SHARP

ELECTRONIC CASH REGISTER

MODEL

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_____

Serial Number _____

Date of Purchase _____

Place of Purchase _____

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 (120V ±10% 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.**

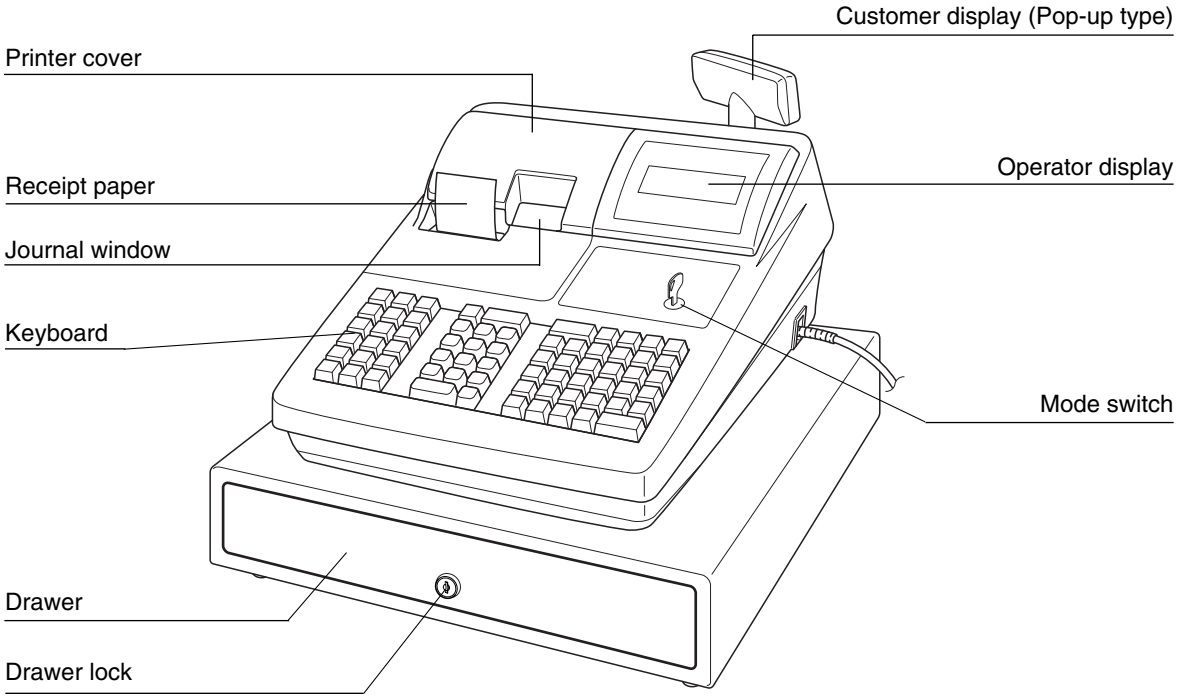
PRECAUTION

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.

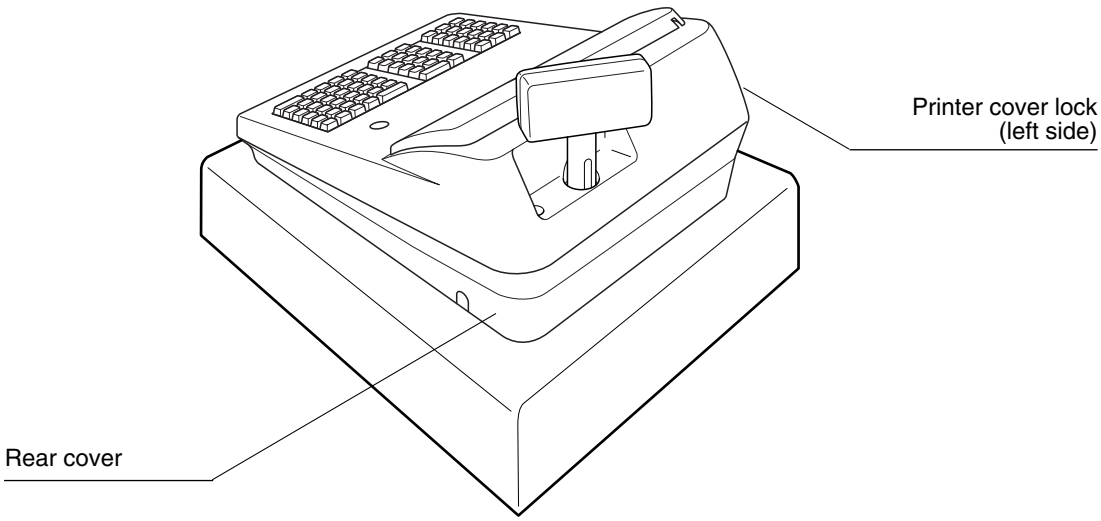
CONTENTS

EXTERNAL VIEW OF THE ER-A520

■ Front view

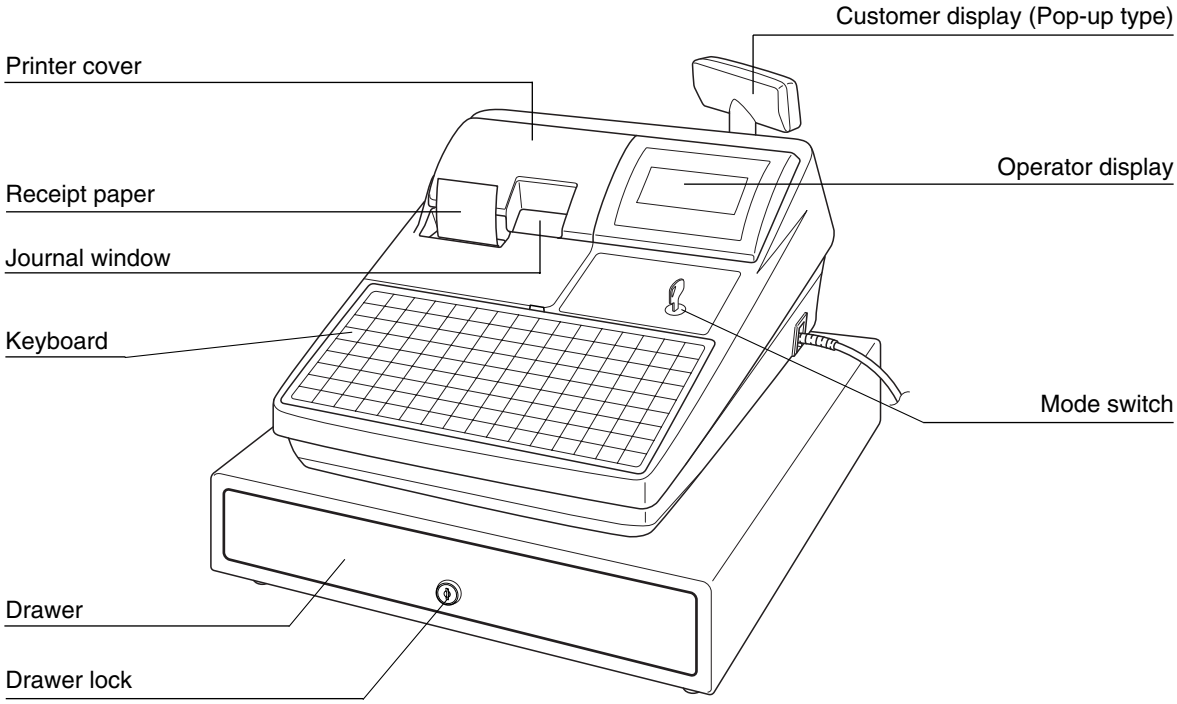


■ Rear view

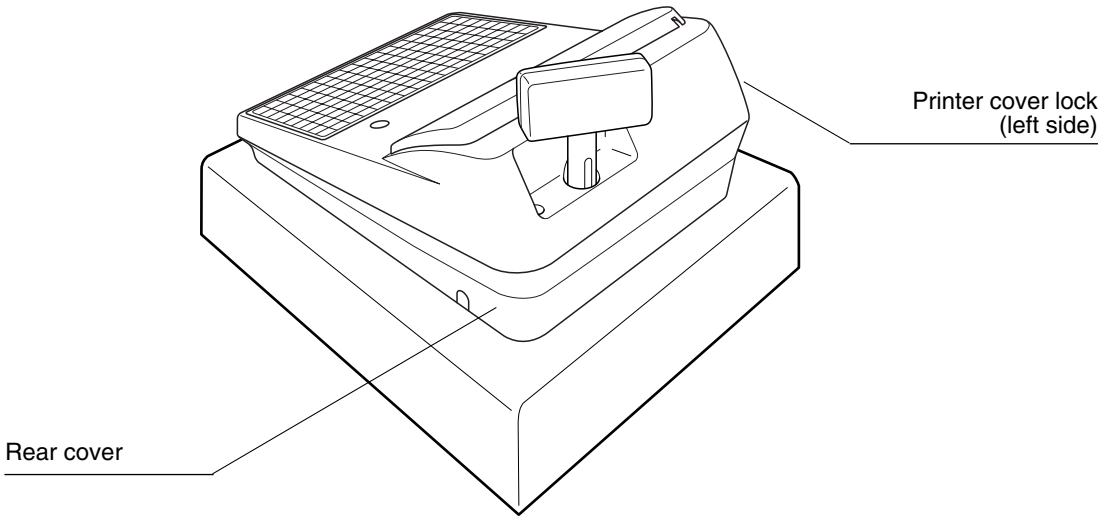


EXTERNAL VIEW OF THE ER-A530

■ Front view



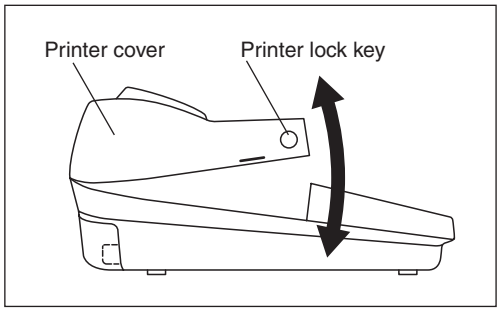
■ Rear view



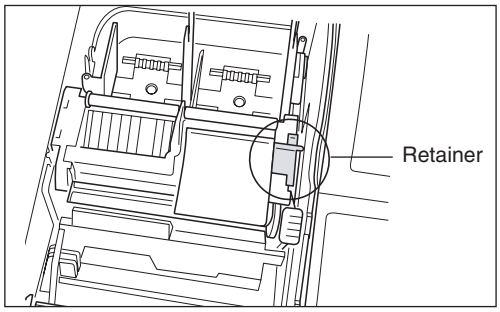
PRINTER

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.

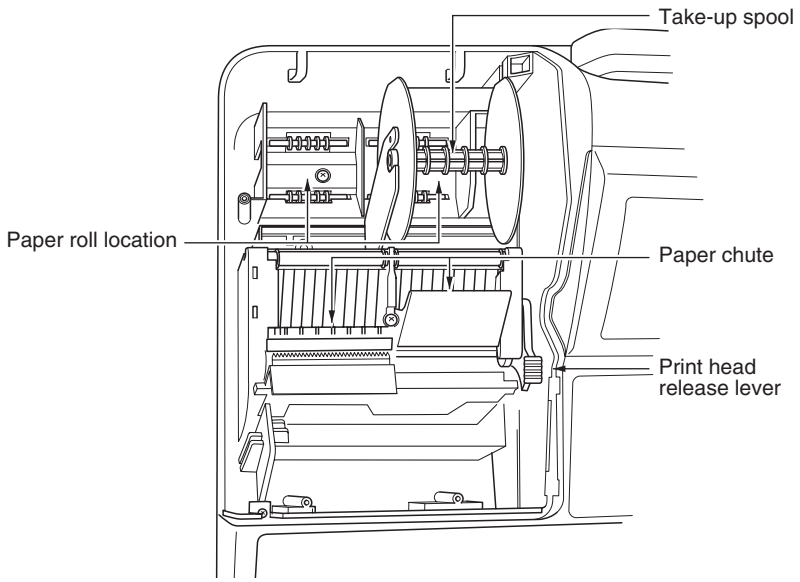


Your register is shipped with the print head release lever held in the up position by a white shipping retainer. Be sure to remove this retainer (see the figure at the right) and push down the print head release lever before you use the register.



Print head release lever

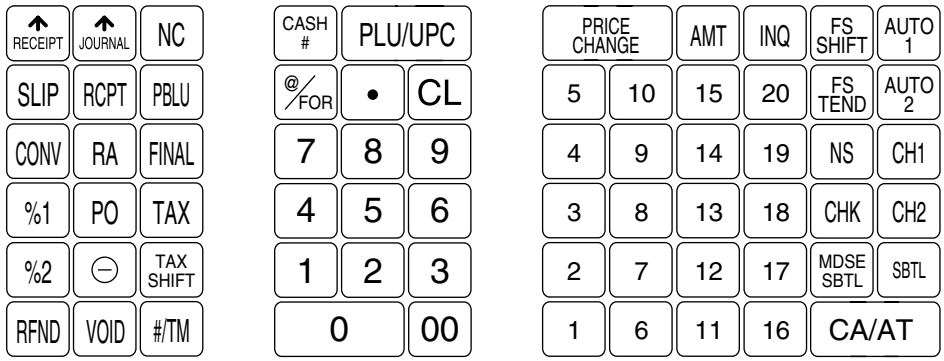
The print head can be lifted by the green lever on the right side of the printer. Pulling the lever forward, lifts the print head up. If the paper becomes jammed and you need to move the print head farther forward, you can pull the lever even further toward you and proceed with the removal of the jammed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



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 — Receipt paper feed key

JOURNAL — Journal paper feed key

0 ~ 9, 00 — Numeric keys

• — Decimal point key

CL — Clear key

@/FOR — Multiplication key

RFND — Refund key

VOID — Void key

AMT — Amount entry key

CASH # — Cashier code entry key

PLU/UPC — PLU/UPC key

INQ — PLU/UPC inquiry key

PRICE CHANGE — UPC price change key

⊖ — Discount 1 key

%1 %2 — Percent 1 and 2 keys

NC — New check key

PBLU — Previous balance key

FINAL — Final key

NS — No-sale key

TAX SHIFT — TAX 1 shift key

TAX — Manual tax key

MDSE SBTL — Merchandise subtotal key

1 ~ 20 — Department keys

AUTO 1 AUTO 2 — Automatic sequencing 1 and 2 keys

RA — Received-on-account 1 key

PO — Paid-out 1 key

FS SHIFT — Food stamp shift key

FS TEND	Food stamp tender key
CH 1 / CH 2	Charge 1and 2 keys
CONV	Currency conversion key
CHK	Check 1 key
SBTL	Subtotal key
CA/AT	Cash/amount tendered key
RCPT	Receipt print key
SLIP	Slip printer key
#/TM	Non-add code/Date & time display 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.*

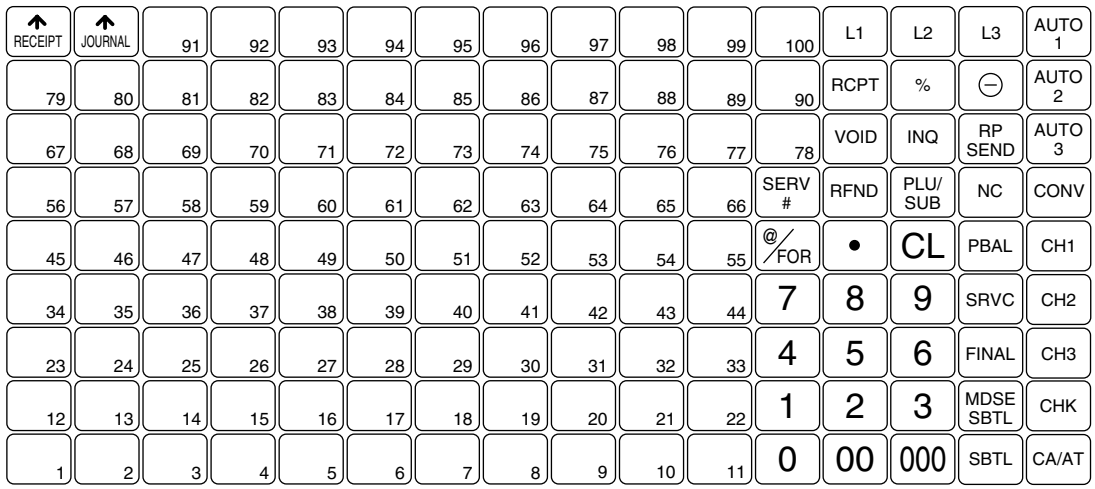
Optional keys

DEPT #	Dept. number key
%3 ~ %5	Percent 3 thru 5 keys
⊖2 ~ ⊖5	Discount 2 thru 5 keys
CH3 ~ CH9	Charge 3 thru 9 keys
CA2 ~ CA5	Cash 2 thru 5 keys
CONV2 ~ CONV4	Currency conversion 2 thru 4 keys
RA2	Received-on-account 2 key
PO2	Paid-out 2 key
AUTO 3 ~ AUTO 10	Automatic sequencing 3 thru 10 keys
SRVC	Service key
TRAY SBTL	Tray subtotal key
RETURN	Return key
CHK2 ~ CHK5	Check 2 through 5 keys
TRANS OUT	Transfer out key
TRANS IN	Transfer in key
CA TIP	Cash tip key
CH TIP	Charge tip key
TIP PAID	Tip paid key
EAT IN 1 ~ EAT IN 3	Eat in 1 thru 3 keys
TAX2 SHIFT ~ TAX4 SHIFT	Tax 2 thru 4 shift keys
DEPO	Deposit key
DEPO RFND	Deposit refund key
LEVEL #	PLU level shift number key
RP SEND	Remote printer send key
GRT EXEMPT	Gratuity exempt key
OPEN TARE	Tare entry key
REPEAT	Repeat entry key
GAS SBTL	Gasoline sales subtotal key
P-SHIFT #	Price shift number key
SCALE	Scale entry key
L1 ~ L5	PLU level shift 1 thru 5 keys
P1 ~ P6	Price level shift 1 thru 6 keys
PRINT	Validation print key
CV CNT	Cover count entry key

NO DEL	No delete key	C NEXT	Condiment next key
BS	Bill separation key	C CANCEL	Condiment cancel key
BT	Bill totalize/Bill transfer key (CHECK-ADD)	EDIT TIP	Edit tip key
BIRTH	Birthday entry key	GLU RECALL	Table# recall key
RFND SALES	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



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 (PLU/SUB) and the previous balance key (PBAL) are shown as PLU/UPC and PBLU respectively in this manual.*

RECEIPT	Receipt paper feed key	@/FOR	Multiplication key
JOURNAL	Journal paper feed key	RCPT	Receipt print key
0 ~ 9, 00, 000	Numeric keys	RFND	Refund key
		VOID	Void key
•	Decimal point key	PLU/ SUB	Price lookup/subdepartment/ UPC key
CL	Clear key	1 ~ 100	Direct price lookup keys

L1 ~ L3	PLU level shift 1 thru 3 keys
NC	New check key
SRVC	Service key
FINAL	Final key
PBAL	Previous balance key
⊖	Discount 1 key
%	Percent 1 key
INQ	PLU/UPC inquiry key
SERV #	Server code entry key
AUTO 1 ~ AUTO 3	Automatic sequencing 1 thru 3 keys
CONV	Currency conversion key
CH 1 ~ CH 3	Charge 1 thru 3 keys
CHK	Check 1 key
MDSE SBTL	Merchandise subtotal key
SBTL	Subtotal key
CA/AT	Cash/amount tendered key
RP SEND	Remote printer send key

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

DEPT #	Dept. number key
%2 ~ %5	Percent 2 thru 5 keys
⊖2 ~ ⊖5	Discount 2 thru 5 keys
CH4 ~ CH9	Charge 4 thru 9 keys
CA2 ~ CA5	Cash 2 thru 5 keys
CONV2 ~ CONV4	Currency conversion 2 thru 4 keys
RA1 RA2	Received-on-account 1 and 2 keys
PO1 PO2	Paid-out 1 and 2 keys
AUTO 4 ~ AUTO 10	Automatic sequencing 4 thru 10 keys
CHK2 ~ CHK5	Check 2 through 5 keys
TRANS OUT	Transfer out key
TRANS IN	Transfer in key
CA TIP	Cash tip key
CH TIP	Charge tip key
TIP PAID	Tip paid key
EAT IN 1 ~ EAT IN 3	Eat in 1 thru 3 keys
TAX1 SHIFT ~ TAX4 SHIFT	Tax 1 thru 4 shift keys
DEPO	Deposit key
DEPO RFND	Deposit refund key
TAX	Manual tax key
TRAY SBTL	Tray subtotal key
RETURN	Return key
GAS SBTL	Gasoline sales subtotal key
#/TM	Non-add code/Date & time display key
NS	No-sale key
SCALE	Scale entry key

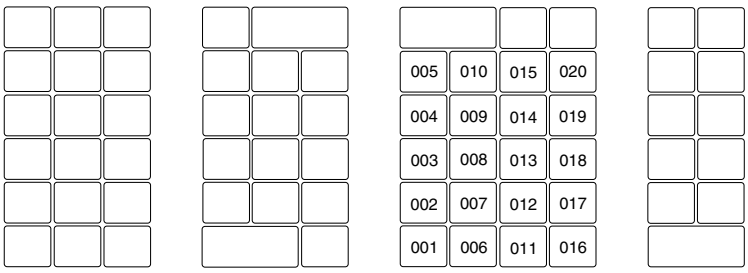
LEVEL #	PLU level shift number key	REPEAT	Repeat entry key
L4 L5	PLU level shift 4 and 5 keys	AMT	Amount entry key
P-SHIFT #	Price shift number key	PRICE CHANGE	UPC price change key
P1 ~ P6	Price level shift 1 thru 6 keys	BIRTH	Birthday entry key
PRINT	Validation print key	RFND SALES	Refund sales key
CV CNT	Cover count entry key	WASTE	Waste mode key
SLIP	Slip printer key	C NEXT	Condiment next key
BS	Bill separation key	C CANCEL	Condiment cancel key
BT	Bill totalize/Bill transfer key (CHECK-ADD)	EDIT TIP	Edit tip key
NO DEL	No delete key	GLU RECALL	Table# recall key
GRT EXEMPT	Gratuity exempt key	FS SHIFT	Food stamp shift key
OPEN TARE	Tare entry key	FS TEND	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

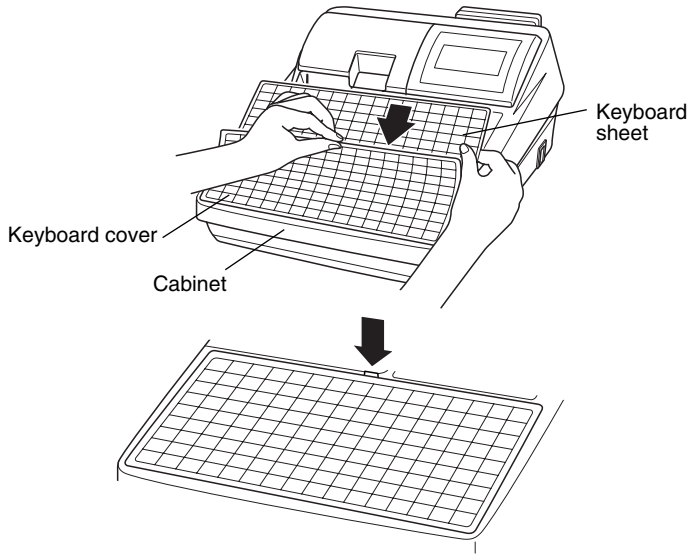


For ER-A530

		111	112	113	114	115	116	117	118	119	120				
099	100	101	102	103	104	105	106	107	108	109	110				
087	088	089	090	091	092	093	094	095	096	097	098				
076	077	078	079	080	081	082	083	084	085	086					
065	066	067	068	069	070	071	072	073	074	075					
054	055	056	057	058	059	060	061	062	063	064					
043	044	045	046	047	048	049	050	051	052	053					
032	033	034	035	036	037	038	039	040	041	042					
021	022	023	024	025	026	027	028	029	030	031					

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.



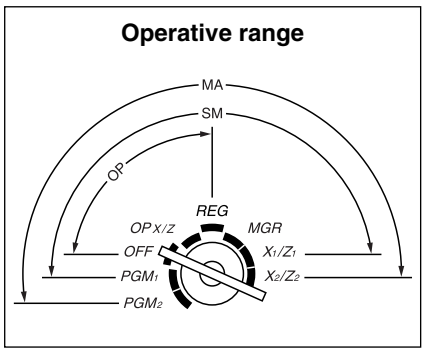
Note

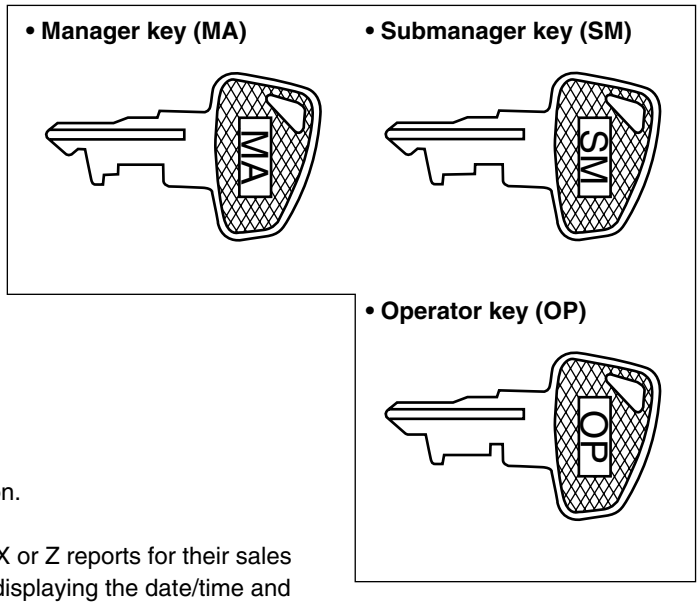
- *Do not spread the keyboard cover too far to avoid tearing the tabs.*
- *Replace the keyboard sheet with a new one if by chance it gets wet. Use of a wet keyboard sheet may cause problems.*
- *Be sure to use only SHARP-supplied keyboard sheets. Thick or hard sheets can make key operations difficult.*
- *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 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 RCPT 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.

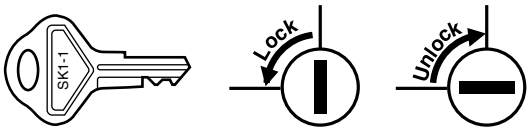
MGR: For manager's and submanager's entries
The manager can use this mode to make entries that are not permitted to be made by cashiers – for example, after-transaction voiding and override entries.

X1/Z1: To take the X/Z report for various daily totals.

X2/Z2: To take the X/Z report for various periodic (weekly or monthly) consolidation of totals.

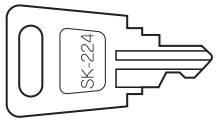
2 Drawer lock key

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

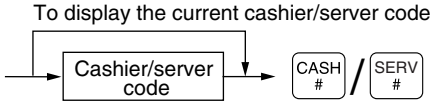
The ER-A520 provides a cashier system and the ER-A530 provides a server system. The cashier/server codes are available in two variants: Variant 1, the codes are displayed ("0000" to "9999"), and Variant 2, the codes are not displayed (always "✱✱✱✱").
When the cashier/server code is assigned by Variant 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

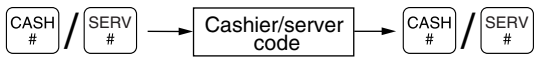
■ Sign-on

To display the current cashier/server code

Variant 1 :
(Code is displayed.)

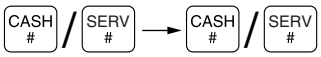


Variant 2 :
(Code is not displayed.)



■ 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

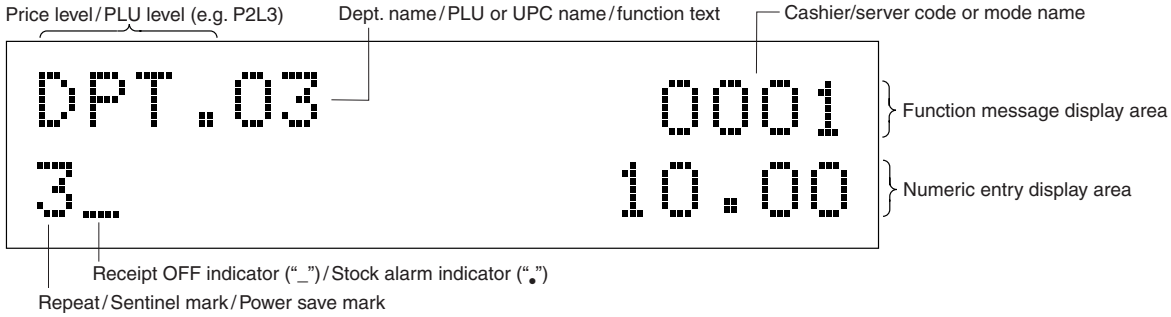
You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the RCPT key in the OP X/Z position. This key toggles the receipt printing status ON and OFF. To check the receipt printing status, turn the mode switch to the OP X/Z position or press the 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 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 → 3 .....9 → 0 → 1 → 2...)
- **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 [#/TM] 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.”

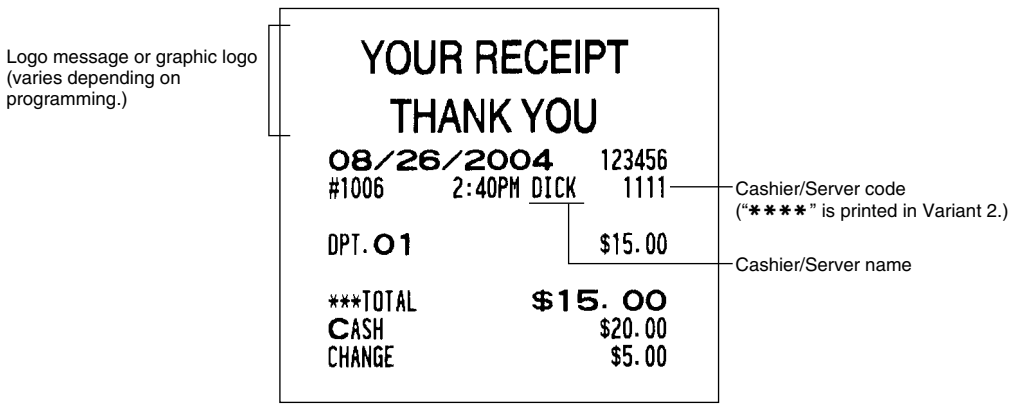
■ Receipt ON/OFF function

You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the [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 [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

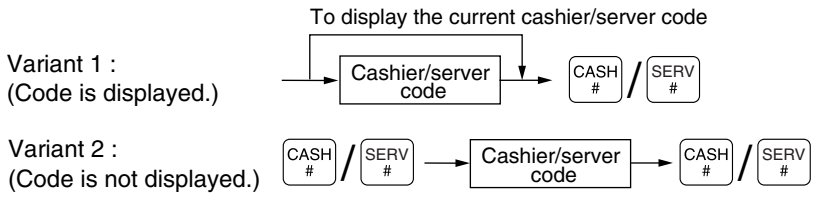
The ER-A520 requires a cashier to be assigned prior to operational item entries. The ER-A530 enforces that a server must enter their code into the register. Depending on register settings, it is possible to keep the same cashier/server code assigned when the same cashier/server is to be used for all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



Note *The operation entries depend on how the register has been programmed. To determine which selections should be considered, please consult your local dealer.*

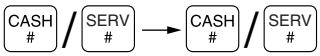
Procedure

■ 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 CL 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 CA/AT, CA2 thru CA5, CHK, CHK2 thru CHK5, or CH1 thru CH9 key to finalize the transaction.

ENTRIES

Note *The example entries provided within this manual describe the function key labeled [PLU/UPC] which is used for the model ER-A520. For the model ER-A530, please substitute the [PLU/UPC] key with the [PLU/SUB] function key.*

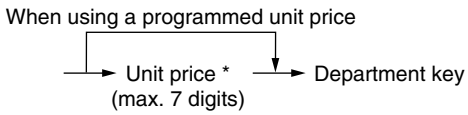
1 Item entries

■ Single item entries

Procedure

Department entries (direct department entries)

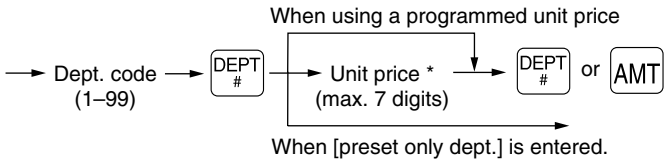
Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.



*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.*

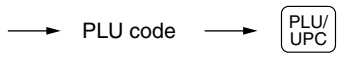
Department entries (indirect department entries)



*Less than the programmed upper limit amounts

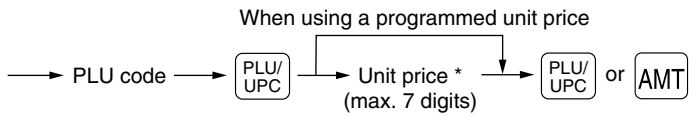
PLU entries (indirect PLU entries)

Enter a PLU code and press the [PLU/UPC] key.



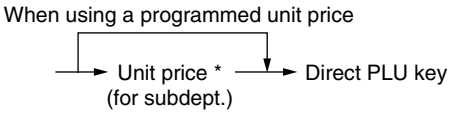
Note *When those PLU's for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.*

Subdepartment (open PLU, open and preset PLU) entries

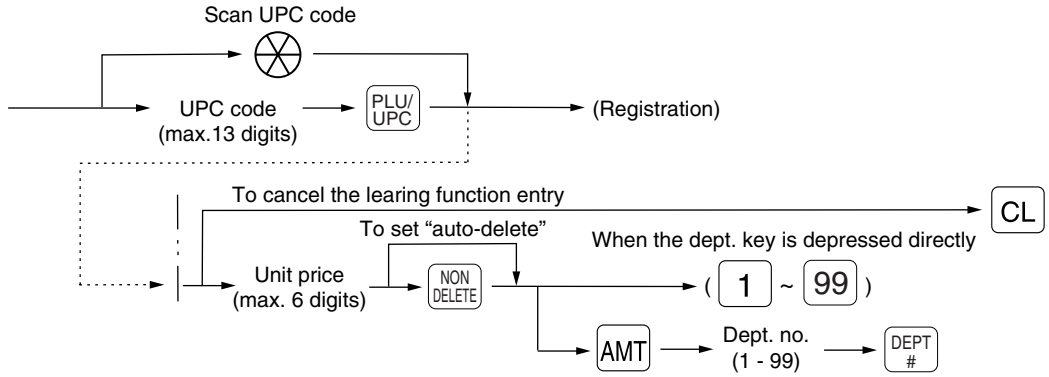


*Less than the programmed upper limit amounts

PLU entries (direct PLU entries)



UPC entries



Example

Key operation

1200 3
5
8 DEPT #
5 DEPT # 680 DEPT #
2 PLU/UPC
11 PLU/UPC 1200 PLU/UPC
8
5012345678900 PLU/UPC
CA/AT

Print

```
DPT.03          $12.00
DPT.05           $5.00
DPT.08           $2.00
DPT.05           $6.80
PLU00002         $1.50
PLU00011        $12.00
PLU00008         $3.50
5012345678900#
APPLE            $2.50
CASH            $45.30
```

■ Repeat entries

You can use this function for entering a sale of two or more same items.
You can use the REPEAT key to repeat entry instead of department, AMT, direct PLU or PLU/UPC key.

Example

Key operation

Repeated department entry (direct)
200 8
8
8

Repeated department entry (indirect)
5 DEPT # 680 DEPT #
DEPT #

Repeated PLU entry (indirect)
10 PLU/UPC
PLU/UPC
PLU/UPC

Repeated PLU entry (direct)
51
51

Repeated subdepartment entry
60 PLU/UPC
500 PLU/UPC
PLU/UPC

Repeated UPC entry
5012345678900 PLU/UPC
PLU/UPC

Repeated department entry (direct) using the repeat key
600 2
REPEAT
REPEAT
CA/AT

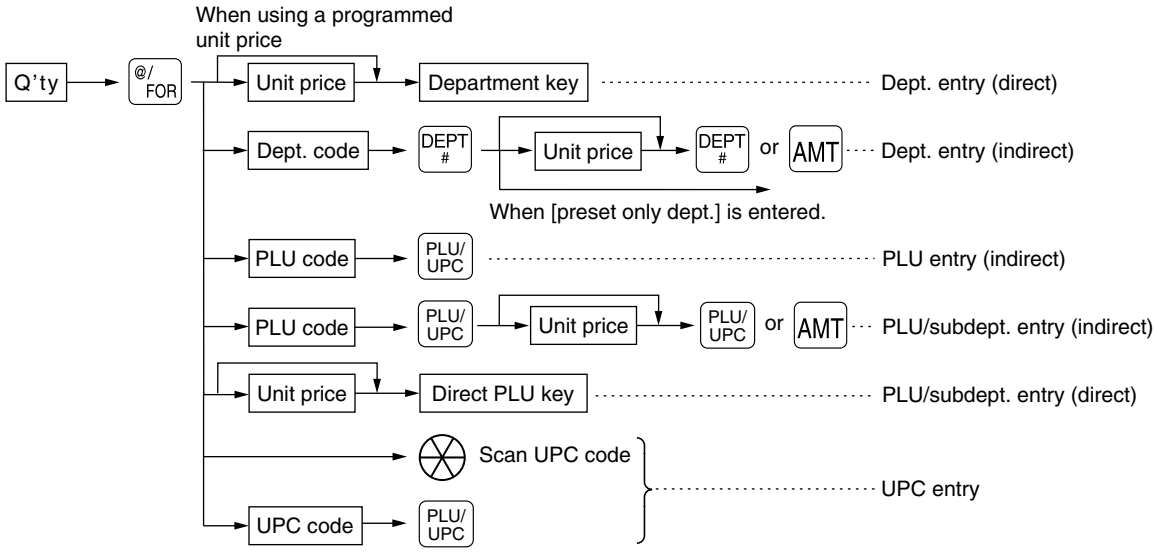
Print

```
DPT.08           $2.00
DPT.08           $2.00
DPT.08           $2.00
DPT.05           $6.80
DPT.05           $6.80
PLU00010         $7.15
PLU00010         $7.15
PLU00010         $7.15
PLU00051         $2.85
PLU00051         $2.85
PLU00060         $5.00
PLU00060         $5.00
5012345678900#
APPLE            $2.50
5012345678900#
APPLE            $2.50
DPT.02           $6.00
DPT.02           $6.00
DPT.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 [PLU/UPC] 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 [DEPT #] key.
- Q'ty: Up to four digits integer + three digits decimal
- Unit price: Less than a programmed upper limit
- Q'ty × unit price: Up to seven digits

Example

	Key operation
Department entry (direct)	7 [•] 500 [@/FOR]
	165 [8]
Department entry (indirect)	2 [@/FOR]
	5 [DEPT #]
	250 [DEPT #]
PLU entry (indirect)	15 [@/FOR]
	13 [PLU/UPC]
PLU entry (direct)	8 [•] 250 [@/FOR]
	[58]
Subdepartment entry	3 [@/FOR]
	60 [PLU/UPC]
	100 [PLU/UPC]
UPC entry	5 [@/FOR]
	5012345678900 [PLU/UPC]
	[CA/AT]

Print

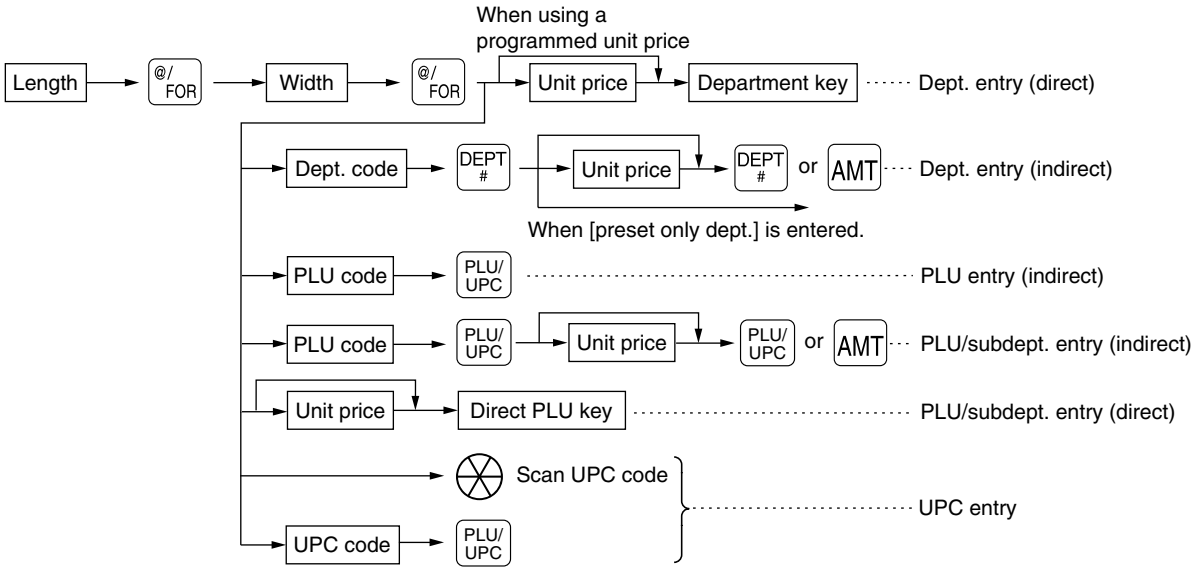
```
                7.500 @ $1.65
DPT.08                $12.38
                2 @ $2.50
DPT.05                 $5.00
               15 @ $2.10
PLU00013              $31.50
               8.250 @ $3.00
PLU00058              $24.75
               3 @ $1.00
PLU00060               $3.00
               5 @ $2.50
5012345678900#
APPLE                 $12.50
CASH                 $89.13
```

Note *You must use a decimal point ([•]) key when entering quantities that are fractional.*

■ 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 [PLU/UPC] 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 [DEPT #] key.
- Length or width: Up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: Less than a programmed upper limit
- Length × Width × Unit price: Up to seven digits

Note

- *For actual use of this function, please consult your dealer.*
- *You must use a decimal point ([•]) key when entering quantities that are fractional.*

Example

Key operation

Department entry	3 [@/FOR]
	4 [@/FOR]
	400 [5]
PLU entry	1 [•] 500 [@/FOR]
	2 [•] 500 [@/FOR]
	8 [PLU/UPC]
Subdepartment entry	1 [•] 750 [@/FOR]
	1 [•] 750 [@/FOR]
	6 [PLU/UPC]
	600 [PLU/UPC]
UPC entry	4 [@/FOR]
	5 [@/FOR]
	5099887654302 [PLU/UPC]
	[CA/AT]

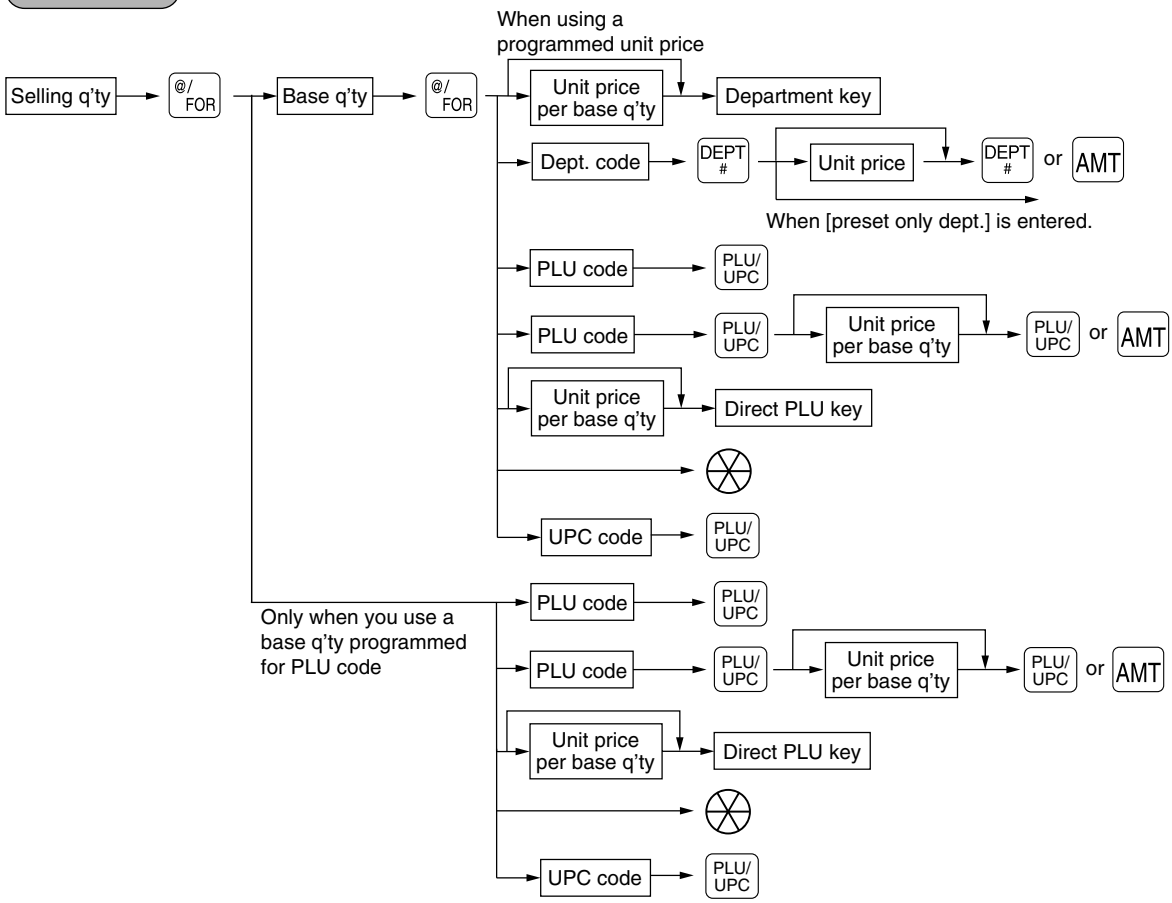
Print

```
                3 @ 4 @ $4.00
DPT.05                 $48.00
      1.500 @ 2.500 @ $3.00
PLU00008               $11.25
      1.750 @ 1.750 @ $6.00
PLU00006               $18.38
                4 @ 5 @ $5.00
5099887654302#
CLOTH                 $100.00

CASH                  $177.63
```

■ Split-pricing entries

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

Procedure



- After scanning a UPC code or pressing the PLU/UPC 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 DEPT # key.
- Selling quantity: Up to four digits integer + three digits decimal
- Base quantity: Up to two digits (integer)

Example

	Key operation	Print
Department entry	7 @/FOR 10 @/FOR 600 7	
PLU entry	8 @/FOR 5 @/FOR 35 PLU/UPC	
UPC entry	5 @/FOR 6 @/FOR 5045678912304 PLU/UPC	
	CA/AT	

```
                  7 @ 10/ $6.00
DPT.07                    $4.20
                  8 @ 5/ $3.00
PLU00035                  $4.80
                  5 @ 6/ $2.50
5045678912304#
CUP_A                     $2.09

