PBLU
5000 СНK
2000 сант

Print


- You can make a tip-in entry before a tender entry. If a tip-in entry is made, the tip amount must be tendered by using the associated media key e.g. CH1 thru CH9 for the charge tip and CASH 1 or CASH 5 for the cash tip.
- Partial tendering is prohibited after tip-in entry operation.


## - Deposit entries

Deposit refers to a payment on a charge account. It can be received in cash, check or by charge. You can make the deposit entry only while in a guest check transaction. It cannot be done during handling of a tendered amount.
A received deposit can be refunded by pressing the $\sqrt{[\text { EPRO }}$ than the deposit balance.

## Procedure



Example To record a $\$ 50.00$ deposit in cash made by a customer with PBLU code 111


## Example

To refund a $\$ 50.00$ deposit made by a customer with PBLU code 111

| Key operation | Print |  |
| :---: | :---: | :---: |
| 111 PBLU |  |  |
| 5000 (2EPO | \#1263 | $\text { 4:19PM DICK } 1111$ |
|  |  | TBL\#0111 |
| SFVC | ***PBAL CASH2 | -30.00 |
|  | DPST RF <br> BAL FHD | -50.00 $\$ 0.00$ |
|  | SERVICE | \$20.00 |

## - Transferring guest checks out or in (Transfer-out/in)

## Transferring guest checks out

At the end of a cashier/server shift or whenever a cashier/server is relieved, one or more open guest checks can be transferred from the cashier/server to the open check file until the responsibility for the check(s) is assigned to another cashier/server.

## Procedure

(cashier/server sign-on)


## Example

GLU\#111 is transferred out.


## Transferring guest checks in

When the second cashier/server is assigned to be responsible for guest checks that have been transferred out:

## Procedure



## Example

GLU\#111 is transferred in.

Key operation


Print

|  |  |  |
| :---: | :---: | :---: |
|  |  |  |

## Bill totalizing/bill transfer

## Bill totalizing

The bill totalizing function is used to totalize multiple bills when, for example, a particular guest pays not only his or her bill, but also the bills of other guests.

## Procedure



## Example <br> Totalizing GLU\#112 and GLU\#113 to GLU\#111

$\qquad$
Key operation


Print


- All \#1 bills are added to a \#2 bill. A maximum of 5 bills may be added to a \#2 bill.
- The GLU/PBLU code of \#1 must be in use. If the guest check(s) of \#1 or \#2 has already been handled by another server, the guest check(s) must have been made "Transferring out."


## Bill transfer

This function is used to change the GLU/PBLU code of a particular bill.

## Procedure



## Example

GLU\#111 is transferred to GLU \#120.
$\qquad$
Key operation


Print

| *B. T. ${ }^{*}$ <br> TBL\#O111 |  |
| :---: | :---: |
| ***PBAL | TBL\#O111 $\$ 46.00$ |
|  | TBL\#O120 |
| ***PBAL | \$0.00 |
| BAL FWD | \$0.00 |
| SERVICE | \$46.00 |

- This function requires that the current GLU/PBLU code be entered for \#1 and a new GLU/PBLU code be entered for \#2.
- A \#1 bill is transferred to a \#2 bill. The \#1 bill is then cleared and set free.


## Bill separating

The function is used when each guest of a group pays his or her own order. With this function, you can select some items from a guest check and make an entry for the payment. Also, you can transfer the items you have selected to other guest checks. This function is available only in the GLU system.

## Procedure



## Example

One of the dept. 9 items is separated from GLU111 (three dept. 7 items and three dept. 9 items are entered.)

Key operation

|  | BS |
| :--- | :--- |
| 111 | PBLU |
| 117 | PBLU |

Dept. 7 item label and the q'ty are displayed. To skip dept. 7 items $\qquad$
Dept. 9 item label and the q'ty are displayed. To select one of dept. 9 items $\qquad$ 1 1 !

BS

Print

TBL\#O111
*B. S. *
TBL\#O117 $\$ 0.00$ $\$ 5.00$ $\$ 5.00$ $\$ 5.00$

## Manual Previous Balance (PB) and Credit Balance (CB) entry

The register allows you to make manual $\mathrm{PB} / \mathrm{CB}$ entries. If you use this function, the previous balance amount is entered manually when making new entries that will adjust the original total.

Note
This function is not available when you use GLU or PBLU system. To use this function, please contact your authorized SHARP dealer.

## New customers

For a new customer, use the following procedure:

## Procedure



Note
When the SRVC or FNNL key is pressed, the tax is automatically calculated and printed. The tax is then added to the balance and the new balance is printed.

## Example <br> Making a service entry for a dept. 5 item (\$87.50) and a dept. 6 item (\$62.50) item for a new

 customer. (A non-add code is used to identify the customer.)$\qquad$


| Print |  |
| :--- | ---: |
| ***PBAL $_{\text {\#13579 }}$ | $\$ 0.00$ |
| DPT.O5 | $\$ 87.50$ |
| DPI.O6 | $\$ 62.50$ |
| BAL FWD | $\$ 150.00$ |
| SERVICE 3 | $\$ 150.00$ |

## Customer with previous or credit balance

To enter a charge to a customer with a previous or credit balance, use the following procedure:

## Procedure


*1 Check digit: The number which is printed at the right of the word "SERVICE" on the receipt of the previous entry. (See the previous page. Check with your authorized SHARP dealer for activation of the check digit feature.)
*2 Previous balance: In case of the balance is plus or zero
*3 Charge balance: In case of the balance is negative

## Example To make a service entry of 5 dept 7 items (unit price $\$ 25.00$ ) for the customer account from the previous example. (non add code number 13579), which has the previous balance \$150.00.

## Key operation



Print

| ***PBKL <br> \#13579 | \$150.00 |
| :---: | :---: |
|  | 5 ¢ \$22.00 |
| DPI. 07 | \$125.00 |
| BAL FWM | \$125.00 |
| SERVICE 3 | \$275.00 |

## Settlement

Use the following procedure:

## Procedure



Example The customer (the non add code number 13579) whose previous balance is $\$ 275.00$ is $\$ 27500$ pays $\$ 200.00$ in check and $\$ 75.00$ in cash.

| Key operation | Print |  |
| :---: | :---: | :---: |
| 327500 [BLU |  |  |
| Check digit 13579 + | *** ${ }_{\text {cha }}^{\text {\#13579 }}$ |  |
| 20000 СНК | BAL FWD | \$0.00 |
| 7500 CAAT | ***TOTAL | \$275. 00 |
|  | ${ }_{\text {CHECK1 }}^{\text {CaSH }}$ | $\$ 200.00$ $\$ 75.00$ |
|  | CHANGE | ${ }^{\$ 50.00}$ |

## 7 Auxiliary entries

## - Percent calculations (premium or discount)

- Your register provides the percent calculation for the merchandise subtotal and item entries. You need to specify in advance whether the register should perform the percent calculation based on the merchandise subtotal or each item entered.
- Percentage: 0.01 to $99.99 \%$


## Percent calculation for the merchandise subtotal

## Example Selling four $\$ 1.40$ items of dept. 5 and two $\$ 2.25$ items of dept. 6; all these items are sold for cash at a premium of $10 \%$ <br> (This example presumes that a premium of $10 \%$ has been programmed for the \% key.)

Key operation


Print

| DPI. 05 | $4 \text { @ } \$ 1.40$ |
| :---: | :---: |
| dPI. 06 | \$2.25 |
| DPI. 06 | \$2.25 |
| MOSE ST | $\$ 10.10$ $10.00 \%$ |
| \%1 | \$1.01 |
| CASH | \$11. 11 |

## Percent calculation for item entries

## Example

Selling for cash an $\$ 8.00$ item of dept. 6 at a discount of $15 \%$ and another $\$ 5.00$ item of PLU 90 at a discount of $7.5 \%$
(This example presumes that a discount of $15 \%$ has been programmed for the $\square$ key.)

| Key operation |
| :---: |
| 8006 |
| \%2 |
| 90 (0um) |
| $7-5 \%$ |
| CAAT |

Print

| DPT. O6 | $\$ 8.00$ |
| :--- | ---: |
| $\% 2$ | $-15.00 \%$ |
| PLU00090 | -1.20 |
| $\% 2$ | -7.00 |
| CASH | -0.38 |

## ■ Discount entries

For discount or coupon tenderings, you may use the $\Theta$ thru ${ }^{\ominus 5}$ key.
If the discount or tendered coupon is the one applicable to sales, use the vendor coupon or if it is applicable to each department key, use the store coupon.

## Discount for the merchandise subtotal

## Example

Selling a $\$ 5.75$ item of dept. 6 and another $\$ 7.50$ item of PLU 80 for cash after subtracting the discount amount $\$ 1.00$ from the total sale amount
(This example presumes that the vendor coupon has been programmed for the ©2 key.)

| Key operation | Print |  |
| :---: | :---: | :---: |
| 5756 |  |  |
| 80 (100) | Plu00080 | 85.75 87.50 |
| 100 O2 | $(-) 2$ | -1.00 |
| CaAT | CASH | \$12. 25 |

## Discount for item entries

## Procedure





Example Selling a $\$ 6.75$ item of dept. 5 for cash after subtracting the coupon amount $75 ¢$ (This example presumes that the store coupon has been programmed for the $\Theta$ key.)
Key operation
$*\left\{\begin{array}{rr}675 & 5 \\ 75 & \Theta \\ \hline & 5 \\ \hline \text { CAAT }\end{array}\right.$

Print

| DPI. 05 |  |
| :--- | ---: |
| $(-) 1$ |  |
| DPT. 05 | $\$ 6.75$ |
| CASH | -0.75 | lines are printed for each entry: The first is the label programmed for the $\Theta$ function and the second is related department and $\Theta$ amount.

## ■ Refund entries

If a refund item is the one entered into a department, enter the amount of the refund, then press the afolo key and the corresponding department key in this order; and if an item entered into a PLU (or UPC) is returned, enter the corresponding PLU (or UPC) code, then press the ando and eriol keys, or press the afol and direct PLU keys without entry of PLU code, in this order.

## Example Receiving the following items returned:

One $\$ 2.50$ item of dept. 5 and seven $\$ 2.10$ items of PLU 13

| Key operation | Print |  |
| :---: | :---: | :---: |
| 250 هran 5 | DPI. 05 | R-2.50 |
| 7 \% 1 OR | WPr. 05 | -7 \$ \$2.10 |
| 13 AFH0 | PLU00013 | R-14.70 |
| CAAT | CHRNGE | \$17. 20 |

## Return entries

If a return item is the one entered into a department, enter the amount of the return, then press the fermen key and the corresponding department key in this order; and if an item entered into a PLU (or UPC) is returned, enter the
 without entry of PLU code, in this order.

## Example Receiving the following items returned:

One $\$ 3.00$ item of dept 1 and one $\$ 3.25$ item of PLU15

Key operation


Print

| DPI. $\mathbf{0} 1$ | RT-3.00 |
| :--- | ---: |
| PLUOOO15 | RT-3.25 |
| CHANGE | \$6. 25 | amount) on the sales reports.

## - Refund sales mode

This function is used for those item return entries relating to departments, PLUs/subdepartments and UPCs.
 All of the REFUND SALES mode entries are automatically handled as refund entries. This mode cannot be finalized by check payment entry.

## Example Receiving the following items returned:

One \$2.50 item of dept. 5 and seven $\$ 2.10$ items of PLU 13

Key operation


Print

| DPI.O5 | $R-2.50$ <br> PLUOO013 |
| :--- | ---: |
| CHANGE | -72.10 |
| R-14.70 |  |

## Printing of non-add code numbers

Enter a non-add code number such as a customer's reference number within a maximum of 16 digits and press the $\underset{\text { M }}{\text { im }}$ key at any point during the entry of a sale. Your register will print it at the time of entry.

Example Selling a $\$ 15.00$ item of dept. 5 by charge account to a customer whose code number is 1230

| Key operation | Print |  |
| :---: | :---: | :---: |
| 1230 彆 |  |  |
| 15005 | DPI. $05^{\text {H1230 }}$ | \$15.00 |
| CH1 | CHARGE1 | \$15.00 |

## ■ Gratuity

## Calculation

When the payment operation is made for sales registrations, the gratuity amount is calculated and printed. You can program a percent rate for calculating the gratuity.
If the percent rate is programmed as $0 \%$, the register does not print any gratuity.
You can program a tax status (taxable 1/taxable 2/taxable 3/taxable 4/non-taxable) for gratuity.

Example When a percent rate of the gratuity is programmed as 10\%:

Key operation
500 5

Print

| MPI. O5 |  |
| :--- | ---: |
| MOSE ST | $\$ 5.00$ |
| GRRTUITY | $\$ 5.00$ |
| CASH | $\$ 5.50$ |

## Exemption

Your register allows you to exempt a customer from the gratuity by pressing the sigir key prior to a payment operation.

## Example When a percent rate of the gratuity is programmed as 10\%:

$\qquad$
12505
10006
gexir
CAAT

Print

| DPI.O5 | $\$ 12.50$ |
| :--- | ---: |
| DPF.06 | $\$ 10.00$ |
| GRAUIIY | $\$ 0.00$ |
| CASH | $\$ 22.50$ |

## 8 Payment treatment

## Tip-in entries

Your register allows the entry of tips that your guests give to cashiers/servers in cash or by credit card. A tip entry must be done before a payment entry.
You must use the corresponding media key e.g. CH 1 thru CH 9 for the charge tip and CASH 1 or CASH 5 for the cash tip.
Two different tip-in entry systems are available: the tip amount entry system and the tip percent rate entry system. It depends on how your register has been programmed which of these systems is used.

## Procedure



## Example

Receiving $\$ 3.00$ by cash as a tip
$\qquad$


Print

|  |  |
| :--- | ---: |
| ***PBAL | TBL \#0011 |
| DPI. O8 | $\$ 12.00$ |
| CA TIP | $\$ 5.00$ |
| BAL FHD | $\$ 3.00$ |
| CASH | $\$ 5.00$ |
|  | $\$ 20.00$ |

## ■ Tip editing

This function is used for entering tip amounts after finalizing a guest check with a charge tender. This is only available when the guest check transaction is finalized through CAT authorization and the tip is to be paid in charge tender. The bill number which is issued when the SFRVC or FNNL key is pressed in guest check entry must be used in order to identify the guest to edit or add tip amount. For the operation, press the 聞 key. When the display prompt appears, enter the bill number and press the PBLU key, then enter tip amount and press the $\mathrm{E}_{\mathrm{TP}}$ key again.
To use the tip editing function, please consult your authorized SHARP dealer.

TBL\# 1110
CH TIP
$\$ 3.00$
CHARGE1

## ■ Tip paid entries

This operation is used when tips that guests have paid by using credit card are paid to respective cashiers/servers in cash. To perform a tip paid entry, enter the cashier/server code, then press the ${\underset{\text { PAID }}{\text { PAR }} \text { key. }}_{\text {key }}$ You can prohibit the tip paid operation in the REG mode by the PGM2 programming.

Note
When the tip amount remains unchanged in Individual Server Resetting, the tip paid function is automatically executed and tip receipt is issued to the report printer prior to report printing.

| $08 / 27 / 2004$ | 123456 |  |
| :--- | ---: | ---: |
| \#1144 | $5: 14 \mathrm{PM} \mathrm{DICK}$ | 1111 |
| IIP PAID |  | $\$ 5.00$ |

## - Currency conversion

Your register allows payment entries of foreign currency. Pressing the coow thru cowve key creates a subtotal in foreign currency. Cash payment is the only media that can be handled after currency conversion.

## Procedure


*Rate: 0.000000 to 999.999999
Note When the amount tendered is short, the deficit is shown in domestic currency.

## Example <br> To convert the amount owed (\$69.50) into the designated foreign currency

Preset rate (1.325) - CONV 1

Key operation


Print


Manual rate - CONV 4 (The conval key can be used only for the manual entry.)

Key operation


Print

| DPT. 06 | $\$ 23.00$ |
| :---: | :---: |
| **TOTAL CONV 4 | $\begin{array}{r} \$ 69.50 \\ i .275 \\ 88.6 ? \end{array}$ |
| $\begin{aligned} & \text { CASH } \\ & \text { CHANGE } \end{aligned}$ | $100.00$ $\$ 8.92$ |

## - Received on account entries

## Procedure



## Example

A customer whose reference number is 12345 tenders $\$ 48.00$ by check for received on account.

| Key operation | Print |  |
| :---: | :---: | :---: |
| 12345 | \#123456 |  |
| $4800{ }^{\text {RA }}$ | CHECK1 $* * * R A$ | \$48.00 |

## Paid out entries

## Procedure



## Example

You pay $\$ 30.00$ by check to a vendor whose code number is 6789 .
$\qquad$
Key operation
6789
3000 PO
CHK

Print


## No sale (exchange)

Simply press the NS key without any entry. The drawer will open and the printer will print "NO SALE" on both the journal and the receipt. If your machine is preset to print a non-add code number before pressing the NS key, a no sale entry is achieved with a non-add code number printed.

## ■ Cashing a check

Enter the check amount, then press a check key ( CHK , $\mathrm{CHKI}^{(\mathrm{CH}}$ thru $\mathrm{CHK5}^{(1)}$ ).

## Procedure



## Example

Cashing a check of a $\$ 30.00$ amount

| Key operation | Print |  |
| :---: | :---: | :---: |
| 6789 年 | \#6789 |  |
| 3000 CHK | CA/CHK1 | \$30.00 |

## Bottle return

This function is used to handle the payment (paid out) for returned empty bottles or cans.

## Example <br> You pay for ten $15 \phi$ returned empty bottles. (This example presupposes that dept. 10 has

 been programmed as bottle return department.)$\qquad$
Key operation
$10 \stackrel{4}{408}$
1510
CAAT

Print

| DPT. 10 | $10 @-0.15$ |
| :--- | ---: |
| CHANGE | -1.50 |

## 9 Automatic sequencing key entries

You can achieve many different key sequences automatically with a single key depression by using an automatic sequencing key ( ( AuTO) thru $\left.\begin{array}{c}\text { AuTOD } \\ 10\end{array}\right)$.

## Example

Performing the transaction "Selling a $\$ 5.00$ item (dept. 7) for cash" programmed for the Auro

$$
(\text { (ANO) }=5007 \text { (CAAT) })
$$

Key operation


Print

| Print |  |
| :--- | ---: |
| OPI.07 | $\$ 5.00$ |
| CASH | $\$ 5.00$ |

## WASTE mode

This mode is used to throw away an article which has already been prepared and is no longer serviceable.

## Procedure



Example Wasting 10 PLU 35 items


Note

- PLU/UPC entries are only allowed in the WASTE mode, and direct and indirect void operations are also allowed in this mode.
- When a WASTE mode transaction is finalized, the drawer does not open.
- The consecutive number is incremented every WASTE mode transaction.
- When the WASTE mode is activated by pressing the waste key, the mode caption "WAST" is displayed.


## CORRECTION

## 1 Correction of the last entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, UPC, percentage (\% through $\% 4$ ), deduction ( $\Theta$ through $\Theta 4$ ) or refund, you can correct this entry by pressing the voD key immediately after the incorrect entry.

## Example

Key operation


Print

| DPT. 06 | \$12.50 |
| :---: | :---: |
| DPT. 06 | $\checkmark-12.50$ |
| PLU00002 | \$2.10 |
| PLU00002 | V-2.10 |
| 5012345678900\# |  |
| APPLE | \$2.50 |
| 5012345678900\# |  |
| APPLE | V-2.50 |
| DPT. 08 | \$6.00 |
|  | -15.00\% |
| \%2 | -0.90 |
| \%2 | V $\$ 0.90$ |
| DPT. 09 | \$3.28 |
| (-) 1 |  |
| DPT. 09 | -0.28 |
| DPT. 09 | W $\$ 0.28$ |
| DPT. 08 | R-2.50 |
| DPT. 08 | RU\$2.50 |
| CASH | \$9. 28 |

## 2 Correction of the next-to-last or earlier entries (indirect void)

With the VOID key, you can void any incorrect department, PLU/subdepartment, UPC or item refund entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the CAAT key). This function is applicable to department, PLU/subdepartment, UPC and item refund entries only.
 just before you scan a UPC code. For the refund indirect void, press the void key after you press the RFND key.

## Example

Key operation


Print


## 3 Subtotal void

You can void an entire transaction. Once the subtotal void is executed, the transaction is aborted and the register issues a receipt.

## Example

Key operation


Print

| DPT. 01 | \$13.10 |
| :---: | :---: |
| DPI. 06 | \$17.55 |
| PLLU00010 | \$7.15 |
| PLU00035 | \$2.50 |
| MOSE SI | \$40.30 |
| SBIL VD | -40.30 |
| ***TOTAL | \$0. 00 |

## 4 Correction of incorrect entries not handled by the direct or indirect void function

Any errors found after the entry of a transaction has been completed or during an amount tendered entry, cannot be voided. These errors must be handled by the manager.
The following steps should be observed:

1. If you are in the middle of making an amount tendered entry, you must first finalize the transaction before making corrections.
2. Try to make correct entries from the beginning.
3. Hand the incorrect receipt to your manager for its cancellation.

# CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT) 

When you need to void incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void, follow this procedure in the MGR mode.

1. Turn the mode switch to the MGR position.
2. Press the Void key to put your register in the VOID mode.
3. Repeat the entries that are recorded on an incorrect receipt. (All data for the incorrect receipt are removed from register memory; the voided amounts are added to the void register totalizer.)

| Incorrect receipt |  |  |
| :--- | ---: | ---: |
| $\mathbf{0 8 / 2 7 / 2 0 0 4}$ | 123456 |  |
| \#1181 | $6: 43 P M$ DICK | 1111 |
| PLU00001 | $\$ 1.25$ |  |
| DPI.O2 | $\$ 5.00$ |  |
| CASH | \$6. 25 |  |


| Cancellation receipt |  |  |
| :---: | :---: | :---: |
| $\begin{aligned} & 08 / 2 \\ & \# 1182 \end{aligned}$ |  | $\begin{array}{r} 123456 \\ 1111 \end{array}$ |
| PLU0000 <br> DPI. 02 |  | $\begin{aligned} & \$ 1.25 \\ & \$ 5.00 \end{aligned}$ |
| CASH |  | 25 | mode.) To void additional transactions repeat steps 2. and 3. above.

## OVERRIDE ENTRIES

Programmed limits (such as maximum amounts) for functions can be overridden by making the entry in the MGR mode.

## Procedure

1. Turn the mode switch to the MGR position.
2. Make the override entry.

## Example

Selling a $\$ 15.00$ item (dept. 2) for cash and subtracting the coupon amount $\$ 2.50$ from the sale amount (This example presumes that the register has been programmed not to allow coupon entries over \$2.00.)

Key operation

|  | 1500 | 2 |
| :--- | :--- | :--- | :--- |
|  |  |  |
| REG-mode250 |  | 2 |
| entries | 2 | CL |

Turn the mode switch to the MGR position.

$$
250 \Theta 2
$$

Return the mode switch to the REG position.

CAAT

## OVERLAPPED CASHIER/SERVER ENTRY

This function allows you to switch from one cashier/server to another interrupting the first cashier/server's entry. The second cashier/server can make a sales entry, then the first cashier/server may continue.

## Example

Cashier 1: Entry started
Cashier 2: Cashier/server change (1 to 2), interruption initiated
Cashier 2: Transaction finished (2)
Cashier 1: Cashier/server change (2 to 1), entry restart

Note

- The overlapped cashier/server entry is not available while the tendering sale.
- If any cashier/server is still making an entry (or has not finalized the transaction yet), the machine does not run in any mode other than REG and MGR and X/Z reports can not be performed. The error message "SERVER ERR." and the corresponding cashier/server code(s) are displayed at this time.

Key operation

1. Cashier/server 1 is assigned.

2. Cashier/server 2 is assigned.

3. Cashier/server 1 is assigned.

## SPECIAL PRINTING FUNCTIONS

## 1 Copy receipt printing

If your customer wants a receipt after you have finalized a transaction with the receipt ON-OFF function in the "OFF" status (no receipting), press the ACPT key. This will make a copy receipt. Your register can also print a copy receipt when the receipt ON-OFF function is in the "ON" status.

Note Pressing the RCPT key in the OP X/Z mode before registration toggles the status "ON" and "OFF".

Example Printing a copy receipt after making the entries shown below with the receipt ON-OFF function in the "OFF" status


When the receipt ON-OFF function is in the "ON" status and you press the RCPT key to make a second copy


## 2 Validation printing function (Slip printer)

Your register can perform validation printing when it is connected with the slip printer. For the details about the slip printer, contact your authorized SHARP dealer.

1. Set a validation slip to the slip printer.
2. Press the PRNT key. The validation printing will start.

## Note

When you make an entry for which compulsory validation printing can be overridden by performing the following operation. If you need this function, Contact your authorized SHARP dealer.

1. Move the mode key to the MGR position.
2. 



## 3 Bill printing

This function is used for issuing bills to customers/guests. Your register can print bills on a slip printer or receipts on the register depending on the programming. You can issue bills when GLU/PBLU/Manual PB/CB entries are done only, for every entry or when a media key is pressed. For this selection, please consult your authorized SHARP dealer.

When bill printing is compulsory, the register will print a bill automatically in case it is to be printed on receipts and when a slip is inserted in case it is to be on a slip printer.
When bill printing is non-compulsory, use the following procedure to print a bill.



This function is available immediately after the finalization of transaction (including after pressing the SSVC or the FNNL key).

## 4 Printing of the employee's arrival and departure times (Slip printer)

Your register can print the employee's arrival and departure time when it is connected with the slip printer. For the details for connecting a slip printer, please contact your authorized SHARP dealer.
For printing of the arrival and departure times, you must be in the OP X/Z mode.

## Printing of arrival time

$\longrightarrow 1 \longrightarrow$ PRINT
Printing of departure time


## 5 Printing of header and footer graphic logos

As an optional setting, your register can print a graphic logo on the top of each receipt (header graphic logo). If preset to do so, a graphic logo can be printed on the bottom of each receipt (footer graphic logo) with the job code \#2616. You can also print the graphic logos with the combination of 3-line header logo message or 3-line footer logo message. Printing only logo messages without the graphic logo is possible. Please consult your dealer when you want to change the setting.

- Sample receipt with a header graphic logo and a footer graphic logo



## 6 Remote printer send function

This function enables a partial order to be sent to the kitchen for preparation while the remaining order is still being placed.

## Example



Remaining items will be sent to the remote printer when the transaction is finalized.
When this function is used, the subtotal void operation is not allowed.

