SHARP

ELECTRONIC CASH REGISTER
ELEKTRONISCHE REGISTRIERKASSE
CAISSE ENREGISTREUSE ELECTRONIQUE
CAJA REGISTRADORA ELECTRONICA
ELEKTRONISCHE KASSA

MODEL
MODELL
MODELE
MODELO **XE-A202**
MODEL

INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS

MANUAL DE INSTRUCCIONES
GEBRUIKSAANWIJZING

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 three new R6 or LR6 batteries ("AA" size) on the register. Otherwise, distorted memory contents and malfunction of the cash register will occur. For this procedure, please refer to page 8.

IMPORTANT

• **Be very careful when removing and replacing the printer cover, as the cutter mounted on it is very sharp.**
• **Install the cash register in a location not subject to direct sunlight, unusual temperature changes, high humidity or splashing water.**
  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 (official (nominal) voltage).**
  Other electrical devices on the same electrical circuit could cause the register to malfunction.
• **For protection against data loss, please install three R6 or LR6 batteries ("AA" size) after initializing the cash register. When handling the batteries, please observe the following:**
  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.**
• **For complete electrical disconnection, disconnect the main plug.**

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

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PARTS AND THEIR FUNCTIONS

1 External View

■ Front view

Operator display

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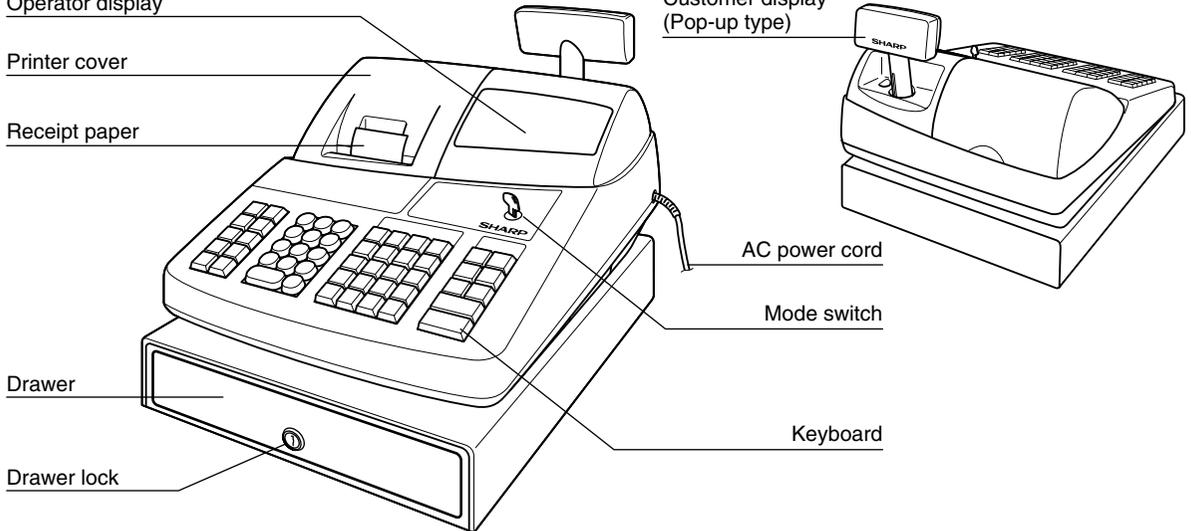
2 Printer
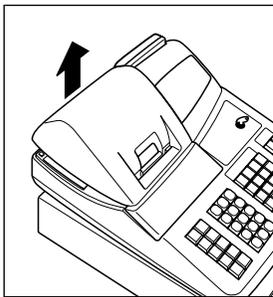
The printer is one station type thermal printer, and therefore it does not require any type of ink ribbon or cartridge.

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 cover. Be careful not to cut yourself.

Take-up spool

Print roller arm

Print roller release rever

Inner cover

Paper roll cradle

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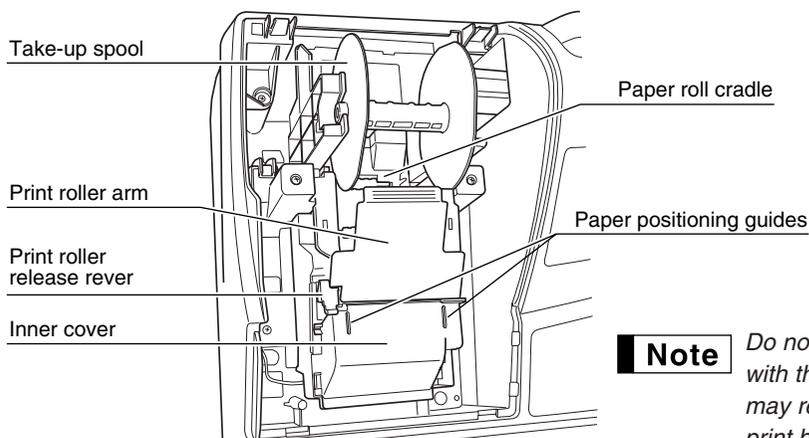
| Note | *Do not attempt to remove the paper roll with the print roller arm is locked. This may result in damage to the printer and print head.*

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 "⏻" position.

Manager key (MA)

Operator key (OP)
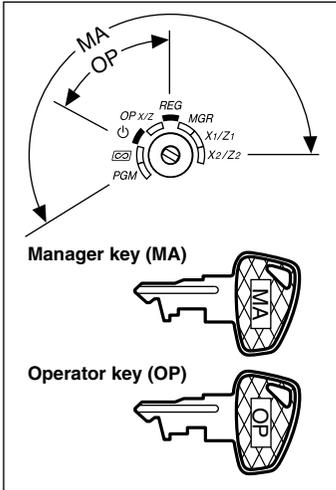
The mode switch has these settings:

⏻ : 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.

⬛ : 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
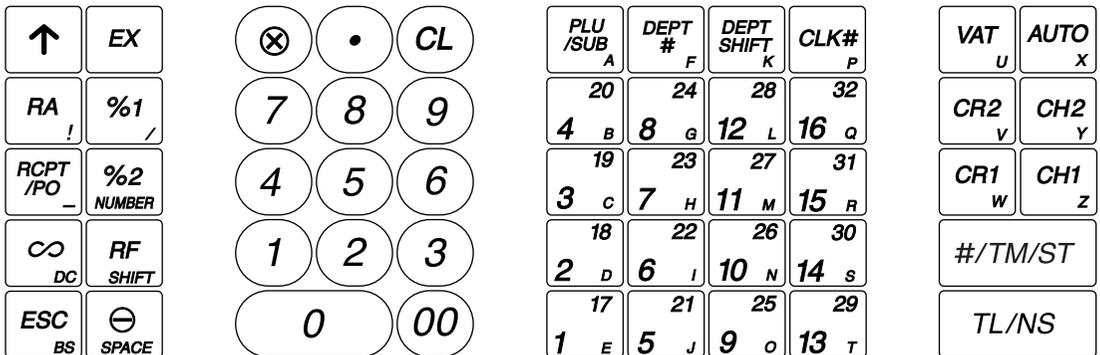
| Note | *The small characters on the bottom or lower right in each key indicates functions or characters which can be used for character entries for text programming. For details, refer to page 34.* |

