SHARP®

ELECTRONIC CASH REGISTER
CAISSE ENREGISTREUSE ELECTRONIQUE

MODEL
MODELE **XE-A202**

INSTRUCTION MANUAL MANUEL D'INSTRUCTIONS

CAUTION

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

ATTENTION

La prise de courant murale devra être installée à proximité de l'équipement et être facilement accessible.

English

INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model XE-A202.
Please read this manual carefully before operating your machine in order to gain full understanding of functions and features.
Please keep this manual for future reference. It will help you if you encounter any operational problems.

CAUTION!

Never install the batteries into the cash register before initializing it. Before you start operating the cash register, you must first initialize it, then install the batteries. Otherwise, distorted memory contents and malfunction of the cash register will occur. For this procedure, please refer to page 7.

IMPORTANT

- **On the printer, a cutter to cut the paper roll is mounted. Always be careful not to cut yourself by the cutter.**
- **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 electronic components.
- **Never operate the register 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 (local voltage ±10% AC).**
  Other electrical devices on the same electrical circuit could cause the register to malfunction.
- **For protection against data loss, please install three "AA" batteries after initializing the cash register. When handling the batteries, never fail to observe the followings:**
  Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the cash register.
  - **Be sure that the the positive (+) and negative (-) poles of each battery are facing in the proper direction for installation.**
  - **Never mix batteries of different types.**
  - **Never mix old batteries and new ones.**
  - **Never leave dead batteries in the battery compartment.**
  - **Remove the batteries if you do not plan to use the cash register for long periods.**
  - **Should a battery leak, clean out the battery compartment immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.**
  - **For battery disposal, follow the corresponding law in your country.**
- **If the register malfunctions, call 905-568-7140 for service - do not try to repair the register yourself.**
- **For a complete electrical disconnection, disconnect the main plug.**

Customer Service Hotline
905-568-7140

For Easy Set-up, see "GETTING STARTED" (page 7).

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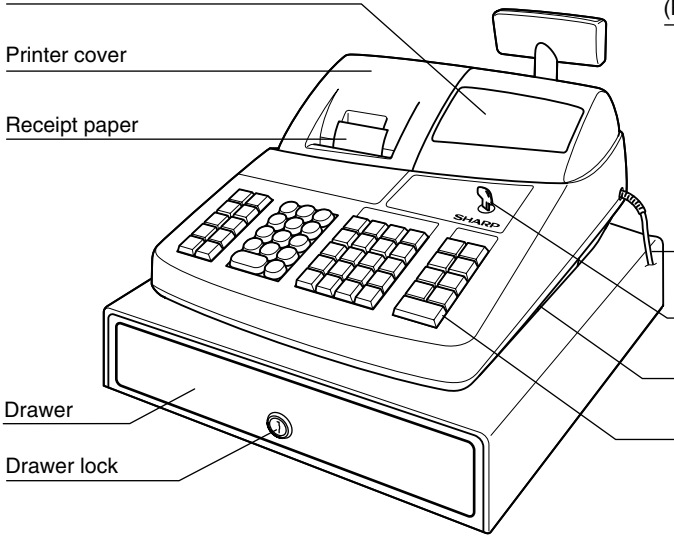
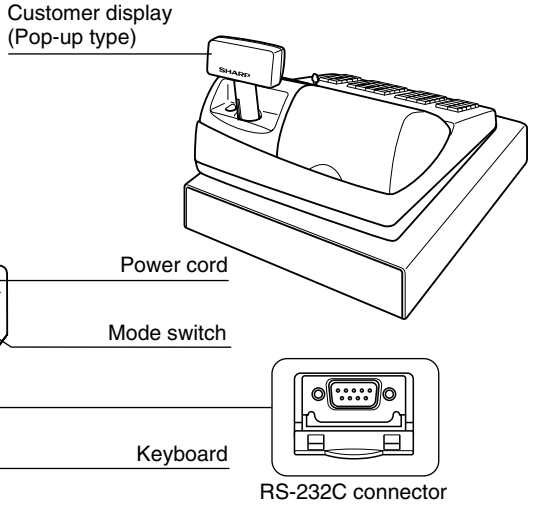
PARTS AND THEIR FUNCTIONS

1 External View

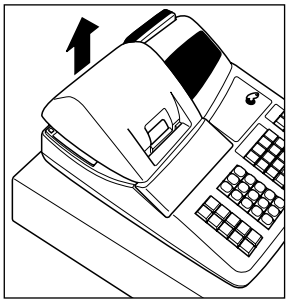
■ Front view



■ Rear view



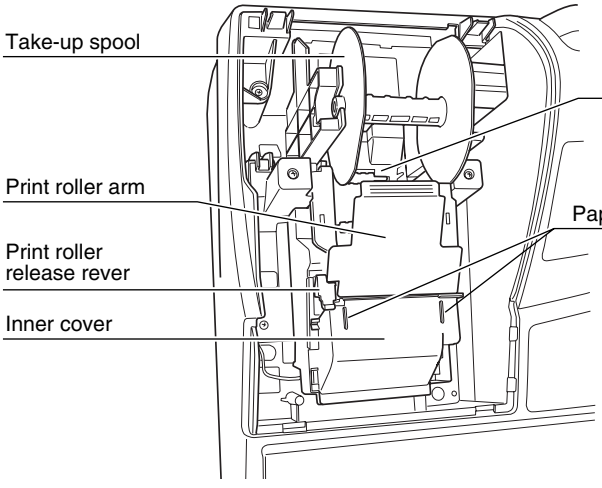
2 Printer



The printer is one station type thermal printer, therefore it does not require any type of ink ribbon or cartridge.

Lift the rear of the printer cover to remove. To re-install, hook the pawls on the cabinet and close.

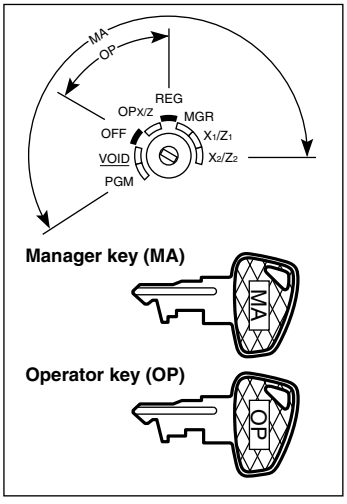
Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself.



Note *Do not attempt to remove the paper roll with the print roller arm is locked. This may result in damage to the printer and print head.*

3 Mode Switch and Mode Keys

The mode switch can be operated by inserting one of the two supplied mode keys - manager (MA) and operator (OP) keys. These keys can be inserted or removed only in the “REG” or “OFF” position.



The mode switch has these settings:

OFF: This mode locks all register operations. (AC power turns off.) No change occurs to register data.

OP X/Z: To take individual clerk X or Z reports, and to take flash reports. It can be used to toggle receipt state “ON” and “OFF” by pressing the RCPT/PO key.

REG: For entering sales.

PGM: To program various items.

VOID: Enters into the void mode. This mode allows correction after finalizing a transaction.

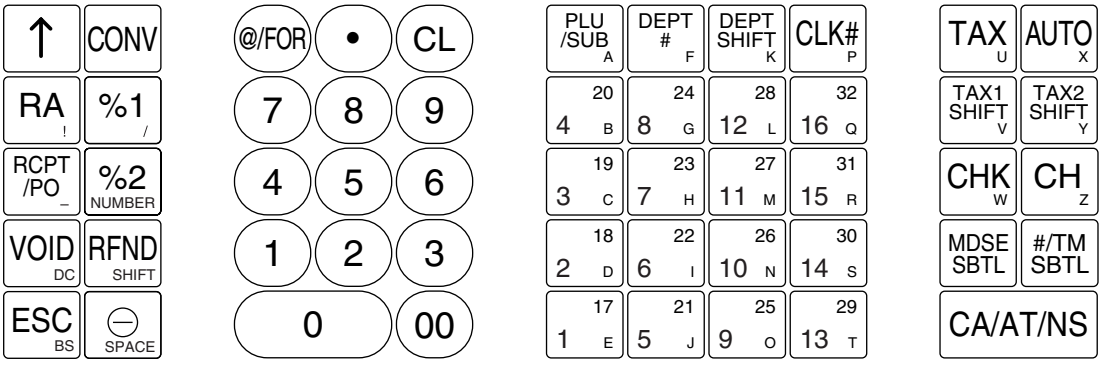
MGR: For manager’s entries. The manager can use this mode for an override entry.

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

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

4 Keyboard

■ Keyboard layout



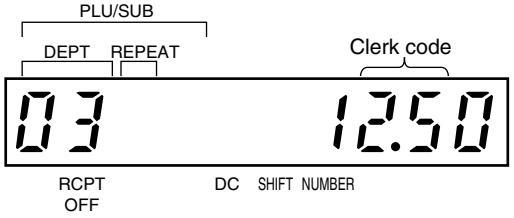
Note *The small characters on the bottom or lower right in each key indicates functions or characters which can be used for character entries for text programming. For details, refer to page 39.*

■ Key names

- ↑ Paper feed key
- RA Received-on account key
- RCPT /PO Receipt print/Paid-out key
- VOID Void key
- ESC Escape key
- CONV Conversion key
- %1 %2 Percent 1 and 2 keys
- RFND Refund key
- ⊖ Discount key
- @/FOR Multiplication key
- • Decimal point key
- CL Clear key
- 00 0 ~ 9 Numeric keys
- PLU /SUB PLU/Subdepartment key
- DEPT # Department code entry key
- DEPT SHIFT Department shift key
- CLK# Clerk code entry key
- 1 (17) ~ 16 (32) Department keys
- TAX Tax key
- TAX1 SHIFT TAX2 SHIFT Tax 1 and 2 shift keys
- AUTO Automatic sequence key
- CHK Check key
- CH Charge key
- MDSE SBTL Merchandise subtotal key
- #/TM SBTL Non-add code/Time display /Subtotal key
- CA/AT/NS Total/Amount tender /No sale key

5 Displays

Operator display



Customer display (Pop-up type)

Amount: Appears in the far-right eight (max.) positions. When the amount is negative, the minus symbol "-" appears before the amount.

Number of repeats for repetitive registrations:
The number of repeats is displayed, starting at "2" and incremental with each repeat. When you have registered ten times, the display will show "0."(2 → 3 ····· 9 → 0 → 1 → 2 ···)

Receipt function status:
The indicator "_" appears in the RCPT OFF position when the receipt function is in the OFF status.

Time: Appears in the far-right six positions (hour-minute -"A" or hour-minute -"P") in the OP X/Z, REG, or MGR mode. "A" is displayed in the morning (AM), and "P" in the afternoon (PM). In the REG or MGR mode, press the #/TM/SBTL key to display the time.

■ Machine state symbols

P : Appears during programming.

E : Appears when an error is detected.

o : Appears when the subtotal is displayed or when the amount tendered is smaller than the sales amount.

c : Appears when the CONV key is pressed to calculate a subtotal in foreign currency.

F : Appears when a transaction is finalized by pressing the CA/AT/NS, CHK or CH key.

C : Appears when the change due amount is displayed.

E-E : May appear in the far-left three positions at the timing of key entry when the electronic journal (EJ) memory is full. (Depending on programming.)

L : Appears when the voltage of the installed batteries is under the required level. You must replace with new ones within two days. Refer to page 63 for details.

L : Appears when the batteries are not installed, or the installed batteries are dead. You must replace with new ones immediately. Refer to page 63 for details.

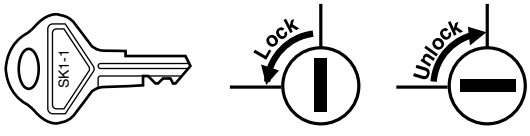
• : May appear right below the eighth and ninth places at the timing of finalization of a transaction when the electronic journal (EJ) memory is nearly full.
Also appears right below the tenth place when power save mode is effective.

H : Appears when the print roller arm is not locked.

PPPPPPPPPP : Appears when the paper is not set or out.

6 Drawer Lock Key

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



GETTING STARTED

Please follow the procedure shown below. The batteries are not installed and the power is OFF.

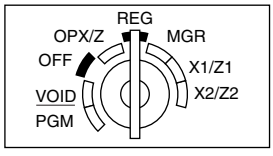
1 Installing the cash register

Find a stable surface where the cash register is not subject to water sources or direct sunlight near an AC outlet.
Unpack the cash register and make sure all accessories are included. For details of accessories, please refer to "Specifications" section.

2 Initializing the cash register

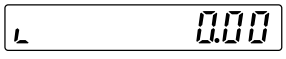
In order for your cash register to operate properly, you must initialize it before programming for the first time. Follow this procedure.

1. Insert the manager (MA) key into the mode switch and turn it to the REG position.



2. Insert the plug into the AC outlet. The buzzer will sound three times.
IMPORTANT: This operation must be performed without batteries installed.

3. The cash register has now been initialized. The register display will show "0.00" with " ⌞ ".



Note *If the buzzer does not sound when the plug is inserted, the initialization has not been done successfully. (This will occur when the voltage is still high because you operated the cash register just before starting initialization.) In this case, wait at least one minute after pulling out the plug, and insert the plug again.*

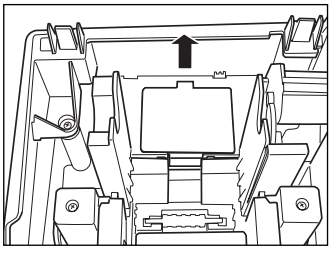
3 Installing batteries

Three new "AA" batteries must be installed in the cash register to prevent the data and user-programmed settings from being erased from the memory, when the AC cord is accidentally disconnected or in case of power failure. Once installed, the batteries will last approximately one year before needing replacement. At this time, the " ⌊ " symbol will appear on the display to indicate the batteries are low and must be replaced within two days. If the no battery symbol " ⌞ " appears, you must install the batteries at once.

Install three new "AA" batteries according to the procedure shown below with the AC cord connected and the mode switch set to the REG position:

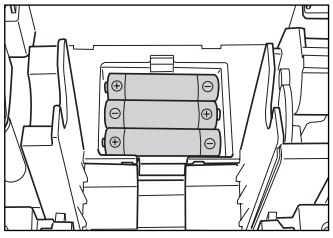
1. Push the printer cover forward and detach it.
Be careful with the paper cutter, so as not to cut yourself.

2. Open the battery compartment cover next to the paper roll cradle.



3. Insert three new “AA” batteries as illustrated at the right.
When the batteries are properly installed “ ⌞ ” on the display will disappear.

4. Close the battery compartment cover.



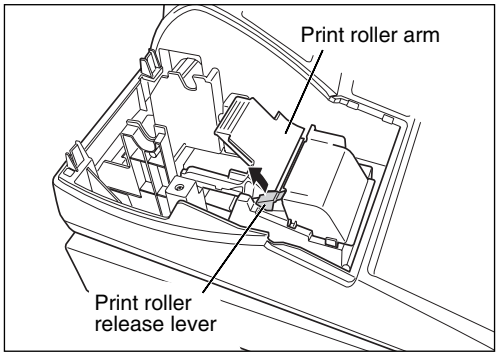
Note *Be sure to observe precautions shown on page 1 when handling batteries.*

4 Installing a paper roll

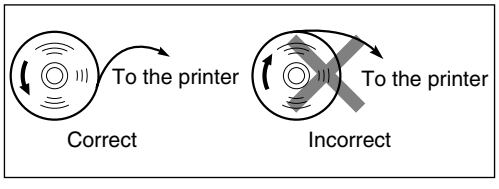
Precaution: The paper cutter is mounted on the printer cover. Take caution when removing and installing the cover.

The register can print receipts or journals. For the printer, you must install the paper roll provided with the register, even when you program the register for not printing receipts or journals.
Install the paper roll according to the procedure shown below with the AC cord connected and the mode switch set to the REG position:

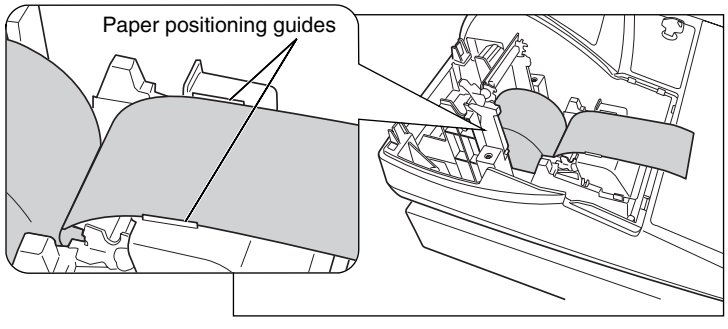
1. Lift up the print roller release lever to unlock and open the print roller arm.



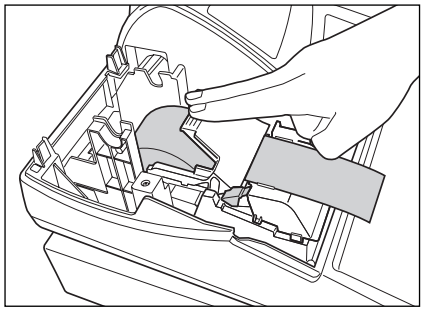
2. Set a paper roll in the paper roll cradle as illustrated at the right.



3. Feed the end of the paper along with the paper positioning guides as illustrated at the right.



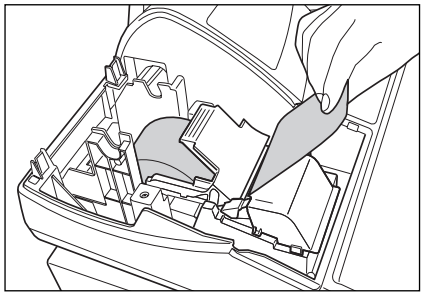
4. While holding down the paper, slowly close the print roller arm, and push down the arm until you hear a click locking the arm. Make sure securely you push down the center of the wing part of the arm as illustrated at the right. The paper will be fed automatically.



Note *If the print roller arm is not securely locked, printing is not done right. If this problem occurs, open the arm, and close the arm as instructed above.*

5. **When not using the take-up spool (using as receipt paper):**

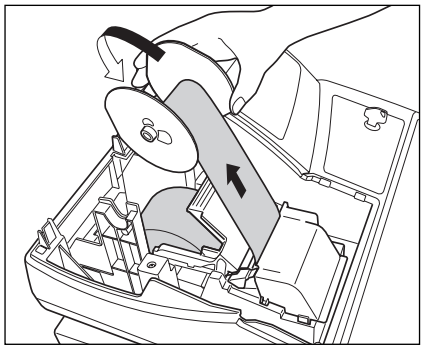
- Cut off the excess paper using the edge of the inner cover, and replace the printer cover. Press the [↑] key to make sure the paper end comes out of the printer cover and clean paper appears.



Note *If the paper end does not come out, open the printer cover, and pass the paper end between the paper cutter and the paper guide of the printer cover, and replace the cover.*

When using the take-up spool (using as journal paper):

- Insert the end of the paper into the slit in the spool. (Press the [↑] key to feed more paper if required.)
- Wind the paper two or three turns around the spool shaft.
- Set the spool on the bearing, and press the [↑] key to take up excess slack in the paper.
- Replace the printer cover.



Note *When using a paper roll as journal paper, you must change the printing style. Refer to "Print Format" in "Various Function Selection Programming 1" section (Job code 6) for changing the printing style.*

5 Programming date, time and tax

Note *The cash register provides text languages of English, French and Spanish. It is preset to English. If you want to change the language, you must change it before programming. Refer to "Language selection" in "Various Function Selection Programming 2" section for changing the language.*

Before you can proceed with registration of sales, **you must program**:

- **date**
- **time**
- **tax**

Please refer to the BASIC FUNCTION PROGRAMMING section for details (page 27).

6 Programming other necessary items

While the cash register is pre-programmed so it can be used with minimal setup, it does provide you with optional functions. Before you start programming, please read through the sales operations section to understand optional functions. The main optional functions are listed below.