## TIME DISPLAY AND AUTOMATIC UPDATING OF THE DATE

## 1 Time display

When you need the time displayed, turn the mode switch to the OP X/Z position after the preceding transaction or operation is finalized.
You can also display the time by pressing the [签 key in the REG or MGR mode.
The time display disappears as soon as you press the CL key in the REG or MGR mode or begin the subsequent entry.

Sample display of 10:25 AM


## 2 Automatic updating of the date

Once the internal clock unit is started at the correct time, it continues to run as long as the built-in battery is charged, and updates the date (month, day, year) automatically.

## PRIOR TO PROGRAMMING

## 1 Programming keyboard layout

When you are in the PGM1 or PGM2 mode, the keyboard layout will be set to one of the programming layouts as shown below.

## For ER-A520



## For ER-A530

| ( ${ }_{\text {RECEPT }}$ | JOUNNL |  | $\leftarrow$ | $\rightarrow$ | 4 | - | N | ¿ | \{ | \} | [ | ] |  |  | $\left(\begin{array}{c}\text { BACK } \\ \text { SPACE }\end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\uparrow$ | $\downarrow$ | " | " | , | ? | < | > |  |  |  |  |  |
| ! | @ | \# | \$ | \% | $\wedge$ | \& | * | $($ | ) | $=$ |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | - | + |  |  |  |  |
| Q | W | E | R | T | Y | U | 1 | O | P | - | @/FOR | $\bullet$ | CL |  |  |
| A | S | D | F | G | H | $J$ | K | L | ; | : | 7 | 8 | 9 |  |  |
|  | Z | X | C | V | B | N | M | , | . | - | 4 | 5 | 6 |  |  |
| (SHIFT) | (DC) | (SPACE) | (SPACE) | (SPACE) | (SPACE) | (SPACE) |  |  |  |  | 1 | 2 | 3 |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 0 | 00 |  | SBTL | CA/AT |

## Note

- The programming keyboard sheet is transparent, allowing placement over the standard keyboard sheet.
- The shaded area contains the character keys which are used for programming characters.
(DC) : Used to enter the double-size character.
(SHHF) : Used to change a lower-case letter/upper-case letter.
(SHIF-2) : Used to select a symbol. (ER-A520 only)




: Used to back up the cursor for deleting.
(SPACE) : Used to enter a space.
(NUM) : Used to enter a numeric character. (ER-A520 only)


## 2 How to program alphanumeric characters

You can program alphanumeric characters for departments, PLUs, UPCs, functions, etc. while in the character entry mode.
There are two ways for programming characters: using character keys on the keyboard and entering character codes with the numeric keys on the keyboard.

## Using character keys on the keyboard (keys on the shaded area)

Enter a character according to the position in the programming keyboard layout.

## Entering alphanumeric characters

To enter a character, simply press a corresponding character key.
 with a character key. If the combination is unavailable, only a character key is entered.
[Ex.] "Å": $\rightarrow(0) \rightarrow A$
To enter a numeric character:
(ER-A520) Press (NUM) key and enter a number by ten keys (0-9).
[Ex.] Entering the character "135": (NUM) $\rightarrow 135 \rightarrow$ (NUM)
(ER-A530) Simply press a corresponding numeric key in the shaded area.
To enter a space, press the (SPACE key.

## Entering double-size characters

(DC) : This key toggles the double-size character mode and normal-size character mode. The default is the normal-size character mode. The double-size character is displayed with the letter " $=$ " (ex. =S).
[Ex.] To program the name "SHARP" in double size : $(D C) \longrightarrow$ SHARP $\longrightarrow(D C)$

## Entering lower-case letters

(SHITI) : You can enter a lower-case letter by using this key. Press (SHFT) key just before you enter the lower-case letter. This key also allows you to enter the characters/symbols shown at the upper right of keys.
[Ex.] To program the name "Sharp" : $\longrightarrow S \longrightarrow$ (SHHFT) $\longrightarrow$ harp $\longrightarrow$ (SHFT)

## Entering symbols shown at the upper left of keys (ER-A520 only)

(SHFF-2) : You can enter symbols by using this key. Press (SHF-2) key just before you enter the symbol.


## Editing text

You can edit the text you have entered by deleting characters.
$\binom{($ BACK }{ SPACE $)}$ : Backs up the cursor for deleting the character or figure at the left of the cursor.

## ■ Entering character codes

Numerals, letters and symbols are programmable by entering the 00 key and character codes. See the "Alphanumeric character code table" on the next page. In this way, you can program characters other than the characters shown in the programming keyboard layout.

$$
X X X \rightarrow 00 \quad X X X: \text { Character code (3 digits) }
$$

Note

- Double-size characters can be made by entering the character code 253.
[Ex.] To program the name "SHARP" in double size

| 253 | 00 | 083 | 00 | 072 | 00 | 065 | 00 | 082 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00 | 080 | 00 |  |  |  |  |  |  |
| $(D C)$ | $S$ | $H$ | $A$ | $R$ | $P$ |  |  |  |

## Alphanumeric character code table

| Code | Character | Code | Character | Code | Character | Code | Character | Code | Character |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 001 | á | 046 | . | 091 | Ä | 136 | $\rightarrow$ | 193 | i |
| 002 | â | 047 | / | 092 | Ö | 137 | $\infty$ | 194 | $\dot{G}$ |
| 003 | ê | 048 | 0 | 093 | Ü | 138 | $\cong$ | 195 | S |
| 004 | î | 049 | 1 | 094 | $\wedge$ | 139 | 4 | 196 | G |
| 005 | Ì | 050 | 2 | 095 | - | 140 | $\checkmark$ | 197 | $\dot{\mathrm{g}}$ |
| 006 | í | 051 | 3 | 096 | , | 141 | F | 198 | K |
| 007 | Ô | 052 | 4 | 097 | a | 142 | T | 199 | k |
| 008 | ó | 053 | 5 | 098 | b | 143 | $\downarrow$ | 200 | L |
| 009 | û | 054 | 6 | 099 | C | 144 | Ç | 201 | 1 |
| 010 | ú | 055 | 7 | 100 | d | 145 | $\bigcirc$ | 202 | Ž |
| 011 | œ | 056 | 8 | 101 | e | 146 | ¿ | 203 | D |
| 012 | ú | 057 | 9 | 102 | f | 147 | Ù | 204 | đ |
| 013 | ú | 058 | : | 103 | g | 148 | à | 205 | C |
| 014 | Ó | 059 | ; | 104 | h | 149 | Æ | 206 | ć |
| 015 | ó | 060 | < | 105 | i | 150 | $\varnothing$ | 207 | € |
| 016 | $\Lambda$ | 061 | $=$ | 106 | j | 151 | Å | 208 | P |
| 017 | $\Psi$ | 062 | $>$ | 107 | k | 152 | Q | 209 | - |
| 018 | $\Gamma$ | 063 | ? | 108 | I | 153 | é | 210 | ě |
| 019 | " | 064 | @ | 109 | m | 154 | è | 211 | S |
| 020 | $\Omega$ | 065 | A | 110 | n | 155 | Pt | 212 | č |
| 021 | $\Delta$ | 066 | B | 111 | 0 | 156 | i | 213 | ž |
| 022 | Ө | 067 | C | 112 | p | 157 | N | 214 | ý |
| 023 | ヨ | 068 | D | 113 | q | 158 | ò | 215 | u̇ |
| 024 | $\Pi$ | 069 | E | 114 | $r$ | 159 | £ | 216 | n̆ |
| 025 | $\Sigma$ | 070 | F | 115 | S | 160 | ¥ | 217 | $\checkmark$ |
| 026 | Y | 071 | G | 116 | t | 161 | - | 218 | - |
| 027 | $\Phi$ | 072 | H | 117 | U | 162 | $\Gamma$ | 219 | r |
| 028 | Ú | 073 | I | 118 | V | 163 | ل | 224 | * |
| 029 | Ú | 074 | J | 119 | W | 164 | - | 225 | § |
| 030 | Ó | 075 | K | 120 | X | 165 | - | 226 | $\varnothing$ |
| 031 | Ó | 076 | L | 121 | y | 177 | Á | 227 | $\sim$ |
| 032 | (space) | 077 | M | 122 | Z | 178 | Í | 228 | $\uparrow$ |
| 033 | ! | 078 | N | 123 | \{ | 180 | $\overline{\mathrm{A}}$ | 229 | ] |
| 034 | " | 079 | O | 124 | I | 181 | $\overline{\mathrm{a}}$ | 230 | [ |
| 035 | \# | 080 | P | 125 | \} | 182 | $\overline{\mathrm{E}}$ | 231 | " |
| 036 | \$ | 081 | Q | 126 | B | 183 | $\overline{\mathrm{e}}$ | 232 | ä |
| 037 | \% | 082 | R | 127 | ¢ | 184 | T | 233 | Ö |
| 038 | \& | 083 | S | 128 | !! | 185 | $\overline{\text { i }}$ | 234 | ü |
| 039 | , | 084 | T | 129 | 1 | 186 | $\bar{U}$ | 235 | æ |
| 040 | $($ | 085 | U | 130 | 2 | 187 | u | 236 | å |
| 041 | ) | 086 | V | 131 | 3 | 188 | N | 237 | É |
| 042 | * | 087 | W | 132 | 4 | 189 | ṇ | 238 | $\tilde{n}$ |
| 043 | + | 088 | X | 133 | 1/2 | 190 | Č | 253 | *(DC) |
| 044 | , | 089 | Y | 134 | F/T | 191 | S |  |  |
| 045 | - | 090 | Z | 135 | $\leftarrow$ | 192 | C |  |  |

*(DC) : Double-size character code
: The shaded character cannot be displayed (will be displayed as space).

## PROGRAMMING

This chapter illustrates how to program your cash register.

## ■ Basic instructions

All the programming items can be programmed by the Job-Code-Based Programming described later.
Also your machine allows you to program some items using the Direct Programming, which does not require you to enter the job code. However, object keys (shown below) must be allocated on the keyboard. For the keys not allocated on the keyboard, you cannot use the direct programming.

## Job-Code-Based Programming



## Direct Programming

Sample procedure : $\longrightarrow$ Data entry $\longrightarrow \mathrm{O}_{2} \rightarrow$ CA/AT
(Object key)

## Preparations for programming

1. Plug your machine into a standard grounded AC outlet.
2. Turn the mode switch to the PGM1 or PGM2 position.

To set the mode switch to the PGM1 position, use the manager or submanager key; and to set it to the PGM2 position, use the manager key.
3. Check to see whether both journal and receipt rolls are present in the machine. If they are missing, install journal and receipt paper rolls correctly referring to the procedure in "4. Installing and removing the paper roll" under "OPERATOR MAINTENANCE".
4. Program the necessary items into your machine.

## Direct Programming

## 1 Setting the date and time

## $\square$ Date PGM 1 PGM 2

Enter the month (one or two digits), day (two digits), and year (four digits : 2000-2099) in this sequence.

## Procedure



Date (seven or eight digits)

## Example



Time PGM1 PGM2
Set the time using the military time (24-hour) system. For example, when the time is set to 2:30 AM, enter 230; and when it is set to $2: 30 \mathrm{PM}$, enter 1430. The time will be printed and displayed using a real-time system. Once you set the time, the internal clock unit will continue to run as long as the built-in battery is alive and update the date (day, month, year) properly.

## Procedure



## Example



## 2 Programming for departments

Your machine is equipped with 20 (ER-A520)/10 (ER-A530) standard departments and a maximum of 99 departments. Your machine allows you to perform the following programming for each department.

## Unit price PGM 1 PGM 2

## Procedure



## Example

Key operation
1000
1 CAAT

Print


## Procedure

To program any dept.


To program the next sequential dept.

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Group number |  | 0 thru 9 (0: Non group) |
| B | Commission group number |  | 0 thru 9 (0: Non commission) |
| C | Sign (plus/minus) | Plus | 0 |
|  |  | Minus | 1 |
| D | Food stamp status | Ineligible | 0 |
|  |  | Eligible | 1 |
| E | Tax 4 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| F | Tax 3 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| G | Tax 2 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| H | Tax 1 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| 1 | Item validation printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| J | Tare table number |  | 0 thru 9 (0: not used) |
| K | Scale entry | Inhibit | 0 |
|  |  | Enable | 1 |
|  |  | Compulsory | 2 |
| L | Registration type | Normal | 0 |
|  |  | SICS (Single Item Cash Sale) | 1 |
|  |  | SIF (Single Item Finalization) | 2 |
| M | Department type | Normal department | 0 |
|  |  | Hash department | 1 |
|  |  | Bottle return department | 2 |
|  |  | Gas department | 3 |
| N | Type of unit price entry | Inhibit department key | 0 |
|  |  | Open only | 1 |
|  |  | Preset only | 2 |
|  |  | Open and preset | 3 |
| 0 | Significant digit for HALO |  | 1 thru 9 |
| P | Number of zeros to follow th | nt digit for HALO | 0 thru 7 |

## Group number

You can assign a department to a maximum of nine groups. This programming enables you to take group sales reports.

## Commission group number

A commission group number (0-9, 0: non commission) can be assigned to each department.

## Sign (plus/minus)

- Assign a plus sign to departments for normal sales transactions.
- Assign a minus sign to departments for minus transactions.

Food stamp status

- Assign a food stamp status (food stamp eligible or food stamp ineligible) to each department.

Tax status (taxable 1 thru 4/non-taxable)

- When an entry of a taxable department is made in a transaction, tax is automatically computed according to the associated tax table or rate.
- Tax 4 is prohibited if you use the food stamp function.


## Item validation printing

If item entries must be validated, program corresponding departments for compulsory validation printing.

## Tare table number

Tare table number associated with scale entry (1 thru 9).

## Scale entry

Program a department for scale entry when your store requires items to be sold by weight and are placed on a scale connected to the register.

## Registration type

- If an entry of a department programmed for SICS is made first, the sale will be finalized as soon as the department key is pressed. If the entry is made after entering a department not programmed for SICS, the sale will not be finalized until the СААТ key is pressed.
- Whenever a sale is made to a department programmed for SIF, the sale is finalized as soon as the department key is pressed.


## Department type

You may program each department as one of the following three types.

- Normal department
- Hash department

A hash department is used to enter the amount of a special "sale", such as a gift certificate sale or for the receipt of payment for utility bills, theatre tickets, etc., i.e. "non-sales" registrations. Any amounts entered in this department are not added to the grand total except tax amounts.

- Bottle Return (BR)
- Gas department

The gas department enables you calculate the quantity of gas sold in gallon by using a preset unit price when the sale amount of gas is entered. (quantity of gas = sales amount entered / preset unit price)
Also gas discount can be automatically applied to the sales. (discount amount = total amount of gas x reduced unit price for each media; cash/check/charge)

## Type of unit price entry

You may select one of the following four types of unit price entry for each department.

- Open and preset
- Preset only
- Open only
- Inhibit department key


## HALO (High Amount Lockout)

You can set an upper limit amount (HALO) for each department. The limit is affective for the REG mode operations and can be overridden in the MGR mode.

- "OP" is the same as $\mathbf{O} \times 10^{P}$

For example, presetting 14 (\$100.00) here means that amount entries of up to $\$ 100.00$ are allowed in the REG mode. When you preset 17, the upper limit amount is 99999.99.


## 3 PLU/UPC programming

Your machine is equipped with 2000 standard PLU/UPC codes. Your machine allows you to perform the following programming for each PLU/UPC.

## Note

- Please note that the price lookup/subdepartment/UPC key (ค) (publ for ER-A520) is shown as fupl
- To review the UPC codes available to this register, please refer to the chapter 13 in "Universal Product Code(UPC) or European Article Number(EAN)".
- $\otimes$ in Procedures indicates that you scan a barcode.


## Unit price PGM 1 PGM 2

## Procedure

To program any PLU/UPC


* In case that price shift function is allowed, the register prompts to enter a unit price for the following level by displaying "P2" thru "P6" on the display, and when a unit price of level 6 is entered, the register goes to the status for programming the following PLU/UPC. When you press the CAAT on the way of programming multiple prices for a PLU/UPC code, prices for the remained levels are kept unchanged.
In case that single price entry is allowed for a PLU/UPC code, the register goes to the status for programming the following PLU/UPC.


## Example

Key operation


Print

(In case of single price entry)

## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Commission group number |  | 0 thru 9 (0: Non commission) |
| B | Sign (plus/minus) | Plus | 0 |
|  |  | Minus | 1 |
| C | Food stamp status | Ineligible | 0 |
|  |  | Eligible | 1 |
| D | Tax 4 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| E | Tax 3 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| F | Tax 2 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| G | Tax 1 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| H | Tare table number |  | 0 thru 9 (0: Not used) |
| I | Scale entry | Inhibit | 0 |
|  |  | Enable | 1 |
|  |  | Compulsory | 2 |
| J | Type of unit price entry | Prohibit mode | 0 |
|  |  | Open price only | 1 |
|  |  | Preset price only | 2 |
|  |  | Open price and preset price | 3 |
|  |  | Delete mode | 4 |

## Commission group number

A commission group number (0-9, 0 : non commission) can be assigned to each department. Sign (plus/minus)
The function of every PLU/UPC varies according to the combination of its sign and the sign of its associated department as follows:

| Sign |  | Function of PLU/UPC |
| :---: | :---: | :--- |
| Department | $\boldsymbol{P L U} / \mathbf{U P C}$ |  |
| + | + | Serves as a normal plus PLU/UPC |
| - | - | Serves as a normal minus PLU/UPC |
| + | - | Accepts store coupon entries, but not split-pricing entries |
| - | + | Not valid; not accepted |

## Food stamp status

- Assign a food stamp status (food stamp eligible or food stamp ineligible) to each PLU/UPC.


## Tax status (taxable 1 thru 4/non-taxable)

- When an entry of a taxable PLU/UPC is made in a transaction, tax is automatically computed according to the associated tax table or rate.
- Tax 4 is prohibited if you use the food stamp function.

Tare table number
Tare table number associated with scale entry (1 thru 9).

## Scale entry

Program a PLU/UPC for scale entry when your store requires items to be sold by weight and are placed on a scale connected to the register.
Type of unit price entry
You may select one of the following four types of unit price entry for each PLU/UPC.

- Open price and preset price (for only PLU)
- Preset price only
- Open price only (for only PLU)
- Prohibit mode: Prohibits the entry of any assigned PLU/UPC code.
- Delete mode: Deletes data programmed for each PLU/UPC.


## Example

Key operation



Associated department PGM 1 PGM 2

## Procedure

To program any PLU/UPC


## Example

Key operation


Print


4 Programming for discount keys ( $\Theta$ )

## $\square$ Discount amount PGM 1 PGM 2

## Procedure

To program zero


## Example

> Key operation
$1000 \Theta$

Print

| *PGM2* |  |
| :---: | :---: |
| $\underset{S}{\mathrm{~F} 001}(-) 1$ | $\begin{array}{r} -10.00 \\ {[17} \end{array}$ |

## Functional programming

## Procedure



To program any coupon function

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Food stamp status | Ineligible | 0 |
|  |  | Eligible | 1 |
| B | Tax 4 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| C | Tax 3 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| D | Tax 2 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| E | Tax 1 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| F | Sign (+/-) | Plus | 0 |
|  |  | Minus | 1 |
| G | Vendor/store coupon selection | Vendor coupon (subtotal $\Theta$ ) | 0 |
|  |  | Store coupon (item $\Theta$ ) | 1 |
| H | Significant digit for HALO |  | 1 thru 9 |
| I | Number of zeros to follow the s | t digit for HALO | 0 thru 7 |

## Tax status (taxable 1 thru 4/non-taxable)

Tax 4 is prohibited if you use the food stamp function.
HALO (High amount lockout)
"HI" is the same as $\mathbf{H} \times 10$ ".
For example, presetting 14 (\$100.00) here means that amount entries of up to $\$ 100.00$ are allowed in the REG mode. When you preset 17, however, the upper limit amount is 99999.99.
When you preset 00, the open amount entry is prohibited.

## Example

Key operation
$000011013 \underset{\text { CAAT }}{\text { O/ }}$

Print


5 Programming for percent keys (\%)

- Percent rate PGM 1 PGM2


## Procedure

To program zero


* Rate: Percent rate: 0.00-100.00

Note You must use a decimal point key when setting percentage rates that are fractional.

## Example



Functional programming

## Procedure

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Type of amount entry | Inhibit percent key | 0 |
|  |  | Open only | 1 |
|  |  | Preset only | 2 |
|  |  | Open and preset | 3 |
| B | Food stamp status | Ineligible | 0 |
|  |  | Eligible | 1 |
| C | Tax 4 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| D | Tax 3 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| E | Tax 2 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| F | Tax 1 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| G | Sign (+/-) | Plus | 0 |
|  |  | Minus | 1 |
| H | item\%/subtotal\% selection | Subtotal \% | 0 |
|  |  | Item \% | 1 |
| I | Always enter 0. |  | 0 |
| J | Always enter 0. |  | 0 |

## Note

## Tax status (taxable 1 thru 4/non-taxable)

Tax 4 is prohibited if you use the food stamp function.

## Example

| Key operation | Print |  |  |
| :---: | :---: | :---: | :---: |
|  | *PGM2* |  |  |
|  | $\begin{aligned} & \text { F006 \% } 1 \\ & S ~ T 1 \end{aligned}$ | 3 | $\begin{gathered} -10.25 \% \\ \mathrm{~L} 100.00 \% \end{gathered}$ |
|  | $\square_{\text {Tax }}$ |  |  |

6 Programming for conversion keys (cowl)

## - Currency conversion rate

## Procedure



* Conversion rate: 0.0000 - 9999.9999

Note You must use a decimal point key when setting conversion rates that are fractional.

## Example



## 7 Programming for the $\mathbb{R A}, P O$, and $T A X$ keys

## ■ High amount lockout (HALO) PGM 2

The HALO limit effects REG mode operations but can be overridden in the MGR mode.
The HALO limit is represented by two figures as follows:

## Procedure


" $A B$ " is the same as $\mathbf{A} \times 10^{B}$.
A: Significant digit (0 through 9)
B: Number of zeros to follow significant digit: (for RA or PO: 0 thru 9), (for manual tax: 0 thru 7 )

## Example

Key operation
13 ROAT


8 Programming for the $\mathrm{CAHAT}^{2}, \mathrm{CA}, \mathrm{CH}^{2}$, and $\mathrm{CHK}_{\mathrm{H}}$ keys
■ High amount lockout (HALO) and functional selection PGM2

## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | GLU/PBLU/Manual PB/CB entry | Enable | 0 |
|  |  | Inhibit | 1 |
|  |  | Compulsory | 2 |
| B | Short amount tender entry | Enable | 0 |
|  |  | Disable | 1 |
| C | Retention of closed GLU/PBLU file | No | 0 |
|  |  | Yes | 1 |
| D | Bill (slip) printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| E | Footer printing on receipt | No | 0 |
|  |  | Yes | 1 |
| F | Non-add code entry | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| G | Change enable (over tender enable) | Enable | 0 |
|  |  | Disable | 1 |
| H | Validation printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| I | Drawer opening | Yes | 0 |
|  |  | No | 1 |
| J | Amount tendered operation | Optional amount tendered for cash or check | 0 |
|  |  | Inhibit amount tendered for charge | 0 |
|  |  | Compulsory amount tendered | 1 |
| K | Significant digit for HALO |  | 0 thru 9 |
| L | Number of zeros to follow the signific | nt digit for HALO | 0 thru 8 |

## Note <br> HALO (High amount lockout)

"KL" is the same as $K \times 10^{L}$.
For example, presetting 13 (\$10.00) here means that amount entries of up to $\$ 10.00$ are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

Example

Key operation
$000000000015 \underbrace{\text { COA }}_{\text {CAAT }}$

Print


## 9 Programming for the automatic tax calculation function

Your machine has an automatic tax calculation feature which allows you to program four tax tables to avoid calculating incorrect tax amounts.
Automatic tax calculations require you to program, in addition to the tax table, the tax status of each pertinent department, PLU/UPC, and function key.

## The tax table (applicable to the add-on tax)

## Sample tax table

New Jersey tax table: 6\%

|  | Range of sales amount |  | A: Difference between the minimum breakpoint and the next one ( $¢$ ) |  |
| :---: | :---: | :---: | :---: | :---: |
| Taxes | Minimum breakpoint | Maximum breakpoint |  |  |
| . 00 | . 01 | to . 10 |  |  |
| .01-T | 11-Q | to . 22 | $10(0.11-0.01)$ | B: ${ }_{\wedge}$ |
| . 02 | . 23 | to . 38 | 12 (0.23-0.11) |  |
| . 03 | . 39 | to . 56 | 16 (0.39-0.23) |  |
| . 04 | . 57 | to . 72 | $18(0.57-0.39)$ | $\downarrow$ |
| . 05 | . 73 | to . 88 | 16 (0.73-0.57) | C: Cyclic |
| . 06 | . 89 | to 1.10 | 16 (0.89-0.73) |  |
| . 07 | $1.11-\mathrm{M} 1$ | to 1.22 | 22 (1.11-0.89) |  |
| . 08 | 1.23 | to 1.38 | 12 (1.23-1.11) |  |
| . 09 | 1.39 | to 1.56 | 16 (1.39-1.23) |  |
| . 10 | 1.57 | to 1.72 | 18 (1.57-1.39) | $\downarrow$ |
| . 11 | 1.73 | to 1.88 | 16 (1.73-1.57) | D: Cyclic-2 |
| . 12 | 1.89 | to 2.10 | 16 (1.89-1.73) |  |
| . 13 | $2.11-\mathrm{M} 2$ to | to 2.22 | 22 (2.11-1.89) |  |

To program a tax table, first make a table like the right table shown above.
From the tax table, calculate the differences between a minimum break point and the next one (A). Then, from the differences, find irregular cycles (B) and regular cycles ( $C$ and $D$ ). These cycles will show you the following items necessary to program the tax table:

T: $\quad$ The tax amount collected on the minimum taxable amount $(Q)$
Q: The minimum taxable amount
M1: $\quad$ The maximum value of the minimum breakpoint on a regular cycle (C). We call this point "MAX point."
M2: $\quad$ The maximum value of the minimum breakpoint on a regular cycle (D). We call this point "MAX point."
M: $\quad$ Range of the minimum breakpoint on a regular cycle: difference between $Q$ and M1 or between M1 and M2


To delete a tax table, use the following sequence:

*1 First figure: The first figure to be entered depends upon whether the difference between a minimum breakpoint to be entered and the preceding minimum breakpoint is not less than $\$ 1.00$ or more than 996 . When the difference is not less than $\$ 1.00$, enter " 1 ," and when it is not more than $99 \varnothing$, enter " 0 " or nothing.
Second figure: The second figure depends upon whether your tax table is to be programmed as tax table 1 , 2,3 or 4 . When your tax table is to be programmed as tax table 1 , enter " 1 "; when it is to be programmed as tax table 2 , enter " 2 "; when it is to be programmed as tax table 3, enter " 3 "; and when it is to be programmed as tax table 4 , enter " 4 ".
*2 If the rate is fractional (e.g. $4-3 / 8 \%$ ), then the fractional portion (3/8) would be converted to its decimal equivalent (i.e. . 375 ) and the resulting rate of 4.375 would be entered. Note that the nominal rate (R) is generally indicated on the tax table.