■ Key names

↑	Paper feed key	⊖	Discount key	CLK#	Clerk code entry key
RA	Received-on account key	⊗	Multiplication key	1~16	Department keys
RCPT/PO	Receipt print/Paid-out key	•	Decimal point key	VAT	Value added tax key
⬛	Void key	CL	Clear key	AUTO	Automatic sequence key
ESC	Escape key	00 0 ~ 9	Numeric keys	CR1 CR2	Credit 1 and 2 keys
EX	Foreign currency exchange key	PLU/SUB	PLU/Subdepartment key	CH1 CH2	Cheque 1 and 2 keys
%1 %2	Percent 1 and 2 keys	DEPT#	Department code entry key	#/TM/ST	Non-add code/Time display /Subtotal key
RF	Refund key	DEPT SHIFT	Department shift key	TL/NS	Total/No sale key

5 Displays

Operator display

PLU/SUB

DEPT REPEAT Clerk code

```
03        12.50
```

RCPT   DC SHIFT NUMBER
OFF

Customer display (Pop-up type)

```
45678.90
```
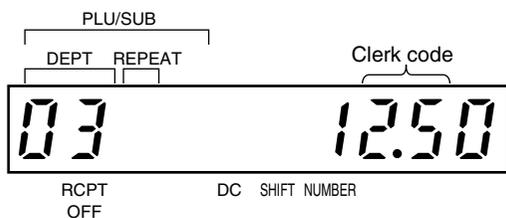
Amount: Appears in the far-right eight (max.) positions. When the amount is negative, the minus symbol "-" appears before the amount.

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."($2 \rightarrow 3 \cdots 9 \rightarrow 0 \rightarrow 1 \rightarrow 2 \cdots$)

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

Time: Appears in the second to sixth positions (using 24-hour format) in the OP X/Z, REG or MGR mode. In the REG or MGR mode, press the #/TM/ST key to display the time.

■ Machine state symbols

P : Appears during programming.

E : Appears when an error is detected.

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

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

F : Appears when a transaction is finalized by pressing the TL/NS, CH1, CH2, CR1 or CR2 key.

Γ : Appears when the change due amount is displayed.

$E\text{-}E$: Appears 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 64 for details.

$\llcorner$: Appears when the batteries are not installed, or the installed batteries are dead. You must replace with new ones immediately. Refer to page 64 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.

$E\text{-}EU$: Appears when programmed date (and time) for EURO modification operation is come.

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

$PPPPPPPPP$: 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

Unpack the cash register and make sure all accessories are included. For details of accessories, please refer to "Specifications" section.

For installing the cash register, find a stable surface near an AC outlet where the cash register will not subject to water sources or direct sunlight, then install the register using the fixing angle bracket provided with the register. The fixing angle bracket prevents the register from moving when the drawer opens. By hooking the register on the bracket, you can secure the register to the position.
Follow the procedure shown below for the installation.

How to install the fixing angle bracket

1. Thoroughly clean the location where the fixing angle bracket (B) is to be placed.

2. Peel off the adhesive tape on the fixing angle bracket.

3. Hook the angle bracket onto the hook (A) that is located at the bottom rear of the register.

4. Firmly stick the fixing angle bracket to the table surface that you cleaned above.
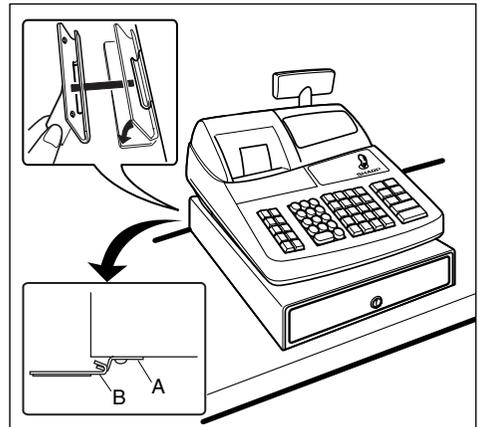
How to remove the register from the fixing angle bracket

1. Lift up the front of the register and pull the register towards you.
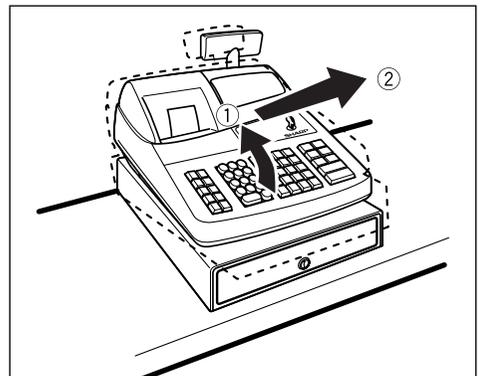
2 Initializing the cash register

In order for the cash register to operate properly, you must initialize it before operating 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 of the AC power cord into the AC outlet. The buzzer will sound three times.
IMPORTANT: This operation must be performed without batteries installed.
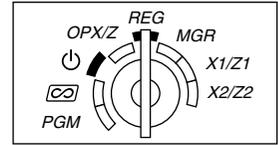
3. The cash register has now been initialized. The register display will show "0.00" with " ∟ ".

| ∟ | 0.00 |

> **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 high because you operated the cash register before starting initialization.) Wait at least one minute after pulling out the plug and insert the plug again.*

3 Installing batteries

Three new R6 or LR6 batteries ("AA"size) must be installed in the cash register to prevent the data and user-programmed settings from being erased from the memory, when the power 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 " L " 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 R6 or LR6 batteries ("AA"size) according to the procedure shown below with the power cord connected and the mode switch set to the REG position:

1. Lift the rear of the printer cover 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.
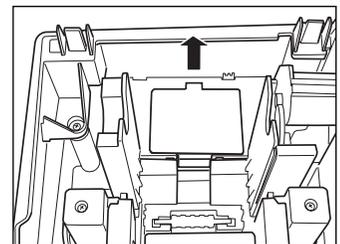
3. Install three new R6 or LR6 batteries ("AA"size) as per the diagram.
When the batteries are properly installed " ∟ " on the display will disappear.
4. Close the battery compartment cover.
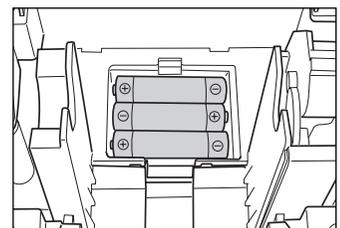
> **Note** *Be sure to observe precautions shown on page 1 when handling batteries.*

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.

Print roller arm
Print roller release lever
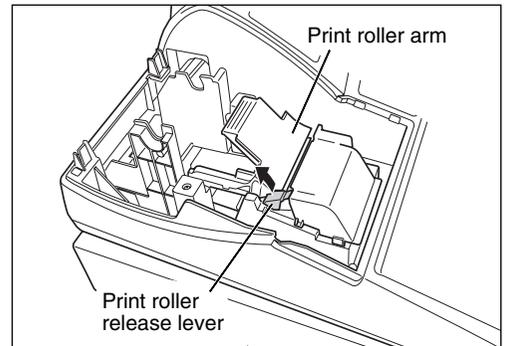
2. Set a paper roll in the paper roll cradle as per the diagram.

To the printer   To the printer
Correct   Incorrect
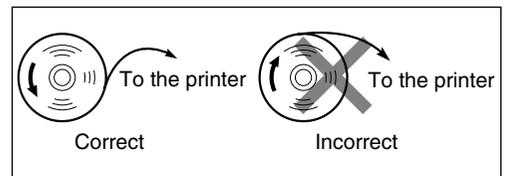
3. Feed the end of the paper along with the paper positioning guides as per the diagram.