- PLU (price lookup)
- Consecutive number
- Machine number
- Receipt or journal printing selection (factory setting: receipt printing)
- Power save mode (factory setting: goes into power save mode in 30 minutes)
- Electronic journal (EJ) memory size (factory setting: 2000 lines are storable. Up to 3000 lines)
  The memory for electronic journal is commonly used for PLU. If you change the setting, the maximum number of PLU code will decrease from 1200 to 200.
- Text programming for clerk name, department items, PLU/subdepartment items, logo messages printed on the top or bottom of receipts, function texts and foreign currency symbol
- Split pricing entry
  This is not factory preset. You must enable this function.
- Foreign currency conversion rate
  You must set a conversion rate to use [CONV] key.
- Preset unit price for departments and PLUs
- Preset amount for [⊖]
- Preset rates for [%1] [%2]
  You do not have to program these preset prices/amount/rates because you can enter when registration. It might be convenient to preset so you do not have to re-enter every time.
- Amount entry digit limit for PO amount, RA amount, Manual tax amount
  The factory setting makes the maximum amount you can enter. You can program to limit the amount.
- Key sequence for AUTO key
- RS-232C programming
- Specification of clerk to be trained

Department programming:
The cash register is pre-programmed for departments as follows:
Department: Allow open price entry, taxable status- taxable 1 for department 1 to 10, and non taxable for department 11 to 99
When you use department 11 or above, and/or you apply taxable status other than taxable 1 for department 1 to 10, you must change department settings. Please refer to the department programming section for programming details.

7 Starting sales entries

Now you are ready for sales registration.

OVERVIEW OF FLOW OF DAILY SALES ENTRIES

Things to do before you start sales entries:

- Make sure the power cord is securely inserted into the AC outlet.
- Turn the mode switch to OP X/Z position, and check if time is correctly set.
- Replace the drawer, if removed for safety.
- Check if there is enough paper on roll.
- Select receipt ON/OFF function.
- Make any necessary programming for the day in PGM mode.

For details, refer to BASIC SALES ENTRY, page 12. For drawer and paper roll, refer to OPERATOR MAINTENANCE, page 62 and for programming, refer to programming sections.

Things you can do for sales entries:

- Item entries
- Item repeat entries
- Item multiplication entries
- Single item cash sale (SICS), if programmed.
- Split pricing entries, if programmed.
- Displaying subtotals
- Cash/Check/Charge sale
- Cash tendering in a foreign currency, if the currency conversion rate is programmed.
- Manual tax entry
- Discount or premium using %1 %2 and ⊖ key
- Refund entry
- No sale
- Paid-out entries
- Received on account entries
- Printing non-add code number
- Making corrections
- Checking sales report

For details of sales entry method, refer to BASIC SALES ENTRY (page 12) and OPTIONAL FEATURES (page 21). For details of correcting sales entries, refer to CORRECTION (page 25). For details on reading sales information, refer to READING (X) AND RESETTING (Z) OF SALES TOTAL (page 57).

Things to do after you close your store:

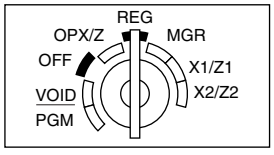
- Print sales reports, and clear sales data for the day.
- Print Electronic Journal (EJ) reports, and clear Electronic Journal (EJ) data, if necessary.
- Account money - comparing it with the amount in cash in drawer printed on the general report.
- Remove the drawer for safety.
- Turn the mode switch to OFF position.

For details of reading sales information, refer to READING (X) AND RESETTING (Z) OF SALES TOTAL (page 57) and EJ REPORT READING AND RESETTING (page 60). For details of removing the drawer and maintenance details, refer to OPERATOR MAINTENANCE (page 62).

BASIC SALES ENTRY

1 Basic Sales Entry Example

Listed below is a basic sales entry example when selling department items by cash. For operation details, please refer to each section.



Mode switch setting

1. Turn the mode switch to the REG position.

Clerk assignment

2. Enter your clerk code. (For example, clerk code is 1. Press the (1) and [CLK#] key in this order.) The clerk code 1 is automatically selected just after initialization of the cash register.

Item entries

3. Enter the price for the first department item. (For example, for 15.00, enter (1)(5)(00), and press the appropriate department key.)

For department 17 to department 32, press the [DEPTSHIFT] key first before pressing the department key.
For department 33 and above, enter the department code using numeric keys, and press the [DEPT#] key, then enter the price and press the [DEPT#] key again.

4. Repeat step 3 for all the department items.

Displaying subtotals

5. Press the [#/TM/SBTL] key to display the amount due.

Finalizing the transaction

6. Enter the amount received from the customer. (You can omit this step if the amount tendered is the same as the subtotal.)

7. Press the [CA/AT/NS] key, and the change due is displayed (when the amount received was not entered, the total amount is displayed) and the drawer is opened.

8. Tear off the receipt and give it to the customer with his or her change.

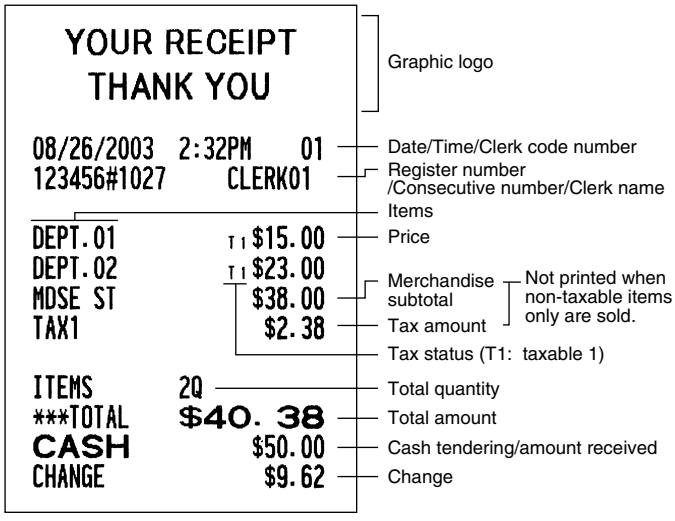
9. Close the drawer.

Key operation example

Clerk assignment	1 [CLK#]	-01-
Item entries	1500 [1 17]	01 15.00
	2300 [2 18]	02 23.00
Displaying subtotal	[#/TM/SBTL]	40.38
	5000	5000
Finalizing the transaction	[CA/AT/NS]	9.62

(In this example, the tax rate is set to 6.25%.)

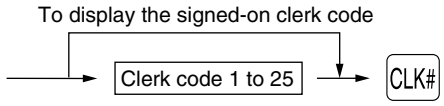
Print



Clerk assignment

Prior to any item entries, clerks must enter their clerk codes into the register. However, the code entry may not be necessary when the same clerk handles the next transaction.

■ Sign-on (in REG, MGR, VOID mode)



■ Sign-off (in REG, MGR, VOID mode)

Receipt ON/OFF function

When you use the printer to issue receipts, you can disable receipt printing in the REG mode to save paper using the receipt ON/OFF function. To disable receipt printing, press the RCPT/PO 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 "_" is illuminated. Your register will print reports regardless of the receipt state, so the paper roll must be installed even when the receipt state is "OFF".

To issue a receipt when receipt ON/OFF function is set to OFF:

If your customer wants a receipt after you finalized a transaction with the receipt ON/OFF function being OFF status, press the RCPT/PO key. This will produce a receipt. However, if more than 30 items were entered, the receipt will be issued in the format of summary receipt print.

Power Save Mode

The register will enter into power save mode when no entries are performed based on the pre-programmed time limit (by default, 30 minutes).

When your register goes to the power save mode, it will light off all the display except the decimal point at the leftmost position. Your register will return to the normal operation mode when any key is pressed or a mode is changed with the mode key. Please note when your register is recovered by a key entry, its key entry is invalid. After the recovery, start the key entry from the beginning.

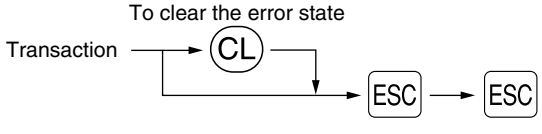
2 Error Warning

In the following examples, your register will go into an error state accompanied with a warning beep and the error symbol " E " on the display. Clear the error state by pressing the CL key and take proper action.
Please refer to the error code table on page 67.

- You enter over a 32-digit number (entry limit overflow): Cancel the entry and re-enter the correct number.
- You make an error in key operation: Clear the error and continue operation.
- You make an entry beyond a programmed amount entry limit: Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.
- An including-tax subtotal exceeds eight digits: Delete the subtotal by pressing the CL key and press the CA/AT/NS, CHK or CH key to finalize the transaction.

Error escape function

When you want to quit a transaction due to an error or an unforeseen event, use the error escape function as shown below:



The transaction is voided (treated as a subtotal void) and the receipt is issued by this function. If you have already entered a tendered amount, the operation is finalized as a cash sale.

3 Item Entries

■ Single item entries

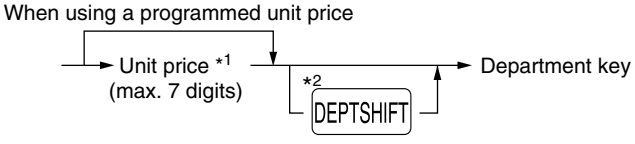
Department entries

The cash register provides a maximum of 99 departments for a merchandise classification. Group attributes, such as taxable status, are applied on items when they are entered to the departments.

• When using the department keys (for department 1 to 32)

For department 1 to 16, enter a unit price and press a department key. If you use a programmed unit price, press a department key only.

For department 17 to 32, enter a unit price, press the DEPTSHIFT key and press a department key. If you use a programmed unit price, press the DEPTSHIFT key and press a department key.

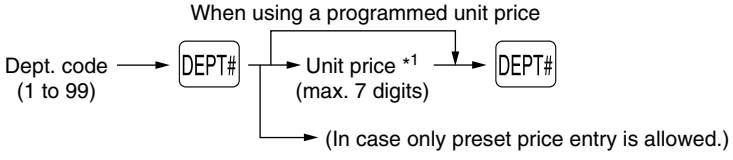


*1 Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.

*2 For the optional departments 17 through 32, press the DEPTSHIFT key.

• When using the department code entry key

Enter a department(dept.) code and press the DEPT# key, then enter a unit price and press the DEPT# key again. If the dept. code is programmed to preset price entry style and a unit price is preset, your cash register will finish its registration operation.



*1 Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.

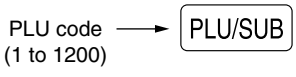
PLU/subdepartment entries

For another merchandise classification, the cash register provides a maximum of 1200 PLUs/subdepartments. PLUs are used to call up preset prices by a code entry. Subdepartments are used to classify merchandise into smaller groups under the departments. Every PLU and subdepartment has a code form 1 to 1200, and should belong to a department to obtain attributes of that department.

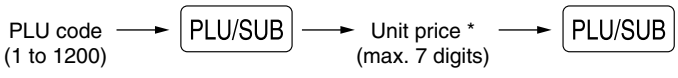
The cash register is pre-programmed to PLU mode and zero for unit price. To use PLU entries, their preset unit prices should be previously programmed. (Refer to page 33.)

To use subdepartment entries, change to subdepartment mode for the PLU codes.

• PLU entries

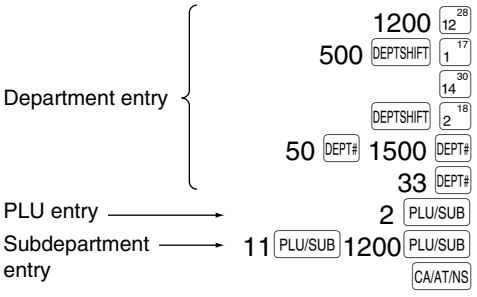


• Subdepartment (open PLU) entries



* Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.

Key operation example



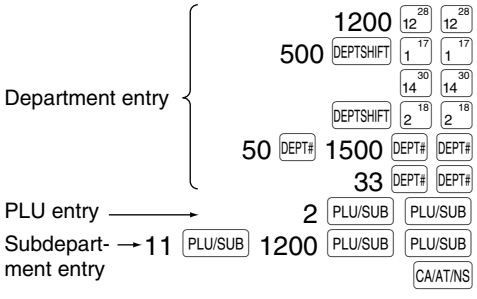
Print

```
DEPT.12          $12.00
DEPT.17          $5.00
DEPT.14          $8.25
DEPT.18          $3.25
DEPT.50          $15.00
DEPT.33          $2.50
PLU0002          $1.50
PLU0011          $12.00

ITEMS      8Q
CASH       $59.50
```

■ Repeat entries

You can use this function for entering a sale of two or more of the same items. Repeat pressing a department key, DEPT# key or PLU/SUB key as shown on key operation example.

Key operation example



Print

```
DEPT.12          $12.00
DEPT.12          $12.00
DEPT.17          $5.00
DEPT.17          $5.00
DEPT.14          $8.25
DEPT.14          $8.25
DEPT.18          $3.25
DEPT.18          $3.25
DEPT.50          $15.00
DEPT.50          $15.00
DEPT.33          $2.50
DEPT.33          $2.50
PLU0002          $1.50
PLU0002          $1.50
PLU0011          $12.00
PLU0011          $12.00

ITEMS      16Q
CASH       $119.00
```

■ Multiplication entries

When you sell a large quantity of items, it is convenient to use the multiplication entry method. Enter quantity using numeric keys and press the @/FOR key before starting item entry as shown in the example below.

Note *When programmed to allow fractional quantity entries, you can enter up to four integers and three digit decimal, though the quantity is counted as one for sales reports. To enter a fractional quantity, use the decimal point key between integer and decimal, as (7)(•)(5) for entering 7.5.*

Key operation example

Department entry
3 @/FOR 1200 12[28]
5 @/FOR 500 DEPTSHIFT 1[17]
3 @/FOR 14[30]
5 @/FOR DEPTSHIFT 2[18]
3 @/FOR 50 DEPT# 1500 DEPT#
5 @/FOR 33 DEPT#

PLU entry → 3 @/FOR 2 PLU/SUB

Subdepartment entry → 5 @/FOR 11 PLU/SUB 1200 PLU/SUB
CA/AT/NS

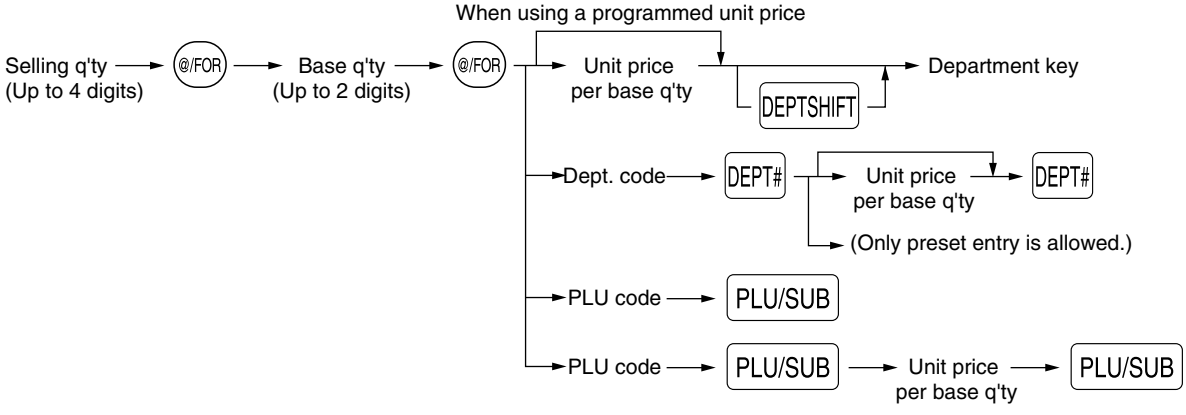
Print

```
                3 @ $12.00
DEPT.12           $36.00
                5 @ $5.00
DEPT.17           $25.00
                3 @ $8.25
DEPT.14           $24.75
                5 @ $3.25
DEPT.18           $16.25
                3 @ $15.00
DEPT.50           $45.00
                5 @ $2.50
DEPT.33           $12.50
                3 @ $1.50
PLU0002            $4.50
                5 @ $12.00
PLU0011           $60.00

ITEMS      32Q
CASH     $224.00
```

■ Split pricing entries

This function is practical when the customer wants to purchase items normally sold in bulk.
To realize this function, you must change the programmed setting. Refer to “Various Function Selection Programming 1” (job code 70) for programming details.

To make split pricing entries, follow the procedure below:



Key operation example

Department entry
7 @/FOR 10 @/FOR
600 7[23]

PLU entry
8 @/FOR 12 @/FOR
35 PLU/SUB
CA/AT/NS

Print

```
          7 @ 10/ $6.00
DEPT.07          T1 $4.20
        8 @ 12/ $10.00
PLU0035          T1 $6.67
MDSE ST           $10.87
TAX1               $0.68

ITEMS       2Q
CASH      $11.55
```

■ Single item cash sale (SICS) entry

- This function is useful when a sale is for only one item and is for cash. This function is applicable only to those departments that have been set for SICS or to their associated PLUs or subdepartments.
- The transaction is complete and the drawer opens as soon as you press the department key, [DEPT#] key or [PLU/SUB] key.

Key operation example

250

For finishing the transaction → [9 25]

Print

```
DEPT.09          T1 $2.50
MDSE ST            $2.50
TAX1               $0.16

ITEMS      1Q
CASH             $2.66
```

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

4 Displaying Subtotals

The register provides three types of subtotals:

Merchandise subtotal

Press the [MDSESBTL] 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 [TAX1SHIFT] and [#/TM/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 [TAX2SHIFT] and [#/TM/SBTL] keys in this order at any point during a transaction. The sale subtotal of taxable 2 items will appear in the display.

Including-tax subtotal (full subtotal)

Press the [#/TM/SBTL] key at any point during a transaction. The sale subtotal including tax and the symbol "□" will appear in the display.

5 Finalization of Transaction

■ Cash or check tendering

Press the [#/TM/SBTL] key to get an including tax subtotal, enter the amount tendered by your customer, then press the [CA/AT/NS] key if it is a cash tender or press the [CHK] 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 symbol "□" will light up. Otherwise the register will show a deficit and the symbol "□" will light up. You now must make a correct tender entry.

Cash tendering

Key operation example

1000 [#/TM/SBTL] [CA/AT/NS]

Print

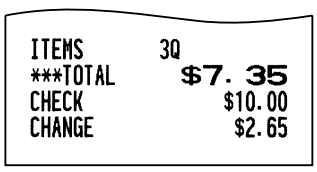
```
ITEMS        3Q
***TOTAL    $7.35
CASH        $10.00
CHANGE       $2.65
```

Check tendering

Key operation example

#/TM/SBTL
1000 CHK

Print



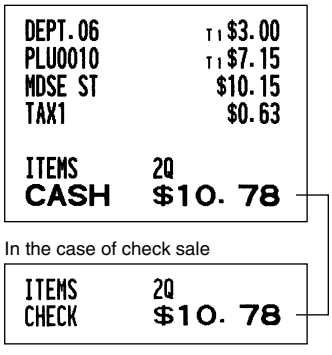
■ Cash or check sale that does not require entry

Enter items and press the CA/AT/NS key if it is a cash sale or press the CHK if it is a check sale. Your register will display the total sale amount.

Key operation example

300 6 22
10 PLU/SUB
CA/AT/NS

Print



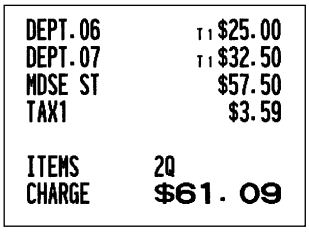
■ Charge (credit) sale

Enter items and press the charge key (CH).