Note If you make an incorrect entry before entering the $M$ in programming a tax table, cancel it with the CL key; and if you make an error after entering the $M$, cancel it with the SBril key. Then program again from the beginning correctly.

## - Limitations to the entry of minimum breakpoints

Your register can support a tax table consisting of no more than 72 breakpoints. (The number of breakpoints is 36 maximum when the breakpoint difference is $\$ 1.00$ or more.) If the number of breakpoints exceeds the register's table capacity, then the manual entry approach should be used.

## Example

Programming the sample tax table shown on the previous page as tax table 1


- If the tax is not provided for every cent, modify the tax table by setting the tax for every cent in the following way.

When setting the tax, consider the minimum breakpoint corresponding to unprovided tax to be the same as the one corresponding to the tax provided on a large amount.

## Sample tax table

Example 8\%

| Tax | Minimum <br> breakpoint |
| :---: | :---: |
| .00 | .01 |
| .01 | .11 |
| .02 | .26 |
| .03 | .47 |
| .04 | .68 |
| .06 | .89 |
| .09 | 1.11 |
| .10 | 1.26 |
| .11 | 1.47 |
| .12 | 1.68 |
| .14 | 1.89 |
| .17 | 2.11 |

Modification of the left tax table

| Tax | Minimum <br> breakpoint |
| :---: | :---: |
| .00 | .01 |
| $.01-\mathrm{T}$ | $11-\mathrm{Q}$ |
| .02 | .26 |
| .03 | .47 |
| .04 | .68 |
| .05 | .89 |
| .06 | .89 |
| .07 | $111-\mathrm{M} 1$ |
| .08 | 1.11 |
| .10 | 1.11 |
| .11 | 1.26 |
| .12 | 1.47 |
| .13 | 1.89 |
| .14 | 1.89 |
| .15 | $2.11-\mathrm{M} 2$ |
| .16 | 2.11 |
| .17 | 2.11 |

From the modified tax table above;
Rate $=8(\%), \mathrm{T}=\$ 0.01=1 \varnothing, \mathrm{Q}=\$ 0.11=11 \varnothing, \mathrm{M} 1=1.11, \mathrm{M} 2=2.11, \mathrm{M}=100$

## Job-Code-Based Programming

This section illustrates how to program items using job codes. Using job codes allows you to program a wide variety of items in comparison with direct programming.

Start this programming by entering a corresponding job code as shown below.


All the items which can be programmed by the job-code-based programming are listed on this page and the following, and those which can also be programmed by the direct programming are marked with the symbol
" Direct " that follows job codes.

## 1 Setting the date and time

## Setting the date PGM2 2610 Direct

Enter the month (one or two digits), day (two digits), and year (four digits: $2000-2099$ ) in this sequence.

## Procedure



## Example

Key operation
2610 • ©
08262004 СААТ

Print


## Setting the time PGM 22611 Direct

Set the time using the military time ( 24 -hour) system. For example, when the time is set to $2: 30 \mathrm{AM}$, enter 230; and when it is set to 2:30 PM, enter 1430. The time is printed and displayed on the real time system.

## Procedure




2 Setting the register and consecutive numbers

## Setting the register number

When your store has two or more registers, it is practical to set separate register numbers for their identification. You may set them with a maximum of six digits.

## Procedure



## Example

To set the register number as " 123456 "


## Setting the consecutive number

The consecutive number is increased by one each time a receipt is issued.
Enter a number (one to four digits) that is one less than the desired starting number.

## Procedure



## Example

Setting the count start number as "1001"


## 3 Programming for the automatic tax calculation function

Your machine has an automatic tax calculation feature which allows you to program four tax tables or rates to avoid calculating incorrect tax amounts.
Automatic tax calculations require you to program, in addition to the tax table and rate, the tax status of each pertinent department, PLU/UPC, and function key.

## The tax table (applicable to the add-on tax) PGM $2 \times 2710$ Direct

## Sample tax table

New Jersey tax table: 6\%

|  | Range of sales amount |  | A: Difference between the minimum breakpoint and the next one ( $¢$ ) |  |
| :---: | :---: | :---: | :---: | :---: |
| Taxes | Minimum breakpoint | Maximum breakpoint |  |  |
| . 00 | . 01 | to 10 | - |  |
| . $01-\mathrm{T}$ | 11-Q | to . 22 | $10(0.11-0.01)$ | B: ${ }_{\uparrow}{ }_{\wedge}$ |
| . 02 | . 23 | to . 38 | 12 (0.23-0.11) |  |
| . 03 | . 39 | to . 56 | 16 (0.39-0.23) |  |
| . 04 | . 57 | to . 72 | 18 (0.57-0.39) | $\downarrow$ |
| . 05 | . 73 | to . 88 | 16 (0.73-0.57) | C: Cyclic |
| . 06 | . 89 | to 1.10 | 16 (0.89-0.73) |  |
| . 07 | $1.11-\mathrm{M} 1$ | to 1.22 | 22 (1.11-0.89) |  |
| . 08 | 1.23 | to 1.38 | 12 (1.23-1.11) |  |
| . 09 | 1.39 | to 1.56 | 16 (1.39-1.23) |  |
| . 10 | 1.57 | to 1.72 | 18 (1.57-1.39) | $\downarrow$ |
| . 11 | 1.73 | to 1.88 | 16 (1.73-1.57) | D: Cyclic |
| . 12 | 1.89 | to 2.10 | 16 (1.89-1.73) |  |
| . 13 | 2.11 - M2 | to 2.22 | 22 (2.11-1.89) |  |

To program a tax table, first make a table like the right table shown above.
From the tax table, calculate the differences between a minimum break point and the next one (A). Then, from the differences, find irregular cycles (B) and regular cycles ( $C$ and $D$ ). These cycles will show you the following items necessary to program the tax table:

T: $\quad$ The tax amount collected on the minimum taxable amount (Q)
Q: The minimum taxable amount
M1: $\quad$ The maximum value of the minimum breakpoint on a regular cycle (C). We call this point "MAX point."
M2: $\quad$ The maximum value of the minimum breakpoint on a regular cycle (D). We call this point "MAX point."
M: Range of the minimum breakpoint on a regular cycle: difference between $Q$ and M 1 or between M1 and M2

## Procedure




To delete a tax table, use the following sequence:

*1 First figure: The first figure to be entered depends upon whether the difference between a minimum breakpoint to be entered and the preceding minimum breakpoint is not less than $\$ 1.00$ or more than 996 . When the difference is not less than $\$ 1.00$, enter " 1 ," and when it is not more than $99 \varnothing$, enter "0" or nothing.
Second figure: The second figure depends upon whether your tax table is to be programmed as tax table 1 , 2,3 or 4 . When your tax table is to be programmed as tax table 1 , enter " 1 "; when it is to be programmed as tax table 2 , enter " 2 "; when it is to be programmed as tax table 3 , enter " 3 "; and when it is to be programmed as tax table 4 , enter " 4 ".
*2 If the rate is fractional (e.g. $4-3 / 8 \%$ ), then the fractional portion (3/8) would be converted to its decimal equivalent (i.e. .375) and the resulting rate of 4.375 would be entered. Note that the nominal rate (R) is generally indicated on the tax table.

Note If you make an incorrect entry before entering the $M$ in programming a tax table, cancel it with the CL key; and if you make an error after entering the $M$, cancel it with the Ssil key. Then program again from the beginning correctly.

## - Limitations to the entry of minimum breakpoints

Your register can support a tax table consisting of no more than 72 breakpoints. (The number of breakpoints is 36 maximum when the breakpoint difference is $\$ 1.00$ or more.) If the number of breakpoints exceeds the register's table capacity, then the manual entry approach should be used.

## Example

Programming the sample tax table shown on the previous page as tax table 1

Key operation

| $2710 \cdot$ ¢00 |  |
| :---: | :---: |
|  | $1{ }^{\text {P1POR }}$ |
| Tax rate $\rightarrow$ | 6 \% |
| M | 100 |
| $\mathrm{T} \rightarrow$ | $1 \stackrel{\square}{\text { POR }}$ |
| Q $\rightarrow$ | 11 ¢op |
|  | 23 \%or |
| cyclic | 39 \%or |
| portion | 57 \%or |
|  | 73 \%or |
| M1 | 89 \%or |
| (MAX point) $\rightarrow$ | 111 ¢08 |
|  | CAAT |

Print

| \#2710 | *PGM2* |  |
| :--- | :--- | ---: |
| IAX1 |  | $6.0000 \%$ |
|  |  | 1 |
|  | 1.00 |  |
|  | 2 | 0.11 |
|  | 3 | 0.23 |
|  | 4 | 0.59 |
|  | 5 | 0.73 |
|  | 6 | 0.89 |
|  | 7 | 1.11 |

- If the tax is not provided for every cent, modify the tax table by setting the tax for every cent in the following way.

When setting the tax, consider the minimum breakpoint corresponding to unprovided tax to be the same as the one corresponding to the tax provided on a large amount.

## Sample tax table

Example 8\%

| Tax | Minimum <br> breakpoint |
| :---: | :---: |
| .00 | .01 |
| .01 | .11 |
| .02 | .26 |
| .03 | .47 |
| .04 | .68 |
| .06 | .89 |
| .09 | 1.11 |
| .10 | 1.26 |
| .11 | 1.47 |
| .12 | 1.68 |
| .14 | 1.89 |
| .17 | 2.11 |

Modification of the left tax table

| Tax | Minimum <br> breakpoint |
| :---: | :---: |
| .00 | .01 |
| $.01-\mathrm{T}$ | $11-\mathrm{Q}$ |
| .02 | .26 |
| .03 | .47 |
| .04 | .68 |
| .05 | .89 |
| .06 | .89 |
| .07 | $1.11-\mathrm{M} 1$ |
| .08 | 1.11 |
| .09 | 1.11 |
| .10 | 1.26 |
| .11 | 1.47 |
| .12 | 1.68 |
| .13 | 1.89 |
| .14 | 1.89 |
| .15 | $2.11-\mathrm{M} 2$ |
| .16 | 2.11 |
| .17 | 2.11 |


| Breakpoint <br> difference (c) |  |
| :---: | :---: |
| 1 |  |
|  | B: Non-cyclic |
| $10(0.11-0.01)$ |  |
| $15(0.26-0.11)$ |  |
| $21(0.47-0.26)$ |  |
| $21(0.68-0.47)$ |  |
| $21(0.89-0.68)$ | C: Cyclic-1 |
| $0(0.89-0.89)$ | $\uparrow$ |
| $22(1.11-0.89)$ |  |
| $0(1.11-1.11)$ |  |
| $0(1.11-1.11)$ |  |
| $15(1.26-1.11)$ |  |
| $21(1.47-1.26)$ |  |
| $21(1.68-1.47)$ |  |
| $21(1.89-1.68)$ | D: Cyclic-2 |
| $0(1.89-1.89)$ |  |
| $22(2.11-1.89)$ |  |
| $0(2.11-2.11)$ |  |
| $0(2.11-2.11)$ |  |

From the modified tax table above;
Rate $=8(\%), \mathrm{T}=\$ 0.01=1 \phi, \mathrm{Q}=\$ 0.11=11 \phi, \mathrm{M} 1=1.11, \mathrm{M} 2=2.11, \mathrm{M}=100$

## The tax rate PGM 2 2711

## Procedure


max. six digits:
0.0001 to
max. five digits:
99.9999\%

To delete a tax rate, use the following sequence:

*A: When you program a tax rate as tax rate 1 , enter " 1 "; when you program it as tax rate 2 , enter " 2 "; when you program it as tax rate 3 , enter " 3 "; and when you program it as tax rate 4 , enter " 4 ".

## Example

Programming the tax rate $4 \%$ as tax rate 2 with tax exempt as $12 \phi$
$\qquad$

|  |
| :---: |
| 2 ¢ 8 OR |
| 4 POR |
| 12 СААА |

Print

| \#2711 *PGM2* |  |
| :--- | ---: |
| TAK2 |  |
|  |  |
|  |  |

## Note

- If you make an incorrect entry before pressing the third $\stackrel{\text { elf }}{\substack{\text { FOR }}}$ key in programming a tax rate, cancel it with the CL key; and if you make an error after pressing the third ${ }_{\text {forl }}^{\text {en }}$ key, cancel it with the SBRI key. Then program again from the beginning correctly.
- You do not need to enter the trailing zeros of the tax rate (after the decimal point), but you do need to enter the decimal for fractions.

\section*{| Doughnut tax exempt (for the Canadian tax system) | PGM 2715 |
| :--- | :--- | :--- | :--- |}

## Procedure



Note This option is available only when your register has been set up with the Canadian tax system.

## Example

 To program the quantity " 6 "$\qquad$


Print
\#2715 *PGM2*
EXPT COUNT

## 4 Programming for departments

Your machine is equipped with 20 (ER-A520)/10 (ER-A530) standard departments and a maximum of 99 departments. Your machine allows you to perform the following programming for each department.

Functional programming 1 PGM 22110 Direct
You can set each department for:

## Item validation printing

If item entries must be validated, program corresponding departments for compulsory validation printing.

## Tare table number

Tare table number associated with scale entry ( 0 thru 9, 0: not used)

## Scale entry

Program a department for scale entry allowed when your store needs automatic scale entries.

## Registration type

- If an entry of a department programmed for SICS is made first, the scale will be finalized as soon as the department key is pressed. If the entry is made after entering a department not programmed for SICS, the sale will not be finalized until the CAAT key is pressed.
- Whenever a sale is made to a department programmed for SIF, the sale is finalized as soon as the department key is pressed.
Department type
You may program each department as one of the following three types.
- Normal department
- Hash department

A hash department is used to enter the amount of a special "sale", such as a gift certificate sale or for the receipt of payment for utility bills, theatre tickets, etc., i.e. "non-sales" registrations. Any amounts entered in this department are not added to the grand total except tax amounts.

- Bottle Return (BR)
- Gas department

The gas department enables you calculate the quantity of gas sold in gallon by using a preset unit price when the sale amount of gas is entered. (quantity of gas = sales amount entered / preset unit price)
Also gas discount can be automatically applied to the sales. (discount amount = total amount of gas x reduced unit price for each media; cash/check/charge)

If your register has not been set for "Bottle return, Hash and gas dept." by your dealer, you cannot program the department for those operations. So contact your dealer if you need them.

## Type of unit price entry

You may select one of the following four types of unit price entry for each department.

- Open and preset
- Preset only
- Open only
- Inhibit department key


## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Item validation printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| B | Tare table number |  | 0 thru 9 (0: not used) |
| C | Scale entry | Inhibit | 0 |
|  |  | Enable | 1 |
|  |  | Compulsory | 2 |
| D | Registration type | Normal | 0 |
|  |  | SICS (Single Item Cash Sale) | 1 |
|  |  | SIF (Single Item Finalization) | 2 |
| $\overline{\mathrm{E}}$ | Department type | Normal department | 0 |
|  |  | Hash department | 1 |
|  |  | Bottle return department | 2 |
|  |  | Gas department | 3 |
| F | Type of unit price entry | Inhibit department key | 0 |
|  |  | Open only | 1 |
|  |  | Preset only | 2 |
|  |  | Open and preset | 3 |

## Example

Programming for department 3
Enter ABCDEF=000003 for department 3.


## Functional programming 2 PGM 2 2111 Direct

## Sign (plus/minus)

- Assign a plus sign to departments for normal sales transactions.
- Assign a minus sign to departments for minus transactions.

Food stamp status

- Assign a food stamp status (food stamp eligible or food stamp ineligible) to each department.

Tax status (taxable 1 thru 4/non-taxable)

- When an entry of a taxable department is made in a transaction, tax is automatically computed according to the associated tax table or rate.

Note
Tax 4 is prohibited if you use the food stamp function.

## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Sign (+/-) | Plus | 0 |
|  |  | Minus | 1 |
| $\mathbf{B}$ | Food stamp status | Ineligible | 0 |
|  |  | Eligible | 1 |
| $\mathbf{C}$ | Tax 4 status | Non-taxable | 0 |
| D | Tax 3 status | Taxable | 1 |
| E | Tax 2 status | Taxable | 0 |
| F | Tax 1 status | Non-taxable | 1 |
|  | Taxable | 0 |  |

## Example

Programming for department 4 and 10 Enter ABCDEF=010001 for department 4.
Enter ABCDEF=100000 for department 10.


Print
 be complete with a press of the ssil key.

■ A limit amount (HALO) of entry
PGM 2
2112 Direct

You can set limit amounts (HALO: High Amount Lockout) for each department. The limit is effective for the REG mode operations and can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

## Procedure

To program any dept.

" $A B$ " is the same as $A \times 10^{B}$.
A: Significant digit (0 through 9)
B: Number of zeros to follow significant digit (0 through 7)
For example, presetting $13(\$ 10.00)$ here means that amount entries of up to $\$ 10.00$ are allowed in the REG mode. When you preset 17, however, the upper limit amount is 99999.99.

## Example

Programming HALO limit of 9000.00 (95) for dept. 1


## Item label PGM 2114

You can program a maximum of 16 characters (item label) for each department.
Select the characters you want to program, referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



To program the next sequential dept.

## Example

## Programming STEAK (steak) for dept. 1



Print


## Unit price PGM 1 PGM 21110 Direct

You can program unit prices up to a maximum of six digits (\$9999.99). Even if a department is not programmed to allow the entry of preset unit prices in functional programming 1 (job \#2110), the department is automatically changed to allow the entry of preset unit prices by this programming entry.

## Procedure

To program any dept.


## Example

Programming $\$ 10.00$ for dept. 1
 - Commission group assignment PGM 2 2115 Direct

Your machine allows you to assign a commission group ( $1-9,0$ : non commission) to each department.

## Procedure



Example Programming commission group 1 for dept. 1 and commission group 2 for dept. 5


## ■ Group number PGM 2 2116 Direct

You can assign departments to a maximum of 9 groups (1 thru 9).
This programming enables you to take the group department sales reports.

## Procedure



## Example

Programming the group number 1 for dept. 1 and the group number 2 for dept. 2


## Group text PGM 2350

You can program a maximum of 8 characters (group name) for each department group.
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMIN".

## Procedure



## Example

Programming DINNER for group number 1

| Key operation | Print |  |
| :---: | :---: | :---: |
|  | \#235 | DINEER |

If an item sold is not allowed to be sold to certain aged persons by law, program the age limitation for the corresponding department.

## Procedure



Note
When a department for which a setting other than zero (1 to 99) has been programmed as the age limitation is entered, the birthday entry will be enforced.

## Example

Programming the age limitation " 18 " for dept. 2


Print station assignment PGM 2118

When you use a remote printer, please consult your dealer.



## Department key positioning PGM 22119

You can assign a department code to each key position. Each key position has a corresponding key number. Departments may be freely selected for the number of department keys and their positions.
To assign the department to a key position, select the key number of the position.
For key number positions, refer to section " 3 Standard key number layout" in chapter "KEYBOARD".

## Procedure

To program any key number


To program the next sequential key number

Note The key number placement is determined by your local authorized SHARP dealer.

## Example

Key operation


Print


## Color Video Monitor (CVM) control character PGM 2.2158

This programming enables you to assign each department with a number that can be used as a CVM control character. This number is converted to a two-digit character code that is transmitted for use with a CVM device.

## Procedure



## Example

Programming 16 as CVM control character for department 1


## 5 PLU/UPC programming

The cash register can deal PLU codes and UPC codes.
A PLU code consist of 5-digits number and leading zeros can be applied to the PLU code.
Your machine has two kinds of PLU registration methods:
Direct PLU registration: Accomplished by pressing item key (direct PLU key) directly.
Indirect PLU registration: Accomplished by making an entry of PLU code and pressing the $\begin{aligned} & \text { PUUV } \\ & \text { PRC }\end{aligned}$ key.
UPC codes are basically codes for barcode reading. With regard to the UPC codes available for this register, please refer to "Universal Product Code(UPC) or European Article Number(EAN)" in this chapter.
For UPC codes, the cash register has a UPC master file as a standard and a dynamic UPC file as an option. Normally you use the UPC master file for saving the data programmed for UPC codes by using job numbers. For the data entered in the UPC learning function mode, which is details in "UPC learning function", is stored in the dynamic UPC file if your register has (if not, the register stores the data in the UPC master file). With regard to data stored in the dynamic UPC file, you can edit the data or if necessary you can create programming data in the dynamic file. The data in the dynamic UPC file can download into the UPC master file.
The phrase of "Dynamic UPC file" is indicated at the right side of job codes for the programming jobs whose data is stored in the dynamic UPC file.

Your machine provides 2000 PLU/UPC codes as a standard, and a maximum of 15000 PLU/UPC codes.
Each PLU/UPC allows you to program the following:

## PLU/UPC code (PLU: max. 5 digits, UPC: 6 to 13 digits)

## Associated department

When a PLU/UPC is associated with a department, the following functions of the PLU/UPC depend on the programming for the corresponding department.

- Type (Bottle return/Hash/Normal)
- Single item cash sale/Single item finalization
- HALO (for "Open" type)
- Item validation print compulsory/non-compulsory

Unit price (max. six digits)
You will usually have unit prices programmed for individual PLUs/UPCs as PLU/UPC unit prices.
If you program unit price " 0.00 " for a PLU/UPC, you can enter only the selling quantity into the PLU/UPC, i.e. the PLU/UPC can be used only as a counter.
When your register is allowed to enter multiple prices (up to 6), you can program 6 different prices for one PLU/UPC code.

## Base quantity for split-pricing entries - two digits

Program a base quantity for each PLU/UPC dedicated to split-pricing entries.

## Type of unit price entry

- If "Preset only" is selected, individual PLU/UPC entries can be made by entering the assigned code and pressing the (PLUC code).
- If "Open only" is selected, the $\begin{aligned} & \text { PLUC } \\ & \text { UPC } \\ & \text { Rey }\end{aligned}$ key must be pressed after the price entry followed by the PLU code and the $\begin{aligned} & \text { PUOC } \\ & \text { UPC } \\ & \text { ent } \\ & \text { ent }\end{aligned}$ ent or the unit price must be entered before pressing a direct PLU key).
- If "Open and preset" is selected, the entries in both "Preset" and "Open" types are available.
- If the delete mode is selected, the corresponding program data for each PLU/UPC is deleted.
- If the prohibit mode is selected, the PLU/UPC code cannot be entered. This mode does not clear the PLU/UPC program data.


## Sign (+/-)

The function of every PLU/UPC varies according to the combination of its sign and its associate department's sign as follows:

| Sign |  | Function of PLU/UPC |
| :---: | :---: | :--- |
| Dept. | PLU/UPC |  |
| + | + | Serves as a normal plus PLU/UPC |
| - | - | Serves as a normal minus PLU/UPC |
| + | - | Accepts store coupon entries, but not split-pricing entries. |
| - | + | Not valid; not accepted. |

## Food stamp status and tax status (taxable 1, 2, 3 and/or 4, non-taxable)

Item label (max. 16 characters)
Tare table number and scale entry
Age limitation

## Commission group ( 1 to 9 )

PLU/UPC group (1 to 99) and group text (max. 8 characters)
Mix-and-match table (max. 10 tables)
Condiment table (max. 99 tables)
Set PLU (for only PLU)
You can link a maximum of 10 PLUs to a particular PLU.

## Link PLU/UPC link

A PLU/UPC is able to link to any other PLU (e.g. bottle deposit). However, the number of links is a maximum of 5 . Even if more than 5 PLUs are linked, the sixth or higher link is not actualized (ignored).
Print station
Delete period for non-accessed UPC codes
Non-PLU code format
PLU level assignment and direct PLU key positioning
Stock quantity
Item label for remote printer (max. 12 characters)
Control character for color video monitor

Note
For some items, you can program in two ways: programming an individual PLU code and for a range of sequential PLU codes. The procedure marked "For each PLU" shows individual PLU programming. The procedure marked "For a range of PLUs" shows sequential range PLU programming.

## 

1050 (Dynamic UPC file)

## Procedure

For each PLU/UPC


Note
As soon as the programming is completed for one PLU/UPC, the next code appears in the display.

For a range of PLUs


Note
PLU codes must have already been defined. If not, an error message "NO RECORD" will appear on the display.

Example Programming for PLU 1 for "Associate department 2"
For each PLU/UPC $\qquad$


Print


## Example

 Programming the PLU 11 thru 20 for "Associate department 3 "
## For a range

 of PLUsKey operation


Print

| \#2230 *PGM2* |  |
| :---: | :---: |
| $00011-$ <br> $(\mathbf{O} 3)$ | 00020 |

## Procedure



* In case that price shift function is allowed, the register prompts to enter a unit price for the following level by displaying "P2" thru " P 6 " on the display, and when a unit price of level 6 is entered, the register goes to the status for programming the following PLU/UPC. When you press the CAATI on the way of programming multiple prices for a PLU/UPC code, prices for the remained levels are kept unchanged.
In case that single price entry is allowed for a PLU/UPC code, the register goes to the status for programming the following PLU/UPC.

Note
The preset amount will work as the unit price for the "Preset" type and as the HALO amount for the "Open" type. In the case of the "Open" type, zero preset prevents amount entry and a 9999.99 preset is the maximum limitation. In the case of the "Preset" type zero and 9999.99 preset have no special meaning. (i.e. 0 amount preset is available.)

## Example <br> Programming " $\$ 1.25, \$ 1.50, \$ 2.00, \$ 2.50, \$ 3.00, \$ 4.00$ " for price level 1 thru 6 of PLU1

| Key operation | Print |  |
| :---: | :---: | :---: |
|  |  | Unit price |

## Procedure



## Example

Programming " 12 " for PLU 2
$\qquad$


Print


## 

## Procedure

## For each PLU/UPC



## For a range of PLUs



Note
When new PLU codes are created in the range specified, the default values are applied to the programming items other than the items set in this programming.