Paper positioning guides
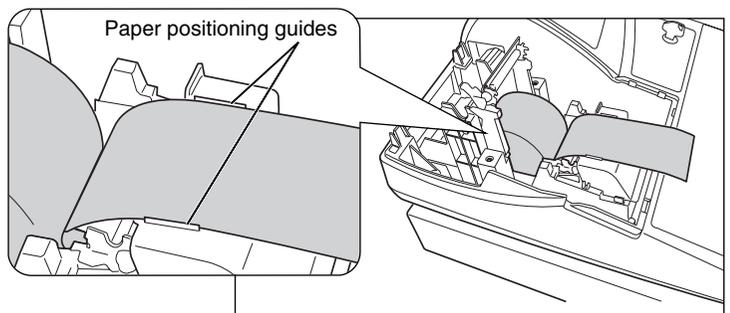
4. While holding down the paper, slowly close the print roller arm, and push down the arm until you hear a click locking the arm. Make sure securely you push down the center of the wing part of the arm as per the diagram. The paper will be fed automatically.
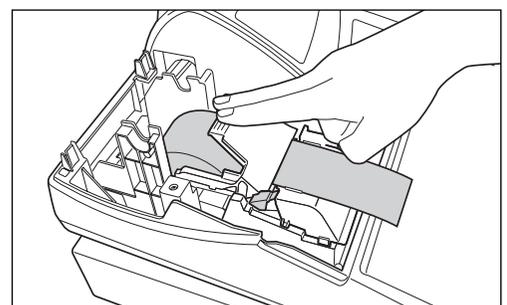
| Note | *If the print roller arm is not securely locked, printing is not done right. If this problem occurs, open the arm, and close the arm as instructed above.* |

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.* |
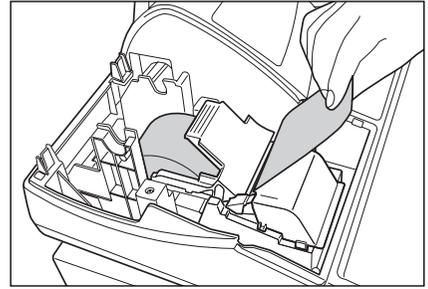
When using the take-up spool (using as journal paper):
 • Insert the end of the paper into the slit in the spool. (Press the ↑
   key to feed more paper if required.)
 • Wind the paper two or three turns around the spool shaft.
 • Set the spool on the bearing, and press the ↑ key to take up
   excess 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.* |
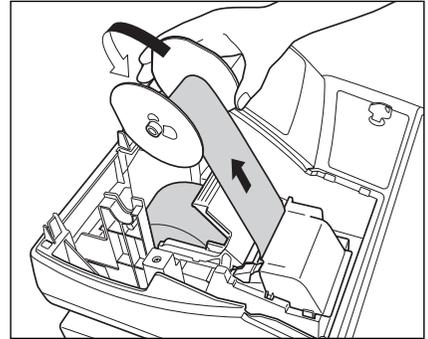
5 Programming date, time and VAT/tax

| **Note** | *The cash register provides text languages of English, German, 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" (Job code 88) section for changing the language.* |

Before you can proceed with registration of sales, **you must program**:
   • date   • time   • VAT/tax
Please refer to the BASIC FUNCTION PROGRAMMING section for details (page 25).

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.

Decimal point position (tab) setting for domestic currency
By default, "2" is selected. When your country has a different tab setting, you must change the setting. Please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 61) on page 44.

Rounding system
When your country has a special rounding system, such as Australia, Switzerland, Norway, Sweden, Denmark and South Africa you must change the setting to suit your country. For the setting for Australia, Switzerland, Norway and South Africa please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 67) on page 46. For the setting for Sweden and Denmark, please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 69) on page 47.

VAT/tax
The cash register provides 6 kinds of VAT/tax. Select an appropriate VAT/tax system first, then set tax rates (up to 4 rates) and assign taxable status to departments. By default, VAT 1 is assigned for all departments.

7 Starting sales entries

Now you are ready for sales registration.

BASIC SALES ENTRY

1 Basic Sales Entry Example

Listed below is a basic sales entry example when selling 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.
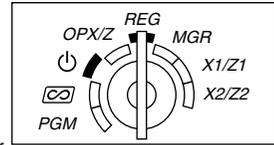
Item entries

3. Enter the price for the first department item. (For example, for 15.00, enter ①⑤⑩, 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 department items.

Displaying subtotals

5. Press the #/TM/ST 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 TL/NS key, and the change due 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# → - 0 1 -
Item entries	1500 1¹⁷ → 01 15.00
	2300 2¹⁸ → 02 23.00
Displaying subtotal	#/TM/ST → □ 38.00
	4000 → 4000
Finalizing the transaction	TL/NS → C 2.00

(In this example, tax system is set to automatic VAT 1-4 and the tax rate is set to 6.25%.)

Print

```
        SHARP
    PRESENTS THE
     XE-A202
       SHARP
         IS
     THE  BEST

26/08/2003 11:24      01
123456#0288 CLERK 01

DEPT.01          *15.00
DEPT.02          *23.00
SUBTOTAL         *38.00
TAX1 ST          *38.00
VAT 1             *2.24
NET 1            *35.76

ITEMS       2Q
***TOTAL    *38. 00
CASH            *40.00
CHANGE           *2.00
```

- Logo message
- Date/Time/Clerk code
- Register number /Consecutive number/Clerk name
- Items
- Price
- Not printed when non-taxable items only are sold.
- Total quantity
- Total amount
- Cash tendering/amount received
- Change

REG
OPX/Z   MGR
         X1/Z1
         X2/Z2
PGM

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 consecutive transactions.

■ Sign-on (in REG, MGR, ⟨ळ⟩ mode)

To display the signed-on clerk code

⌐→ | Clerk code 1 to 20 | →→ |CLK#|

■ Sign-off (in REG, MGR, ⟨ळ⟩ mode)

|CLK#| ⟶ |CLK#|
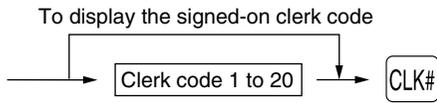
Receipt ON/OFF function

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 mode, the receipt off indicator "_" is illuminated.

The register will print reports regardless of the receipt state, so the paper roll must be installed.

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 a summary receipt.

Copy receipt

You can print a copy receipt by pressing the |RCPT/PO| key when the receipt ON/OFF function is in the "ON" status. To realize this function, you must enable the function. Please refer to page 45 (Job code 63).

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 the register goes to the power save mode, all display lights will turn off except the decimal point at the leftmost position. The 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 the 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 an error symbol " F " on the display. Clear the error state by pressing the ⟨CL⟩ key and take the proper action. Please refer to the error code table on page 68.

• Enter over a 32-digit number (entry limit overflow): Cancel the entry and re-enter the correct number.
• An error in key operation: Clear the error and continue operation.
• 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 |TL/NS|, |CH1|, |CH2|, |CR1| or |CR2| key to finalize the transaction.

Error escape function

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

To clear the error state

Transaction ⟶ ⟨CL⟩ ⌐→
                      ↓
              └→ |ESC| ⟶ |ESC|
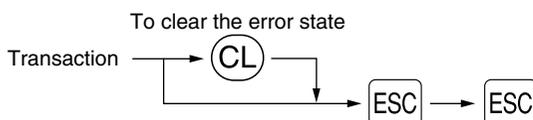
The transaction is voided (treated as a subtotal void) and the receipt is issued by this function. If you have already entered a tendered amount, the operation is finalized as a cash sale.

3 Item Entries

■ Single item entries

1. Department entries

The cash register provides a maximum of 50 departments for a merchandise classification. Group attributes, such as taxable status, are applied to 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.