Key operation example

2500 6 22
3250 7 23
CH

Print



■ Mixed-tender sale

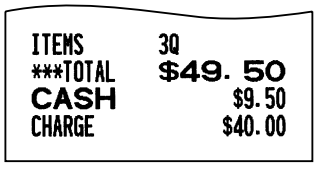
You can perform mixed-tendering of check and cash, cash and charge, and check and charge.

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

Key operation example

#/TM/SBTL
950 CA/AT/NS
CH

Print



6 Tax Calculation

■ Automatic tax

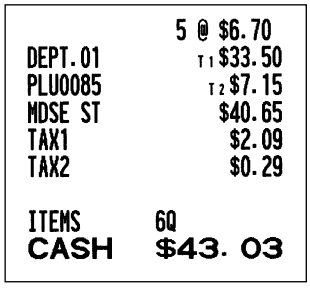
When the register is programmed with a tax rate (or tax table) and the tax status of an individual department is set for taxable, it computes the automatic tax on any item that is entered directly into the department or indirectly via a related PLU.

Example: Selling five $6.70 items (dept. 1, taxable 1) and one $7.15 item (PLU no. 85, taxable 2) for cash

Key operation example

5 @/FOR 670 1[17]
85 PLU/SUB
CA/AT/NS

Print



■ Manual tax

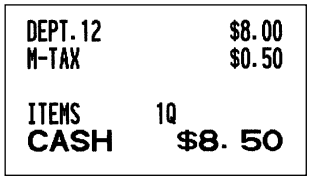
The machine allows you to enter tax manually after it finalizes an item entry.

Example: Selling an $8.00 item (dept. 12) for cash with 50 cents as tax

Key operation example

800 12[28]
50 TAX
CA/AT/NS

Print



■ Tax delete

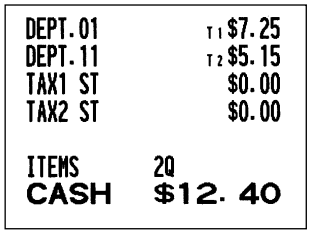
You can delete the automatic tax on the taxable 1 and taxable 2 subtotal of each transaction by pressing the TAX key after the subtotal is displayed.
To delete taxable 1 subtotal, press TAX1SHIFT, #/TM/SBTL to get taxable 1 subtotal, and then press TAX to delete the subtotal.
To delete taxable 2 subtotal, press TAX2SHIFT, #/TM/SBTL to get taxable 2 subtotal, and then press TAX to delete the subtotal.
To delete all taxable (1-4) subtotal, press TAX1SHIFT, TAX2SHIFT, #/TM/SBTL and TAX in this order.

Example: Selling a $7.25 item (dept. 1, taxable 1) and another $5.15 item (dept. 11, taxable 2) for cash and entering the sale as a non-taxable one

Key operation example

725 1[17]
515 11[27]
TAX1SHIFT #/TM/SBTL
TAX
TAX2SHIFT #/TM/SBTL
TAX
CA/AT/NS

Print



■ Tax status shift

The machine allows you to shift the programmed tax status of each department or the PLU key by pressing the [TAX1SHIFT] and/or [TAX2SHIFT] keys before those keys. After each entry is completed, the programmed tax status of each key is resumed.

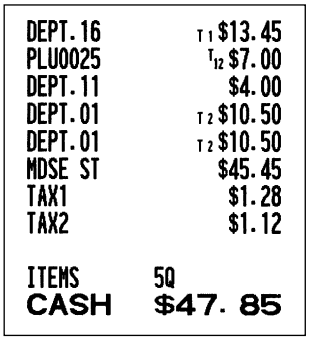
Example: Selling the following items for cash with their programmed tax status reversed

- One $13.45 item of dept. 16 (non-taxable) as a taxable 1 item
- One $7.00 item of PLU no. 25 (non-taxable) as a taxable 1 and 2 item
- One $4.00 item of dept. 11 (taxable 2) as a non-taxable item
- Two $10.50 items of dept. 1 (taxable 1) as taxable 2 items

Key operation example

1345 [TAX1SHIFT] [16 (32)]
25 [TAX1SHIFT] [TAX2SHIFT] [PLU/SUB]
400 [TAX2SHIFT] [11 (27)]
1050 [TAX1SHIFT] [TAX2SHIFT] [1 (17)]
[1 (17)]
[CA/AT/NS]

Print



Note

When Canadian tax system is applied:
When using a tax status shift, the entry of a multi-taxable item for PST or GST will be prohibited. Please see below:

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

OPTIONAL FEATURES

1 Auxiliary Entries

■ Discount and premium entries using the percent key

The percent key is used to apply a manually entered or preset discount or premium percent rate to individual items or to a merchandise subtotal. In the default setting, you can manually enter a discount percent rate to both individual items and merchandise subtotal. For manual entry of discount or premium percent rate, enter the rate (up to 100.00) with the numeric keys (you need a decimal point when you enter a fractional percent rate), and press a percent key. When using a preset rate (if programmed), just press a percent key.
When entry limit is programmed for a percent key, you can not enter a rate over the limit (error code 34 will occur.)

Percent calculation for the merchandise subtotal

Key operation example

4 [@/FOR]
140 [5 21]
570 [7 23]
[MDSESBTL]
10 [%1]
[CA/AT/NS]

Print

```
                4 @ $1.40
DEPT.05        T1 $5.60
DEPT.07        T1 $5.70
MDSE ST          $11.30
                  -10%
%1               -1.13
MDSE ST          $10.17
TAX1              $0.71

ITEMS      5Q
CASH       $10.88
```

Percent calculation for item entries

Key operation example

800 [6 22]
7 [•] 5 [%1]
15 [PLU/SUB]
[%2]
[CA/AT/NS]

(When premium and 15% are programmed for the [%2] key)

Print

```
DEPT.06        T1 $8.00
                  -7.5%
%1               -0.60
PLU0015        T1 $5.00
                 15.00%
%2               $0.75
MDSE ST          $13.15
TAX1              $0.81

ITEMS      2Q
CASH       $13.96
```

■ Discount and premium entries using the discount key

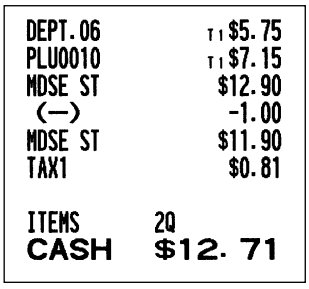
The discount key is used to apply a manually entered or preset discount or premium amount to individual items or to a merchandise subtotal. In the default setting, you can manually enter a discount amount to both individual items and merchandise subtotal. For manual entry of discount or premium amounts, enter the amount with the numeric keys, and press the discount key. When using a preset amount (if programmed), press the discount key.
When entry digit limit is programmed for the discount key, you can not enter an amount over the limit (error code 34 will occur.)

Discount for the merchandise subtotal

Key operation example

575 [6 22]
10 [PLU/SUB]
[MDSESBTL]
100 [⊖]
[CA/AT/NS]

Print



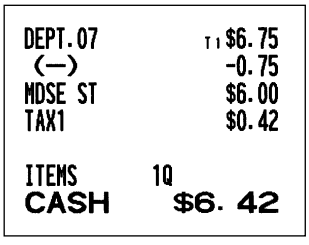
Discount for item entries

Key operation example

675 [7 23]
[⊖]
[CA/AT/NS]

(When a discount amount of $0.75 is programmed.)

Print



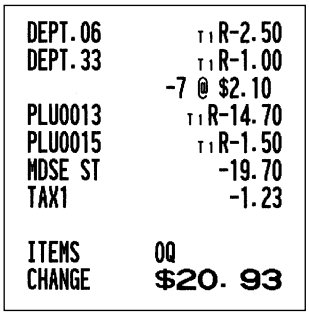
■ Refund entries

For departments 1 to 16, enter the refund amount and press the [RFND] key, and then press the corresponding department key and for departments 17 to 32, enter the refund amount and press the [RFND] key, then press the [DEPTSHIFT] key and press the corresponding department key (when using the preset price, omit entering the amount). In case of department 33 to 99, enter the department code and press [RFND] key and the [DEPT#] key, then enter the refund amount and press the [DEPT#] key if necessary.
For a refund of a PLU item, enter the PLU code and press the [RFND] key, then press the [PLU/SUB] key.
For a refund of a subdepartment item, enter the PLU code and press the [RFND] key and [PLU/SUB] key, then enter the refund amount and press the [PLU/SUB] key.

Key operation example

250 [RFND] [6 22]
33 [RFND] [DEPT#] 100 [DEPT#]
7 [@/FOR]
13 [RFND] [PLU/SUB]
15 [RFND] [PLU/SUB] 150 [PLU/SUB]
[CA/AT/NS]

Print



■ Non-add code number entries and printing

You can enter a non-add code number such as a customer's code number and credit card number, a maximum of 16 digits, at any point during the entry of a sale. The cash register will print it at once.
To enter a non-add code number, enter the number and press the [#/TM/SBTL] key.

Key operation example

1230 #/TM/SBTL
1500 6 22
CH

Print

```
        #1230
DEPT.06          T1 $15.00
MDSE ST             $15.00
TAX1                 $0.94

ITEMS          1Q
CHARGE        $15.94
```

2 Auxiliary Payment Treatment

■ Currency conversion

The register allows payment entries in a foreign currency (only cash payment is available). Pressing the CONV key creates a subtotal in the foreign currency.
When using a programmed currency conversion rate, press the CONV key after item entries, then enter the tendered amount in foreign currency if not exact amount payment, and press the CA/AT/NS key.
When making a manual entry of currency conversion rate, after item entries, enter the conversion rate (0.0000 to 9999.9999; you need a decimal point when you enter fractional conversion rate) and press the CONV key, then enter the tendered amount in foreign currency if not exact amount payment, and press the CA/AT/NS key.
In both cases, the change due will be displayed in domestic currency, and when the amount tendered is short, the deficit is shown in domestic currency.

Note

- *Press the CL key after pressing the CONV key to cancel payment in a foreign currency.*
- *If programmed, a foreign currency symbol is printed when you use a prest rate.*

Applying preset conversion rate

Key operation example

2300 6 22
4650 7 23
Currency conversion → CONV
Amount tendered in foreign currency → 10000 CA/AT/NS

(When a currency conversion rate of 0.9275 is programmed for the CONV key.)

Print

```
DEPT.06          T1 $23.00
DEPT.07          T1 $46.50
MDSE ST             $69.50
TAX1                 $4.34

ITEMS          2Q
***TOTAL       $73.84   ← Domestic currency
CONV 1          0.9275  ← Conversion rate
                €68.49  ← Foreign currency
CASH            €100.00 ← Foreign currency
CHANGE          $33.97  ← Domestic currency
```

Foreign currency symbol (Printed if programmed)

Applying manual conversion rate

Key operation example

2300 6 22
4650 7 23
Conversion rate → 1 · 275 CONV
10000 CA/AT/NS

Print

```
DEPT.06          T1 $23.00
DEPT.07          T1 $46.50
MDSE ST             $69.50
TAX1                 $4.34

ITEMS          2Q
***TOTAL       $73.84
CONV 2          1.275
                94.15
CASH           100.00
CHANGE          $4.58
```

■ Received-on Account and Paid-out Entries

When you receive on account from a customer or when you pay an amount to a vendor, it is a good idea to use the [RA] key or the [RCPT/PO] key respectively.
For the received-on-account (RA) entry, enter the amount, and press the [RA] key.
For the paid-out (PO) entry, enter the amount and press the [RCPT/PO] key.

Note *Cash tendering only available for RA and PO operation.*

Key operation example	Print
12345 [#/TM/SBTL] 4800 [RA]	#12345 ***RA $48.00

■ No sale (exchange)

When you need to open the drawer with no sale, just press the [CA/AT/NS] key. The drawer will open and printer will print “NO SALE” on the receipt or journal. If you let the machine print a non-add code number before pressing the [CA/AT/NS] key, a no sale entry is achieved and a non-add code number is printed.

```
      #45678
NO SALE
```

3 Automatic Sequence Key ([AUTO] key) Entries

You can achieve a programmed transaction simply by pressing the [AUTO] key.

Key operation example	Print
[AUTO] ([AUTO] = 500 [7 23] [CA/AT/NS])	DEPT.07 T1 $5.00 MDSE ST $5.00 TAX1 $0.31 ITEMS 1Q CASH $5.31

CORRECTION

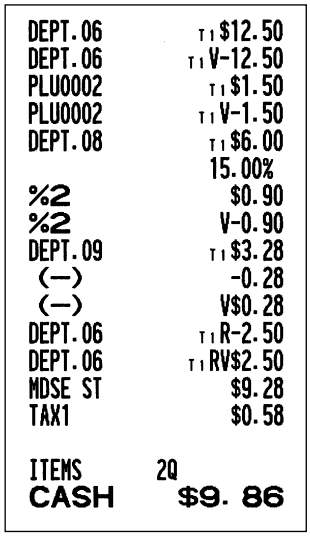
1 Correction of the Last Entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, percentage (%1 and %2), discount (⊖) or refund, you can void this entry by pressing the VOID key immediately after the incorrect entry.

Key operation example

1250 6 (22)
VOID
2 PLU/SUB
VOID
600 8 (24)
%2
VOID
328 9 (25)
28 ⊖
VOID
250 RFND 6 (22)
VOID
CA/AT/NS

Print



2 Correction of the Next-to-last or Earlier Entry (indirect void)

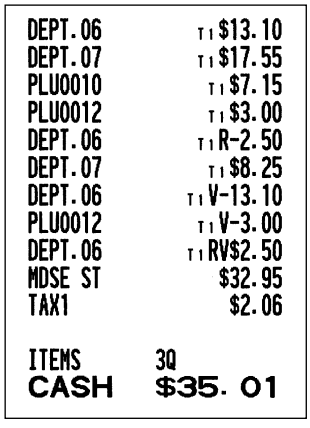
You can void any incorrect department entry, PLU/subdepartment entry or item refund entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the CA/AT/NS key). This function is applicable to department, PLU/subdepartment and refund entries only.
For the operation, press the VOID key just before you press a department key, DEPT# key or PLU/SUB key. For the refund indirect void, press the VOID key after you press the RFND key.

Key operation example

1310 6 (22)
1755 7 (23)
10 PLU/SUB
12 PLU/SUB
250 RFND 6 (22)
825 7 (23)
1310 VOID 6 (22)
12 VOID PLU/SUB
250 RFND VOID 6 (22)
CA/AT/NS

Correction of a department entry
Correction of a PLU entry
Correction of a refund entry

Print



3 Subtotal Void

You can void an entire transaction. Once subtotal void is executed, the transaction is aborted and the register issues a receipt. This function does not work when more than 30 items have been entered.

Key operation example

1310 [2 18]
[2 18]
1755 [6 22]
10 [PLU/SUB]
35 [PLU/SUB]
Subtotal void { [#/TM/SBTL] [VOID] [#/TM/SBTL] }

Print

DEPT.02	T1 $13.10
DEPT.02	T1 $13.10
DEPT.06	T1 $17.55
PLU0010	T1 $7.15
PLU0035	T1 $3.00
MDSE ST	$53.90
SBTL VD	-53.90
***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 corrected by the manager.
The following steps should be taken:

1. If you are making the amount tendered entry, finalize the transaction.
2. Make correct entries from the beginning.
3. Hand the incorrect receipt to your manager for its cancellation.

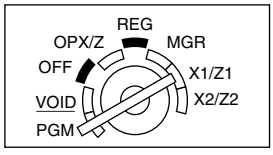
PRIOR TO PROGRAMMING

Before starting sales entries, you must first program necessary items so that the cash register suits your sales manner. In this manual, there are three sections, **BASIC FUNCTION PROGRAMMING where required items must be programmed**, AUXILIARY FUNCTION PROGRAMMING where you can program for more convenient use of keys on the keyboard, and ADVANCED FUNCTION PROGRAMMING where various optional programming features are provided. Find the appropriate features for your needs, and make the necessary programming.

Note *You can select the language of text (English, French or Spanish) printed on receipts or journals. For the language selection, please refer to "Language Selection" described later in this section.*

■ Procedure for programming

1. Check to see whether a paper roll is present in the machine. If there is not enough paper on the roll, replace it with a new one (refer to MAINTENANCE section for the replacement).
2. Put the manager key in the mode switch and turn it to the PGM position.
3. Program necessary items into the cash register.
   Every time you program an item, the cash register will print the setting. Please refer to print samples in each section.
4. If necessary, issue programming reports for your reference.



Note
- *On the procedures and key operation examples shown in the programming details, numbers such as "08262003" indicates the parameter which must be entered using the corresponding numeric keys.*
- *Asterisks in the tables shown in the programming details indicate default settings.*

BASIC FUNCTION PROGRAMMING
(For Quick Start)

1 Date and Time Programming

■ Date

For setting the date, enter the date in 8 digits using the month-day-year (MM/DD/YYYY) format, then press the #/TM/SBTL key.

Procedure Date(MM/DD/YYYY) → #/TM/SBTL

Key operation example

08262003 #/TM/SBTL
(Aug. 26, 2003)

Print

PGM
08/26/2003 — Date

Note *You can use the date format of day-month-year (DD/MM/YYYY) or year-month-day (YYYY/MM/DD) format. To change the format, refer to "Various Function Selection Programming 1" section (Job code 61).*

■ Time

For setting the time, enter the time in 4 digits using the 24-hour format. For example, when the time is set to 2:30 AM, enter 230; and when it is set to 2:30 PM, enter 1430.

Procedure

Time(max. 4 digits in 24-hour format) → #/TM/SBTL

Key operation example	Print
1430 #/TM/SBTL	*PGM* 2:30PM ← Time

Note *In the display, current time is displayed in 12-hour format. For AM time, "A" and for PM time "P" will appear in the rightmost position with the current time. If you want to display time in the 24-hour format, refer to "Various Function Selection Programming 1" section (Job code 61).*

2 Tax Programming for Automatic Tax Calculation Function

Note *The cash register can support US and Canadian tax systems. If you use the Canadian tax system, you must first change the tax system, then program the tax rate or tax table and quantity for doughnut exempt which are described in this section. For changing your cash register's tax system, please refer to "Various Function Selection Programming 1" section (job code 70).*

Before you can proceed with registration of sales, you must first program the tax that is levied in accordance with the law of your state. The cash register comes with the ability to program four different tax rates. In most states, you will only need to program Tax 1. However if you live in an area that has a separate local tax (such as a Parish tax) or a hospitality tax, the register can be programmed to calculate these separate taxes.

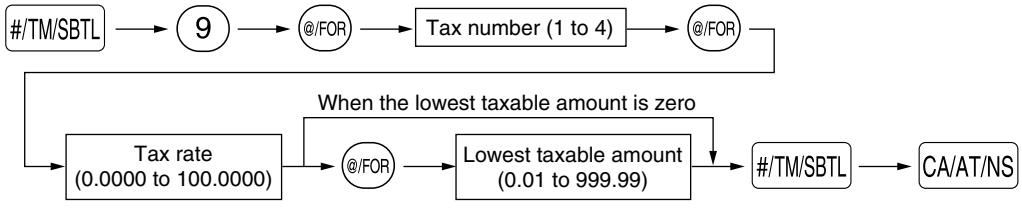
When you program the tax status for a department, tax will be automatically added to sales of items assigned to the department according to the programmed tax status for the department. You can also enter tax manually.

There are two tax programming methods. The tax rate method uses a straight percentage rate per dollar. The tax table method requires tax break information from your states or local tax offices. Use the method which is acceptable in your state. You can obtain necessary data for tax programming from your local tax office.

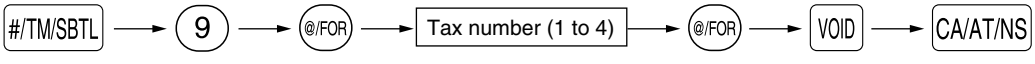
■ Tax programming using a tax rate

The percent rate specified here is used for tax calculation on taxable subtotals.