* Item:

| A | Delete method (for only UPC) For PLU, always enter 1. | Delete in non-accessed UPC deleting job (\#105 in Z1 mode) | 0 |
| :---: | :---: | :---: | :---: |
|  |  | Inhibit to delete in non-accessed UPC deleting job (\#105 in Z1 mode) | 1 |
| B | Condiment type PLU (for only PLU) | Disable | 0 |
|  | For UPC, always enter 0. | Enable | 1 |
| C | Condiment entry (for only PLU) | Allowed | 0 |
|  | For UPC, always enter 0. | Compulsory | 1 |
| D | Price shift entry | Enable | 0 |
|  |  | Inhibit | 1 |
|  |  | Compulsory | 2 |
| E | Tare table number |  | 0: Not used) |
| F | Scale entry | Inhibit | 0 |
|  |  | Enable | 1 |
|  |  | Compulsory | 2 |
| G | Type of unit price entry | Prohibit mode | 0 |
|  |  | Open price only (for only PLU) | 1 |
|  |  | Preset price only | 2 |
|  |  | Open price and preset price (for only PLU) | 3 |
|  |  | Delete mode | 4 |

## Example

To program ABCDEFG=1000003 for PLU1

## For each PLU/UPC

$\qquad$
Key operation


Print


To program ABCDEFG=1000003 for PLU11 thru 20
For a range
of PLUs

Key operation


Print



## Procedure

For each PLU/UPC
To program any PLU/UPC


## For a range of PLUs



Note
For a range of PLUs: PLU codes must have already been defined. If not, an error message "NO RECORD" will appear on the display.

| * | Item: | Selection: | Entry: |
| :--- | :--- | :--- | :--- |
| A | Sign (+/-) | Plus | 0 |
|  |  | Minus | 1 |
| B | Food stamp status | Ineligible | 0 |
| C | Tax 4 status | Eligible | 1 |
| D | Tax 3 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| E | Tax 2 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| F | Tax 1 status | Non-taxable | 0 |
|  |  | Taxable | 1 |

## Note

## Tax status (taxable 1 thru 4/non-taxable)

Tax 4 is prohibited if you use the food stamp function.
A PLU/UPC not programmed for Tax 1 thru Tax 4 statuses is registered depending on the tax status of the department which the PLU/UPC belongs to.

## Example

 Programming ABCDEF=010001 for PLU 1For each PLU/UPC $\qquad$ Key operation

Print


|  |  | rint |
| :---: | :---: | :---: |
|  | \#2211 *PGM |  |
|  | P00001 <br> PLUOOOO1 | (02) 100 |
|  |  | 1. 25 |
|  | PLU00001 | 1.50 |
|  | PLU00001 | 2. 00 |
|  | Plu0000 | 2. 50 |
|  | Plu00001 |  |
|  | PLu00001 |  |
| Taxable 1 Food stampeligible | $\begin{aligned} & \text { F11 } \\ & 1000003 \end{aligned} \mathrm{KP000}$ |  |
|  |  |  |

Programming the range PLU 11 thru 20 for $\mathrm{ABCDEF}=000001$

## For a range

 of PLUsKey operation


Print


| Item label | PGM 2 | 2214 | 2064 | (Dynamic UPC file) |
| :--- | :--- | :--- | :--- | :--- |

You can program a maximum of 16 characters (item label) for each PLU/UPC.
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



* In case that price shift function is allowed, the register prompts to enter an item level for the following level by displaying "P2" thru "P6" on the display, and when an item level of level 6 is entered, the register goes to the status for programming the following PLU/UPC. You must enter texts for all price levels.
In case that single price entry is allowed for a PLU/UPC code, the register goes to the status for programming the following PLU/UPC.


## Example

Programming "MILK_1, MILK_2, MILK_3, MILK_4, MILK_5, MILK_6" for price levels 1 thru 6 of PLU1

Key operation


Print

| \#2214 *PGM2* |  |
| :---: | :---: |
| P00001 | (02) 100 |
| MiLK_1 | 1. 25 |
| MILK_2 |  |
|  | 1.50 |
| MILK_3 |  |
| MILK_4 | 2. 00 |
| HLK-4 | 2. 50 |
| MILK_5 |  |
| MILK_6 |  |
|  |  |
| FI1 KPOOO | 6000000 CO |
| 1000003 | $00100 ~ M O O C O D$ $S$ |
| PLU00001 |  |
| PLLU00001 |  |
| PLU00001 |  |
| PLU00001 |  |
| PLU00001 |  |
| PLU00001 |  |


| Commission groups PGM 2 | 2215 | 2235 | Direct 2065 | (Dynamic UPC file) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

You can assign PLUs/UPCs to commission groups (1 to 9).

## Procedure

For each PLU/UPC
To program any PLU/UPC


## For a range of PLUs



Note
For a range of PLUs: PLU codes must have already been defined. If not, an error message "NO RECORD" will appear on the display.

## Example Programming the commission group 1 for PLU 1

For each PLU/UPC $\qquad$ Print


Key operation

Programming all of PLU 11 thru 20 for the commission group 1

## For a range

 of PLUsKey operation


\section*{| $\square$ | Group number | PGM 2 | 2216 | 2066 | (Dynamic UPC file) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

You can assign PLU/UPCs to a maximum of 99 groups. Each PLU/UPC can belong to a maximum of three groups.


* AB: Group number (0 to 99) for group 1

CD: Group number (0 to 99) for group 2
EF: Group number ( 0 to 99 ) for group 3

## Example

Programming 01/10/50 (Group 1/2/3) for PLU1

Key operation


Print


## - Group text PGM2 2351

You can program a maximum of 8 characters (group name) for each PLU/UPC group.
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".


Programming DRINK for group number 1

Key operation


## Print


\#01
DRINK

If an item sold is not allowed to be sold to certain aged persons by law, program the age limitation for the corresponding PLU/UPC.

## Procedure

## For each PLU/UPC



For a range of PLUs


Note

- PLU codes must have already been defined. If not, an error message "NO RECORD" will appear on the display.
- When a PLU/UPC for which a setting other than zero (1 to 99) has been programmed as the age limitation is entered, the birthday entry will be enforced.


## Example

 Programming the age limitation "18" for PLU 2$\qquad$ Print



Programming the PLU 11 thru 20 for the age limitation " 18 "

## For a range

 of PLUsKey operation


Print

## \#2236 *PGM2*

$00011-{ }^{\text {A18 }} 00020$

## 

You can assign a stock quantity to each PLU/UPC code. (If you want to control a stock quantity, please consult your dealer.) When you assign it for the first time, follow the below procedure:

## Procedure



## Example

To program the stock quantity " 10 " for PLU 2


Note

- If you assign another stock quantity to the PLU/UPC code which you have assigned a stock quantity to, it will be overridden.
- You must use a decimal point $(\sqrt{\bullet})$ key when setting quantities that are fractional.

If you need to add or subtract a stock quantity, follow the below procedure:

## Procedure



## Adding the stock quantity

## Example

To add the stock quantity " 4 " to the current stock quantity " 10 " of PLU2


## Subtracting the stock quantity

Example To subtract the stock quantity "1.5" from the current stock quantity " 14 " of PLU 2

Key operation

Print


## Set PLU PGM $2 \quad 2221$

## Procedure



Note
PLU codes must have already been defined.
You can program a maximum of 15 set PLUs. A set PLU can be tied to a maximum of 10 PLUs.

Example Programming the set PLU 20 (tied PLUs: PLU 201 and PLU 202)


## Mix-and-match table

The mix-and-match table consists of the adjustment amount and the matching count for discount (satisfying the count of entered items). You can program a maximum of 99 mix-and-match tables. One table can be assigned maximum of 5 kind of items.
[Ex.] Mix-and-match table no. 1: matching count=3, adjustment amount \$7.00
Mix-and-match items of table no. 1: Item-A (\$2.30), Item-B (\$3.10), Item-C (\$2.50)

| $<$ Sale $1>$ |  |
| ---: | :--- |
| Item-A | $\$ 2.30$ |
| Item-A | $\$ 2.30$ |
| Item-B | $\$ 3.10$ |
| Subtotal | $\$ 7.70$ |
| (Discount | $\$ 0.70$ ) |
| Total | $\$ 7.00$ |


| $<$ Sale $2>$ |  |
| ---: | :--- |
| Item-C | $\$ 2.50$ |
| Item-C | $\$ 2.50$ |
| Item-C | $\$ 2.50$ |
| Subtotal | $\$ 7.50$ |
| (Discount | $\$ 0.50$ ) |
| Total | $\$ 7.00$ |


| <Sale |  |
| ---: | :--- |
| Item-A | $\$ 2.30$ |
| Item-B | $\$ 3.10$ |
| Item-C | $\$ 2.50$ |
| Subtotal | $\$ 7.90$ |
| (Discount | $\$ 0.90$ ) |
| Total | $\$ 7.00$ |

## Programming of matching count and adjustment amount

## Procedure



* AB: $\quad$ Matching count (1-99)

CDEFGH: Adjustment amount (max. 6 digits)
Example Programming mix-and-match table no. 1 (matching count=3, adjustment amount \$5.00)


Assigning items to the mix-and-match tables

## Procedure



Key operation


Print


\section*{| PLU condiment table PGM 2 | 2222 | 2223 |
| :--- | :--- | :--- | :--- |}

The "condiment entry" is intended to guide the operator in making menu entries which require special cooking instructions. For example, a cashier/server can make such entries as "garnishing potato," "with salad," and "grilling steak rate." When a cashier/server enters a menu-item PLU to which PLUs for the condiment entry have been assigned, these orders (such as "garnishing potato") will be printed on the receipt and conveyed to the kitchen.

Before you program for the condiment entry, prepare a condiment table. The following shows an example of a condiment table:

## Condiment table



The condiment table should contain the following:
Condiment table: The condiment table is a group of condiment PLUs, which is assigned to each menuitem PLU. A table consists of a message text and up to 15 PLUs. Also, you can assign the next condiment table number to a condiment table to link them.
The message text is used for displaying a prompting message. The PLU is used for the special order setting. For example, when a server enters a menu-item PLU, a display message programmed for the message text such as "HOWCOOK?." will appear. Then specify one of the PLU programmed for text such as "RARE."
Table number: The table number is intended to identify each condiment table.

## Assigning PLU condiment table number

## Procedure



## Example Programming condiment table \#1 for PLU 15

Key operation


Print

| \#2222 *PGM2* |  |  |
| :---: | :---: | :---: |
| P00015 PLU00015 | (03) 100 |  |
|  | 0. 00 |  |
| PLU00015 |  |  |
| PLU00015 |  |  |
|  | 0. 00 |  |
| PLU00015 |  |  |
| PLU00015 |  |  |
|  | 0. 00 |  |
| PLU00015 |  |  |
| $\operatorname{T1}_{1000003} K P 000$ | $\begin{array}{r} 0.00 \\ \text { G00 } 0000 \mathrm{Ol} \\ 00 \mathrm{A18} \mathrm{MOO} \mathrm{Cl} \\ \mathrm{~S} \quad 0.000 \end{array}$ | $\begin{aligned} & \text { Condiment } \\ & \text { table \# } \end{aligned}$ |
| PLU00015 |  |  |
| PLU00015 |  |  |
| PLU00015 |  |  |
| PLU00015 |  |  |
| PLU00015 |  |  |
| PLU00015 |  |  |

## Assigning PLUs for condiment entry

## Procedure



To program any other table
*A: Repeat times (1 to 9)
BC: Next table\# (00 to 99: 00: not applied)

## Example

Programming repeat time 1 and next condiment table \#2 and PLU 23/24/25 for PLUs for condiment entry for condiment table \#1.

| Key operation |
| :--- | :--- |



Note PLU codes must have been already defined.

## Print station to PLU/UPC assignment

When you use a remote printer, consult your dealer.

## Procedure



To program any PLU/UPC

| $*$ | Item: | Selection: | Entry: |
| :--- | :--- | :--- | :---: |
| $\mathbf{A}$ | Remote printer 1 output | Output | 1 |
|  |  | Not output | 0 |
| $\mathbf{B}$ | Remote printer 2 output | Output | 1 |
|  |  | Not output | 0 |
| $\mathbf{C}$ | Printing on the chit receipt | Yes | 1 |
|  |  | No | 0 |



Print

| \#2218 *PGM2* |  |
| :---: | :---: |
| P00009 PLU00009 | (01) 100 |
|  | 0. 00 |
| PLU00009 |  |
| PLJ00009 | 0. 00 |
|  | 0. 00 |
| PLU00009 | 0. 00 |
| PLU00009 |  |
|  | 0. 00 |
| PLU00009 | O. 00 <br> 6000000 CO |
| 1000002 | 00 AOO MOOCOO |
| PLuoooog |  |
| PLU00009 |  |
| PLU00009 |  |
| PLU00009 |  |
| PLU00009 |  |
| PLU00009 |  |

Delete period for non-accessed UPC codes
You can delete the UPC codes which have not been accessed during the period you set in this program when you execute the job \#105 in Z1 mode when you set "Delete in non-accessed UPC deleting job" in the UPC delete method (\#2210).

## Procedure



* When you select "00" for the period, no UPC code is deleted by the non-accessed UPC deleting job.


## Example

Key operation
$2 0 2 9 \longdiv { \bullet - 1 0 8 }$

Print

```
#2029 *PGM2*
```

The register allows you to specify the Non-PLU code format (flag code: 2, 02, 20-29).
The format data is as follows:


## Procedure


*1 Flag code: 2, 02, 20-29

| $* 2$ | Selection: | Entry: |
| :--- | :--- | :--- |
| Item: | Length of field 1 (number of digits) | $0-9$ |
| B | Length of field 2 (number of digits) |  |
| C | Always enter 0. | (Fixed position) |
| D | Meaning of field 2*3 | Quantity |
|  |  | Price |
| E | Price check digit used | Yes |
|  |  | No |
| F | TAB or decimal point of field $2(0,1,2,3)$ | 2 |

*3. When you preset a quantity, the sales amount is calculated as follows: quantity $x$ unit price programmed in \#1210.

\section*{Example <br> 

Key operation


Print


## Procedure



To program for the following PLU/UPC

## Note

PLU/UPC codes must have already been defined.
You can program a maximum of 15 link PLUs/UPCs. A link PLU/UPC can be linked to a maximum of 5 PLUs.

## Example

Programming so that PLU 25, 26 and 27 are linked to PLU 21


## ■ Programming of PLU levels and direct PLU keys $\operatorname{PGM} 2 \mathbf{2 2 1 9}$

You can assign PLU codes to fixed keys in each PLU level and use those keys as direct PLU key.
For assigning a PLU level, press the $L 1, L 2, L 3, L 4$ or $L 5$ key or enter level number and press the For example, if you want to assign PLU level 1 and key no. 1 to a PLU code, press the $L 1$ key and enter 1 before entering the PLU code.
For key no. position, refer to section "3 Standard key number layout" in chapter "KEYBOARD".

## Procedure



To keep the current level

- PLU codes must have already been defined.
- The key number placement is determined by your local Authorized SHARP Dealer.


## Example

$\qquad$


Print


## ■ Item label for remote printer PGM 2 2244 2094 (Dynamic UPC file)

You can program a maximum 12 characters (item label) for each PLU/UPC which are printed by remote printers. Select the characters you want to program, referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



* In case that price shift function is allowed, the register prompts to enter a remote printer item level for the following level by displaying "P2" thru "P6" on the display, and when an item level of level 6 is entered, the register goes to the status for programming the following PLU/UPC. You must enter texts for all price levels. In case that single price entry is allowed for a PLU/UPC code, the register goes to the status for programming the following PLU/UPC.


## Example

Programming "MILK_K1, MILK_K2, MILK_K3, MILK_K4, MILK_K5, MILK_K6" for price levels 1 thru 6 of PLU1

| Key operation | Print |
| :---: | :---: |
|  |  |

This programming enables you to assign each PLU/UPC with a number that can be used as a CVM control character. This number is converted to a two-digit character code that is transmitted for use with a CVM device.

## Procedure

For each PLU/UPC
To program any PLU/UPC


## For a range of PLUs



Note
For a range of PLUs: PLU codes must have already been defined. If not, an error message "NO RECORD" will appear on the display.

## Example

Programming 16 as CVM control character for PLU1

For each PLU/UPC $\qquad$
Key operation


Print


Programming the range PLU11 through 20 for CVM control character 16

For a range of PLUs

Key operation


Print

| \#2234 *PGM2* |  |
| ---: | ---: | ---: |
| $00011-$ | 00020 |
| 10 |  |

## 6 Programming for miscellaneous keys

Only function keys which you have allocated on the keyboard will allow this programming.


## 1310 Direct

You can program percent rates, currency conversion rates, commission rate, gratuity rate, tip-in rate and discount amount.

## Procedure


*1: Function no.

*2: Rate or amount
0 - 999999 (Discount amount)
0.00 - 100.00 (\% rate)
0.0000 - 9999.9999 (Currency conversion rate)
0.00 - 999.99 (Commission rate)
$0.00-100.00$ (Gratuity rate)
0.00 - 100.00 (Tip-in rate)

Example Assigning $\$ 10.00$ to the $\Theta$ key, $10.25 \%$ to the $\%$ key, and 1.325 to the coow key.


Note

- You must use a decimal point when setting percentage rates that are fractional.
- When amount entry is selected for tip-in entry on the programming job \#2616, you cannot program for function number 141.


## Procedure


*: Function no.

11:Gas discount when finalized by CAAT 12:Gas discount when finalized by CA2 13:Gas discount when finalized by CA3 14:Gas discount when finalized by CA4 15:Gas discount when finalized by CA5 16:Gas discount when finalized by СНК 17:Gas discount when finalized by Санг 18:Gas discount when finalized by снкз 19:Gas discount when finalized by CHK4 20:Gas discount when finalized by CHK5

21:Gas discount when finalized by CH 1
22:Gas discount when finalized by CH 2
23:Gas discount when finalized by CH3
24:Gas discount when finalized by CH4
25:Gas discount when finalized by CH5
26:Gas discount when finalized by СН6
27:Gas discount when finalized by $\mathrm{CH7}$ 28:Gas discount when finalized by 애8 29:Gas discount when finalized by СН9

| Key operation | Print |  |
| :---: | :---: | :---: |
| $1311 \text { • } 11 \text { COBR }$ | \#1311 *PGM2* <br> F011 GAS(-)1 | 0.505 |

## - Currency description text (com) PGM 22334

You can program a maximum of 4 characters for each of the coow thru comve keys.

## Procedure


*: Function no.
$\begin{array}{ll}\text { 106: For the coov key } & \text { 108: For the coms key } \\ \text { 107: For the cown key } & \text { 109: For the cown key }\end{array}$

## Example




## 2312 Direct

The HALO limit is in effect for the REG-mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

## Procedure


*1: Function no.

2: For the $\Theta 2$ key 95: For the RA key
3: For the $\Theta_{3}$ key 96: For the RA2 key
4: For the $\ominus_{4}$ key 97: For the PO key
5: For the ©5 key 98: For the Po2 key
*2: $A B$ is the same as $A \times 10^{8}$.
A: Significant digit (0 through 9)
B: Number of zeros to follow significant digit

0 through 8 (for the RA, RA2, PO , and PO keys)
For example, presetting 13 (\$10.00) here means that amount entries of up to $\$ 10.00$ are allowed in the REG mode.

You can set up $A B=18$ for no limitation (for the $R A, ~ R A 2$, $P O$, and Po2 keys).

Example
Programming 13 for the $\Theta$ key.


- +/- sign, food stamp status, and tax status (\%, $\Theta$, gratuity)
+/- sign: Programming of the +/- sign assigns the premium or discount function for each key.
Food stamp status: Programming of the food stamp status decides whether a premium or discount should be dealt with as a food stamp-eligible amount or not.
Tax status: Programming of the tax status decides whether a premium or discount should be dealt with as a taxable (taxable $1 / 2 / 3 / 4$ ) or non-taxable amount.

Note Tax 4 is prohibited if you use the food stamp function.

## Procedure


*1: Function no.

| 1: For the | $\Theta$ | key | 6: For the | \% | (\%1) key | 87: For the gratuity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2: For the | (2) | key | 7: For the | \%2 | key |  |
| 3: For the | (93) | key | 8: For the | 03 | key |  |
| 4: For the | (94) | key | 9: For the | \%4 | key |  |
| 5: For the | (95) | key | 10: For the | \%5 | key |  |


| *2: | Item: | Selection: | Entry: |
| :--- | :--- | :--- | :--- |
| A | $(+/-)$ sign | Plus | 0 |
|  |  | Minus | 1 |
| B | Food stamp status | Ineligible | 0 |
| C | Tax 4 status | Eligible | 1 |
| D | Tax 3 status | Non-taxable | 0 |
|  |  | Taxable | 1 |
| E | Tax 2 status | Non-taxable | 0 |
| F | Tax 1 status | Non-taxable | 1 |
|  |  | Taxable | 0 |

Example Programming $\mathrm{ABCDEF}=100001$ for the \% key and $\mathrm{ABCDEF}=000000$ for the \% key

Key operation


## Print

| \#2311 *PGM2* |  |  |  |
| :---: | :---: | :---: | :---: |
| F006 |  |  | -10.25\% |
| ${ }_{\text {S }} \mathrm{S}$ IT | \%2 | 3 | L100.00\% |
| S |  | 3 | L100.00\% |

## Percent entry type (\%) PGM 22310

You can program the entry type of rates for percent entries.

## Procedure


*1: Function no.
6: For the \% (\%1) key
7: For the \%2 key
8: For the \%3 key
9: For the \%4 key
10: For the \%5 key

## Example Programming "Preset rate only" for the \%2 key

Key operation


Print


## Item\% or subtotal\% selection (\%) PGM 2 2315 Direct

Item\%: Select this when a percent calculation is desired for the individual department and PLU/UPC. Subtotal\%: Select this when a percent calculation is desired for merchandise subtotals.

## Procedure


*1: Function no.

*2: A
6: For the \% (\%1) key
0: Subtotal\%
7: For the \%2 key
8: For the \%3 key
9: For the \%4 key
10: For the \%5 key

## Example Programming "Item\%" for the \%2 key



## Percent rate limitation (\%) PGM 22313

You can program the upper limit of percent rates for percent entries.
Percent entries that use the upper limit may be overridden in the MGR mode.

## Procedure


*1: Function no.
6: For the \% (\%1) key
8: For the \%3 key
7: For the \%2 key
9: For the \%4 key 10: For the \%5 key
*2: Rate limitation $0.00-100.00$ (Entering 0.00 inhibits the open percent rate entry)

Note The $\quad \bullet$ key is needed only for fractional entry.

## Example Programming the limit to $15.5 \%$ for the $\% 2$ key

Key operation



Vendor or store coupon selection ( $\Theta$ )
Vendor coupon: Select this when the coupon is to be applied to the total sales amount.
Store coupon: Select this when the coupon is to be applied to an individual department or PLU.

## Procedure


*1: Function no.
1: For the $\Theta$ key
4: For the $\Theta 4$ key
2: For the $\Theta_{2}$ key
5: For the ${ }^{\ominus 5}$ key
*2: A
0 : Vendor coupon (subtotal $\Theta$ )
1: Store coupon (item $\Theta$ )

Example
Programming the "Store coupon" for the $\Theta 2$ key.

Key operation


Print


## 7 Programming for the media keys

## 

You can set each media for:

## GLU/PBLU/Manual PB/CB entry compulsory

## Short amount tender entry

## Retention of closed GLU/PBLU file

Bill (slip) print compulsory
Footer printing on receipt
This programming decides whether or not your machine should print a message at the foot of a receipt when a specified media key is used.

## Non-add code compulsory

You can enforce the non-add code entry when a media entry is accepted.

## Change enable (over tender enable)

Either change enable or disable can be selected for a corresponding media key.

## Validation printing compulsory

If media entries must be validated, set the corresponding media for compulsory validation print.
Drawer opening
You can program each media key to or not to open the drawer.
Amount tendered compulsory
You may select amount tendered compulsory or optional for the CAAT, CA2 thru CA5, CHK, and CHK2 thru CHK5 keys.
You may select amount tendered compulsory or inhibited for the CH 1 thru CH 9 keys.

## Procedure


*1: Function no.

89: For the CAAT key
90: For the CA2 key
91: For the CA3 key
92: For the CA4 key
93: For the CA5 key
114: For the $\mathrm{CH1}$ key
116: For the CH 2 key
118: For the CH3 key

120: For the CH4 key
122: For the CH5 key
124: For the CH 6 key
126: For the $\mathrm{CH7}$ key
128: For the CH8 key
130: For the CH9 key
132: For the CHK key
133: For the CHK2 key

134: For the СНкз key
135: For the CHK4 key
136: For the CHK5 key
82: For the SARC key
94: For the FED key
238: For the FNAL key

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | GLU/PBLU/Manual PB/CB entry | Enable | 0 |
|  |  | Inhibit | 1 |
|  |  | Compulsory | 2 |
| B | Short amount tender entry | Enable | 0 |
|  |  | Disable | 1 |
| C | Retention of closed GLU/PBLU file | No | 0 |
|  |  | Yes | 1 |
| D | Bill (slip) printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| E | Footer printing on receipt | No | 0 |
|  |  | Yes | 1 |
| F | Non-add code entry | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| G | Change enable (over tender enable) | Enable | 0 |
|  |  | Disable | 1 |
| H | Validation printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| I | Drawer opening | Yes | 0 |
|  |  | No | 1 |
| J | Amount tendered operation | Optional amount tendered for cash or check | 0 |
|  |  | Inhibit amount tendered for charge | 0 |
|  |  | Compulsory amount tendered | 1 |

Note

- For the savg or fiml key, always enter 0 as A thru $C$ and $E$ thru $J$.
- For the Fsict key, always enter 0 as B, G, and J.


## Example

Programming of the CH 3 key for ABCDEFGHIJ=0000000001
$\qquad$
Key operation
2320 -
118 FOR
0000000001 S8BT

Print


Functional programming 2 PGM 2326
You can program each media key for gas discount availability and tax status (tax 1 thru 4).

## Procedure


*1: Function no.

89: For the CAAT key
90: For the CA2 key
91: For the CA3 key
92: For the (CA4 key
93: For the CA5 key
114: For the $\mathrm{CHH}_{1}$ key
116: For the $\mathrm{CH}_{2}$ key
118: For the $\mathrm{CH}_{3}$ key

120: For the CH 4 key
122: For the CH5 key
124: For the СНН key
126: For the $\mathrm{CHH}_{7}$ key
128: For the CH8 key
130: For the СН9 key
132: For the CHK key
133: For the Cसk2 key

134: For the C대3 key
135: For the CHK4 key
136: For the CसमК5 key
110: For the EatM key
111: For the 展正
112: For the $\sqrt{\left[\operatorname{arm}_{3}^{2}\right]}$ key

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Gas discount | Disable | 0 |
|  |  | Enable | 1 |
| B | Tax 4 calculation status | calculate tax 4 | 0 |
|  |  | delete tax 4 | 1 |
| C | Tax 3 calculation status | calculate tax 3 | 0 |
|  |  | delete tax 3 | 1 |
| D | Tax 2 calculation status | calculate tax 2 | 0 |
|  |  | delete tax 2 | 1 |
| E | Tax 1 calculation status | calculate tax 1 | 0 |
|  |  | delete tax 1 | 1 |

Note


## Example Programming the $\mathrm{CH3}$ EyTM key to enable gas discount



■ High amount lockout (HALO) for check cashing, check change, and cash in drawer PGM2 2321
You can program the upper limit amounts for check cashing, check change, and cash in drawer.