When using a programmed unit price
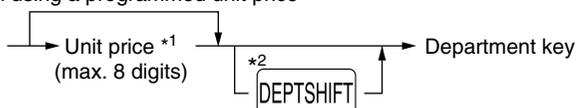
Unit price *1
(max. 8 digits)
*2
DEPTSHIFT
Department key

*1 Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.
*2 For the departments 17 through 32, press the DEPTSHIFT key.

Note *Please note if you press the same key after using the DEPTSHIFT key, it acts as a repeat entry. For example, when you register an item of dept. 17 using the DEPTSHIFT key and then an item of dept. 1 using the preset unit price, you should use the department code entry key described below for the dept. 1 item. If you just press the ₁ ¹⁷ key to register dept. 1 item, it will act as a repeat entry of dept. 17 item.*

• 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 you use a programmed unit price, enter a dept. code and press the DEPT# key.
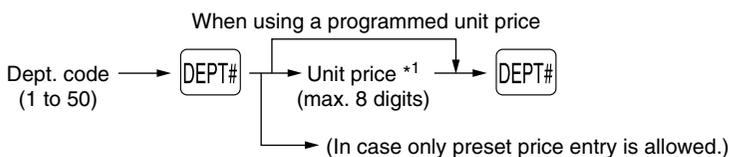
When using a programmed unit price

Dept. code
(1 to 50)
DEPT#
Unit price *1
(max. 8 digits)
DEPT#

(In case only preset price entry is allowed.)

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

2. 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 from 1 to 1200, and should belong to a department to obtain attributes of that department.

By default, the cash register is preprogrammed to be able to use 1 to 200 codes, and these 200 codes are set to PLU mode and zero for unit price.
To extend the number of PLU codes to 1200, please refer to "EJ memory type" on page 41, and for other PLU/subdepartment programming, refer to "PLU and Subdepartment Programming" on page 29.

• PLU entries

PLU code ⟶ |PLU/SUB|

• Subdepartment (open PLU) entries
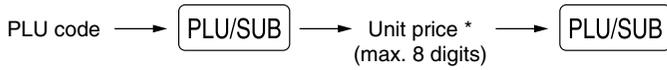
PLU code ⟶ |PLU/SUB| ⟶ Unit price * ⟶ |PLU/SUB|
                   (max. 8 digits)

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

Key operation example		**Print**

Department entry
```
                    1200 12²⁸
            500 DEPTSHIFT 1¹⁷
                          14³⁰
            DEPTSHIFT 2¹⁸
      50 DEPT# 1500 DEPT#
                    33 DEPT#
```
PLU entry ⟶ 2 PLU/SUB
Subdepartment entry ⟶ 11 PLU/SUB 1200 PLU/SUB
TL/NS
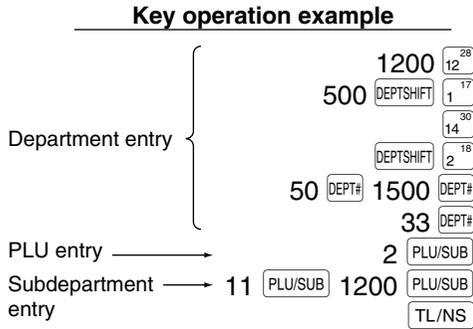
```
DEPT.12        *12.00
DEPT.17         *5.00
DEPT.14         *8.25
DEPT.18         *3.25
DEPT.50        *15.00
DEPT.33         *2.50
PLU.0002        *1.50
PLU.0011       *12.00

ITEMS       8Q
CASH  *59.50
```

■ Repeat entries

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

Key operation example		**Print**

Department entry
```
                  1200 12²⁸ 12²⁸
          500 DEPTSHIFT 1¹⁷ 1¹⁷
                        14³⁰ 14³⁰
          DEPTSHIFT 2¹⁸ 2¹⁸
    50 DEPT# 1500 DEPT# DEPT#
                  33 DEPT# DEPT#
```
PLU entry ⟶ 2 PLU/SUB PLU/SUB
Subdepartment entry ⟶ 11 PLU/SUB 1200 PLU/SUB PLU/SUB
TL/NS
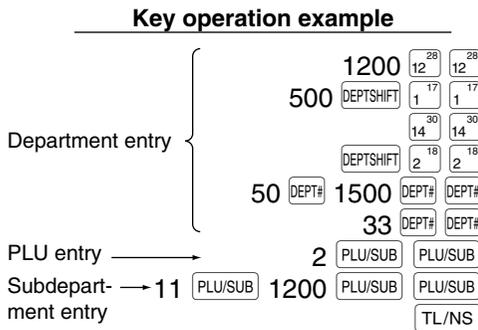
```
DEPT.12        *12.00
DEPT.12        *12.00
DEPT.17         *5.00
DEPT.17         *5.00
DEPT.14         *8.25
DEPT.14         *8.25
DEPT.18         *3.25
DEPT.18         *3.25
DEPT.50        *15.00
DEPT.50        *15.00
DEPT.33         *2.50
DEPT.33         *2.50
PLU.0002        *1.50
PLU.0002        *1.50
PLU.0011       *12.00
PLU.0011       *12.00

ITEMS      16Q
CASH
           *119.00
```

15

■ Multiplication entries

When selling a large quantity of items, it is convenient to use the multiplication entry method. Enter quantity using numeric keys and press the ⊗ 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	Print

Department entry
```
              3 ⊗ 1200 [12²⁸]
          5 ⊗ 500 DEPTSHIFT [1¹⁷]
                  3 ⊗ [14³⁰]
              5 ⊗ DEPTSHIFT [2¹⁸]
      3 ⊗ 50 DEPT# 1500 DEPT#
              5 ⊗ 33 DEPT#
```
PLU entry ⟶ 3 ⊗ 2 PLU/SUB
Subdepart- ⟶ 5 ⊗ 11 PLU/SUB 1200 PLU/SUB
ment entry
TL/NS

```
3x 12.00
DEPT.12        *36.00
5x 5.00
DEPT.17        *25.00
3x 8.25
DEPT.14        *24.75
5x 3.25
DEPT.18        *16.25
3x 15.00
DEPT.50        *45.00
5x 2.50
DEPT.33        *12.50
3x 1.50
PLU.0002        *4.50
5x 12.00
PLU.0011       *60.00

ITEMS     32Q
CASH
           *224.00
```

■ 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	Print

For finishing ⟶ 250 [9²⁵]
the transaction

```
DEPT.09         *2.50

ITEMS     1Q
CASH    *2.50
```

| 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 subtotal is displayed by pressing the [#/TM/ST] key. When you press it, the subtotal of all entries which have been made is displayed and the symbol "▱" will light up in the display.

Note *Subtotal will not be printed on a receipt on the current factory setting. If you want to print it, change the setting by programming. Refer to "Receipt print format" (Job code 7) on page 44.*

5 Finalization of Transaction

■ Cash or cheque tendering

Press the [#/TM/ST] key to get a subtotal, enter the amount tendered by your customer, then press the [TL/NS] key if it is a cash tender or press a cheque key ([CH1] or [CH2]) if it is a cheque tender. When the amount tendered is greater than the amount of the sale, the 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	**Print**

```
          ⟨
      #/TM/ST
 1000 TL/NS
```

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

Cheque tendering

Key operation example	**Print**

```
          ⟨
      #/TM/ST
 1000 CH1
```

```
ITEMS        3Q
***TOTAL    *7.35
CHECK1       *10.00
CHANGE       *2.65
```

■ Cash or cheque sale that does not require tender entry

Enter items and press the [TL/NS] key if it is a cash sale or press a cheque key if it is a cheque sale. The register will display the total sale amount.