Procedure



To delete a tax rate, use the following sequence:



Example: Programming the tax rate 4% as tax rate 2 with tax exempt as 12¢

Key operation example

#/TM/SBTL 9 @/FOR
2 @/FOR
4 @/FOR
12 #/TM/SBTL
CA/AT/NS

Print

```
*PGM*
T2          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.*
- *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.*
- *The lowest taxable amount setting is ignored when you select VAT system for Canadian tax.*

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

If you are in an area that uses a tax table for tax calculation, you can program the cash register accordingly. Tax table programming can be performed for Tax 1 through Tax 4.

Sample tax table

New Jersey tax table: 6%

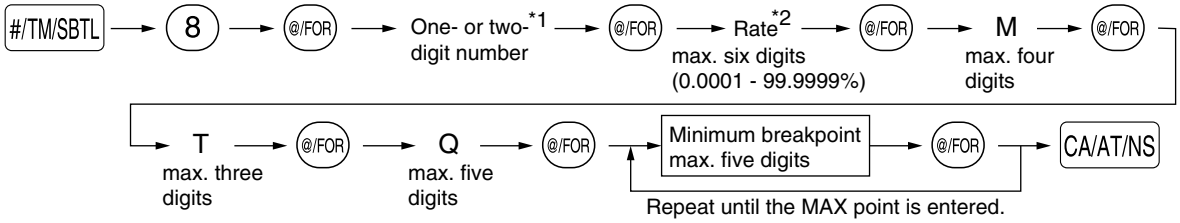
	Range of sales amount		
Taxes	**Minimum breakpoint**		**Maximum breakpoint**
.00	.01	to	.10
.01 ← T	.11 ← Q	to	.22
.02	.23	to	.38
.03	.39	to	.56
.04	.57	to	.72
.05	.73	to	.88
.06	.89	to	1.10
.07	1.11 ← M1	to	1.22
.08	1.23	to	1.38
.09	1.39	to	1.56
.10	1.57	to	1.72
.11	1.73	to	1.88
.12	1.89	to	2.10
.13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

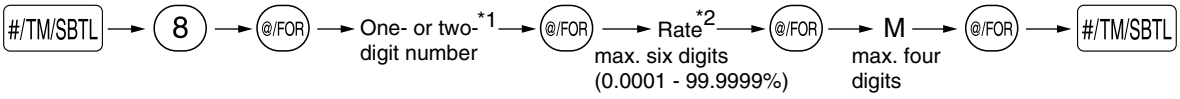
To program a tax table, first make a table like the one shown above right.
From the tax table, calculate the differences between a minimum break point and the next one (A). Then, from the differences, find irregular cycles (B) and regular cycles (C and D). These cycles will show you the following items 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: (1 or 0)** 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: (1 to 4) The second figure depends upon whether your tax table is to be programmed as tax table 1, 2, 3 or 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 #/TM/SBTL key. Then program again from the beginning.*

• Limitations to the entry of minimum breakpoints

The register can support a tax table consisting of no more than 72 breakpoints. (The maximum number of breakpoints is 36 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 example

	#/TM/SBTL 8 @/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/NS

Print

PGM	
T1	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 manner.

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

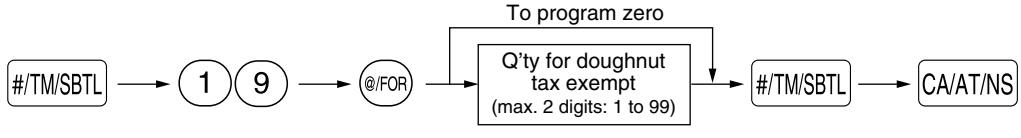
Breakpoint difference (¢)	
1	B: Non-cyclic
10 (0.11-0.01)	
15 (0.26-0.11)	C: Cyclic-1
21 (0.47-0.26)	
21 (0.68-0.47)	
21 (0.89-0.68)	
0 (0.89-0.89)	
22 (1.11-0.89)	
0 (1.11-1.11)	
0 (1.11-1.11)	
15 (1.26-1.11)	D: Cyclic-2
21 (1.47-1.26)	
21 (1.68-1.47)	
21 (1.89-1.68)	
0 (1.89-1.89)	
22 (2.11-1.89)	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

■ Quantity for doughnut tax exempt (for Canadian tax system)

This option is available only when the Canadian tax system is selected.

Procedure



Example: To program the quantity "6"

Key operation example

#/TM/SBTL 19 @/FOR
6 #/TM/SBTL
CA/AT/NS

Print

PGM
#19 06

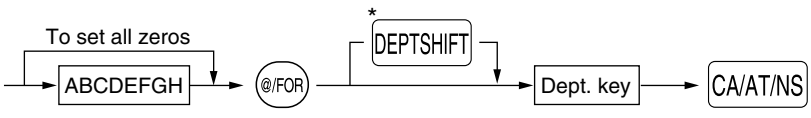
AUXILIARY FUNCTION PROGRAMMING

1 Department Programming

Merchandise can be classified into a maximum of 99 departments. Items sold with use of the department keys can later be printed on a report that shows the quantities sold and sales amounts classified by department. The data is useful for making purchasing decisions and other store operations. Departments can be assigned to articles whose prices were set using PLU/subdepartment function.
When using a department key, you must set the parameters to specify the department status, such as positive or negative department. Prices can be assigned directly to departments for frequently purchased items, which enables you to enter the prices by simply pressing the department keys or dept. code entries.

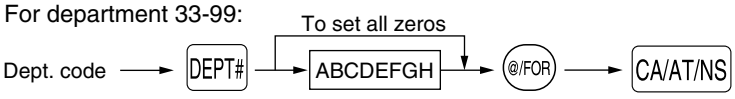
■ Department status

Procedure



*To program departments 17 through 32, press the department shift key at this point.

For department 33-99:



To program another department, start from the beginning without pressing the CA/AT/NS key.

Item:		Selection:	Entry:
A	Tax 4 status	Taxable	1
		Non-taxable*	0
B	Tax 3 status	Taxable	1
		Non-taxable*	0
C	Tax 2 status	Taxable	1
		Non-taxable*	0
D	Tax 1 status	Taxable (*for dept. 1 thru 10)	1
		Non-taxable (*for dept. 11 thru 99)	0
E	SICS / Normal	SICS	1
		Normal*	0
F	Sign	Negative department	1
		Positive department*	0
G	Entry digit limit		0-7 (default: 7)
H	Type of unit price entry	Open and preset	3
		Preset only	2
		Open only*	1
		Inhibit department key	0

Tax status (taxable 1 through 4 / non-taxable)
- When any entry of a taxable department is made in a transaction, tax is automatically computed according to the associated tax table or rate.

SICS (Single Item Cash Sale)
- If an entry of a department programmed for SICS is made first, the sale will be finalized as a cash sale 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/NS key is pressed.

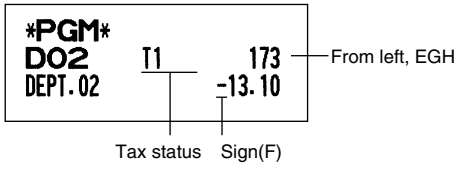
Entry digit limit
- Set the number of allowable digits for the maximum entry amount for each department. The limit is effective for operations in the REG mode and can be overridden in the MGR mode.

Example: Programming department 2 as taxable 1, SICS, negative department, entry digit limit - 7 digits, and allowing open & preset entry. (ABCDEFGH: 00011173)

Key operation example

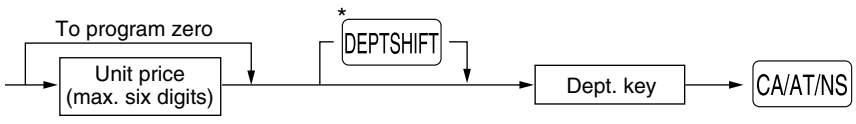
00011173 @/FOR
2 18 CA/AT/NS

Print



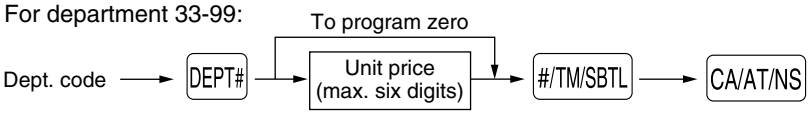
■ Preset unit price

Procedure



*To program departments 17 through 32, press the department shift key at this point.

For department 33-99:

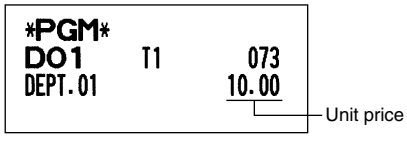


To program another department, start from the beginning without pressing the CA/AT/NS key.

Key operation example

1000 1 17
CA/AT/NS

Print



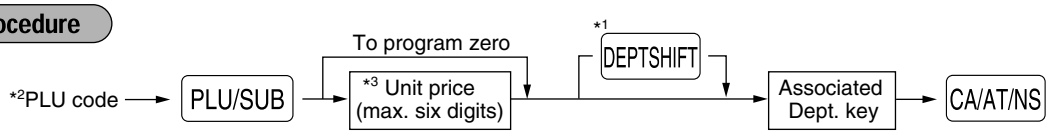
Note *Even if a department is not programmed to allow the entry of preset unit prices in functional programming, the department is automatically changed to allow the entry of preset unit prices by this programming entry.*

2 PLU (Price Look-Up) and Subdepartment Programming

The PLU function allows speedy key entries whereby a price is automatically called up when a code is entered. The subdepartment is a kind of “open PLU”, which requires you to enter a price after the PLU code is entered. A maximum of 1200 PLU/subdepartment settings are possible. Each one belongs to a department and acquires the department’s parameters (tax status, SICS and sign).
The cash register is preprogrammed so all 1200 codes are assigned as PLUs associated with department 1 and preset unit price “0”.

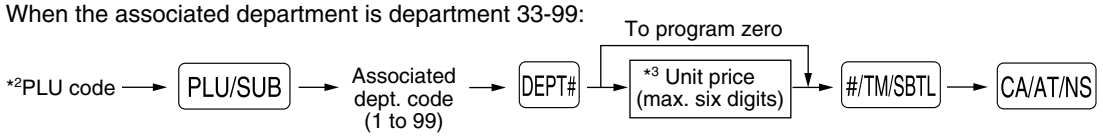
■ Unit price and associated department assignment

Procedure



*1: To assign departments 17 through 32, press the department shift key at this point.

When the associated department is department 33-99:

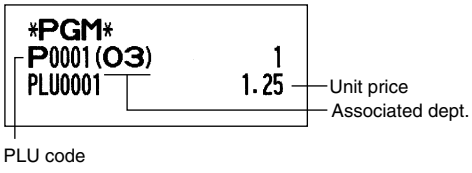


*2: 1 through 1200 (Depending on the EJ memory size setting, up to 200)
*3: For a subdepartment, set the limit amount of unit price entry.
To program the following PLU, start from entering a unit price or an associated department code without pressing the CA/AT/NS key.
To program another PLU, start from the beginning without pressing the CA/AT/NS key.

Key operation example

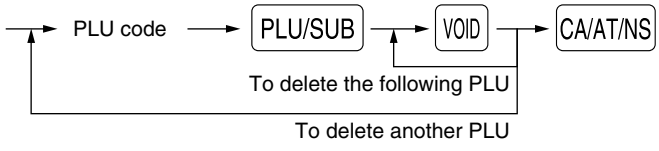
1 PLU/SUB
125 3 19
CA/AT/NS

Print



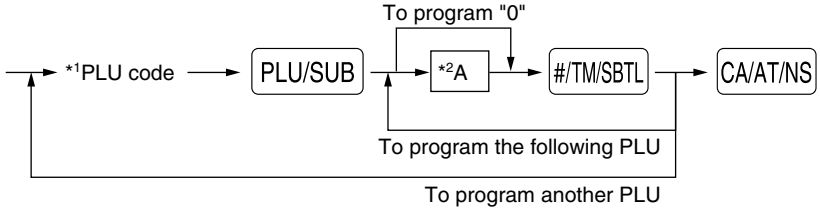
To delete a PLU code, use the following sequence:

Procedure



■ PLU/subdepartment selection

Procedure

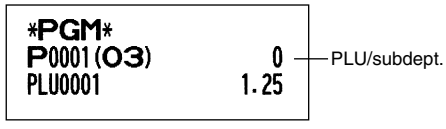


*1: 1 through 1200 (Depending on the EJ memory size setting, up to 200)
*2: 0 for subdepartment or 1 for PLU (default: 1)

Key operation example

1 PLU/SUB
0 #/TM/SBTL CA/AT/NS

Print



Note *When you program the last PLU code, the programming sequence will be complete with a press of the #/TM/SBTL key.*

3 Miscellaneous Key Programming

The cash register provides miscellaneous keys such as [%1], [%2], [⊖], [RFND], [RA], [RCPT/PO], [CONV], [TAX], [CHK], [CH] and [CA/AT/NS]. While the cash register is pre-programmed so you can use these keys, you must set a currency conversion rate to use [CONV] key. You can also program these keys for more convenient use. Please refer to the data below for programming these keys. Factory setting is indicated with parentheses.

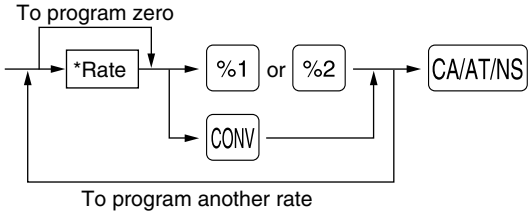
[%1], [%2]	Percent rate (0.00%), tax status (non-taxable), sign (minus), item % and subtotal % entry* (both are allowed), percent rate limitation (100 %)
[⊖]	Amount (0.00), tax status (non-taxable), sign (minus), item ⊖ and subtotal ⊖ entry* (both are allowed), entry digit limit (7 digits)
[RFND]	Not necessary to program
[RA], [RCPT/PO]	Entry digit limit (9 digits)
[CONV]	Currency conversion rate (0.0000), currency conversion rate entry method - open or preset (both are enabled)
[CHK], [CH] and [CA/AT/NS]	Compulsory entry of amount tender (not compulsory), entry digit limit (8 digits), footer printing (not printed)
[TAX] (Manual tax)	Entry digit limit (7 digits)

* Item %/Item ⊖: Percent/discount calculation is applied to individual department and PLU/subdepartment.

* Subtotal %/Subtotal ⊖: Percent/discount calculation is applied to subtotals.

■ Rate for [%1], [%2] and [CONV]

Procedure

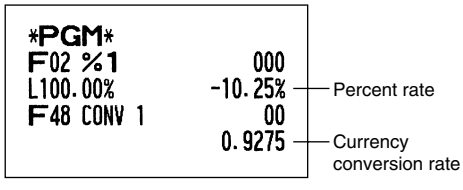


*: Rate
0.00 — 100.00 (% rate)
0.0000 — 9999.9999 (Currency conversion rate)

Key operation example

10 [•] 25 [%1]
0 [•] 9275 [CONV]
[CA/AT/NS]

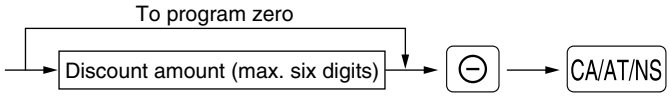
Print



Note *You must use a decimal point when setting fractional rates.*

■ Amount for ⊖

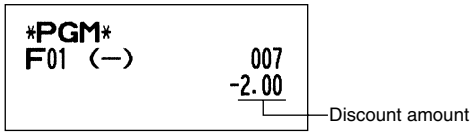
Procedure



Key operation example

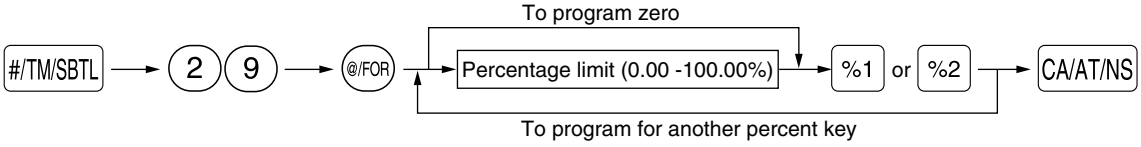
200 ⊖ CA/AT/NS

Print



■ Percent rate limitation for %1 and %2

Procedure



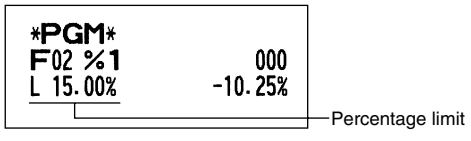
Note

- *Percent entries that exceed the upper limit may be overridden in the MGR mode.*
- *10.00% can be entered as 1 0 or 1 0 • 0 0. The • key is needed only for fractional entry.*

Key operation example

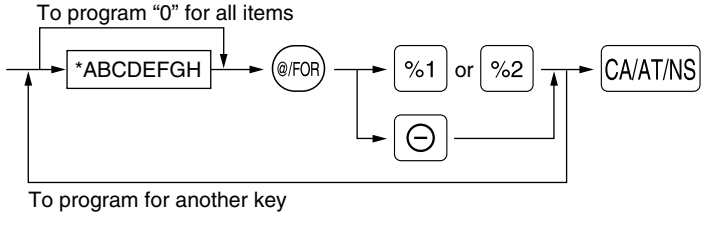
#/TM/SBTL 29 @/FOR
15 • 00 %1
CA/AT/NS

Print



■ Function parameters for %1, %2 and ⊖

Procedure



*:	Item:		Selection:	Entry:
	A	Tax 4 status	Taxable	1
			Non-taxable*	0
	B	Tax 3 status	Taxable	1
			Non-taxable*	0
	C	Tax 2 status	Taxable	1
			Non-taxable*	0
	D	Tax 1 status	Taxable	1
			Non-taxable*	0
	E	+/- sign	+ (premium) sign	0
			- (discount) sign*	1
	F	Item % / Item ⊖	Allow*	0
			Disallow	1
	G	Subtotal % / Subtotal ⊖	Allow*	0
			Disallow	1
	H	Entry digit limit for discount key		0-7 (default: 7)

When programming for percent keys, always enter 0 for H.

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

- When taxable is selected, tax is applied to the amount obtained after premium or discount calculation.

+/- sign

- Programming of the +/- sign assigns the premium or discount function for each key.

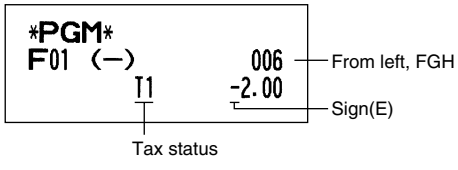
Entry digit limit (For discount key only)

- The entry digit limit is in effect for the REG mode operations but can be overridden in the MGR mode. The entry digit limit is represented by the number of allowable digit for the maximum entry amount for discount key.

Key operation example

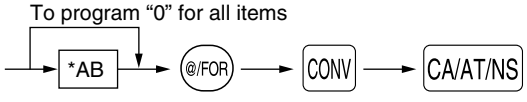
00011006 @/FOR
⊖ CA/AT/NS

Print



■ Function parameters for CONV

Procedure

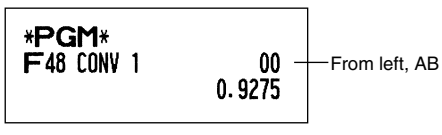


*:	Item:		Selection:	Entry:
	A	Open rate entry	Allow*	0
			Disallow	1
	B	Preset rate entry	Allow*	0
			Disallow	1

Key operation example

00 @/FOR
CONV CA/AT/NS

Print



■ Entry digit limit for RA, RCPT/PO and TAX

Procedure

Entry digit limit → @/FOR → RA, RCPT/PO or TAX → CA/AT/NS
(only for manual entry)

- For RA RCPT/PO, enter 0 to 9 (digits), and for TAX (manual tax), enter 0 to 7 (digits). By default, 9 for RA and RCPT/PO and 7 for TAX are set.
  Entry digit limit is in effect for REG mode operation but can be overridden in the MGR mode. The entry digit limit is represented by the number of allowable digits for maximum entry or total amount. When "0" is set, the operation of the corresponding key is prohibited.

Key operation example

4 @/FOR
RCPT/PO CA/AT/NS

Print