## Procedure


*1: Function no.
99: For check 1 cashing
100: For check 2 cashing
101: For check 3 cashing
102: For check 4 cashing
103: For check 5 cashing
104: For check change
138: For cash in drawer (sentinel)
*2: Limit amount
0 thru 999999.99 (check cashing and check change)
0 thru 9999999.99 (cash in drawer)

## Example

Setting the limit to $\$ 99.99$ for check 1 cashing.

Key operation


Print
\#2321 *PGM2*
F099 CA/CHK1
99. 99

High amount lockout (HALO) of entry for media keys PGM 2322 Direct
The HALO limit is in effect for REG mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

## Procedure


*1: Function no.

| 89: For the | key | 118: For the | $\mathrm{CH}_{3}$ key | 132: For the C | k key |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 90: For the | key | 120: For the | CH4) key | 133: For the chr | Hk2 key |
| 91: For the C | key | 122: For the | CH5 key | 134: For the char | ннк3 ke |
| 92: For the C | key | 124: For the | CH6) key | 135: For the chmo | Hk4 |
| 93: For the C | key | 126: For the | CH7) key | 136: For the chat | HK5 |
| 114: For the $C$ | key | 128: For the | CH8) key |  |  |
| 116: For the | key | 130: For the | CH9 key |  |  |

*2: AB
A: Significant digit (1 thru 9)
B: Number of zeros to follow significant digit (0 thru 8)
You can set up $A B=18$ for no limitation.

Setting the HALO limit to $\$ 1000.00$ (15) for the $\mathrm{CH}_{3}$ key

Key operation


Print


## Print station assignment PGM 2 2328

When you use a remote printer, consult your dealer.

## Procedure


*1: Function no.

89: For the CAAT key
90: For the CA2 key
91: For the САЗ key
92: For the CA4 key
93: For the CA5 key
114: For the CH1 key
116: For the CH2 key
118: For the СН3 key

120: For the CH 4 key
134: For the Cннк3 key
122: For the CH5 key
135: For the CHK4 key
124: For the $\mathrm{CH}_{\mathrm{H}}$ key
136: For the CHks key
126: For the $\mathrm{CH}_{7}$ key
82: For the ssavc key
128: For the CH8 key
94: For the $\underset{\text { FSicl }}{ }$ key
238: For the FMML key
*2: Item:
Selection:
Entry:

| A | Remote printer 1 output | Output | 1 |
| :--- | :--- | :--- | :--- |
|  |  | Not output | 0 |
| B | Remote printer 2 output | Output | 1 |
|  |  | Not output | 0 |
| C | Printing on the chit receipt | Yes | 1 |
|  |  | No | 0 |

## Example

Programming of the $\mathrm{CH}_{3}$ key for selecting "remote printer 1 output/remote printer 2 not output/printing on chit receipt"

Key operation


Print


## ■ CAT programming

When you use a credit card authorization terminal, please consult your authorized SHARP dealer.

*1: Function no.

*2: Item:


K Number of CAT authorization receipt 0 to 9

Number of CAT authorization receipt
Even when 0 is set, 1 receipt is issued.

## Example

Programming of the CH3 key for ABCDEFGHIJK $=00000000000$.

Key operation

| Key operation |
| :---: |
| $2330 \cdot{ }^{\circ}$ |
| 118 ¢ 18 |
| 00000000000 Sstr |
| CAAT |

Print


## 8 Programming of function text

## ■ Programming PGM2 2314

You can program a maximum of 8 characters for each function key and other functions using the table on the following pages. Select the characters you want to program referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



* Function no.: See "List of function texts" shown below (until function no. 289).


## Example

Programming CARD for CH 3 key

## Key operation



Print

## \#2314 *PGM2*

## F 118 CARD <br> KP101 L15

10000000000000000000000001

## List of function texts

| Function no. | Key or function | In default of proramming |
| :---: | :---: | :---: |
| 1 | $\ominus 1$ | (-) 1 |
| 2 | $\ominus 2$ | $(-) 2$ |
| 3 | $\Theta 3$ | $(-) 3$ |
| 4 | $\ominus 4$ | $(-) 4$ |
| 5 | $\ominus 5$ | $(-) 5$ |
| 6 | \%1 | \% 1 |
| 7 | \%2 | \% 2 |
| 8 | \%3 | \% 3 |
| 9 | \%4 | \% 4 |
| 10 | \%5 | \% 5 |
| 11 | Gas discount for cash 1 | GAS (-)1 |
| 12 | Gas discount for cash 2 | GAS (-)2 |
| 13 | Gas discount for cash 3 | GAS (-)3 |
| 14 | Gas discount for cash 4 | GAS (-)4 |
| 15 | Gas discount for cash 5 | GAS (-)5 |
| 16 | Gas discount for check 1 | GAS (-)6 |


| Function <br> no. | Key or function | In default of <br> proramming |
| :---: | :--- | :--- |
| 17 | Gas discount for check 2 | GAS (-)7 |
| 18 | Gas discount for check 3 | GAS (-)8 |
| 19 | Gas discount for check 4 | GAS (-)9 |
| 20 | Gas discount for check 5 | GAS (-)10 |
| 21 | Gas discount for charge 1 | GAS (-)11 |
| 22 | Gas discount for charge 2 | GAS (-)12 |
| 23 | Gas discount for charge 3 | GAS (-)13 |
| 24 | Gas discount for charge 4 | GAS (-)14 |
| 25 | Gas discount for charge 5 | GAS (-)15 |
| 26 | Gas discount for charge 6 | GAS (-)16 |
| 27 | Gas discount for charge 7 | GAS (-)17 |
| 28 | Gas discount for charge 8 | GAS (-)18 |
| 29 | Gas discount for charge 9 | GAS (-)19 |
| 30 | Net sales tota | N E T 1 |
| 31 | Net taxable 1 subtotal | TAX1 ST |
| 32 | Gross tax 1 total | GRS TAX1 |


| Function no. | Key or function | In default of proramming |
| :---: | :---: | :---: |
| 33 | Tax 1 total of refund entries | RFD TAX1 |
| 34 | Net tax 1 total | TAX1 |
| 35 | Exempt tax 1 | TX1 EXPT |
| 36 | Net taxable 2 subtotal | TAX2 ST |
| 37 | Gross tax 2 total | GRS TAX2 |
| 38 | Tax 2 total of refund entries | RFD TAX2 |
| 39 | Net tax 2 tota | TAX2 |
| 40 | Exempt tax 2 | TX2 EXPT |
| 41 | Net taxable 3 subtotal | TAX3 ST |
| 42 | Gross tax 3 total | GRS TAX3 |
| 43 | Tax 3 total of refund entries | RFD TAX3 |
| 44 | Net tax 3 total | TAX3 |
| 45 | Exempt tax 3 | TX3 EXPT |
| 46 | Net taxable 4 subtotal | TAX4 ST |
| 47 | Gross tax 4 total | GRS TAX4 |
| 48 | Tax 4 total of refund entries | RFD TAX4 |
| 49 | Net tax 4 total | TAX4 |
| 50 | Exempt tax 4 | TX4 EXPT |
| 51 | Gross manual tax total | GRS MTAX |
| 52 | Refund manual tax total | RFD MTAX |
| 53 | Net manual tax total | M-TAX |
| *54 | Exempt total from GST | GST EXPT |
| *55 | PST total | PST TTL |
| *56 | GST total | GST TTL |
| 57 | FS1 forgive | FS TX1 |
| 58 | FS2 forgive | FS TX2 |
| 59 | FS3 forgive | FS TX3 |
| 60 | Tax total | TTL TAX |
| 61 | Net | N E T |
| 62 | Sales total including tax total | NET 2 |
| 63 | Coupon-like PLU | CP PLU |
| 64 | Vender coupon UPC | V. CP UPC |
| 65 | Item void | VOID |
| 66 | Subtotal void | SBTL VD |
| 67 | Manager void | MGR VD |
| 68 | Void mode | VOID |
| 69 | Refund | REFUND |
| 70 | Return | RETURN |
| 71 | Hash item void | HASH VD |
| 72 | Hash item refund | HASH RF |
| 73 | Hash item return | HASH RT |
| 74 | No sale | NO SALE |
| 75 | Validation print counter | VP CNT |
| 76 | Bill (slip) counter | BILL CNT |
| 77 | Drawer counter | DRW CNT |
| 78 | Dray total counter | TRAY CNT |
| 79 | Transfer out | TRAN.OUT |


| Function no. | Key or function | In default of proramming |
| :---: | :---: | :---: |
| 80 | Transfer in | TRAN.IN |
| 81 | PBAL | ***PBAL |
| 82 | Service | SERVICE |
| 83 | Deposit | DEPOSIT |
| 84 | Deposit refund | DPST RF |
| 85 | Cover count | COVER CT |
| 86 | Customer counter | TRANS CT |
| 87 | Gratuity | GRATUITY |
| 88 | Sales total | N E T 3 |
| 89 | Cash | C ASH |
| 90 | Cash 2 | C ASH2 |
| 91 | Cash 3 | C ASH3 |
| 92 | Cash 4 | C ASH4 |
| 93 | Cash 5 | C ASH5 |
| 94 | Food stamp sales | FSSALE |
| 95 | RA | ***RA |
| 96 | RA2 | ***RA2 |
| 97 | PO | ***PO |
| 98 | PO2 | ***PO2 |
| 99 | Check cashing 1 | CA/CHK1 |
| 100 | Check cashing 2 | CA/CHK2 |
| 101 | Check cashing 3 | CA/CHK3 |
| 102 | Check cashing 4 | CA/CHK4 |
| 103 | Check cashing 5 | CA/CHK5 |
| 104 | Check change | CHK/CG |
| 105 | Food stamp change | FS/CG |
| 106 | Currency conversion 1 | CONV 1 |
| 107 | Currency conversion 2 | CONV 2 |
| 108 | Currency conversion 3 | CONV 3 |
| 109 | Currency conversion 4 | CONV 4 |
| 110 | Eat-in 1 | EAT IN 1 |
| 111 | Eat-in 2 | EAT IN 2 |
| 112 | Eat-in 3 | EAT IN 3 |
| 113 | Food stamp in drawer | FS/ID |
| 114 | Gross charge 1 | CHARGE1 |
| 115 | Refund charge 1 | CHARGE1- |
| 116 | Gross charge 2 | CHARGE2 |
| 117 | Refund charge 2 | CHARGE2- |
| 118 | Gross charge 3 | CHARGE3 |
| 119 | Refund charge 3 | CHARGE3- |
| 120 | Gross charge 4 | CHARGE4 |
| 121 | Refund charge 4 | CHARGE4- |
| 122 | Gross charge 5 | CHARGE5 |
| 123 | Refund charge 5 | CHARGE5- |
| 124 | Gross charge 6 | CHARGE6 |
| 125 | Refund charge 6 | CHARGE6- |
| 126 | Gross charge 7 | CHARGE7 |


| Function no. | Key or function | In default of proramming |
| :---: | :---: | :---: |
| 127 | Refund charge 7 | CHARGE7- |
| 128 | Gross charge 8 | CHARGE8 |
| 129 | Refund charge 8 | CHARGE8- |
| 130 | Gross charge 9 | CHARGE9 |
| 131 | Refund charge 9 | CHARGE9- |
| 132 | Check 1 | CHECK1 |
| 133 | Check 2 | CHECK2 |
| 134 | Check 3 | CHECK3 |
| 135 | Check 4 | CHECK4 |
| 136 | Check 5 | CHECK5 |
| 137 | Cash + check in drawer | CA/CH ID |
| 138 | Cash in drawer | ****CID |
| 139 | Cash tip | CA TIP |
| 140 | Charge tip | CH TIP |
| 141 | Tip-in (used only for PGM mode) | TIP IN |
| 142 | Tip paid | TIP PAID |
| *143 | Exempt VAT | VAT EXPT |
| 144 | Sales average | AVE. |
| 145 | Price level 1 for PLU/UPC | LEVEL 1 |
| 146 | Price level 2 for PLU/UPC | LEVEL 2 |
| 147 | Price level 3 for PLU/UPC | LEVEL 3 |
| 148 | Price level 4 for PLU/UPC | LEVEL 4 |
| 149 | Price level 5 for PLU/UPC | LEVEL 5 |
| 150 | Price level 6 for PLU/UPC | LEVEL 6 |
| 151 | (+) Dept. total | *DEPT TL |
| 152 | (-) Dept. total | DEPT(-) |
| 153 | Hash (+) dept. total | *HASH TL |
| 154 | Hash (-) dept. total | HASH(-) |
| 155 | (+) Bottle return total | *BTTL TL |
| 156 | (-) Bottle return total | BTTL(-) |
| 157 | Gas (+) dept. total | *GAS TL |
| 158 | Gas (-) dept. total | GAS(-) |
| 159 | Hash net total (for trans. report) | HASH TTL |
| 160 | Waste total (for PLU/trans. report) | WASTE TL |
| 161 | Subtotal (-) total (for trans. report) | ST(-) TL |
| 162 | Subtotal \% tota (for trans. report) | ST\% TL |
| 163 | Item (-) total (for trans. report) | (-) TL |
| 164 | Item \% total (for trans. report) | \% TL |
| 165 | Gas discount total (for trans. report) | GASDISTL |
| 166 | RA total (for trans. report) | RA TL |
| 167 | PO total (for trans. report) | PO TL |
| 168 | Check cashing total (for trans. report) | CA/CK TL |
| 169 | Cash total (for trans. report) | CASH TL |
| 170 | Check total (for trans. report) | CHECK TL |
| 171 | Charge total (for trans. report) | CHR TL |
| 172 | Currency conversion total (for trans. report) | CONV TL |
| 173 | Commission sale 1 | COM.SAL1 |


| Function no. | Key or function | In default of proramming |
| :---: | :---: | :---: |
| 174 | Commission sale 2 | COM.SAL2 |
| 175 | Commission sale 3 | COM.SAL3 |
| 176 | Commission sale 4 | COM.SAL4 |
| 177 | Commission sale 5 | COM.SAL5 |
| 178 | Commission sale 6 | COM.SAL6 |
| 179 | Commission sale 7 | COM.SAL7 |
| 180 | Commission sale 8 | COM.SAL8 |
| 181 | Commission sale 9 | COM.SAL9 |
| 182 | Non commission sale | NON COM. |
| 183 | Commission amount 1 | COM.AMT1 |
| 184 | Commission amount 2 | COM.AMT2 |
| 185 | Commission amount 3 | COM.AMT3 |
| 186 | Commission amount 4 | COM.AMT4 |
| 187 | Commission amount 5 | COM.AMT5 |
| 188 | Commission amount 6 | COM.AMT6 |
| 189 | Commission amount 7 | COM.AMT7 |
| 190 | Commission amount 8 | COM.AMT8 |
| 191 | Commission amount 9 | COM.AMT9 |
| 192 | Commission amount total | COM.TTL |
| 193 | Waste (for PLU/UPC report) | WASTE |
| 194 | Net sales (for PLU/UPC report) | NET SLS |
| 195 | Net sales total (for PLU/UPC report) | NET TL |
| 196 | Free GLU/PBLU (for GLU/PBLU report) | FREE GLU |
| 197 | Closed check (for server report) | CLOSE CK |
| 198 | Open check (for server report) | OPEN CK |
| 199 | Percent of net sales (for server report) | (\%)SALES |
| 200 | Cash/check is | CA/CH IS |
| 201 | Conversion1 is | CONV1 IS |
| 202 | Conversion2 is | CONV2 IS |
| 203 | Conversion3 is | CONV3 IS |
| 204 | CCD differ | CCD DIF. |
| 205 | CCD differ total | DIF. TL |
| 206 | Subtotal | SUBTOTAL |
| 207 | Merchandise subtotal | MDSE ST |
| 208 | Tray subtotal | TRAY TL |
| 209 | Total | ***TOTAL |
| 210 | Change | CHANGE |
| 211 | Food stamp subtotal | FS ST |
| 212 | Food stamp tender | FS TEND |
| 213 | Food stamp change | FS CG |
| 214 | Items | ITEMS |
| 215 | Copy receipt title | D E P T |
| 216 | Group report title | GROUP |
| 217 | PLU/UPC report title | PLU/UPC |
| 218 | Stock report title | STOCK |
| 219 | Zero sales report title | ZERO SAL |
| 220 | Category report title | CATEGORY |


| Function no. | Key or function | In default of proramming | Function no. | Key or function | In default of proramming |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 221 | Transaction report title | TRANS. | 256 | Gas sales subtotal (for check 5) | GAS10 ST |
| 222 | Cash in drawer report title | C I D | 257 | Gas sales subtotal (for charge 1) | GAS11 ST |
| 223 | Commission sales report title | SALES | 258 | Gas sales subtotal (for charge 2) | GAS12 ST |
| 224 | CCD report title | C C D | 259 | Gas sales subtotal (for charge 3) | GAS13 ST |
| 225 | Server/cashier report title | SERVER | 260 | Gas sales subtotal (for charge 4) | GAS14 ST |
| 226 | Hourly report title | HOURLY | 261 | Gas sales subtotal (for charge 5) | GAS15 ST |
| 227 | Daily net report title | DAILY | 262 | Gas sales subtotal (for charge 6) | GAS16 ST |
| 228 | GLU/PBLU report title | G L U | 263 | Gas sales subtotal (for charge 7) | GAS17 ST |
| 229 | Non-accessed UPC report title | NO ACCES | 264 | Gas sales subtotal (for charge 8) | GAS18 ST |
| 230 | Dynamic UPC report title | DYN.UPC | 265 | Gas sales subtotal (for charge 9) | GAS19 ST |
| 231 | Tax report title | T A X | 266 | AMOUNT (text on display) | AMOUNT |
| 232 | Non-add code text | \# | 267 | WEIGHT (text on display) | WEIGHT |
| 233 | GLU/PBLU code text | T B L \# | 268 | Refund type of sales (text on display) | RF SALE |
| 234 | Copy receipt title | COPY | 269 | Price change title | PR. CHNG |
| 235 | Waste receipt title | WASTE | 270 | Tip amount for tip edit | TIP AMT |
| 236 | Bill transfer receipt title | B. T. | 271 | Final balance (for closed GLU report) | FIN. BAL |
| 237 | Bill separate receipt title | B. S. | 272 | Edit tip | EDIT TIP |
| 238 | Final (used only for PGM mode) | FINAL | 273 | Bill on receipt title | B I L L |
| 239 | Balance | BALANCE | 274 | RA cash total (for trans. report) | RA CASH |
| 240 | Slip print message on journal | SLIP PR. | 275 | RA2 cash total (for trans. report) | RA2 CASH |
| 241 | Slip next page | NEXT P. | 276 | RA check total (for trans. report) | RA CHK |
| 242 | Balance forward | BAL FWD | 277 | RA2 check total (for trans. report) | RA2 CHK |
| 243 | Tare weight | TARE WT. | 278 | RA charge total (for trans. report) | RA CHR |
| 244 | DUE (text on display) | DUE | 279 | RA2 charge total (for trans. report) | RA2 CHR |
| 245 | Tip due (text on display) | TIP DUE | 280 | RA food stamp total (for trans. report) | RA FS |
| 246 | TAX ST (text on display) | TAX ST | 281 | RA2 food stamp total (for trans. report) | RA2 FS |
| 247 | Gas sales subtotal (for cash 1) | GAS1 ST | 282 | PO cash total (for trans. report) | PO CASH |
| 248 | Gas sales subtotal (for cash 2) | GAS2 ST | 283 | PO2 cash total (for trans. report) | PO2 CASH |
| 249 | Gas sales subtotal (for cash 3) | GAS3 ST | 284 | PO check total (for trans. report) | PO CHK |
| 250 | Gas sales subtotal (for cash 4) | GAS4 ST | 285 | PO2 check total (for trans. report) | PO2 CHK |
| 251 | Gas sales subtotal (for cash 5) | GAS5 ST | 286 | PO charge total (for trans. report) | PO CHR |
| 252 | Gas sales subtotal (for check 1) | GAS6 ST | 287 | PO2 charge total (for trans. report) | PO2 CHR |
| 253 | Gas sales subtotal (for check 2) | GAS7 ST | 288 | PO food stamp total (for trans. report) | PO FS |
| 254 | Gas sales subtotal (for check 3) | GAS8 ST | 289 | PO2 food stamp total (for trans. report) | PO2 FS |

255 Gas sales subtotal (for check 4) GAS9 ST

## Note

- The items marked with " * " are for Canada only.
- The function no. 143 "Exempt VAT" is only effective for the Canadian tax system (2 GST, VAT type).


## $\theta$ Server/Cashier programming

The ER-A520 provides a cashier system and the ER-A530 provides a server system. Please note that texts for cashiers/servers are printed as servers (SRV/SERV) on the receipts.

## Server/Cashier code

You can assign a server/cashier code to each server/cashier. For more details, please contact your authorized SHARP dealer.

## Procedure



* Programming code "0" inhibits entries of the selected server/cashier no.


## Example

To program 1111 for server/cashier no. 1 and 1014 for server/cashier no. 4
$\qquad$
Key operation


Print


## Server/Cashier name PGM1 PGM2 1414

You can program a maximum of 8 characters (server/cashier name) for each server/cashier. Select the characters you want to program referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



The server/cashier code must be programmed for the server/cashier by job \#1400 prior to assigning text.

## Example

 To program "DICK" for server/cashier code 1111 and "PETER" for server/cashier code 1014

## Functional programming

## Procedure



Note The server/cashier code must be programmed for the server/cashier by job \#1400 prior to the programming.

| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :---: |
| A | GLU/PBLU/Manual PB/CB entry | Non-compulsory | 0 |
|  |  | Compulsory | 1 |
| B | Drawer no. | Use no drawer | 0 |
|  |  | Set the drawer no. 1 or 2 | 1 or 2 |

## Example <br> Programming AB=01 for server/cashier code 1111

$\qquad$


Print

| \#2410 *PGM2* |  |  |
| :--- | :--- | :--- |
| $0115 R 1 \%$ DICK  1111 <br> $0001-9999$   | $0.00 \%$ | 001 |

## GLU/PBLU code range assignment

## Procedure



Note The server/cashier code must be programmed for the server/cashier by job \#1400 prior to the programming.

## Example

Assigning GLU/PBLU code 1 to 100 for server/cashier code 1111


## Procedure



Note

- You must enter the decimal for fractional rates.
- The server/cashier code must be programmed for the server/cashier by job \#1400 prior to the programming.

Example Programming 20\% for server/cashier code 1111


## Programming various functions

## Programming for optional feature selection

 PGM 2
## 2616

Your register enables you to select the following options:

## OP X/Z mode availability

When a cashier needs to take the cashier $X / Z$ report, he or she will use the OP X/Z mode.
This programming determines whether he or she will be allowed to use this mode.
Note
You can take the cashier $X$ and $Z$ reports in the $X 1 / Z 1$ mode regardless of the above programming.

## Paid-out in the REG mode

Refund type of sale in the REG mode
Refund in the REG mode
Direct void in the REG mode Indirect void in the REG mode
Subtotal void in the REG mode
Validation printing in a refund/return entry
First item direct void
PLU level shift mode

- Automatic return mode: This mode automatically shift the PLU level back to level 1 (ordinary level) after a direct PLU entry.
- Lock shift mode: This mode holds the current PLU level until making a level shift operation (pressing a level shift key).

Available mode for PLU level shift
Printing of the number of purchased items
Time printing on the receipt/journal
Journal print form
You may choose either of the following forms.

- Detailed journal print that shows the details of all entries - the same information as printed on the receipt.
- Summary journal print that shows information about all entries other than normal department entries (entries into "+" departments and their associated "+" PLUs).
Availability of the item validation printing
Validation printing in a discount $(\Theta)$ entry
Zero skip for various reports
Share \% printing in dept. report
Tip entry method
Cover count entry
Automatic return mode for PLU level
- By one receipt: Returns the PLU level to level 1 after each receipt.
- By one item: Returns the PLU level to level 1 after each item entry.


## Available mode for PLU/UPC price shift

## PLU/UPC price shift mode

- Automatic return mode: This mode automatically shifts the price level back to price 1 (ordinary level) after the entry.
- Lock shift mode: This mode holds the current price level until making a price shift selection (pressing the price shift key).
Automatic return mode for PLU/UPC price level
- By one receipt: Returns the price level to price 1 after each receipt.
- By one item: Returns the price level to price 1 after each item entry.

No sale in REG mode
Void mode in REG mode
Finalization when the subtotal amount is zero in the REG mode
Item printing in PBLU transactions on the slip
Tip-paid operation in REG mode
Transfer-in/out operation in REG mode
Usability of the RA entry
Validation printing in a check cashing entry
Validation printing in a RA entry
Validation printing in a PO entry
Birthday date printing for the age limitation
Footer graphic logo printing
Learning function of UPC entry
Price change function in REG mode
Printing of the price shift text on the receipt/journal
Treating the EAN8 code (200XXXXC/D)
Price entry after ISBN/ISSN code entry

## Procedure


**P: 1

* Item

A OP X/Z mode
Selection:
Entry:

B Paid-out in REG mode

C Refund type of sale in the REG mode
Enable
0
Disable 1
Enable 0
Disable 1

D Refund and return in the REG mode

E Direct void in REG mode
Enable 0

F Indirect void in the REG mode

| Enable | 0 |
| :--- | :--- |
| Disable | 1 |


|  |  | Disable |
| :--- | :--- | :--- | 1

H Validation printing in a refund and return entry
Disable 1

Non-compulsory 0
Compulsory 1
**P: 2

| Item: | Selection: | Entry: |
| :---: | :---: | :---: |
| A The first item direct void | Enable | 0 |
|  | Disable | 1 |
| B PLU level shift mode | Automatic return mode | 0 |
|  | Lock shift mode | 1 |
| C Available mode for PLU level shift | REG and MGR modes | 0 |
|  | MGR mode only | 1 |
| D Printing of the number of purchased items | No | 0 |
|  | Yes | 1 |
| E Time printing on the receipt/journal | Yes | 0 |
|  | No | 1 |
| F Journal print form | Detailed | 0 |
|  | Limited | 1 |
| G Availability of the item validation printing | Enable | 0 |
|  | Disable | 1 |
| H Validation printing in a discount ( $\odot$ ) entry | Non-compulsory | 0 |
|  | Compulsory | 1 |



Note Automatic return mode for PLU level shift: This setting is available only when available mode for PLU level shift is set to automatic return mode. (See P:2/parameter B shown above.)
**P: 5

| $*$ | Item: | Selection: | Entry: |
| :---: | :--- | :--- | :--- |
| A | Always enter 0. | 0 |  |
| B | Always enter 0. | 0 |  |
| C | Always enter 0. | 0 |  |
| D | Always enter 0. | 0 |  |
| E | Always enter 0. |  | 0 |
| F | Available mode for PLU/UPC price shift | REG and MGR modes |  |
|  |  | MGR mode only | 0 |
| G | PLU/UPC price shift mode | Automatic return mode | 1 |
|  |  | Lock shift mode | 0 |
| H | Automatic return mode for PLU/UPC price level | After each item | 1 |
|  |  | After each receipt | 0 |

Note
Automatic return mode for PLU/UPC price level: This setting is available only when PLU/UPC price shift mode is set to automatic return mode (parameter $G$ ).