CASH                    $11.09
```

Note *You must use the decimal point (•) 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, [PLU/UPC] key, the direct PLU key or scanning a UPC code.

Example

Key operation	Print
250 For finishing the transaction → [9]	DPT. 09 $2.50 CASH $2.50

Note *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

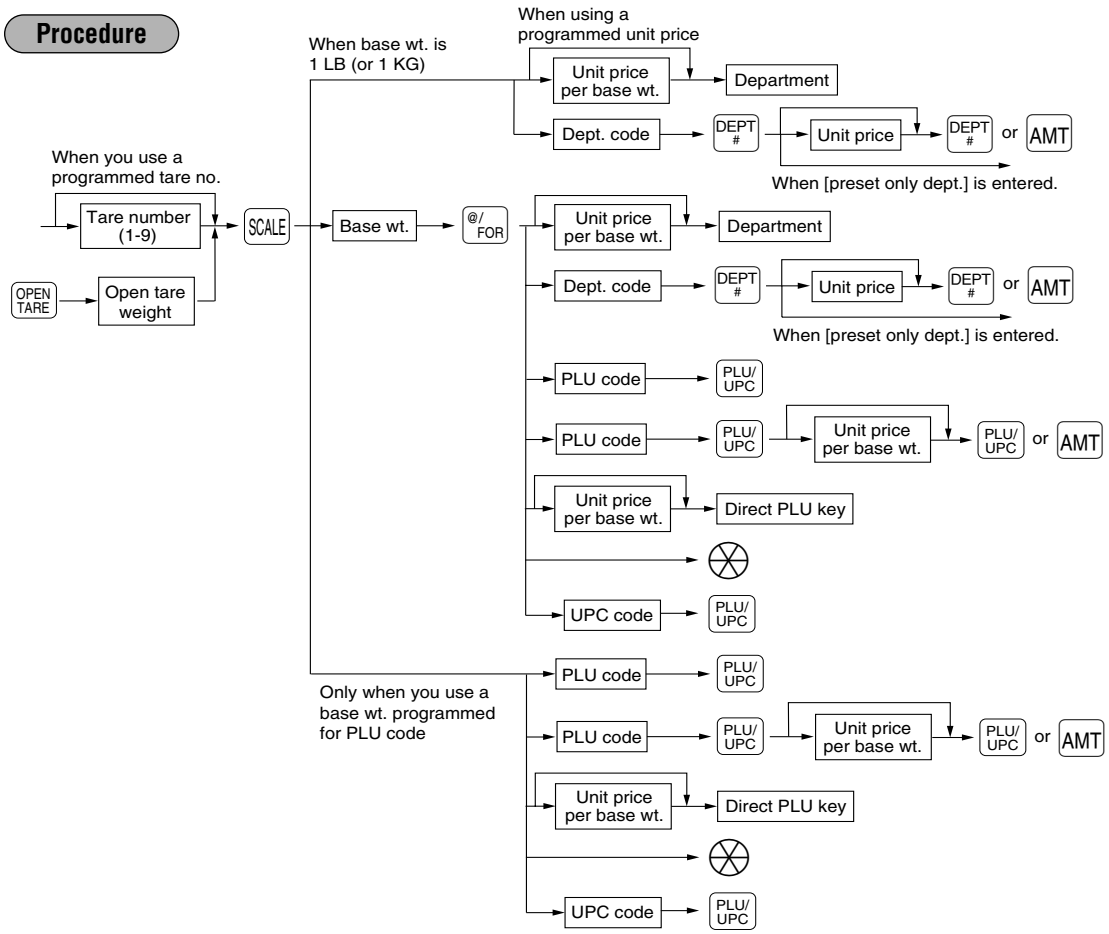
Key operation	Print
1745 [8] 1500 For finishing the transaction → [9]	DPT. 08 $17.45 DPT. 09 $15.00 CASH $32.45

■ 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

Procedure



- 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

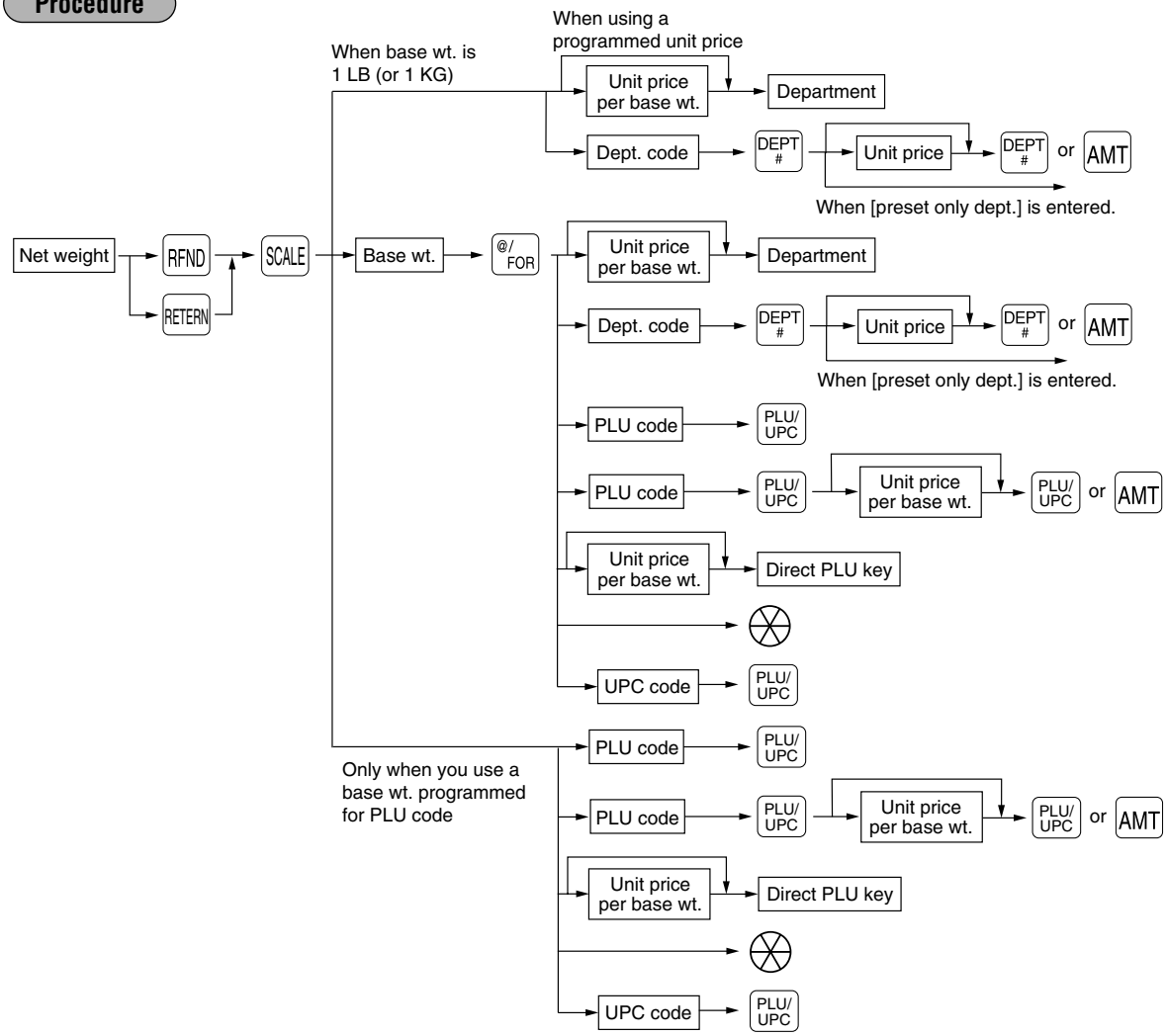
SCALE 200 1
SCALE 1 PLU/UPC
CA/AT

Print

```
  32.85 lb
      @ $2.00/lb
DPT.01                  $65.70
  37.25 lb
     @ 15/ $7.15/lb
PLU00001                $17.76

CASH                   $83.46
```

ii) Manual scale entries of refunded items

Procedure



- 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 [RFND] [SCALE] 200 [1]
37 [•] 25 [RFND] [SCALE] 1 [PLU/UPC]
[CA/AT]

Print

```
MAN WT
  32.85 lb
       @ $2.00/lb
DPT.01                    R-65.70
"RETURNED FOR CREDIT"
MAN WT
  37.25 lb
     @ 15/ $7.15/lb
PLU00001                  R-17.76
"RETURNED FOR CREDIT"

CHANGE                $83.46
```

■ 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 [L1] 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, [LEVEL #].

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.

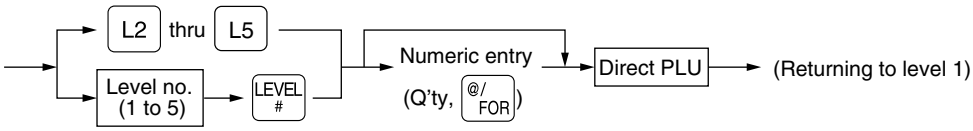
** The lock shift mode holds the current PLU level until a PLU level shift key is pressed.

Automatic return mode (for PLU levels)

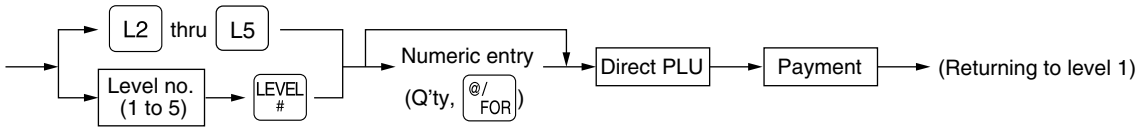
If you shift the PLU level while in the automatic return mode, press the desired PLU level shift key before numeric entries.

Procedure

• each item



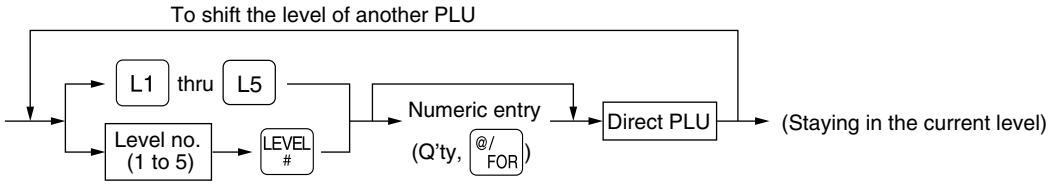
• each transaction



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



Note *If you select the automatic return mode, it is not necessary to use the [L1] key on the keyboard, but if you select the lock shift mode, it is necessary to use the key.*

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:

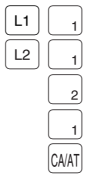
Key operation

Print

```
PLU00001          $1.25
PLU00065         $12.00
PLU00002          $1.50
PLU00001          $1.25

CASH             $16.00
```

• 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 also a shift price level by entering level number and pressing the price level shift number key, [P-SHIFT #].

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.

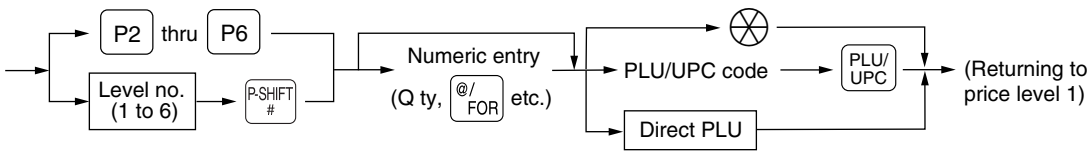
** The lock shift mode holds the current PLU/UPC price level until pressing the price level shift key.

Automatic return mode (for price levels)

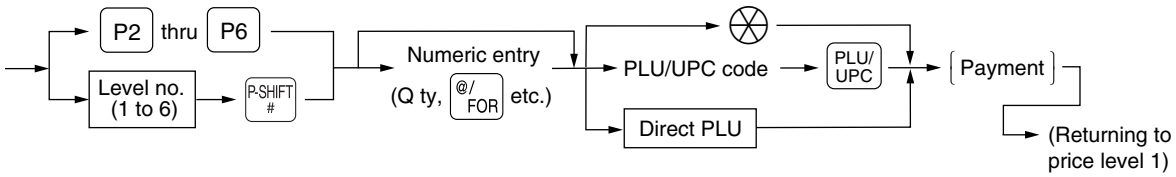
If your register has been programmed for the price level shift in the automatic return mode, press a desired price level shift key before a numeric type entry.

Procedure

(each item)



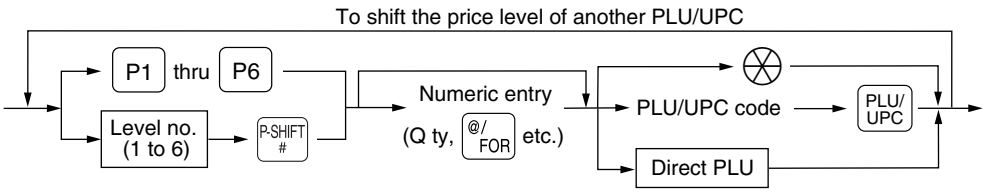
(each transaction)



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 [P1] 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

1 [PLU/UPC]
[P2] 1 [PLU/UPC]
2 [PLU/UPC]
[CA/AT]

Print

```
LEVEL 1
PLU00001          $1.91
LEVEL 2
PLU00001          $2.00
LEVEL 1
PLU00002          $0.79

CASH              $4.70
```

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

Key operation

1 [PLU/UPC]
[P2] 1 [PLU/UPC]
2 [PLU/UPC]
[CA/AT]

Print

```
LEVEL 1
PLU00001          $1.91
LEVEL 2
PLU00001          $2.00
LEVEL 2
PLU00002          $0.99

CASH              $4.90
```

■ 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

[20]
[CA/AT]

Print

```
PLU00020          $2.50
  PLU00201
  PLU00202

CASH              $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 ([TAX SHIFT], [TAX2 SHIFT], [TAX3 SHIFT], [TAX4 SHIFT] or [FS SHIFT] key). The percent calculation is in effect for the amount of the 1st ranking PLU.

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

Key operation	Print
21 [PLU/UPC] [CA/AT]	PLU00021 $3.50 PLU00025 $3.00 PLU00026 $2.00 PLU00027 $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

→ XXXXXX → [BIRTH]

Birthday (five or six digits)

Note

- *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 Oct. 2, 1985 (When dept. 7 is programmed as the age limitation "17".)

Key operation	Print
100285 [BIRTH] 300 [7] [CA/AT]	#10/02/85 DPT.07 $3.00 CASH $3.00

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

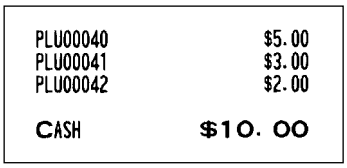
Selling on a mix-and-match basis the following items in table no. 1 to which the matching q'ty "3" and the adjusted amount "$10.00" are assigned:

- 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 → 40
Treated as $3.00 item → 41
Treated as $2.00 item → 42
CA/AT

Print



■ 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 CA/AT key to end this entry.

Table number	PLU codes for condiment entry (programmed text, price)				Next table no.
1	220 (HOWCOOK?)	221 (RARE 0.00)	222 (MED.RARE 0.00)	223 (WELLDONE 0.00)	4
4	225 (POTATO?)	226 (P. CHIPS 0.60)	227 (MASHED.P 0.60)	228 (BAKED.P 0.50)	_____

Menu-item PLUs (PLU210 is linked to table #1) — Message text — Condiment PLUs (preset price entry is allowed.)

Example

Key operation

210 PLU/UPC
"HOWCOOK?" appears. →
221 PLU/UPC
"POTATO?" appears. →
226 PLU/UPC
CA/AT

Print

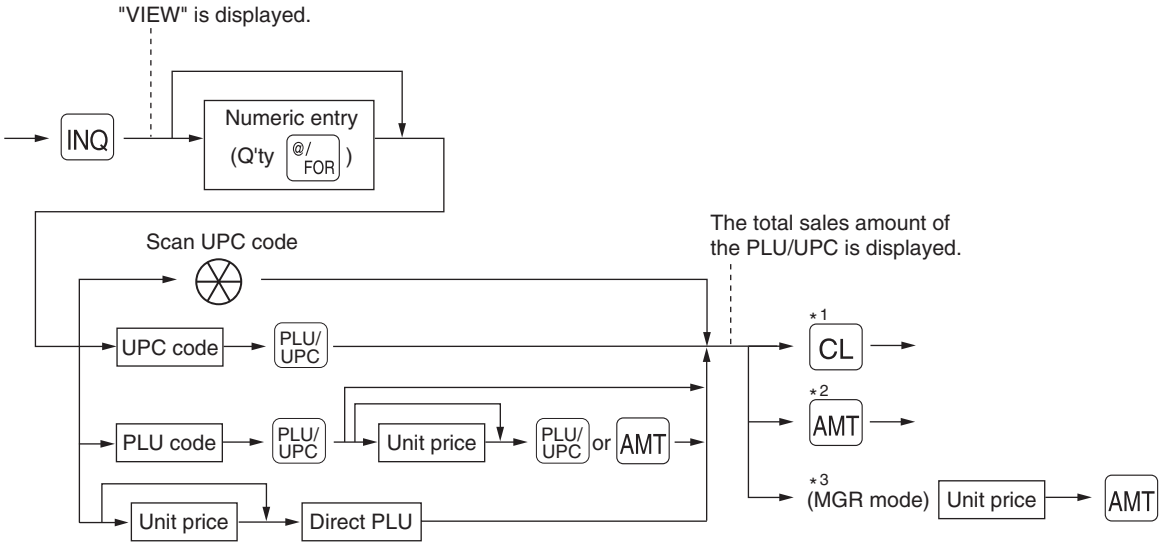
Note

- *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 [C NEXT] key is pressed, the entry skips to the next table which is programmed.*
- *When the [C CANCEL] 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 [C NEXT] 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 [CL] 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 [REPEAT] key.*

Example

Key operation	Print
5 [PLU/UPC]	
[INQ]	
Price is displayed. → 5089123456708 [PLU/UPC]	PLU00005 $2.00
	5089123456708#
	GRAPE $5.20
[AMT]	CASH $7.20
[CA/AT]	

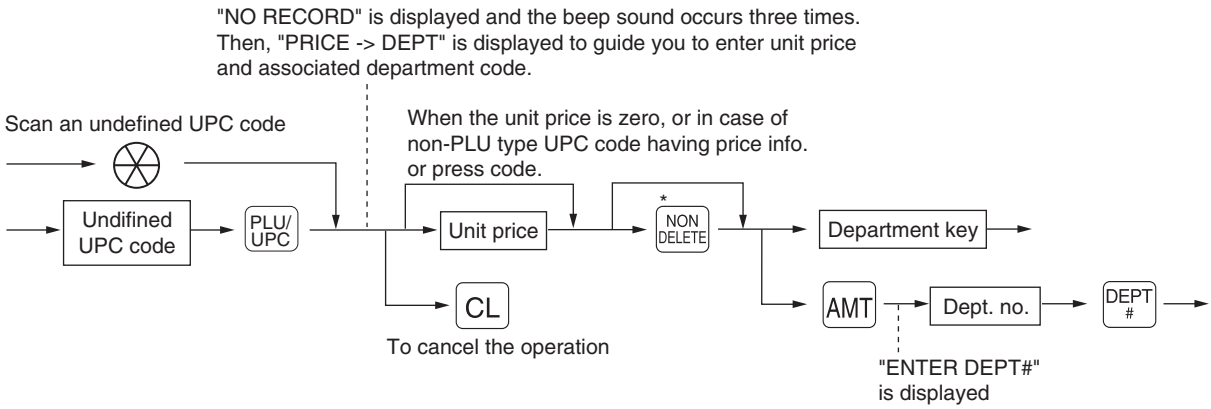
■ UPC learning function

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



* Press the NON DELETE 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 REPEAT key.*

Example

	Key operation	Print
“NO RECORD”, “PRICE -> DEPT” are displayed.	5056789123404 PLU/UPC 750 5 CA/AT	5056789123404# DPT.05 $7.50 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.

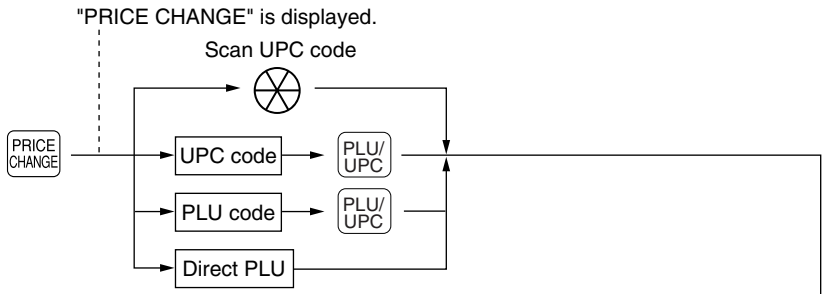
There are two methods for price changes:

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.

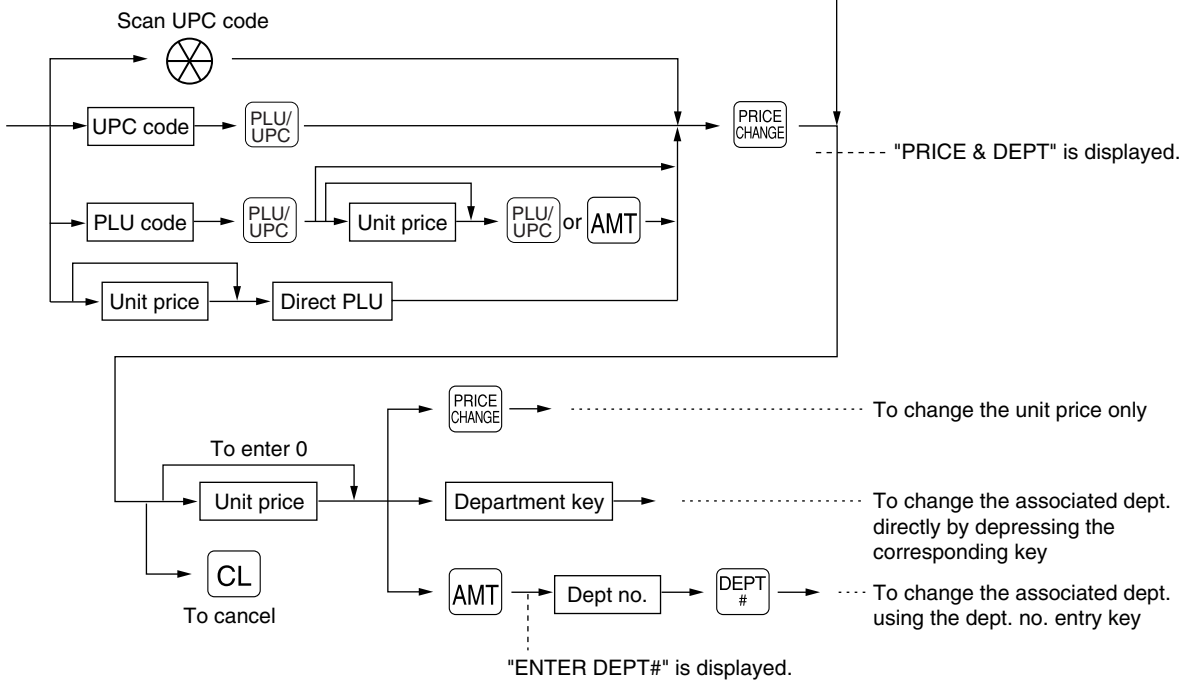
Note *For the Non-PLU type price embedded UPC-A codes, the prices in the codes have the priority over the preset prices. So, for these codes, a changed price is valid only when the price change is executed.*

Procedure

Price change mode



Changing a price during a transaction



Example

• Price change mode

Key operation

5087654321106 [PLU/UPC]
600 [PRICE CHANGE]

Print

```
        *PR. CHNG *
DEPT01
5087654321106#
ORANGE                $6.00
```

• Changing a price during a transaction

Key operation

5087654321106 [PLU/UPC]
[PRICE CHANGE]
600 [PRICE CHANGE]
[CA/AT]

The journal printer prints the following format in this position.

```
        *PR. CHNG *
DEPT01
```

Associated dept. no.

Print

```
5087654321106#
ORANGE                $5.30
5087654321106#
ORANGE               V-5.30
5087654321106#
ORANGE                $6.00

CASH                 $6. 00
```

Note

- *When an undefined code is entered in the price change mode, the register results in an error.*
- *When you press the [PRICE CHANGE] key during a transaction, the UPC entry is voided upon the 1st depression of the [PRICE CHANGE] 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 [REPEAT] key.*

2 Displaying and printing subtotals

Your register provides these five types of subtotals:

■ Merchandise subtotal

Press the [MDSE SBTL] key at any point during a transaction. The net sale subtotal - not including tax - will appear in the display.

■ Taxable subtotal

Taxable 1 subtotal

Press the [TAX SHIFT] ([TAX1 SHIFT]) and [SBTL] keys in this order at any point during a transaction. The sale subtotal of taxable 1 items will appear in the display.

Taxable 2 subtotal

Press the [TAX2 SHIFT] and [SBTL] 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 [TAX3 SHIFT] and [SBTL] keys in this order at any point during a transaction. The sale subtotal of taxable 3 items will appear in the display.

Taxable 4 subtotal

Press the [TAX4 SHIFT] 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 [SBTL] key at any point during a transaction. The sale subtotal including tax will appear in the display.

■ Food stamp-eligible subtotal

Press the [FS TEND] 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 [TRAY SBTL] 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.

→ Number of media to be used for finalization* (1-19) → [GAS SBTL]

*: [CA/AT] : 1, [CA2] : 2, [CA3] : 3, [CA4] : 4, [CA5] : 5, [CHK] : 6, [CHK2] : 7, [CHK3] : 8, [CHK4] : 9, [CHK5] : 10, [CH1] : 11, [CH2] : 12, [CH3] : 13, [CH4] : 14, [CH5] : 15, [CH6] : 16, [CH7] : 17, [CH8] : 18, [CH9] : 19

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 [CA/AT] or one of the [CA2] thru [CA5] keys if it is a cash tender or press the [CHK] or one of the [CHK2] 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

Key operation	Print
[SBTL] 1000 [CA/AT]	***TOTAL $7.35 CASH $10.00 CHANGE $2.65

Check tendering

Key operation	Print
[SBTL] 1000 [CHK]	***TOTAL $7.35 CHECK1 $10.00 CHANGE $2.65

■ 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.

Key operation	Print
[SBTL] 1000 [CHK] 500 [CA/AT]	***TOTAL $14.56 CHECK1 $10.00 CASH $5.00 CHANGE $0.44

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

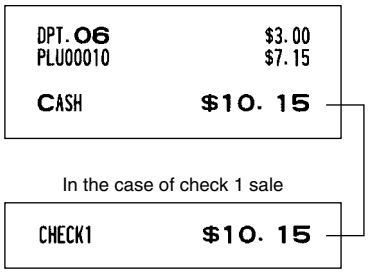
Enter items and press the [CA/AT] or one of the [CA2] thru [CA5] keys if it is a cash sale or press the [CHK] or one of the [CHK2] thru [CHK5] keys if it is a check sale. Your register will display the total sale amount.

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

Key operation

300 [6]
10 [PLU/UPC]
[CA/AT]

Print



In the case of check 1 sale

■ Charge (credit) sale

Enter items and press the corresponding charge keys ([CH1] thru [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

2500 [5]
3250 [6]
[CH1]

Print

Amount tendering operations (i.e., change calculations) can be achieved by the [CH1] thru [CH9] key when it has been preset in PGM2 job #2320.

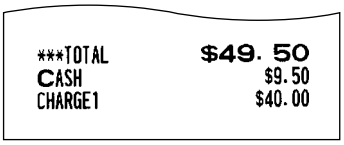
■ Mixed-tender sale (cash or check tendering + charge tendering)

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

Key operation

[SBTL]
950 [CA/AT]
[CH1]

Print



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 [FS 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.

Key operation

425 [4]
34 [PLU/UPC]
To display the food stamp-eligible subtotal → [FS TEND]
1000 [FS TEND]

Display shows:

FS CG	1111
1.00	0.75

Food stamp change | Cash change

Print

DPT.04	T1 $4.25
PLU00034	T2 $4.00
***TOTAL	$8.25
FS ST	$8.25
FS TEND	$10.00
FS CG	$1.00 — Food stamp change due
CHANGE	$0.75 — Cash change due

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

Example 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.

Key operation

248 [5]
542 [8]
[FS TEND]
500 [FS TEND]
500 [CA/AT]

Display shows:

FS CG	1111
2.00	0.10

Food stamp change | Cash change

Print

DPT.05	T1 $2.48
DPT.08	$5.42
***TOTAL	$7.90
FS ST	$2.48
FS TEND	$5.00
FS CG	$2.00 — Food stamp change due
CASH	$5.00
CHANGE	$0.10 — Cash change due

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

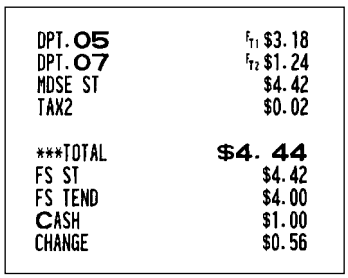
- Accept the remainder in food stamps or in cash or check. If your register is programmed to exempt taxation, additional food stamp tender is not allowed.

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.

Key operation

318 [5]
124 [7]
[FS TEND]
400 [FS TEND]
To enter the cash tendering of the remainder → 100 [CA/AT]

Print



■ Food stamp status shift

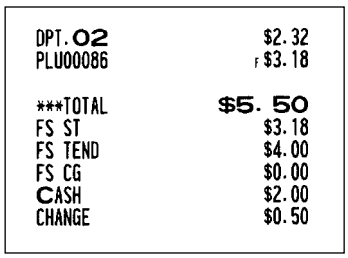
Your machine allows you to shift the programmed food-stamp status of each department, PLU/UPC or [⊖] thru [⊖5], percent key by pressing the [FS SHIFT] key prior to those keys. After each entry is completed, the programmed food stamp status is resumed.

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

232 [FS SHIFT] [2]
86 [FS SHIFT] [PLU/UPC]
[FS TEND]
400 [FS TEND]
200 [CA/AT]

Print



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 [@/FOR]	5 @ $6.70
670 [1]	DPT. 01 T1 $33.50
85 [PLU/UPC]	PLU00085 T2 $7.15
[CA/AT]	MDSE ST $40.65
	TAX1 $2.01
	TAX2 $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	Print
800 [7]	DPT. 07 $8.00
50 [TAX]	M-TAX $0.50
[CA/AT]	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

Key operation

725 [1]
515 [3]
* [TAX SHIFT] [SBTL]
[TAX]
[TAX2 SHIFT] [SBTL]
[TAX]
[CA/AT]

* [TAX1 SHIFT] for ER-A530

Print

```
DPT.01          T1 $7.25
DPT.03          T2 $5.15
TAX1 ST           $0.00
TAX2 ST           $0.00

CASH            $12.40
```

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 [CA2] key is programmed as tax delete for the same case with the above example

Key operation

725 [1]
515 [3]
[CA2]

Print

```
DPT.01          T1 $7.25
DPT.03          T2 $5.15
MDSE ST          $12.40
TAX1              $0.00
TAX2              $0.00

CASH2           $12.40
```

■ Tax status shift

Your machine allows you to shift the programmed tax status of each department, ⊖ thru ⊖4, percent key or the PLU/UPC key by pressing the TAX SHIFT (TAX1 SHIFT), TAX2 SHIFT, TAX3 SHIFT and/or TAX4 SHIFT keys before those keys. After each entry is completed, the programmed tax status of each key is resumed.

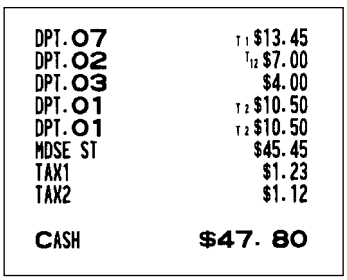
Example Selling the following items for cash with their programmed tax status reversed

- 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

Key operation

1345 TAX SHIFT 7
700 TAX SHIFT TAX2 SHIFT 2
400 TAX2 SHIFT 3
1050 TAX SHIFT TAX2 SHIFT 1
1
CA/AT

Print



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 *Please note that the previous balance key ([PBLU] for ER-A520 and [PBAL] for ER-A530) is shown as [PBLU].*

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 [GLU RECALL] key, or enteringa GLU code when additional ordering or finalization is required.

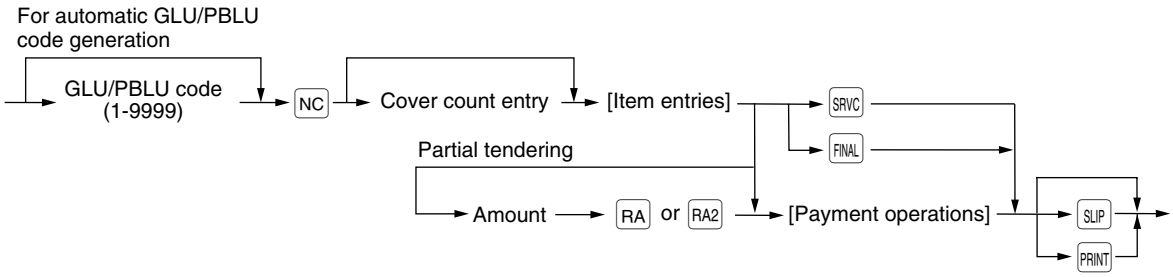
PBLU system: If this system is selected, the previous balance is stored in the previous balance lookup file (PB lookup file). The information can be automatically recalled by entering a previous balance lookup code (a PBLU code) when additional ordering occurs.

■ GLU/PBLU system

New guest

For a new guest;

Procedure



Note

- *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 [CV CNT] key.*
- *When the [SRVC] key is pressed, the tax is not calculated.*
- *You can temporarily finalize a guest check by pressing the [FINAL] 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

111 NC
2 CV CNT
3500 2
2700 3
FINAL

Print

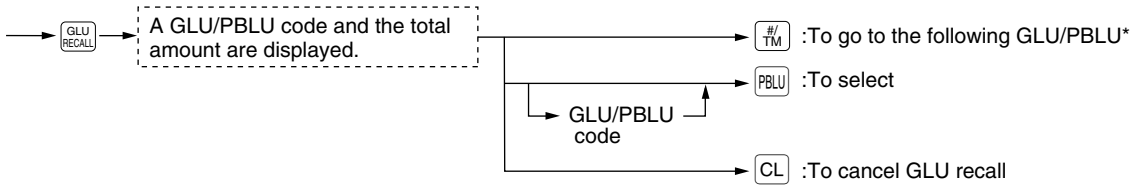
```
08/27/2004  123456   BILL#0141
#1258       4:10PM DICK    1111

              TBL#0111
***PBAL                  $0.00
COVER CT  2
DPT.02                T1 $35.00
DPT.03                T1 $27.00
BAL FWD                 $62.00
MDSE ST                 $62.00
TAX1                     $3.88

***TOTAL               $65.88
```

Not printed when the SRVC key is pressed instead of the FINAL key.

GLU recall

Each cashier/server can recall their GLU/PBLUs for reorder or settlement by pressing the GLU RECALL key. The register 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 the #/TM key is pressed.

Example

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

Key operation

Get ready for sales entry → GLU RECALL, #/TM, #/TM, PBLU
300 7
500 7
FINAL

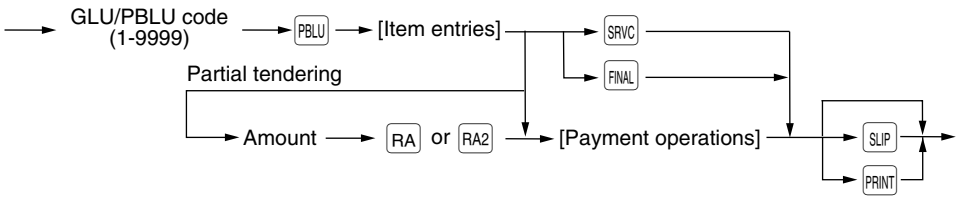
Print

```
08/27/2004  123456   BILL#0136
#1238       3:39PM DICK    1111

              TBL#0113
***PBAL                 $24.00
DPT.07                   $3.00
DPT.07                   $5.00
BAL FWD                  $8.00

***TOTAL               $32.00
```

Reorder entries

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

Procedure



Example

Key operation	
111	PBLU
1400	5
1600	6
3000	RA
	CA/AT

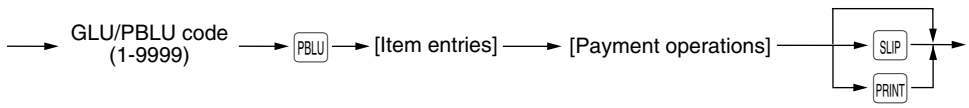
Print

```
          TBL#0111
***PBAL      $65.88
DPT.05       $14.00
DPT.06       $16.00
BAL FWD      $30.00

***TOTAL     $95.88
***RA        $30.00
CASH         $30.00
***TOTAL     $65.88
```

Settlement

Use the following procedure:

Procedure



Example

Key operation	
111	PBLU
5000	CHK
2000	CA/AT

Print

```
          TBL#0111
***PBAL      $65.88
BAL FWD       $0.00

***TOTAL     $65.88
CHECK1       $50.00
CASH         $20.00
CHANGE        $4.12
```

Note

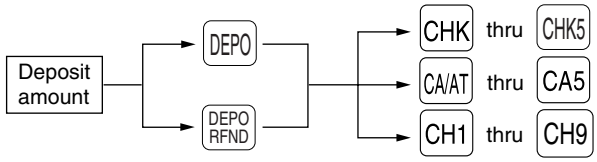
- *You can make a tip-in entry before a tender entry. If a tip-in entry is made, the tip amount must be tendered by using the associated media key e.g. CH1 thru CH9 for the charge tip and CASH 1 or CASH 5 for the cash tip.*
- *Partial tendering is prohibited after tip-in entry operation.*

■ 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 DEPO RFND key. You cannot attempt to refund an amount larger than the deposit balance.

Procedure



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

Key operation

111 PBLU
5000 DEPO
CA2
SRVC

Print

```
08/27/2004  123456   BILL#0142
#1262       4:18PM DICK    1111

                TBL#0111
***PBAL                  $20.00
CASH2
DEPOSIT                  $50.00
BAL FWD                   $0.00
SERVICE                 -30.00
```

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

Key operation

111 PBLU
5000 DEPO RFND
CA2
SRVC

Print

```
08/27/2004  123456   BILL#0142
#1263       4:19PM DICK    1111

                TBL#0111
***PBAL                  -30.00
CASH2
DPST RF                  -50.00
BAL FWD                   $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) [TRANS OUT] → GLU/PBLU code (1-9999) → [PBLU] → [TRANS OUT]

(For the next guest check: repeat from GLU/PBLU code)

Example GLU#111 is transferred out.

Key operation	Print
[TRANS OUT] 111 [PBLU] [TRANS OUT]	08/27/2004 123456 #1267 4:30PM DICK 1111 *TRAN.OUT* TBL#0111 ***PBAL $25.00

Transferring guest checks in

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

Procedure

(new cashier/server sign-on) [TRANS IN] → GLU/PBLU code (1-9999) → [PBLU] → Cover count entry (2 digits) → [CV CNT] → [TRANS IN]

Only when cover count entry is non-compulsory: the cover count entry and [CV CNT] may be skipped.

(For the next guest check: repeat from GLU/PBLU code)

Example GLU#111 is transferred in.

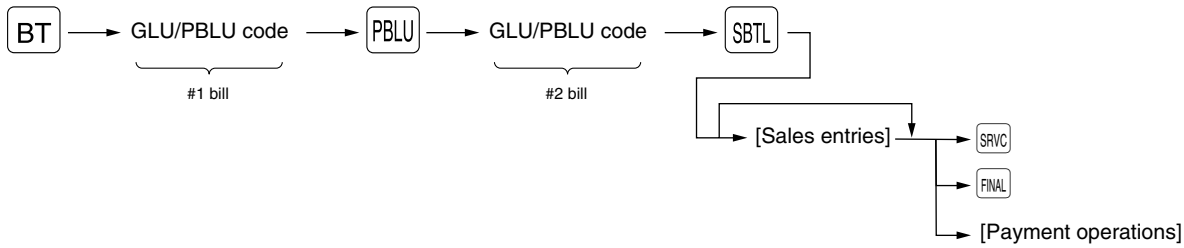
Key operation	Print
[TRANS IN] 111 [PBLU] [TRANS IN]	08/27/2004 123456 #1270 4:35PM JILL 1112 *TRAN.IN * TBL#0111 ***PBAL $25.00

■ 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 Totalizing GLU#112 and GLU#113 to GLU#111

Key operation

BT
112 PBLU
113 PBLU
111 SBTL
SRVC

Print

```
*B. T. *
TBL#0112
***PBAL          $15.00
TBL#0113
***PBAL          $11.00
TBL#0111
***PBAL          $20.00
BAL FWD           $0.00
SERVICE          $46.00
```

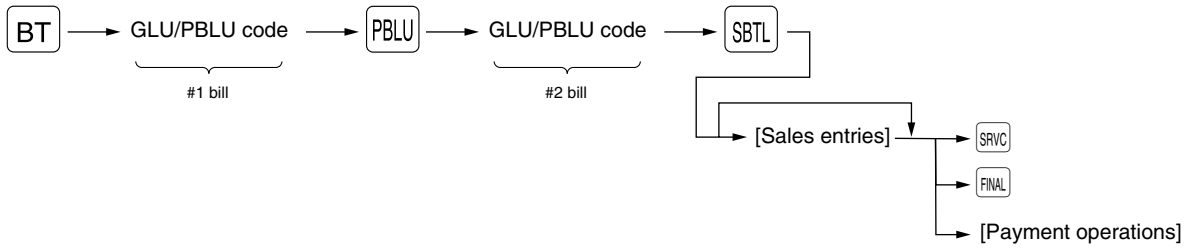
Note

- *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.

Key operation

BT
111 PBLU
120 SBTL
SRVC

Print

```
*B. T. *
TBL#0111
***PBAL          $46.00
TBL#0120
***PBAL          $0.00
BAL FWD          $0.00
SERVICE          $46.00
```

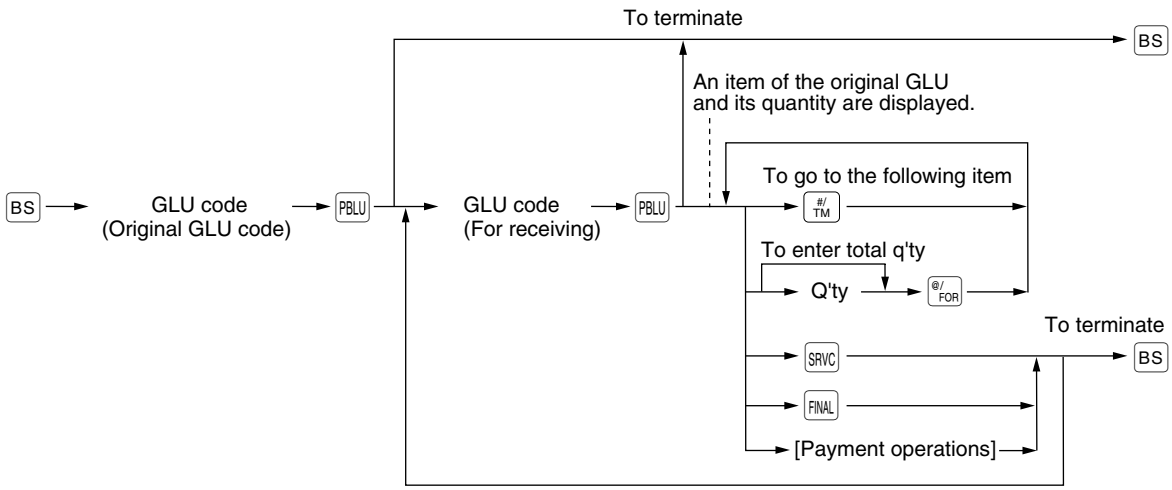
Note

- *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 → #/TM
Dept. 9 item label and the q'ty are displayed. ----------
To select one of dept. 9 items → 1 @/FOR
SRVC
BS

Print

```
          TBL#0111
        *B. S. *
          TBL#0117
***PBAL              $0.00
DPT.09               $5.00
BAL FWD              $5.00
SERVICE              $5.00
```

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

The register allows you to make manual PB/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

NC → [Item entries] → SRVC or FINAL

Note *When the SRVC or FINAL 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 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.)

Key operation

NC
13579 #/TM
8750 5
6250 6
SRVC

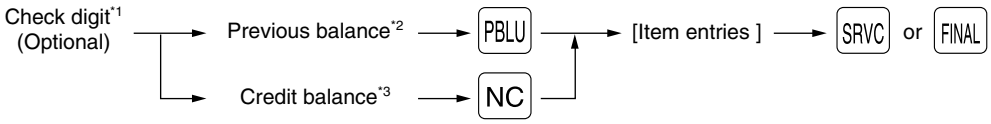
Print

```
***PBAL              $0.00
      #13579
DPT.05              $87.50
DPT.06              $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 that the balance is plus or zero

*3 Credit balance: In case that 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

Check digit — 3 15000 [PBLU]
13579 [#/TM]
5 [@/FOR]
2500 [7]
[SRVC]

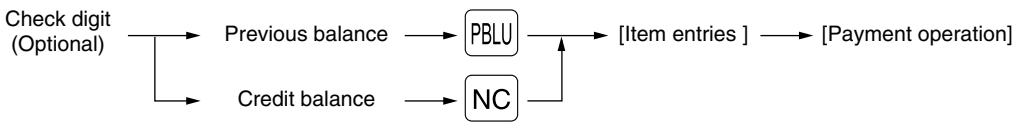
Print

```
***PBAL                 $150.00
      #13579
                    5 @ $25.00
DPT.07                  $125.00
BAL FWD                 $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

Check digit — 3 27500 [PBLU]
13579 [#/TM]
20000 [CHK]
7500 [CA/AT]

Print

```
***PBAL                 $275.00
      #13579
BAL FWD                   $0.00

***TOTAL               $275.00
CHECK1                  $200.00
CASH                     $75.00
CHANGE                    $0.00
```

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%
(This example presumes that a premium of 10% has been programmed for the [%] key.)

Key operation	Print
4 [@/FOR]	4 @ $1.40
140 [5]	DPT. 05 $5.60
225 [6]	DPT. 06 $2.25
[6]	DPT. 06 $2.25
[MDSE SBTL]	MDSE ST $10.10
[%]	10.00%
[CA/AT]	%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 [%2] key.)

Key operation	Print
800 [6]	DPT. 06 $8.00
[%2]	-15.00%
90 [PLU/UPC]	%2 -1.20
7 [•] 5 [%2]	PLU000090 $5.00
[CA/AT]	-7.5%
	%2 -0.38
	CASH $11.42

■ Discount entries

For discount or coupon tenderings, you may use the ⊖ thru ⊖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.

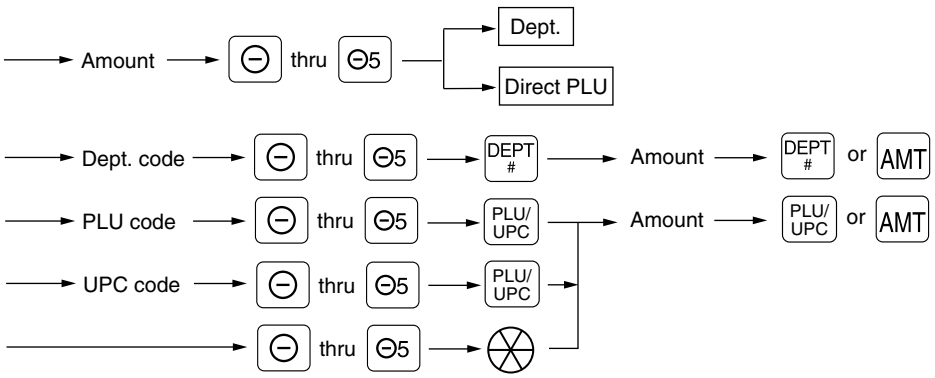
Discount for the merchandise subtotal

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
575 [6] 80 [PLU/UPC] 100 [⊖2] [CA/AT]	DPT. 06 $5.75 PLU00080 $7.50 (−) 2 -1.00 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 ⊖ key.)

Key operation	Print
675 [5] * 75 [⊖] [5] [CA/AT]	DPT. 05 $6.75 (−) 1 DPT. 05 -0.75 CASH $6.00

Note

* *The ⊖ is entered as a modifier for the department which will be netted by the coupon amount. Such item netting coupon entries may generally be entered at any point within a transaction. Two lines are printed for each entry: The first is the label programmed for the ⊖ function and the second is related department and ⊖ amount.*

■ Refund entries

If a refund item is the one entered into a department, enter the amount of the refund, then press the [RFND] 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 [RFND] and [PLU/UPC] keys, or press the [RFND] 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 [RFND] [5] 7 [@/FOR] 13 [RFND] [PLU/UPC] [CA/AT]	DPT.05 R-2.50 -7 @ $2.10 PLU00013 R-14.70 CHANGE $17.20

■ Return entries

If a return item is the one entered into a department, enter the amount of the return, then press the [RETURN] 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 [RETURN] and [PLU/UPC] keys, or press the [RETURN] and direct PLU keys 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
300 [RETURN] [1] 15 [RETURN] [PLU/UPC] [CA/AT]	DPT.01 RT-3.00 PLU00015 RT-3.25 CHANGE $6.25

Note *The returned items are not subjected to the calculation for dept./PLU/UPC items (quantity and amount) on the sales reports.*

■ Refund sales mode

This function is used for those item return entries relating to departments, PLUs/subdepartments and UPCs. Pressing the [RFND SALE] key at the beginning of a transaction causes the register to enter the REFUND SALES mode. 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
[RFND SALE]	DPT. 05 R-2.50
250 [5]	-7 @ $2.10
7 [@/FOR]	PLU00013 R-14.70
13 [PLU/UPC]	CHANGE $17.20
[CA/AT]	

■ 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 [#/TM] 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 [#/TM]	#1230
1500 [5]	DPT. 05 $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	Print
500 [5] [CA/AT]	DPT. 05 $5.00 MDSE ST $5.00 GRATUITY $0.50 CASH $5.50

Exemption

Your register allows you to exempt a customer from the gratuity by pressing the [GRT EXEMPT] key prior to a payment operation.

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

Key operation	Print
1250 [5] 1000 [6] [GRT EXEMPT] [CA/AT]	DPT. 05 $12.50 DPT. 06 $10.00 GRATUITY $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. CH1 thru CH9 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

Tip amount entry system: → Tip amount → [CA TIP] / [CH TIP]

When you use a programmed percent rate

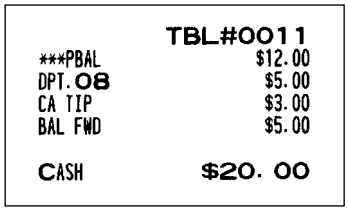
Tip percent rate entry system: → Tip percent rate (0.01 - 99.99) → [CA TIP] / [CH TIP]

Example Receiving $3.00 by cash as a tip

Key operation

300 [CA TIP] [CA/AT]

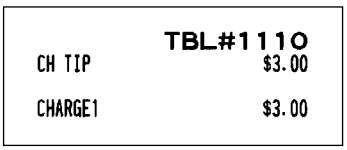
Print



■ 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 SRVC or FINAL 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 ED TIP key. When the display prompt appears, enter the bill number and press the PBLU key, then enter tip amount and press the ED TIP key again.

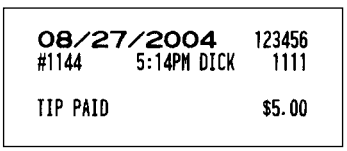
To use the tip editing function, please consult your authorized SHARP dealer.



■ 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 TIP PAID key. You can prohibit the tip paid operation in the REG mode by the PGM2 programming.

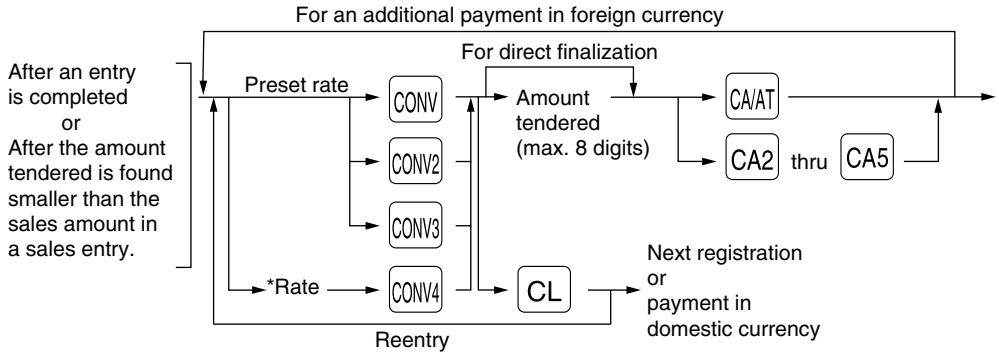
Note *When the tip amount remains unchanged in Individual Server Resetting, the tip paid function is automatically executed and tip receipt is issued to the report printer prior to report printing.*



■ Currency conversion

Your register allows payment entries of foreign currency. Pressing the [CONV] thru [CONV4] 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 To convert the amount owed ($69.50) into the designated foreign currency

Preset rate (1.325) - CONV 1

Key operation

Currency conversion →
2300 [6]
4650 [7]
[CONV]
Amount tendered in foreign currency →
10000 [CA/AT]

Print

DPT. 06	$23.00
DPT. 07	$46.50
***TOTAL	$69.50
CONV 1	0.8063
	€56.04
CASH	€100.00
CHANGE	$54.52

Domestic currency
Conversion rate
Foreign currency
Domestic currency

Manual rate - CONV 4 (The [CONV4] key can be used only for the manual entry.)

Key operation

2300 [6]
4650 [7]
1 [•] 275 [CONV4]
10000 [CA/AT]

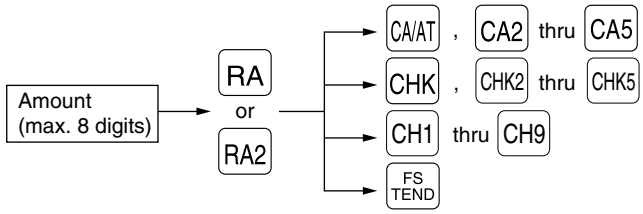
Print

DPT. 06	$23.00
DPT. 07	$46.50
***TOTAL	$69.50
CONV 4	1.275
	88.62
CASH	100.00
CHANGE	$8.92

Conversion rate

■ Received on account entries

Procedure

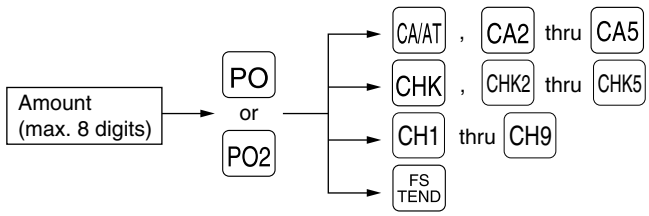


Example A customer whose reference number is 12345 tenders $48.00 by check for received on account.

Key operation	Print
12345 #/TM 4800 RA CHK	#123456 CHECK1 ***RA $48.00

■ Paid out entries

Procedure



Example You pay $30.00 by check to a vendor whose code number is 6789.

Key operation	Print
6789 #/TM 3000 PO CHK	#6789 CHECK1 ***PO $30.00

■ No sale (exchange)

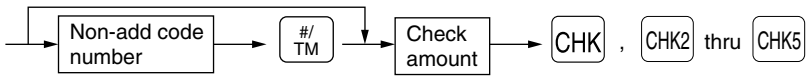
Simply press the NS key without any entry. The drawer will open and the printer will print “NO SALE” on both the journal and the receipt. If your machine is preset to print a non-add code number before pressing the NS key, a no sale entry is achieved with a non-add code number printed.

#45678
NO SALE

■ Cashing a check

Enter the check amount, then press a check key ([CHK], [CHK1] thru [CHK5]).

Procedure



Example Cashing a check of a $30.00 amount

Key operation	Print
6789 [#/TM] 3000 [CHK]	#6789 CA/CHK1 $30.00

■ Bottle return

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

Example You pay for ten 15¢ returned empty bottles. (This example presupposes that dept. 10 has been programmed as bottle return department.)

Key operation	Print
10 [@/FOR] 15 [10] [CA/AT]	10 @ -0.15 DPT. 10 -1.50 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 1] thru [AUTO 10]).

Example Performing the transaction “Selling a $5.00 item (dept. 7) for cash” programmed for the [AUTO 2] ([AUTO 2] = 500 [7] [CA/AT])

Key operation	Print
[AUTO 2]	DPT. 07 $5.00 CASH $5.00

10 WASTE mode

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

Procedure

WASTE → [Item entries] → WASTE

WASTE mode

Example Wasting 10 PLU 35 items

Key operation

10 @/FOR 35 WASTE PLU/UPC WASTE

Print

```
        * WASTE  *
              10 @ $2.50
PLU00035          $25.00
```

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 (⊖ through ⊖4) or refund, you can correct this entry by pressing the VOID key immediately after the incorrect entry.

Example

Key operation

1250 6
VOID
2 PLU/UPC
VOID
5012345678900 PLU/UPC
VOID
600 8
%2
VOID
328 9
28 ⊖ 9
VOID
250 RFND 8
VOID
CA/AT

Print

```
DPT.06              $12.50
DPT.06              V-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              V$0.28
DPT.08              R-2.50
DPT.08              RV$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 CA/AT key). This function is applicable to department, PLU/subdepartment, UPC and item refund entries only.
For the operation, press the VOID key just before you press a department key, DEPT # key, direct PLU key, PLU/UPC key or 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

1310 6
1755 7
10 PLU/UPC
8
58 PLU/UPC
825 7
5012345678900 PLU/UPC
1310 VOID 6
VOID 8
58 VOID PLU/UPC
5012345678900 VOID PLU/UPC
CA/AT

Print

```
DPT.06              $13.10
DPT.07              $17.55
PLU00010             $7.15
PLU00008             $3.00
PLU00058             $3.00
DPT.07              $8.25
5012345678900#
APPLE               $2.50
DPT.06              V-13.10
PLU00008            V-3.00
PLU00058            V-3.00
5012345678900#
APPLE               V-2.50

CASH                $32.95
```

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
1310 [1] 1755 [6] 10 [PLU/UPC] 35 [PLU/UPC] Subtotal void { [SBTL] [VOID] [SBTL]	DPT.01 $13.10 DPT.06 $17.55 PLU00010 $7.15 PLU00035 $2.50 MDSE ST $40.30 SBTL 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:

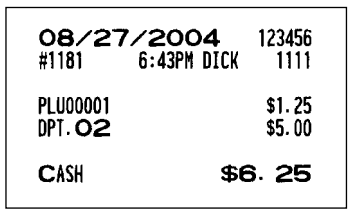
1. If you are in the middle of making an amount tendered entry, you must first finalize the transaction before making corrections.
2. Try to make correct entries from the beginning.
3. Hand the incorrect receipt to your manager for its cancellation.

CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT)

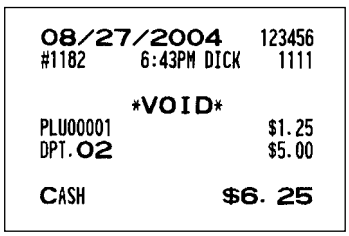
When you need to void incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void, follow this procedure in the MGR mode.

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



Cancellation receipt



Note *Your machine leaves the VOID mode whenever a transaction is canceled (i.e. finalized in the VOID 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	Print
1500 [2] REG-mode250 [⊖2] [2] ...Error entries [CL]	
Turn the mode switch to the MGR position. 250 [⊖2]	
Return the mode switch to the REG position. [CA/AT]	

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	Comments
1. Cashier/server 1 is assigned.	The entry by cashier/server 1 is started.
(1 [CASH #])	
100 [1]	
360 [3]	
[3]	
2. Cashier/server 2 is assigned.	The entry by cashier/server 2 is started.
2 [CASH #]	(The entry by cashier/server 1 is interrupted.)
3 [@/FOR]	
150 [2]	
[CA/AT]	The transaction by cashier/server 2 is finalized.
3. Cashier/server 1 is assigned.	
1 [CASH #]	The entry by cashier/server 1 is restarted.
100 [1]	
360 [3]	
[CA/AT]	The transaction by cashier/server 1 is finalized.

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 [RCPT] 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

Key operation

850 [2]
3 [@/FOR]
150 [1]
[CA/AT]

For receipting→ [RCPT]

Print

Print on the journal

```
08/27/2004          123456
#1187    6:56PM DICK  1111
DPT.02               $8.50
                3 @ $1.50
DPT.01               $4.50
CASH                $13.00
```

Print on the receipt

```
08/27/2004          123456
#1187    6:56PM DICK  1111

DPT.02               $8.50
                3 @ $1.50
DPT.01               $4.50

CASH                $13.00
```

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

```
08/27/2004          123456
#1188    7:00PM DICK  1111

        *COPY*
DPT.02               $8.50
                3 @ $1.50
DPT.01               $4.50

CASH                $13.00
```

When the receipt ON-OFF function is in the ON status, the *COPY* symbol will be printed on the receipt.

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 [PRINT] 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. → [•] → [PRINT]

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.

Bill on receipts
Bill on the slip (auto feed)

→ XX → [SLIP]
(XX: No. of lines of slip feed)

	BILL
	TBL#0111
***PBAL	$0.00
	2 @ $10.00
DPT.07	$20.00
DPT.09	$5.00
DPT.09	$3.00
DPT.07	$5.00
BAL FWD	$33.00
***TOTAL	$33.00

Note *This function is available immediately after the finalization of transaction (including after pressing the [SRVC] or the [FINAL] 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

→ 1 → [PRINT]

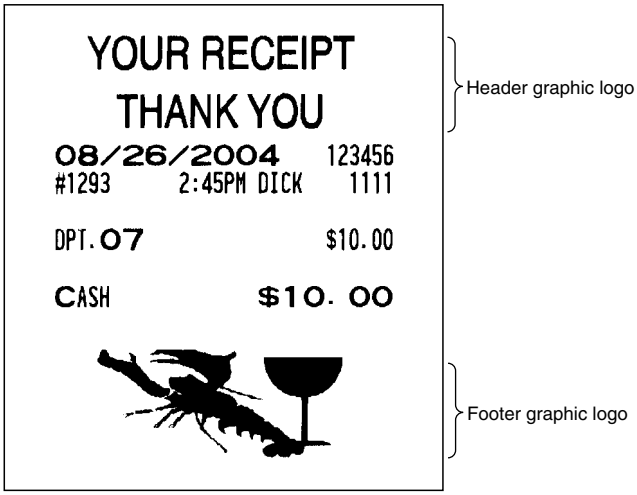
Printing of departure time

→ 2 → [PRINT]

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

Item entry → [RP SEND] → Data transfer to the remote printer

Remaining items will be sent to the remote printer when the transaction is finalized.

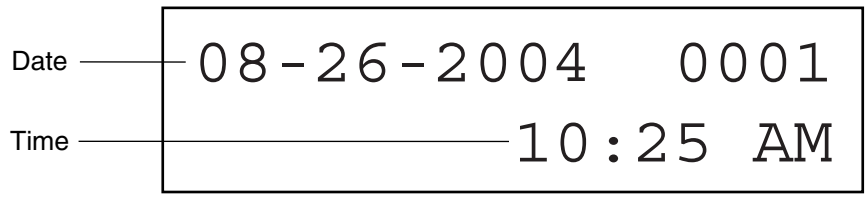
When this function is used, the subtotal void operation is not allowed.

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 [#/TM] 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

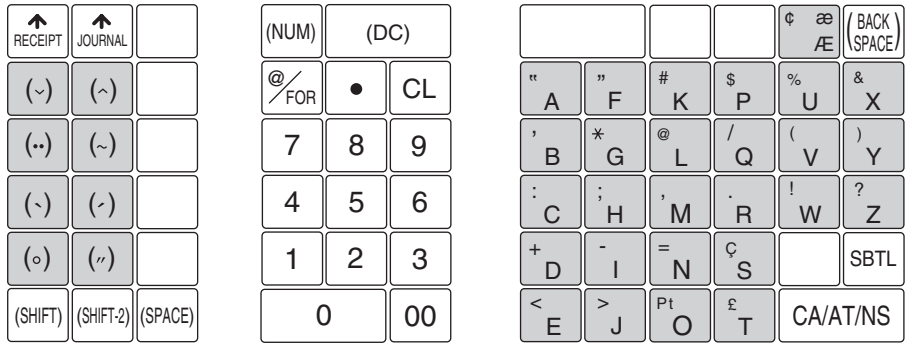
Once the internal clock unit is started at the correct time, it continues to run as long as the built-in battery is charged, and updates the date (month, day, year) automatically.

PRIOR TO PROGRAMMING

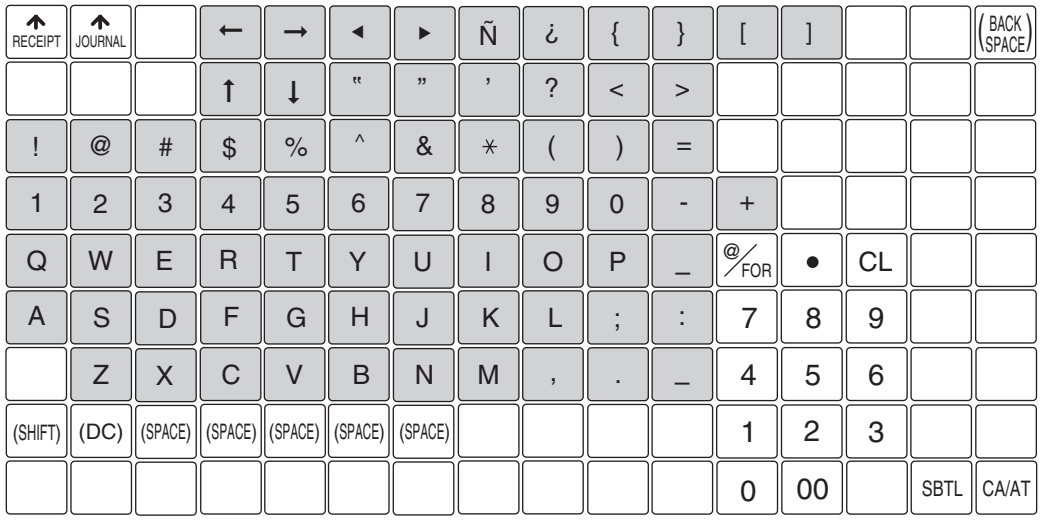
1 Programming keyboard layout

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



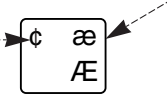
Note

- *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.

(SHIFT) : Used to change a lower-case letter/upper-case letter.

(SHIFT-2) : Used to select a symbol. (ER-A520 only)



To enter the letter " ¢ ¢ ", press (SHIFT-2) [¢ æ Æ] (SHIFT-2) [¢ æ Æ]

To enter the upper-case letter "Æ Æ", press [¢ æ Æ] [¢ æ Æ]

To enter the lower-case letter "æ æ", press (SHIFT) [¢ æ Æ] [¢ æ Æ] (SHIFT)

(BACK SPACE) : 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.

In case of ER-A520, "(ˇ)", "(^)", "(¨)", " (`)", "(´)", "(˝)", "(°)", and "(~)" keys can be used in combination with a character key. If the combination is unavailable, only a character key is entered.
[Ex.] "Å" : ⟶ [(°)] ⟶ 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)] ⟶ 135 ⟶ [(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 : [(DC)] ⟶ SHARP ⟶ [(DC)]

Entering lower-case letters

[(SHIFT)] : You can enter a lower-case letter by using this key. Press [(SHIFT)] 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" : ⟶ S ⟶ [(SHIFT)] ⟶ harp ⟶ [(SHIFT)]

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

[(SHIFT-2)] : You can enter symbols by using this key. Press [(SHIFT-2)] key just before you enter the symbol.
[Ex.] To program the symbol " ¢ ¢ " : ⟶ [(SHIFT-2)] ⟶ ¢ ⟶ [(SHIFT-2)] ⟶ ¢

Editing text

You can edit the text you have entered by deleting characters.
[(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.

XXX ⟶ [00] XXX: 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]
(DC) S H A R P

Alphanumeric character code table

Code	Character
001	á
002	â
003	ê
004	î
005	ì
006	í
007	ô
008	ó
009	û
010	ú
011	œ
012	ű
013	ú
014	ő
015	ó
016	Λ
017	Ψ
018	Γ
019	¨
020	Ω
021	Δ
022	Θ
023	Ξ
024	Π
025	Σ
026	Y
027	Φ
028	Ű
029	Ú
030	Ő
031	Ó
032	(space)
033	!
034	”
035	#
036	$
037	%
038	&
039	’
040	(
041	)
042	*
043	+
044	,
045	-

Code	Character
046	.
047	/
048	0
049	1
050	2
051	3
052	4
053	5
054	6
055	7
056	8
057	9
058	:
059	;
060	<
061	=
062	>
063	?
064	@
065	A
066	B
067	C
068	D
069	E
070	F
071	G
072	H
073	I
074	J
075	K
076	L
077	M
078	N
079	O
080	P
081	Q
082	R
083	S
084	T
085	U
086	V
087	W
088	X
089	Y
090	Z

Code	Character
091	Ä
092	Ö
093	Ü
094	^
095	_
096	‘
097	a
098	b
099	c
100	d
101	e
102	f
103	g
104	h
105	i
106	j
107	k
108	l
109	m
110	n
111	o
112	p
113	q
114	r
115	s
116	t
117	u
118	v
119	w
120	x
121	y
122	z
123	{
124	|
125	}
126	ß
127	¢
128	!!
129	$_1$
130	$_2$
131	$_3$
132	$_4$
133	1/2
134	F/T
135	←

Code	Character
136	→
137	↑
138	↓
139	◀
140	▶
141	F
142	T
143	↓
144	ç
145	°
146	¿
147	Ù
148	à
149	Æ
150	ø
151	Å
152	¤
153	é
154	è
155	Pt
156	¡
157	Ñ
158	ò
159	£
160	¥
161	◦
162	⌜
163	⌟
164	ˎ
165	·
177	Á
178	Í
180	$\bar{A}$
181	$\bar{a}$
182	$\bar{E}$
183	$\bar{e}$
184	$\bar{I}$
185	$\bar{i}$
186	$\bar{U}$
187	$\bar{u}$
188	Ṇ
189	ṇ
190	Č
191	Š
192	Ç

Code	Character
193	i̇
194	Ġ
195	Ṣ
196	Ġ
197	ġ
198	Ḳ
199	ḳ
200	Ļ
201	ļ
202	Ž
203	Đ
204	đ
205	Ć
206	ć
207	€
208	**P**
209	ˋ
210	ě
211	š
212	č
213	ž
214	ý
215	u̇
216	ň
217	˘
218	ˊ
219	ř
224	*
225	§
226	Ø
227	ˆ
228	↑
229	]
230	[
231	‟
232	ä
233	ö
234	ü
235	æ
236	å
237	É
238	ñ
253	*(DC)

*(DC) : Double-size character code

: The shaded character cannot be displayed (will be displayed as space).

Note *The character “!!” (code: 128) is displayed as “!”.*

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

Simplified procedure : XXX (Job code) → [•] → [@/FOR] → [Data entry] → [CA/AT]

Direct Programming

Sample procedure : → [Data entry] → [⊖2] → [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

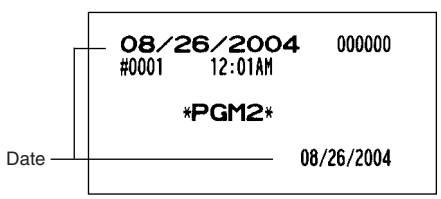
■ Date PGM 1 PGM 2

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

Procedure

XXXXXXXX → [#/TM]
Date (seven or eight digits)

Example

Key operation	Print
08262004 [#/TM]	

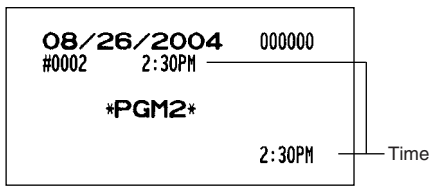
■ Time PGM 1 PGM 2

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 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

XXXX → [#/TM]
Time (max. four digits)

Example

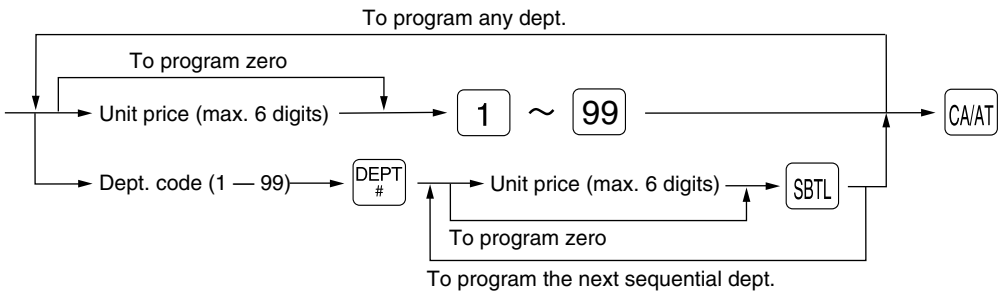
Key operation	Print
1430 [#/TM]	

2 Programming for departments

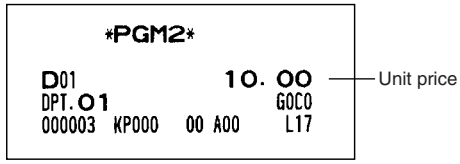
Your machine is equipped with 20 (ER-A520)/10 (ER-A530) standard departments and a maximum of 99 departments. Your machine allows you to perform the following programming for each department.

■ Unit price PGM 1 PGM 2

Procedure

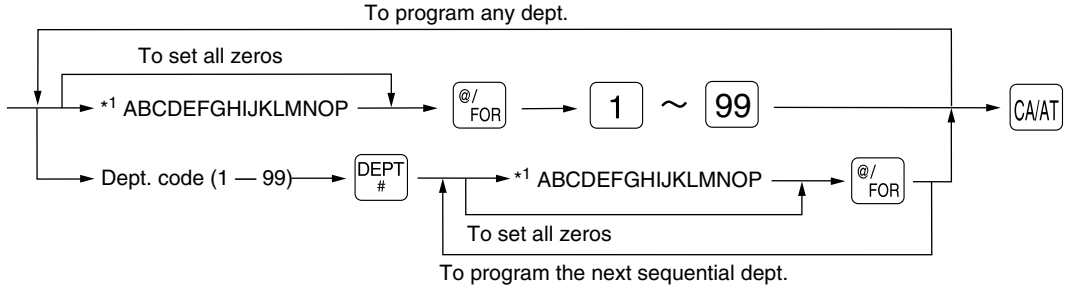


Example

Key operation	Print
1000 [1] [CA/AT]	

■ Functional selection PGM 2

Procedure



*1 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
I	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
O	Significant digit for HALO		1 thru 9
P	Number of zeros to follow the significant digit for HALO		0 thru 7

Note

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 [CA/AT] 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*

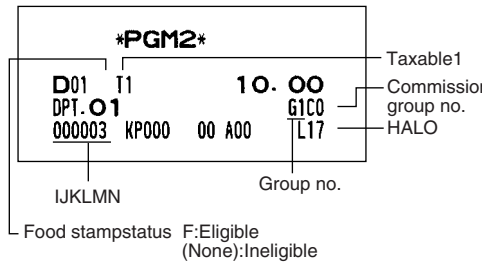
HALO (High Amount Lockout)

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 **O** × 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.

Example

Key operation	Print
1000000100000317 @/FOR 1 CA/AT	

3 PLU/UPC programming

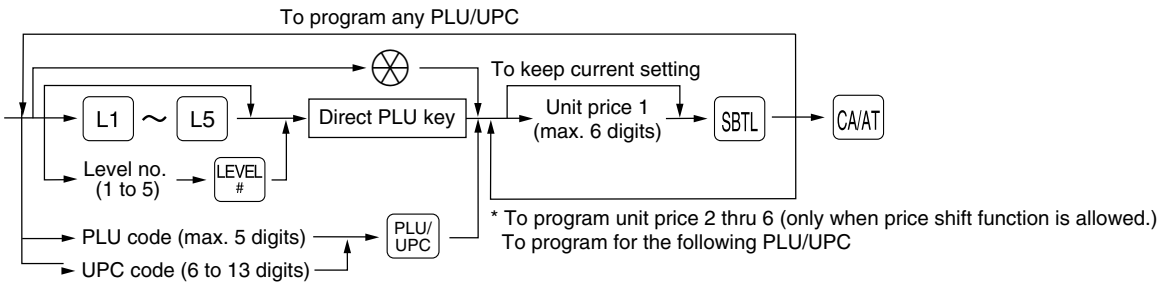
Your machine is equipped with 2000 standard PLU/UPC codes. Your machine allows you to perform the following programming for each PLU/UPC.

Note

- *Please note that the price lookup/subdepartment/UPC key (PLU/SUB for ER-A520) is shown as PLU/UPC.*
- *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)".*
- ⊗ *in Procedures indicates that you scan a barcode.*

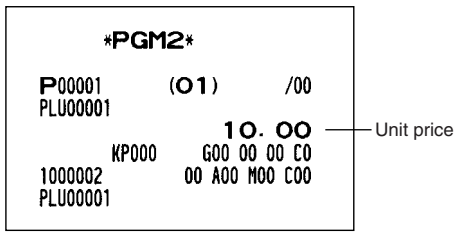
■ Unit price PGM 1 PGM 2

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 "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 CA/AT 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.

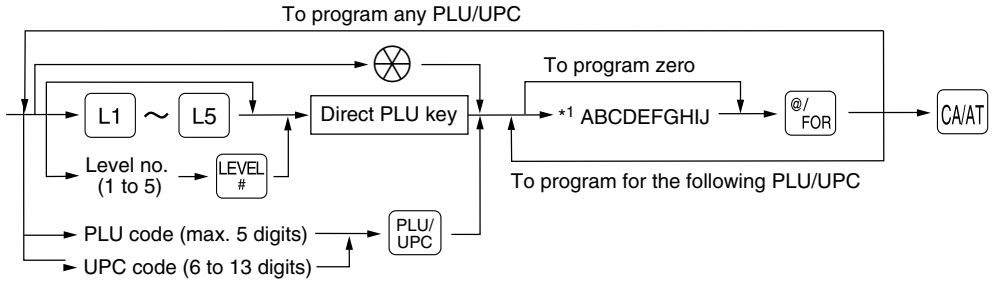
Example

Key operation	Print
1 PLU/UPC 1000 SBTL CA/AT	

(In case of single price entry)

■ Functional selection PGM 2

Procedure



*1 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

Note

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	*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

- *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.

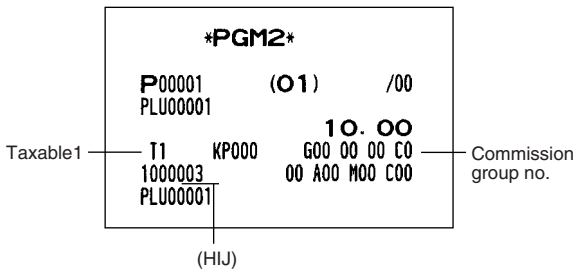
- *Open price and preset price (for only PLU)*
- *Preset price only*
- *Open price only (for only PLU)*
- *Prohibit mode: Prohibits the entry of any assigned PLU/UPC code.*
- *Delete mode: Deletes data programmed for each PLU/UPC.*

Example

Key operation

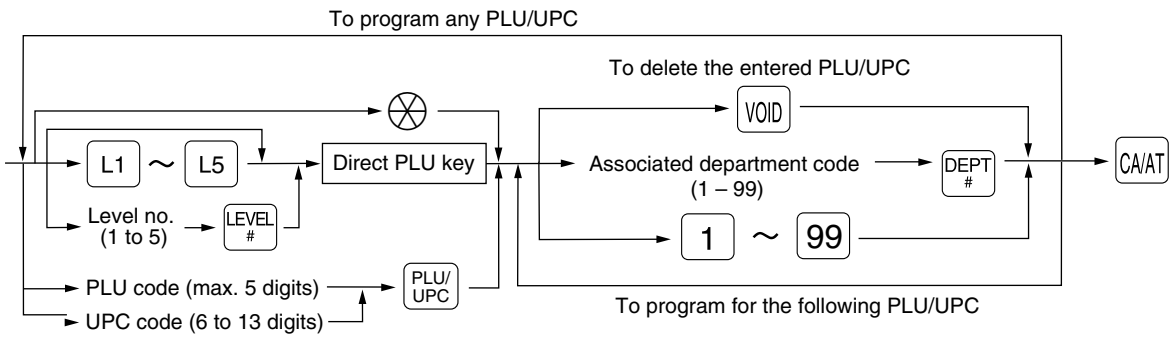
1 [PLU/UPC] 0000001003 [@/FOR] [CA/AT]

Print



■ Associated department PGM 1 PGM 2

Procedure

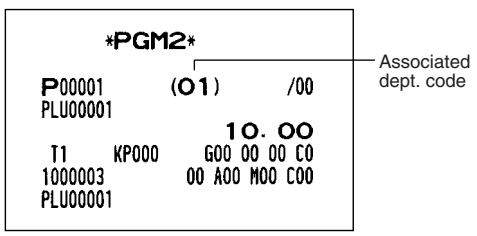


Example

Key operation

1 [PLU/UPC] [1] [CA/AT]

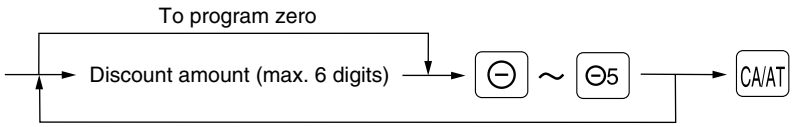
Print



4 Programming for discount keys (⊖)

■ Discount amount PGM 1 PGM 2

Procedure

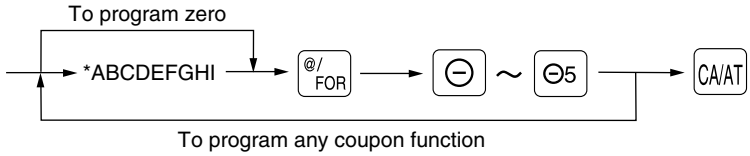


Example

Key operation	Print
1000 ⊖ CA/AT	*PGM2* F001 (−) 1 -10.00 (Discount amount) S L17

■ Functional programming PGM 2

Procedure



*	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 ⊖)	0
			Store coupon (item ⊖)	1
	H	Significant digit for HALO		1 thru 9
	I	Number of zeros to follow the significant digit for HALO		0 thru 7

Note

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 **H** x 10^{I}.*
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.

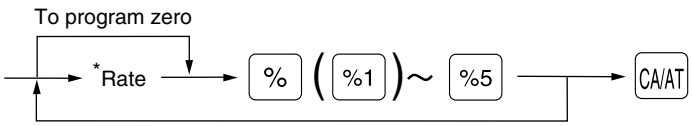
Example

Key operation	Print
000011013 [@/FOR] [⊖] [CA/AT]	*PGM2* F001 (−) 1 -10.00 S I1 L13 — HALO Taxable 1 Food stamp status F:Eligible (None):Ineligible Subtotal ⊖

5 Programming for percent keys ([%])

■ Percent rate PGM 1 PGM 2

Procedure



* Rate: Percent rate: 0.00 – 100.00

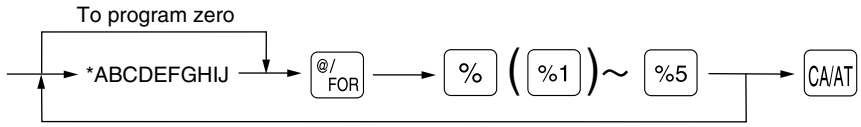
Note *You must use a decimal point key when setting percentage rates that are fractional.*

Example

Key operation	Print
10 [•] 25 [%] [CA/AT]	*PGM2* F006 %1 -10.25% S 3 L100.00% — Percent rate

■ Functional programming PGM 2

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

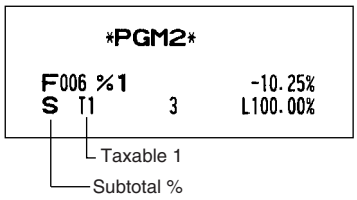
Tax status (taxable 1 thru 4/non-taxable)
Tax 4 is prohibited if you use the food stamp function.

Example

Key operation

3000011000 @/FOR % CA/AT

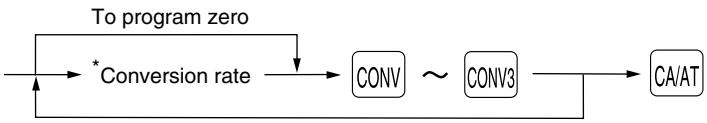
Print



6 Programming for conversion keys (CONV)

■ Currency conversion rate PGM 1 PGM 2

Procedure



* Conversion rate: 0.0000 – 9999.9999

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

Example

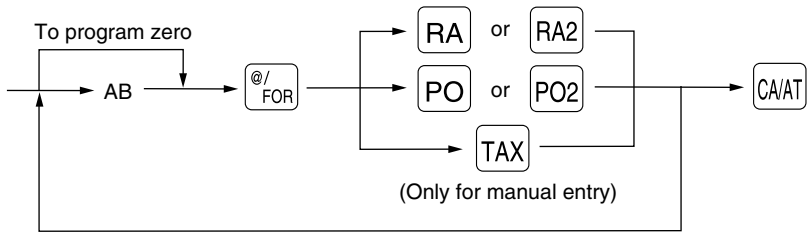
Key operation	Print
0 • 8063 CONV CA/AT	*PGM2* F106 CONV 1 0.8063

7 Programming for the RA, PO, and TAX 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



"AB" is the same as **A** × 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)

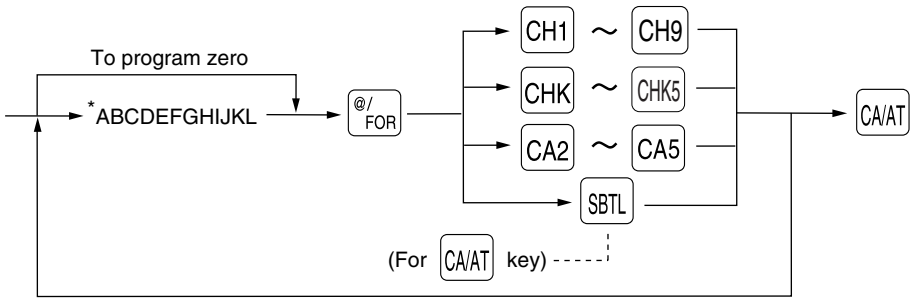
Example

Key operation	Print
13 @/FOR RA CA/AT	*PGM2* F095 ***RA L13

8 Programming for the CA/AT, CA, CH, and CHK keys

■ High amount lockout (HALO) and functional selection PGM 2

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 significant digit for HALO		0 thru 8

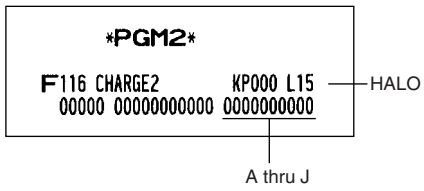
Note

HALO (High amount lockout)

*"**KL**" is the same as **K** × 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	Print
000000000015 [@/FOR] [CH2/CA/AT]	

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) PGM 2

Sample tax table

New Jersey tax table: 6%

	Range of sales amount		
Taxes	**Minimum breakpoint**		**Maximum breakpoint**
.00	.01	to	.10
.01 ← T	.11 ← Q	to	.22
.02	.23	to	.38
.03	.39	to	.56
.04	.57	to	.72
.05	.73	to	.88
.06	.89	to	1.10
.07	1.11 ← M1	to	1.22
.08	1.23	to	1.38
.09	1.39	to	1.56
.10	1.57	to	1.72
.11	1.73	to	1.88
.12	1.89	to	2.10
.13	2.11 ← M2	to	2.22

A: Difference between the minimum breakpoint and the next one (¢)	
–	B: Non-cyclic
10 (0.11 - 0.01)	
12 (0.23 - 0.11)	C: Cyclic-1
16 (0.39 - 0.23)	
18 (0.57 - 0.39)	
16 (0.73 - 0.57)	
16 (0.89 - 0.73)	
22 (1.11 - 0.89)	
12 (1.23 - 1.11)	D: Cyclic-2
16 (1.39 - 1.23)	
18 (1.57 - 1.39)	
16 (1.73 - 1.57)	
16 (1.89 - 1.73)	
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: The tax amount collected on the minimum taxable amount (Q)
Q: The minimum taxable amount
M1: The maximum value of the minimum breakpoint on a regular cycle (C).
We call this point “MAX point.”
M2: 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 M1 or between M1 and M2

Procedure

[TAX] → One- or two-*1 digit number → [@/FOR] → Rate*2 (max. six digits (0.0001 - 99.9999%)) → [@/FOR] → M (max. four digits) → [@/FOR] →

→ T (max. three digits) → [@/FOR] → Q (max. five digits) → [@/FOR] → Minimum breakpoint (max. five digits) → [@/FOR] → [CA/AT]

Repeat until the MAX point is entered.

To delete a tax table, use the following sequence:

[TAX] → One- or two-*1 digit number → [@/FOR] → Rate*2 (max. six digits (0.0001 - 99.9999%)) → [@/FOR] → M (max. four digits) → [@/FOR] → [SBTL]

*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 99¢. When the difference is not less than $1.00, enter "1," and when it is not more than 99¢, 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 [SBTL] 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

	[TAX]
	1 [@/FOR]
Tax rate →	6 [@/FOR]
M →	100 [@/FOR]
T →	1 [@/FOR]
Q →	11 [@/FOR]
The first cyclic portion	23 [@/FOR]
	39 [@/FOR]
	57 [@/FOR]
	73 [@/FOR]
	89 [@/FOR]
M1 (MAX point) →	111 [@/FOR]
	[CA/AT]

Print

```
     *PGM2*
TAX1            6.0000%
              /  1.00
          1      0.11
          2      0.23
          3      0.39
          4      0.57
          5      0.73
          6      0.89
          7      1.11
```

Note *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 point for fractions.*

• 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 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 breakpoint
.00	.01
.01 ← T	.11 ← Q
.02	.26
.03	.47
.04	.68
.05	.89
.06	.89
.07	1.11 ← M1
.08	1.11
.09	1.11
.10	1.26
.11	1.47
.12	1.68
.13	1.89
.14	1.89
.15	2.11 ← M2
.16	2.11
.17	2.11

Breakpoint difference (¢)	
1	B: Non-cyclic
10 (0.11-0.01)	
15 (0.26-0.11)	C: Cyclic-1
21 (0.47-0.26)	
21 (0.68-0.47)	
21 (0.89-0.68)	
0 (0.89-0.89)	
22 (1.11-0.89)	
0 (1.11-1.11)	
0 (1.11-1.11)	
15 (1.26-1.11)	D: Cyclic-2
21 (1.47-1.26)	
21 (1.68-1.47)	
21 (1.89-1.68)	
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(%), T = $0.01 = 1¢, Q = $0.11 = 11¢, M1 = 1.11, M2 = 2.11, 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.

2110 → [•] → [@/FOR] →

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 PGM 2 2610 Direct

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

Procedure

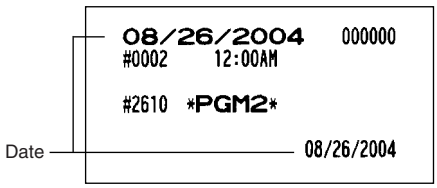
2610 → [•] → [@/FOR] → Date (seven or eight digits) → [CA/AT]

Example

Key operation

2610 [•] [@/FOR]
08262004 [CA/AT]

Print



■ Setting the time PGM 2 2611 Direct

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 PM, enter 1430. The time is printed and displayed on the real time system.

Procedure

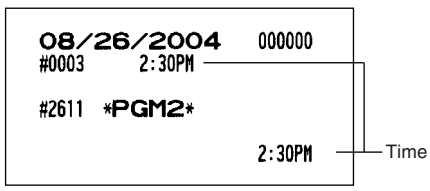
2611 → [•] → [@/FOR] → Time (max. four digits) → [CA/AT]

Example

Key operation

2611 [•] [@/FOR]
1430 [CA/AT]

Print

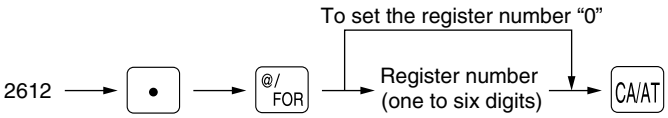


2 Setting the register and consecutive numbers

■ Setting the register number PGM 2 2612

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

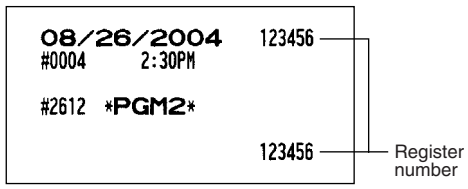


Example To set the register number as “123456”

Key operation

2612 • @/FOR
123456 CA/AT

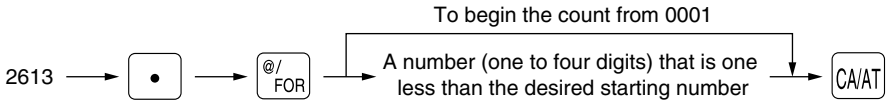
Print



■ Setting the consecutive number PGM 2 2613

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

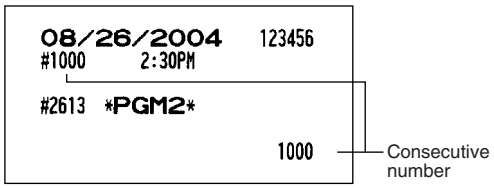


Example Setting the count start number as “1001”

Key operation

2613 • @/FOR
1000 CA/AT

Print



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 2710 Direct

Sample tax table

New Jersey tax table: 6%

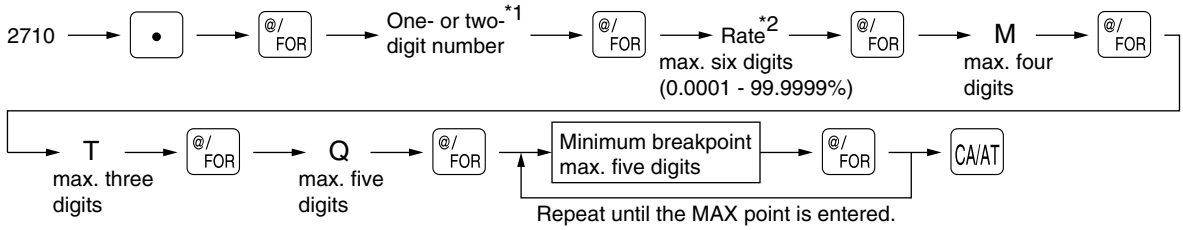
	Range of sales amount		
Taxes	**Minimum breakpoint**		**Maximum breakpoint**
.00	.01	to	.10
.01 ← T	.11 ← Q	to	.22
.02	.23	to	.38
.03	.39	to	.56
.04	.57	to	.72
.05	.73	to	.88
.06	.89	to	1.10
.07	1.11 ← M1	to	1.22
.08	1.23	to	1.38
.09	1.39	to	1.56
.10	1.57	to	1.72
.11	1.73	to	1.88
.12	1.89	to	2.10
.13	2.11 ← M2	to	2.22

A: Difference between the minimum breakpoint and the next one (¢)	
–	B: Non-cyclic
10 (0.11 - 0.01)	
12 (0.23 - 0.11)	C: Cyclic-1
16 (0.39 - 0.23)	
18 (0.57 - 0.39)	
16 (0.73 - 0.57)	
16 (0.89 - 0.73)	
22 (1.11 - 0.89)	
12 (1.23 - 1.11)	D: Cyclic-2
16 (1.39 - 1.23)	
18 (1.57 - 1.39)	
16 (1.73 - 1.57)	
16 (1.89 - 1.73)	
22 (2.11 - 1.89)	

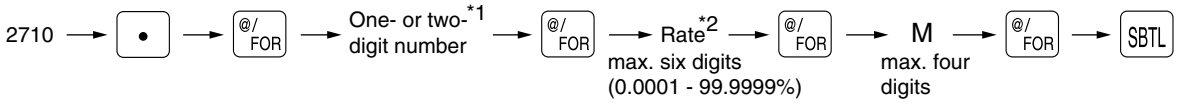
To program a tax table, first make a table like the right table shown above.
From the tax table, calculate the differences between a minimum break point and the next one (A). Then, from the differences, find irregular cycles (B) and regular cycles (C and D). These cycles will show you the following items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

T: The tax amount collected on the minimum taxable amount (Q)
Q: The minimum taxable amount
M1: The maximum value of the minimum breakpoint on a regular cycle (C).
We call this point “MAX point.”
M2: 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 M1 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 99¢. When the difference is not less than $1.00, enter "1," and when it is not more than 99¢, 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 SBTL 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 • @/FOR
	1 @/FOR
Tax rate →	6 @/FOR
M →	100 @/FOR
T →	1 @/FOR
Q →	11 @/FOR
The first cyclic portion	23 @/FOR
	39 @/FOR
	57 @/FOR
	73 @/FOR
	89 @/FOR
M1 (MAX point)→	111 @/FOR
	CA/AT

Print

```
#2710 *PGM2*

TAX1                 6.0000%
                     / 1.00
                 1     0.11
                 2     0.23
                 3     0.39
                 4     0.57
                 5     0.73
                 6     0.89
                 7     1.11
```

Note *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 point for fractions.*

• 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 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

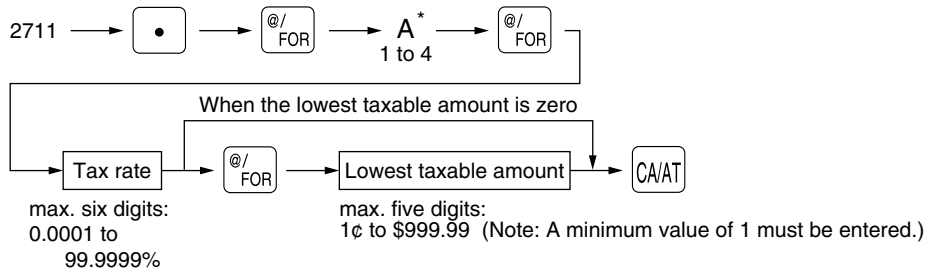
Tax	Minimum breakpoint
.00	.01
.01 ← T	.11 ← Q
.02	.26
.03	.47
.04	.68
.05	.89
.06	.89
.07	1.11 ← M1
.08	1.11
.09	1.11
.10	1.26
.11	1.47
.12	1.68
.13	1.89
.14	1.89
.15	2.11 ← M2
.16	2.11
.17	2.11

Breakpoint difference (¢)	
1	B: Non-cyclic
10 (0.11-0.01)	
15 (0.26-0.11)	C: Cyclic-1
21 (0.47-0.26)	
21 (0.68-0.47)	
21 (0.89-0.68)	
0 (0.89-0.89)	
22 (1.11-0.89)	
0 (1.11-1.11)	
0 (1.11-1.11)	
15 (1.26-1.11)	D: Cyclic-2
21 (1.47-1.26)	
21 (1.68-1.47)	
21 (1.89-1.68)	
0 (1.89-1.89)	
22 (2.11-1.89)	
0 (2.11-2.11)	
0 (2.11-2.11)	

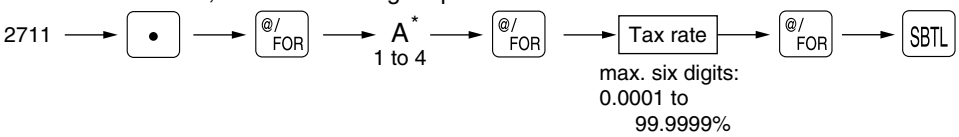
From the modified tax table above;
Rate = 8(%), T = $0.01 = 1¢, Q = $0.11 = 11¢, M1 = 1.11, M2 = 2.11, M = 100

■ The tax rate PGM 2 2711

Procedure



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¢

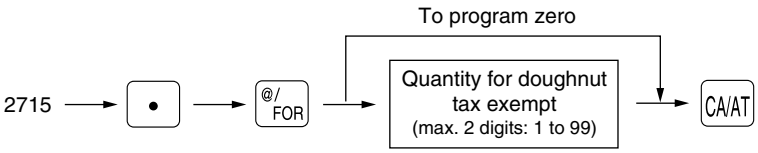
Key operation	Print
2711 [•] [@/FOR] 2 [@/FOR] 4 [@/FOR] 12 [CA/AT]	#2711 *PGM2* TAX2 4.0000% 0.12

Note

- *If you make an incorrect entry before pressing the third [@/FOR] key in programming a tax rate, cancel it with the [CL] key; and if you make an error after pressing the third [@/FOR] key, cancel it with the [SBTL] 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.*

■ Doughnut tax exempt (for the Canadian tax system) PGM 2 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”

Key operation	Print
2715 [•] [@/FOR] 6 [CA/AT]	#2715 *PGM2* EXPT COUNT 6

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 2 2110 Direct

You can set each department for:

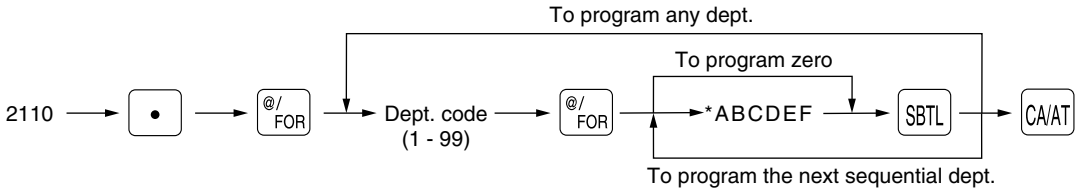
Item validation printing
If item entries must be validated, program corresponding departments for compulsory validation printing.
Tare table number
Tare table number associated with scale entry (0 thru 9, 0: not used)
Scale entry
Program a department for scale entry allowed when your store needs automatic 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 CA/AT 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)

Note *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



*1 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
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

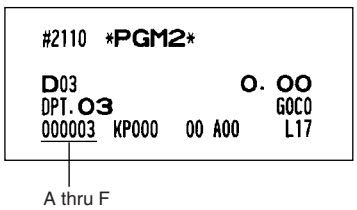
Example

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

Key operation

2110 • @/FOR
3 @/FOR 000003 SBTL
CA/AT

Print



■ Functional programming 2 PGM 2 2111 Direct

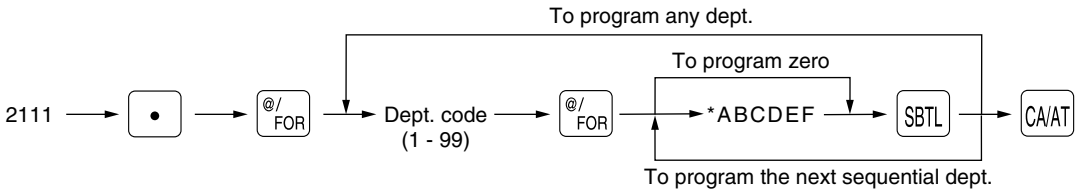
Sign (plus/minus)
- Assign a plus sign to departments for normal sales transactions.
- Assign a minus sign to departments for minus transactions.