Key operation example	**Print**

```
 300 [6²²]
  10 PLU/SUB
     TL/NS
```

```
DEPT.06       *3.00
PLU.0010      *7.15

ITEMS         2Q
CASH  *10.15
```

In the case of cheque 1 sale

```
ITEMS         2Q
CHECK1  *10.15
```

Note *When programmed not to allow "direct non-tender finalization after tendering" (Job code 63, refer to page 45), you must always enter a tender amount.*

■ Credit sale

Enter items and press a credit key ($\boxed{CR1}$ or $\boxed{CR2}$).

<table>
<tr><th>Key operation example</th><th>Print</th></tr>
<tr><td>

2500 $\boxed{6^{22}}$
3250 $\boxed{7^{23}}$
$\boxed{CR1}$

</td><td>

```
DEPT.06        *25.00
DEPT.07        *32.50

ITEMS      2Q
CREDIT1   *57. 50
```

</td></tr>
</table>

■ Mixed-tender sale

You can perform mixed-tendering of cheque and cash, cash and credit, and cheque and credit.

<table>
<tr><th>Key operation example</th><th>Print</th></tr>
<tr><td>

⟩
$\boxed{\text{#/TM/ST}}$
950 $\boxed{\text{TL/NS}}$
$\boxed{CR2}$

</td><td>

```
ITEMS      3Q
***TOTAL  *49. 50
CASH           *9.50
CREDIT2       *40.00
```

</td></tr>
</table>

6 Computation of VAT (Value Added Tax)/tax

■ VAT/ tax system

The cash register may be programmed for the following six VAT/tax systems. The cash register is pre-programmed as automatic VAT 1-4 system.

Automatic VAT 1-4 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates VAT for taxable 1 through 4 subtotals by using the corresponding programmed percentages.

Automatic tax 1-4 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates taxes for taxable 1 through 4 subtotals by using the corresponding programmed percentages, and also adds the the calculated taxes to those subtotals, respectively.

Manual VAT 1-4 system (Manual entry method using programmed percentages)

$$\longrightarrow \boxed{\text{#/TM/ST}} \longrightarrow \boxed{\text{VAT}}$$

This system provides the VAT calculation for taxable 1 through 4 subtotals. This calculation is performed using the corresponding programmed percentages when the $\boxed{\text{VAT}}$ key is pressed just after the $\boxed{\text{#/TM/ST}}$ key.

Manual VAT 1 system (Manual entry method for subtotals that uses VAT 1 preset percentages)

To use a programmed rate

$$\longrightarrow \boxed{\text{#/TM/ST}} \longrightarrow \text{VAT rate} \longrightarrow \boxed{\text{VAT}}$$
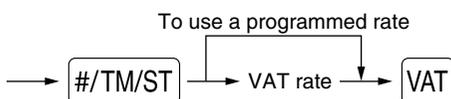
This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 preset percentages when the $\boxed{\text{VAT}}$ key is pressed just after the $\boxed{\text{#/TM/ST}}$ key. For this system, the keyed-in tax rate can be used.

Manual tax 1-4 system (Manual entry method using preset percentages)

$$\longrightarrow \boxed{\text{\#/TM/ST}} \longrightarrow \boxed{\text{VAT}}$$

This system provides the tax calculation for taxable 1 through 4 subtotals. This calculation is performed using the corresponding programmed percentages when the $\boxed{\text{VAT}}$ key is pressed just after the $\boxed{\text{\#/TM/ST}}$ key.
After this calculation, you must finalize the transaction.

Automatic VAT 1 and automatic tax 2-4 system
This system enables the calculation in the combination with automatic VAT 1 and automatic tax 2 through 4. The combination can be any of VAT1 corresponding to taxable 1 and any of tax 2 through 4 corresponding to taxable 2 through taxable 4 for each item. The tax amount is calculated automatically with the percentages previously programmed for these taxes.

Note	• *The tax status of PLU/subdepartment depends on the tax status of the department which the PLU/subdepartment belongs to.*

  • *VAT/tax assignment symbol can be printed at the fixed right position near the amount on the receipt as follows:*

$$VAT1/tax1 \longrightarrow A$$
$$VAT2/tax2 \longrightarrow B$$
$$VAT3/tax3 \longrightarrow C$$
$$VAT4/tax4 \longrightarrow D$$

When the multiple VAT/tax is assigned to a department or a PLU, a symbol of the lowest number assigned to VAT/tax rate will be printed. For programming, please refer to "Various Function Selection Programming 1" (Job code 66) on page 45.

OPTIONAL FEATURES

1 Auxiliary Entries

■ Percent calculations (premium or discount)

Your register provides the percent calculation for the subtotal and/or each item entry depending on the programming.
 • Percentage: 0.01 to 100.00% (Depending on the programming)
          Application of preset rate (if programmed) and manual rate entry are available.

Percent calculation for subtotal

Key operation example	Print

Key operation example:
```
     4 ⊗
   140 [5²¹]
   570 [7²³]
       [#/TM/ST]
    10 [%1]
       [TL/NS]
```

Print:
```
4x 1.40
DEPT.05          *5.60
DEPT.07          *5.70
SUBTOTAL        *11.30
                 -10%
%1               -1.13

ITEMS       5Q
CASH   *10.17
```

Percent calculation for item entries

Key operation example	Print

Key operation example

800 $\boxed{6 \quad ^{22}}$
7 $\odot$ 5 $\boxed{\%1}$
15 $\boxed{\text{PLU/SUB}}$
$\boxed{\%2}$
$\boxed{\text{TL/NS}}$

(When premium and 15% are programmed for the $\boxed{\%2}$ key)

Print

```
DEPT.06        *8.00
               -7.5%
%1             -0.60
PLU.0015       *5.00
              15.00%
%2             *0.75

ITEMS      2Q
CASH  *13.15
```

■ Deduction entries

Your register allows you to deduct a preset amount or a certain amount manually entered, which are less than a programmed upper limit. These calculations can be after the entry of an item and/or the computation of subtotal depending on the programming.

Deduction for subtotal

Key operation example

575 $\boxed{6 \quad ^{22}}$
10 $\boxed{\text{PLU/SUB}}$
$\boxed{\text{#/TM/ST}}$
100 $\boxed{\ominus}$
$\boxed{\text{TL/NS}}$

Print

```
DEPT.06        *5.75
PLU.0010       *7.15
SUBTOTAL      *12.90
(−)            -1.00

ITEMS      2Q
CASH  *11.90
```

Deduction for item entries

Key operation example

675 $\boxed{7 \quad ^{23}}$
$\boxed{\ominus}$
$\boxed{\text{TL/NS}}$

(When a deduction amount of 0.75 is programmed.)

Print

```
DEPT.07        *6.75
(−)            -0.75

ITEMS      1Q
CASH   *6.00
```

■ Refund entries

For departments 1 to 16, enter the refund amount and press the $\boxed{\text{RF}}$ key, and then press the corresponding department key and for departments 17 to 32, enter the refund amount and press the $\boxed{\text{RF}}$ key, then press the $\boxed{\text{DEPTSHIFT}}$ key and press the corresponding department key (when using the preset price, omit entering the amount). In case of department 33 to 50, enter the department code and press $\boxed{\text{RF}}$ key and the $\boxed{\text{DEPT#}}$ key, then enter the refund amount and press the $\boxed{\text{DEPT#}}$ key if necessary.
For a refund of a PLU item, enter the PLU code and press the $\boxed{\text{RF}}$ key, then press the $\boxed{\text{PLU/SUB}}$ key.
For a refund of a subdepartment item, enter the PLU code and press the $\boxed{\text{RF}}$ key and $\boxed{\text{PLU/SUB}}$ key, then enter the refund amount and press the $\boxed{\text{PLU/SUB}}$ key.