```
*PGM*
F41 ***PO              4
```

■ Function parameters for CHK, CH and CA/AT/NS (when using as CA key)

Procedure

To program "0" for all items
*1 ABC → @/FOR → *2 #/TM/SBTL, CHK or CH → CA/AT/NS
To program for another key

*2: Press #/TM/SBTL key for CA key setting.

*1: Item:		Selection:	Entry:
A	Footer printing	Allow	1
		Disallow*	0
B	Amount tendered entry	Compulsory	1
		Non-compulsory (for the CA or CHK keys)*	0
		Inhibit (for the CH key)*	0
C	Entry digit limit		0-8 (default: 8)

Footer printing

- This programming decides whether or not the machine should print a message at the foot of a receipt when a specified media key is used. With regard to programming method of footer logo message, refer to "Logo messages" section on page 43.

Amount tendered entry

- You may select amount tendered, compulsory or optional, for the CA/AT/NS and CHK keys.
- You may select amount tendered, compulsory or inhibited, for the CH key.

Entry digit limit

- For the CH and CHK keys, program upper limit entry amount for the tendered amount. For the CA/AT/NS key, program upper limit entry for total cash amount which can be handled on the register. The entry digit limit is in effect for REG mode operation but can be overridden in the MGR mode. The entry digit limit is represented by the number of allowable digits for the maximum entry or total amount. When "0" is set, the operation of the corresponding key is prohibited.

Key operation example

018 @/FOR
CHK CA/AT/NS

Print

```
*PGM*
F45 CHECK
            000000000018
```

ABC (A:0, B:1, C:8)

4 Text Programming

The register allows you to program the text for clerk names, department item names, PLU/subdepartment item names, and so on, if necessary. There are two ways for programming text: using character keys on the keyboard or entering character codes with numeric keys on the keyboard.

Using character keys on the keyboard

You can enter characters according to the small figures printed in the lower right position of the key tops. For the layout, please refer to "Keyboard" section on page 5.

The following are used as control keys for character entry:

[SHIFT] Toggles between upper-case and lower-case letters. By default, the upper-case letter is selected. Once the [SHIFT] key is pressed, you are locked in for entering lower-case letters. "_" lights up at the SHIFT position of the display when lower-case letters entry is selected.

[NUMBER] Press the [NUMBER] key to enter numeric characters. For example to enter "1", press the [NUMBER] and (1) key. If you press the (1) key without pressing the [NUMBER] key, the cash register goes to character codes entry mode.
Once the [NUMBER] key is pressed, you are locked in for entering numeric characters. "_" lights up at the NUMBER position of the display when numeric characters entry is selected.

[DC] Toggles between single-size and double-size characters. By default, the single-size character is selected. Once the [DC] key is pressed, you are locked in for entering double size characters. "_" lights up at the DC position of the display when double-size characters entry is selected.

[BS] Backs up the cursor, erasing the character to the left.

Example To program the word "Clerk01" with the letter "C" being double size.

To make the letter "C" double size character	[DC] [C]
To make character size return to normal size	[DC]
To toggle the characters to lower-case letters	[SHIFT]
	[L] [E] [R] [K]
To enter numbers	[NUMBER] (0) (1)

Entering character codes with numeric keys on the keyboard

Numerals, letters and symbols are programmable by entering the character code and the (00) key. (If numeric characters entry is selected, that is, "_" lights up at the NUMBER position of the display, press the [NUMBER] key to release it.) Set the alphanumeric character code table on the next page. By doing this, you can program characters other than those on the key tops.

- Double-size characters can be made by entering the character code 253.
- All three digits of the character code MUST be entered (even if it starts with zero).

Example To program the word "SHARP" in double-size characters

253 (00) 083 (00) 072 (00) 065 (00) 082 (00) 080 (00)
S H A R P

When you press an appropriate number key (job code number) and press the (•) key for text entry just after you start programming with the [#/TM/SBTL] key, the cash register will be automatically ready for text entry.
Listed below is an overview of what you can program and the allowable number of single sized characters for each text entry.

- Department text 12 characters
- PLU text (item label) 12 characters
- Function text 8 characters
- Logo message 6 lines and 24 characters for each line
- Clerk name 8 characters
- Foreign currency symbol 4 characters

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	Υ
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	Ø
153	é
154	è
155	Pt
156	ì
157	Ñ
158	ò
159	£
160	¥
161	◦
162	⌜
163	⌟
164	ˎ
165	·
177	Á
178	Í
180	Ā
181	ā
182	Ē
183	ē
184	Ī
185	ī
186	Ū
187	ū
188	Ṇ
189	ṇ
190	Č
191	Š
192	Ç

Code	Character
193	İ
194	Ġ
195	Ṣ
196	Ġ
197	ġ
198	Ķ
199	ķ
200	Ļ
201	ļ
202	Ž
203	Đ
204	đ
205	Ċ
206	ć
207	€
208	₱
209	ˋ
210	ě
211	š
212	č
213	ž
214	ý
215	ụ
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)

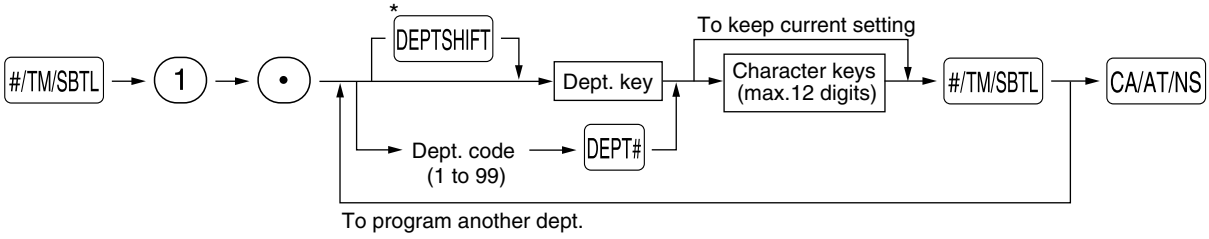
*(DC): Double-size character code

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

Note *The character “!!” (code 128) cannot be displayed (displayed as “!”).*

■ Department text

Procedure



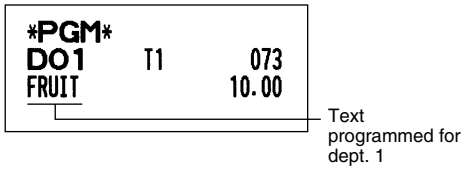
*To program departments 17 through 32, press the department shift key.

Key operation example

#/TM/SBTL 1 •
17
FRUIT #/TM/SBTL
CA/AT/NS

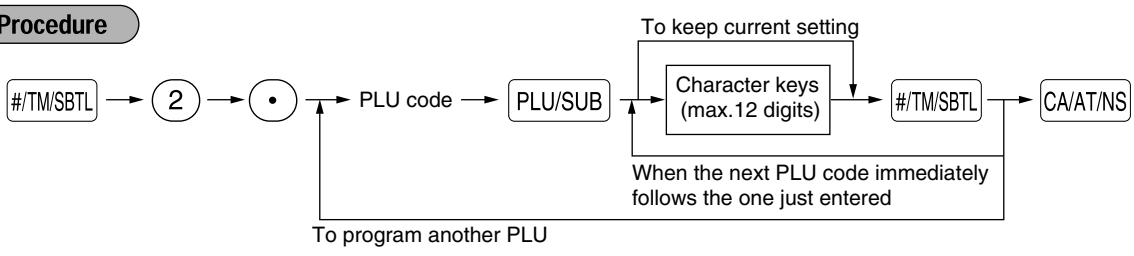
(Programming FRUIT for dept.1)

Print



■ PLU text (item label)

Procedure

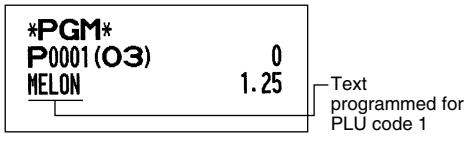


Key operation example

#/TM/SBTL 2 •
1 PLU/SUB
MELON #/TM/SBTL
CA/AT/NS

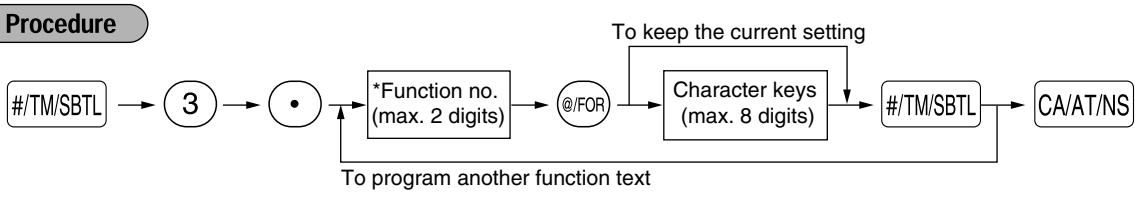
(Programming MELON to PLU1)

Print



■ Function text

Procedure



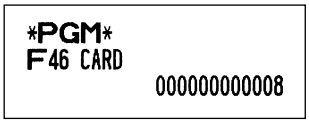
* Function no.: See “List of function texts” shown on the following page.

Key operation example

[#/TM/SBTL] 3 [•]
46 [@/FOR]
CARD [#/TM/SBTL]
[CA/AT/NS]

(Programming CARD for gross charge)

Print



■ List of function texts

Function no.	Key or function	Default setting
1	⊖	**(–)**
2	%1	**%1**
3	%2	**%2**
4	Net sales total	**NET1**
5	Net taxable 1 subtotal	TAX1 ST
6	Gross tax 1 total	GRS TAX1
7	Tax 1 total of refund entries	RFD TAX1
8	Net tax 1 total	TAX1
9	Exempt tax 1	TX1 EXPT
10	Net taxable 2 subtotal	TAX2 ST
11	Gross tax 2 total	GRS TAX2
12	Tax 2 total of refund entries	RFD TAX2
13	Net tax 2 total	TAX2
14	Exempt tax 2	TX2 EXPT
15	Net taxable 3 subtotal	TAX3 ST
16	Gross tax 3 total	GRS TAX3
17	Tax 3 total of refund entries	RFD TAX3
18	Net tax 3 total	TAX3
19	Exempt tax 3	TX3 EXPT
20	Net taxable 4 subtotal	TAX4 ST
21	Gross tax 4 total	GRS TAX4
22	Tax 4 total of refund entries	RFD TAX4
23	Net tax 4 total	TAX4
24	Exempt tax 4	TX4 EXPT
25	Gross manual tax total	GRS MTAX
26	Refund manual tax total	RFD MTAX
27	Net manual tax total	M-TAX
* 28	Exempt total from GST	GST EXPT
* 29	PST total	PST TTL
* 30	GST total	GST TTL
31	Tax total	TTL TAX
32	Net	**NET**
33	Sales total including tax total	**NET2**
34	Refund	REFUND
35	Item void	VOID

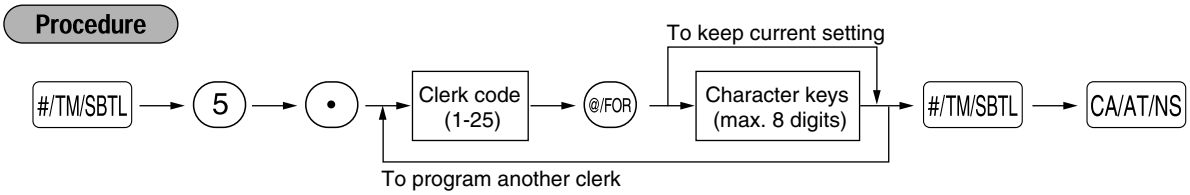
Function no.	Key or function	Default setting
36	Void mode	**VOID**
37	Manager void	MGR VD
38	Subtotal void	SBTL VD
39	No sale	NO SALE
40	RA	***RA
41	PO	***PO
42	Customer counter	TRANS CT
43	Sales total	**NET 3**
44	Cash	**CASH**
45	Check	CHECK
46	Gross charge	CHARGE
47	Refund charge	CHARGE–
48	Currency conversion1 (Preset)	CONV 1
49	Currency conversion2 (Open)	CONV 2
50	Cash in drawer	**** CID
51	Cash+check in drawer	CA+CH ID
52	Check change	CHK/CG
53	Exempt VAT	VAT EXPT
54	(+)Dept. total	*DEPT TL
55	(–)Dept. total	DEPT(–)
56	Subtotal	SUBTOTAL
57	Merchandise subtotal	MDSE ST
58	Total	*** TOTAL
59	Change	CHANGE
60	Items	ITEMS
61	Department report title	**DEPT**
62	PLU report title	**PLU**
63	Transaction report title	TRANS.
64	Clerk report title	CLERK
65	Hourly report title	HOURLY
66	Non add symbol	#
67	Copy receipt title	**COPY**
68	EJ report title	**EJ**
69	EJ report end title	**EJ** END

Note

- *The items marked with " * " are for Canada only.*
- *The function no. 53 "Exempt VAT" is only effective for the Canadian tax system (2 GST, VAT type).*

■ Clerk names

Procedure



Key operation example

#/TM/SBTL 5 •
1 @/FOR
DAVID #/TM/SBTL
CA/AT/NS

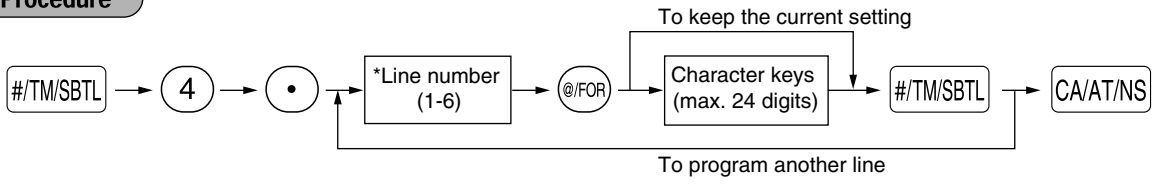
Print

PGM
C#01 DAVID

■ Logo messages

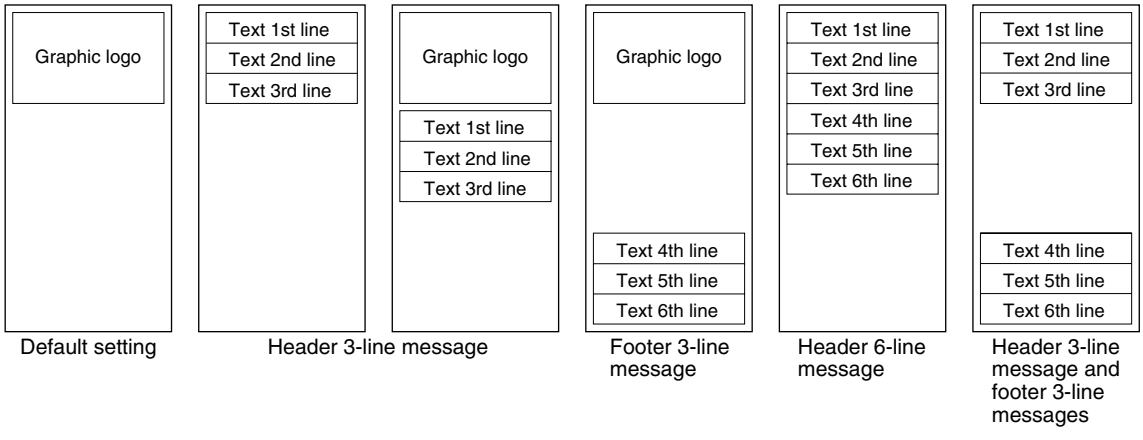
The register can print programmed messages on every receipt. On the standard model, the graphic logo is printed on the receipt. If you want to print logo messages, please change the logo message print format. (See page 51 for the programming details.) The options are listed below:

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)

Logo print format (6 types)



To print the logo message “THANK YOU” using double sized characters and centering on the third line.

Key operation example

#/TM/SBTL 4 •
3 @/FOR
SPACE SPACE SPACE
DC THANK SPACE YOU DC
SPACE SPACE SPACE
#/TM/SBTL CA/AT/NS

Print

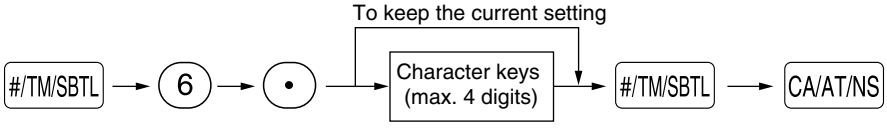
```
*PGM*
  THANK  YOU
```

Note *A 6-line logo message is preprogrammed when shipped. Please start entering from the first line when you first program a logo message.*

■ Foreign currency symbol

Foreign currency symbol for CONV key is printed with a foreign currency exchange amount.

Procedure



Key operation example

#/TM/SBTL 6 •
SPACE SPACE SPACE
Entry using character code → 207 00
#/TM/SBTL CA/AT/NS

Print

```
*PGM*
F48 CONV 1          00
  €              0.9275
```

Foreign currency symbol

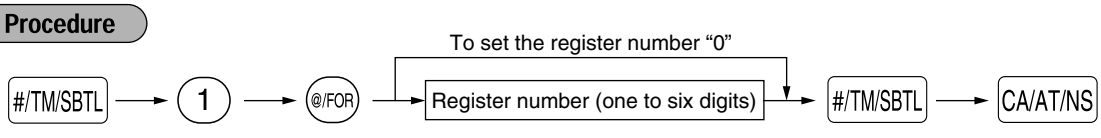
ADVANCED PROGRAMMING

1 Register Number and Consecutive Number Programming

The register number and consecutive numbers are printed on every receipt or journal.
When your store has two or more registers, it is practical to set separate register numbers for their identification.
The consecutive number is increased by one each time a receipt is issued or when a journal print occurs.
For consecutive number programming, enter a number (max. 4 digits) that is one less than the desired starting number.

■ Register number

Procedure



Key operation example

#/TM/SBTL 1 @/FOR
123456 #/TM/SBTL CA/AT/NS

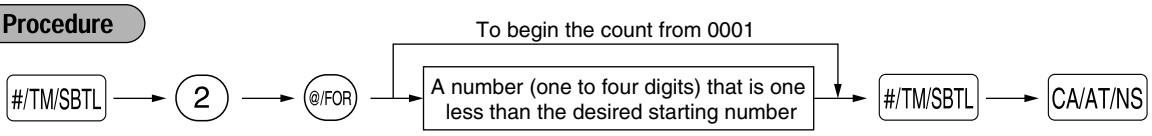
Print