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



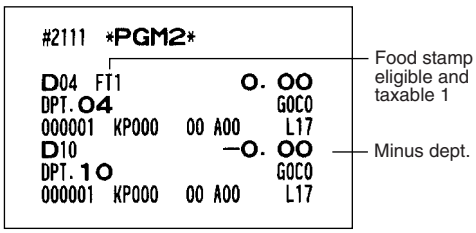
*	Item:		Selection:	Entry:
	A	Sign (+/-)	Plus	0
			Minus	1
	B	Food stamp status	Ineligible	0
			Eligible	1
	C	Tax 4 status	Non-taxable	0
			Taxable	1
	D	Tax 3 status	Non-taxable	0
			Taxable	1
	E	Tax 2 status	Non-taxable	0
			Taxable	1
	F	Tax 1 status	Non-taxable	0
			Taxable	1

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

Key operation

2111 • @/FOR
4 @/FOR 010001 SBTL
10 @/FOR 100000 SBTL
CA/AT

Print

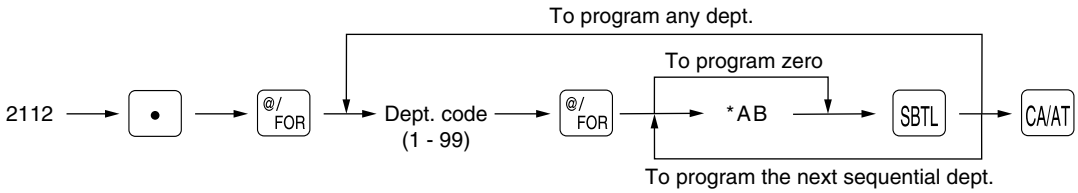


Note *When you program the last dept. code you are allowed to program, the programming sequence will be complete with a press of the SBTL key.*

■ 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



"**AB**" is the same as **A** × 10^{B}.

A: Significant digit (0 through 9)

B: Number of zeros to follow significant digit (0 through 7)

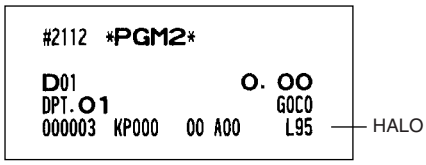
For example, presetting 13 ($10.00) here means that amount entries of up to $10.00 are allowed in the REG mode. When you preset 17, however, the upper limit amount is 99999.99.

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

Key operation

2112 • @/FOR
1 @/FOR 95 SBTL
CA/AT

Print

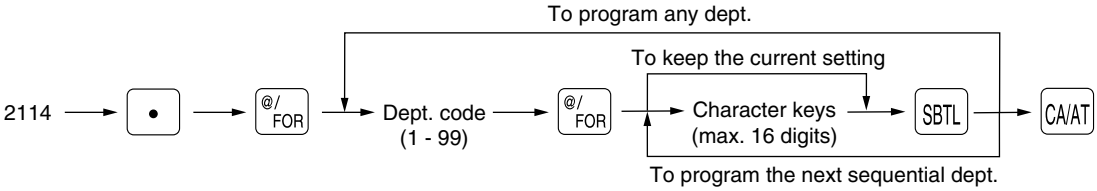


■ Item label PGM 2 2114

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

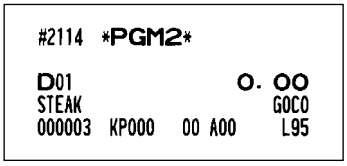


Example Programming STEAK (steak) for dept. 1

Key operation

2114 • @/FOR
1 @/FOR STEAK SBTL
CA/AT

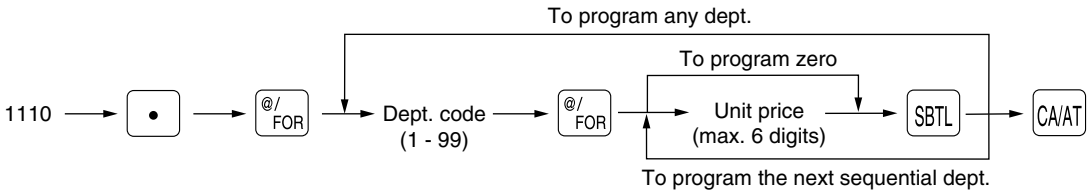
Print



■ Unit price PGM 1 PGM 2 1110 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

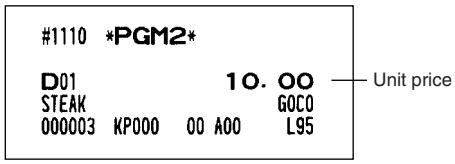


Example Programming $10.00 for dept. 1

Key operation

1110 • @/FOR
1 @/FOR 1000 SBTL
CA/AT

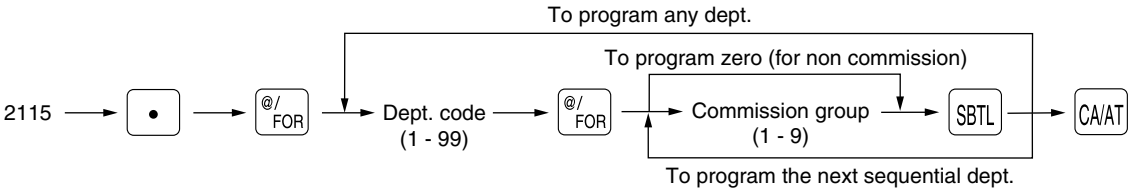
Print



■ 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

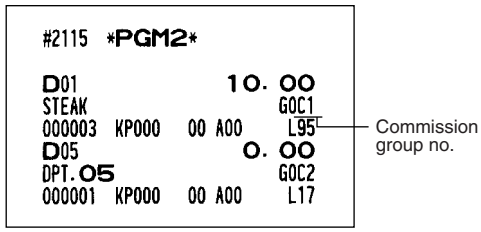


Example Programming commission group 1 for dept. 1 and commission group 2 for dept. 5

Key operation

2115 • @/FOR
1 @/FOR 1 SBTL
5 @/FOR 2 SBTL
CA/AT

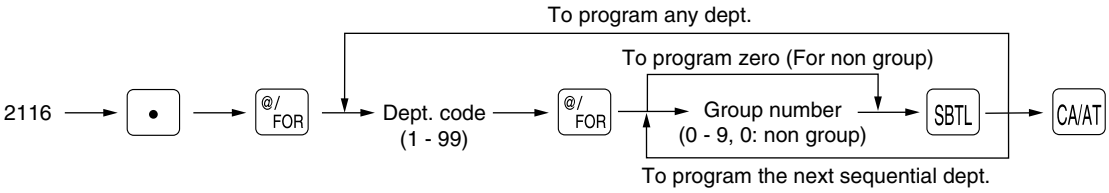
Print



■ 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

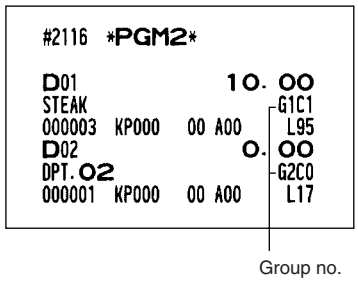


Example Programming the group number 1 for dept. 1 and the group number 2 for dept. 2

Key operation

2116 • @/FOR
1 @/FOR 1 SBTL
2 SBTL
CA/AT

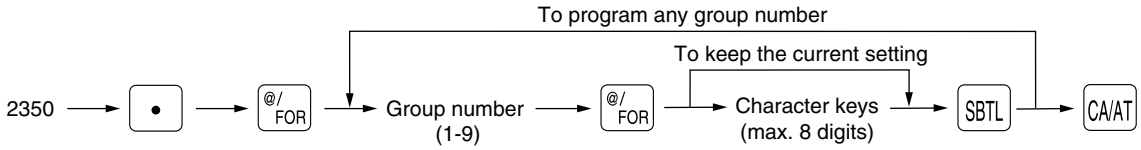
Print



■ Group text PGM 2 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

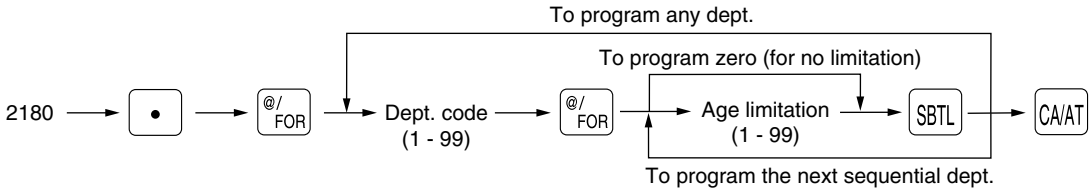
2350 • @/FOR
1 @/FOR DINNER SBTL
CA/AT

Print

■ Age limitation PGM 2 2180

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



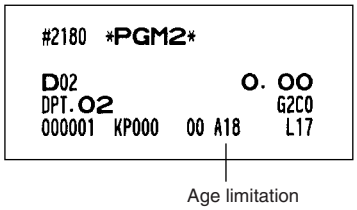
Note *When a department for which a setting other than zero (1 to 99) has been programmed as the age limitation is entered, the birthday entry will be enforced.*

Example Programming the age limitation "18" for dept. 2

Key operation

2180 • @/FOR
2 @/FOR 18 SBTL
CA/AT

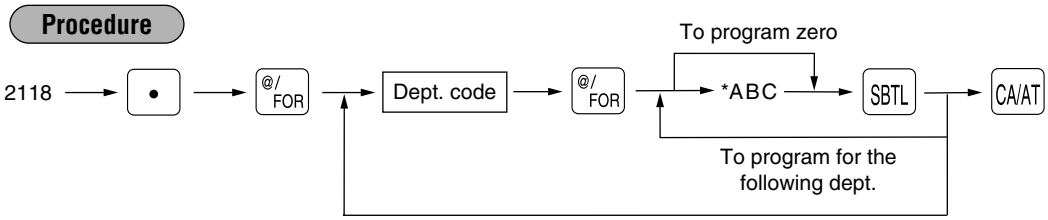
Print



■ Print station assignment PGM 2 2118

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

Procedure



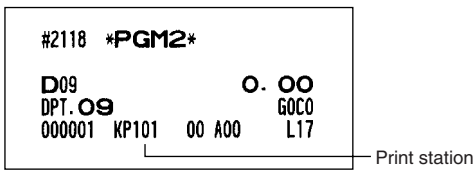
*	Item:		Selection:	Entry:
	A	Remote printer 1 output	Output	1
			Not output	0
	B	Remote printer 2 output	Output	1
			Not output	0
	C	Printing on the chit receipt	Yes	1
			No	0

Example

Key operation

2118 • @/FOR
9 @/FOR 101 SBTL
CA/AT

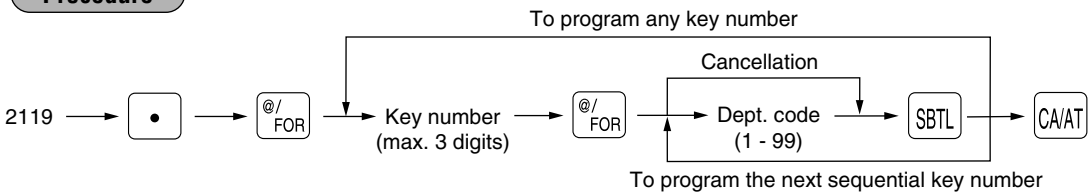
Print



■ Department key positioning PGM 2 2119

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



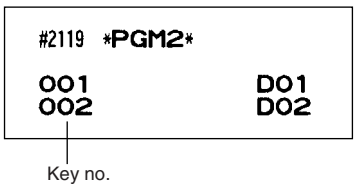
Note *The key number placement is determined by your local authorized SHARP dealer.*

Example

Key operation

2119 • @/FOR
1 @/FOR 1 SBTL
2 SBTL
CA/AT

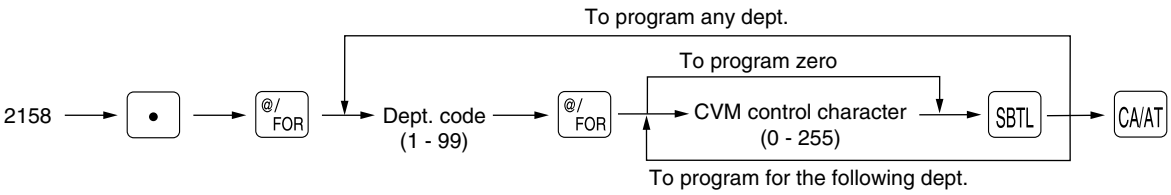
Print



■ 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



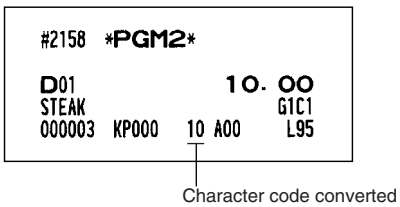
Example

Programming 16 as CVM control character for department 1

Key operation

2158 • @/FOR
1 @/FOR 16 SBTL
CA/AT

Print



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 PLU/UPC 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 PLU/UPC key (or by pressing a direct PLU key without any PLU code entry, or by scanning the UPC code).
- If “Open only” is selected, the PLU/UPC key must be pressed after the price entry followed by the PLU code and the PLU/UPC entry (, 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

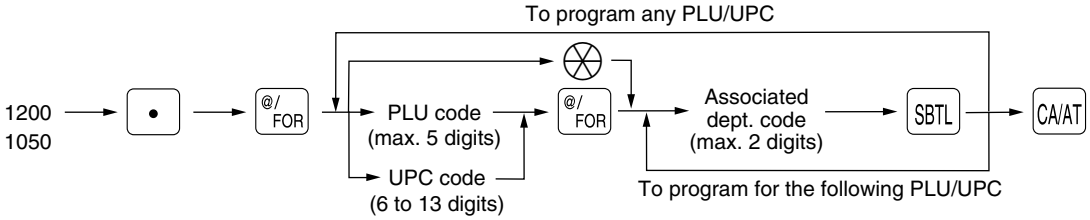
Note *For some items, you can program in two ways: programming an individual PLU code and for a range of sequential PLU codes. The procedure marked "For each PLU" shows individual PLU programming. The procedure marked "For a range of PLUs" shows sequential range PLU programming.*

■ Associated department PGM 1 PGM 2 1200 2230 Direct

1050 (Dynamic UPC file)

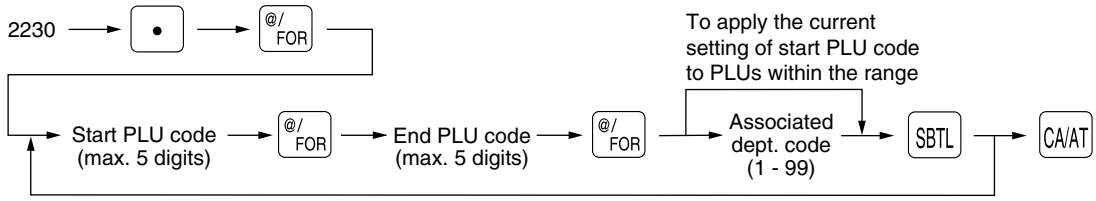
Procedure

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

Key operation

1200 • @/FOR
1 @/FOR 2 SBTL
CA/AT

Print

```
#1200 *PGM2*
P00001        (02)        /00
PLU00001
                          0.00
PLU00001
                          0.00
PLU00001
                          0.00
PLU00001
                          0.00
PLU00001
                          0.00
PLU00001
                          0.00
        KP000      G00 00 00 C0
1000002          00 A00 M00 C00
                      S    0.000
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

Dept. code

Example Programming the PLU 11 thru 20 for “Associate department 3”

For a range of PLUs

Key operation

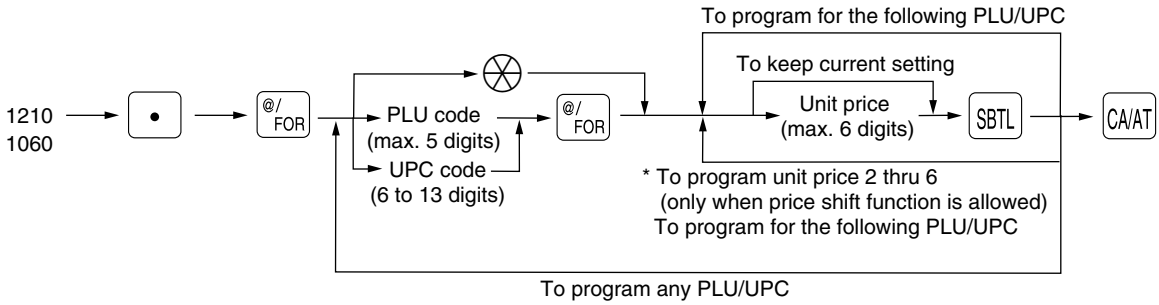
2230 • @/FOR
11 @/FOR 20 @/FOR
3 SBTL
CA/AT

Print

```
#2230 *PGM2*
          00011-          00020
            (03)
```

■ Unit prices PGM 1 PGM 2 1210 Direct 1060 (Dynamic UPC file)

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 "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 CA/AT 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 Programming "$1.25, $1.50, $2.00, $2.50, $3.00, $4.00" for price level 1 thru 6 of PLU1

Key operation

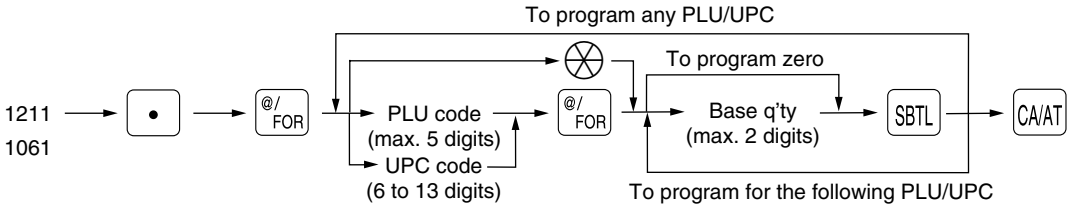
1210 • @/FOR
1 @/FOR 125 SBTL
150 SBTL
200 SBTL
250 SBTL
300 SBTL
400 SBTL
CA/AT

Print

```
#1210 *PGM2*

P00001      (02)      /00
PLU00001
                    1.25   <- Unit price
PLU00001
                    1.50
PLU00001
                    2.00
PLU00001
                    2.50
PLU00001
                    3.00
PLU00001
                    4.00
        KP000    G00 00 00 C0
1000002        00 A00 M00 C00
                  S    0.000
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

■ Base quantity PGM 1 PGM 2 1211 Direct 1061 (Dynamic UPC file)

Procedure

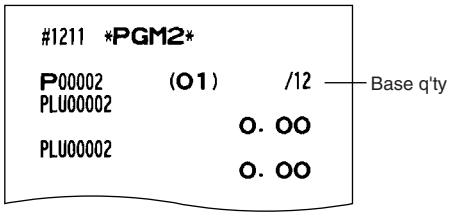


Example Programming "12" for PLU 2

Key operation

1211 • @/FOR
2 @/FOR 12 SBTL
CA/AT

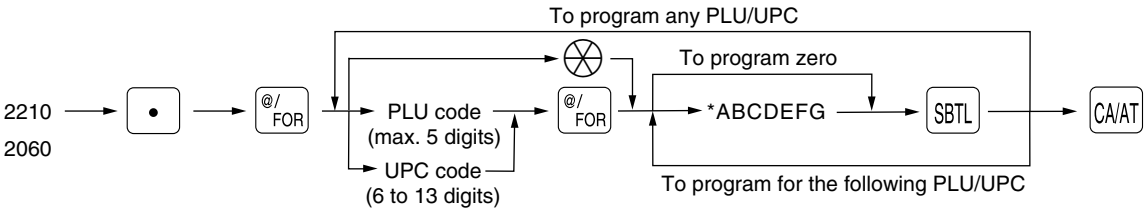
Print



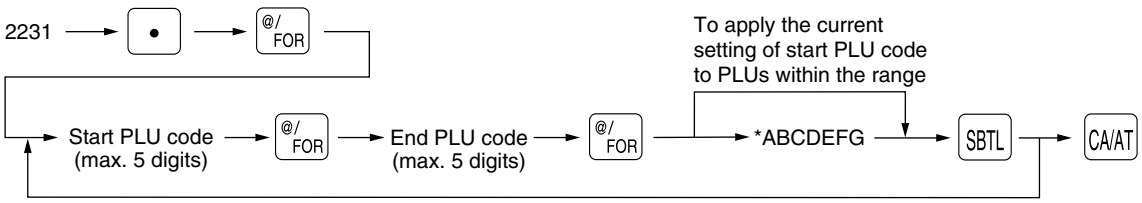
■ Functional programming 1 PGM 2 2210 2231 Direct 2060 (Dynamic UPC file)

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:		Selection:	Entry:
	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) For UPC, always enter 0.	Disable	0
			Enable	1
	C	Condiment entry (for only PLU) For UPC, always enter 0.	Allowed	0
			Compulsory	1
	D	Price shift entry	Enable	0
			Inhibit	1
			Compulsory	2
	E	Tare table number		0 thru 9 (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

Key operation

2210 [•] [@/FOR]
1 [@/FOR] 1000003 [SBTL]
[CA/AT]

Print

```
#2210 *PGM2*

P00001      (02)      /00
PLU00001
                      1.25
PLU00001
                      1.50
PLU00001
                      2.00
PLU00001
                      2.50
PLU00001
                      3.00
PLU00001
                      4.00
        KP000    G00 00 00 C0
1000003        00 A00 M00 C00
                    S   0.000
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

A thru G

To program ABCDEFG=1000003 for PLU11 thru 20

For a range of PLUs

Key operation

2231 [•] [@/FOR]
11 [@/FOR] 20 [@/FOR]
1000003 [SBTL]
[CA/AT]

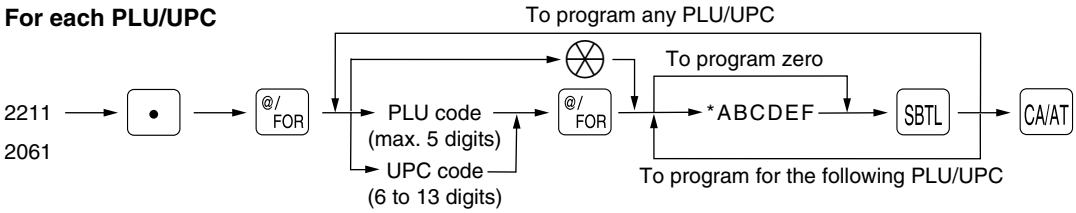
Print

```
#2231 *PGM2*

          00011-      00020
1000003
```

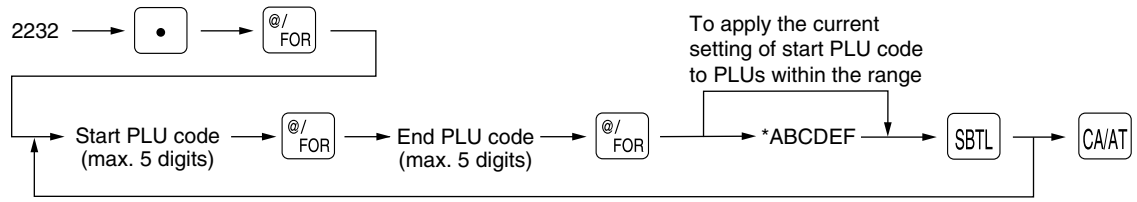
■ Functional programming 2 PGM 2 2211 2232 Direct 2061 (Dynamic UPC file)

Procedure

For each 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
			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

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.

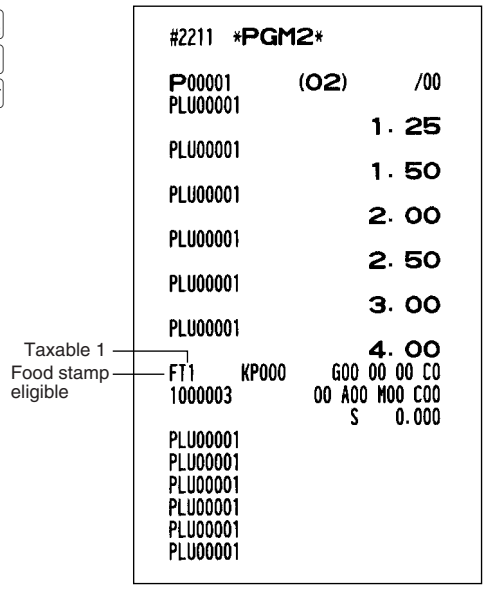
Example Programming ABCDEF=010001 for PLU 1

For each PLU/UPC

Key operation

2211 [•] [@/FOR]
1 [@/FOR] 010001 [SBTL]
[CA/AT]

Print



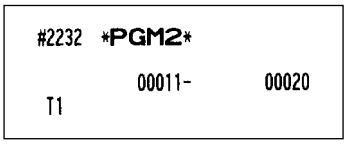
Programming the range PLU 11 thru 20 for ABCDEF=000001

For a range of PLUs

Key operation

2232 [•] [@/FOR]
11 [@/FOR] 20 [@/FOR]
000001 [SBTL]
[CA/AT]

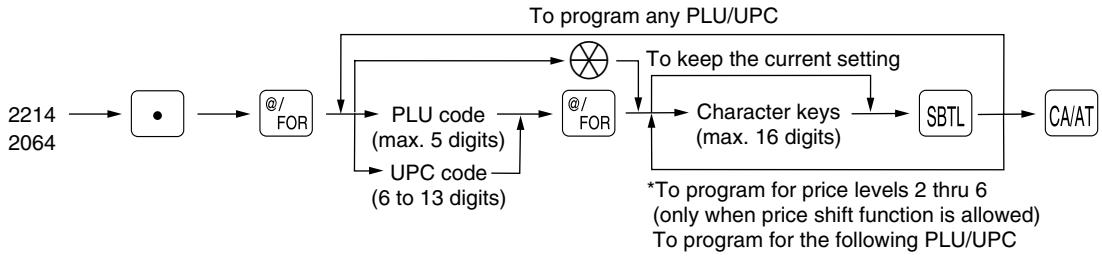
Print



■ 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

2214 • @/FOR
1 @/FOR MILK_1 SBTL
MILK_2 SBTL
MILK_3 SBTL
MILK_4 SBTL
MILK_5 SBTL
MILK_6 SBTL
CA/AT

Print

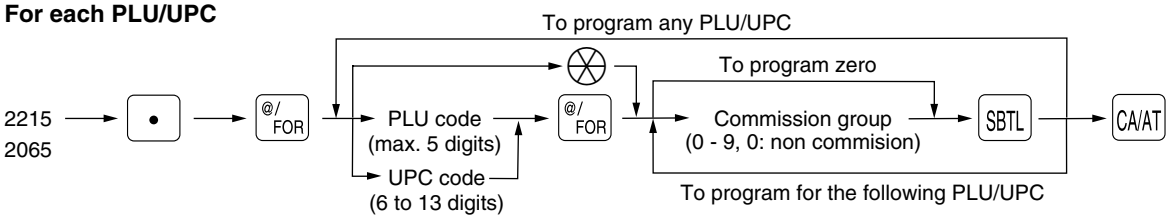
```
#2214 *PGM2*

P00001        (02)        /00
MILK_1
                        1.25
MILK_2
                        1.50
MILK_3
                        2.00
MILK_4
                        2.50
MILK_5
                        3.00
MILK_6
                        4.00
FT1     KP000     G00 00 00 C0
1000003         00 A00 M00 C00
                     S    0.000

PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

■ Commission groups PGM 2 2215 2235 Direct 2065 (Dynamic UPC file)

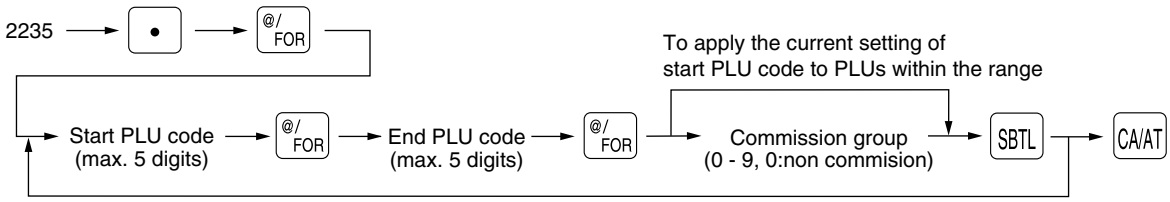
You can assign PLUs/UPCs to commission groups (1 to 9).

Procedure

For each PLU/UPC



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

Key operation

2215 • @/FOR
1 @/FOR 1 SBTL
CA/AT

Print

```
#2215 *PGM2*

P00001        (02)        /00
MILK_1
                          1.25
MILK_2
                          1.50
MILK_3
                          2.00
MILK_4
                          2.50
MILK_5
                          3.00
MILK_6
                          4.00
FT1     KP000     G00 00 00 C1
1000003         00 A00 M00 C00
                     S    0.000
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

Commission group no.

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

For a range of PLUs

Key operation

2235 • @/FOR
11 @/FOR 20 @/FOR
1 SBTL
CA/AT

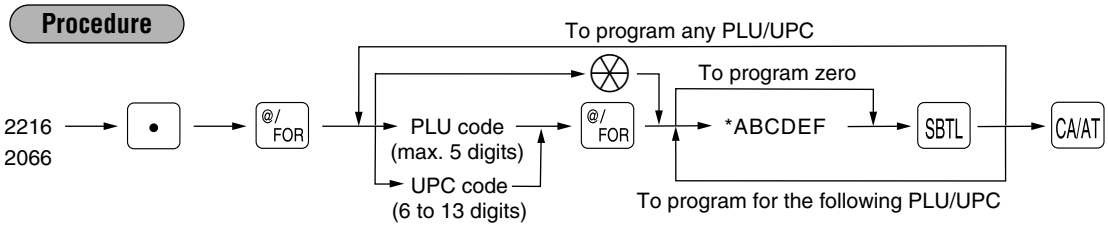
Print

```
#2235 *PGM2*

          00011-        00020
                          C1
```

■ 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.

Procedure



* 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

2216 • @/FOR
1 @/FOR 011050 SBTL
CA/AT

Print

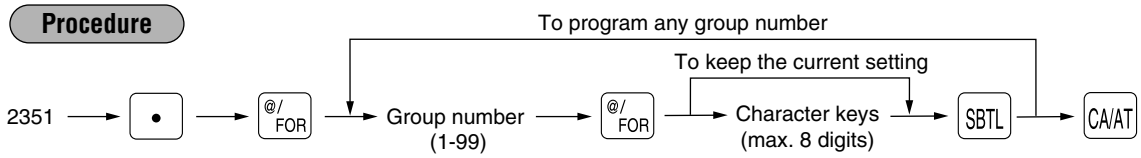
```
#2216 *PGM2*

P00001        (02)        /00
MILK_1
                        1.25
MILK_2
                        1.50
MILK_3
                        2.00
MILK_4
                        2.50
MILK_5
                        3.00
MILK_6
                        4.00
FT1     KP000     G01 10 50 C1
1000003        00 A00 M00 C00
                  S     0.000
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

Group nos.

■ Group text PGM 2 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".

Procedure



Example Programming DRINK for group number 1

Key operation

2351 • @/FOR
1 @/FOR DRINK SBTL
CA/AT

Print

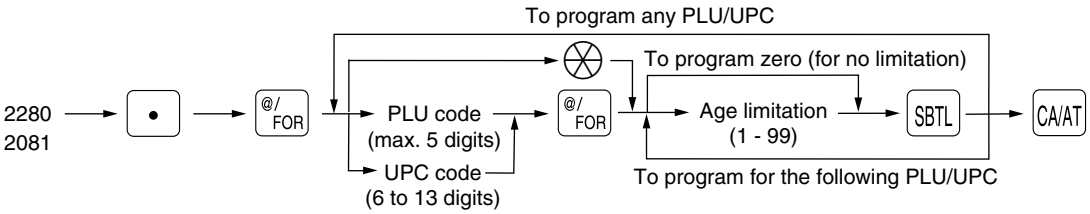
```
#2351 *PGM2*

#01              DRINK
```

■ Age limitation PGM 2 2280 2236 2081 (Dynamic UPC file)

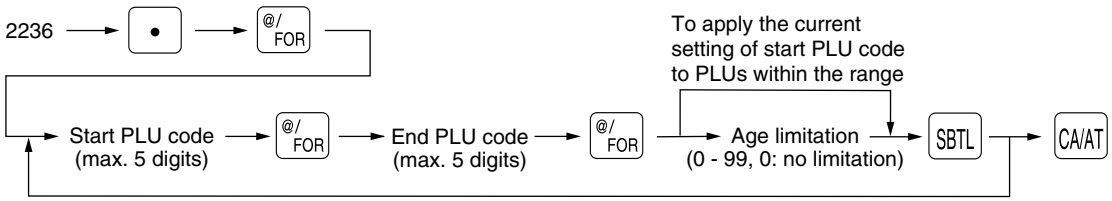
If an item sold is not allowed to be sold to certain aged persons by law, program the age limitation for the corresponding PLU/UPC.

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.*

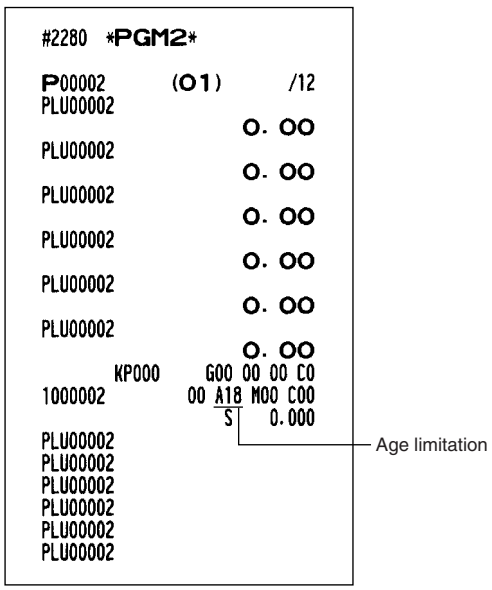
Example Programming the age limitation “18” for PLU 2

For each PLU/UPC

Key operation

2280 • @/FOR
2 @/FOR 18 SBTL
CA/AT

Print



Programming the PLU 11 thru 20 for the age limitation “18”

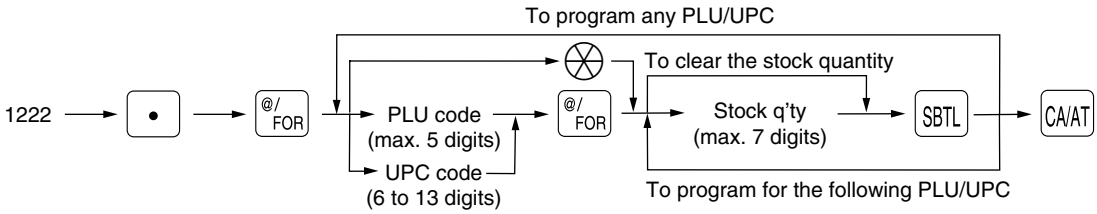
For a range of PLUs

Key operation	Print
2236 [•] [@/FOR] 11 [@/FOR] 20 [@/FOR] 18 [SBTL] [CA/AT]	#2236 *PGM2* 00011- 00020 A18

■ Stock quantity PGM 1 PGM 2 1222 1220 1221

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

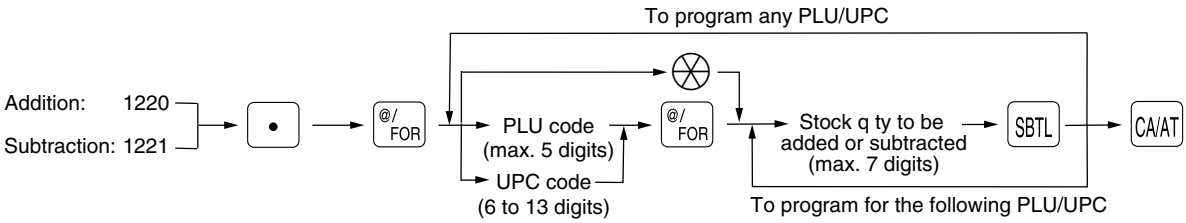
Key operation	Print
1222 [•] [@/FOR] 2 [@/FOR] 10 [SBTL] [CA/AT]	#1222 *PGM2* P00002 0.000 10.000 S 10.000 — Stock q ty

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 ([•]) 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

Key operation	Print
1220 [•] [@/FOR] 2 [@/FOR] 4 [SBTL] [CA/AT]	#1220 *PGM2* P00002 10.000 4.000 — Added stock q'ty S 14.000

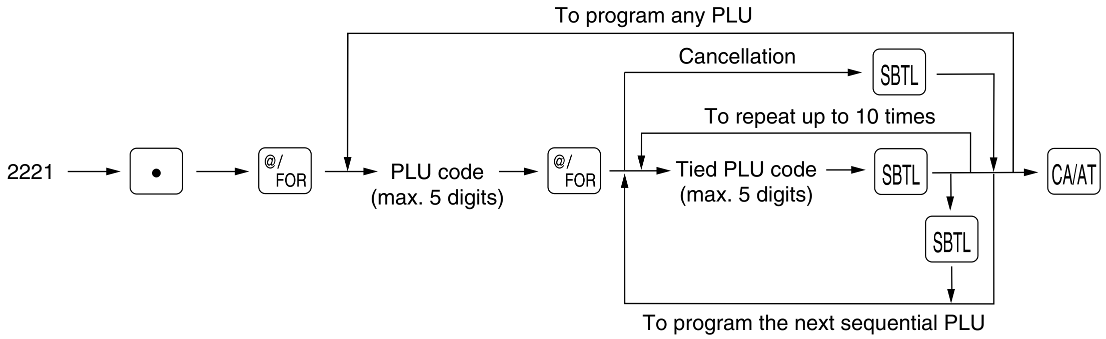
Subtracting the stock quantity

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

Key operation	Print
1221 [•] [@/FOR] 2 [@/FOR] 1 [•] 5 [SBTL] [CA/AT]	#1221 *PGM2* P00002 14.000 -1.500 — Subtracted stock q'ty S 12.500

■ Set PLU PGM 2 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)

Key operation	Print
2221 [•] [@/FOR] 20 [@/FOR] 201 [SBTL] 202 [SBTL] [CA/AT]	#2221 *PGM2* P00020 SP00201 P00202 — Tied PLUs

■ Mix-and-match table PGM 2 2217 2225 2067 (Dynamic UPC file)

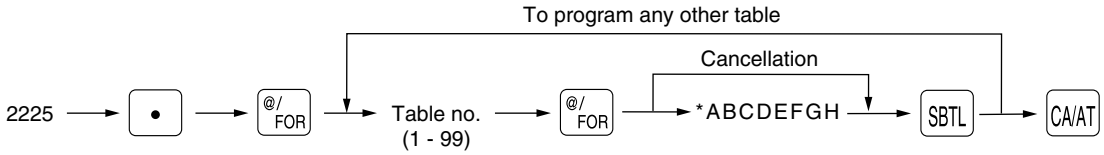
The mix-and-match table consists of the adjustment amount and the matching count for discount (satisfying the count of entered items). You can program a maximum of 99 mix-and-match tables. One table can be assigned maximum of 5 kind of items.

[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>		<Sale 2>		<Sale 3>	
Item-A	$2.30	Item-C	$2.50	Item-A	$2.30
Item-A	$2.30	Item-C	$2.50	Item-B	$3.10
Item-B	$3.10	Item-C	$2.50	Item-C	$2.50
Subtotal	$7.70	Subtotal	$7.50	Subtotal	$7.90
(Discount	$0.70)	(Discount	$0.50)	(Discount	$0.90)
Total	$7.00	Total	$7.00	Total	$7.00

Programming of matching count and adjustment amount

Procedure



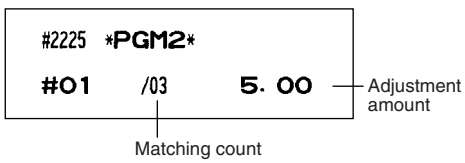
* AB: Matching count (1 - 99)
CDEFGH: Adjustment amount (max. 6 digits)

Example Programming mix-and-match table no.1 (matching count=3, adjustment amount $5.00)

Key operation

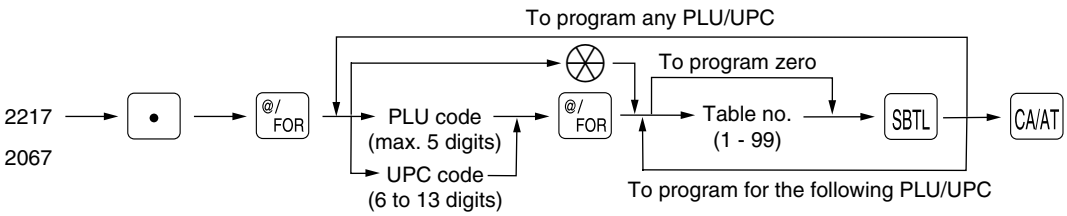
2225 • @/FOR
1 @/FOR 03000500 SBTL
CA/AT

Print



Assigning items to the mix-and-match tables

Procedure



Example Programming mix-and-match table no.1 for PLU 1

Key operation

2217 [•] [@/FOR]
1 [@/FOR] 1 [SBTL]
[CA/AT]

Print

```
#2217 *PGM2*

P00001        (02)        /00
MILK_1
                          1.25
MILK_2
                          1.50
MILK_3
                          2.00
MILK_4
                          2.50
MILK_5
                          3.00
MILK_6
                          4.00
FT1      KP000     G01 10 50 C1
1000003          00 A00 M01 C00
                      S    0.000
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
PLU00001
```

Mix-and-match table no.

■ 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

Table number	PLU codes for condiment entry (programmed text)					
01	Message text (HOWCOOK?)	23 (RARE)	25 (MED.RARE)	27 (WELLDONE)	.....	02
02	Message text (WITH?)	44 (SALAD)	45 (FRUITS)			
⋮	⋮	⋮	⋮	⋮	.....	⋮
04	Message text (POTATO?)	33 (P.CHIPS)	37 (MASHED.P)	38 (BAKED.P)		99
99	Message text (DRINK?)	63 (TEA)	65 (MILK)	67 (A.JUICE)	.....	

Condiment tables (Up to 99)

PLUs (Up to 15 for a table)

Next condiment table number

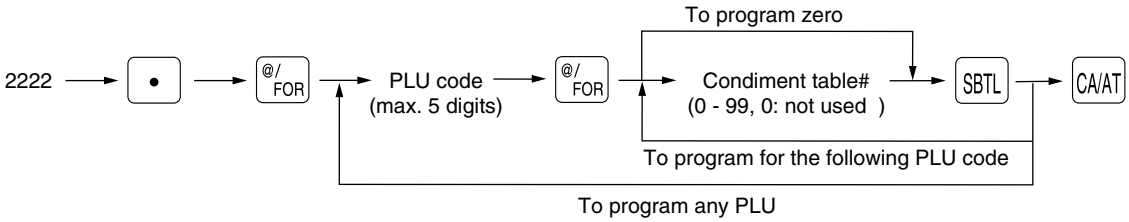
The condiment table should contain the following:

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

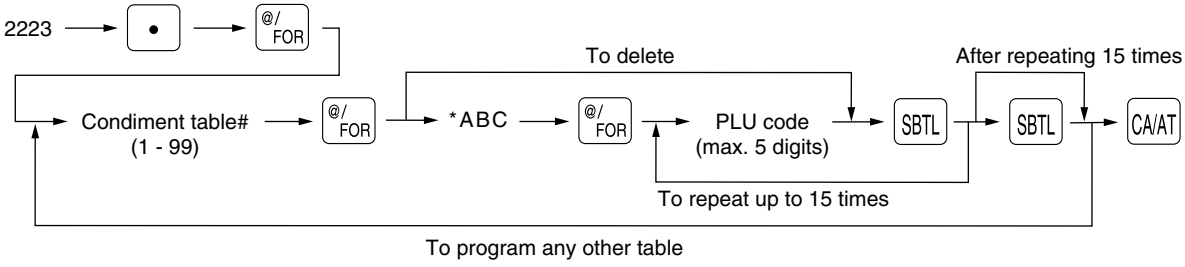
2222 • @/FOR
15 @/FOR 1 SBTL
CA/AT

Print

```
#2222  *PGM2*

P00015        (03)        /00
PLU00015
                        0.00
PLU00015
                        0.00
PLU00015
                        0.00
PLU00015
                        0.00
PLU00015
                        0.00
PLU00015
                        0.00
 T1     KP000     G00 00 00 C1
1000003          00 A18 M00 C01   <- Condiment table #
                   S    0.000
PLU00015
PLU00015
PLU00015
PLU00015
PLU00015
PLU00015
```

Assigning PLUs for condiment entry

Procedure



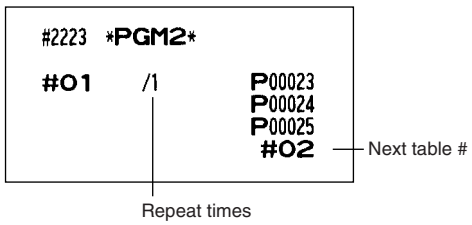
*A: Repeat times (1 to 9)
BC: Next table# (00 to 99: 00: not applied)

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

2223 • @/FOR
1 @/FOR
102 @/FOR
23 SBTL
24 SBTL
25 SBTL
SBTL
CA/AT

Print

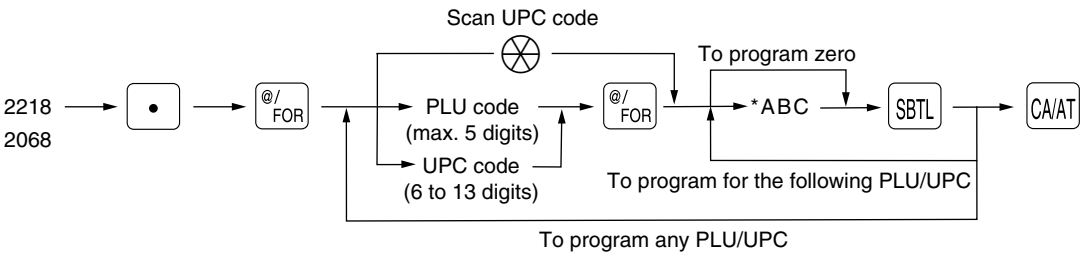


Note *PLU codes must have been already defined.*

■ Print station to PLU/UPC assignment PGM 2 2218 2068 (Dynamic UPC file)

When you use a remote printer, consult your dealer.