[^1]
**P: 8

| Item: | Selection: | Entry: |
| :---: | :---: | :---: |
| A Always enter 0. |  | 0 |
| B Always enter 0. |  | 0 |
| C Always enter 0. |  | 0 |
| D Usability of the received-account entry | Without limitation | 0 |
|  | Only for GLU/PBLU transaction | 1 |
| E Validation printing in a check cashing | Non-compulsorly | 0 |
|  | Compulsory | 1 |
| F Validation printing in a received-account entry | Non-compulsorly | 0 |
|  | Compulsory | 1 |
| G Validation printing in a paid-out entry | Non-compulsorly | 0 |
|  | Compulsory | 1 |
| H Validation printing in tip-in/tip-paid operation | Non-compulsorly | 0 |
|  | Compulsory | 1 |


| Item: | Selection: | Entry: |
| :---: | :---: | :---: |
| A Always enter 0. |  | 0 |
| B Always enter 0. |  | 0 |
| C Birthday date printing for the age limitation | Yes | 0 |
|  | No | 1 |
| D Always enter 0. |  | 0 |
| E Always enter 0. |  | 0 |
| F Always enter 0. |  | 0 |
| G Always enter 0. |  | 0 |
| H Footer graphic logo printing | No | 0 |
|  | Yes | 1 |

**P: 10

| Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :---: |
| $\mathbf{A}$ and B | Always enter 0. |  | 0 |
| $\mathbf{C}$ | Learning function of UPC entry | Yes | 0 |
|  |  | No | 1 |
| $\mathbf{D}$ to H | Always enter 0. | (Fixed position) | 0 |

**P: 11 (ABCDEFGH: Always enter 0.)
**P: 12

| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ to $\mathbf{G}$ | Always enter 0. | 0 |  |
| $\mathbf{H}$ | Price change function in REG mode | Enable | 0 |
|  |  | Disable | 1 |

**P: 13

| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ to $\mathbf{C}$ | Always enter 0. | 0 |  |
| $\mathbf{D}$ | Printing of the price shift text on the <br> receipt/journal | Yes | 0 |
|  | No | 1 |  |
| $\mathbf{E}$ | Always enter 0. |  | 0 |
| $\mathbf{F}$ | Treating the EAN8 code (200XXXXC/D) | Yes | 0 |
|  |  | No | 1 |
| $\mathbf{G}$ | Always enter 0. |  | 0 |
| $\mathbf{H}$ | Price entry after ISBN/ISSN code entry | Compulsory | 0 |
|  |  | Inhibited | 1 |

## Example <br> Programming to select zero suppression for the server/cashier report, transaction report, dept. report, PLU/UPC report and daily net report, and to select non-skip printing for an hourly report.



Print


## Programming the parameter of the slip printer PGM2 2615

## Procedure



* AB: Initial slip feed line (0 to 64)

CD: Slip print max. line no. (0 to 99)
E: Validation printing counter (1 thru 9 times)
To inhibit validation printing, enter 0.
F: Feed lines after printing of a tray subtotal (0 thru 9 lines)

## Example Entering 009910 to ABCDEF



## Setting the time limit for THE TILL TIMER ${ }^{\text {тм }}$

The machine counts the number of times the drawer is left open for longer than a programmed time limit. The counter will be incremented by one each time a programmed time limit is reached. The time limit for THE TILL TIMER ${ }^{\text {TM }}$ can be preset for 0 to 255 seconds. The count is printed on the general report and cashier report.

## Procedure



## Example Setting the time limit as 30 (seconds).

Key operation


Print

## \#2617 *PGM2*

## - Scale tare table PGM $2 \boxed{2618}$

The register can be programmed with up to nine tare tables and allows different tares to be assigned to them (for auto scale entries).

## Procedure



## Example

To assign the tare weight 0.20 lbs to tare table no. 1
$\qquad$


Print


## ■ Programming of logo messages PGM 22614

Your register can print programmed messages for customers on every receipt. On the standard model, the ER-A520 prints a graphic logo/the ER-A530 is set to print a header 3-line message on the receipt. (If you want a graphic logo customerized for your store, please consult your dealer.)
If you want to print logo message, please consult your dealer too. You have five options described below.
Select the characters you want to program, referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

## Procedure

To program any line no.


* "Header 3-line message" type: 1 to 3
"Footer 3-line message" type : 4 to 6
"Header 6-line message" type: 1 to 6
"Header 3-line and footer 3-line message" type: 1 to 6 ( 1 to 3 as header, 4 to 6 as footer)


Graphic logo only


Header 3-line message


Footer 3-line message


Header 6-line message


Header 3-line message and footer 3-line messages

## Example

To program the following logo message by using 3 lines:
YOUR
STORE
MESSAGE


## - Selection of $\mathrm{X} 1 / \mathrm{Z} 1$ and $\mathrm{X} 2 / \mathrm{Z} 2$ reports to be printed in the stacked report sequence PGM $2 \quad 2620$

Your register is equipped with the stacked report printing function that enables multiple $\mathrm{X} / \mathrm{Z}$ reports to be printed in sequence with only a single request.

## Procedure



To program any Job no.

- A maximum of 70 steps are programmable. "1 step" means the memory size used for one norange type job no. The range type reports needs 6,8 or 16 steps to execute the printing. Find how many steps are required at the column of Note to calculate total number of steps for the reports you want to print in sequence.
- When the $Z$ of stacked report is initiated, $X$ only reports will be skipped.

Job code numbers to be used are as follows.

| *1: Job no. | Report name | *2: Start/End range parameter | Note |
| :---: | :---: | :---: | :---: |
| 00 | General |  |  |
| 10 | Full department |  |  |
| 13 | Full department group |  |  |
| 20 | PLU/UPC | *3 Start code/End code (max. 5/13 digits) | 16 steps |
| 24 | PLU/UPC stock | *3 Start code/End code (max. 5/13 digits) | 16 steps |
| 27 | PLU/UPC zero sales |  |  |
| 29 | PLU/UPC price category | *3 Start price amount/End price amount | 8 steps |
| 30 | Transaction |  |  |
| 31 | Cash in drawer |  |  |
| 32 | Commission sale |  |  |
| 33 | Tax |  |  |
| 40 | Full server/cashier |  |  |
| 60 | Hourly sales information | *3 Start time/End time (0 thru 2330) | Range report is available only in the X1 mode. 6 steps for a range report. |
| 69 | Dynamic UPC | *3 Start code/End code (max. 13 digits) | 16 steps |
| 70 | Daily net report |  |  |
| 80 | GLU/PBLU report | *3 Start GLU/PBLU code/End GLU/PBLU code <br> (1 thru 9999) | 6 steps |

*3: Both range setting and full setting are allowed.

## Example

To print reports 10 and 13 as a stacked report.

Key operation
Print

\#2620 *PGM2*

You can set the time range for the hourly report.

## Procedure

When A thru C are all zeros.

*A: Time range
To set the time range to 30 minutes (in the 24 -hour system), enter 0 .
To set the time range to 60 minutes (in the 24 -hour system), enter 1 .
$B C$ : Starting time (hour $=00$ to 23)

## Example

Setting the time range to 60 minutes with the starting time being set at 7:00
$\qquad$
$2619 \underset{107 \text { COAAT }}{\square}$


Note To change this setting, an hourly $Z$ report (\#160) must be taken prior to the changes.

## ■ Programming of power save mode

## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :---: |
| A | Entering power save mode when time is <br> displayed. | Enable | 0 |
|  | Disable | 1 |  |
| BCD | Time (min.) to entering power save mode <br> since no operation is made. |  | 1 through 254 (min.) <br> (999: The power save mode is inhibited.) |
|  |  |  |  |

## Example

Key operation


0030 CAAT

Print


You can specify the range of GLU/PBLU codes available for the register.

## Procedure



## Example

Programming 1 for start code and 1000 for end code

Key operation


Print


## - Bill number PGM 2 2636

A consecutive bill number is automatically increased by one each time a GLU/PBLU entry is finalized. Specify a number that one less than a desired starting number.

## Procedure



## Example

Starting bill number from 1


You can program the printing density of the receipt/journal printer.

## Procedure


*AB: Printing density (00-99)
$00=89 \%$ for standard density
$50=100 \%$ for standard density
$99=111 \%$ for standard density

## Example Programming "100\% for standard density"

$\qquad$
Key operation


Print

```
#2990 *PGM2*
```


## - Editing guidance/error messages PGM 2641

Your register has standard guidance/error messages as indicated in the following list. For more information about the alphanumeric characters programming, see section " 2 How to program alphanumeric characters" under the chapter "PRIOR TO PROGRAMMING".

## Procedure



* Text no.: See "LIST OF GUIDANCE/ERROR MESSAGES" shown on the following page.


## Example

Programming "ENTRY ERROR" for text no. 1


## ■ LIST OF GUIDANCE/ERROR MESSAGES

| Text no. | Description | In default of programming |
| :---: | :---: | :---: |
| 1 | Registration error | ENTRY ERROR |
| 2 | Misoperation error | MISOPERATION |
| 3 | Desired code is not programmed yet. | NO RECORD |
| 4 | (Reserved) |  |
| 5 | Secret code error | SECRET CODE |
| 6 | Code is not free | NOT FREE |
| 7 | Memory is full. | MEMORY FULL |
| 8 | Insert slip paper. | INSERT SLIP |
| 9 | The entered server/cashier's code is not authorized. | NO AUTHORITY |
| 10 | Stock is empty. | OUT OF STOCK |
| 11 | Compulsory pushing the subtotal key | SBTL COMPUL. |
| 12 | Compulsory tendering | TEND COMPUL. |
| 13 | Compulsory GLU/PBLU entry | PB COMPUL. |
| 14 | (Reserved) |  |
| 15 | Compulsory cover count entry | COV CNT COMP |
| 16 | Check edit error (for manual PB entry) | C/D ERROR |
| 17-19 | (Reserved) |  |
| 20 | Remote printer off line | OFF LINE |
| 21 | (Reserved) |  |
| 22 | Overlapped server/cashier error | SERVER ERR. |
| 23-26 | (Reserved) |  |
| 27 | Power off | POWER OFF |
| 28-29 | (Reserved) |  |
| 30 | Compulsory tender entry for tip | TIP ERROR |
| 31 | Compulsory non-add code | \# COMPULSORY |
| 32 | The server/cashier is not assigned. | NOT ASSIGNED |
| 33 | (Reserved) |  |
| 34 | Overflow limitation | OVER LIMIT. |
| 35 | The open price entry is inhibited. | INH. OPEN PR |
| 36 | The unit price entry is inhibited. | INH. UNIT PR |
| 37 | The direct non-tendering finalization after previous tender entry is inhibited. | NOT NON-TEND |
| 38 | Read error of scale data | SCALE ERROR |


| Text no. | Description | In default of programming |
| :---: | :---: | :---: |
| 39-47 | (Reserved) |  |
| 48 | Enter check number | ENTER CHECK\# |
| 49 | Enter cover count | COVER COUNT |
| 50 | (Reserved) |  |
| 51 | Weight on scale | WEIGHT |
| 52 | Closed check file is full. | C.FILE FULL |
| 53 | (Reserved) |  |
| 54 | Entry of tare weight | ENTR TARE WT |
| 55-60 | (Reserved) |  |
| 61 | Desired code is not programmed yet. (learning function) | NO RECORD |
| 62 | Enter price and dept. no. | PRICE $\rightarrow$ DEPT |
| 63 | Enter price and dept. no. | PRICE \& DEPT |
| 64 | Enter dept. no. | ENTER DEPT\# |
| 65-66 | (Reserved) |  |
| 67 | REG buffer is full. | BUFFER FULL |
| 68-69 | (Reserved) |  |
| 70 | Price entry at UPC refund | ENTER PRICE |
| 71 | PLU/UPC file is full. | UPC FULL |
| 72-73 | (Reserved) |  |
| 74 | Non-accessed UPC delete job | DELETE |
| 75 | (Reserved) |  |
| 76 | Closing the drawer is compulsory. | CLOSE DRAWER |
| 77 | Price level shift error | ENTER P.SFT |
| 78 | (Reserved) |  |
| 79 | Reading of undefined vender coupon UPC | OP ENTER |
| 80 | (Reserved) |  |
| 81 | Message for prompting entry of secret code | ENTR SECRET\# |
| 82-83 | (Reserved) |  |
| 84 | Data backup send success | SEND OK |
| 85 | Data backup receive success | RECEIVE OK |
| 86 | Data backup communication error | COM. ERROR |
| 87 | Backup data format error | DATA ERROR |
| 88 | Data backup time out error | TIME OUT |
| 89-93 | (Reserved) |  |
| 94 | Age limitation error | AGE ERROR |

You can program the text (3 lines) to be printed on validation slip. Up to 30 characters can be programmed per line.

## Procedure



## Example Programming "FOR DEPOSIT ONLY" for the check validation message



Note The PRNT key must be placed on the keyboard.

## Slip printer's logo message PGM 2643

You can program the text ( 3 lines) to be printed on slip. Up to 30 characters can be programmed per line.

## Procedure

To program any line no.


## Example

Programming "TEXT1" for the slip printer's logo message


Note The sLIP key must be placed on the keyboard.

RS-232C channel assignment
Your register is equipped with two RS-232C interfaces. If you use the communication functions, the channel number of each RS-232C interface must be programmed by using the following procedure.
To activate the communication functions, please consult your dealer.

| Procedure |  |
| :--- | :--- | :--- |

Note For the barcode reader, when you use the model ER-A6HS1, always select the standard channel 1.
** P: 3

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0. |  | 0 |
| B | Channel no. for the slip printer TM-295 (see below for the selection) | Not connected | 0 |
|  |  | Standard channel 1 | 1 |
|  |  | Standard channel 2 | 2 |
| C | Always enter 0. |  | 0 |
| D | Channel no. for CAT | Not connected | 0 |
|  |  | Standard channel 1 | 1 |
|  |  | Standard channel 2 | 2 |

## Channel no. for the slip printer TM-295

Select "Not connected" for internal printer (printing bills on receipt)
Set "standard channel 1" or "standard channel 2" for TM-295 printer.

## Example

Assigning channel 1 to the slip printer TM-295
$\qquad$


Print
30100

## Barcode reader programming PGM2 2691

## Procedure



* Item:

Selection:
Entry:

| $\mathbf{A}$ | Data bit | 7 bits | 1 |
| :--- | :--- | :--- | :--- |
| $\mathbf{B}$ | Parity bit | Non parity | 0 |
|  |  | Odd parity | 2 |
| $\mathbf{C}$ | Stop bit | $\frac{1 \text { bit }}{2 \text { bits }}$ | 1 |
| $\mathbf{D}$ | Transmission speed | $\underline{19200 \mathrm{bps}}$ | 0 |
|  |  | $\underline{9600 \mathrm{bps}}$ | 1 |

Example


## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Logo text printing | Not print | 0 |
|  |  | Print | 1 |
| $\mathbf{B}$ | Auto cutter function | Disable | 0 |
|  |  | Enable | 1 |
| $\mathbf{C}$ | Type of the printer | TM-U200 or TM-U230 | 0 |
|  | 1 |  |  |
|  |  | TM-T88(3) | 2 |
| ${$$} }$ | 3 |  |  |

## Example

Key operation


Print

```
#2692 *PGM2*
```

    1100
    
## Second remote printer assignment PGM 2 3653

## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Second remote printer | Nothing | 0 |
|  |  | Remote printer 1 | 1 |
|  |  | Remote printer 2 | 2 |

## Example

Key operation


Print


## Procedure



## Example

Key operation


Print format for remote printer PGM 2

3655

## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Taxable status print | Not print | 0 |
|  |  | Print | 1 |
| $\mathbf{B}$ | Q'ty print when q'ty is "1". | Not print | 0 |
|  |  | Print | 1 |
| $\mathbf{C}$ | Dept./PLU/UPC code print | Not print | 0 |
|  |  | Print | 1 |
| $\mathbf{D}$ | Unit price print | Not print | 0 |
| E | Amount print | Print | 1 |

## Taxable status print

Taxable status printing is allowed only when "amount print" (parameter E) is set to "Print".

## Example



## Procedure



| * | Stem: | Selection: | Entry: |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Taxable status print | Not print | 0 |
|  |  | Print | 1 |
| $\mathbf{B}$ | Q'ty print when q'ty is "1". | Not print | 0 |
|  |  | Print | 1 |
| $\mathbf{C}$ | Dept./PLU/UPC code print | Not print | 0 |
|  |  | Unint price print | Not print |
|  |  | Print | 1 |
| E | Amount print | Not print | 0 |

## Taxable status print

Taxable status printing is allowed only when "amount print" (parameter E) is set to "Print".

## Example

## Key operation

$3656-1$ - 1
00000 CAAT

Print

```
#3656 *PGM2*
```

CHIT FORMAT

## Online terminal number

## Procedure



## Transmission line form system

## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :---: |
| A | Sending of the Cl signal | No | 0 |
|  |  | Sending | 1 |
| Line form | Full duplex system | 0 |  |
|  |  | Half duplex system | 1 |

## Functional programming

## Procedure

$$
6112 \longrightarrow \bullet \oplus \begin{array}{|c|c|}
\hline \text { FOR }
\end{array} \longrightarrow{ }^{*} \mathrm{~A} \longrightarrow \mathrm{CA} / \mathrm{AT}
$$

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Baud rate (38400/19200/9600/4800 bps) | 4800 bps | 4 |
|  | The selected baud rate is used for on-line | 9600 bps | 5 |
|  | communications. | 19200 bps | 6 |
|  | It is not used for the data backup function. | 38400 bps | 7 |

## Start code and end code

## Procedure



* ABC: Start code (000-127)

DEF: End code (000-127)

## Time out setting

## Procedure



## Baud rate specification for print data sending

## Procedure



* Baud rate

4: 4800 bps 5: 9600 bps $6: 19200 \mathrm{bps} \quad 7: 38400 \mathrm{bps}$

## Start/end code specification for print data sending

## Procedure



* ABC: Start code - 000 to 127

DEF: End code - 000 to 127

## Functional selection for print data sending

## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Sensing of DR signal | Yes | 0 |
|  | No | 1 |  |
| B | Sensing of CS signal | Yes | 0 |
| C | Sending of all print data | No | 1 |

## 7116

## Phone number for dial out

## Procedure



* The valid characters for dialing are " $0-9$ ", " $W$ " and ",".


## Password for dial out

## Procedure



* The password can be programmed with zero suppression, however it is used without zero suppression (00000000-99999999) for dialing.


## Functional selection

## Procedure



* |  | Item: | Selection: | Entry: |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Food stamp mode | Disable | 0 |
|  |  | Enable | 1 |
| $\mathbf{B}$ | PIN PAD on CAT for DEBIT CARD | Yes | 0 |
|  |  | No | 1 |
| $\mathbf{C}$ | Key type for PIN PAD | STATIC | 0 |
|  |  | DUKPT | 1 |
|  |  | INDEX | 2 |
| $\mathbf{D}$ | Dial mode for dial out | Tone | 0 |

Time out setting for time 1 (reading a credit/debit card)

## Procedure



## Time out setting for time 2 (for the response of authorization)

## Procedure



Time out setting for time 3 (for the reading of dial in/out)

## Procedure



## Allowed cash tip rate for authorization

## Procedure



## ■ Secret codes to control access to the PGM1 mode, X1/Z1 mode and X2/Z2 mode PGM2 <br> 2630 <br> 2631 <br> 2632

When a secret code has been set for that specific mode operation, before performing any PGM1 mode, X1/Z1 mode or X2/Z2 mode operation, you must enter a secret code according to the following procedure.

## Operating

## Procedure



## Note

- Once a secret code is entered, it does not need to be entered again unless the mode switch setting is changed or an operation is performed.
- In case a secret code is forgotten, enter zero to cancel a secret code entry.


## Programming

## Procedure



* 2630 for the PGM1 mode 2631 for the X1/Z1 mode 2632 for the X2/Z2 mode


## Example

 Programming secret code 1234 for $\mathrm{X} 1 / \mathrm{Z} 1$ mode| Key operation | Print |  |
| :---: | :---: | :---: |
| $\begin{array}{r} 2631 \bullet \cdot{ }^{\text {IFOR }}+ \\ 1234 \text { CAAT } \end{array}$ | \#2631 *PGM2* | 1234 |

## Loading dynamic UPCs to the main UPC file

PGM 2
2099
The UPC master file can be updated by loading the data recorded in the dynamic UPC file to the UPC master file. Execute the following job.

## Procedure



| \#2099 *PGM2* |  |
| :---: | :---: |
| 5099887654302\#(O3) DPT. O 3 | 03) 100 |
| $\begin{aligned} & \mathrm{FT1} \\ & 0000002 \end{aligned} \mathrm{KP000} \mathrm{GOO}$ | $\begin{array}{r} 7.0 \mathrm{OO} \\ \mathrm{GOOOOO} 00 \mathrm{C3} \\ 00 \mathrm{AOOMOOCOO} \end{array}$ |
| $\begin{aligned} & 4901305920795 \#(\mathbf{O 1}) \\ & \text { DPI.O1 } \end{aligned}$ | $\text { 01) } \quad 100$ |
| $0000002^{\mathrm{KP} 000} 00_{\mathrm{Al}}^{\mathrm{GOO}}$ | $\begin{array}{r} 12.50 \\ 6000000 \mathrm{Cl} \\ 00 \mathrm{AOO} \mathrm{MOOCOO} \end{array}$ |

Setting the AUTO key - Automatic sequencing key - X2/Z2 2900
If you program frequently performed transactions or report sequences for the AUTO keys, you can enter those transactions simply by pressing the corresponding AUTO keys during key operations. This programming can be done when your machine is in the X2/Z2 mode.

## Procedure



## Example Programming for the AUTO key and AUTO key as follows:

AUTO); entering a $\$ 1.50$ item (PLU2) and a $\$ 1.00$ item (dept. 3)
AUTO; ; selling a $\$ 5.00$-programmed- item (dept. 2) for cash


Note

- When the AUTO key has been programmed to execute a report job function etc., the mode switch must be in the corresponding position.
- The AUTO sequence key can not be preset to another AUTO sequence key.


## 11 TRAINING mode

The training mode is used when the operator or the manager practices register operations.
When a training cashier has been selected, the machine automatically enters the training mode. When a training cashier has not been selected, the register automatically enters the ordinary REG mode. (For programming of a training cashier, please consult your local dealer.)

The training operations are valid only in REG, MGR, and VOID mode.
The training cashier memory is updated in the training mode. Other memories are not updated.
Example
Key operation

| 1000 | 2 |  |
| :--- | :--- | :--- |
| 3 FOOB | 3 |  |
|  | CAAT |  |
|  |  |  |



## 12 Reading stored programs

Your machine allows you to read program stored in the PGM1 and PGM2 modes.

■ Program details and procedures for their reading

|  | Program for: | Mode switch position | Job code no. | Procedure | Related job code nos. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Departments | PGM2 or PGM1 | 1100 |  | $\begin{aligned} & 1110,2110, \\ & 2111,2112, \\ & 2114,2115, \\ & 2116,2180, \\ & 2118,2158 \end{aligned}$ |
| 2 | PLUs/UPCs | PGM2 or PGM1 | 1200 |  | 1200, 1210, <br> 1211, 2210, <br> 2211, 2217, <br> 2214, 2215, <br> 2222, 2230, <br> 2231, 2232, <br> 2235, 2236, <br> 2280, 2218, <br> 2216, 2234, <br> 2244, 2258 |
| 3 | Key nos. for departments and PLUs | PGM2 | 2119 | $\longrightarrow 2119 \longrightarrow{ }_{\mathrm{FOR}}^{\boxed{~ O}} \longrightarrow \mathrm{CAAT}$ | 2119, 2219 |
| 4 | Link PLUs/UPC link | PGM2 | 2220 |  | 2220 |
| 5 | Set PLUs | PGM2 | 2221 |  | 2221 |
| 6 | Mix-and-match table | PGM2 | 2225 | $\longrightarrow 2225 \longrightarrow$ CA/AT $^{\text {® }}$ | 2225 |
| 7 | Condiment table | PGM2 | 2223 | $\longrightarrow 2223 \longrightarrow$ cAIAT $_{\text {® }}^{\text {EOR }}$ | 2223 |
| 8 | UPC's function | PGM2 | 2025 |  | 2025, 2029 |


|  | Program for: | Mode switch position | Job code no. | Procedure | Related job code nos. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Dynamic UPCs | PGM2 or PGM1 | 1050 |  | $\begin{aligned} & 1050,1060, \\ & 1061,2059, \\ & 2060,2061, \\ & 2064,2065, \\ & 2066,2067, \\ & 2068,2081, \\ & 2094 \end{aligned}$ |
| 10 | Dept. /PLU/UPC group text | PGM2 or PGM1 | 2350 |  | 2350, 2351 |
| 11 | Servers/cashiers | PGM2 or PGM1 | 1400 |  | $\begin{aligned} & 1400,1414, \\ & 2410,2411 \\ & 2413 \\ & \hline \end{aligned}$ |
| 12 | GLU/PBLU code | PGM2 | 2800 | $\longrightarrow 2800 \longrightarrow \text { CA/AT }$ | 2810 |
| 13 | Function preset 1 | PGM2 or PGM1 | 1300 | $\longrightarrow 1300 \longrightarrow \text { CA/ } \longrightarrow$ | $\begin{aligned} & \text { 1310, 1311, } \\ & \text { 2310, 2311, } \\ & 2312,2313, \\ & 2314,2315, \\ & 2316,2320, \\ & 2321,2322, \\ & 2326,2334, \\ & 2328,2330 \end{aligned}$ |
| 14 | Function preset 2 | PGM2 | 2600 | $\longrightarrow 2600 \longrightarrow \stackrel{(\leftrightarrow)}{\text { FOR }} \longrightarrow \text { CAAT }$ | $\begin{aligned} & \text { 2614, 2615, } \\ & \text { 2616, 2617, } \\ & \text { 2618, 2619, } \\ & \text { 2620, 2630, } \\ & 2631,2632, \\ & 2636,2689, \\ & 2690,2691, \\ & 2692 \end{aligned}$ |
| 15 | Messages | PGM2 | 2640 |  | $\begin{aligned} & 2641,2642, \\ & 2643 \end{aligned}$ |
| 16 | Tax tables and rates | PGM2 or PGM1 | 2700 | $\longrightarrow 2700 \longrightarrow$ CAIAT $^{\text {® }}$ | 2710, 2711 |
| 17 | Auto keys | PGM2 | 2900 | $\longrightarrow 2900 \longrightarrow$ CAIAT $^{\text {@ }}$ | 2900 |
| 18 | Thermal printer | PGM2 | 2990 |  | 2990 |
| 19 | Remote printer | PGM2 | 3650 |  | $\begin{aligned} & 3653,3654, \\ & 3655,3656 \end{aligned}$ |
| 20 | On-line preset | PGM2 or PGM1 | 6110 |  | $\begin{aligned} & \hline 6110,6111, \\ & 6112,6113, \\ & 6115,6212, \\ & 6213,6220 \\ & \hline \end{aligned}$ |
| 21 | CAT preset | PGM2 | 7110 | $\longrightarrow 7110 \longrightarrow \mathrm{CAOR}_{\mathrm{FOR}} \longrightarrow \mathrm{CAAT}$ | $\begin{aligned} & 7110,7111, \\ & 7112,7113, \\ & 7114,7115, \\ & 7116 \end{aligned}$ |

- Sample printouts

1 Reading of programmed items for departments (Reading in the PGM1 and PGM2 modes)

2 Reading of programmed items for PLUs/UPCs
(Reading in the PGM1 and PGM2 modes)


3 Reading of programmed key nos. for departments and PLUs
(Reading in the PGM2 mode)


| 138 | ---- |
| :--- | :--- |
| 139 | $\cdots$ |
| 140 | ---- |
| 141 | -- |
| 142 |  |

4 Reading of programmed items for link PLUs (Reading in the PGM2 mode)


5 Reading of programmed set PLUs
(Reading in the PGM2 mode)


6 Reading of mix-and-match table
(Reading in the PGM2 mode)


7 Reading of condiment table (Reading in the PGM2 mode)


8 Reading of programmed UPC's function (Reading in the PGM2 mode)


9 Reading of programmed Dynamic UPC
(Reading in the PGM1 and PGM2 mode)


The subsequent printout occurs in the same
format as in the sample reading of
programmed items for PLUs/UPCs.