```
*PGM*
#1              123456
```

Register number

■ Consecutive numbers

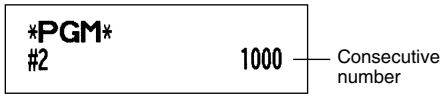
Procedure



Key operation example

1000 #/TM/SBTL 2 @/FOR 1000 #/TM/SBTL CA/AT/NS

Print



2 Electronic Journal (EJ) Programming

The cash register provides the electronic journal (EJ) function. By default, a maximum of 2000 lines can be stored in memory. If you want to store more journal data, you can expand to a maximum of 3000 lines, although the maximum number of PLUs is decreased to 200 codes because the memory is shared with PLU settings.

You can also program various options for EJ, such as availability of EJ memory nearly full warning, availability of printing EJ data during a transaction, data type to be stored in memory, and printing format.

For reading journal data, refer to “EJ REPORT READING AND RESETTING” (page 60).

■ EJ memory type

Caution *When this procedure is executed, EJ data is cleared, and PLU data (programming data and sales data) are reset to the default after all data is cleared even if the same memory type is selected.*

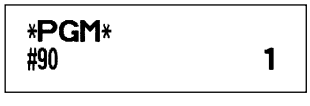
Procedure

*A: 0 for EJ 2000 lines and PLU 1200 codes (default)
1 for EJ 3000 lines and PLU 200 codes

Key operation example

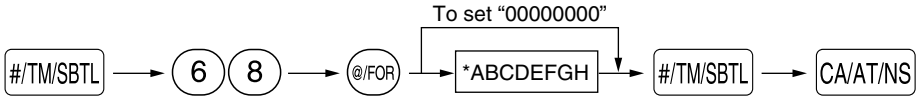
#/TM/SBTL 90 @/FOR 1 CA/AT/NS

Print



■ Function parameters for EJ

Procedure



*	Item:		Selection:	Entry:
	A	Always enter 0.	(Fixed position)	0
	B	Always enter 0.	(Fixed position)	0
	C	Temporary EJ printing during a transaction	Disallow	0
			Allow*	1
	D	EJ printing and clearing EJ data when issuing general Z1 report	No*	0
			Yes	1
	E	PGM mode operation records type	Details*	0
			Header information only	1
	F	REG/MGR/VOID modes operation records type	Details*	0
			Total	1
	G	Compressing printing for EJ data	No (normal size)	0
			Yes (small size)*	1
	H	Action when EJ memory area is full	Continue	0
			Warning (near full warning)*	1
			Lock (with near full warning)	2

On the default setting, an asterisk is marked.

Temporary EJ printing during a transaction

- If selecting "yes", you can print journal data of a current transaction recorded in EJ memory by pressing the RCPT/PO key during the transaction. To realize this function completely, the cash register is programmed to receipt printing and set Receipt ON/OFF function to OFF.

PGM mode operation records type

- The header information only is printed during the program reading operation.
  The header information only is printed for X/Z reports.
  (Receipt sample for Header Information only)