Key operation example	Print

<div align="center">

250 [RF] [6 22]
35 [RF] [DEPT#] 100 [DEPT#]
7 ⊗
13 [RF] [PLU/SUB]
11 [RF] [PLU/SUB] 150 [PLU/SUB]
[TL/NS]

</div>

```
DEPT.06        R-2.50
DEPT.35        R-1.00
 -7x 2.10
PLU.0013      R-14.70
PLU.0011       R-1.50

ITEMS     0Q
CHANGE    *19.70
```

■ 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/ST] key.

Key operation example	Print

<div align="center">

1230 [#/TM/ST]
1500 [6 22]
[CR1]

</div>

```
    #0000000000001230
DEPT.06         *15.00

ITEMS     1Q
CREDIT1  *15.00
```

2 Auxiliary Payment Treatment

■ Currency exchange

For an additional payment in foreign currency

After an entry is completed or After the amount tendered is found smaller than the sales amount in a sales entry

Preset exchange rate → *Exchange rate → [EX] → For direct finalization → Amount tendered (max. 8 digits) → [TL/NS]
→ [CH1] or [CH2]
→ [CR1] or [CR2]

(CL) → Next registration or payment in domestic currency

Reentry
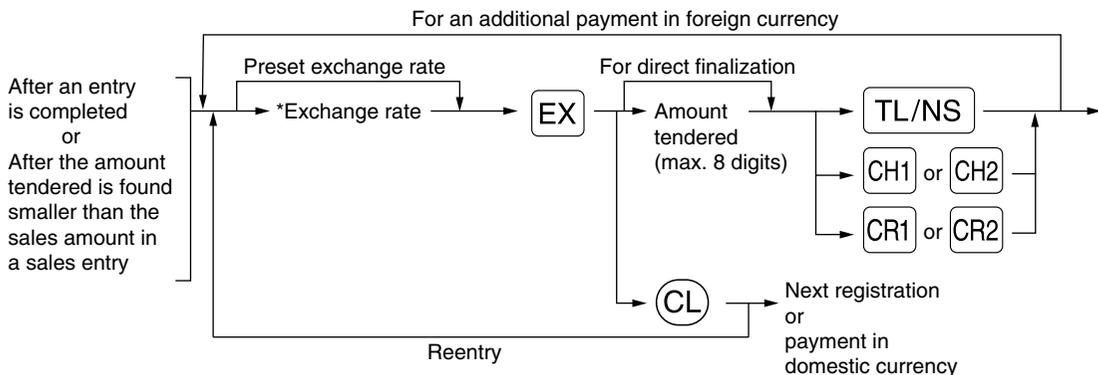
*Exchange rate: 0.000000 to 999.999999

Note	• Press the (CL) key after pressing the [EX] key *to cancel payment in a foreign currency.*
	• *If "Yes" is selected for cheque and credit operation when tendering in foreign currency in EURO programming, you can finalize a sale in foreign currency using the* [CH1], [CH2], [CR1] *or* [CR2] *key with preset exchange rate operation.*
	• *If programmed, a foreign currency symbol is printed when you use a preset rate.*

Applying preset exchange rate

Key operation example

2300 6^{22}
4650 7^{23}

Currency exchange ——————→ EX

Amount tendered in foreign currency ——→ 10000 TL/NS

(When a currency exchange rate of 0.939938 is programmed for the EX key.)

Print

```
DEPT.06          *23.00
DEPT.07          *46.50

ITEMS            2Q
***TOTAL       *69.50          —— Domestic currency
EXCH1          0.939938        —— Exchange rate
               US $65.33       —— Foreign currency
CASH          US $100.00       —| Foreign currency
CHANGE           *36.88        —— Domestic currency
```

Foreign currency symbol
(Printed if programmed)

Applying manual exchange rate

Key operation example

2300 6^{22}
4650 7^{23}

Exchange rate ——————→ 1 · 275 EX
10000 TL/NS

Print

```
DEPT.06          *23.00
DEPT.07          *46.50

ITEMS            2Q
***TOTAL       *69.50
EXCH2          1.275
               88.62
CASH          100.00
CHANGE           *8.92
```

■ Received-on account entries

When you receive on account from a customer, use the RA key. For the received-on-account (RA) entry, enter the amount, and press the RA key.

| **Note** | *Cash tendering only available for RA operation.* |

Key operation example

12345 #/TM/ST
4800 RA

Print

```
         #0000000000012345
***RA            *48.00
```

■ Paid-out entries

When you pay an amount to a vendor, use the RCPT/PO key. For the paid-out (PO) entry, enter the amount and press the RCPT/PO key.

| **Note** | *Cash tendering only available for PO operation.* |

Key operation example

54321 #/TM/ST
2300 RCPT/PO

Print

```
         #0000000000054321
***PO            *23.00
```

■ No sale (exchange)

When you need to open the drawer with no sale, press the $\boxed{\text{TL/NS}}$ 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 $\boxed{\text{TL/NS}}$ key, a no sale entry is achieved and a non-add code number is printed.

```
          #0000000000045678
NO SALE
```

3   Automatic Sequence Key ($\boxed{\text{AUTO}}$ key) Entries

You can achieve a programmed transaction simply by pressing the $\boxed{\text{AUTO}}$ key.

Key operation example	Print
$\boxed{\text{AUTO}}$ $(\boxed{\text{AUTO}} = 500\ \boxed{6^{\ 22}}\ \boxed{\text{TL/NS}})$	DEPT.06 ✳5.00 ITEMS 1Q **CASH** **✳5.00**

CORRECTION

1   Correction of the Last Entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, percentage ($\boxed{\%1}$ and $\boxed{\%2}$), discount ($\boxed{\ominus}$) or refund, you can void this entry by pressing the $\boxed{\infty}$ key immediately after the incorrect entry.

Key operation example	Print
1250 $\boxed{6^{\ 22}}$ $\boxed{\infty}$ 2 $\boxed{\text{PLU/SUB}}$ $\boxed{\infty}$ 600 $\boxed{8^{\ 24}}$ $\boxed{\%2}$ $\boxed{\infty}$ 328 $\boxed{9^{\ 25}}$ 28 $\boxed{\ominus}$ $\boxed{\infty}$ 250 $\boxed{\text{RF}}$ $\boxed{6^{\ 22}}$ $\boxed{\infty}$ $\boxed{\text{TL/NS}}$	DEPT.06 ✳12.50 DEPT.06 ⱳ-12.50 PLU.0002 ✳1.50 PLU.0002 ⱳ-1.50 DEPT.08 ✳6.00 15.00% %2 ✳0.90 %2 ⱳ-0.90 DEPT.09 ✳3.28 (−) −0.28 (−) ⱳ✳0.28 DEPT.06 R-2.50 DEPT.06 Rⱳ✳2.50 ITEMS 2Q **CASH** **✳9.28**

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 TL/NS key). This function is applicable to department, PLU/subdepartment and refund entries only.
Press the ∞ key just before you press a department key, DEPT# key or PLU/SUB key. For the refund indirect void, press the ∞ key after you press the RF key.