Procedure



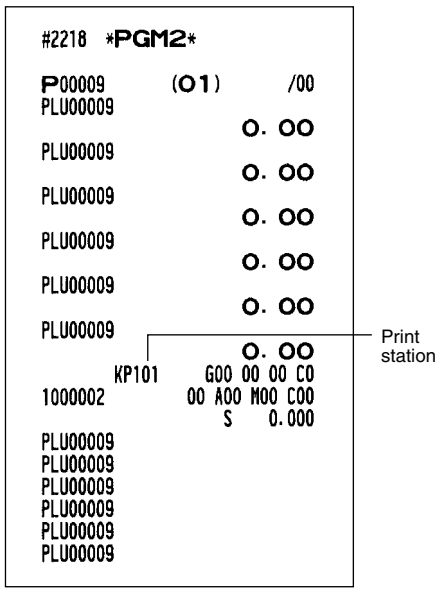
*	Item:		Selection:	Entry:
	A	Remote printer 1 output	Output	1
			Not output	0
	B	Remote printer 2 output	Output	1
			Not output	0
	C	Printing on the chit receipt	Yes	1
			No	0

Example

Key operation

2218 [•] [@/FOR]
9 [@/FOR]
101 [SBTL]
[CA/AT]

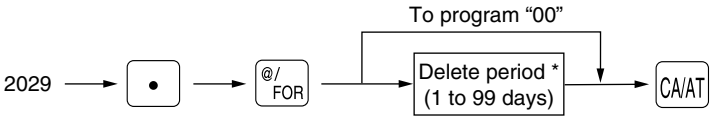
Print



■ Delete period for non-accessed UPC codes PGM 2 2029

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

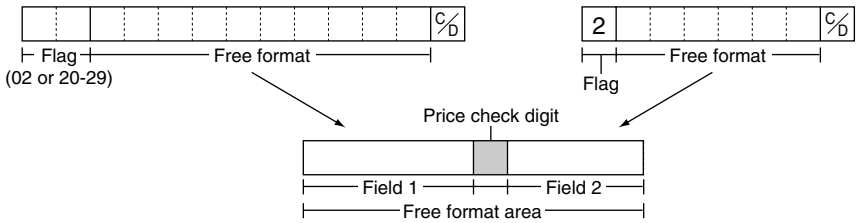
Key operation

2029 [•] [@/FOR]
60 [CA/AT]

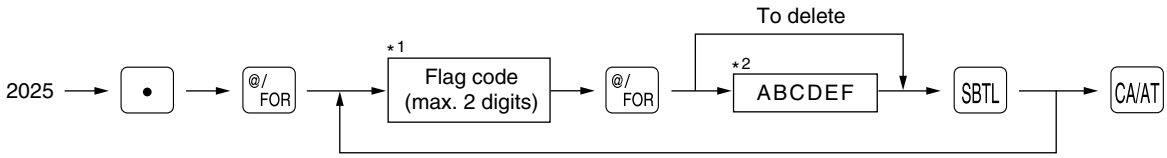
Print

■ Programming Non-PLU code format PGM 2 2025

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



Procedure



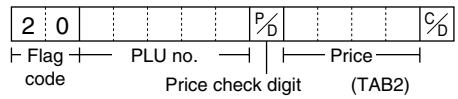
*1 Flag code: 2, 02, 20 - 29

*2

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

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

Example



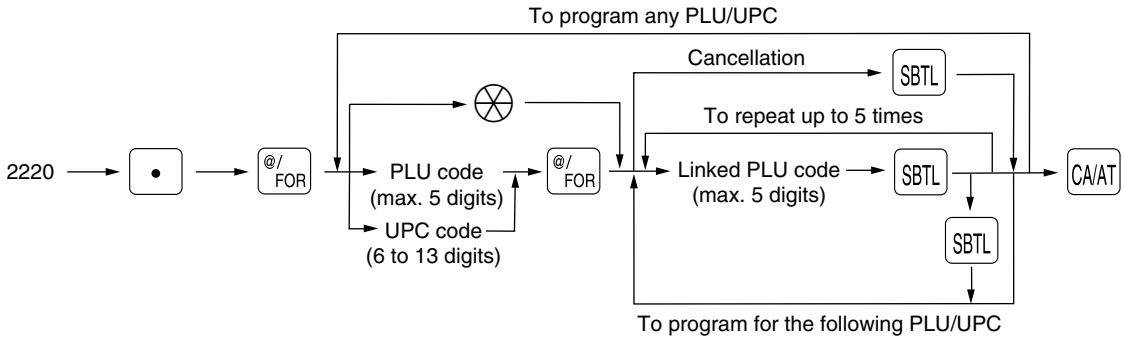
Key operation

2025 • @/FOR
20 @/FOR
540012 SBTL
CA/AT

Print

■ Link PLU/UPC link PGM 2 2220

Procedure



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

Key operation

2220 • @/FOR
21 @/FOR 25 SBTL
26 SBTL
27 SBTL
CA/AT

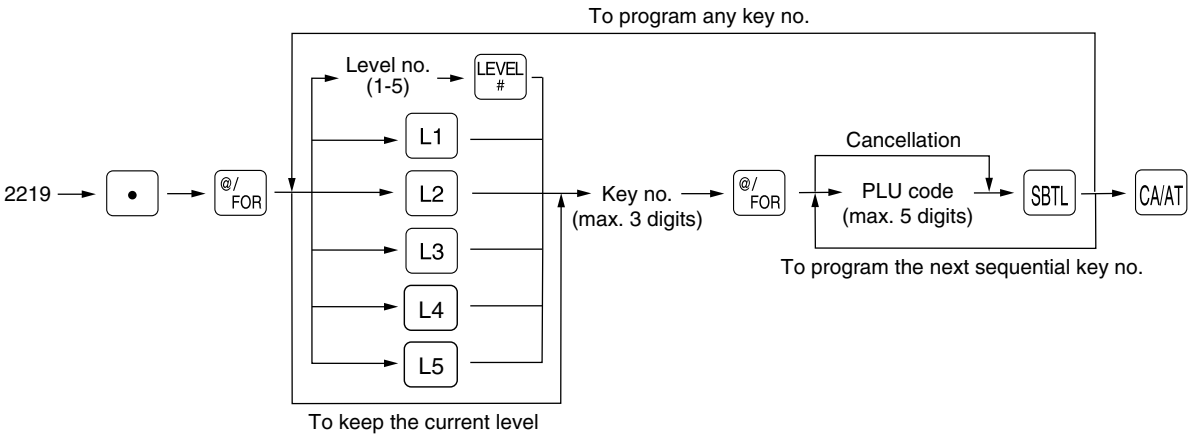
Print

#2220 *PGM2*
P00021
LP00025
P00026
P00027
Linked PLUs

■ Programming of PLU levels and direct PLU keys PGM 2 2219

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 L1, L2, L3, L4 or L5 key or enter level number and press the LEVEL # key.
For example, if you want to assign PLU level 1 and key no. 1 to a PLU code, press the L1 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



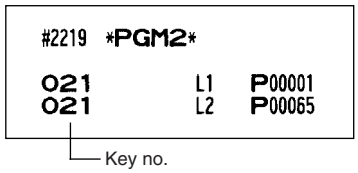
Note
- *PLU codes must have already been defined.*
- *The key number placement is determined by your local Authorized SHARP Dealer.*

Example Programming of PLU 1 (level 1) and PLU 65 (level 2) are assigned to key no. 21

Key operation

2219 • @/FOR
L1 21 @/FOR 1 SBTL
L2 21 @/FOR 65 SBTL
CA/AT

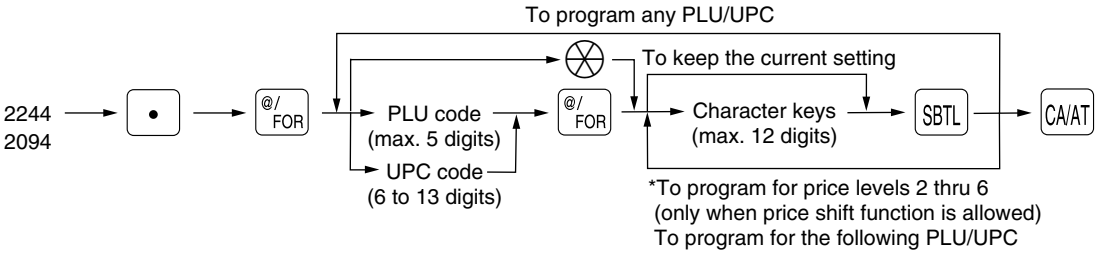
Print



■ 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



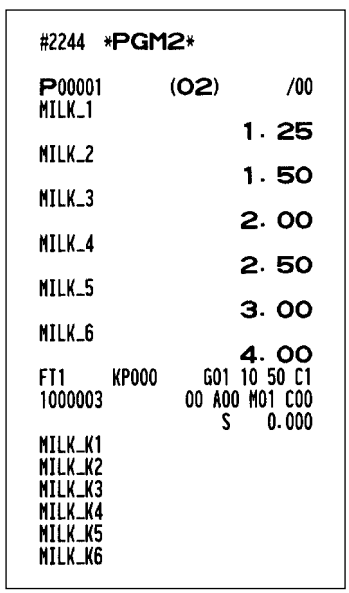
* In case that price shift function is allowed, the register prompts to enter a remote printer item level for the following level by displaying "P2" thru "P6" on the display, and when an item level of level 6 is entered, the register goes to the status for programming the following PLU/UPC. You must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

2244 • @/FOR
1 @/FOR MILK_K1 SBTL
MILK_K2 SBTL
MILK_K3 SBTL
MILK_K4 SBTL
MILK_K5 SBTL
MILK_K6 SBTL
CA/AT

Print



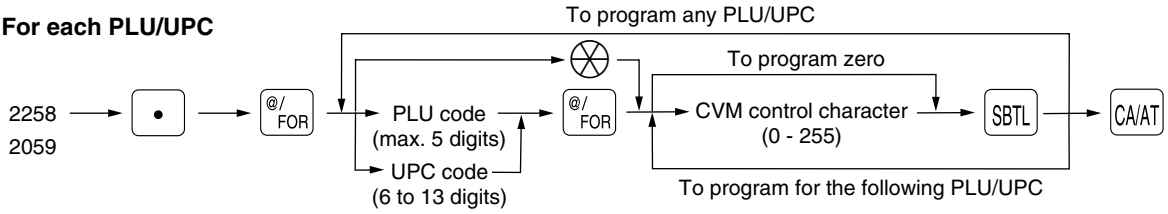
■ Color Video Monitor (CVM) control character PGM 2 2258 2234

2059 (Dynamic UPC file)

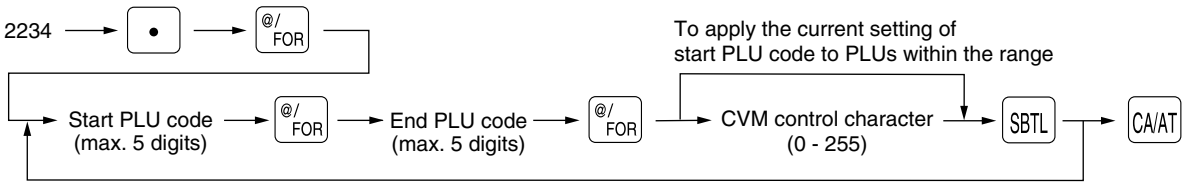
This programming enables you to assign each PLU/UPC with a number that can be used as a CVM control character. This number is converted to a two-digit character code that is transmitted for use with a CVM device.

Procedure

For each PLU/UPC



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

Key operation

2258 • @/FOR
1 @/FOR 16 SBTL
CA/AT

Print

```
#2258 *PGM2*

P00001      (02)      /00
MILK_1
                      1.25
MILK_2
                      1.50
MILK_3
                      2.00
MILK_4
                      2.50
MILK_5
                      3.00
MILK_6
                      4.00
FT1     KP000    G01 10 50 C1
1000003        10 A00 M01 C00
                  S    0.000
MILK_K1
MILK_K2
MILK_K3
MILK_K4
MILK_K5
MILK_K6
```

Character code converted

Programming the range PLU11 through 20 for CVM control character 16

For a range of PLUs

Key operation

2234 • @/FOR
11 @/FOR 20 @/FOR
16 SBTL
CA/AT

Print

```
#2234 *PGM2*

          00011-      00020
              10
```

6 Programming for miscellaneous keys

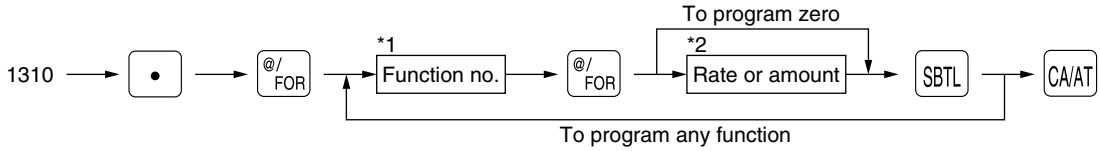
Only function keys which you have allocated on the keyboard will allow this programming.

■ Rate ([%], [CONV], commission, gratuity, [CA TIP], [CH TIP]) and discount ([⊖]) PGM 1 PGM 2

1310 **Direct**

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

Procedure



*1: Function no.

1: For the [⊖] key	7: For the [%2] key	173: For the commission sale 1	180: For the commission sale 8
2: For the [⊖2] key	8: For the [%3] key	174: For the commission sale 2	181: For the commission sale 9
3: For the [⊖3] key	9: For the [%4] key	175: For the commission sale 3	87: For the gratuity
4: For the [⊖4] key	10: For the [%5] key	176: For the commission sale 4	141: For the [CA TIP] and [CH TIP] keys (tip-in)
5: For the [⊖5] key	106: For the [CONV] key	177: For the commission sale 5	
6: For the [%] key ([%1])	107: For the [CONV2] key	178: For the commission sale 6	
	108: For the [CONV3] key	179: For the commission sale 7	

*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 [⊖] key, 10.25% to the [%] key, and 1.325 to the [CONV] key.

Key operation

1310 [•] [@/FOR]
1 [@/FOR] 1000 [SBTL]
6 [@/FOR] 10 [•] 25 [SBTL]
106 [@/FOR] 0 [•] 8063 [SBTL]
[CA/AT]

Print

```
#1310 *PGM2*

F001 (—) 1          -10.00
S                      L17
F006 %1             -10.25%
S              3    L100.00%
F106 CONV 1
                     0.8063
```

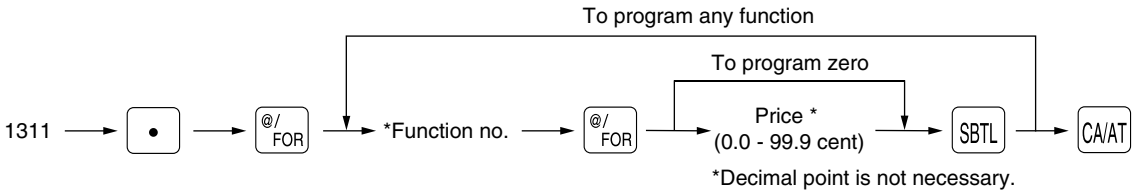
Discount amount
Percent rate
Conversion rate

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.*

■ Gas discount unit price PGM 1 PGM 2 1311

Procedure



*: Function no.

11:Gas discount when finalized by CA/AT
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 CHK
17:Gas discount when finalized by CHK2
18:Gas discount when finalized by CHK3
19:Gas discount when finalized by CHK4
20:Gas discount when finalized by CHK5
21:Gas discount when finalized by CH1
22:Gas discount when finalized by CH2
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 CH6
27:Gas discount when finalized by CH7
28:Gas discount when finalized by CH8
29:Gas discount when finalized by CH9

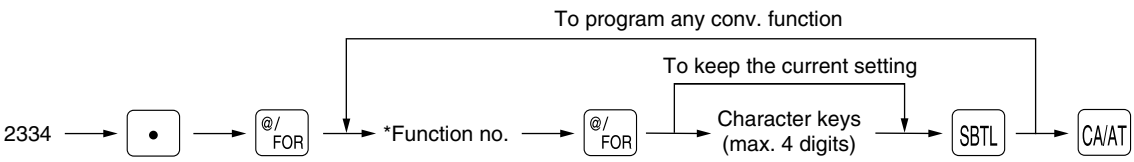
Example Programming 50.5 cents for gas discount unit price when finalized by CA/AT

Key operation	Print
1311 • @/FOR 11 @/FOR 505 SBTL CA/AT	#1311 *PGM2* F011 GAS(-)1 0.505

■ Currency description text (CONV) PGM 2 2334

You can program a maximum of 4 characters for each of the CONV thru CONV4 keys.

Procedure



*: Function no.

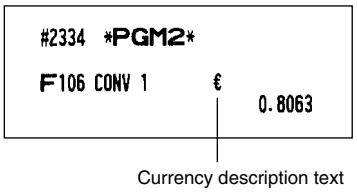
106: For the CONV key
107: For the CONV2 key
108: For the CONV3 key
109: For the CONV4 key

Example Programming "€" for the [CONV2] key

Key operation

(Entry using character code) → 2334 [•] [@/FOR] 106 [@/FOR] [SPACE] [SPACE] [SPACE] 207 [00] [SBTL] [CA/AT]

Print

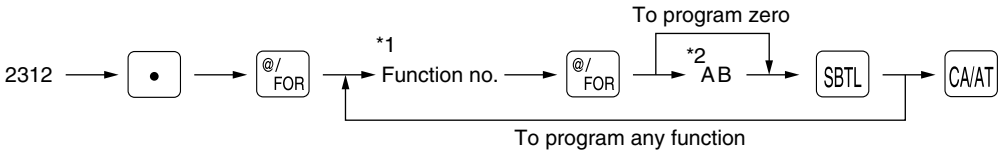


■ A limit amount (HALO) of entry ([⊖], [TAX] (for manual tax), [CA TIP], [CH TIP], [RA], [PO]) PGM 2

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.

1: For the [⊖] key	53: For the [TAX] key	141:For the [CA TIP] and [CH TIP] key
2: For the [⊖2] key	95: For the [RA] key	
3: For the [⊖3] key	96: For the [RA2] key	
4: For the [⊖4] key	97: For the [PO] key	
5: For the [⊖5] key	98: For the [PO2] key	

*2: AB is the same as A x 10^B.

A: Significant digit (0 through 9)

B: Number of zeros to follow significant digit

0 through 7 (for the [⊖] thru [⊖5], [TAX], [CA TIP] and [CH TIP] keys)

0 through 8 (for the [RA], [RA2], [PO], and [PO2] 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 AB = 17 for no limitation (for the [⊖] thru [⊖5], [TAX], [CA TIP] and [CH TIP] keys).

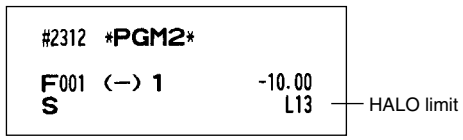
You can set up AB = 18 for no limitation (for the [RA], [RA2], [PO], and [PO2] keys).

Example Programming 13 for the [⊖] key.

Key operation

2312 [•] [@/FOR] 1 [@/FOR] 13 [SBTL] [CA/AT]

Print



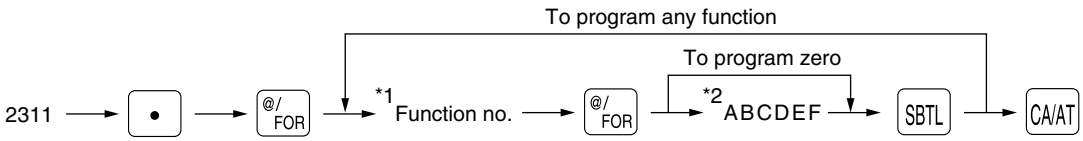
■ +/- sign, food stamp status, and tax status (%, ⊖, gratuity) PGM 2 2311

Direct

+/- 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) non-taxable amount.

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

Procedure



*1: Function no.

1: For the ⊖ key	6: For the % (%1) key	87: For the gratuity
2: For the ⊖2 key	7: For the %2 key	
3: For the ⊖3 key	8: For the %3 key	
4: For the ⊖4 key	9: For the %4 key	
5: For the ⊖5 key	10: For the %5 key	

*2:

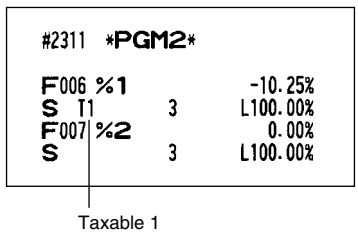
Item:		Selection:	Entry:
A	(+/-) sign	Plus	0
		Minus	1
B	Food stamp status	Ineligible	0
		Eligible	1
C	Tax 4 status	Non-taxable	0
		Taxable	1
D	Tax 3 status	Non-taxable	0
		Taxable	1
E	Tax 2 status	Non-taxable	0
		Taxable	1
F	Tax 1 status	Non-taxable	0
		Taxable	1

Example Programming ABCDEF=100001 for the % key and ABCDEF=000000 for the %2 key

Key operation

2311 • @/FOR
6 @/FOR 100001 SBTL
7 @/FOR 000000 SBTL
CA/AT

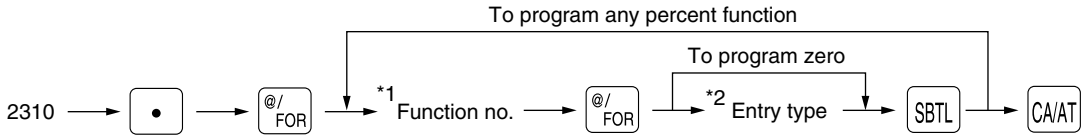
Print



■ Percent entry type (%) PGM 2 2310

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

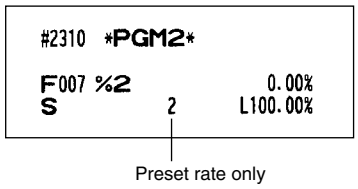
*2: Entry type
- 0: Inhibited entry
- 1: Open rate only
- 2: Preset rate only
- 3: Open rate and preset rate

Example Programming “Preset rate only” for the %2 key

Key operation

2310 • @/FOR
7 @/FOR 2 SBTL
CA/AT

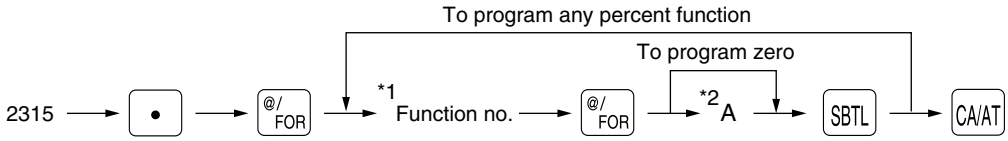
Print



■ 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.
- 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

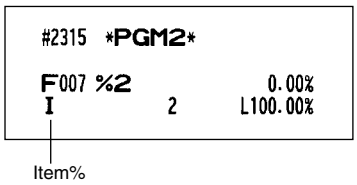
*2: A
- 0: Subtotal%
- 1: Item%

Example Programming "Item%" for the %2 key

Key operation

2315 • @/FOR
7 @/FOR 1 SBTL
CA/AT

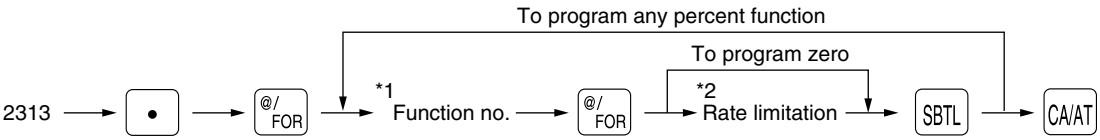
Print



■ Percent rate limitation (%) PGM 2 2313

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
- 7: For the %2 key
- 8: For the %3 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)

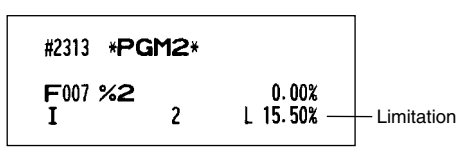
Note *The • key is needed only for fractional entry.*

Example Programming the limit to 15.5% for the %2 key

Key operation

2313 • @/FOR
7 @/FOR 15 • 5 SBTL
CA/AT

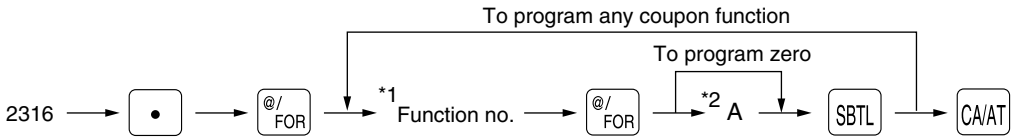
Print



■ Vendor or store coupon selection (⊖) PGM 2 2316 Direct

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 ⊖ key
- 2: For the ⊖2 key
- 3: For the ⊖3 key
- 4: For the ⊖4 key
- 5: For the ⊖5 key

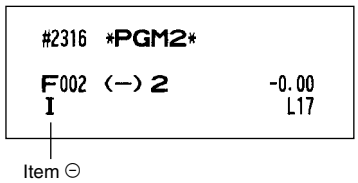
*2: A
- 0: Vendor coupon (subtotal ⊖)
- 1: Store coupon (item ⊖)

Example Programming the “Store coupon” for the ⊖2 key.

Key operation

2316 • @/FOR
2 @/FOR 1 SBTL
CA/AT

Print



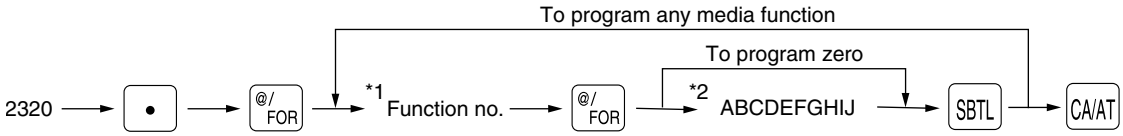
7 Programming for the media keys

■ Functional programming 1 PGM 2 2320 Direct

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 [CA/AT], [CA2] thru [CA5], [CHK], and [CHK2] thru [CHK5] keys.
You may select amount tendered compulsory or inhibited for the [CH1] thru [CH9] keys.

Procedure



*1: Function no.

89: For the [CA/AT] key
90: For the [CA2] key
91: For the [CA3] key
92: For the [CA4] key
93: For the [CA5] key
114: For the [CH1] key
116: For the [CH2] key
118: For the [CH3] key
120: For the [CH4] key
122: For the [CH5] key
124: For the [CH6] key
126: For the [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 [CHK3] key
135: For the [CHK4] key
136: For the [CHK5] key
82: For the [SRVC] key
94: For the [FS TEND] key
238: For the [FINAL] key

*2: 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

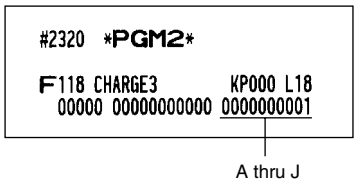
- *For the [SRVC] or [FINAL] key, always enter 0 as A thru C and E thru J.*
- *For the [FS TEND] key, always enter 0 as B, G, and J.*

Example Programming of the [CH3] key for ABCDEFGHIJ=0000000001

Key operation

2320 [•] [@/FOR]
118 [@/FOR]
0000000001 [SBTL]
[CA/AT]

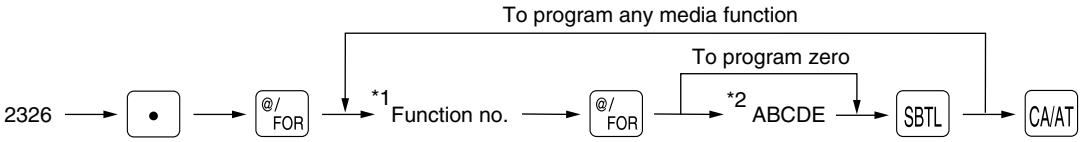
Print



■ Functional programming 2 PGM 2 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 CA/AT key	120: For the CH4 key	134: For the CHK3 key
90: For the CA2 key	122: For the CH5 key	135: For the CHK4 key
91: For the CA3 key	124: For the CH6 key	136: For the CHK5 key
92: For the CA4 key	126: For the CH7 key	110: For the EAT IN 1 key
93: For the CA5 key	128: For the CH8 key	111: For the EAT IN 2 key
114: For the CH1 key	130: For the CH9 key	112: For the EAT IN 3 key
116: For the CH2 key	132: For the CHK key	
118: For the CH3 key	133: For the CHK2 key	

*2:

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

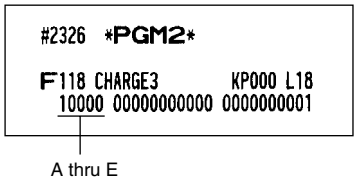
Note *For the EAT IN 1, EAT IN 2 and EAT IN 3 keys, always enter 0 as A.*

Example Programming the CH3 EAT IN 1 key to enable gas discount

Key operation

2326 • @/FOR
118 @/FOR 10000 SBTL
CA/AT

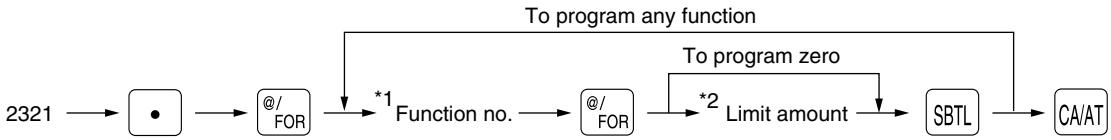
Print



■ High amount lockout (HALO) for check cashing, check change, and cash in drawer PGM 2 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

2321 • @/FOR
99 @/FOR 9999 SBTL
CA/AT

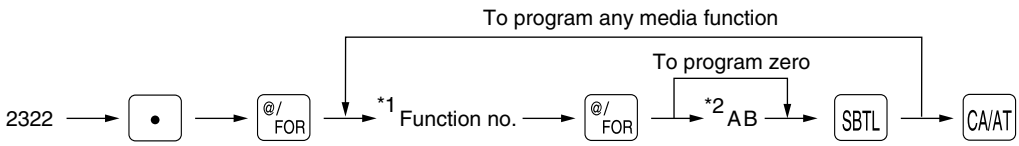
Print

```
#2321 *PGM2*
F099 CA/CHK1
                99.99
```

■ High amount lockout (HALO) of entry for media keys PGM 2 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 CA/AT key	118: For the CH3 key	132: For the CHK key
90: For the CA2 key	120: For the CH4 key	133: For the CHK2 key
91: For the CA3 key	122: For the CH5 key	134: For the CHK3 key
92: For the CA4 key	124: For the CH6 key	135: For the CHK4 key
93: For the CA5 key	126: For the CH7 key	136: For the CHK5 key
114: For the CH1 key	128: For the CH8 key	
116: For the CH2 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 AB = 18 for no limitation.

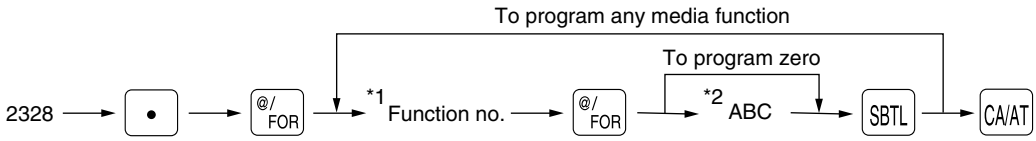
Example Setting the HALO limit to $1000.00 (15) for the CH3 key

Key operation	Print
2322 • @/FOR 118 @/FOR 15 SBTL CA/AT	#2328 *PGM2* F118 CHARGE3 KP101 L15 ← HALO 10000 00000000000 0000000001

■ Print station assignment PGM 2 2328

When you use a remote printer, consult your dealer.

Procedure



*1: Function no.

89: For the CA/AT key	120: For the CH4 key	134: For the CHK3 key
90: For the CA2 key	122: For the CH5 key	135: For the CHK4 key
91: For the CA3 key	124: For the CH6 key	136: For the CHK5 key
92: For the CA4 key	126: For the CH7 key	82: For the SRVC key
93: For the CA5 key	128: For the CH8 key	94: For the FS TEND key
114: For the CH1 key	130: For the CH9 key	238: For the FINAL key
116: For the CH2 key	132: For the CHK key	
118: For the CH3 key	133: For the CHK2 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

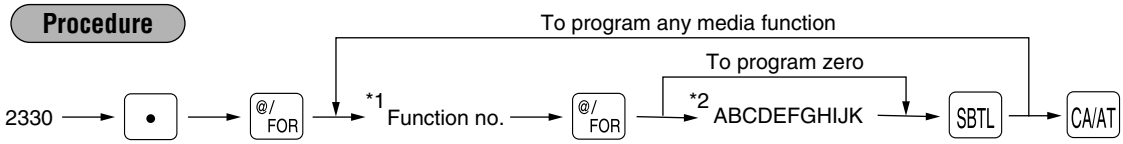
Example Programming of the CH3 key for selecting “remote printer 1 output/remote printer 2 not output/printing on chit receipt”

Key operation	Print
2328 • @/FOR 118 @/FOR 101 SBTL CA/AT	#2328 *PGM2* F118 CHARGE3 KP101 L15 ← Print station 10000 00000000000 0000000001

■ CAT programming PGM 2 2330

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

Procedure



*1: Function no.

89: For the CA/AT key
90: For the CA2 key
91: For the CA3 key
92: For the CA4 key
93: For the CA5 key
114: For the CH1 key
116: For the CH2 key
118: For the CH3 key
120: For the CH4 key
122: For the CH5 key
124: For the CH6 key
126: For the 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 CHK3 key
135: For the CHK4 key
136: For the CHK5 key
82: For the SRVC key
238: For the FINAL key

*2:

Item:		Selection:	Entry:
A	CAT transaction	Non-compulsory	0
		Compulsory	1
B	CAT action	POST-AUTH	0
		DIAL	1
		Authorization only	2
C	CAT type	CREDIT	0
		DEBIT	1
		CHECK	2
D	Card number printing	Yes	0
		No	1
E	Card number print format	Partial (printing only part of the card number)	0
		Full (printing the entire card number)	1
F	CAT signature line print	Yes	0
		No	1
G	CAT expiration printing	Yes	0
		No	1
H	Always enter 0.		0
I	Tip and total amount printing on authorization receipt	Yes	0
		No	1
J	Receipt and authorization receipt printing when the CAT entry is made at receipt OFF status	Yes	0
		No	1
K	Number of CAT authorization receipt		0 to 9

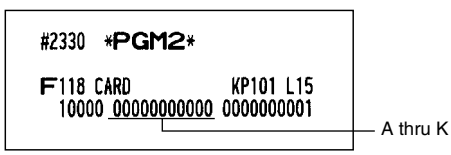
Number of CAT authorization receipt
Even when 0 is set, 1 receipt is issued.

Example Programming of the CH3 key for ABCDEFGHIJK = 00000000000.

Key operation

2330 • @/FOR
118 @/FOR
00000000000 SBTL
CA/AT

Print

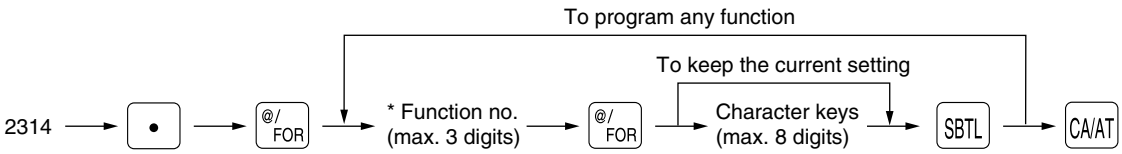


8 Programming of function text

■ Programming PGM 2 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 CH3 key

Key operation

2314 • @/FOR
118 @/FOR CARD SPACE SPACE SPACE
SBTL
CA/AT

Print

#2314 *PGM2*
F118 CARD KP101 L15
10000 00000000000 0000000001

■ List of function texts

Function no.	Key or function	In default of proramming
1	⊖1	**(–) 1**
2	⊖2	**(–) 2**
3	⊖3	**(–) 3**
4	⊖4	**(–) 4**
5	⊖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 no.	Key or function	In default of 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	**N E T 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	**V O I D**
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
221	Transaction report title	TRANS.
222	Cash in drawer report title	**C I D**
223	Commission sales report title	SALES
224	CCD report title	**C C D**
225	Server/cashier report title	SERVER
226	Hourly report title	HOURLY
227	Daily net report title	DAILY
228	GLU/PBLU report title	**G L U**
229	Non-accessed UPC report title	NO ACCES
230	Dynamic UPC report title	DYN.UPC
231	Tax report title	**T A X**
232	Non-add code text	#
233	GLU/PBLU code text	**T B L #**
234	Copy receipt title	**C O P Y**
235	Waste receipt title	WASTE
236	Bill transfer receipt title	**B. T.**
237	Bill separate receipt title	**B. S.**
238	Final (used only for PGM mode)	FINAL
239	Balance	BALANCE
240	Slip print message on journal	SLIP PR.
241	Slip next page	NEXT P.
242	Balance forward	BAL FWD
243	Tare weight	TARE WT.
244	DUE (text on display)	DUE
245	Tip due (text on display)	TIP DUE
246	TAX ST (text on display)	TAX ST
247	Gas sales subtotal (for cash 1)	GAS1 ST
248	Gas sales subtotal (for cash 2)	GAS2 ST
249	Gas sales subtotal (for cash 3)	GAS3 ST
250	Gas sales subtotal (for cash 4)	GAS4 ST
251	Gas sales subtotal (for cash 5)	GAS5 ST
252	Gas sales subtotal (for check 1)	GAS6 ST
253	Gas sales subtotal (for check 2)	GAS7 ST
254	Gas sales subtotal (for check 3)	GAS8 ST
255	Gas sales subtotal (for check 4)	GAS9 ST

Function no.	Key or function	In default of proramming
256	Gas sales subtotal (for check 5)	GAS10 ST
257	Gas sales subtotal (for charge 1)	GAS11 ST
258	Gas sales subtotal (for charge 2)	GAS12 ST
259	Gas sales subtotal (for charge 3)	GAS13 ST
260	Gas sales subtotal (for charge 4)	GAS14 ST
261	Gas sales subtotal (for charge 5)	GAS15 ST
262	Gas sales subtotal (for charge 6)	GAS16 ST
263	Gas sales subtotal (for charge 7)	GAS17 ST
264	Gas sales subtotal (for charge 8)	GAS18 ST
265	Gas sales subtotal (for charge 9)	GAS19 ST
266	AMOUNT (text on display)	AMOUNT
267	WEIGHT (text on display)	WEIGHT
268	Refund type of sales (text on display)	RF SALE
269	Price change title	PR. CHNG
270	Tip amount for tip edit	TIP AMT
271	Final balance (for closed GLU report)	FIN. BAL
272	Edit tip	EDIT TIP
273	Bill on receipt title	**B I L L**
274	RA cash total (for trans. report)	RA CASH
275	RA2 cash total (for trans. report)	RA2 CASH
276	RA check total (for trans. report)	RA CHK
277	RA2 check total (for trans. report)	RA2 CHK
278	RA charge total (for trans. report)	RA CHR
279	RA2 charge total (for trans. report)	RA2 CHR
280	RA food stamp total (for trans. report)	RA FS
281	RA2 food stamp total (for trans. report)	RA2 FS
282	PO cash total (for trans. report)	PO CASH
283	PO2 cash total (for trans. report)	PO2 CASH
284	PO check total (for trans. report)	PO CHK
285	PO2 check total (for trans. report)	PO2 CHK
286	PO charge total (for trans. report)	PO CHR
287	PO2 charge total (for trans. report)	PO2 CHR
288	PO food stamp total (for trans. report)	PO FS
289	PO2 food stamp total (for trans. report)	PO2 FS

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).*

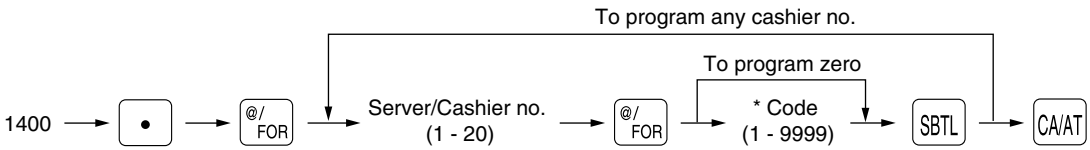
9 Server/Cashier programming

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 PGM 1 PGM 2 1400

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

Key operation

1400 • @/FOR
1 @/FOR 1111 SBTL
4 @/FOR 1014 SBTL
CA/AT

Print

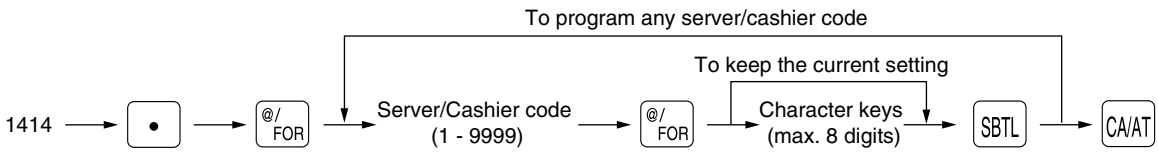
```
#1400  *PGM2*

01SRV# SERV.01          1111
0001-9999      0.00%    0D1
04SRV# SERV.04          1014
0001-9999      0.00%    0D1
```

Server/Cashier code

■ Server/Cashier name PGM 1 PGM 2 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



Note *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

Key operation

1414 • @/FOR
1111 @/FOR DICK SBTL
1014 @/FOR PETER SBTL
CA/AT

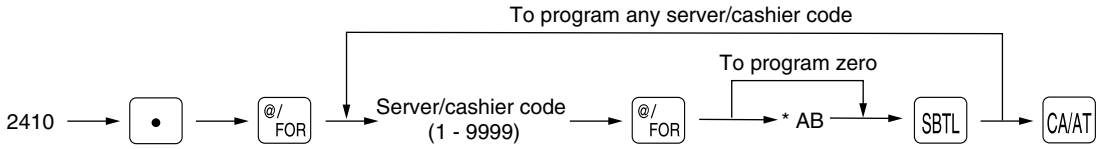
Print

```
#1414  *PGM2*

01SRV# DICK             1111
0001-9999      0.00%    0D1
04SRV# PETER            1014
0001-9999      0.00%    0D1
```

Server/Cashier name

■ Functional programming PGM 2 2410

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 Programming AB=01 for server/cashier code 1111

Key operation

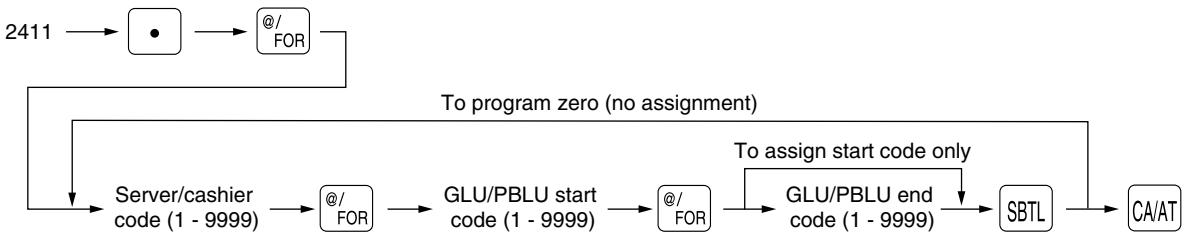
2410 • @/FOR
1111 @/FOR 01 SBTL
CA/AT

Print

```
#2410 *PGM2*

01SRV# DICK              1111
0001-9999      0.00%     0D1
```

■ GLU/PBLU code range assignment PGM 2 2411

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

Key operation

2411 • @/FOR
1111 @/FOR 1 @/FOR 100 SBTL
CA/AT

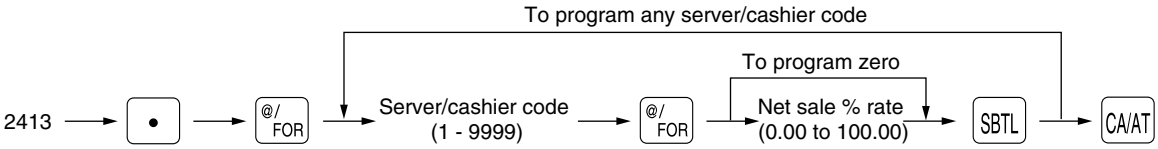
Print

```
#2411 *PGM2*

87SRV# DICK              1111
0001-0100      0.00%     0D1
```

GLU/PBLU range

■ Net sales % rate PGM 2 2413

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

Key operation	Print
2413 • @/FOR 1111 @/FOR 20 SBTL CA/AT	#2413 *PGM2* 01SRV# DICK 1111 0001-9999 20.00% 0D1

10 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 X1/Z1 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 (⊖) 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

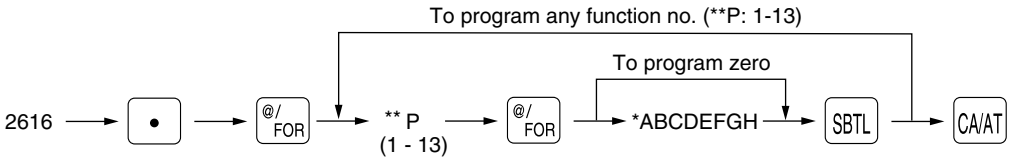
- Automatic return mode: This mode automatically shifts the price level back to price 1 (ordinary level) after the entry.
- Lock shift mode: This mode holds the current price level until making a price shift selection (pressing the price shift key).

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:	Selection:	Entry:
A	OP X/Z mode	Enable	0
		Disable	1
B	Paid-out in REG mode	Enable	0
		Disable	1
C	Refund type of sale in the REG mode	Enable	0
		Disable	1
D	Refund and return in the REG mode	Enable	0
		Disable	1
E	Direct void in REG mode	Enable	0
		Disable	1
F	Indirect void in the REG mode	Enable	0
		Disable	1
G	Subtotal void in REG mode	Enable	0
		Disable	1
H	Validation printing in a refund and return entry	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 (⊖) entry	Non-compulsory	0
		Compulsory	1

**P: 3

*	Item:		Selection:	Entry:
	A	Always enter 0.		0
	B	Always enter 0.		0
	C	Zero skip in server/cashier report	Yes	0
			No	1
	D	Zero skip in transaction report	Yes	0
			No	1
	E	Zero skip in department report	Yes	0
			No	1
	F	Zero skip in PLU/UPC report	Yes	0
			No	1
	G	Zero skip in hourly report	Yes	0
			No	1
	H	Zero skip in daily net report	Yes	0
			No	1

**P: 4

*	Item:		Selection:	Entry:
	A	Share % printing in dept. report	Yes	0
			No	1
	B	Tip entry method	Amount entry	0
			Fixed rate entry	1
	C	Always enter 0.		0
	D	Always enter 0.		0
	E	Always enter 0.		0
	F	Cover count entry	Non-compulsory	0
			Compulsory	1
	G	Always enter 0.		0
	H	Automatic return mode for PLU level shift	After each item	0
			After each receipt	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	0
			MGR mode only	1
	G	PLU/UPC price shift mode	Automatic return mode	0
			Lock shift mode	1
	H	Automatic return mode for PLU/UPC price level	After each item	0
			After each receipt	1

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).*

**P: 6 (ABCDEFGH: Always enter 0.)

**P: 7

*	Item:		Selection:	Entry:
	A	Void mode in REG mode	Enable	0
			Disable	1
	B	Always enter 0.		0
	C	No sale in REG mode	Enable	0
			Disable	1
	D	Finalization when the subtotal amount is zero in the REG mode	Enable	0
			Disable	1
	E	Item printing in GLU/PBLU transaction on the slip	Yes	0
			No	1
	F	Tip-paid operation in REG mode	Enable	0
			Disable	1
	G	Transfer-in/out operation in REG mode	Enable	0
			Disable	1
	H	Always enter 0.		0

**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

**P: 9

*	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:
	A and **B**	Always enter 0.		0
	C	Learning function of UPC entry	Yes	0
			No	1
	D to **H**	Always enter 0.	(Fixed position)	0

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

**P: 12

*	Item:		Selection:	Entry:
	A to **G**	Always enter 0.		0
	H	Price change function in REG mode	Enable	0
			Disable	1

**P: 13

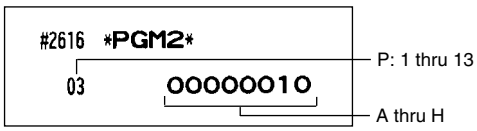
*	Item:		Selection:	Entry:
	A to **C**	Always enter 0.		0
	D	Printing of the price shift text on the receipt/journal	Yes	0
			No	1
	E	Always enter 0.		0
	F	Treating the EAN8 code (200XXXXC/D)	Yes	0
			No	1
	G	Always enter 0.		0
	H	Price entry after ISBN/ISSN code entry	Compulsory	0
			Inhibited	1

Example 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.

Key operation

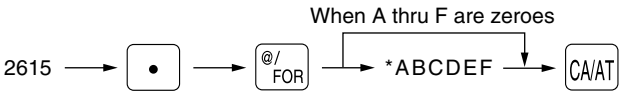
2616 [•] [@/FOR]
3 [@/FOR] 00000010 [SBTL]
[CA/AT]

Print



■ Programming the parameter of the slip printer PGM 2 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

Key operation

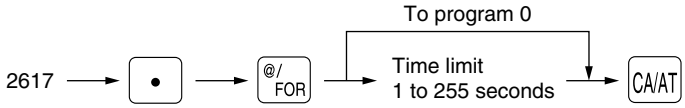
2615 [•] [@/FOR]
009910 [CA/AT]

Print

■ Setting the time limit for THE TILL TIMER™ PGM 2 2617

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™ can be preset for 0 to 255 seconds. The count is printed on the general report and cashier report.

Procedure



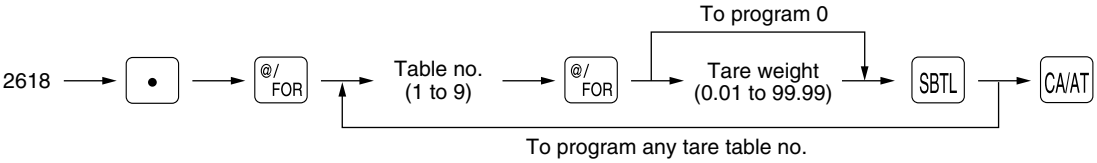
Example Setting the time limit as 30 (seconds).