```
08/26/2003  2:36PM     01
123456#1008       CLERK01
*X1*
*DEPT*
* TRANS. *
```

Action when EJ memory area is full

- By default, when the memory for EJ becomes nearly full, the cash register shows decimal points at the 8th and 9th positions of the display (EJ memory nearly full message), and the cash register keeps storing new data while erasing the oldest data. When "0" is selected, the cash register will no longer show EJ memory nearly full message. When "2" is selected, the cash register shows EJ memory nearly full message and when the memory is totally full, the cash register locks the sales/data entry with a display of the memory full message "E-E". You will only be able to issue an EJ report.

Key operation example

#/TM/SBTL 68 @/FOR
00100002 #/TM/SBTL CA/AT/NS

Print

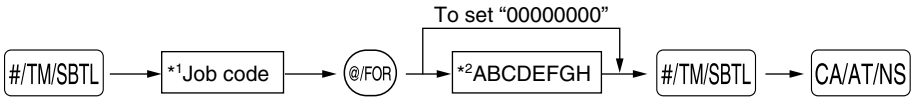
```
*PGM*
#68      00100002
```

3 Various Function Selection Programming 1

The cash register provides various detailed functions listed below.
- Function selection for miscellaneous keys
- Print format
- Receipt print format
- Function selection for tax
- Others

For this programming, job code entry style is applied. You can continue programming until you press the CA/AT/NS key for the programming described in this section. To continue programming, repeat from a job code entry.

Procedure



*1 Enter job code using numeric keys specified in each section below.
*2 Data entry details are listed on each table in each section below.

Example: When programming for job code 5 as ABCDEFGH: 00000100.

Key operation example	Print
#/TM/SBTL 5 @/FOR 00000100 #/TM/SBTL CA/AT/NS	*PGM* #5 00000100

■ Function selection for miscellaneous keys

Job code: 5

*	Item:		Selection:	Entry:
	A	PO in REG mode	Allow the PO operation in REG mode*	0
			Disallow it	1
	B	RA in REG mode	Allow the RA operation in REG mode*	0
			Disallow it	1
	C	Subtotal void in REG mode	Allow the REG mode subtotal void*	0
			Disallow it	1
	D	Indirect void in REG mode	Allow the REG mode indirect void*	0
			Disallow it	1
	E	Direct void in REG mode	Allow the REG mode direct void*	0
			Disallow it	1
	F	Refund key availability	Allow the REG mode refund entry*	0
			Disallow it	1
	G	No sale in REG mode	Allow the no sale operation in REG mode*	0
			Disallow it	1
	H	Fractional quantity availability	Allow fractional quantity entry	0
			Disallow it*	1

■ Print format

Job code: 6

*	Item:		Selection:	Entry:
	A	Printing style	Use the printer for journal printing	0
			Use the printer for receipt printing*	1
	B	Receipt print format	Total	0
			Detailed*	1
	C	Time print on all receipts/journals	Allow time printing*	0
			Disallow it	1
	D	Date print on all receipts/journals	Allow date printing*	0
			Disallow it	1
	E	Consecutive no. print on all receipts/journals	Allow consecutive no. printing*	0
			Disallow it	1
	F	Always enter 0.	(Fixed position)	0
	G	Zero skip for PLU report	Disallow zero skip	0
			Allow zero skip*	1
	H	Zero skip for general, clerk and hourly reports	Disallow zero skip	0
			Allow zero skip*	1

Printing style

- Even when receipt printing is selected, the journal rewind motor will be driven in PGM, OP X/Z, X1/Z1 and X2/Z2 modes so you can wind sales and programming reports.

■ Receipt print format

Job code: 7

*	Item:		Selection:	Entry:
	A	Always enter 0.	(Fixed position)	0
	B	Always enter 0.	(Fixed position)	0
	C	Subtotal print with a press of subtotal key	Disallow subtotal printing*	0
			Allow it	1
	D	Merchandise print with a press of merchandise subtotal key	Disallow merchandise subtotal printing*	0
			Allow it	1
	E	Always enter 0.	(Fixed position)	0
	F	Always enter 0.	(Fixed position)	0
	G	Always enter 0.	(Fixed position)	0
	H	Number of purchases print	Allow printing of number of purchases*	0
			Disallow it	1

■ Function selection for tax

Job code: 15

*	Item:		Selection:	Entry:
	A to **F**	Always enter 0.	(Fixed position)	0
	G	Tax delete in REG mode availability	Allow tax delete in REG mode*	0
			Disallow it	1
	H	Manual tax entry in REG mode availability	Allow manual tax entry in REG mode*	0
			Disallow it	1

■ Other programming

Job code: 61

*	Item:		Selection:	Entry:
	A	Always enter 0.	(Fixed position)	0
	B	Always enter 0.	(Fixed position)	0
	C	Minus dept. and PLU/subdept. availability	Disallow to program minus dept. and PLU/subdept.	0
			Allow it*	1
	D	Fractional treatment	Round off (4 down, 5 up)*	0
			Raising to unit	1
			Disregarding fractional treatment	2
	E	Use of ⓪⓪ key	Use ⓪⓪ key as 00 key*	0
			Use ⓪⓪ key as 000 key	1
	F	Time format	Use 12-hour format*	0
			Use 24-hour format	1
	G	Date format	Use month-day-year format*	0
			Use day-month-year format	1
			Use year-month-day format	2
	H	Position of decimal point (from right) (TAB)		0 to 3 (default 2)

Job code: 62

*	Item:		Selection:	Entry:
	A	Always enter 0.	(Fixed position)	0
	B	Error beep activation	By lock error*	0
			By misoperation	1
	C	Key touch sound availability	Allow to sound*	0
			Disallow it	1
	D	Buffered keyboard	Yes*	0
			No	1
	E	Void mode operation availability	Allow void mode operation*	0
			Disallow it	1
	F	Void mode entry data print in Z2 reports	Allow printing of void mode entry data in Z2 reports*	0
			Disallow it	1
	G	Void mode entry data print in Z1 reports	Allow printing of void mode entry data in Z1 reports*	0
			Disallow it	1
	H	Addition of hourly sales total data in void mode	No*	0
			Yes	1

Job code: 66

*	Item:		Selection:	Entry:
	A	Printing a receipt after transaction	Total only	0
			Details*	1
	B	Amount printing when PLU/subdept. unit price is zero	Disallow printing*	0
			Allow it	1
	C	Subtotal printing for conversion of deficit	Allow printing*	0
			Disallow it	1
	D	Always enter 0.	(Fixed position)	0
	E	Compression printing on journals in PGM, OP X/Z, X1/Z1 and X2/Z2 modes	Disallow compression printing (normal size)	0
			Allow compression printing (small size)*	1
	F	Compression printing on journals in REG, MGR and VOID modes	Disallow compression printing (normal size)	0
			Allow compression printing (small size)*	1
	G	Logo message printing on journals	Disallow logo message printing on journals*	0
			Allow logo message printing on journals	1
	H	Footer printing	Printing footer on all receipts*	0
			Printing footer with selected function key at the time of finalization	1

Compression printing

- This programming is valid only when journal printing is selected. This does not affect EJ printing. (For EJ programming, please refer to page 46.)

Job code: 70

*	Item:		Selection:	Entry:
	A	Split pricing counting	Quantity*	0
			Package	1
	B	Multiplication/split pricing entry availability	Allow multiplication entry only*	0
			Allow both of multiplication and split pricing	1
	C	Always enter 0.	(Fixed position)	0
	D	Always enter 0.	(Fixed position)	0
	E	Tax printing when GST is VAT	Allow tax printing*	0
			Disallow it	1
	F	GST exempt printing on X/Z reports	Allow printing of GST exempt*	0
			Disallow it	1
	GH	Tax calculation system	Auto tax*	00
			Canadian tax (tax type number)	01 through 11

Tax calculation system

- For US tax system, select “auto-tax”.
- For Canadian tax, from the table below, specify a tax system suitable for your province (if necessary contact your local tax office for correct sales tax information) and for your type of retail business. In the cash register, four kinds of tax can be set and each tax is arranged to match GST or PST as follows:

  Tax 1: PST Tax 2: PST
  Tax 3: PST or GST Tax 4: GST

Canadian tax type number	Tax 4 method	Tax 3 method		Tax 2 and 1 method
	GST	GST	PST	PST
01	VAT	VAT	-	Tax on tax
02	VAT	VAT	-	Tax on base
03	VAT	-	Tax on tax	Tax on tax
04	VAT	-	Tax on base	Tax on base
05	Add on Tax	-	Tax on tax	Tax on Tax
06	Add on Tax	-	Tax on base	Tax on base
07	Add on Tax	VAT	-	Tax on tax
08	Add on Tax	VAT	-	Tax on base
09	Add on Tax	Add on Tax	-	Tax on tax
10	Add on Tax	Add on Tax	-	Tax on base
11	VAT	-	VAT (Tax on base)	Tax on tax

(The most common type for Canada is type number 06.)

Note

- *To program a GST, use Tax 4; and to program two GSTs, use Tax 3 and 4. To program a PST, use Tax 1; to program two PSTs, use Tax 1 and 2; and to program three PSTs, use Tax 1, 2 and 3.*
- *The entry of a multi-taxable item for PST or GST is prohibited as follows for the Canadian tax system. When programming for departments, avoid programming the prohibited multi-taxable status.*

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

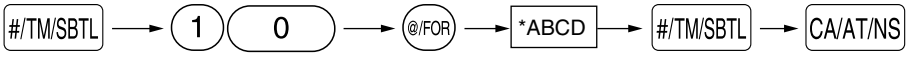
4 Various Function Selection Programming 2

The cash register provides various options so you can use the register to suit your sales needs.
In this section, you can program the following features (parameters within parentheses indicates default setting):

- Power save mode (entering the power save mode in 30 minutes)
- Logo message print format (graphic logo only)
- Thermal printer density (standard density)
- RS-232C interface
- Language selection (English)
- Training clerk specification (none) - If you specify a clerk code who is trained for use on this cash register, the cash register will go into training mode when the clerk code is registered for sales entries. The sales operations done by the trained clerk does not affect sales total. For details, refer to TRAINING MODE section.

■ Power save mode

Procedure



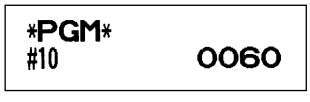
*	Item:		Selection:	Entry:
	A	Entering power save mode	Yes*	0
		when time is displayed	No	1
	B-D	Time(min.) to entering power save mode		001-254 or 999
		since no operation is made		(Default 030)

Note *When 999 is set for B to D, entering into power save mode is inhibited.*

Key operation example

#/TM/SBTL 10 @/FOR
0060 #/TM/SBTL CA/AT/NS

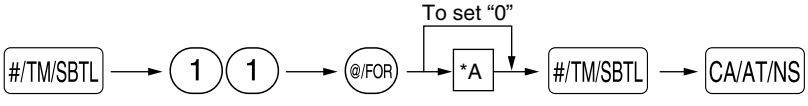
Print



■ Logo message print format

You can select the number of lines for your logo message, and the position to print it on receipt or journal.

Procedure

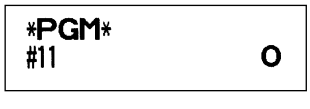


*A: Logo message type
- 0: Header 3-line message without graphic logo
- 1: Graphic logo only (default)
- 2: Footer 3-line message with graphic logo
- 3: Header 6-line message
- 4: Header 3-line message with graphic logo
- 5: Header 3-line message and footer 3-line message

Key operation example

#/TM/SBTL 11 @/FOR
0 #/TM/SBTL CA/AT/NS

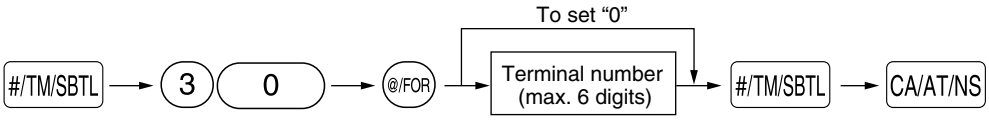
Print



■ RS-232C interface

(1) RS-232C terminal number

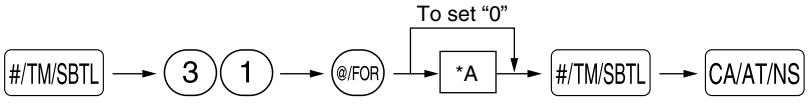
Procedure



Default: 1

(2) RS-232C transmission form

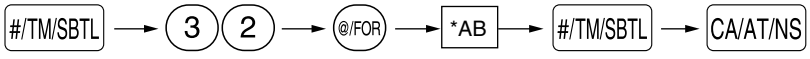
Procedure



*	Item:		Selection:	Entry:
	A	Transmission line form	Half duplex system	1
			Full duplex system*	0

(3) RS-232C baud rate

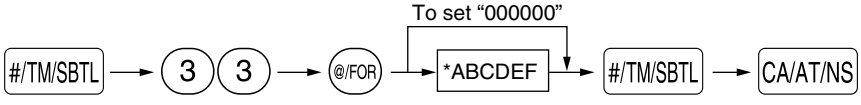
Procedure



*	Item:		Selection:	Entry:
	A	Always enter 0.		0
	B	Baud rate (bps)	2400	3
			4800	4
			9600*	5
			19200	6

(4) RS-232C start code and end code

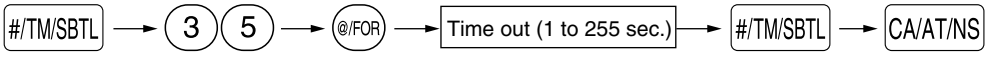
Procedure



*A-C: Start code 000-127 (default: 002)
D-F: End code 000-127 (default: 013)

(5) RS-232C time out setting

Procedure



Default: 007

Key operation example

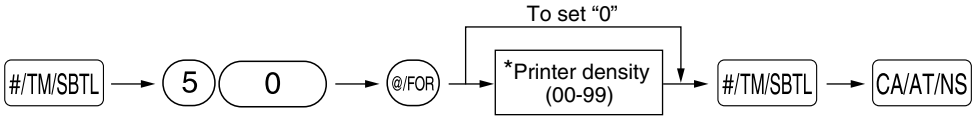
#/TM/SBTL 35 @/FOR
30 #/TM/SBTL CA/AT/NS

Print

PGM
#35 030

■ Thermal printer density

Procedure

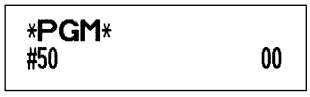


* 50 is the default setting. To make the print darker, set a larger number, and to make the print lighter, set a smaller number.

Key operation example

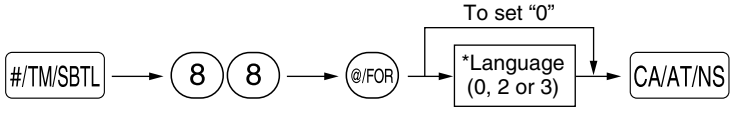
#/TM/SBTL 50 @/FOR
00 #/TM/SBTL CA/AT/NS

Print



■ Language selection

Procedure

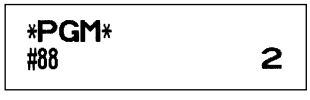


*Language: 0: English 2: French 3: Spanish (default: English)

Key operation example

#/TM/SBTL 88 @/FOR
2 CA/AT/NS

Print

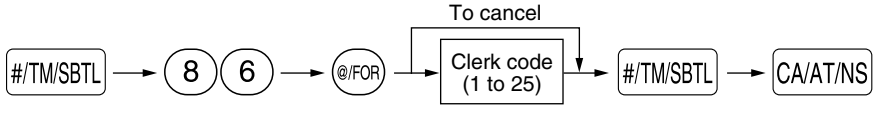


Caution *When you change the language, the texts such as clerk names, logo messages and function texts (refer to page 42), which you programmed, will be reset to the default settings. The language selection must be made before programming clerk names, logo messages and function texts.*

■ Training clerk specification for training mode

For the details of clerk training, please refer to "TRAINING MODE" on page 56.

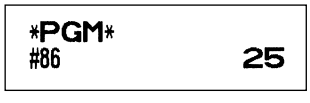
Procedure



Key operation example

#/TM/SBTL 86 @/FOR
25 #/TM/SBTL CA/AT/NS

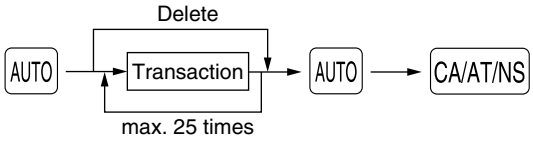
Print



■ AUTO key programming — Automatic sequence key —

If you program frequently performed transactions or report sequences for the [AUTO] key, you can recall those transactions and/or reports simply by pressing the [AUTO] key in key operations.

Procedure

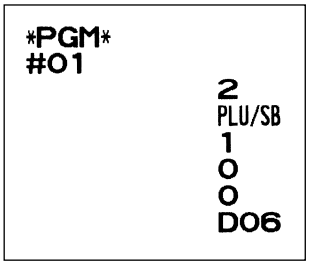


Programming for [AUTO]; entering a PLU 2 item (programmed unit price: 1.50) and a dept. 6 item (unit price: 1.00)

Key operation example

AUTO setting → 2 [PLU/SUB] 100 [AUTO] [6 22] [AUTO] [CA/AT/NS]

Print



Note *When the [AUTO] key has been programmed to execute a report job function, the mode switch must be in the appropriate position (OPX/Z for individual clerk reports, X1/Z1 for daily reports or X2/Z2 for weekly or monthly reports).*

5 Reading Stored Programs

The machine allows you to read every program stored in the PGM mode.

■ Key sequence for reading stored program

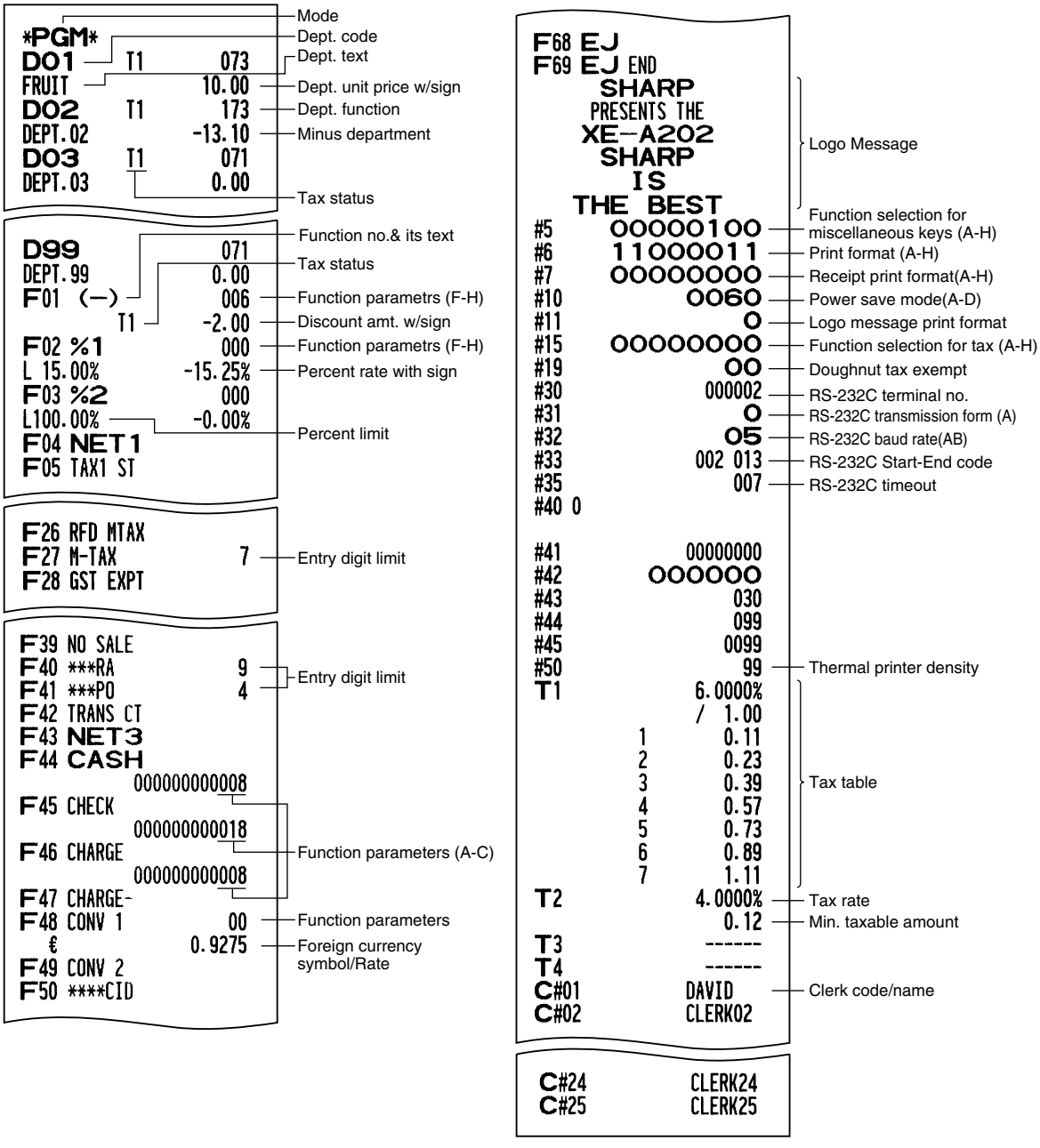
Report name	Key sequence
Programming report 1	[CA/AT/NS]
Programming report 2	(2) → [CA/AT/NS]
Auto key programming report	(1) → [CA/AT/NS]
Printer density programming report	(3) → [CA/AT/NS]
PLU programming report	Start PLU code → (@/FOR) → End PLU code → [PLU/SUB]

Note

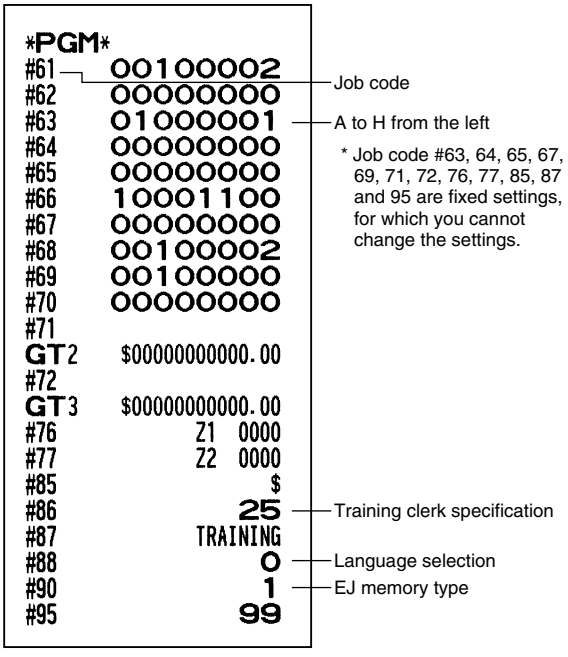
- *To stop reading programming report 1 or PLU programming report, turn the mode switch to the MGR position.*
- *When printing is performed continuously, the printing may be intermitted several seconds. After the intermission, the printing will be restarted.*

■ Sample printouts

1 Programming report 1

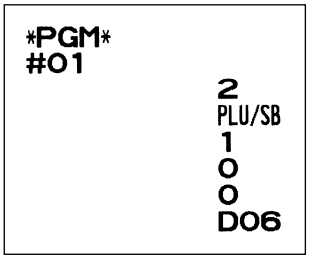


2 Programming report 2

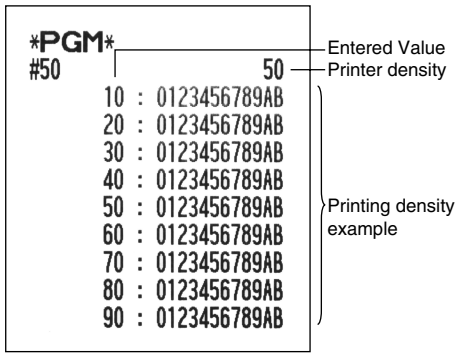


* Job code #63, 64, 65, 67, 69, 71, 72, 76, 77, 85, 87 and 95 are fixed settings, for which you cannot change the settings.

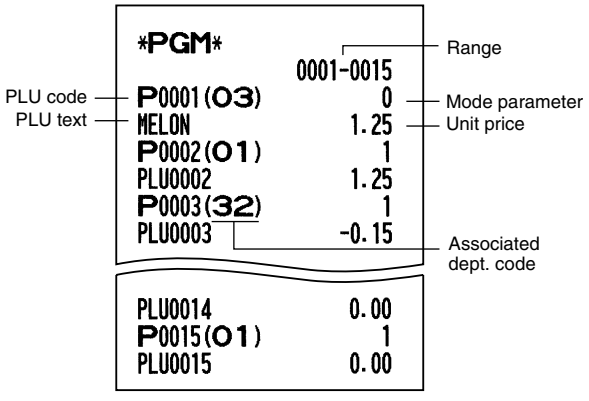
3 Auto key programming report



4 Printer density programming report



5 PLU programming report



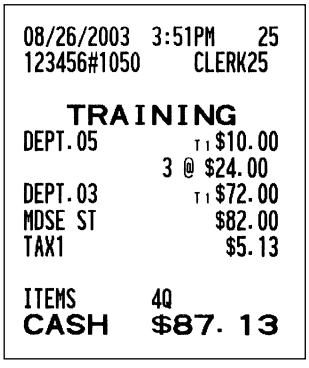
TRAINING MODE

The training mode is used when the operator or the manager practices register operations.
When a clerk in training is selected, the machine automatically enters the training mode. To specify a clerk to be trained, refer to “Training clerk specification for training mode” in “ADVANCED PROGRAMMING” in page 53.
The training operation is valid only in REG, MGR and VOID mode.
The corresponding clerk memory is only updated in the training mode.

Key operation example

A clerk set in training →
25 [CLK#]
1000 [21 5]
3 [@/FOR]
[19 3]
[CA/AT/NS]

Print



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 reset. 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 through GT3, Training GT, reset count, and consecutive number.

1 Summary of Reading (X) and Resetting (Z) Reports

X1 and Z1 reports: Daily sales reports
X2 and Z2 reports: Periodic (monthly) consolidation reports
When you take a X or Z report, turn the mode switch to the appropriate position referring to the column of "Mode switch position" shown on the table below, and use the following corresponding key sequence.

Item	Mode switch position			Key operation
	OPX/Z	X1/Z1	X2/Z2	
Flash report: (Only display) To clear the display, press the CL key or turn the mode switch to another position.	X	—	—	Dept. code → DEPT# : Department sales total [For dept. 1 to 16; Dept. key (1 (17) to 16 (32)) For dept. 17 to 32; DEPTSHIFT → Dept. key (1 (17) to 16 (32))]
				@/FOR key: Amount of cash in drawer
				CA/AT/NS key: Sales total
Full sales report	—	X1, Z1	X2, Z2	Reading: CA/AT/NS Resetting: • → CA/AT/NS
Individual clerk report	X, Z	—	—	Reading: CLK# Resetting: • → CLK# (The report of the current clerk)
Full clerk report	—	X1, Z1	—	Reading: CLK# Resetting: • → CLK#
PLU sales report	—	X1, Z1	—	Reading: Start PLU code → @/FOR → End PLU code (All PLUs) → PLU/SUB Resetting: Start PLU code → @/FOR → End PLU code (All PLUs) → • → PLU/SUB
Hourly report	—	X1, Z1	—	Reading: #/TM/SBTL Resetting: • → #/TM/SBTL

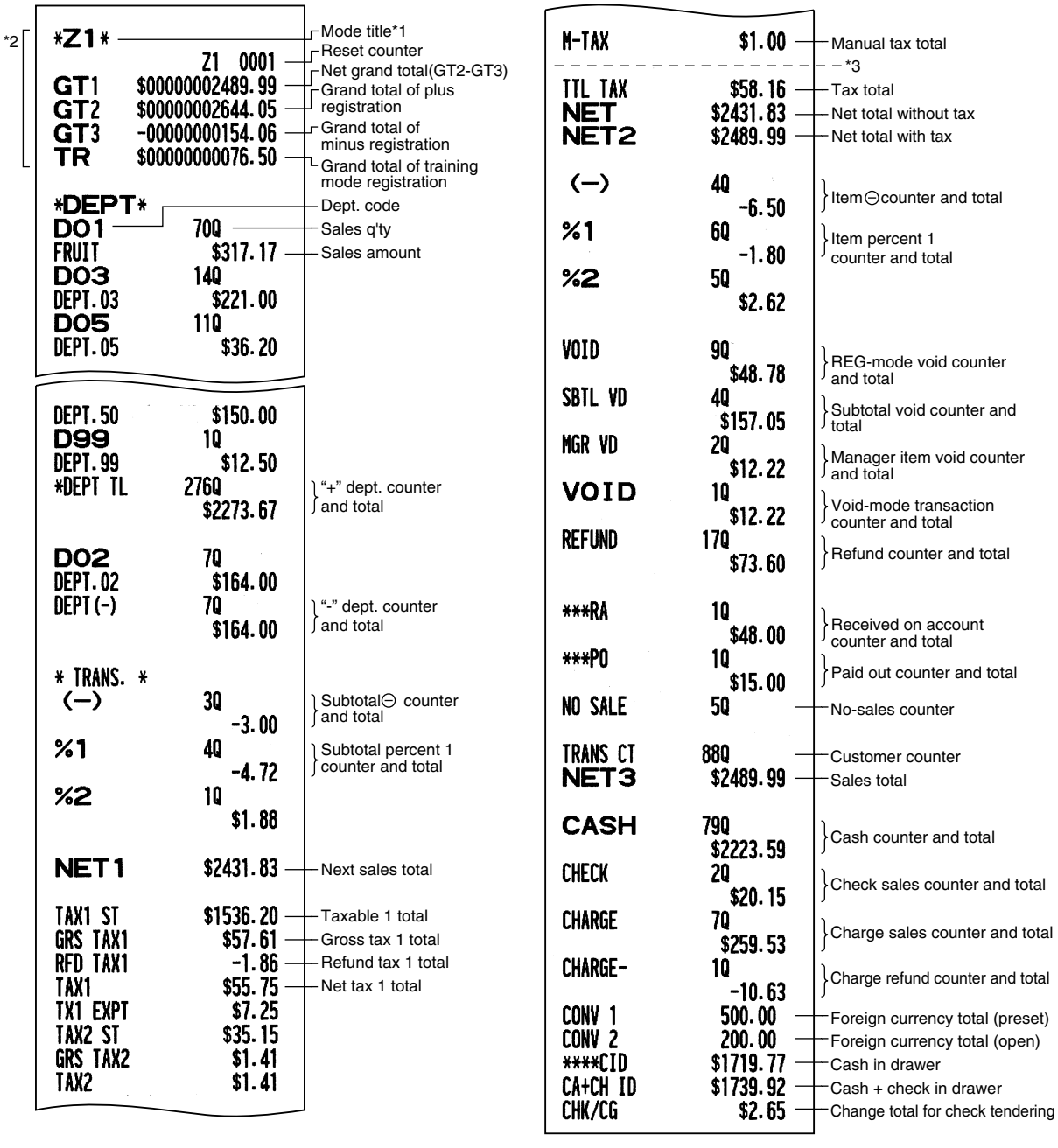
Note

- *When both sales quantities and sales amounts are zero, printing is skipped. If you do not want to skip, change the programming. (Refer to "Print format" of "Various Function Selection Programming 1".)*
- *"X" represents read symbol and "Z" represents reset symbol in the reports.*
- *To stop reading and resetting the PLU sales report, turn the mode switch to the MGR position. The data will not be erased when you reset.*
- *When printing is performed continuously, the printing may be intermitted several seconds. After the intermission, the printing will be restarted.*

2 Daily Sales Totals

■ Full sales report

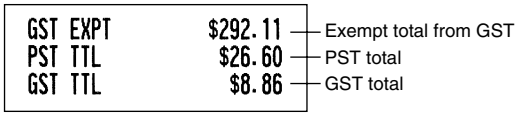
• Sample report



*1: When you take X1 report, "X1" is printed.

*2: Printed in the Z1 report only.

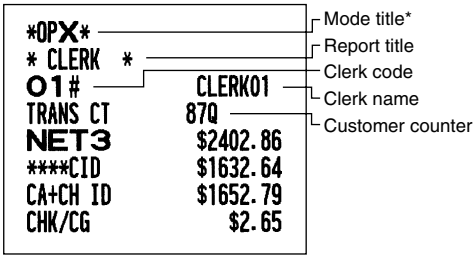
*3: When the Canadian tax system is selected, the following is printed here.



■ Clerk reports

Individual clerk report

• Sample report

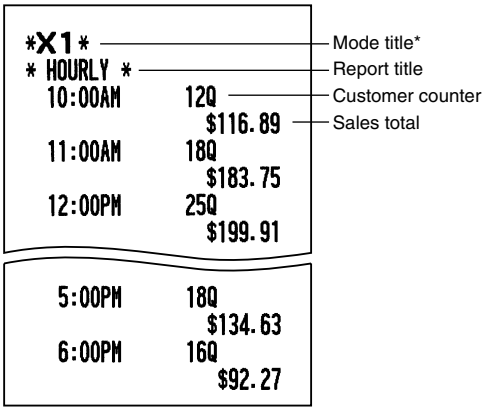


Full clerk report

The printout occurs in the same format as in the sample report of individual clerk, but all clerk's sales data are printed in the order of clerk code number (from #1 to #25).

■ Hourly report

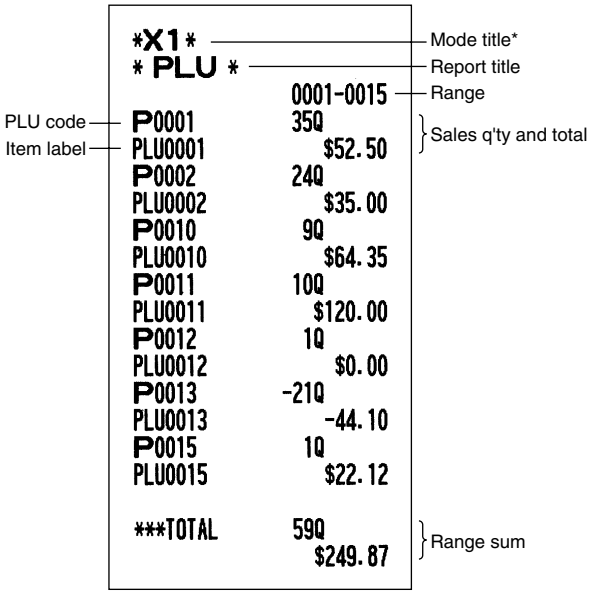
• Sample report



*: When you take Z1 report, "Z1" is printed.

■ PLU sales report

• Sample report

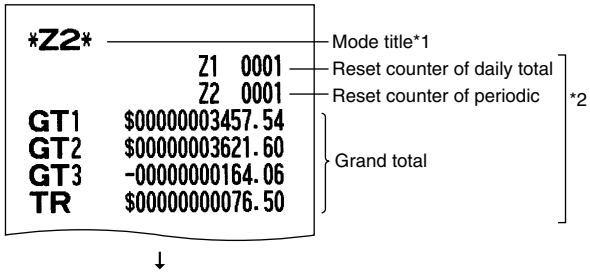


*: When you take Z1 report, "Z1" is printed.

3 Periodic Consolidation

■ Full sales report

• Sample report



The subsequent printouts are the same in format as in the X1/Z1 full sales report.

*1: When you take X2 report, "X2" is printed.
*2: Printed in the Z2 report only

EJ REPORT READING AND RESETTING

The cash register provides an electronic journal (EJ) function. This function is intended to record the journal data in a memory instead of journal paper, and print the data as an EJ report. The register records the journal data in REG, PGM, VOID, X1/Z1 and X2/Z2 modes. By default, a maximum of 2000 lines are stored in the memory, but you can expand it to 3000 lines. For details of EJ programming, please refer to "Electronic Journal Programming" section (page 45).

■ Printing journal data on the way of a transaction

You can print journal data of a current transaction recorded in EJ memory by pressing the RCPT/PO key during the transaction.

Note *This function is valid when the printing style is programmed to receipt, and the receipt ON/OFF function is set to OFF.*

• Sample print

```
*EJ    *
08/26/2003  2:31PM    01
123456#1004      CLERK01
DEPT.03          T1 $10.00
DEPT.04          T1 $45.00
*EJ END*
```

EJ report title

EJ report end title

■ Reading and resetting the electronic journal data (Issuing EJ report)

You can read the journal data stored in the EJ memory in the journal format by executing the following procedure in the X1/Z1 or OP X/Z mode.

To read all of the data:

7 00 → @/FOR → CA/AT/NS

To reset all of the data:

7 00 → • → @/FOR → CA/AT/NS

To read the last 10 records:

7 1 0 → @/FOR → CA/AT/NS

Note

- *On the EJ memory, a maximum of 2000 (or 3000, if programmed) lines of data can be stored. When executing all data reading, all of the data stored in the EJ memory will be printed. To save paper, compression print is available.*
- *To stop reading or resetting the data, turn the mode switch to "MGR" position. The data will not be erased when resetting.*
- *When printing is performed continuously, the printing may be intermitted several seconds. After the intermission, the printing will be restarted.*

• Sample EJ report