Key operation example	Print

Key operation example:

1310 6²²
1755 7²³
10 PLU/SUB
12 PLU/SUB
250 RF 6²²
825 7²³

Correction of a department entry → 1310 ∞ 6²²

Correction of a PLU entry → 12 ∞ PLU/SUB

Correction of a refund entry → 250 RF ∞ 6²²

TL/NS

Print:

```
DEPT.06        *13.10
DEPT.07        *17.55
PLU.0010        *7.15
PLU.0012        *3.60
DEPT.06        R-2.50
DEPT.07         *8.25
DEPT.06       ∽-13.10
PLU.0012       ∽-3.60
DEPT.06       R∽*2.50

ITEMS       3Q
CASH  *32. 95
```

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	Print

Key operation example:

1310 2¹⁸
2¹⁸
1755 6²²
10 PLU/SUB
35 PLU/SUB

Subtotal void {
#/TM/ST
∞
#/TM/ST
}

Print:

```
DEPT.02        *13.10
DEPT.02        *13.10
DEPT.06        *17.55
PLU.0010        *7.15
PLU.0035       *10.00
SUBTOTAL       *60.90
SBTL ∽        -60.90
***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 making the amount tendered entry, finalize the transaction.
2. Make correct entries from the beginning.
3. Hand the incorrect receipt to the manager for its cancellation.

PRIOR TO PROGRAMMING

Before starting sales entries, you must first program necessary items so the cash register suits your sales needs. 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, German, 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 the 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.
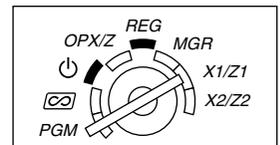
| Note | • *On the key operation example shown in the programming details, numbers such as "26082003" indicates the parameter which must be entered using the corresponding numeric keys.*
• *Asterisks in the tables shown in the programming details indicate default settings.* |

BASIC FUNCTION PROGRAMMING
(For Quick Start)

1 Date and Time Programming

■ Date

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

Procedure

Date(DD/MM/YYYY) ⟶ #/TM/ST

Key operation example	**Print**
26082003 #/TM/ST (26 Aug., 2003)	*PGM* 26/08/2003 —Date

| Note | *You can use the date format of month-day-year (MM/DD/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/ST

Key operation example	Print
1430 #/TM/ST	

```
*PGM*
            14:30        ──Time
```

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

2 Tax Programming

If you program the VAT/tax, the cash register can calculate the sales tax. In the VAT system, the tax is included in the price you enter in the register, and the tax amount is calculated when tendered according to the VAT rate programmed. In the tax system, the tax is calculated when tendered according to the tax rate programmed, and added to the price. The cash register can provide totally 6 kinds of VAT/tax systems (automatic VAT1-4, automatic tax 1-4, manual VAT 1-4, manual VAT 1, manual tax 1-4, and automatic VAT1 and automatic tax 2-4 systems) and 4 kinds of rates. By default, the cash register is pre-programmed as automatic VAT1-4 system.

When you program tax rate(s) and taxable status for each department, tax will be automatically added to sales of items assigned to the department according to the programmed tax status for the department and the corresponding tax rate(s).

For details of the tax systems, refer to "Computation of VAT (Value Added Tax)/tax section on page 18. To change the tax system, please refer "Other programming" of "Various Function Selection Programming 1" section (Job code 69) on page 47.

■ Tax rate programming

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

Procedure

#/TM/ST ⟶ (9) ⟶ (×) ⟶ Tax number (1 to 4) ⟶ (×)

To program "0.0000"   When the lowest taxable amount is zero

⟶ * Sign and tax rate ⟶ (×) ⟶ Lowest taxable amount (0.01 to 999.99) ⟶ #/TM/ST ⟶ TL/NS
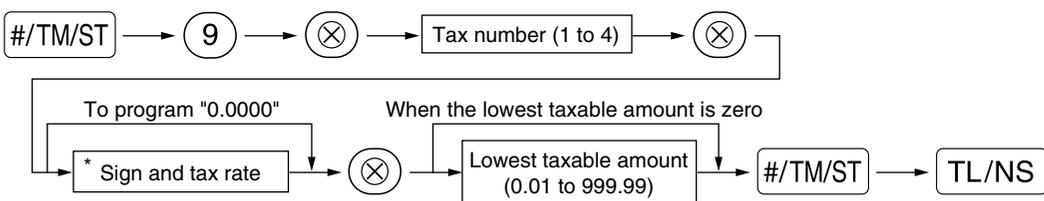
*Sign and tax rate: X YYY.YYYY

Tax rate=0.0000 to 100.0000

Sign −/+ = 1/0
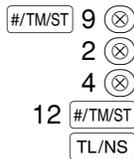
Key operation example	Print
[#/TM/ST] 9 $\otimes$ 2 $\otimes$ 4 $\otimes$ 12 [#/TM/ST] [TL/NS]	*PGM* T2 4.0000% 0.12

Note

- *The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added system), it is ignored.*
- *If you make an incorrect entry before pressing the third $\otimes$ 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.*
- *If you select VAT system, the sign which you program is ignored.*

To delete a tax rate, use the following sequence:

Procedure

$$[\text{\#/TM/ST}] \longrightarrow (9) \longrightarrow (\otimes) \longrightarrow \boxed{\text{Tax number (1 to 4)}} \longrightarrow (\otimes) \longrightarrow \boxed{\infty} \longrightarrow \boxed{\text{TL/NS}}$$
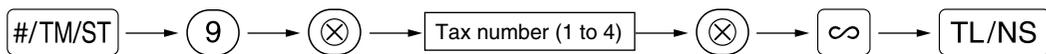
AUXILIARY FUNCTION PROGRAMMING

1 Department Programming

Merchandise can be classified into a maximum of 50 departments. Items sold using the department keys can later be printed on a report shown as the quantities sold and sales amounts classified by department. The data is useful for making purchasing decisions and other store operations.

■ Department status

Procedure

$$\longrightarrow \boxed{\text{ABCDEFGH}} \longrightarrow (\otimes) \longrightarrow \boxed{\text{DEPTSHIFT}} \longrightarrow \boxed{\text{Dept. key}} \longrightarrow \boxed{\text{TL/NS}}$$

(To set all zeros / *To program departments 17 through 32, press the department shift key.)

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

For department 33-50:

$$\text{Dept. code} \longrightarrow \boxed{\text{DEPT\#}} \longrightarrow \boxed{\text{ABCDEFGH}} \longrightarrow (\otimes) \longrightarrow \boxed{\text{TL/NS}}$$

(To set all zeros)
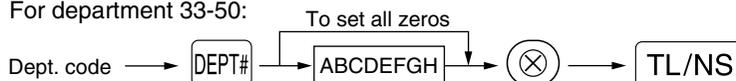
To program another department, start from the beginning without pressing the [TL/NS] key.

Item:		Selection:	Entry:
A	VAT 4 or tax 4 status	Taxable	1
		Non-taxable*	0
B	VAT 3 or tax 3 status	Taxable	1
		Non-taxable*	0
C	VAT 2 or tax 2 status	Taxable	1
		Non-taxable*	0
D	VAT 1 or tax 1 status	Taxable*	1
		Non-taxable	0
E	SICS / Normal	SICS	1
		Normal*	0
F	Sign	Negative department	1
		Positive department*	0
G	Entry digit limit		0-8 (default:8)
H	Type of unit price entry	Open and preset	3
		Preset only	2
		Open only*	1
		Inhibit department key	0

VAT/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 rate as soon as the transaction is completed.

By default, VAT 1 is assigned for all departments.

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 TL/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.

Key operation example	Print
ABCDEFGH ⟶ 00011183 ⊗	*PGM*
2¹⁸ TL/NS	D02 T1 183 ——From left, EGH
	DEPT.02 -0.00
	Tax status Sign(F)

■ Preset unit price

Procedure
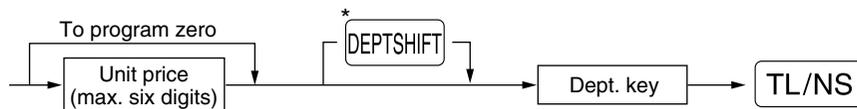
To program zero
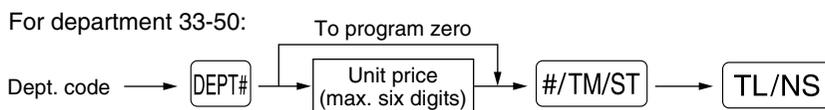
Unit price (max. six digits) → [DEPTSHIFT]* → Dept. key → TL/NS

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

For department 33-50:

To program zero

Dept. code ⟶ DEPT# → Unit price (max. six digits) → #/TM/ST ⟶ TL/NS

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

Key operation example	Print

1000 $\boxed{1^{17}}$
$\boxed{\text{TL/NS}}$