* When you take this report in the PGM1 mode, the PGM2 indication is replaced by "PGM1".

10 Reading of programmed department and PLU/UPC group text
(Reading in the PGM2 mode)


11 Reading of programmed items for servers/cashiers (Reading in the PGM1 and PGM2 modes)


* When you take this report in the PGM1 mode, the PGM2 indication is replaced by "PGM1".

12 Reading of programmed GLU/PBLU code (Reading in the PGM2 modes)

(Reading in the PGM1 and PGM2 modes)


F112 EAT IN 3
00000
Fl13 FS/ID
F114 CHARGE1 KPOOO L18 10000000000000000000000000
F115 CHARGE1-
F116 ChARGE2 KPOOO L18 10000000000000000000000000
F117 Chargez-
F118 CHARGE3 KPOOO L18 10000000000000000000000000
F119 Charge3-
F120 CHARGE4
KPOOO L18 10000000000000000000000000
F121 Charge4-
F122 CHARGE5 KPOOOL18 10000000000000000000000000 F123 CHARGE5-
F124 CHARGEG
KPOOO L18 10000000000000000000000000
F125 CHARGEG-
F126 CHARGE7 KPDOOO L18 10000000000000000000000000
F127 Chargel-
F128 CHRGEE KPOOO L18 10000000000000000000000000
F129 CHARGE8-
F130 CHARGES
KPOOO L18 10000000000000000000000000
F131 Chargeg-
F132 CHECK1 KP000 L18 10000000000000000000000000
F133 CHECK2
KP000 L18
10000000000000000000000000
134 CHECK3 KPOOO L18 10000000000000000000000000
F135 CHECK4 KPDOOO L18 10000000000000000000000000
F136 CHECK5 KPDOOO L18 10000000000000000000000000
F137 Ca/CH 10
F138 ***世CID
F139 CA TIP
F140 CH TIP
F141 IIP IN
0.00\%

F142 IIP PaID
F143 vat Expi
F144 AVE.
F145 LEVE 1
F146 LEVEL 2
$\underset{\sim}{\text { F148 LEVEL }} 4$
F150 LEVEL 6
F151 *0 DEFT TL
F152 DEPT (-)
F153 *HASH TL
F154 HASH(-)
F155* *BTL TL
F156 BTTL (-)
F157 *GAS TL
F158 GAS (-)
F159 HASH TTL
F160 MASTE TL
F161 ST(-) TL

[^2]the PGM2 indication is replaced by "PGM1".

|  | $\begin{aligned} & 5.00 \% \\ & 7.00 \% \\ & 8.00 \% \\ & 10.00 \% \\ & 12.00 \% \\ & 13.00 \% \\ & 15.00 \% \\ & 17.70 \% \\ & 20.00 \% \end{aligned}$ |
| :---: | :---: |

14 Reading of programmed items for functions - 2 (Reading in the PGM2 mode)

| \#2600 | *PGM2* |  |
| :---: | :---: | :---: |
| \#2614 |  | -Logo message |
|  | $\begin{gathered} \text { YOUR } \\ \text { STORE } \\ \text { MESSAGE } \end{gathered}$ |  |
| \#2615 | 009910 |  |
| \#2616 |  | -Line feed for tray subtotal |
| 01 | 00000000 |  |
| 02 | 00000000 |  |
| 03 | 00000010 |  |
| 04 | 00000000 |  |
| 05 | 00000000 |  |
| 06 | 00000000 |  |
| 07 | 00000000 | \}Optional feature selection |
| 08 | 00000000 |  |
| 09 | 00000000 |  |
| 10 | 00000000 |  |
| 11 | 00000000 |  |
| 12 | 00000000 |  |
| 13 | 00000000 |  |
| \#2617 | 030 | - Drawer open alarm time |
| \$2618 |  |  |
| 1 | 0.20 |  |
| 2 | 0.00 |  |
|  | 0.00 |  |
| 4 | 0.00 |  |
| 5 | 0.00 | Scale tare tables |
| 6 | 0.00 |  |
| 7 | 0.00 |  |
| 8 | 0.00 |  |
| 9 | 0.00 |  |
| \#2619 | 107 | - Hourly report format/start |
| \#2620 |  |  |
|  | 10 13 | \}Stacked report |
| \#2630 | 0000 |  |
| \$2631 | 0000 | Secret code |
| \#2632 | 0000 |  |
| \#2636 | 0000 | Bill number |
| \#2689 | 0030 | -Power saving mode |
| \#2690 |  |  |
|  | 0000 |  |
| $?$ | 0000 | RS-232C channel data |
| 3 | 0100 |  |
| \#2691 | 1110 | -Barcode reader data |
| \#2692 |  |  |
|  | $100$ | \}Remote printer data |
| 2 | 000 | $\}$ Remote printer data |



16 Reading of programmed tax tables and rates (Reading in the PGM2 mode)


17 Reading of programmed items
for auto keys
(Reading in the PGM2 mode)
\#2900 *PGM2*
\#01
\#O2
\#03
\#04

.

## 13 Universal Product Code (UPC) or European Article Number (EAN)

## ■ UPC or EAN code

Your machine can support the following codes:

- UPC-A (Number system character: 0, 2, 3, 4, 5) •UPC-E
- EAN-8 - EAN-13 - Internal code EAN-8/EAN-13

For the codes used in-store marking, there are two types of PLU type (treated as a code like PLU no.) and NonPLU type (price/quantity information is included in the code).
When a code is non-PLU type, the price/quantity in the code is read for sales entry (in case of quantity, "quantity multiplys preset unit price" is processed to obtain price.)

## UPC-A

- Number system character: 0 <used in the source marking>
- Number system character: 3 <used as NDC or HRI>
- Number system character: 5 <used as coupon>

For entry, a full 12 digit number or 11 digit number (omitting the check digits) must be entered.


- Number system character: 2 <In-store marking Non-PLU type> You can program the format by the job \#2025.
- Number system character: 4 <In-store marking PLU type>

For entry, a full 12 digit number, 11 digit number (omitting the check digit), or a leading zero plus 12 digit number must be
 entered.(Any numbers are allowed for the digits marked with *, and on the receipt/journal, non-PLU type code is printed like 2020008**** (****: price information).)

## UPC-E

- UPC-E is a zero-suppressed version of UPC-A that conforms to $\square$ the UPC-E Standards. This code is used for marking small packages.

For entry, a 6 digit number or a leading zero plus 6 digits number must be entered.

## EAN 8

- Ordinary EAN-8 code (flag: neither 0 nor 2 ) <used in the source marking>

For entry, a full 8 digit number must be entered.

- Internal code (flag 2) <in-store marking non-PLU short type> Program the format by the job \#2025.
- Internal code (flag 0) <in-store marking PLU short type>

For entry, a full 8 digit number must be entered. On the receipt/journal, non-PLU type code is printed like 208**** (****: price/quantity information)


## EAN-13

- Ordinary EAN-13 code (used in the source marking)
- Specific EAN-13 code (flag 977, 978, 979) (used in the source marking: ISBM, ISSN)

For entry, you must enter a full of 13 digits number.

- Internal code (used in the in-store marking, the flag character number: 20 through 29 and 02)
Program the format by the job\# 2025.



## Add-on code

UPC-A and EAN-13 may be followed by a two digits number or a five digits number as add-on code, excepting UPC-A without a check digit plus two or five digits add-on code.
Therefore, the total number of digits enterable for sales entries are as shown below:

| Code entry | No add-on code | 2-digit add-on code | 5-digit add-on code |
| :---: | :---: | :---: | :---: |
| UPC-A | 12 | 14 | 17 |
| UPC-A w/leading zero | 13 | 15 | 18 |
| UPC-A w/o check digit | 11 | - | - |
| UPC-E | 6 | - | - |
| EAN-8 | 8 | - | - |
| EAN-13 | 13 | 15 | 18 |

Your register automatically judges the add-on code in an UPC/EAN code entered from the total number of digits and the flag.

## READING (X) AND RESETTING (Z) OF SALES TOTALS

- Use the reading function $(X)$ when you need to take a reading of sales information entered since the last resetting. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function $(Z)$ when you need to clear the register's memory. Resetting prints all sales information and clears the entire memory except for the GT1 thru GT3 and training GT, reset count, and consecutive number.
- If you want to stop the printing report, turn the mode switch to the MGR position. The symbol ("******") is printed.

Summary of reading ( $X$ ) and resetting $(Z)$ reports and the key operations to obtain the reports

X1 and Z1 reports: Daily sales reports
X2 and Z 2 reports: Periodic (monthly) consolidation reports

| Item | Mode switch position |  | Job code | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | X1/Z1 | X2/Z2 |  |  |
| Flash report: (Only display) To clear the display, press the $\square$ key or turn the mode switch to another position. | X1 | - | - | Dept. key ( $\square$ 1 to $\square$ 99 ) <br> Dept. code $\qquad$ \# : Department total amount |
|  |  |  |  | (a) ${ }_{\text {FOR }}$ key: Amount of cash in drawer |
|  |  |  |  | SBTL key: Paid total |
| General report | X1, Z1 | X1, Z 1 | 100 |  |
|  |  | X2, Z2 | 200 |  |
| Individual cashier/ server report | X1, Z1 | X1, Z1 | 141 |  |
|  |  | X2, Z 2 | 241 |  |
|  | <OP X/Z> X, Z |  | 41 |  |
| Full cashier/server report | X1, Z1 | X1, Z 1 | 140 |  |
|  |  | X2, Z2 | 240 |  |
| Full department report | X1 | X1 | 110 |  |
|  |  | X2 | 210 |  |
| Individual group total report on department | X1 | X1 | 112 | $\begin{aligned} & 112 \\ & 212 \end{aligned}{ }_{\text {FOR }} \longrightarrow \text { Group number } \longrightarrow \text { CAAT }$ |
|  |  | X2 | 212 |  |
| Full group total report on department | X1 | X1 | 113 | $\begin{aligned} & 113 \\ & 213 \end{aligned} \longrightarrow \begin{gathered} \text { Q/ } \\ \text { FOR } \end{gathered} \longrightarrow \text { CAAT }$ |
|  |  | X2 | 213 |  |
| PLU/UPC report by designated range | X1, Z 1 | X1, Z 1 | 120 | All PLUs/UPCs |
|  |  | X2, Z2 | 220 |  |

\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Item} \& \multicolumn{2}{|l|}{Mode switch position} \& \multirow[t]{2}{*}{Job code} \& \multirow[t]{2}{*}{Key operation} <br>
\hline \& X1/Z1 \& X2/Z2 \& \& <br>
\hline PLU/UPC report by pick up list \& X1, Z 1 \& X1, $\mathrm{Z1}$

X2, Z2 \& 109

209 \&  <br>
\hline PLU/UPC report by associated department \& X1, Z1 \& $\mathrm{X} 1, \mathrm{Z} 1$
$\mathrm{X} 2, \mathrm{Z} 2$ \& 121
221 \&  <br>
\hline Individual group total report on PLU/UPC \& X1 \& X1
X2 \& 122
222 \&  <br>
\hline Full group total report on PLU/UPC \& X1 \& X 1
X 2 \& 123

223 \& $$
\begin{aligned}
& 123 \\
& 223
\end{aligned} \longrightarrow \stackrel{\text { © }}{\substack{\text { FOR }}} \longrightarrow \text { CAAT }
$$ <br>

\hline PLU/UPC zero sales report by department \& X1 \& X 1
X 2 \& 127
227 \&  <br>
\hline PLU/UPC price category report \& X1 \& X 1
X 2 \& 129
229 \&  <br>
\hline PLU/UPC stock report \& X1 \& X1 \& 124 \&  <br>
\hline PLU/UPC stock report by pick up list \& X1 \& X1 \& 104 \&  <br>
\hline
\end{tabular}

| Item | Mode switch position |  | Job code | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | X1/Z1 | X2/Z2 |  |  |
| GLU/PBLU report | X1, Z1 | X1, Z 1 | 180 |  |
| GLU/PBLU report by cashier/server | X1, Z 1 | X1, Z 1 | 181 |  |
| Closed GLU/PBLU report | X1, Z 1 | X1, Z 1 | 182 |  |
| Closed GLU/PBLU report by cashier/ server | X1, Z 1 | X1, Z 1 | 183 |  |
| Commission sales report | X1 | X1 | 132 | $\begin{aligned} & 132 \\ & 232 \end{aligned} \longrightarrow \begin{gathered} \text { @ } \\ \text { FOR } \end{gathered} \longrightarrow \text { CA/AT }$ |
|  |  | X2 | 232 |  |
| Tax report | X1 | X1 | 133 | $\begin{aligned} & 133 \\ & 233 \end{aligned} \longrightarrow \begin{gathered} \text { @/ } \\ \text { FOR } \end{gathered} \longrightarrow \text { CA/AT }$ |
|  |  | X2 | 233 |  |
| Transaction report | X1 | X1 | 130 | $\begin{aligned} & 130 \\ & 230 \end{aligned} \longrightarrow \stackrel{\text { QAIAT }}{\substack{\text { FOR }}} \longrightarrow \text { CAIT }$ |
|  |  | X2 | 230 |  |
| Cash in drawer report | X1 | X1 | 131 |  |
|  |  | X2 | 231 |  |
| Dynamic UPC report by designated range | X1, Z1 | X1, Z 1 | 169 |  |
| Dynamic UPC report by pick up list | X1, Z 1 | X1, Z1 | 165 |  |

\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Item} \& \multicolumn{2}{|l|}{Mode switch position} \& \multirow[t]{2}{*}{Job code} \& \multirow[t]{2}{*}{Key operation} <br>
\hline \& X1/Z1 \& X2/Z2 \& \& <br>
\hline Dynamic UPC report by associated department \& X1, Z1 \& X1, Z1 \& 166 \&  <br>
\hline Dynamic UPC clear report by designated range \& X1, Z 1 \& X1, Z1 \& 168 \&  <br>
\hline Dynamic UPC clear report by pick up list \& X1, Z1 \& X1, Z1 \& 164 \&  <br>
\hline Dynamic UPC clear report by associated department \& X1, Z1 \& X1, Z1 \& 167 \&  <br>
\hline Hourly report \& X1 ${ }_{\text {X1 }}{ }^{\text {X1, } \mathrm{Z} 1}$ \& X1

X1, $\mathrm{Z1}$ \& 160 \&  <br>
\hline Stacked report \& X1, Z1 \& $\mathrm{X} 1, \mathrm{Z} 1$
$\mathrm{X} 2, \mathrm{Z} 2$ \& 190
290 \&  <br>
\hline Daily net report \& \& X2, Z2 \& 270 \&  <br>
\hline
\end{tabular}

## Non-accessed UPC deleting

| Item | Mode switch position |  | Job code | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | X1/Z1 | X2/Z2 |  |  |
| Reading of non-accessed UPCs | X1 | X1 | 105 | $105 \longrightarrow{ }_{\text {¢OR }}^{\text {¢ }}$ ( CAAT |
| Deleting of non-accessed UPCs | Z1 | Z1 | 105 | For full deleting |

When you execute the job \#105 in Z1 mode, not only the sales data, but also the UPC code(s) (the related data files) themselves will be deleted.

## 2 Daily sales totals

## ■ General report

You can take $X$ and $Z$ reports in the $\mathrm{X} 1 / \mathrm{Z} 1$ mode. The use of the decimal $(\sqrt{\bullet})$ key determines when the report will actually reset the totals.


Note Not all reports provide the resetting capability. Please refer to the chart on pages 190-194.


[^3]

* When manual $\mathrm{PB} / \mathrm{CB}$ function is enabled, amount is also printed for each print item.

| PO CASH | 10 | \$10.00 | - PO1 by cash counter and total |
| :---: | :---: | :---: | :---: |
| PO CHK | 10 | \$5.00 |  |
| PO CHR | 10 | \$12.00 |  |
| PO FS | 10 | \$3.00 |  |
| ***PO | 40 | \$30.00 |  |
| PO2 CASH | 10 | \$13.00 |  |
| P02 CHK | 10 | \$5.00 |  |
| P02 CHR | 10 | \$20.00 |  |
| P02 FS | 10 | \$5.00 |  |
| ***P02 | 40 | \$43.00 |  |
| PO TL | 80 | \$73.00 | - PO total |
| CA/CHK1 | 10 | \$30.00 | - Check cashing 1 counter and total |
| CA/CHK2 | 10 | \$15.00 |  |
| CA/CHK3 | 20 | \$15.00 |  |
| CA/CHK4 | 10 | \$13.00 |  |
| CA/CHK5 | 00 | \$0.00 |  |
| CA/CK TL | 50 | \$73.00 | - Check cashing total |
| CHK/CG |  | \$25.14 | - Cash change total for check and charge tendering |
| FS/CG |  | \$0.00 | - Cash change total for food stamp tendering |
| CONV 1 |  | € 50.00 | - Currency conversion 1 total (by programmed rate) |
| CONV 2 |  | 20.00 |  |
| CONV 3 |  | 50.00 |  |
| CONV 4 |  | 50.00 | - Currency conversion 4 total (by manual rate) |
| CONV TL |  | 170.00 | - Currency conversion total |
| FS/ID |  | \$92.00 | - Food stamp in drawer total |
| Chargel | 100 | \$297.60 | - Charge 1 counter and total |
| CHARGE1- | 10 | -5. 31 | - Charge 1 refund/return counter and total |
| CHARGE2 | 110 | \$337.72 |  |
| CHARGE2- | 10 | -5.31 |  |
| CHARGE3 | 40 | \$158.71 |  |
| CHARGE3- | 10 | -10.63 |  |
| CHARGE4 | 20 | \$43. 31 |  |
| CHARGEA- | 10 | -10.63 |  |
| CHARGE5 | 20 | \$52.12 |  |
| CHARGE5- | 10 | -11.03 |  |
| CHARGEG | 30 | \$62.47 |  |
| CHARGEG- | 10 | -3. 31 |  |
| CHARGE7 | 20 | \$26.82 |  |
| CHARGET- | 10 | -5.31 |  |
| CHARGE8 | 20 | \$57.10 |  |
| CHARGE8- | 10 | -7.97 |  |
| CHARGES | 20 | \$85. 70 |  |
| CHARGE9- | 10 | -3.19 |  |
| CHR TL | 470 | \$1058.86 | - Charge total |
| CHECK1 | 50 | \$142.96 | - Check 1 counter and total |
| CHECK2 | 20 | \$84.63 |  |
| CHECK3 | 20 | \$183.00 |  |
| CHECK4 | 30 | \$319.48 |  |
| CHECK5 | 10 | \$10.31 |  |
| CHECK TL | 130 | \$740.38 | - Check total |
| CA/CH ID |  | \$3042. 64 | - Cash + check in drawer |
| ****CID |  | \$2302. 26 | - Cash in drawer |
| DEPOSIT | 10 | \$10.00 | - Deposit counter and total |
| DPST RF | 10 | -10.00 | - Deposit refund counter and total |
| TIP PAID | 40 | \$71.50 | - Tip-paid counter and total |
| CA TIP | 100 | \$42.00 | - Cash tip counter and total |
| CH TIP | 110 | \$39.50 | - Charge tip counter and total |

## Cashier/Server report

Using this function, you can take $X$ and $Z$ reports for individual cashiers/servers or all cashiers/servers.

## Individual cashier/server reading and resetting

Note
The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for "OP X/Z mode available" in the PGM2 mode.

- Sample X report

* When you take these reports in the OP X/Z mode, the X report shows an "OP X " and the Z report shows an "OP Z".
- Sample Z report


The subsequent printout occurs in the same format as in the sample $X$ report.

| GAS(-) 18 | 40 | -3. 50 |  |
| :---: | :---: | :---: | :---: |
| GAS (-) 19 | 10 | -0.60 |  |
| DRU CNT | 70 |  |  |
| CONV 1 |  | 30.00 |  |
| CONV 2 |  | 50.00 |  |
| CONV 3 |  | 70.00 |  |
| CONV 4 |  | 100.00 |  |
| FS/ID |  | \$37.00 |  |
| CASH | 350 | \$612.42 |  |
| CASH2 | 20 | \$71.00 |  |
| CASH3 | 20 | \$74.45 |  |
| CASH4 | 20 | \$54. 05 |  |
| CASH5 | 20 | \$52.65 |  |
| CHARGE1 | 40 | \$99.20 |  |
| CHARGE1- | 10 | -3.00 |  |
| CHARGE2 | 20 | \$35.00 |  |
| CHARGE2- | 10 | -5.00 |  |
| CHARGE3 | 10 | \$22.00 |  |
| CHARGE3- | 10 | -10.00 |  |
| CHARGE4 | 20 | \$42.68 |  |
| CHARGE4- | 10 | -12.00 |  |
| CHARGE5 | 30 | \$58.00 |  |
| CHARGE5- | 10 | -10.00 |  |
| CHARGEG | 10 | \$12.00 |  |
| CHARGE6- | 10 | -2.00 |  |
| CHARCE7 | 10 | \$25.00 |  |
| CHARGE7- | 10 | -12.00 |  |
| CHARCE8 | 50 | \$146.50 |  |
| CHARGE8- | 10 | -20.00 |  |
| CHARGES | 20 | \$81.40 |  |
| CHARGES- | 10 | -12.00 |  |
| CHECK1 | 30 | \$106.40 |  |
| CHECK2 | 10 | \$100.00 |  |
| CHECK3 | 20 | \$52.20 |  |
| CHECK4 | 10 | \$80.00 |  |
| CHECK5 | 10 | \$26.00 |  |
| CA/CH ID |  | \$986. 66 |  |
| ****ID |  | \$622.06 |  |
| COM. SALI |  | \$408.75 | Commission 1 sales total |
| COM. AMTI |  | \$20.44 | - Commission 1 amount |
| COH. SALS |  | \$517.00 |  |
| COH. AMTS |  | \$103.40 |  |
| COH. TTL |  | \$151.45 | Commission amount total |
| NON COM. |  | \$538.80 | - Non-commission sales total |

## Full cashier/server reading and resetting

The printout occurs in the same format as in the sample report of individual cashier/server, but all cashiers/servers' sales data are printed in the order of cashier/server code number (from \#1 to \#20), and then the total of all cashiers/servers is printed.

## ■ Hourly report

You can take $X$ and $Z$ reports for sales totals and transaction (customer) counters for 48 half hours, or 24 hours. If both quantity and amount are zero, their print is skipped.

## - Sample X report



- Sample Z report

The subsequent printout occurs in the same format as in the sample $X$ report.

Full department report

| $\begin{aligned} & \text { \#110 * }{ }^{\text {*DEP }} 1 \text { * } \end{aligned}$ |  |  | -Sales q'ty |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { DO1 } \\ & \text { DPT.O1 } \end{aligned}$ |  | 01-99 |  |
|  | 391.0000 | 75. $26 \%$ |  |
|  |  | \$2189. 10 | - AmountRatio of dept. 1 salesamount to + realdept. total |
| D02 <br> DPI. 02 D03 DPI. 03 *DEPT TL | 64.0000 | 5.33\% |  |
|  |  | \$155.00 |  |
|  | 78.0000 | 19.41\% |  |
|  |  | \$564.50 |  |
|  | 533.0000 | \$2908.60 |  |
|  |  | 100.00\% |  |
| $\begin{aligned} & \text { DO4 } \\ & \text { DPI. O4 } \\ & \text { DEPT (-) } \end{aligned}$ | 4.0000 |  |  |
|  |  | -11.00 |  |
|  | 4.0000 | -11.00 |  |
| $\begin{aligned} & \text { DO5 } \\ & \text { DPT. } 05 \\ & 1 \mathrm{TL} \end{aligned}$ | 6.0000 |  |  |
|  |  | \$59.00 |  |
|  | 6.0000 | \$59.00 |  |
| D06 <br> DPI. 06 <br> HASH (-) | 2.0000 |  |  |
|  |  | -17.00 |  |
|  | 2.0000 | -17.00 |  |
| $\begin{aligned} & \text { DO7 } \\ & \text { DPI.O7 } \end{aligned}$*BTIL TL | 28.0000 |  |  |
|  |  | \$14.00 |  |
|  | 28.0000 | \$14.00 |  |
| D08 DPI. 08 BTIL(-) | 10.0000 |  |  |
|  |  | -5.00 |  |
|  | 10.0000 | -5.00 |  |
| D09 DPI. 09 *GAS IL | 21.0000 | 267 |  |
|  |  | \$566. 00 |  |
|  | 21.0000 | 267 |  |
|  |  | \$566. 00 |  |
| D10 <br> DPT. 10 <br> GAS(-) | 1.0000 |  |  |
|  |  | -10.00 |  |
|  | 1.0000 |  |  |
|  |  | -10.00 |  |

## PLU/UPC report (by designated range or pick up list)

This function provides you with $X$ and $Z$ reports for sales information of PLUs/UPCs.
You can select either of the designated range operation or pick up list operation. The range may represent all or part of the PLUs/UPCs in your register.