```
*OPX*
*EJ    *
08/26/2003  2:34PM    01
123456#1006      CLERK01
***PO               $15.00
08/26/2003  2:35PM    01
123456#1007      CLERK01
DEPT.99             $12.50
ITEMS          1Q
CHARGE          $12.50
08/26/2003  2:36PM    01
123456#1008      CLERK01
*X1*
*DEPT*
* TRANS. *
08/26/2003  2:39PM    01
123456#1009      CLERK01
```

Header information print

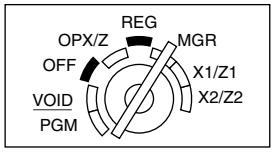
```
MDSE ST             $50.00
TAX1                 $3.13
ITEMS          4Q
CASH            $53.13
08/26/2003  2:41PM    01
123456#1014      CLERK01
DEPT.03          T1 $10.00
DEPT.04          T1 $45.00
MDSE ST             $55.00
TAX1                 $3.44
ITEMS          2Q
CASH            $58.44
08/26/2003  2:41PM    01
123456#1015      CLERK01
NO SALE
*EJ END*
```

OVERRIDE ENTRIES

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

Procedure

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



Example

On this example, the register has been programmed not to allow discounts entries over $1.00.

Key operation example

REG-mode entries
1500 [3 19]
250 [⊖] ...Error
[CL]

Turn the mode switch to the MGR position.
250 [⊖]

Return the mode switch to the REG position.
[CA/AT/NS]

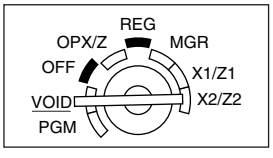
Print

```
DEPT.03          T1 $15.00
(—)                -2.50
MDSE ST            $12.50
TAX1                $0.94

ITEMS          1Q
CASH          $13.44
```

CORRECTION AFTER FINALIZING A TRANSACTION (Void mode)

When you need to void incorrect entries that clerks cannot correct (incorrect entries found after finalizing a transaction or cannot be corrected by direct or indirect void), follow this procedure:

1. Turn the mode switch to the VOID position using the manager key (MA), to enter into the void mode.
2. 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-mode transaction totalizer.)



Incorrect receipt

```
DEPT.04          T1 $10.00
DEPT.03          T1 $1.50
MDSE ST            $11.50
TAX1                $0.72

ITEMS          2Q
CASH          $12.22
```

Cancellation receipt

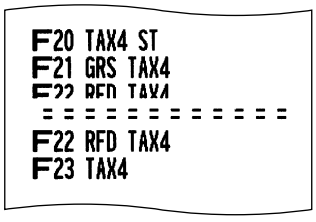
```
          *VOID*
DEPT.04          T1 $10.00
DEPT.03          T1 $1.50
MDSE ST            $11.50
TAX1                $0.72

ITEMS          2Q
CASH          $12.22
```

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 power failure is encountered in register idle state or during an entry, the machine returns to normal operation after power recovery.
- When 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.)



2 In Case of Printer Error

If the printer runs out of paper, the printer will stall, and "PPPPPPPPPP" will appear on the display. Key entries will not be accepted. Refer to section 5 in this chapter, install a new roll, then press the CL key. The printer will print the power failure symbol and resume printing.

If the print roller arm is not locked, the printer stalls, "H" will appear on the extreme left of the display. Key entries will not be accepted. Push down the arm until it is securely locked, then press the CL key. The printer will print the power failure symbol and resume printing.

3 Cautions in Handling the Printer and Recording Paper

■ Cautions in handling the printer

- Avoid dusty and humid environments, direct sunlight and iron powder. (A permanent magnet and electromagnet are used in this machine.)
- Never pull the paper when the print roller arm is locked. First lift up the arm, and then remove the paper.
- Never touch the surface of the print head and print roller.

■ 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 storage places. Avoid direct sunlight.
- The printed text on the paper can discolor under conditions of high humidity and temperature, exposure to the direct sunlight, contact with glue, thinner or a freshly copied blueprint, and heat caused by friction from scratching or other such means.
- Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.

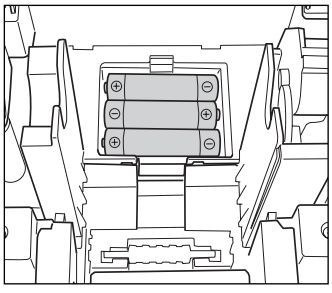
4 Replacing the Batteries

This cash register displays a low battery symbol (L) when the batteries are low, and displays a no battery symbol (L) when batteries are extremely low or batteries are not installed.

When the low battery symbol is displayed, replace the batteries with new ones as soon as possible. The existing batteries will be dead in about two days.
When the no battery symbol is displayed, replace the batteries immediately. Otherwise, if the AC power cord is disconnected or a power failure occurs, all the programmed settings will be reset to the default settings and any data stored in memory will be cleared.

Note *Be sure to observe precautions shown on page 1 when handling batteries.*

To replace the batteries:



1. **Make sure that the cash register is plugged in.**
2. Turn the mode switch to the REG position.
3. Remove the printer cover.
4. Open the battery compartment cover next to the paper roll cradle and remove the old batteries.
5. Install three new “AA” batteries in the battery compartment. Be sure the positive and negative poles of each battery are facing in the proper direction. When they are installed correctly, the “ L ” or “ L ” symbol will disappear.
6. Close the battery compartment cover.
7. Replace the printer cover.

5 Replacing the Paper Roll

Be sure to use paper rolls specified by SHARP.
The use of any other paper rolls other than those specified could cause paper jamming, resulting in register malfunction.

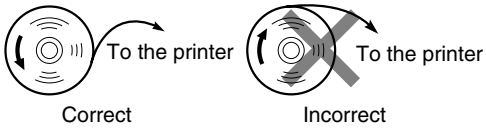
Paper specification

Paper width: 2.25 ± 0.02 in (57.5 ± 0.5 mm)
Max. outside diameter: 3.15 in (80 mm)
Quality: Thermal paper

- **Be sure to set the paper roll prior to using your machine, otherwise it may cause a malfunction.**

Install the paper roll in the printer. Be careful to set the roll correctly.

(How to set the paper roll)

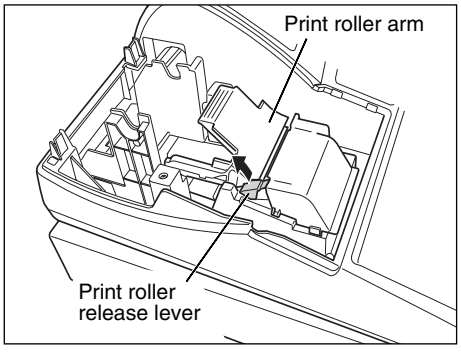


■ Removing the paper roll

When a red dye appears on the paper roll, it is time to replace it. Replace the paper roll with a new one. If you plan on not using the register for an extended period of time, remove the paper roll, and store it in an appropriate place.

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself.

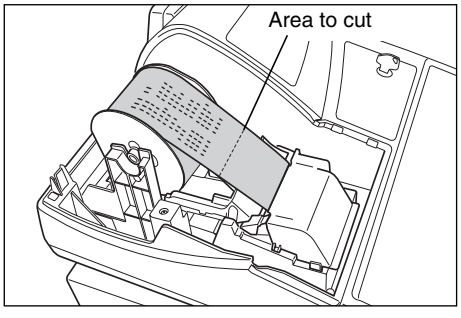
When not using the take-up spool (using as receipt paper):



1. Remove the printer cover.
2. Lift up the print roller release lever to unlock and open the print roller arm.
3. Remove the paper roll from the paper roll cradle.

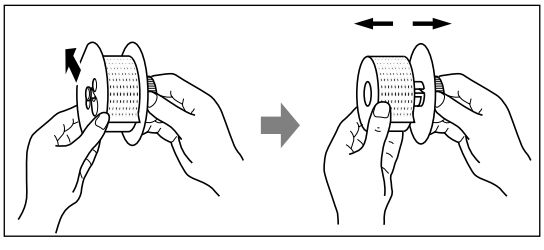
Note *Do not pull the paper through the printer.*

When using the take-up spool (using as journal paper):



1. Turn the mode switch to a position other than OFF with the power cord connected.
2. Remove the printer cover.
3. Press the [↑] key to advance the journal paper until its printed part is out of the way.
4. Cut the paper and remove the take-up spool.
5. Lift up the print roller release lever to unlock and open the print roller arm.
6. Remove the paper roll from the paper roll cradle.

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

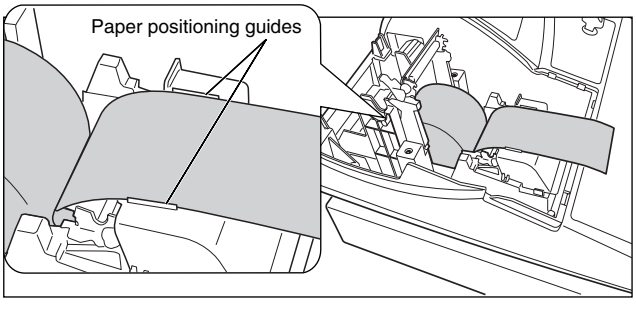


7. Remove the outer side of the take-up spool as shown on the left.
8. Remove the printed journal roll from the take-up spool.

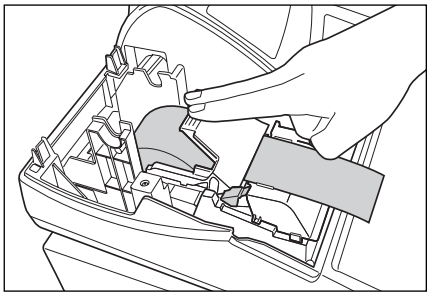
■ Installing the paper roll

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself.

Installing the receipt paper roll:

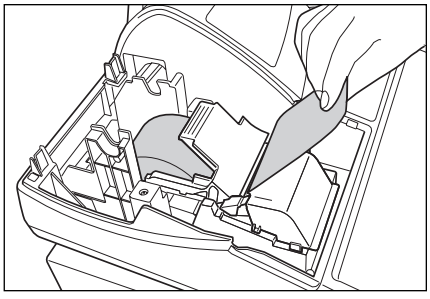


1. Turn the mode switch to a position other than OFF with the power cord connected.
2. Remove the printer cover.
3. Lift up the print roller release lever to unlock and open the print roller arm.
4. Set the paper correctly in the paper roll cradle.
5. Feed the end of the paper along with the paper positioning guides.



6. While holding down the paper, slowly close the print roller arm, and push down the arm until you hear a click locking the arm. Make sure securely you push down the center of the wing part of the arm as illustrated at the left. The paper will be fed automatically.

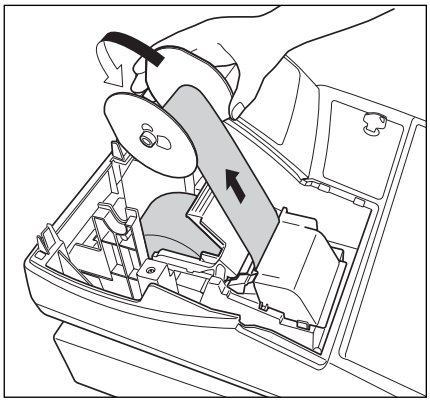
Note *If the print roller arm is not securely locked, printing is not done right. If this problem occurs, open the arm, and close the arm as instructed above.*



7. Cut off the excess paper using the edge of the inner cover, and replace the printer cover. Press the [↑] key to make sure the paper end comes out of the printer cover and clean paper appears.

Note *If the paper end does not come out, open the printer cover, and pass the paper end between the paper cutter and the paper guide of the printer cover, and replace the cover.*

Installing the journal paper roll:



1. Turn the mode switch to a position other than OFF with the power cord connected.
2. Remove the printer cover.
3. Lift up the print roller release lever to unlock and open the print roller arm.
4. Set the paper correctly in the paper roll cradle.
5. Feed the end of the paper along with the paper positioning guides.
6. While holding down the paper, slowly close the print roller arm, and push down the arm until you hear a click locking the arm. Make sure securely you push down the center of the wing part of the arm as illustrated at the left. The paper will be fed automatically.
7. Insert the end of the paper into the slit in the spool. (Press the [↑] key to feed more paper if required.)
8. Wind the paper two or three turns around the spool shaft.
9. Set the spool on the bearing, and press the [↑] key to take up excess slack in the paper.
10. Replace the printer cover.

Note *You can wind the roll paper in OP X/Z, X1/Z1, and X2/Z2 modes even if you programmed so that the printer is used for issuance of receipts. This may be convenient to wind reports. In this case, set the roll paper to the take-up spool.*

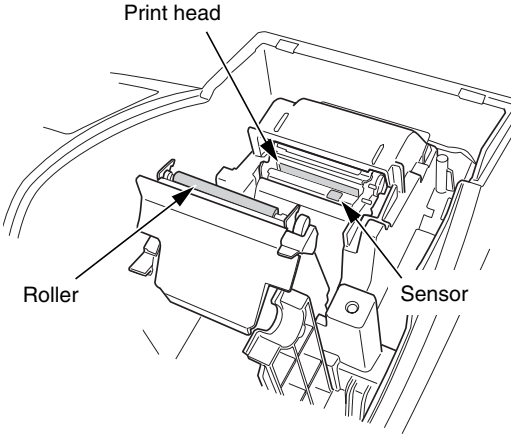
6 Removing a Paper Jam

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself. Never touch the print head immediately after printing, as the head may still be hot.

1. Remove the printer cover.
2. Lift up the print roller release lever to unlock the print roller arm, and open the print roller arm.
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Reset the paper roll correctly by following the steps in “Installing the paper roll”.

7 Cleaning the Printer (Print Head / Sensor / Roller)

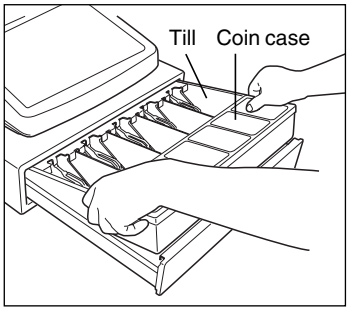
When the printed text is getting dark or faint, paper dust may be stuck to the print head, sensor and/or roller. Clean them as follows:

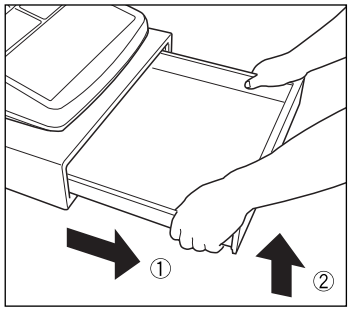


Caution:
- **Never touch the print head with a tool or anything hard as it may damage the head.**
- **The paper cutter is mounted on the printer cover. Be careful not to cut yourself.**

1. Turn the mode switch to the OFF position.
2. Remove the printer cover.
3. Lift up the print roller release lever to unlock and open the print roller arm.
4. Remove the paper roll referring to the “Removing the paper roll” section.
5. Clean the print head with a cotton swab or soft rag moistened with ethyl alcohol or isopropyl alcohol. Clean the roller and the sensor in the same manner.
6. Reset the paper roll correctly by following the steps in “Installing the paper roll”.

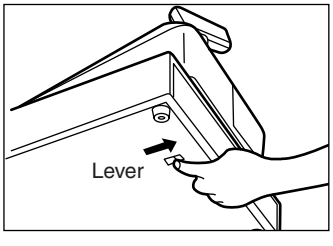
8 Removing the Till and the Drawer





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. The 6-denomination coin case is detachable.

9 Opening the Drawer by Hand



The drawer automatically opens. However, when a power failure occurs or the machine becomes out of order, slide the lever located on the bottom of the machine in the direction of the arrow. (See the figure at the left.)
The drawer will not open if it is locked with the key.

10 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 “Checking” shown in the right-hand column before calling for service.

Fault	Checking
(1) The display shows symbols that do not make sense.	• Has the machine been initialized properly as shown “GETTING STARTED”? (Note that initialization clears all the data and programmed settings stored in memory.)
(2) 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?
(3) The display is illuminated, but the whole machine refuses registrations.	• Is a clerk code assigned to the register? • Is the mode switch set properly at the “REG” position?
(4) No receipt is issued.	• Is the paper roll properly installed? • Is there a paper jam? • Is the receipt function in the “OFF” status? • Is the print roller arm securely locked?
(5) No journal paper is taken up.	• Is the take-up spool installed on the bearing properly? • Is there a paper jam? • Is the journal printing selected in the printing style programming? (If the receipt printing is selected, the paper is not wound around the take-up spool.)
(6) Printing is unusual.	• Is the print roller arm securely locked? • Is the paper roll properly installed? • Are the print head/sensor/roller clean?

■ Error code table

When the following error codes are displayed, press the CL key and take a proper action according to the table below.

Error code	Error status	Action
E01	Registration error	Make a correct key entry.
E02	Misoperation error	Make a correct key entry.
E03	Undefined code is entered.	Enter a correct code
E07	Memory is full (in the AUTO key programming).	Program the AUTO key within 25 steps.
E11	Compulsory depression of the #/TM/SBTL key for direct finalization	Press the #/TM/SBTL key and continue the operation.
E12	Compulsory tendering	Make a tendering operation.
E32	No entry of a clerk code	Make a clerk code entry.
E34	Overflow limitation error	Make a registration within a limit of entry.
E35	The open price entry is inhibited.	Make a preset price entry.
E36	The preset price entry is inhibited.	Make an open price entry.
E37	The direct finalization is inhibited.	Make a tendering operation.
E67	Subtotal void is not allowed.	Finalize the transaction, and correct the wrong entries in the void mode.

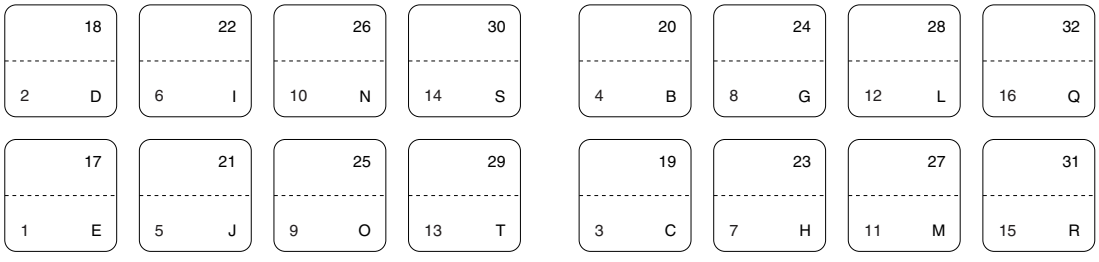
SPECIFICATIONS

Model:	XE-A202	
Dimensions:	16.6 (W) x 16.9 (D) x 11.7 (H) in. (421 (W) x 429 (D) x 297 (H) mm)	
Weight:	28.0 lb (12.7 kg)	
Power source:	Local voltage ±10% AC, 50/60 Hz	
Power consumption:	Stand-by 7.7 W	
	Operating 30 W (max.)	
Working temperature:	32 °F to 104 °F (0 °C to 40 °C)	
Electronics:	LSI (CPU) etc.	
Display:		
Operator display:	7-segment display (10 positions)	
Customer display:	7-segment display (7 positions)	
Printer:		
Type:	One-station thermal printer	
Printing speed:	Approx. 12 lines/second	
Printing capacity:	24 digits each for receipt and journal paper	
Other functions:	• Graphic logo printing function	
	• Logo message function	
	• Receipt (ON-OFF) function, compression printing function	
Paper roll:	Width: 2.25 ± 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 6 for coin denominations	
Accessories:	Manager key	2
	Operator key	2
	Drawer lock key	2
	Paper roll	1
	Take-up spool	1
	RS-232C cable (QCNWG3190BHZZ)	1
	Fixing tape for peripherals	1 set
	Customer support tool	1 disk
	Quick Start Guide (English)	1 copy
	Quick Start Guide (French)	1 copy
	Instruction manual	1 copy
	Limited warranty	1 copy

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

Use these labels with the department keys. Write department names on the labels and attach them to the department keys by first removing the transparent key covers. (Please make a copy of this page.)

Example:



AE-A202

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