Key operation	Print
2617 • @/FOR 30 CA/AT	#2617 *PGM2* 030

■ Scale tare table PGM 2 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



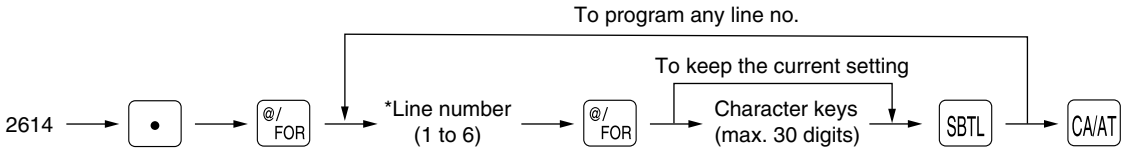
Example To assign the tare weight 0.20 lbs to tare table no. 1

Key operation	Print
2618 • @/FOR 1 @/FOR 20 SBTL CA/AT	#2618 *PGM2* 1 0.20 Table no. Tare weight

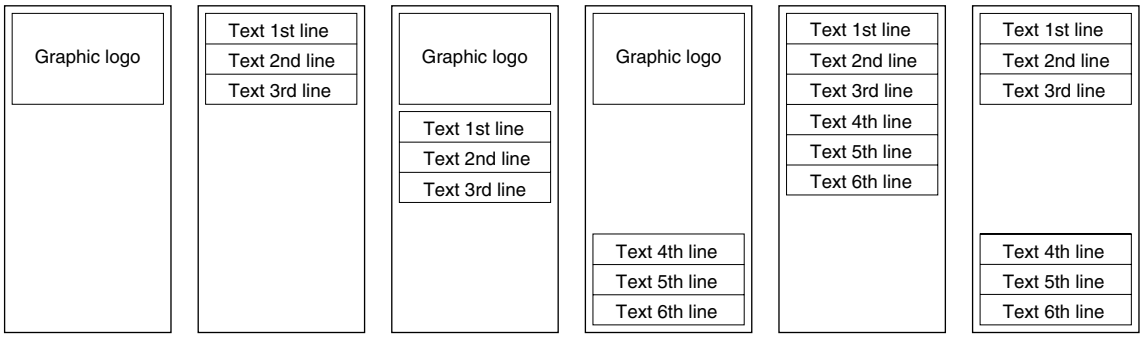
■ Programming of logo messages PGM 2 2614

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



* "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

Key operation

2614 • @/FOR
1 @/FOR (SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)
(DC) Y O U R (DC)
(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE) SBTL
2 @/FOR (SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)
(DC) S T O R E (DC)
(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE) SBTL
3 @/FOR (SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)(SPACE)
(DC) M E S S A G E (DC)
(SPACE)(SPACE)(SPACE) SBTL
CA/AT

((SPACE):Space key)

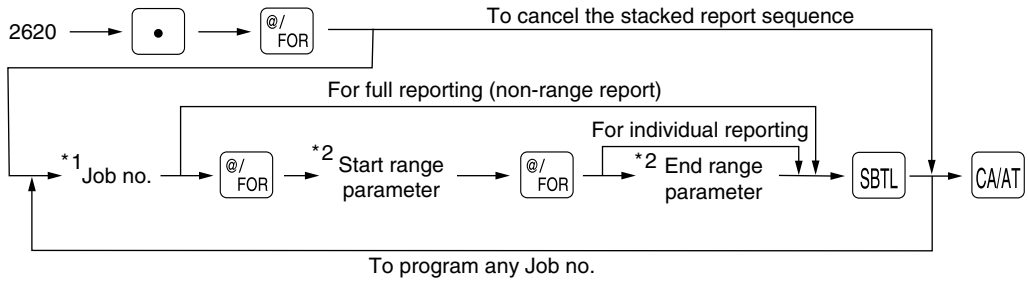
Print

#2614 *PGM2*
YOUR
STORE
MESSAGE

■ Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence PGM 2 2620

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

Procedure



Note

- *A maximum of 70 steps are programmable. "1 step" means the memory size used for one no-range 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 (1 thru 9999)	6 steps

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

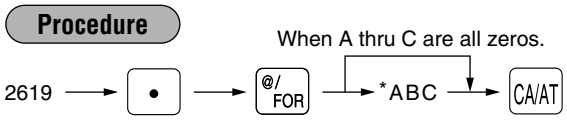
Example To print reports 10 and 13 as a stacked report.

Key operation	Print
2620 • @/FOR 10 SBTL 13 SBTL CA/AT	#2620 *PGM2* 10 13

■ Setting the time range for hourly reports PGM 2 2619

You can set the time range for the hourly report.

Procedure



*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.
BC: Starting time (hour = 00 to 23)

Example Setting the time range to 60 minutes with the starting time being set at 7:00

Key operation	Print
2619 • @/FOR 107 CA/AT	#2619 *PGM2* 1 07

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

■ Programming of power save mode PGM 2 2689

Procedure

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

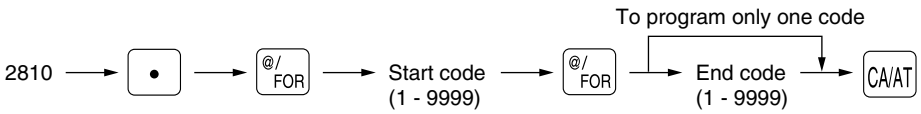
Example

Key operation	Print
2689 • @/FOR 0030 CA/AT	#2689 *PGM2* 0 030

■ Available GLU/PBLU codes PGM 2 2810

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

Procedure



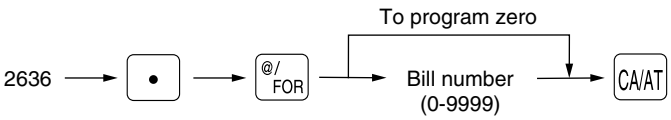
Example Programming 1 for start code and 1000 for end code

Key operation	Print
2810 • @/FOR 1 @/FOR 1000 CA/AT	#2810 *PGM2* 0001-1000

■ 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



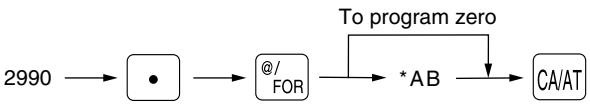
Example Starting bill number from 1

Key operation	Print
2636 • @/FOR 0 CA/AT	#2636 *PGM2* 0000

■ Functional programming for the printer PGM 2 2990

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

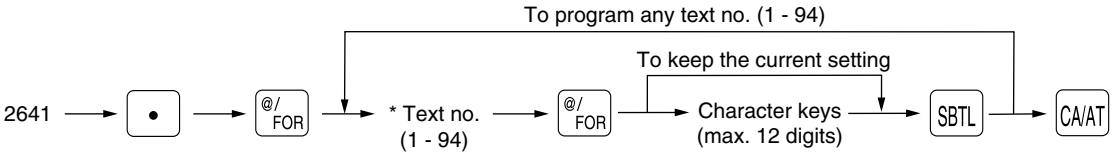
Example Programming “100% for standard density”

Key operation	Print
2990 • @/FOR 50 CA/AT	#2990 *PGM2* 50

■ Editing guidance/error messages PGM 2 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

Key operation	Print
2641 • @/FOR 1 @/FOR ENTRY SPACE ERROR SBTL CA/AT	#2641 *PGM2* 01 ENTRY ERROR

■ LIST OF GUIDANCE/ERROR MESSAGES

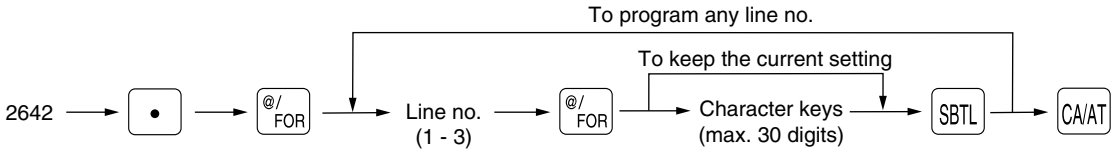
Text no.	Description	In default of programming
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPERATION
3	Desired code is not programmed yet.	NO RECORD
4	(Reserved)	
5	Secret code error	SECRET CODE
6	Code is not free	NOT FREE
7	Memory is full.	MEMORY FULL
8	Insert slip paper.	INSERT SLIP
9	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 → 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	**D E L E T E**
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

■ Validation message PGM 2 2642

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

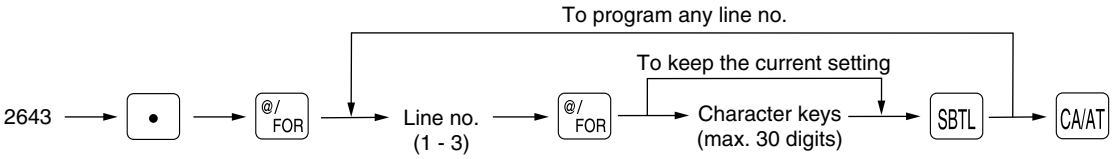
Key operation	Print
2642 • @/FOR 3 @/FOR FOR SPACE DEPOSIT SPACE ONLY SBTL CA/AT	#2642 *PGM2* FOR DEPOSIT ONLY

Note *The PRINT key must be placed on the keyboard.*

■ Slip printer’s logo message PGM 2 2643

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

Procedure



Example Programming “TEXT1” for the slip printer’s logo message

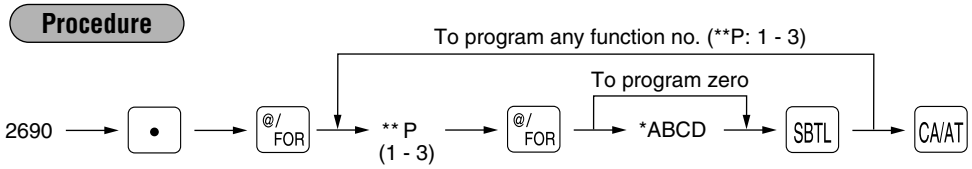
Key operation	Print
2643 • @/FOR 1 @/FOR TEXT1 SBTL CA/AT	#2643 *PGM2* TEXT1

Note *The SLIP key must be placed on the keyboard.*

■ RS-232C channel assignment PGM 2 2690

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



** P: 1

*	Item:		Selection:	Entry:
	A	Channel no. for the ON-LINE communication	Not connected	0
			Standard channel 1	1
			Standard channel 2	2
	B	Channel no. for print data sending (CVM)	Not connected	0
			Standard channel 1	1
			Standard channel 2	2
	C	Channel no. for the scale	Not connected	0
			Standard channel 1	1
			Standard channel 2	2
	D	Channel no. for the coin dispenser	Not connected	0
			Standard channel 1	1
			Standard channel 2	2

** P: 2

*	Item:		Selection:	Entry:
	A	Channel no. for the barcode reader	Not connected	0
			Standard channel 1	1
			Standard channel 2	2
	B	Channel no. for the remote printer 1	Not connected	0
			Standard channel 1	1
			Standard channel 2	2
	C	Channel no. for the remote printer 2	Not connected	0
			Standard channel 1	1
			Standard channel 2	2
	D	Always enter 0.		0

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	Not connected	0
		(see below for the selection)	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.

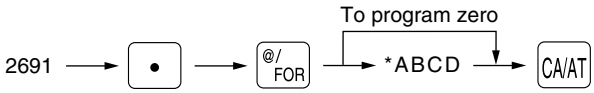
Note
- *Never enter any number other than 0, 1 and 2.*
- *The data backup function always uses standard channel 1.*

Example Assigning channel 1 to the slip printer TM-295

Key operation	Print
2690 [•] [@/FOR] 3 [@/FOR] 0100 [SBTL] [CA/AT]	#2690 *PGM2* 3 0100

■ Barcode reader programming PGM 2 2691

Procedure



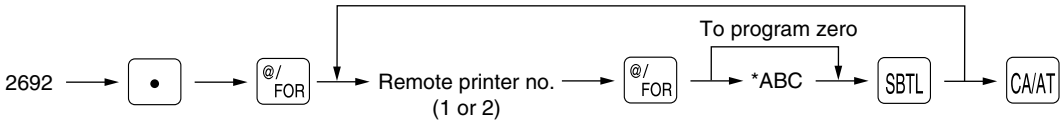
*	Item:		Selection:	Entry:
	A	Data bit	7 bits	1
			8 bits	0
	B	Parity bit	Non parity	2
			Odd parity	1
			Even parity	0
	C	Stop bit	1 bit	1
			2 bits	0
	D	Transmission speed	19200 bps	2
			9600 bps	1
			4800 bps	0

Example

Key operation	Print
2691 [•] [@/FOR] 1110 [CA/AT]	#2691 *PGM2* 1110 — ABCD

■ Remote printer assignment PGM 2 2692

Procedure



*	Item:		Selection:	Entry:
	A	Logo text printing	Not print	0
			Print	1
	B	Auto cutter function	Disable	0
			Enable	1
	C	Type of the printer	TM-U200 or TM-U230	0
			TM-U220 (type B only)	1
			TM-T88(3)	2
			TM-T88(3)+Logo	3

Example

Key operation

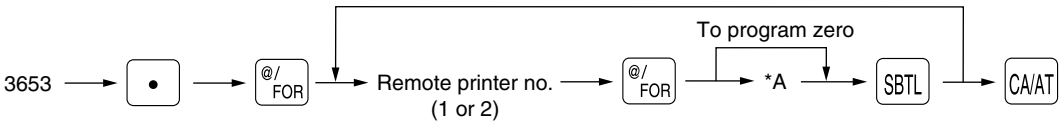
2692 • @/FOR
1 @/FOR 100 SBTL
CA/AT

Print

#2692 *PGM2*
1 100

■ 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

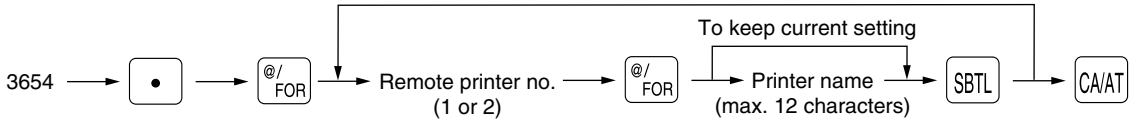
3653 • @/FOR
1 @/FOR 2 SBTL
CA/AT

Print

#3653 *PGM2*
KP1 00000
KP-2
Remote printer 2

■ Remote printer name PGM 2 3654

Procedure

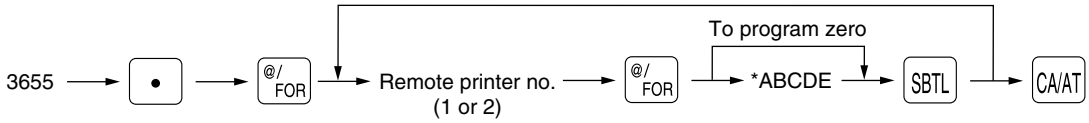


Example

Key operation	Print
3654 • @/FOR 1 @/FOR KP1 SBTL CA/AT	#3654 *PGM2* KP1 KP1 00000 KP-2 Printer name

■ Print format for remote printer PGM 2 3655

Procedure



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

Taxable status print

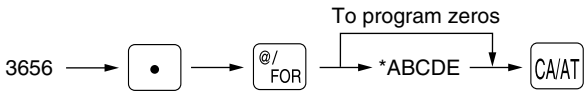
Taxable status printing is allowed only when "amount print" (parameter E) is set to "Print".

Example

Key operation	Print
3655 • @/FOR 1 @/FOR 00000 SBTL CA/AT	#3655 *PGM2* KP1 KP1 00000 KP-2 Print format

■ Chit receipt format PGM 2 3656

Procedure



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

Taxable status print

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

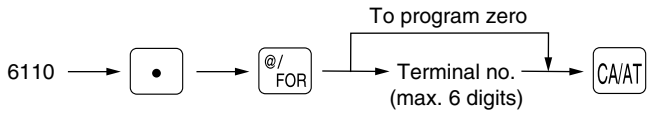
Example

Key operation	Print
3656 • @/FOR 00000 CA/AT	#3656 *PGM2* CHIT FORMAT 00000

■ RS-232C interface PGM 2 6110 6111 6112 6113 6115 6212 6213 6220

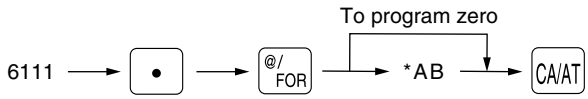
Online terminal number

Procedure



Transmission line form system

Procedure



*	Item:		Selection:	Entry:
	A	Sending of the CI signal	No	0
			Sending	1
	B	Line form	Full duplex system	0
			Half duplex system	1

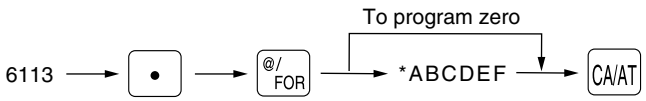
Functional programming

Procedure

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

Start code and end code

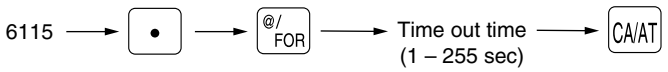
Procedure



* ABC: Start code (000 – 127)
  DEF: End code (000 – 127)

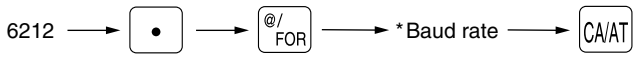
Time out setting

Procedure



Baud rate specification for print data sending

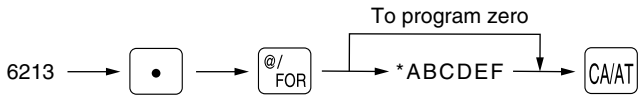
Procedure



* Baud rate
  4: 4800 bps 5: 9600 bps 6: 19200 bps 7: 38400 bps

Start/end code specification for print data sending

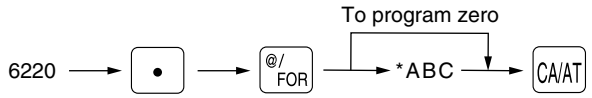
Procedure



* ABC: Start code - 000 to 127
  DEF: End code - 000 to 127

Functional selection for print data sending

Procedure

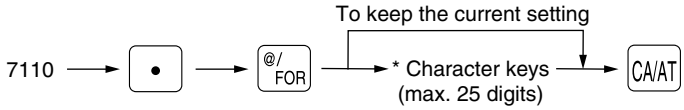


*	Item:		Selection:	Entry:
	A	Sensing of DR signal	Yes	0
			No	1
	B	Sensing of CS signal	Yes	0
			No	1
	C	Sending of all print data	Disable	0
			Enable	1

■ Programming the CAT interface PGM 2 7110 7111 7112 7113 7114 7115 7116

Phone number for dial out

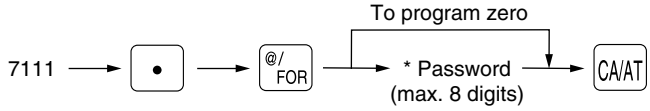
Procedure



* The valid characters for dialing are “0 – 9”, “W” and “,”.

Password for dial out

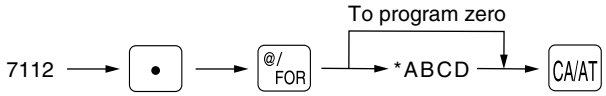
Procedure



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

Functional selection

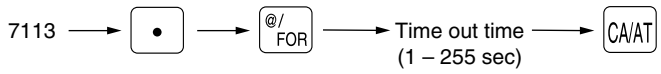
Procedure



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

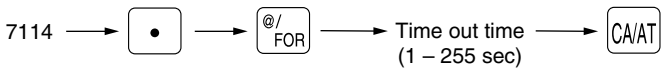
Time out setting for time 1 (reading a credit/debit card)

Procedure



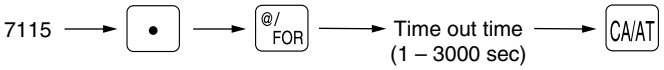
Time out setting for time 2 (for the response of authorization)

Procedure



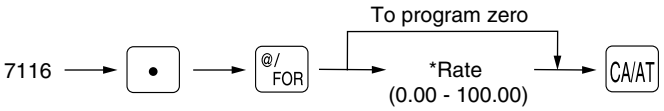
Time out setting for time 3 (for the reading of dial in/out)

Procedure



Allowed cash tip rate for authorization

Procedure



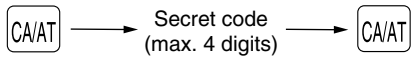
* You need a decimal point for fractional rate entry.

■ Secret codes to control access to the PGM1 mode, X1/Z1 mode and X2/Z2 mode PGM 2 2630 2631 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

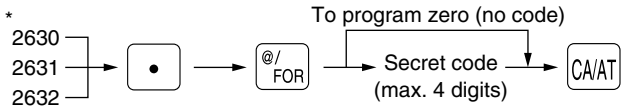


Note

- *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

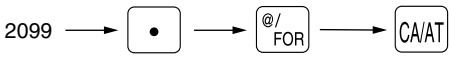
Example Programming secret code 1234 for X1/Z1 mode

Key operation	Print
2631 • @/FOR 1234 CA/AT	#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

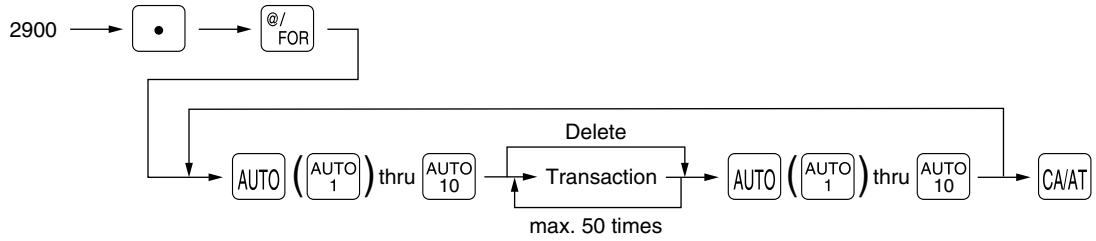



```
#2099 *PGM2*

5099887654302#(03)        /00
DPT.03
                          7.00
FT1     KP000     G00 00 00 C3
0000002         00 A00 M00 C00

4901305920795#(01)        /00
DPT.01
                         12.50
        KP000     G00 00 00 C1
0000002         00 A00 M00 C00
```

■ 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 2 key as follows:
AUTO; entering a $1.50 item (PLU2) and a $1.00 item (dept. 3)
AUTO 2; selling a $5.00 -programmed- item (dept. 2) for cash

Key operation

2900 • @/FOR AUTO

AUTO1 setting → 2 100 3 AUTO

AUTO2 setting → 2 AUTO 2 CA/AT AUTO 2 CA/AT

Print

```
#2900 *PGM2*
#01
                L1   P00002
                     1  KEY
                     0  KEY
                     0  KEY
                       DO3
#02
                       DO2
                     CA/AT
```

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 [@/FOR] [3]
[CA/AT]

Print

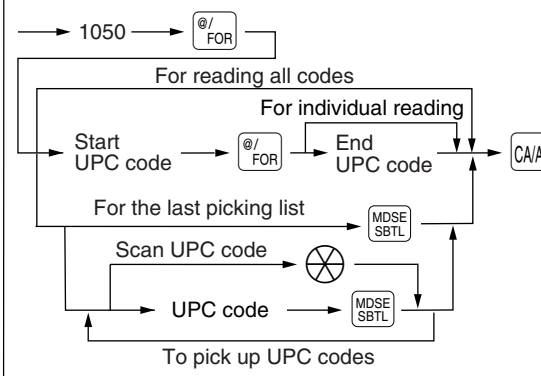
```
08/27/2004          123456
#1197      2:04PM PETER  1014

      **TRAINING**
DPT.02                T1 $10.00
                   3 @ $1.50
DPT.03                T1 $4.50
MDSE ST                 $14.50
TAX1                     $0.87

CASH                  $15.37
```

12 Reading stored programs

Your machine allows you to read program stored in the PGM1 and PGM2 modes.

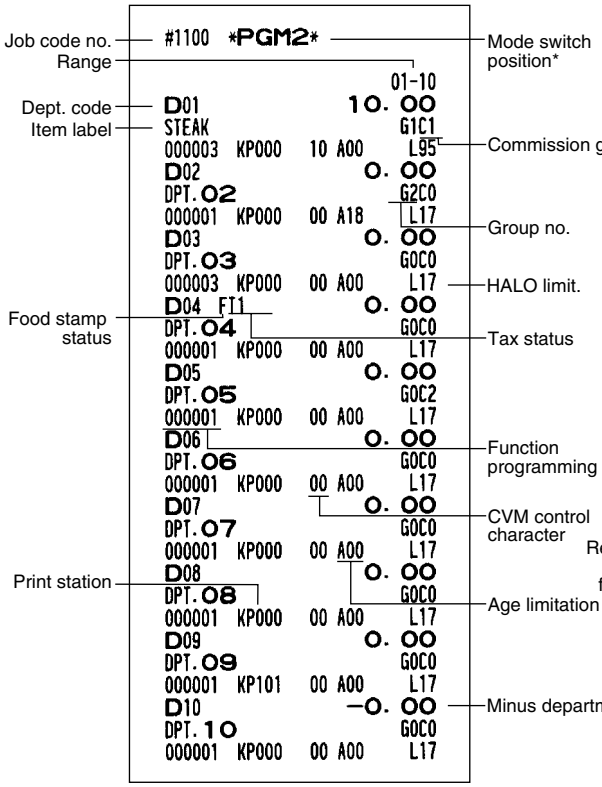
■ Program details and procedures for their reading

Program for:		Mode switch position	Job code no.	Procedure	Related job code nos.
1	Departments	PGM2 or PGM1	1100	→ 1100 → [@/FOR] → For reading all codes / For individual reading: Start dept. code → [@/FOR] → End dept. code → [CA/AT]	1110, 2110, 2111, 2112, 2114, 2115, 2116, 2180, 2118, 2158
2	PLUs/UPCs	PGM2 or PGM1	1200	→ 1200 → [@/FOR] → For reading all codes / For individual reading: Start PLU/UPC code → [@/FOR] → End PLU/UPC code → [CA/AT]; For the last picking list → [MDSE SBTL]; Scan UPC code; PLU/UPC code → [MDSE SBTL]; To pick up PLU/UPC codes	1200, 1210, 1211, 2210, 2211, 2217, 2214, 2215, 2222, 2230, 2231, 2232, 2235, 2236, 2280, 2218, 2216, 2234, 2244, 2258
3	Key nos. for departments and PLUs	PGM2	2119	→ 2119 → [@/FOR] → [CA/AT]	2119, 2219
4	Link PLUs/UPC link	PGM2	2220	→ 2220 → [@/FOR] → For reading all codes / For individual reading: Start PLU/UPC code → [@/FOR] → End PLU/UPC code → [CA/AT]	2220
5	Set PLUs	PGM2	2221	→ 2221 → [@/FOR] → For reading all codes / For individual reading: Start PLU code → [@/FOR] → End PLU code → [CA/AT]	2221
6	Mix-and-match table	PGM2	2225	→ 2225 → [@/FOR] → [CA/AT]	2225
7	Condiment table	PGM2	2223	→ 2223 → [@/FOR] → [CA/AT]	2223
8	UPC's function	PGM2	2025	→ 2025 → [@/FOR] → [CA/AT]	2025, 2029

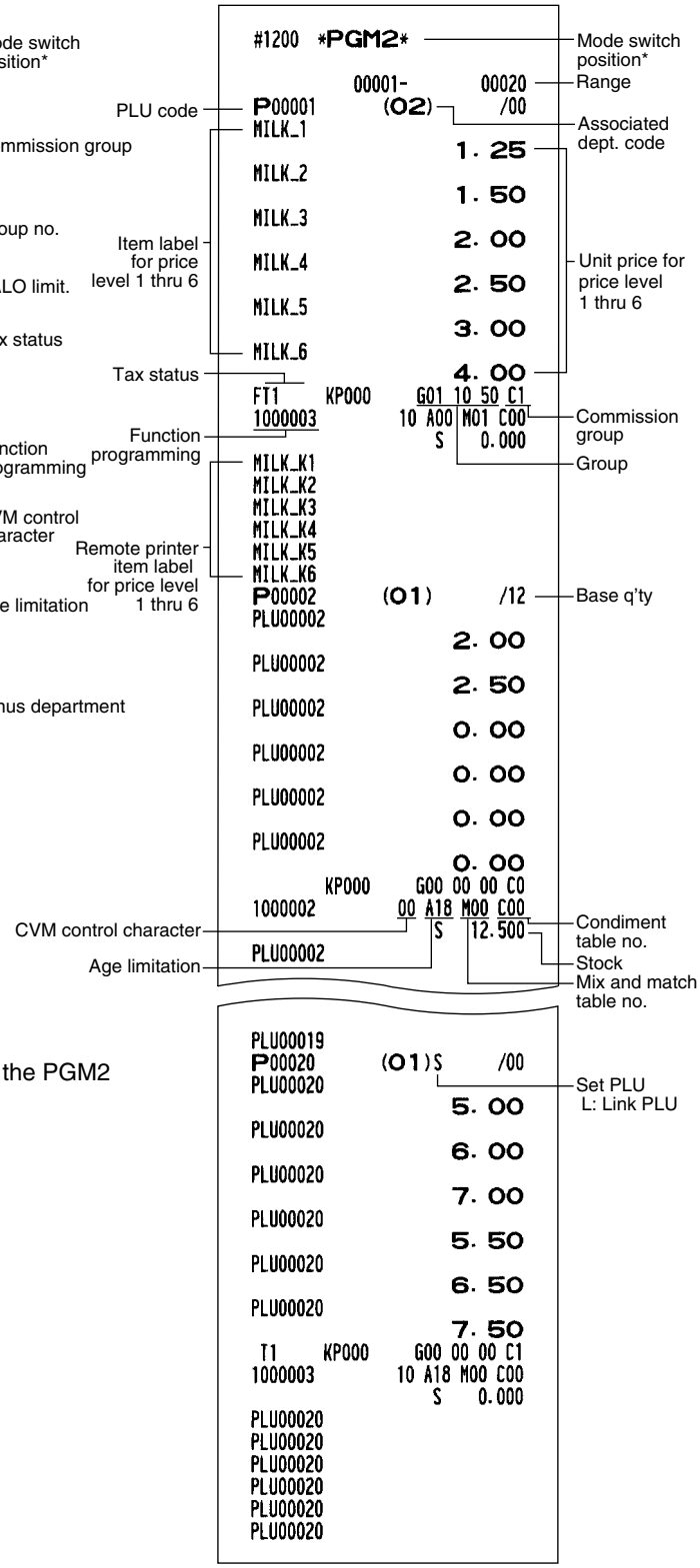
Program for:		Mode switch position	Job code no.	Procedure	Related job code nos.
9	Dynamic UPCs	PGM2 or PGM1	1050		1050, 1060, 1061, 2059, 2060, 2061, 2064, 2065, 2066, 2067, 2068, 2081, 2094
10	Dept. /PLU/UPC group text	PGM2 or PGM1	2350	→ 2350 → @/FOR → CA/AT	2350, 2351
11	Servers/cashiers	PGM2 or PGM1	1400	→ 1400 → @/FOR → CA/AT	1400, 1414, 2410, 2411 2413
12	GLU/PBLU code	PGM2	2800	→ 2800 → @/FOR → CA/AT	2810
13	Function preset 1	PGM2 or PGM1	1300	→ 1300 → @/FOR → CA/AT	1310, 1311, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2320, 2321, 2322, 2326, 2334, 2328, 2330
14	Function preset 2	PGM2	2600	→ 2600 → @/FOR → CA/AT	2614, 2615, 2616, 2617, 2618, 2619, 2620, 2630, 2631, 2632, 2636, 2689, 2690, 2691, 2692
15	Messages	PGM2	2640	→ 2640 → @/FOR → CA/AT	2641, 2642, 2643
16	Tax tables and rates	PGM2 or PGM1	2700	→ 2700 → @/FOR → CA/AT	2710, 2711
17	Auto keys	PGM2	2900	→ 2900 → @/FOR → CA/AT	2900
18	Thermal printer	PGM2	2990	→ 2990 → @/FOR → CA/AT	2990
19	Remote printer	PGM2	3650	→ 3650 → @/FOR → CA/AT	3653, 3654, 3655, 3656
20	On-line preset	PGM2 or PGM1	6110	→ 6110 → @/FOR → CA/AT	6110, 6111, 6112, 6113, 6115, 6212, 6213, 6220
21	CAT preset	PGM2	7110	→ 7110 → @/FOR → CA/AT	7110, 7111, 7112, 7113, 7114, 7115, 7116

■ Sample printouts

1 Reading of programmed items for departments (Reading in the PGM1 and PGM2 modes)

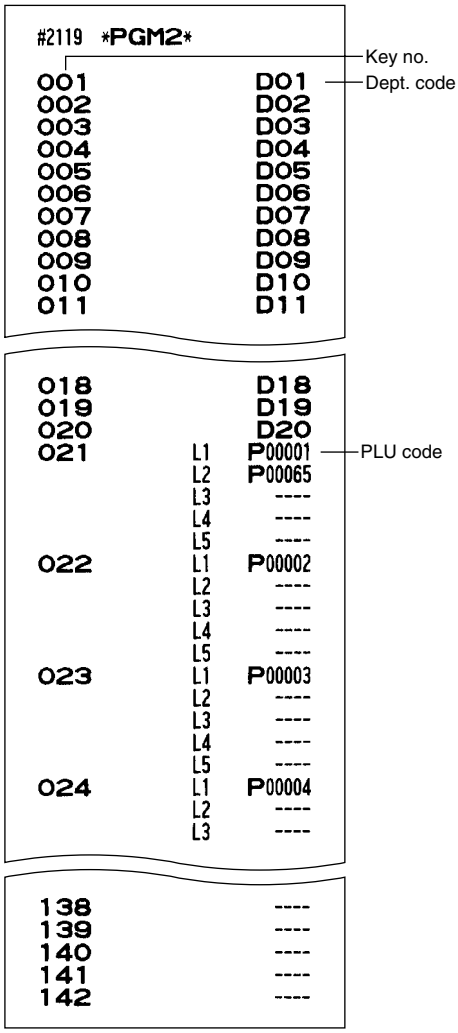


2 Reading of programmed items for PLUs/UPCs (Reading in the PGM1 and PGM2 modes)

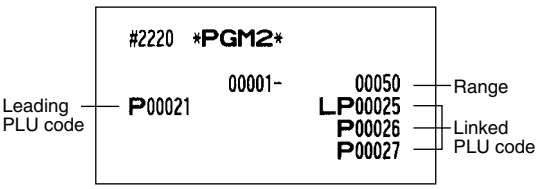


* When you take this report in the PGM1 mode, the PGM2 indication is replaced by “PGM1”.

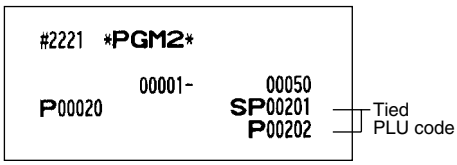
3 Reading of programmed key nos. for departments and PLUs (Reading in the PGM2 mode)



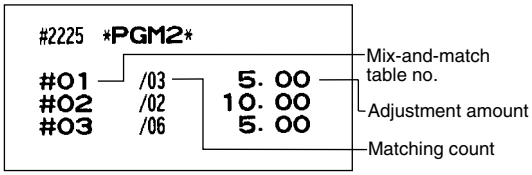
4 Reading of programmed items for link PLUs (Reading in the PGM2 mode)



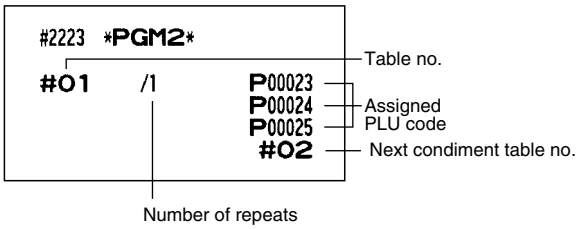
5 Reading of programmed set PLUs (Reading in the PGM2 mode)



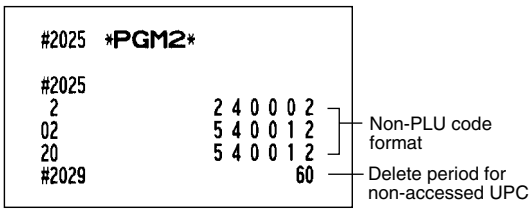
6 Reading of mix-and-match table (Reading in the PGM2 mode)



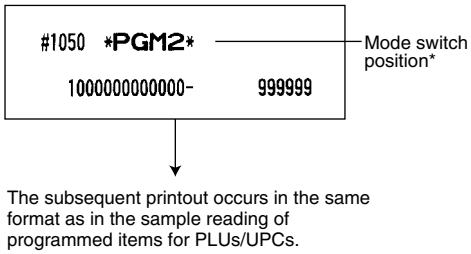
7 Reading of condiment table (Reading in the PGM2 mode)



8 Reading of programmed UPC's function (Reading in the PGM2 mode)



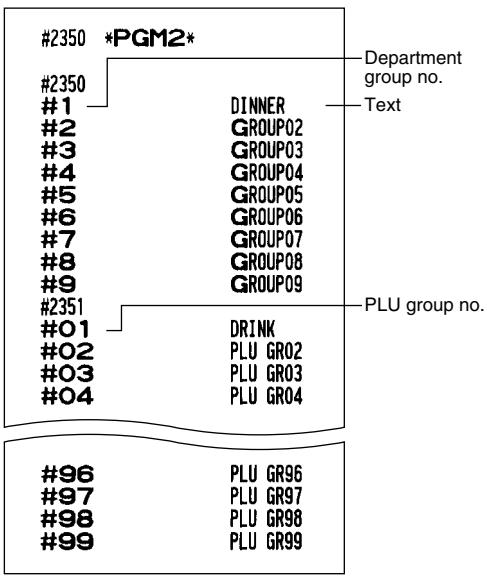
9 Reading of programmed Dynamic UPC (Reading in the PGM1 and PGM2 mode)



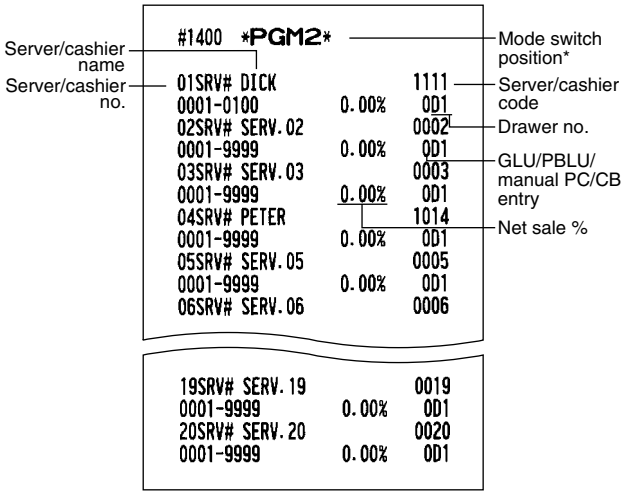
The subsequent printout occurs in the same format as in the sample reading of programmed items for PLUs/UPCs.

* 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)

13 Reading of programmed items for functions - 1
(Reading in the PGM1 and PGM2 modes)

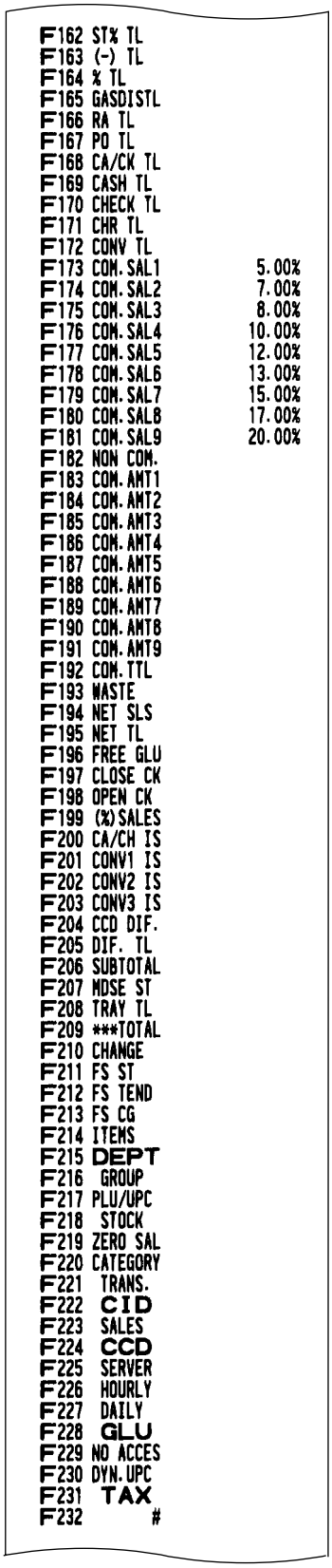
```
#1300 *PGM2*

F001 (-) 1              -0.50
I                         L17
F002 (-) 2              -0.75
I                         L22
F003 (-) 3              -1.00
I                         L17
F004 (-) 4              -2.00
S                         L17
F005 (-) 5              -2.50
S                         L17
F006 %1                  5.00%
I           3          L100.00%
F007 %2                 -10.00%
I           3          L100.00%
F008 %3                 -15.00%
S           3          L100.00%
F009 %4                 -20.00%
S           3          L100.00%
F010 %5                 -30.00%
S           3          L100.00%
F011 GAS(-)1              0.300
F012 GAS(-)2              0.250
F013 GAS(-)3              0.200
F014 GAS(-)4              0.100
F015 GAS(-)5              0.500
F016 GAS(-)6              0.200
F017 GAS(-)7              0.150
F018 GAS(-)8              0.100
F019 GAS(-)9              0.100
F020 GAS(-)10             0.500
F021 GAS(-)11             0.500
F022 GAS(-)12             0.500
F023 GAS(-)13             0.500
F024 GAS(-)14             0.450
F025 GAS(-)15             0.450
F026 GAS(-)16             0.400
F027 GAS(-)17             0.400
F028 GAS(-)18             0.350
F029 GAS(-)19             0.300
F030 NET1
F031 TAX1 ST
F032 GRS TAX1
F033 RFD TAX1
F034 TAX1
F035 TX1 EXPT
F036 TAX2 ST
F037 GRS TAX2
F038 RFD TAX2
F039 TAX2
F040 TX2 EXPT
F041 TAX3 ST
F042 GRS TAX3
F043 RFD TAX3
F044 TAX3
F045 TX3 EXPT
F046 TAX4 ST
F047 GRS TAX4
F048 RFD TAX4
F049 TAX4
F050 TX4 EXPT
F051 GRS MTAX
F052 RFD MTAX
F053 M-TAX                L17
F054 GST EXPT
```

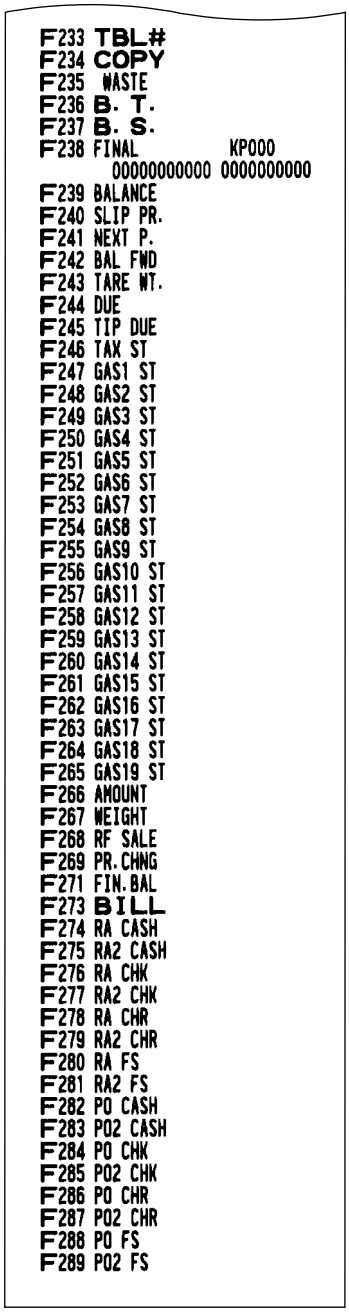
```
F055 PST TTL
F056 GST TTL
F057 FS TX1
F058 FS TX2
F059 FS TX3
F060 TTL TAX
F061 NET
F062 NET2
F063 CP PLU
F064 V.CP UPC
F065 VOID
F066 SBTL VD
F067 MGR VD
F068 VOID
F069 REFUND
F070 RETURN
F071 HASH VD
F072 HASH RF
F073 HASH RT
F074 NO SALE
F075 VP CNT
F076 BILL CNT
F077 DRW CNT
F078 TRAY CNT
F079 TRAN.OUT
F080 TRAN.IN
F081 ***PBAL
F082 SERVICE          KP000
     00000000000 0000000000
F083 DEPOSIT
F084 DPST RF
F085 COVER CT
F086 TRANS CT
F087 GRATUITY            0.00%

F088 NET3
F089 CASH             KP000 L18
  10000 00000000000 0000000000
F090 CASH2            KP000 L18
  10000 00000000000 0000000000
F091 CASH3            KP000 L18
  10000 00000000000 0000000000
F092 CASH4            KP000 L18
  10000 00000000000 0000000000
F093 CASH5            KP000 L18
  10000 00000000000 0000000000
F094 FSSALE           KP000
                   0000000000
F095 ***RA                L18
F096 ***RA2               L18
F097 ***PO                L18
F098 ***PO2               L18
F099 CA/CHK1        999999.99
F100 CA/CHK2        999999.99
F101 CA/CHK3        999999.99
F102 CA/CHK4        999999.99
F103 CA/CHK5        999999.99
F104 CHK/CG         999999.99
F105 FS/CG
F106 CONV 1       € 0.8063
F107 CONV 2         1.1200
F108 CONV 3         1.2500
F109 CONV 4
F110 EAT IN 1
  00000
F111 EAT IN 2
  00000
```

```
F112 EAT IN 3
  00000
F113 FS/ID
F114 CHARGE1          KP000 L18
  10000 00000000000 0000000000
F115 CHARGE1-
F116 CHARGE2          KP000 L18
  10000 00000000000 0000000000
F117 CHARGE2-
F118 CHARGE3          KP000 L18
  10000 00000000000 0000000000
F119 CHARGE3-
F120 CHARGE4          KP000 L18
  10000 00000000000 0000000000
F121 CHARGE4-
F122 CHARGE5          KP000 L18
  10000 00000000000 0000000000
F123 CHARGE5-
F124 CHARGE6          KP000 L18
  10000 00000000000 0000000000
F125 CHARGE6-
F126 CHARGE7          KP000 L18
  10000 00000000000 0000000000
F127 CHARGE7-
F128 CHARGE8          KP000 L18
  10000 00000000000 0000000000
F129 CHARGE8-
F130 CHARGE9          KP000 L18
  10000 00000000000 0000000000
F131 CHARGE9-
F132 CHECK1           KP000 L18
  10000 00000000000 0000000000
F133 CHECK2           KP000 L18
  10000 00000000000 0000000000
F134 CHECK3           KP000 L18
  10000 00000000000 0000000000
F135 CHECK4           KP000 L18
  10000 00000000000 0000000000
F136 CHECK5           KP000 L18
  10000 00000000000 0000000000
F137 CA/CH ID
F138 ****CID       9999999.99
F139 CA TIP
F140 CH TIP
F141 TIP IN              0.00%
                           L17
F142 TIP PAID
F143 VAT EXPT
F144 AVE.
F145 LEVEL 1
F146 LEVEL 2
F147 LEVEL 3
F148 LEVEL 4
F149 LEVEL 5
F150 LEVEL 6
F151 *DEPT TL
F152 DEPT(-)
F153 *HASH TL
F154 HASH(-)
F155 *BTTL TL
F156 BTTL(-)
F157 *GAS TL
F158 GAS(-)
F159 HASH TTL
F160 WASTE TL
F161 ST(-) TL
```

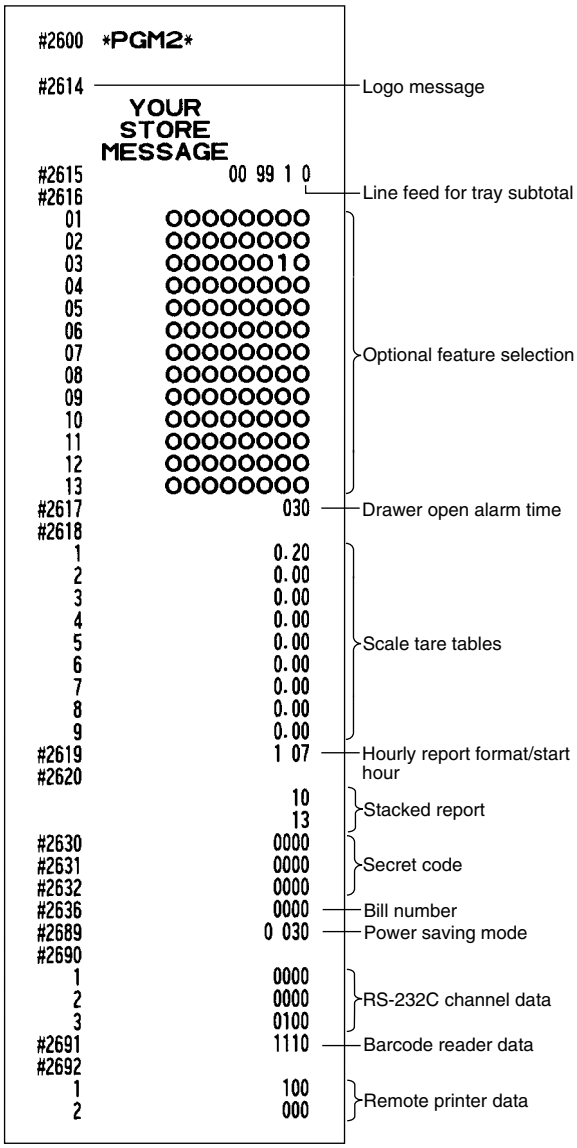
To be continued on the next page

* When you take this report in the PGM1 mode, the PGM2 indication is replaced by “PGM1”.