\section*{- Sample X report} |  |
| :---: |
| PLU code |
| Item label for |
| price level 1 |
|  |
| Item label for |
| price level 2 |

- Sample Z report



## Note

*1: The PLU/UPC range is not printed in pick up report (\#109).
*2: Not printed when waste mode is disabled


## PLU/UPC report by associated department

- Sample X report


The subsequent printout occurs in the same format as th ePLU/UPC report by designated range.

- Sample Z report


The subsequent printout occurs in the same format as in the sample X report.

Individual group total report on PLU/UPC

Full group total report on PLU/UPC


## PLU/UPC zero sales report by

 departmentPLU/UPC stock report (by designated range or pick up list)


PLU/UPC price category report


| PLU00013 | 15.0000 | \$120.00 |
| :---: | :---: | :---: |
| ***TOTAL | 171.0000 | \$430.00 |
|  | 14.0000 | \$35.00 |
|  | 9.0000 | \$31.50 |
|  | 6.0000 | \$16.50 |
|  | 16.0000 | \$52.00 |
|  | 4.0000 | \$15.00 |
| UPC 5012345678900\# |  |  |
| APPLE | 11.0000 | \$27.50 |
| APPLE_2 | 6.0000 | \$16.50 |
| APPLE 3 | 1.0000 | \$3.00 |
| APPLE-4 | 9.0000 | \$31.50 |
| APPLE-5 | 8.0000 | \$30.00 |
| APPLE 6 | 11.0000 | \$44.00 |
| 5045678912304\# |  |  |


| GRAPE_6 | 3.0000 | $\$ 12.75$ |
| ---: | ---: | ---: |
| ***TOTAL | 27.0000 | $\$ 89.10$ |
|  | 9.0000 | $\$ 26.25$ |
|  | 5.0000 | $\$ 17.00$ |
|  | 11.0000 | $\$ 39.00$ |
|  | 18.0000 | $\$ 70.00$ |
|  | 14.0000 | $\$ 56.75$ |

## ■ GLU/PBLU report

- Sample X report

- Sample Z report


The subsequent printout occurs in the same format as in the sample $X$ report.

## GLU/PBLU report by cashier/server

- Sample X report

| ${ }_{*}^{\# 181} \text { GLU }^{*}{ }^{*} 1^{*}$ |  |  |
| :---: | :---: | :---: |
| 01SRU\#1 1 |  | DICK |
| 1111\# |  |  |
| COVER CT | 50 |  |
| ***PBAL |  | \$20.00 |
| 1113\# |  |  |
| COVER CT | 20 |  |
| ***PBAL |  | \$34.00 |
| FREE GLU <br> 1112\# |  |  |
|  |  |  |
| COVER CT ***PBAL | 60 |  |
|  |  | \$30.00 |
| ***TOTAL COVER CT ***PBAL |  |  |
|  | 130 |  |
|  |  | \$84.00 |

- Sample Z report


The subsequent printout occurs in the same format as in the sample X report.

## Closed GLU/PBLU report

- Sample X report


|  |  |  |
| :--- | ---: | ---: |
| FIN. BAL |  | $\$ 50.88$ |
| *A*TOTAL |  |  |
| COUER CT | 330 |  |
| CASH | 30 | $\$ 54.60$ |
| CASH2 | 10 | $\$ 20.14$ |
| CASH5 | 10 | $\$ 23.32$ |
| CHECK1 | 10 | $\$ 27.56$ |
| CHECK2 | 10 | $\$ 12.72$ |
| CHARGE1 | 20 | $\$ 60.42$ |
| CHARE2 | 10 | $\$ 10.60$ |
| CHARGE3 | 10 | $\$ 38.16$ |
| CONW 1 | 10 | 50.00 |
| FSSALE | 10 | $\$ 30.00$ |
| IIP AMT | 20 | $\$ 9.00$ |
| FIN. BAL | 120 | $\$ 348.52$ |
|  |  |  |

- Sample Z report



## - Closed GLU/PBLU report by cashier/server

- Sample X report


|  |  |  |
| :--- | ---: | ---: |
| IIP AMT |  | $\$ 0.00$ |
| FIN. BAL |  | $\$ 23.32$ |
| ***TDIAL |  |  |
| COVER CT | 240 |  |
| CASH | 20 | $\$ 65.72$ |
| CASH2 | 10 | $\$ 20.14$ |
| CASH5 | 10 | $\$ 23.32$ |
| CHECK1 | 10 | $\$ 27.56$ |
| CHECK2 | 10 | $\$ 12.72$ |
| CHARGEE | 10 | $\$ 34.98$ |
| CHARG2 | 10 | $\$ 10.60$ |
| CHARGE3 | 10 | $\$ 38.16$ |
| TIP AMT | 20 | $\$ 9.00$ |
| FIN. BAL | 90 | $\$ 242.20$ |

## Transaction report



In this report the same transaction data as those printed when general reading is taken are printed except department sales totals.

## Tax report



[^4]
## Cash in drawer report

You can take full cashier X reports for cash in drawer.


| ***TOTAL |  |  |
| :--- | :--- | :--- |
| TRANSTI | 670 |  |
| NET3 |  |  |
| ****C10 |  | $\$ 1769.42$ |
|  |  |  |

## ■ Dynamic UPC report (by designated range or pick up list)

The printout occurs in the same format as in the sample report of PLU/UPC report (by designated range or pick up list).

## ■ Dynamic UPC report by associated department

The printout occurs in the same format as in the sample report of PLU/UPC report by associated department.

## ■ Dynamic UPC clear (by designated range or pick up list)

Please note that the UPCs specified for this report are deleted from the dynamic UPC file when Z report is issued.
The printout occurs in the same format as in the sample report of PLU/UPC report (by designated range or pick up list).

## Dynamic UPC clear by associated department

Please note that the UPCs specified for this report are deleted from the dynamic UPC file when Z report is issued.
The printout occurs in the same format as in the sample report of PLU/UPC report by associated department.

## X1/Z1 stacked report

You can print multiple $\mathrm{X} 1 / \mathrm{Z} 1$ reports in sequence at a single time. In this case, you need to program in advance what $\mathrm{X} 1 / \mathrm{Z} 1$ reports should be printed in the stacked report sequence.

Note
The following job code numbers (only) can be used for stacked report printing.
Job code number: 100, 110, 113, 120, 124, 127, 129, 130, 131, 132, 140, 160, 180
Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for further details.

## - Deleting of non-accessed UPCs

- Sample X report (Reading)

- Sample Z report (Deleting)


The subsequent printout occurs in the same format as in the sample $X$ report.
*: When there is any sales data of the UPC for \#209 report, the data in printed here.
When you delete the UPC in Z1 mode under the this situation, the data for \#209 is also deleted.

## 3 Periodic consolidation

Your register allows you to take consolidation $X$ and $Z$ reports of a chosen period (normally one week or a month).

## ■ General Overview

The periodic reading or resetting reports are the same in format as those in the $\mathrm{X} 1 / \mathrm{Z} 1$ report for daily total except job code no. (\#2xx) and mode indication ("X2" or "Z2".)

- Sample X report


The subsequent printouts are the same in format as those in the X/Z report for daily total.

## Daily net report

- Sample X report

- Sample Z report


The subsequent printout occurs in the same format as in the sample X report.
*: Overflowed data will be printed with the indication of $* * / * *$ at the date column.

## ■ X2/Z2 stacked report

You can print multiple X2/Z2 reports in sequence at a single time. In this case, you need to program in advance what X2/Z2 reports should be printed in the stacked report sequence.

Note
The following job code numbers (only) can be used for stacked report printing.
Job code number: 200, 210, 213, 220, 227, 229, 230, 231, 232, 240, 270
Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for further details.

# COMPULSORY CASH/CHECK DECLARATION 

If you want to make the declaration of the cash and check amount in the drawer mandatory before performing cashier $Z$ reports, please consult your dealer and have your register programmed for compulsory cash/check declaration.
If your register is programmed for compulsory cash/check declaration (CCD), a cashier must first count and declare the cash and check amounts (of domestic and foreign currency) in the drawer, before he or she can performing a cashier report. The procedure for outputting a CCD report is shown below.

## Types of compulsory cash/check declarations

- Compulsory declaration prior to individual cashier resetting
- Compulsory declaration prior to full cashier resetting


## Note

- Compulsory cash/check declaration is available in the above two types. You can choose either of these. Please consult your dealer for further details.
- When the cash/check declaration is compulsory, flash reports are not available.


## Key operation

After the CAAT key is pressed, the register prompts the cashier to input the cash and check accounts for both domestic and foreign currency. The cashier can simply input the total amounts of each currency unit, or the number of bills or coins of each denomination of each currency unit.

## - Individual cashier report

OP X/Z mode


[^5]conv to CoNs : When inputting the amount of a foreign currency in the drawer


## OPERATOR MAINTENANCE

## 1 In case of power failure

When power is lost, the machine retains its memory contents and all information on sales entries.

- When a power failure is encountered in register idle state or during an entry, the machine returns to the normal state of operation after power recovery.
- When a power failure is encountered during a printing cycle, the register prints "========" and then carries out the correct printing procedure after power recovery. (See the sample print.)

| F001 (-) 1 | -10.00 |
| :---: | :---: |
| S | L13 |
| 二= = = = = | = = = |
| F002 (-) 2 | -0.00 |
| 1 | L17 |
| F006 \%1 | -10.25\% |

## 2 In case of printer error

If the printer runs out of paper, the printer will hault, "PAPER EMPTY" error will appear on the display. Key entries will not be accepted. Referring to " 4 . Installing and removing the paper roll" in this chapter, install a new roll paper in the proper position, then press the (CL key. The printer will print the power failure symbol and resume printing.

If the print head is up, the printer haults, "HEAD UP" error will appear on the display. Key entries will not be accepted. Bring the print head to the correct position, then press the CL key. The printer will print the power failure symbol and resume printing.

## 3 Thermal printing

Your register prints by means of thermal printing. The print head applies heat to thermal paper which is chemically treated to change color when heated to a certain level. This creates the printed text.

Cautions in handling the printer


- If you are not going to use the register for an extended period of time, pull the print head release lever toward you so that the print head is set apart from the plate.
- Avoid the following environments:

Dusty and humid places
Direct sunlight
Iron powder (A permanent magnet and electromagnet are used in this machine.)

- Use the print head release lever only when necessary.
- Never pull the paper when it is in contact with the print head. First release the head with the print head release lever, and then remove the paper.
- Never touch the surface of the print head.
- Never touch around the print head and the motor during printing or before they have had sufficient time to cool.


## - Cautions in handling the recording paper (thermal paper)

- Use only the paper specified by SHARP.
- Do not unpack the thermal paper until you are ready to use it.
- Avoid heat. The paper will color at around $70^{\circ} \mathrm{C}$.
- Avoid dusty and humid places for storage. Avoid direct sunlight.
- The printed text on the paper can discolor under the following conditions:

Exposure to high humidity and temperature
Exposure to the direct sunlight
Contact with glue, thinner or a freshly copied blueprint
Heat caused by friction from scratching or other such means
Contact with a rubber eraser or adhesive tape

- Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.
- Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.
- For the storage of thermal paper, it is recommended to store the paper in a box with a dark and dry atmosphere of the room temperature 5 to $25^{\circ} \mathrm{C}$ having no rapid temperature change.


## 4 Installing and removing the paper roll

## - Recording paper specifications

Be sure to use paper rolls specified by SHARP.
The use of any other paper rolls than specified could cause paper jamming, resulting in register malfunction.

## Paper specification

Paper width: $2.26 \pm 0.02 \mathrm{in} .(57.5 \pm 0.5 \mathrm{~mm})$
Max. outside diameter: 3.15 in . 80 mm )
Quality:
Thermal paper
Paper tube:
0.71 in . ( 18 mm )

- Be sure to set paper roll(s) prior to using your machine, otherwise it may cause a malfunction.

Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

## Note

If the top end of the paper roll is fixed with paste or tape, the paper may lose its color development ability in the pasted or taped area due to the deterioration of the heat-sensitive color development component of the paper surface. This may result in nothing appearing at this location when printing is performed. Therefore, when setting a new paper roll in the machine, be sure to cut off approximately one revolution (approx. 25 cm long).

## (How to set the paper roll)


(How to cut the paper end)

## ■ Installing the paper roll

## Installing the receipt paper roll



1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in its printing position.
4. Set the paper correctly as illustrated above in the receipt side of the printer.
5. Insert the end of the paper into the paper chute as shown on the left. It will automatically be fed through the printer.
6. Cut off the excess paper that comes out of the printer with the manual cutter.
7. Replace the printer cover.

## Installing the journal paper roll



1. Turn the mode switch to the "REG" position with the $A C$ cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in its printing position.
4. Set the paper correctly as illustrated on the previous page in the journal side of the printer.
5. Insert the end of the paper into the paper chute as shown on the left. It will automatically be fed through the printer.
6. Insert the end of the paper into the slit in the paper take-up spool. (Press the key to feed more paper through if required.)
7. Wind the paper two or three turns around the spool shaft.
8. Set the spool on the bearing.
9. Replace the printer cover.

- When you want to manually install a new roll of paper while your machine is turned off, follow the steps shown below:

1. Pull the print head release lever toward you to lift up the print head.
2. Correctly place the new paper roll into the receipt/journal paper roll location.
3. Insert the paper end into the paper chute until it comes out of the printer.
4. Cut or roll the paper onto the take-up spool as described for automatic installation.
5. Return the print head release lever to its original position.

Note
If nothing is printed when printing is performed, check the printing face of the paper is at the outer side. Also in case nothing is printed on the receipt side, please check if the receipt on/off function is set to on.

## Removing the paper roll

When a colored dye appears on the paper roll, it is time to replace the existing paper roll. Replace the paper roll with a new one. If you plan not to use your register for an extended period of time, remove the paper roll, and store it in the appropriate place.

## Removing the receipt paper roll



1. Remove the printer cover.
2. Cut the paper behind the printer and near the paper roll.
3. Press the Ain key until the paper remaining in the printer comes out completely.
4. Remove the paper roll from the back of the printer.

Note Do not pull the paper through the printer.

## Removing the journal paper roll


4. Cut the paper behind the printer and near the paper roll.
5. Press the anim key until the paper remaining in the printer comes out completely.
6. Remove the paper roll from the back of the printer.

Note Do not pull the paper through the printer.

7. Remove the outer side of the take-up spool as shown on the left.

8. Remove the printed journal roll from the take-up spool.

## ■ Removing a paper jam

Precaution: Be very careful with the manual paper cutter, so as not to cut yourself. Never touch the print head immediately after printing, because the head may still be hot.


1. Remove the printer cover.
2. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Return the print head release lever to its original position.
5. Reset the paper roll(s) correctly by following the steps in "Installing the paper roll".
6. Replace the printer cover.

5 Cleaning the print head
When the printed text is getting dark or faint, paper dust may be stuck to the print head. Clean the print head as follows:


1. Turn the mode switch to the "OFF" position.
2. Remove the printer cover.
3. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).

4. Clean the print head with a soft rag moist with ethyl alcohol or isopropyl alcohol.
5. Return the print head release lever to its original position immediately after cleaning.
6. Reset the paper roll correctly by following the steps in "Installing the paper roll".
7. Replace the printer cover.

## Caution:

- Never touch the print head with a tool or anything hard as it may damage the head.
- The paper cutter is mounted on the printer (receipt side). Be careful not to cut yourself.

6 Removing the till and the drawer
The till in the register is detachable. After closing your business for the day, remove the till from the drawer and keep the drawer open. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.


## 7 Opening the drawer by hand

The drawer automatically opens normally. However, when power failure is encountered or the machine becomes out of order, slide the lever located on the machine bottom toward the rear. (See the figure below.) The drawer will not open if it is locked with a drawer lock key.


## 8 Before calling for service

The malfunctions shown in the left-hand column below, labelled "Fault," do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to the "Checking" shown in the right-hand column before calling for service.

| Fault |  |
| :--- | :--- |
| (1) The display won't be illuminated even when <br> the mode switch is turned to any other <br> position than "OFF". | •Is power supplied to the electrical outlet? <br> •Is the power cord plug out or loosely connected to the <br> electrical outlet? |
| (2) The display is illuminated, but the whole machine <br> refuses registrations. | •Is a cashier code assigned to the register? <br> •Is the mode switch set properly at the "REG" position? |
| (3) No receipt is issued. | •Is the receipt paper roll properly installed? <br> •Is there a paper jam? <br> •Is the receipt function in the "OFF" status? <br> •Is the print head release lever at the printing position? |
| (4) No journal paper is taken up. | •Is the take-up spool installed on the bearing properly? <br> •Is there a paper jam? |
| (5) Printing is unusual. | •Is the print head release lever at the printing position? <br> •Is the paper roll properly installed? |

## - Error message table

| Text no. | Description | In default of programming |
| :---: | :---: | :---: |
| 1 | Registration error | ENTRY ERROR |
| 2 | Misoperation error | MISOPERATION |
| 3 | Desired code is not programmed yet. | NO RECORD |
| 4 | (Reserved) |  |
| 5 | Secret code error | SECRET CODE |
| 6 | Code is not free | NOT FREE |
| 7 | Memory is full. | MEMORY FULL |
| 8 | Insert slip paper. | INSERT SLIP |
| 9 | The entered server/cashier's code is not authorized. | NO AUTHORITY |
| 10 | Stock is empty. | OUT OF STOCK |
| 11 | Compulsory pushing the subtotal key | SBTL COMPUL. |
| 12 | Compulsory tendering | TEND COMPUL. |
| 13 | Compulsory GLU/PBLU entry | PB COMPUL. |
| 14 | (Reserved) |  |
| 15 | Compulsory cover count entry | COV CNT COMP |
| 16 | Check edit error (for manual PB entry) | C/D ERROR |
| 17-19 | (Reserved) |  |
| 20 | Remote printer off line | OFF LINE |
| 21 | (Reserved) |  |
| 22 | Overlapped server/cashier error | SERVER ERR. |
| 23-26 | (Reserved) |  |
| 27 | Power off | POWER OFF |
| 28-29 | (Reserved) |  |
| 30 | Compulsory tender entry for tip | TIP ERROR |
| 31 | Compulsory non-add code | \# COMPULSORY |
| 32 | The server/cashier is not assigned. | NOT ASSIGNED |
| 33 | (Reserved) |  |
| 34 | Overflow limitation | OVER LIMIT. |
| 35 | The open price entry is inhibited. | INH. OPEN PR |
| 36 | The unit price entry is inhibited. | INH. UNIT PR |
| 37 | The direct non-tendering finalization after previous tender entry is inhibited. | NOT NON-TEND |
| 38 | Read error of scale data | SCALE ERROR |


| Text <br> no. | Description | In default of <br> programming |
| :---: | :--- | :--- |
| $39-47$ | (Reserved) |  |
| 48 | Enter check number | ENTER CHECK\# |
| 49 | Enter cover count | WEIGHT |
| 50 | (Reserved) | C.FILE FULL |
| 51 | Weight on scale | ENTR TARE WT |
| 52 | Closed check file is full. |  |
| 53 | (Reserved) | NO RECORD |
| 54 | Entry of tare weight | PRICE $\rightarrow$ DEPT |
| $55-60$ | (Reserved) | PRICE \& DEPT |
| 61 | Desired code is not programmed <br> yet. (learning function) |  |
| 62 | Enter price and dept. no. | ENTER DEPT\# |
| 63 | Enter price and dept. no. | BUFFER FULL |
| 64 | Enter dept. no. | ENTER PRICE |
| $65-66$ | (Reserved) | UPC FULL |
| 67 | REG buffer is full. |  |
| $68-69$ | (Reserved) | D E L E T E |
| 70 | Price entry at UPC refund |  |
| 71 | PLU/UPC file is full. | CLOSE DRAWER |
| $72-73$ | (Reserved) | ENTER P.SFT |
| 74 | Non-accessed UPC delete job |  |
| 75 | (Reserved) | OP ENTER |
| 76 | Closing the drawer is <br> compulsory. |  |
| 77 | Price level shift error | ENTR SECRET\# |
| 78 | (Reserved) | Reading of undefined vender <br> coupon UPC |
| 79 | (Reserved) | Message for prompting entry <br> of secret code |
| 80 | SEND OK |  |
| 81 | RECEIVE OK |  |
| $82-83$ | Reserved) | COM. ERROR |
| 84 | Data backup send success | DATA ERROR |
| 85 | Data backup receive success | Data backup communication <br> error |
| 86 | Backup data format error |  |
| 88 | Data backup time out error | (Reserved) |

## LIST OF OPTIONS

For your register, the following Sharp options are available.
For further details on additional options that may be considered, please contact your dealer.
-Remote drawer models ER-03DW and ER-04DW
-Till model ER-55CC2 for the standard cash drawer
-Key kit models
By using the following key kits, the keyboard layout can be changed on your register including the expansion of the number of departments.

ER-11KT7: 30 regular size key kits
ER-12KT7: $301 \times 2$ size key kits
ER-22KT7: $102 \times 2$ size key kits
ER-11DK7G: 30 regular size dummy key kits
ER-51DK7G: $105 \times 1$ size dummy key kits
-Display model UP-P16DP
-RAM board model UP-S02MB

## SPECIFICATIONS

| Model: | ER-A520/A530 |
| :---: | :---: |
| Dimensions: | 16.6 (W) $\times 16.8$ (D) x 11.7 (H) in. (421 (W) $\times 427$ (D) $\times 297$ (H) mm) |
| Weight: | $31.7 \mathrm{lbs}(14.4 \mathrm{~kg}$ ) |
| Power source: | $120 \mathrm{~V} \pm 10 \% \mathrm{AC}, 60 \mathrm{~Hz}$ |
| Power consumption: | Stand-by 11 W |
|  | Operating 47 W (max.) |
| Working temperature: | 32 to $104{ }^{\circ} \mathrm{F}$ (0 to $40^{\circ} \mathrm{C}$ ) |
| Electronics: | LSI (CPU) etc. |
| Built-in battery: | Rechargeable battery, memory holding time about 1 month (with fully charged built-in battery, at room temperature) |
| Display: |  |
| Operator display: | LCD dot-matrix display (16 positions x 2 lines) |
| Customer display: | 7-segment display (7 positions) |
| Printer: |  |
| Type: | 2-station thermal printer |
| Printing speed: | Approx. 17 lines/second |
| Printing capacity: | 30 digits each for receipt and journal paper |
| Other functions: | - Graphic logo printing function |
|  | - Logo text printing function |
|  | - Receipt (ON-OFF) function, journal selective function |
|  | - Receipt and journal independent paper feed function |
| Paper roll: | Width: $2.26 \pm 0.02 \mathrm{in} .(57.5 \pm 0.5 \mathrm{~mm})$ |
|  | Max. diam.: 3.15 in. ( 80 mm ) |
|  | Quality: High quality ( 0.06 to 0.08 mm thickness) |
| Cash drawer: | 5 slots for bill and 5 for coin denominations |
| Accessories: | Manager key 2 |
|  | Submanager key 2 |
|  | Operator key 2 |
|  | Drawer lock key 2 |
|  | Printer cover lock key 2 |
|  | Paper roll 2 |
|  | Take-up spool 1 |
|  | Standard key sheet 1 (provided with the keyboard)] |
|  | Programming key sheet 1 (provided with the keyboard) $\int$ for ER-A530 only |
|  | Ferrite cores 2 (used for connection cabling installation) |
|  | Leaflet 1 copy |

[^6]
## NOTICE

BE SURE TO ASK YOUR AUTHORIZED SHARP DEALER ABOUT THE WARRANTY THAT YOUR SELLING DEALER EXTENDS TO YOU. In order to assure you, the end-user, of warranty protection, Sharp extends a limited warranty to each of its authorized dealers, and in turn requires each of its authorized dealers to extend its own warranty to you on terms that are no less favorable than those given to the dealer by Sharp. You should be aware, however, that Sharp does not itself extend any warranties, either express or implied, directly to you, the end-user, and no one is authorized to make any representations or warranties on behalf of Sharp. Specifically, SHARP DOES NOT EXTEND TO YOU, THE END-USER, ANY EXPRESS WARRANTY OR ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR USE OR FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE HARDWARE, SOFTWARE, OR FIRMWARE EMBODIED IN OR USED IN CONJUNCTION WITH THIS PRODUCT. Sharp is not responsible for any damages or loss, either direct, incidental or consequential, which you, the end-user, may experience as a result of your purchase or use of the hardware, software or firmware embodied in or used in conjunction with this product. Your sole remedy in the event that you encounter any difficulties with the product is against the authorized dealer from which you purchased the product. In the event that this authorized dealer does not honor its warranty commitments, please contact the General Manager of Sales, Retail and Financial System Division, ISG, Sharp Electronics Corporation, Sharp Plaza, P.O. Box 650, Mahwah, NJ 07430-2135 so that Sharp can try to help you to assure complete satisfaction of all the warranty rights to which you are entitled from the authorized dealer.

## SHARP.

## SHARP ELECTRONICS CORPORATION

Sharp Plaza, Mahwah, New Jersey 07430-2135<br>1-800-BE-SHARP<br>http://www.sharp-usa.com

## SHARP CORPORATION


[^0]:    ■ Rear view

[^1]:    **P: 6 (ABCDEFGH: Always enter 0.)

[^2]:    * When you take this report in the PGM1 mode,

[^3]:    *1 When food stamp function is allowed, tax 4 items are not printed.

[^4]:    *1 Not printed when food stamp function is allowed.
    *2 Printed only when Canadian tax is selected.
    *3 Not printed when Canadian tax is selected.

[^5]:    \# : When inputting the cash or check amount (domestic currency) in the drawer

[^6]:    * Specifications and appearance subject to change without notice for improvement.