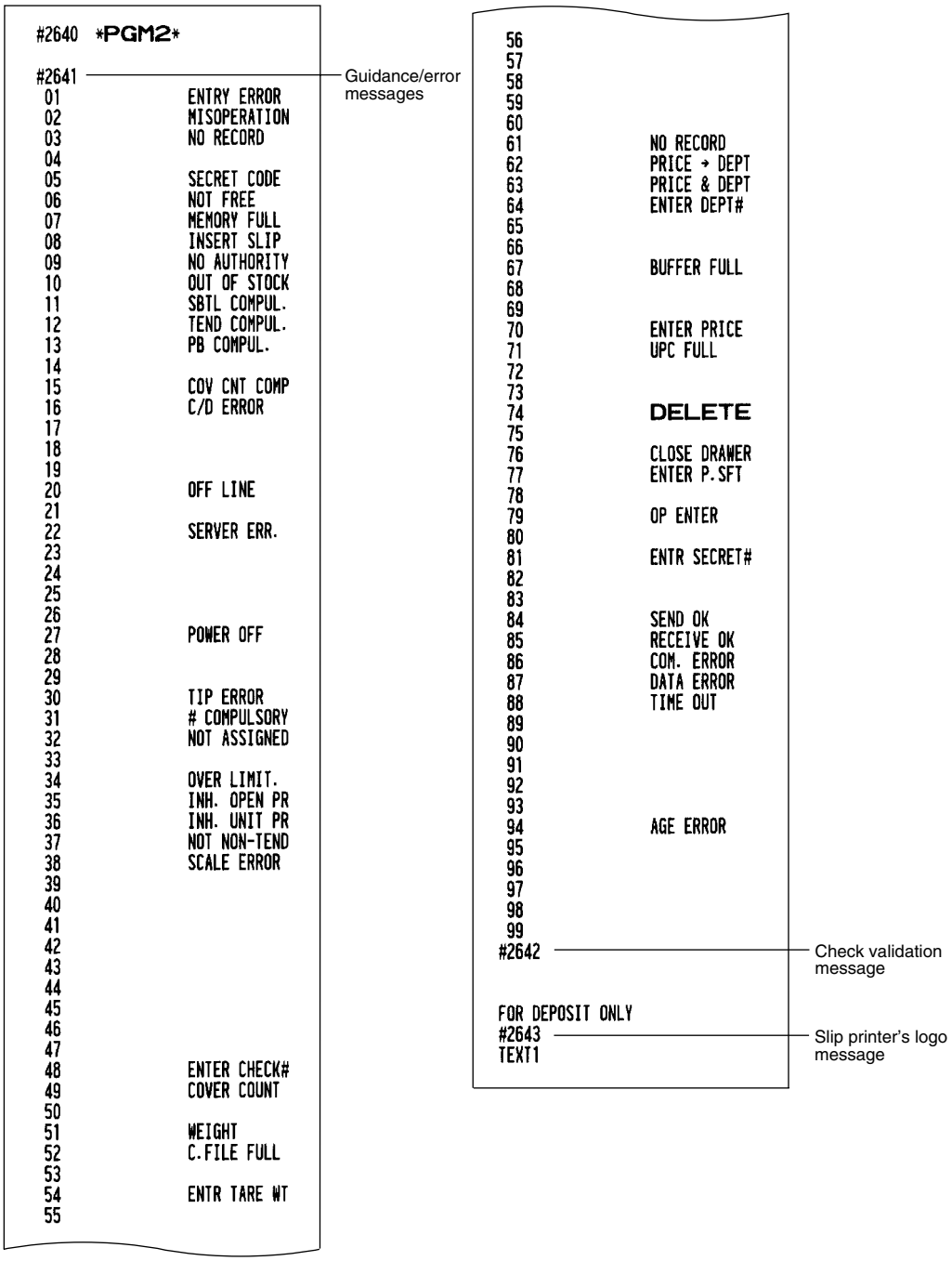

F162 ST% TL
F163 (-) TL
F164 % TL
F165 GASDISTL
F166 RA TL
F167 PO TL
F168 CA/CK TL
F169 CASH TL
F170 CHECK TL
F171 CHR TL
F172 CONV TL
F173 COM.SAL1 5.00%
F174 COM.SAL2 7.00%
F175 COM.SAL3 8.00%
F176 COM.SAL4 10.00%
F177 COM.SAL5 12.00%
F178 COM.SAL6 13.00%
F179 COM.SAL7 15.00%
F180 COM.SAL8 17.00%
F181 COM.SAL9 20.00%
F182 NON COM.
F183 COM.AMT1
F184 COM.AMT2
F185 COM.AMT3
F186 COM.AMT4
F187 COM.AMT5
F188 COM.AMT6
F189 COM.AMT7
F190 COM.AMT8
F191 COM.AMT9
F192 COM.TTL
F193 WASTE
F194 NET SLS
F195 NET TL
F196 FREE GLU
F197 CLOSE CK
F198 OPEN CK
F199 (%)SALES
F200 CA/CH IS
F201 CONV1 IS
F202 CONV2 IS
F203 CONV3 IS
F204 CCD DIF.
F205 DIF. TL
F206 SUBTOTAL
F207 MDSE ST
F208 TRAY TL
F209 ***TOTAL
F210 CHANGE
F211 FS ST
F212 FS TEND
F213 FS CG
F214 ITEMS
F215 DEPT
F216 GROUP
F217 PLU/UPC
F218 STOCK
F219 ZERO SAL
F220 CATEGORY
F221 TRANS.
F222 CID
F223 SALES
F224 CCD
F225 SERVER
F226 HOURLY
F227 DAILY
F228 GLU
F229 NO ACCES
F230 DYN.UPC
F231 TAX
F232 #


F233 TBL#
F234 COPY
F235 WASTE
F236 B. T.
F237 B. S.
F238 FINAL KP000
00000000000 0000000000
F239 BALANCE
F240 SLIP PR.
F241 NEXT P.
F242 BAL FWD
F243 TARE WT.
F244 DUE
F245 TIP DUE
F246 TAX ST
F247 GAS1 ST
F248 GAS2 ST
F249 GAS3 ST
F250 GAS4 ST
F251 GAS5 ST
F252 GAS6 ST
F253 GAS7 ST
F254 GAS8 ST
F255 GAS9 ST
F256 GAS10 ST
F257 GAS11 ST
F258 GAS12 ST
F259 GAS13 ST
F260 GAS14 ST
F261 GAS15 ST
F262 GAS16 ST
F263 GAS17 ST
F264 GAS18 ST
F265 GAS19 ST
F266 AMOUNT
F267 WEIGHT
F268 RF SALE
F269 PR.CHNG
F271 FIN.BAL
F273 BILL
F274 RA CASH
F275 RA2 CASH
F276 RA CHK
F277 RA2 CHK
F278 RA CHR
F279 RA2 CHR
F280 RA FS
F281 RA2 FS
F282 PO CASH
F283 PO2 CASH
F284 PO CHK
F285 PO2 CHK
F286 PO CHR
F287 PO2 CHR
F288 PO FS
F289 PO2 FS

14 Reading of programmed items for functions - 2 (Reading in the PGM2 mode)

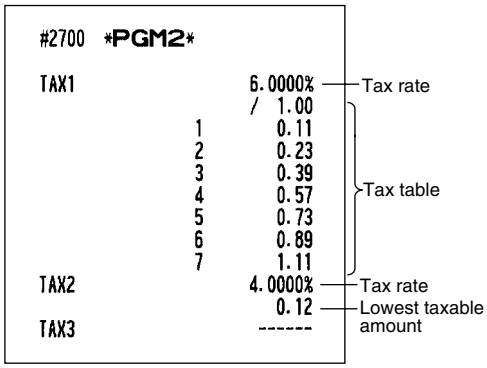


15 Reading of programmed messages (Reading in the PGM2 mode)

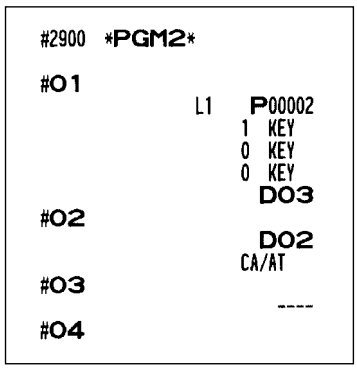


To be continued

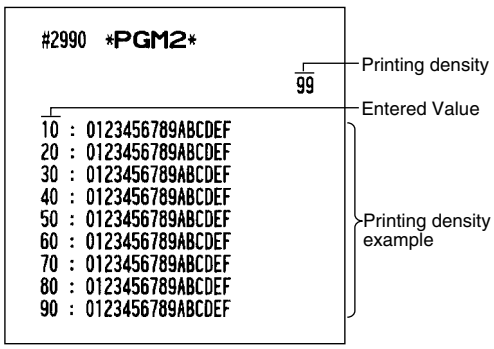
16 Reading of programmed tax tables and rates (Reading in the PGM2 mode)



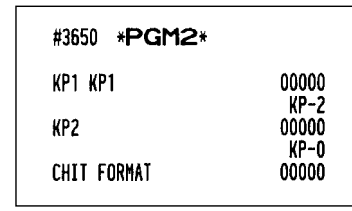
17 Reading of programmed items for auto keys (Reading in the PGM2 mode)



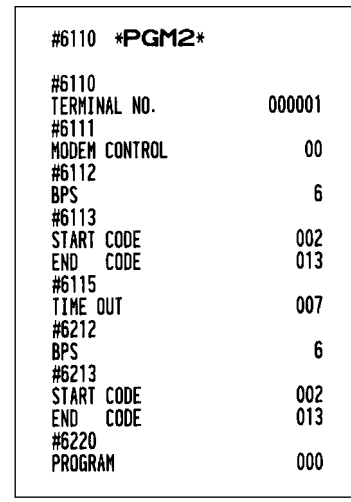
18 Reading of programmed items for the thermal printer (Reading in the PGM2 mode)



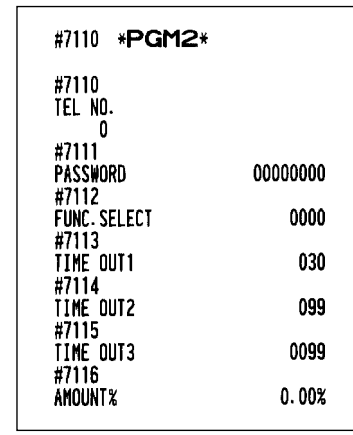
19 Reading of remote printer preset (Reading in the PGM2 mode)



20 Reading of ON-LINE preset (Reading in the PGM2 mode)



21 Reading of CAT preset (Reading in the PGM2 mode)



13 Universal Product Code (UPC) or European Article Number (EAN)

■ UPC or EAN code

Your machine can support the following codes:

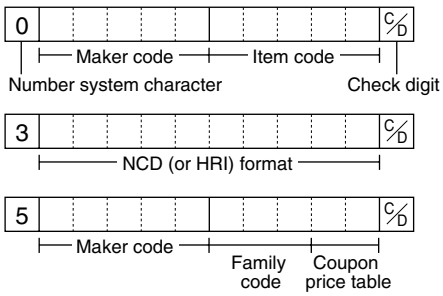
- UPC-A (Number system character: 0, 2, 3, 4, 5)
- UPC-E
- EAN-8
- EAN-13
- Internal code EAN-8/EAN-13

For the codes used in-store marking, there are two types of PLU type (treated as a code like PLU no.) and Non-PLU 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

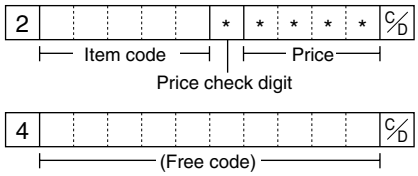
- Number system character: 0 <used in the source marking>
- Number system character: 3 <used as NDC or HRI>
- Number system character: 5 <used as coupon>

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>

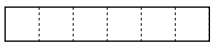
For entry, a full 12 digit number, 11 digit number (omitting the check digit), or a leading zero plus 12 digit number must be entered.(Any numbers are allowed for the digits marked with *, and on the receipt/journal, non-PLU type code is printed like 2020008**** (****: price information).)



UPC-E

- UPC-E is a zero-suppressed version of UPC-A that conforms to 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.



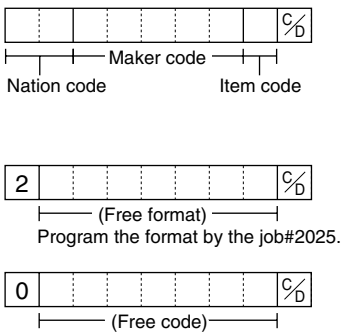
EAN 8

- Ordinary EAN-8 code (flag: neither 0 nor 2) <used in the source marking>

For entry, a full 8 digit number must be entered.

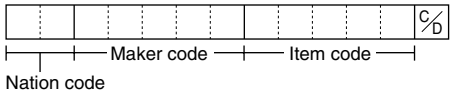
- Internal code (flag 2) <in-store marking non-PLU short type>
  Program the format by the job #2025.
- Internal code (flag 0) <in-store marking PLU short type>

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)



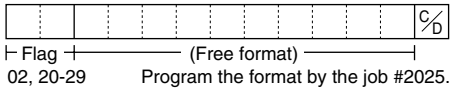
EAN-13

- 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

Note *Your register automatically judges the add-on code in an UPC/EAN code entered from the total number of digits and the flag.*

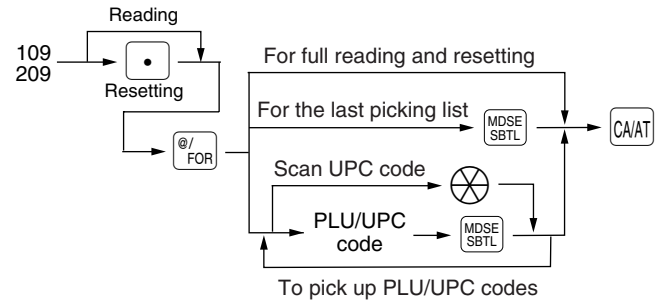
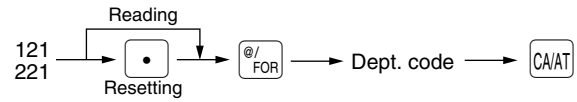
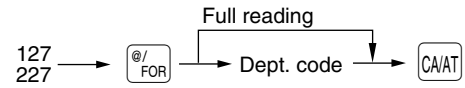
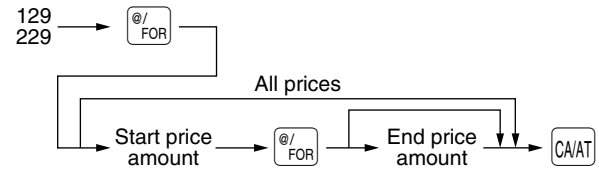
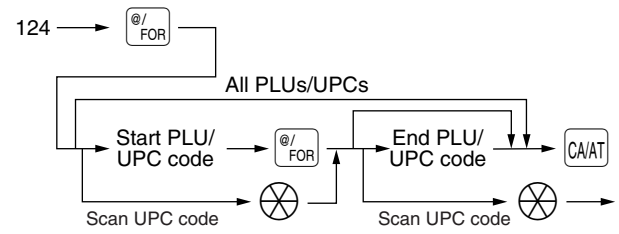
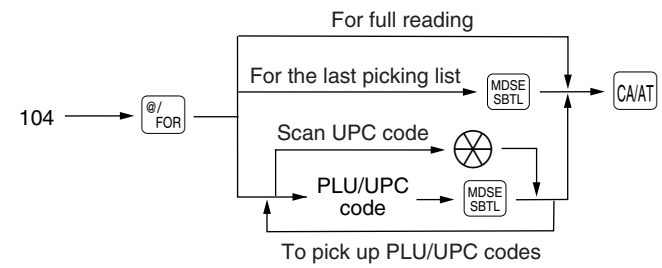
READING (X) AND RESETTING (Z) OF SALES TOTALS

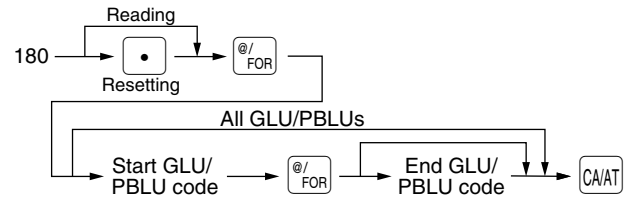
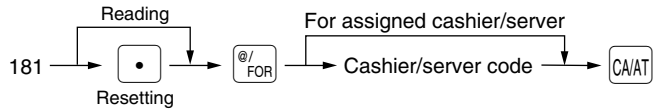
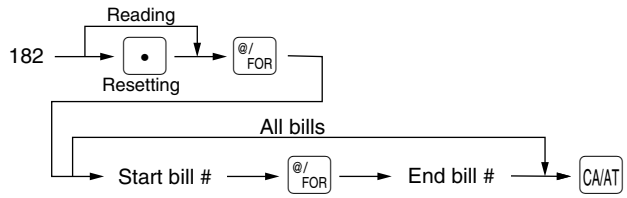
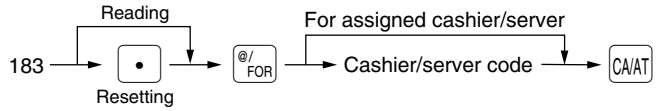
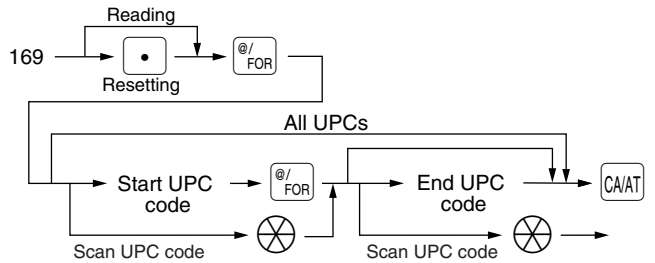
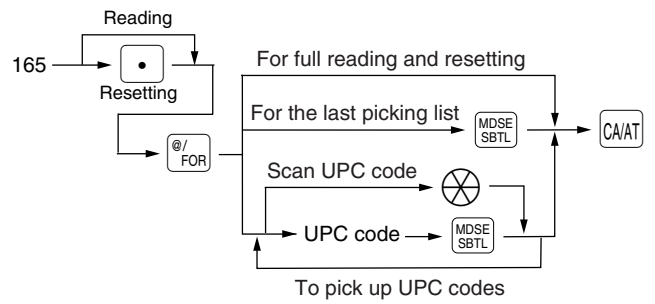
- Use the reading function (X) when you need to take a reading of sales information entered since the last resetting. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function (Z) when you need to clear the register's memory. Resetting prints 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.

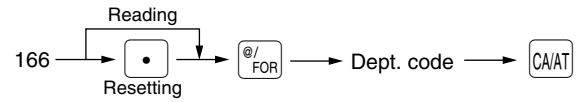
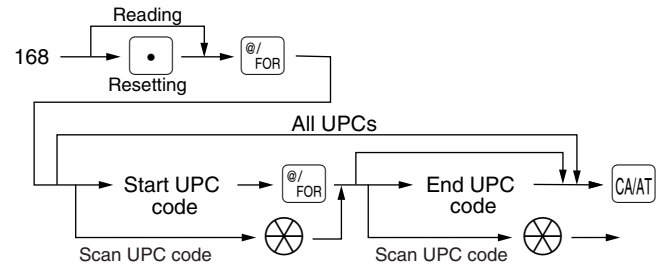
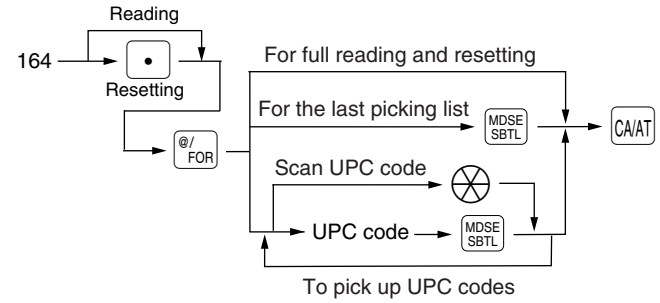
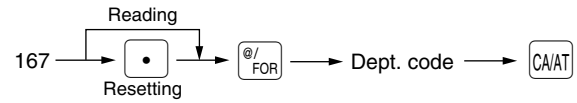
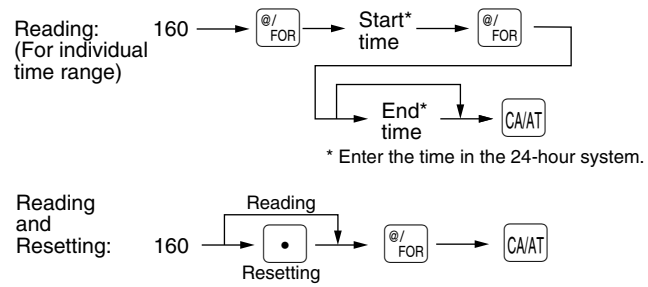
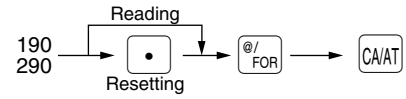
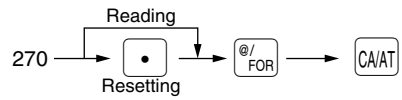
1 Summary of reading (X) and resetting (Z) reports and the key operations to obtain the reports

X1 and Z1 reports: Daily sales reports
X2 and Z2 reports: Periodic (monthly) consolidation reports

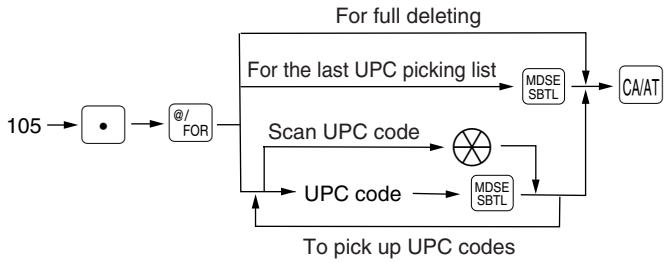
Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
Flash report: (Only display) To clear the display, press the CL key or turn the mode switch to another position.	X1	—	—	Dept. key (1 to 99) Dept. code → DEPT # : Department total amount
				@/FOR key: Amount of cash in drawer
				SBTL key: Paid total
General report	X1, Z1	X1, Z1	100	100 / 200 → • (Reading / Resetting) → @/FOR → CA/AT
		X2, Z2	200	
Individual cashier/server report	X1, Z1	X1, Z1	141	141 / 241 → • (Reading / Resetting) → @/FOR → For assigned cashier/server → Cashier/server code → CA/AT
		X2, Z2	241	
	<OP X/Z> X, Z		41	41 → • (Reading / Resetting) → @/FOR → CA/AT
Full cashier/server report	X1, Z1	X1, Z1	140	140 / 240 → • (Reading / Resetting) → @/FOR → CA/AT
		X2, Z2	240	
Full department report	X1	X1	110	110 / 210 → @/FOR → CA/AT
		X2	210	
Individual group total report on department	X1	X1	112	112 / 212 → @/FOR → Group number → CA/AT
		X2	212	
Full group total report on department	X1	X1	113	113 / 213 → @/FOR → CA/AT
		X2	213	
PLU/UPC report by designated range	X1, Z1	X1, Z1	120	120 / 220 → • (Reading / Resetting) → @/FOR → All PLUs/UPCs → Start PLU/UPC code → @/FOR → End PLU/UPC code → CA/AT; Scan UPC code; Scan UPC code
		X2, Z2	220	

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
PLU/UPC report by pick up list	X1, Z1	X1, Z1	109	
		X2, Z2	209	
PLU/UPC report by associated department	X1, Z1	X1, Z1	121	
		X2, Z2	221	
Individual group total report on PLU/UPC	X1	X1	122	
		X2	222	
Full group total report on PLU/UPC	X1	X1	123	
		X2	223	
PLU/UPC zero sales report by department	X1	X1	127	
		X2	227	
PLU/UPC price category report	X1	X1	129	
		X2	229	
PLU/UPC stock report	X1	X1	124	
PLU/UPC stock report by pick up list	X1	X1	104	

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
GLU/PBLU report	X1, Z1	X1, Z1	180	
GLU/PBLU report by cashier/server	X1, Z1	X1, Z1	181	
Closed GLU/PBLU report	X1, Z1	X1, Z1	182	
Closed GLU/PBLU report by cashier/ server	X1, Z1	X1, Z1	183	
Commission sales report	X1	X1	132	
		X2	232	
Tax report	X1	X1	133	
		X2	233	
Transaction report	X1	X1	130	
		X2	230	
Cash in drawer report	X1	X1	131	
		X2	231	
Dynamic UPC report by designated range	X1, Z1	X1, Z1	169	
Dynamic UPC report by pick up list	X1, Z1	X1, Z1	165	

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
Dynamic UPC report by associated department	X1, Z1	X1, Z1	166	
Dynamic UPC clear report by designated range	X1, Z1	X1, Z1	168	
Dynamic UPC clear report by pick up list	X1, Z1	X1, Z1	164	
Dynamic UPC clear report by associated department	X1, Z1	X1, Z1	167	
Hourly report	X1	X1	160	
	X1, Z1	X1, Z1		
Stacked report	X1, Z1	X1, Z1	190	 When Z of stacked report is initiated, X only reports will be skipped.
		X2, Z2	290	
Daily net report		X2, Z2	270	

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 → @/FOR → CA/AT
Deleting of non-accessed UPCs	Z1	Z1	105	

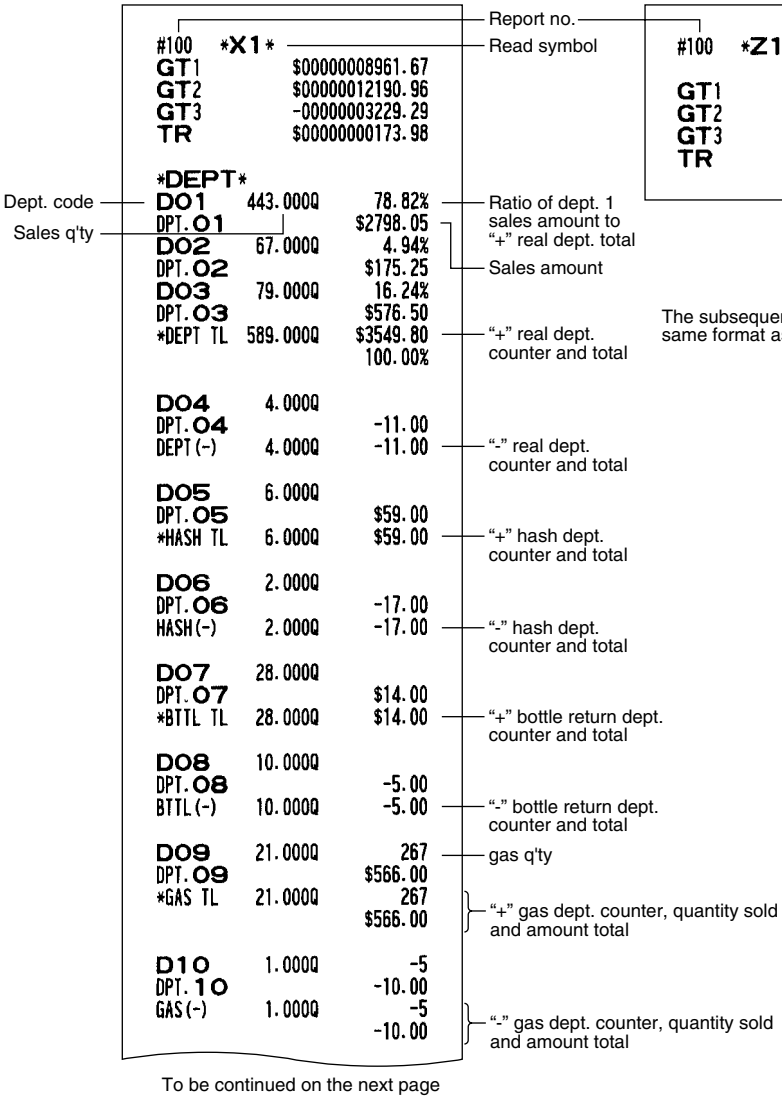
Note *When you execute the job #105 in Z1 mode, not only the sales data, but also the UPC code(s) (the related data files) themselves will be deleted.*

2 Daily sales totals

■ General report

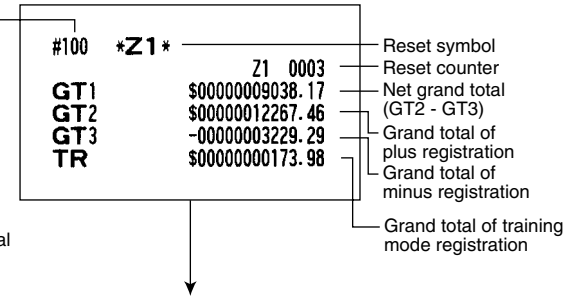
You can take X and Z reports in the X1/Z1 mode. The use of the decimal (•) key determines when the report will actually reset the totals.

• Sample X report



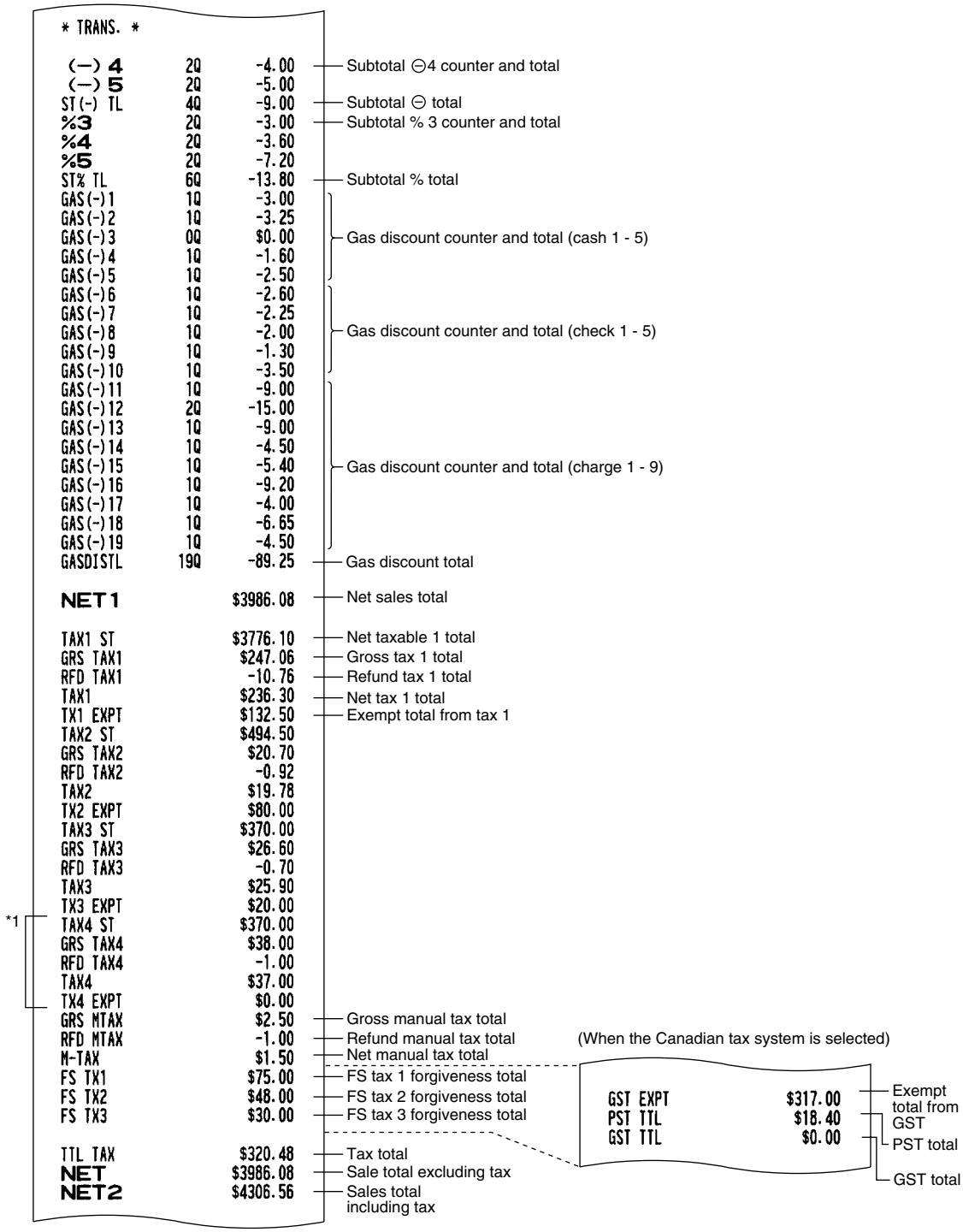
To be continued on the next page

• Sample Z report



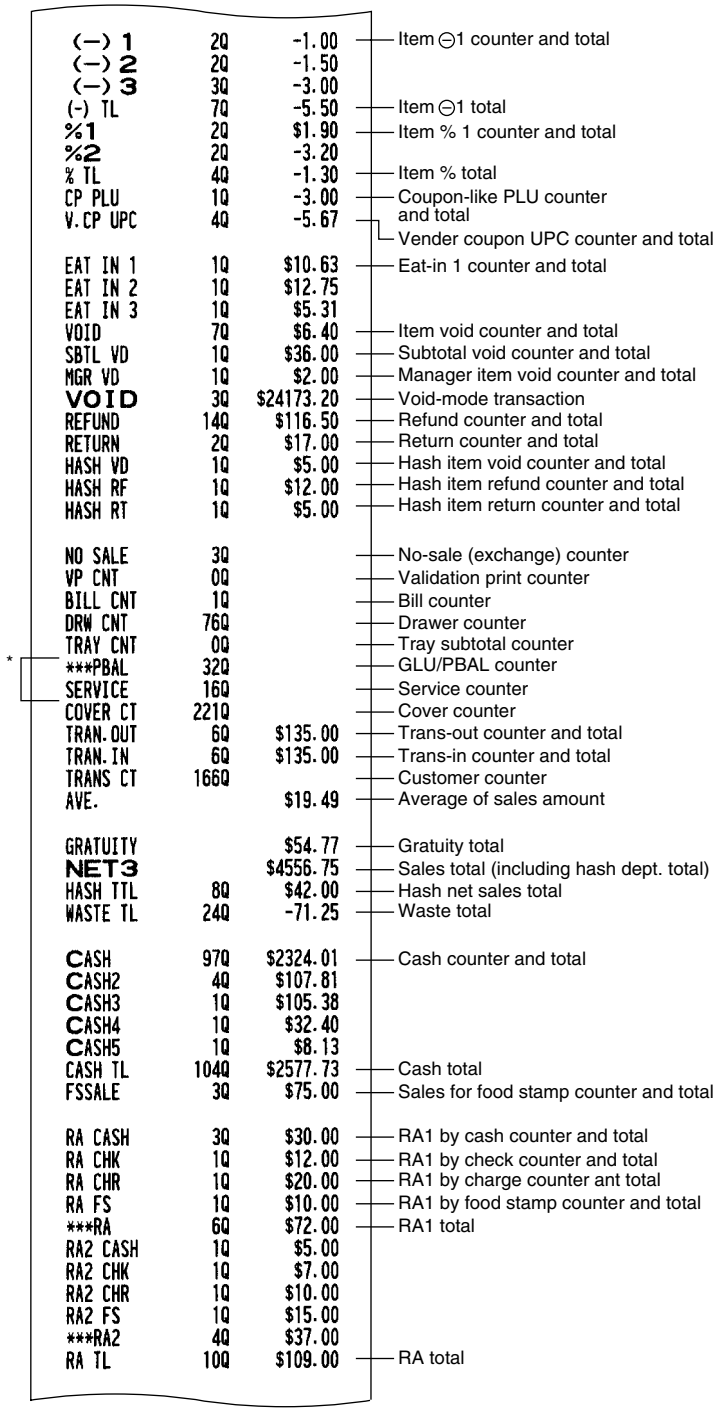
The subsequent printout occurs in the same format as in the X report.

Note *Not all reports provide the resetting capability. Please refer to the chart on pages 190-194.*

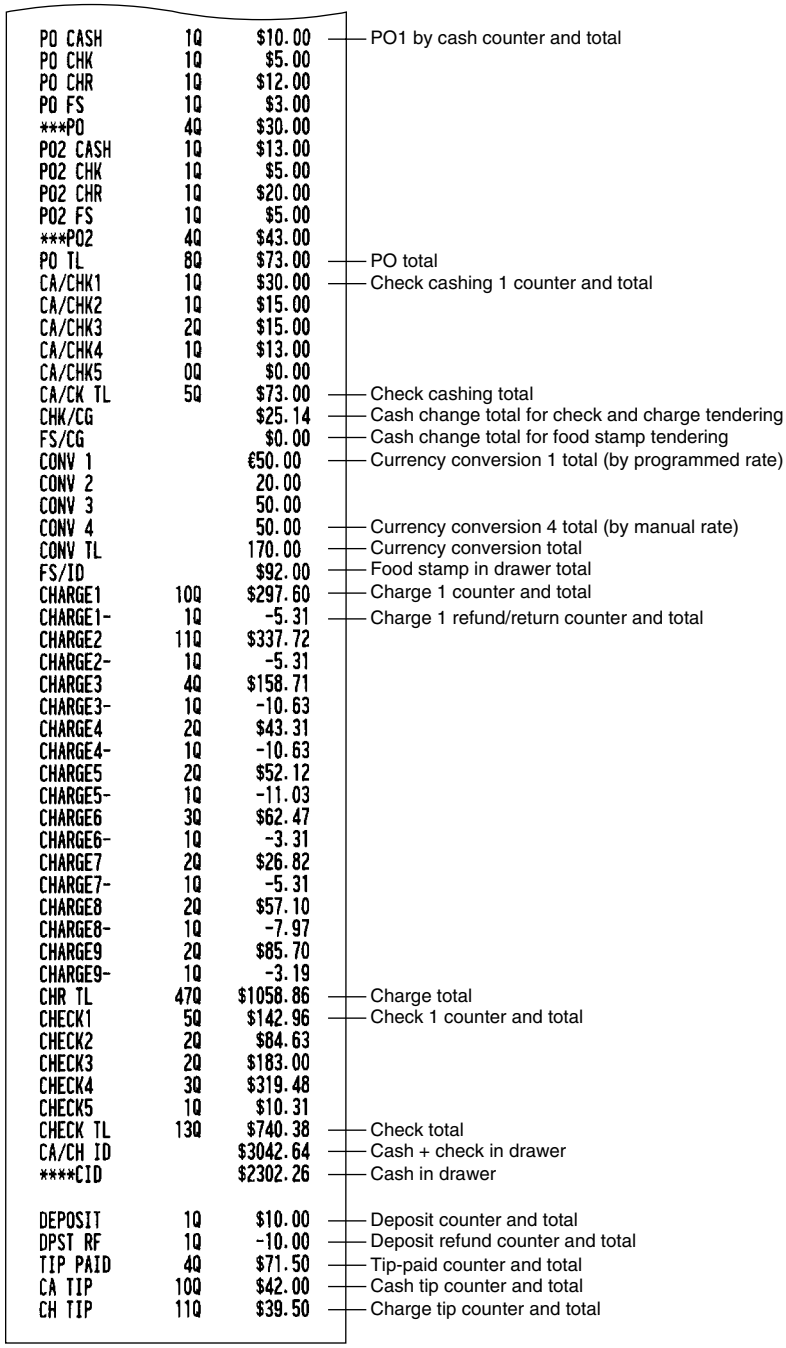


To be continued on the next page

*1 When food stamp function is allowed, tax 4 items are not printed.



* When manual PB/CB function is enabled, amount is also printed for each print item.


PO CASH 1Q $10.00
PO CHK 1Q $5.00
PO CHR 1Q $12.00
PO FS 1Q $3.00
***PO 4Q $30.00
PO2 CASH 1Q $13.00
PO2 CHK 1Q $5.00
PO2 CHR 1Q $20.00
PO2 FS 1Q $5.00
***PO2 4Q $43.00
PO TL 8Q $73.00
CA/CHK1 1Q $30.00
CA/CHK2 1Q $15.00
CA/CHK3 2Q $15.00
CA/CHK4 1Q $13.00
CA/CHK5 0Q $0.00
CA/CK TL 5Q $73.00
CHK/CG $25.14
FS/CG $0.00
CONV 1 €50.00
CONV 2 20.00
CONV 3 50.00
CONV 4 50.00
CONV TL 170.00
FS/ID $92.00
CHARGE1 10Q $297.60
CHARGE1- 1Q -5.31
CHARGE2 11Q $337.72
CHARGE2- 1Q -5.31
CHARGE3 4Q $158.71
CHARGE3- 1Q -10.63
CHARGE4 2Q $43.31
CHARGE4- 1Q -10.63
CHARGE5 2Q $52.12
CHARGE5- 1Q -11.03
CHARGE6 3Q $62.47
CHARGE6- 1Q -3.31
CHARGE7 2Q $26.82
CHARGE7- 1Q -5.31
CHARGE8 2Q $57.10
CHARGE8- 1Q -7.97
CHARGE9 2Q $85.70
CHARGE9- 1Q -3.19
CHR TL 47Q $1058.86
CHECK1 5Q $142.96
CHECK2 2Q $84.63
CHECK3 2Q $183.00
CHECK4 3Q $319.48
CHECK5 1Q $10.31
CHECK TL 13Q $740.38
CA/CH ID $3042.64
****CID $2302.26
DEPOSIT 1Q $10.00
DPST RF 1Q -10.00
TIP PAID 4Q $71.50
CA TIP 10Q $42.00
CH TIP 11Q $39.50
PO1 by cash counter and total
PO total
Check cashing 1 counter and total
Check cashing total
Cash change total for check and charge tendering
Cash change total for food stamp tendering
Currency conversion 1 total (by programmed rate)
Currency conversion 4 total (by manual rate)
Currency conversion total
Food stamp in drawer total
Charge 1 counter and total
Charge 1 refund/return counter and total
Charge total
Check 1 counter and total
Check total
Cash + check in drawer
Cash in drawer
Deposit counter and total
Deposit refund counter and total
Tip-paid counter and total
Cash tip counter and total
Charge tip counter and total

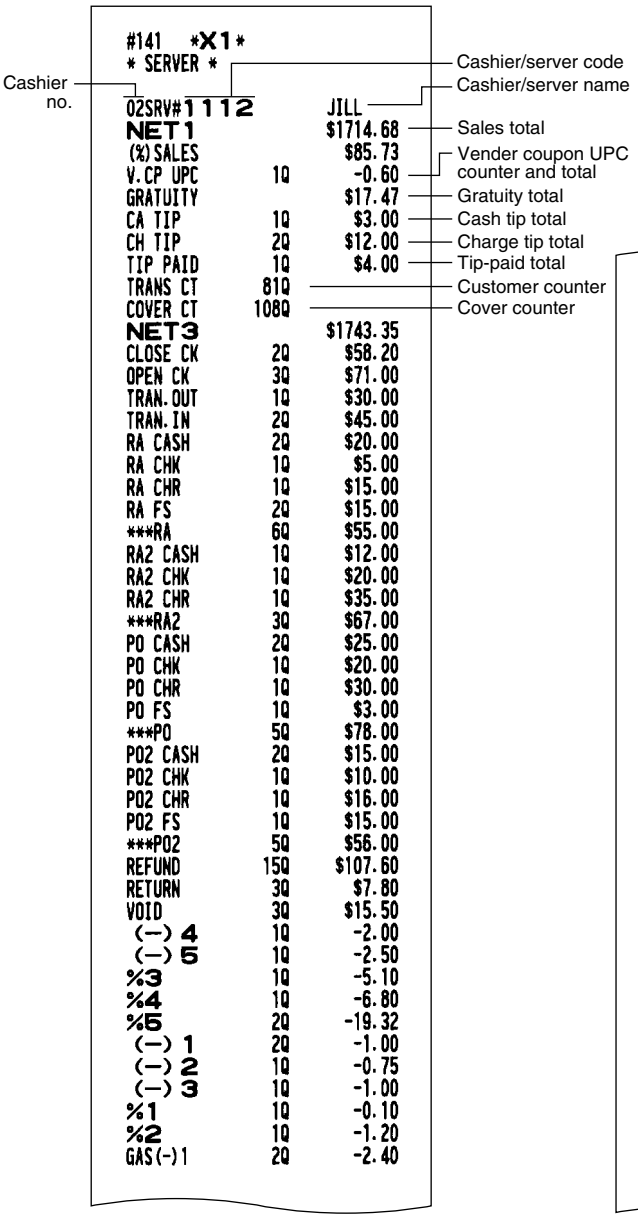
■ Cashier/Server report

Using this function, you can take X and Z reports for individual cashiers/servers or all cashiers/servers.

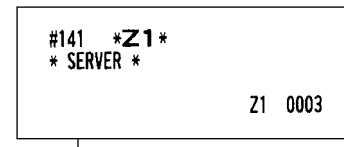
Individual cashier/server reading and resetting

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.*

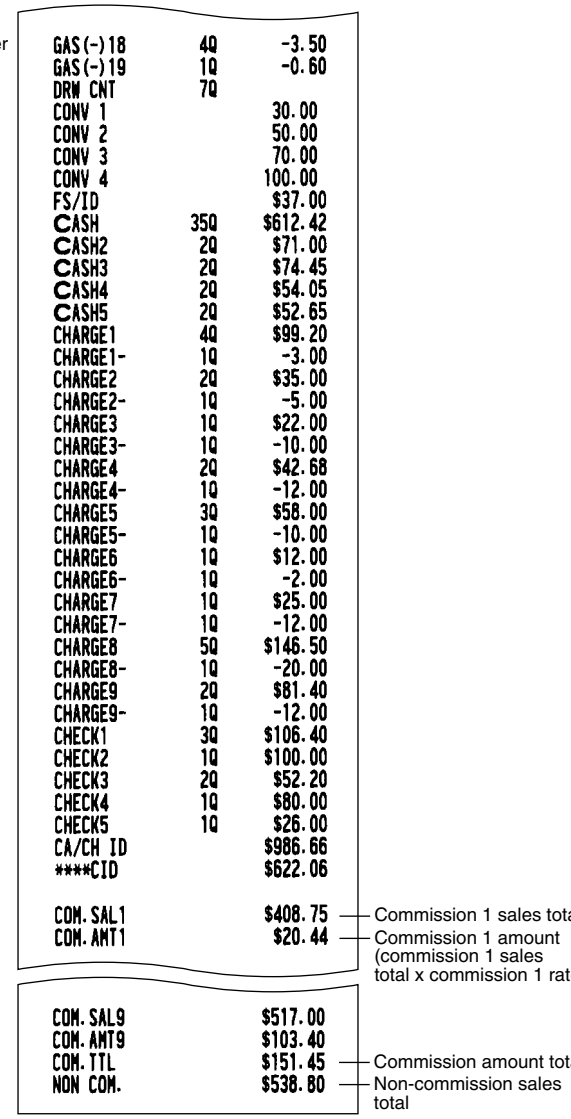
• Sample X report



• Sample Z report



The subsequent printout occurs in the same format as in the 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”.

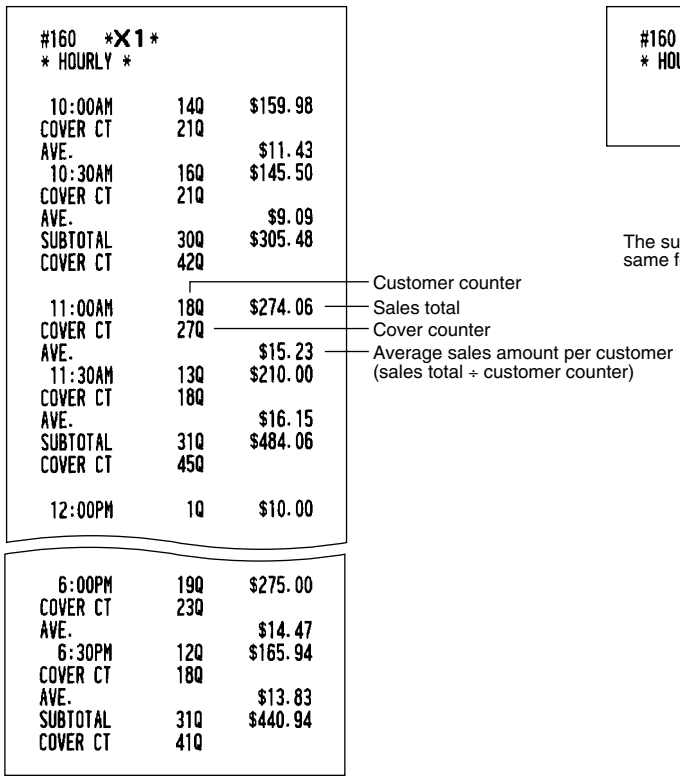
Full cashier/server reading and resetting

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.

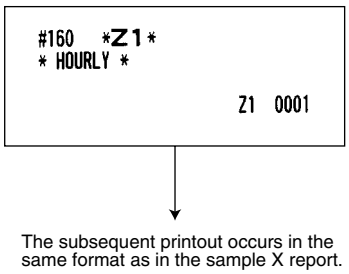
■ Hourly report

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.

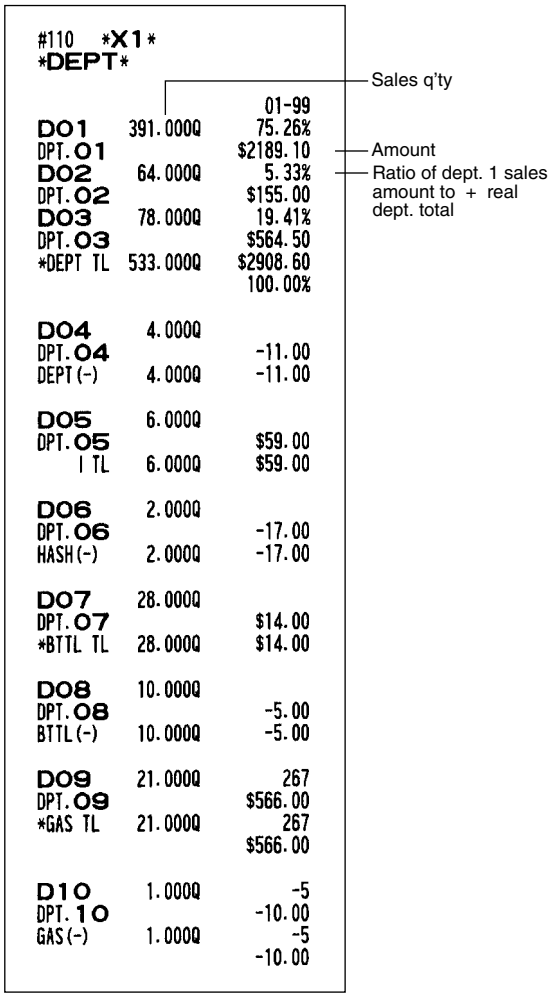
• Sample X report



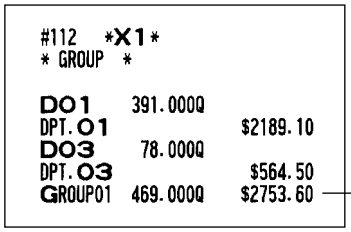
• Sample Z report



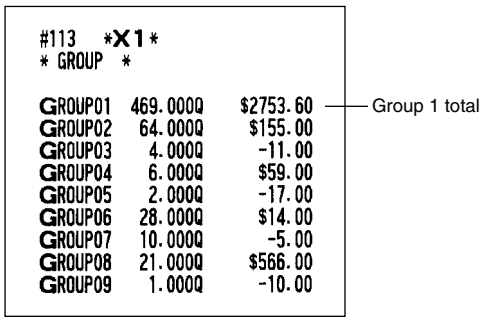
■ Full department report



■ Individual group total report on department



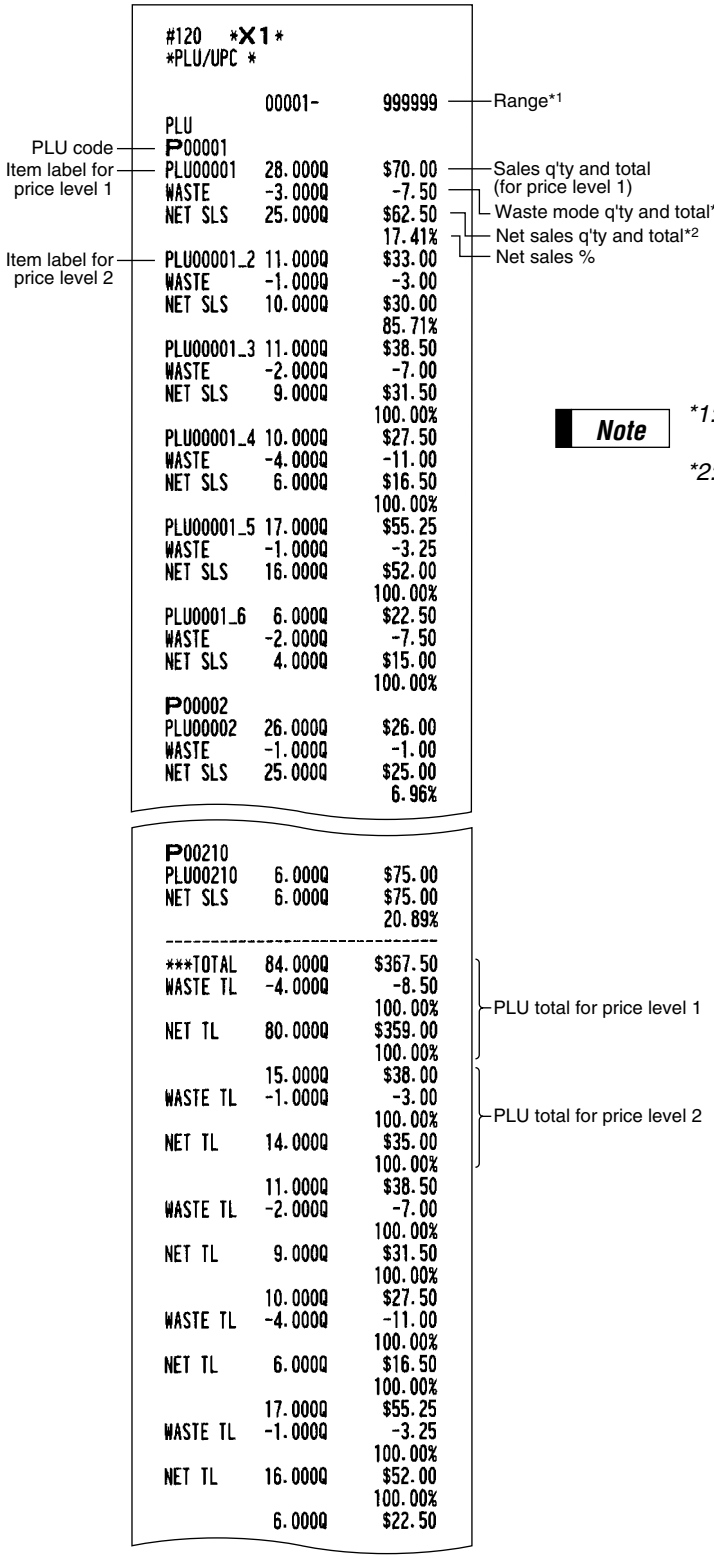
■ Full group total report on department



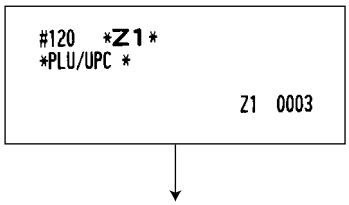
■ PLU/UPC report (by designated range or pick up list)

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.

• Sample X report



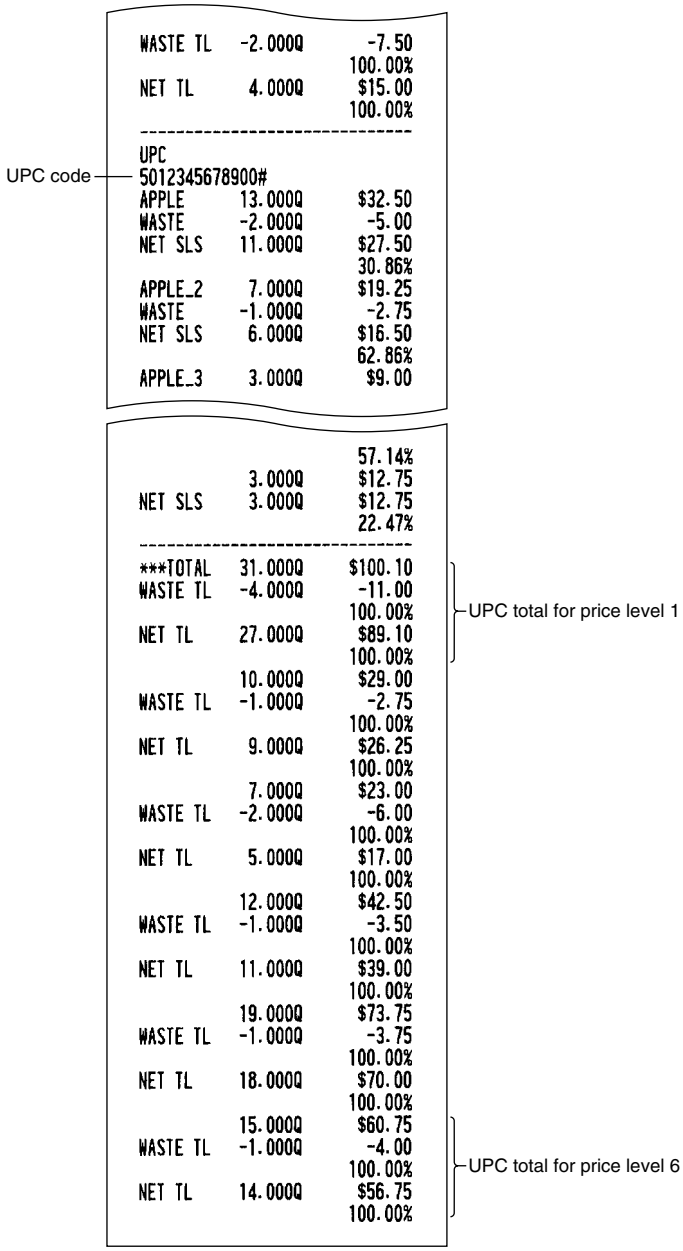
• Sample Z report



The subsequent printout occurs in the same format as in the sample X report.

Note

**1: The PLU/UPC range is not printed in pick up report (#109).*
**2: Not printed when waste mode is disabled*


WASTE TL -2.000Q -7.50
100.00%
NET TL 4.000Q $15.00
100.00%
UPC
UPC code
5012345678900#
APPLE 13.000Q $32.50
WASTE -2.000Q -5.00
NET SLS 11.000Q $27.50
30.86%
APPLE_2 7.000Q $19.25
WASTE -1.000Q -2.75
NET SLS 6.000Q $16.50
62.86%
APPLE_3 3.000Q $9.00
57.14%
3.000Q $12.75
NET SLS 3.000Q $12.75
22.47%
***TOTAL 31.000Q $100.10
WASTE TL -4.000Q -11.00
100.00%
NET TL 27.000Q $89.10
100.00%
UPC total for price level 1
10.000Q $29.00
WASTE TL -1.000Q -2.75
100.00%
NET TL 9.000Q $26.25
100.00%
7.000Q $23.00
WASTE TL -2.000Q -6.00
100.00%
NET TL 5.000Q $17.00
100.00%
12.000Q $42.50
WASTE TL -1.000Q -3.50
100.00%
NET TL 11.000Q $39.00
100.00%
19.000Q $73.75
WASTE TL -1.000Q -3.75
100.00%
NET TL 18.000Q $70.00
100.00%
15.000Q $60.75
WASTE TL -1.000Q -4.00
100.00%
UPC total for price level 6
NET TL 14.000Q $56.75
100.00%

■ PLU/UPC report by associated department

• Sample X report

```
#121   *X1*
*PLU/UPC *

DPT. 01                 D01
PLU
```

The subsequent printout occurs in the same format as th ePLU/UPC report by designated range.

• Sample Z report

```
#121   *Z1*
*PLU/UPC *

                        Z1  0004
```

The subsequent printout occurs in the same format as in the sample X report.

■ Individual group total report on PLU/UPC

```
#122   *X1*
*PLU/UPC *

PLU
P00001
PLU00001    25.000Q      $62.50
PLU00001_2  10.000Q      $30.00
PLU00001_3   9.000Q      $31.50
PLU00001_4   6.000Q      $16.50
PLU00001_5  16.000Q      $52.00
PLU00001_6   4.000Q      $15.00
P00002
PLU00002    25.000Q      $25.00
PLU00002_2   4.000Q       $5.00
P00003
PLU00003     2.000Q       $4.00
P00005
PLU00005     2.000Q       $5.00
------------------------------
UPC
5012345678900#
APPLE       11.000Q      $27.50
APPLE_2      6.000Q      $16.50
APPLE_3      1.000Q       $3.00
APPLE_4      9.000Q      $31.50
APPLE_5      8.000Q      $30.00
APPLE_6     11.000Q      $44.00
5045678912304#
CUP_A        5.000Q      $12.50
5087654321106#
ORANGE       7.000Q      $37.10
5089123456708#
GRAPE        4.000Q      $12.00
GRAPE_2      3.000Q       $9.75
GRAPE_3      4.000Q      $14.00
GRAPE_4      2.000Q       $7.50
GRAPE_5     10.000Q      $40.00
GRAPE_6      3.000Q      $12.75
------------------------------
PLU GR01   187.000Q     $544.60
```

PLU code — P00001

Item label for price level 1 — PLU00001 25.000Q $62.50

Sales q'ty and amount for price level 1 — $62.50

Group 1 sales q'ty and amount — PLU GR01 187.000Q $544.60

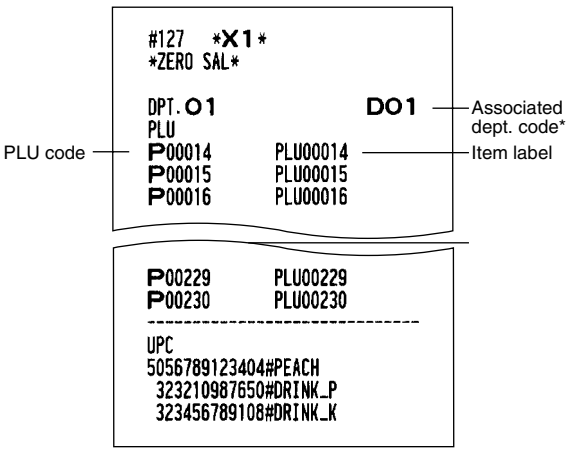
■ Full group total report on PLU/UPC

```
#123   *X1*
*PLU/UPC *

PLU GR01   243.000Q     $735.60
PLU GR02    42.000Q     $245.00
PLU GR03    19.000Q      $61.10
PLU GR04    16.000Q      $40.00
PLU GR05   192.000Q     $460.00
PLU GR06    28.000Q     $173.00
PLU GR07    34.000Q     $387.50
PLU GR08    34.000Q     $387.50
PLU GR09    36.000Q     $377.50
PLU GR10   149.000Q     $473.50
PLU GR11    62.000Q      $93.10
PLU GR12    17.000Q      $34.00

PLU GR98    26.000Q     $147.50
PLU GR99    38.000Q     $291.50
```

Group text — PLU GR01 243.000Q $735.60

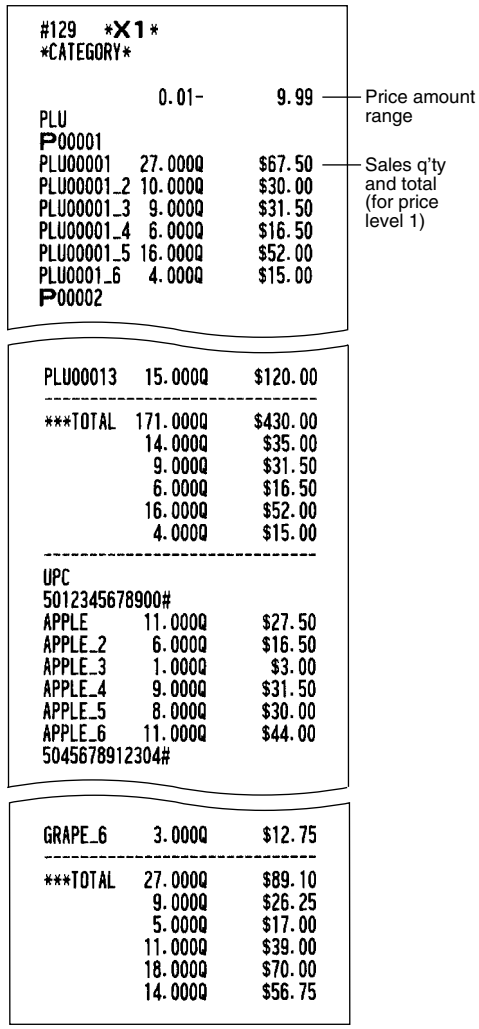
Sales q'ty and amount for PLU group 11 — PLU GR11 62.000Q $93.10

■ PLU/UPC zero sales report by department

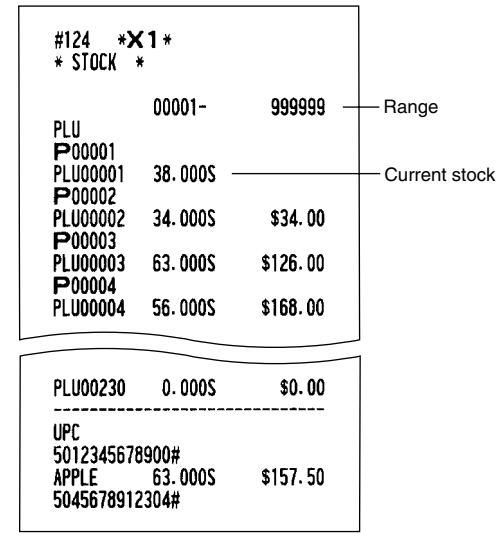


* When printing full zero sale report, no associated dept. code is printed.

■ PLU/UPC price category report

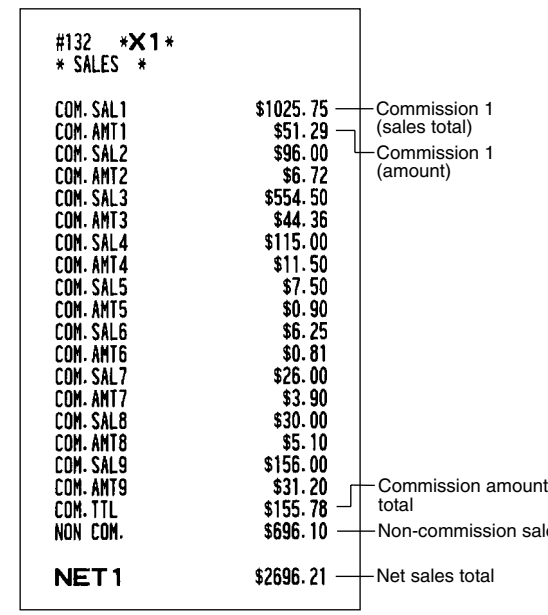


■ PLU/UPC stock report (by designated range or pick up list)



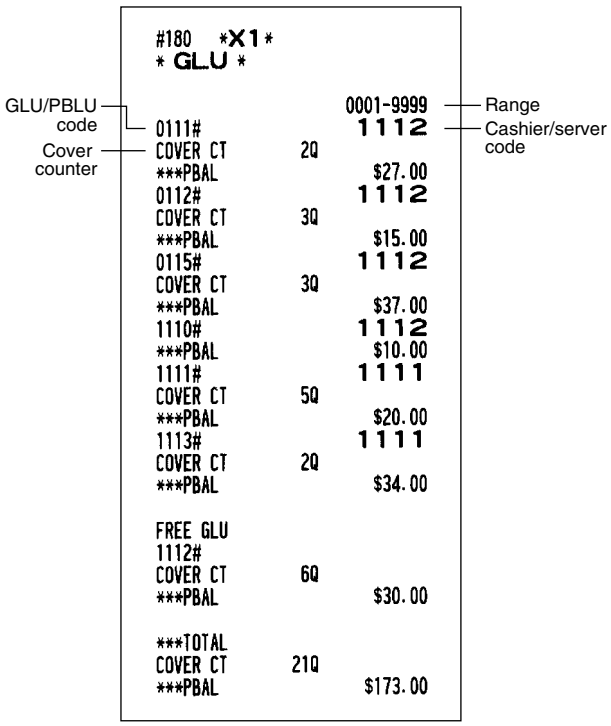
Note *The PLU/UPC range is not printed in pick up report (#104).*

■ Commission sales report

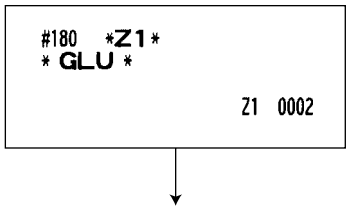


■ GLU/PBLU report

• Sample X report



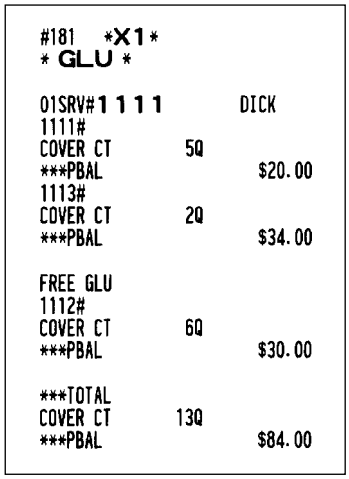
• Sample Z report



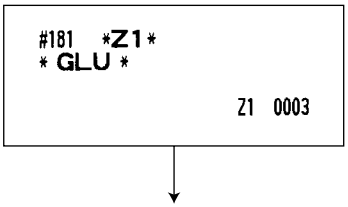
The subsequent printout occurs in the same format as in the sample X report.

■ GLU/PBLU report by cashier/server

• Sample X report



• Sample Z report



The subsequent printout occurs in the same format as in the sample X report.

■ Closed GLU/PBLU report

• Sample X report

```
#182  *X1*
* GLU *

                    0001-9999
0203#                1111
TBL#1110
COVER CT       3Q
CASH                  $33.92
TIP AMT                $0.00
FIN. BAL              $33.92
0204#                1111
TBL#1111
COVER CT       3Q
CHARGE1               $34.98
TIP AMT                $5.00
FIN. BAL              $39.98
0205#                1111
TBL#1115
COVER CT       2Q
CHARGE2               $10.60
```

```
FIN. BAL              $50.88

***TOTAL
COVER CT      33Q
CASH           3Q     $54.60
CASH2          1Q     $20.14
CASH5          1Q     $23.32
CHECK1         1Q     $27.56
CHECK2         1Q     $12.72
CHARGE1        2Q     $60.42
CHARGE2        1Q     $10.60
CHARGE3        1Q     $38.16
CONV 1         1Q      50.00
FSSALE         1Q     $30.00
TIP AMT        2Q      $9.00
FIN. BAL      12Q    $348.52
```

• Sample Z report

```
#182  *Z1*
* GLU *
```

The subsequent printout occurs in the same format as in the sample X report.

■ Closed GLU/PBLU report by cashier/server

• Sample X report

```
#183  *X1*
* GLU *

01SRV#1111          DICK
0203#
TBL#1110
COVER CT        3Q
CASH                    $33.92
TIP AMT                  $0.00
FIN.BAL                 $33.92
0204#
TBL#1111
COVER CT        3Q
CHARGE1                 $34.98
TIP AMT                  $5.00
```

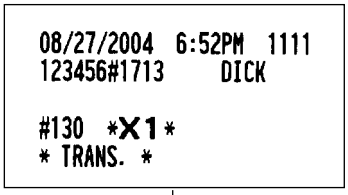
```
TIP AMT                  $0.00
FIN.BAL                 $23.32

***TOTAL
COVER CT       24Q
CASH            2Q      $65.72
CASH2           1Q      $20.14
CASH5           1Q      $23.32
CHECK1          1Q      $27.56
CHECK2          1Q      $12.72
CHARGE1         1Q      $34.98
CHARGE2         1Q      $10.60
CHARGE3         1Q      $38.16
TIP AMT         2Q       $9.00
FIN.BAL         9Q     $242.20
```

• Sample Z report

```
#183  *Z1*
* GLU *
```

The subsequent printout occurs in the same format as in the sample X report.

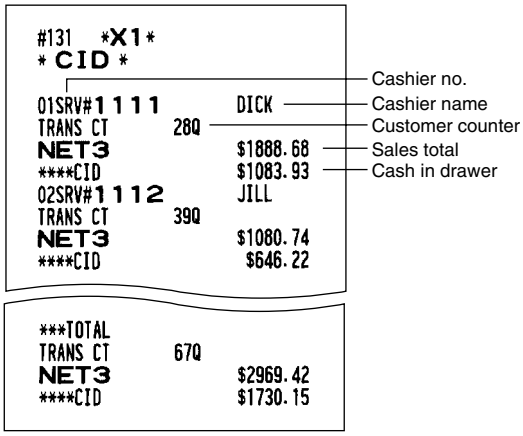
■ Transaction report



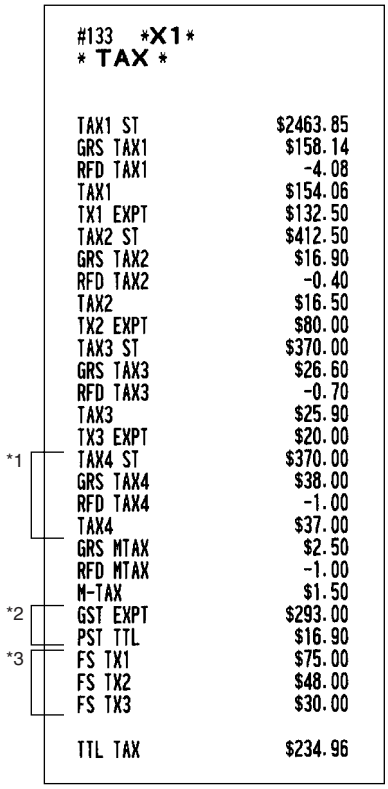
In this report the same transaction data as those printed when general reading is taken are printed except department sales totals.

■ Cash in drawer report

You can take full cashier X reports for cash in drawer.



■ Tax report



*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.

■ 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

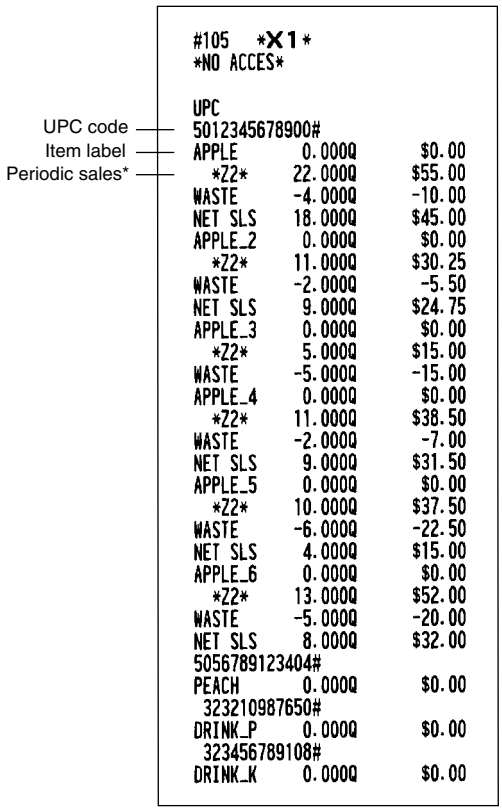
You can print multiple X1/Z1 reports in sequence at a single time. In this case, you need to program in advance what X1/Z1 reports should be printed in the stacked report sequence.

Note

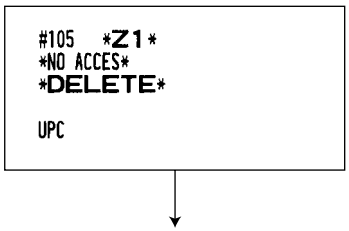
The following job code numbers (only) can be used for stacked report printing.
Job code number: 100, 110, 113, 120, 124, 127, 129, 130, 131, 132, 140, 160, 180
Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for further details.

■ 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.

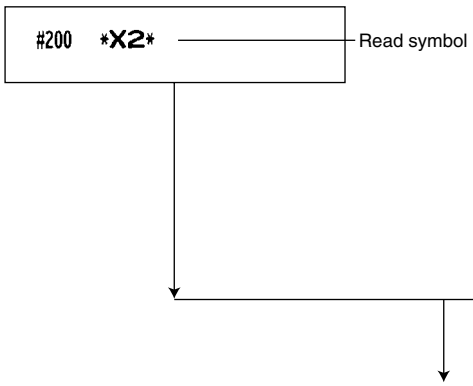
3 Periodic consolidation

Your register allows you to take consolidation X and Z reports of a chosen period (normally one week or a month).

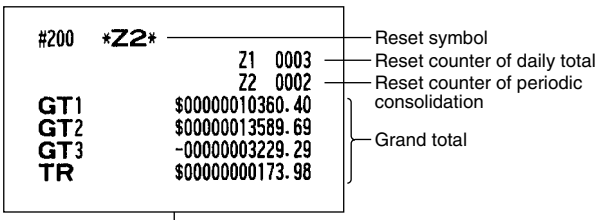
■ General Overview

The periodic reading or resetting reports are the same in format as those in the X1/Z1 report for daily total except job code no. (#2xx) and mode indication (“X2” or “Z2”.)

• Sample X report



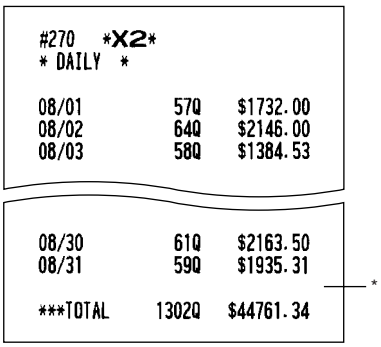
• Sample Z report



The subsequent printouts are the same in format as those in the X/Z report for daily total.

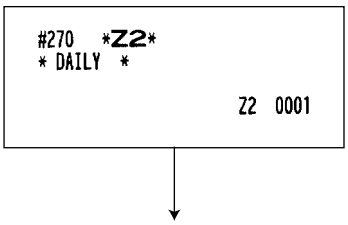
■ Daily net report

• Sample X report



*: Overflowed data will be printed with the indication of ∗∗/∗∗ at the date column.

• Sample Z report



The subsequent printout occurs in the same format as in the sample X report.

■ 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.

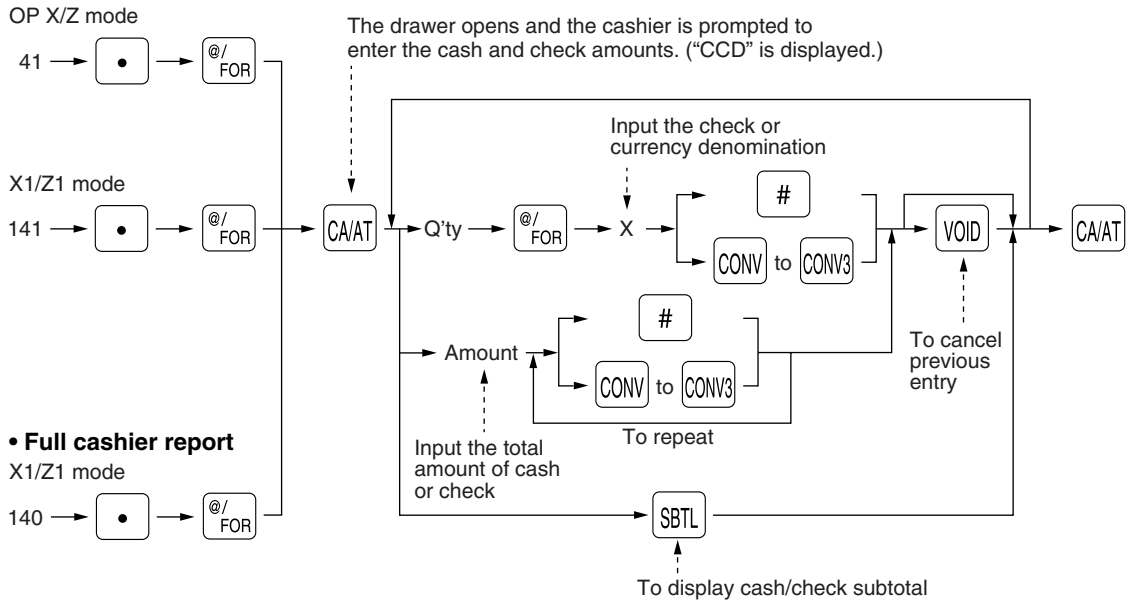
Types of compulsory cash/check declarations
- Compulsory declaration prior to individual cashier resetting
- Compulsory declaration prior to full cashier resetting

Note

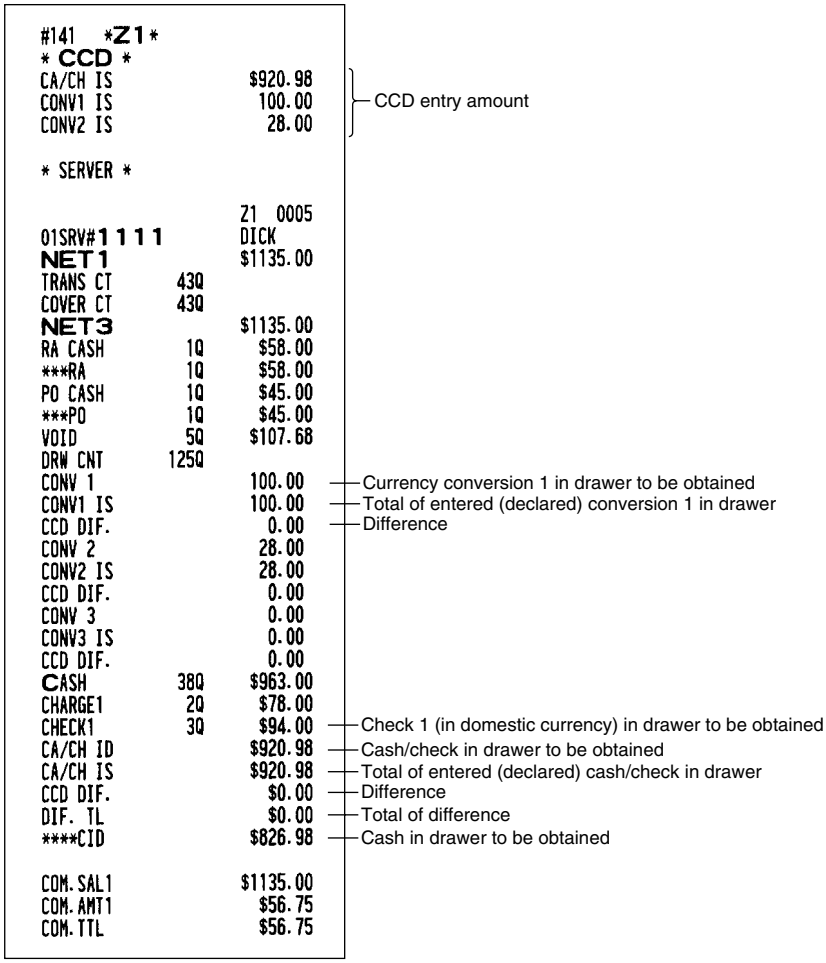
- *Compulsory cash/check declaration is available in the above two types. You can choose either of these. Please consult your dealer for further details.*
- *When the cash/check declaration is compulsory, flash reports are not available.*

Key operation
After the CA/AT 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



: When inputting the cash or check amount (domestic currency) in the drawer
CONV to CONV3 : When inputting the amount of a foreign currency in the drawer


#141 *Z1*
* CCD *
CA/CH IS $920.98
CONV1 IS 100.00
CONV2 IS 28.00
CCD entry amount
* SERVER *
Z1 0005
01SRV#1111 DICK
NET1 $1135.00
TRANS CT 43Q
COVER CT 43Q
NET3 $1135.00
RA CASH 1Q $58.00
***RA 1Q $58.00
PO CASH 1Q $45.00
***PO 1Q $45.00
VOID 5Q $107.68
DRW CNT 125Q
CONV 1 100.00
Currency conversion 1 in drawer to be obtained
CONV1 IS 100.00
Total of entered (declared) conversion 1 in drawer
CCD DIF. 0.00
Difference
CONV 2 28.00
CONV2 IS 28.00
CCD DIF. 0.00
CONV 3 0.00
CONV3 IS 0.00
CCD DIF. 0.00
CASH 38Q $963.00
CHARGE1 2Q $78.00
CHECK1 3Q $94.00
Check 1 (in domestic currency) in drawer to be obtained
CA/CH ID $920.98
Cash/check in drawer to be obtained
CA/CH IS $920.98
Total of entered (declared) cash/check in drawer
CCD DIF. $0.00
Difference
DIF. TL $0.00
Total of difference
****CID $826.98
Cash in drawer to be obtained
COM.SAL1 $1135.00
COM.AMT1 $56.75
COM.TTL $56.75

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
- - - - - - - - - - - - - -
F002 (−) 2           -0.00
I                      L17
F006 %1             -10.25%
```

2 In case of printer error

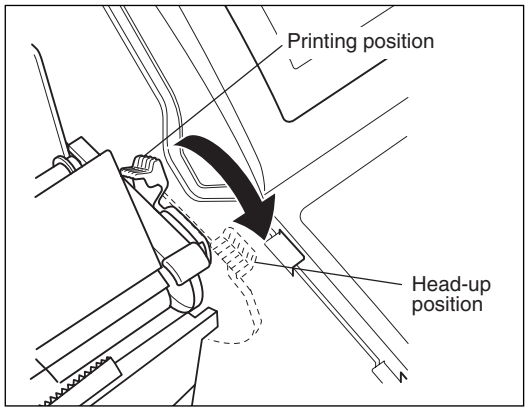
If the printer runs out of paper, the printer will hault, "PAPER EMPTY" error will appear on the display. Key entries will not be accepted. Referring to "4. Installing and removing the paper roll" in this chapter, install a new roll paper in the proper position, then press the CL key. The printer will 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°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.
- 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°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

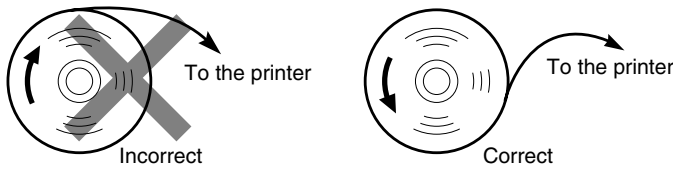
Paper width:	2.26 ± 0.02 in. (57.5 ± 0.5 mm)
Max. outside diameter:	3.15 in. (80 mm)
Quality:	Thermal paper
Paper tube:	0.71 in. (18 mm)

• Be sure to set paper roll(s) prior to using your machine, otherwise it may cause a malfunction.

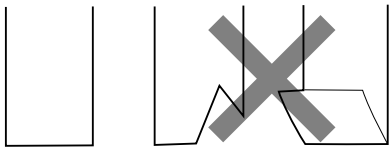
Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

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)

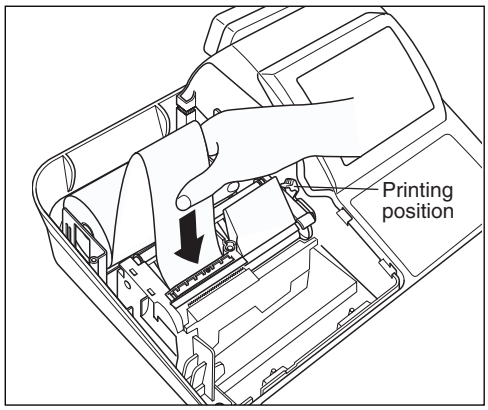


(How to cut the paper end)



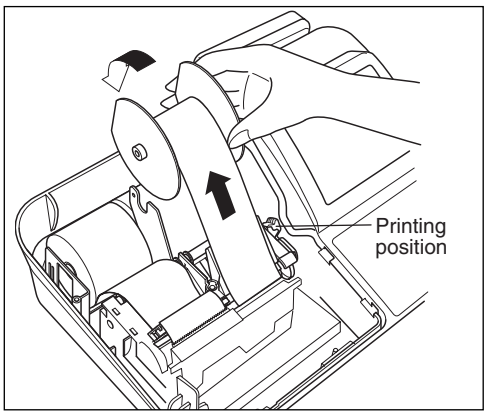
■ Installing the paper roll

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 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 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 JOURNAL 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.

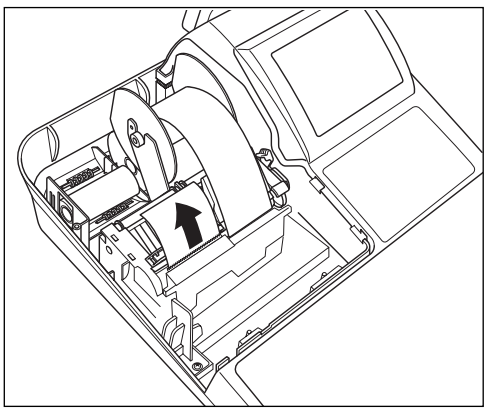
- When you want to manually install a new roll of paper while your machine is turned off, follow the steps shown below:
  1. Pull the print head release lever toward you to lift up the print head.
  2. Correctly place the new paper roll into the receipt/journal paper roll location.
  3. Insert the paper 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.

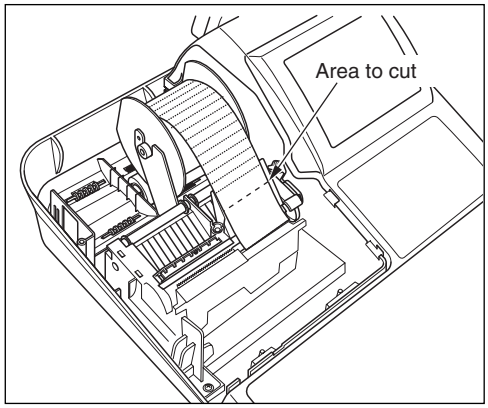
Removing the receipt paper roll



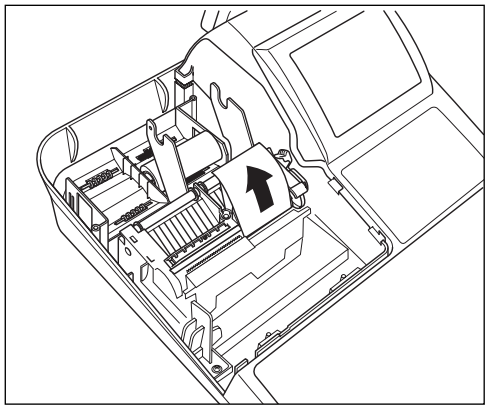
1. Remove the printer cover.
2. Cut the paper behind the printer and near the paper roll.
3. Press the RECEIPT key until the paper remaining in the printer comes out completely.
4. Remove the paper roll from the back of the printer.

Note *Do not pull the paper through the printer.*

Removing the journal paper roll

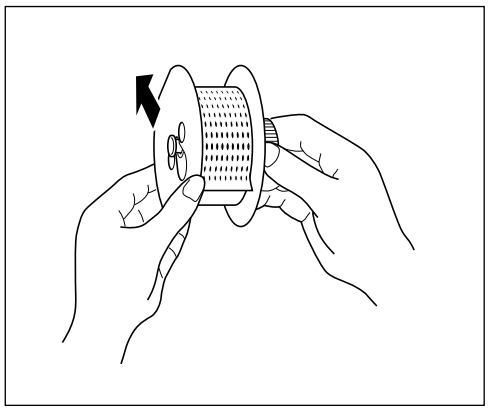


1. Remove the printer cover.
2. Press the JOURNAL key to advance the journal paper until its printed part is out of the way.
3. Cut the paper and remove the take-up spool.

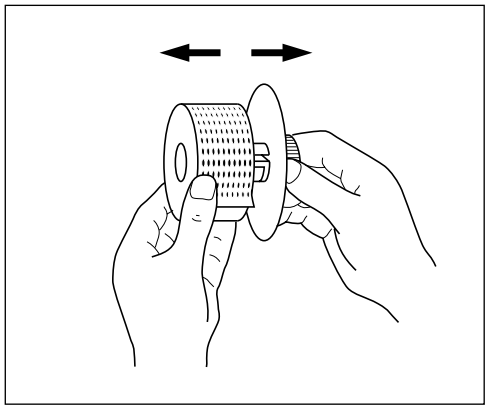


4. Cut the paper behind the printer and near the paper roll.
5. Press the JOURNAL key until the paper remaining in the printer comes out completely.
6. Remove the paper roll from the back of the printer.

Note *Do not pull the paper through the printer.*



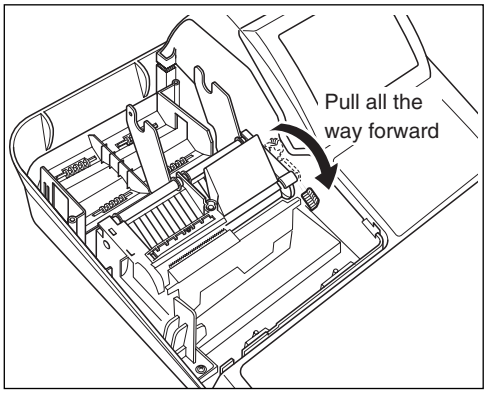
7. Remove the outer side of the take-up spool as shown on the left.



8. Remove the printed journal roll from the take-up spool.

■ Removing a paper jam

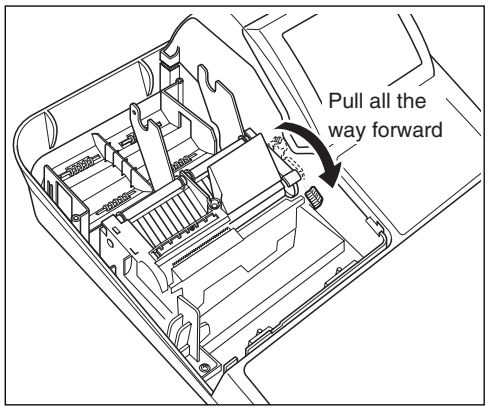
Precaution: Be very careful with the manual paper cutter, so as not to cut yourself. Never touch the print head immediately after printing, because the head may still be hot.



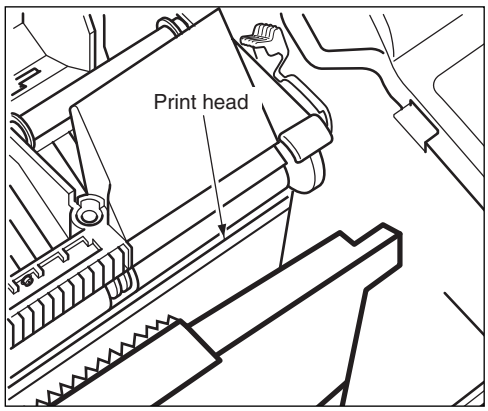
1. Remove the printer cover.
2. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
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).



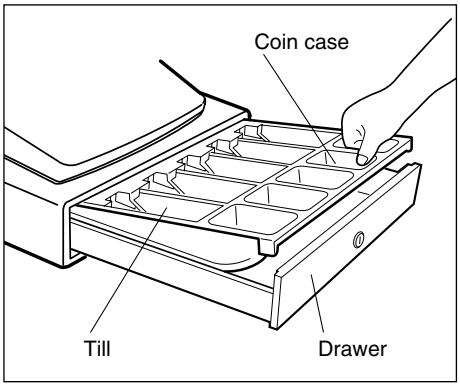
4. Clean the print head with a soft rag moist with ethyl alcohol or isopropyl alcohol.
5. Return the print head release lever to its original position immediately after cleaning.
6. Reset the paper roll correctly by following the steps in "Installing the paper roll".
7. Replace the printer cover.

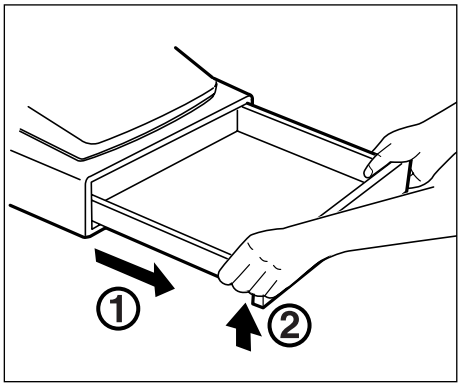
Caution:

- **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

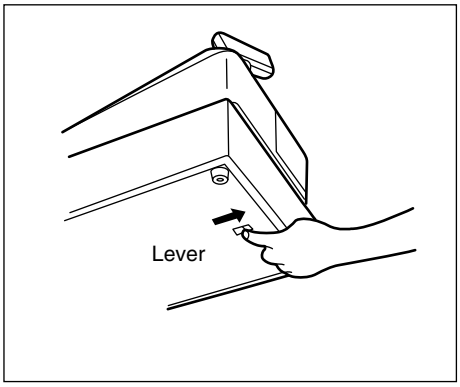
The till in the register is detachable. After closing your business for the day, remove the till from the drawer and keep the drawer open. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.





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	Checking
(1) The display won’t be illuminated even when the mode switch is turned to any other position than “OFF”.	• Is power supplied to the electrical outlet? • Is the power cord plug out or loosely connected to the electrical outlet?
(2) The display is illuminated, but the whole machine refuses registrations.	• Is a cashier code assigned to the register? • Is the mode switch set properly at the “REG” position?
(3) No receipt is issued.	• Is the receipt paper roll properly installed? • Is there a paper jam? • Is the receipt function in the “OFF” status? • 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? • Is there a paper jam?
(5) Printing is unusual.	• Is the print head release lever at the printing position? • 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 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 → 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	**D E L E T E**
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

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: 30 1 x 2 size key kits
  ER-22KT7: 10 2 x 2 size key kits
  ER-11DK7G: 30 regular size dummy key kits
  ER-51DK7G: 10 5 x 1 size dummy key kits

  } for ER-A520 only

- Display model UP-P16DP
- RAM board model UP-S02MB

SPECIFICATIONS

Model:	ER-A520/A530	
Dimensions:	16.6 (W) x 16.8 (D) x 11.7 (H) in. (421 (W) x 427 (D) x 297 (H) mm)	
Weight:	31.7 lbs (14.4 kg)	
Power source:	120V ± 10% AC, 60Hz	
Power consumption:	Stand-by 11 W	
	Operating 47 W (max.)	
Working temperature:	32 to 104°F (0 to 40°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 ± 0.02 in. (57.5 ± 0.5 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) } for ER-A530 only
	Programming key sheet	1 (provided with the keyboard) } for ER-A530 only
	Ferrite cores	2 (used for connection cabling installation)
	Leaflet	1 copy

* Specifications and appearance subject to change without notice for improvement.

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
1-800-BE-SHARP
http://www.sharp-usa.com

SHARP CORPORATION