```
*PGM*
DO1    T1      083
DEPT.01        10.00 ── Unit price
```

Note *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. By default, PLU/subdepartment setting for 1 through 200 codes are possible, and can extend to 1200. To extend the number, please refer to "EJ memory type" on page 41.

■ Unit price and associated department assignment

Procedure

PLU code → $\boxed{\text{PLU/SUB}}$ → To program zero / *2 Unit price (max. six digits) → *1 $\boxed{\text{DEPTSHIFT}}$ → Associated Dept. key → $\boxed{\text{TL/NS}}$
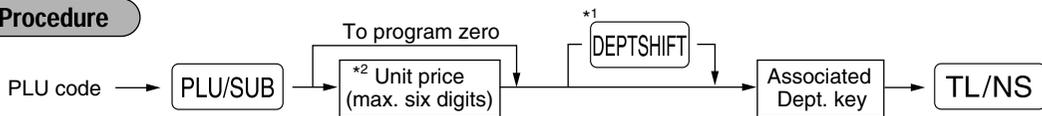
*1: To assign departments 17 through 32, press the department shift key.

When the associated department is department 33-50:

PLU code → $\boxed{\text{PLU/SUB}}$ → Associated dept. code (33 to 50) → $\boxed{\text{DEPT\#}}$ → To program zero / *2 Unit price (max. six digits) → $\boxed{\text{\#/TM/ST}}$ → $\boxed{\text{TL/NS}}$
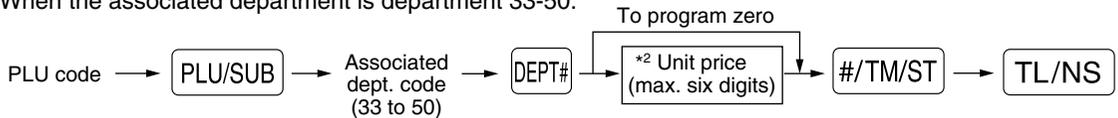
*2: For a subdepartment, set the limit amount of unit price entry.
To program the following PLU code, start from entering a unit price or an associated department code without pressing the $\boxed{\text{TL/NS}}$ key.
To program another PLU code, start from the beginning without pressing the $\boxed{\text{TL/NS}}$ key.

Key operation example	Print

1 $\boxed{\text{PLU/SUB}}$
125 $\boxed{3^{19}}$
$\boxed{\text{TL/NS}}$

```
*PGM*
P0001 (O3)        1
PLU.0001       1.25 ── Unit price
                    └─ Associated dept.
```
PLU code

To delete a PLU code, use the following sequence:

Procedure

PLU code → $\boxed{\text{PLU/SUB}}$ → $\boxed{\infty}$ → $\boxed{\text{TL/NS}}$
To delete the following PLU code
To delete another PLU code

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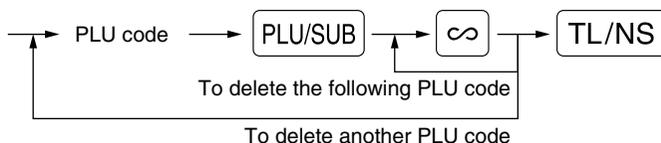
■ PLU/subdepartment selection

To program "0"

PLU code → │ PLU/SUB │ → │ *A │ → │ #/TM/ST │ → │ TL/NS │

To program the following PLU code

To program another PLU code
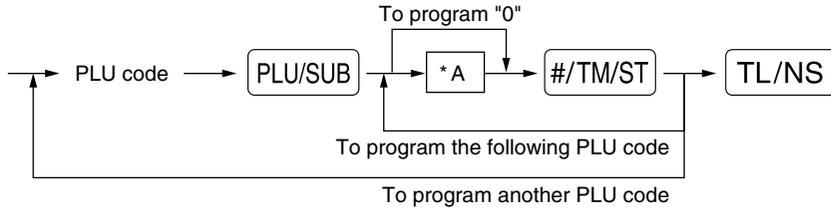
*: 0 for subdepartment or 1 for PLU

Key operation example	Print
1 │PLU/SUB│ 0 │#/TM/ST│ │TL/NS│	```*PGM* P0001(03) 0 PLU.0001 1.25``` ─ PLU/subdept.

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

---

3 Miscellaneous Key Programming

The cash register provides miscellaneous keys such as │%1│, │%2│, │⊝│, │RA│, │RCPT/PO│, │EX│, │CH1│, │CH2│, │CR1│, │CR2│ and │TL/NS│.

■ Rate for │%1│, │%2│ and │EX│

To program zero

→ │ *Rate │ → │ %1 │ or │ %2 │ → │ TL/NS │

→ │ EX │

To program another rate
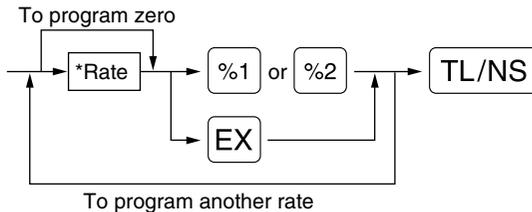
*: Rate
  0.00 — 100.00 (% rate)
  0.000000 — 999.999999 (Currency exchange rate)

Key operation example	Print
10 ⊙ 25 │%1│ 0 ⊙ 939938 │EX│ │TL/NS│	```*PGM* F02 %1 000 L100.00% -10.25% ─ Percent rate F28 EXCH1 002 0.939938 ─ Currency exchange rate```

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

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■ Amount for $\ominus$

To program zero

Discount amount (max. six digits) → $\ominus$ → TL/NS
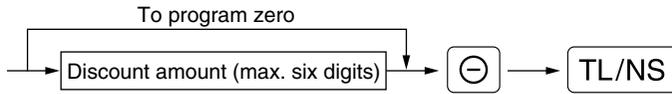
Key operation example

200 $\ominus$
TL/NS

Print

```
*PGM*
F01 (−)        008
              -2.00
```
Discount amount

■ Percent rate limitation for $\boxed{\%1}$ and $\boxed{\%2}$

You can program the upper limit of percent rates for percent entries.

Procedure

To program zero

$\boxed{\#/TM/ST}$ → ② ⑨ → ⊗ → Percentage limit (0.00 -100.00%) → $\boxed{\%1}$ or $\boxed{\%2}$ → TL/NS

To program for another percent key
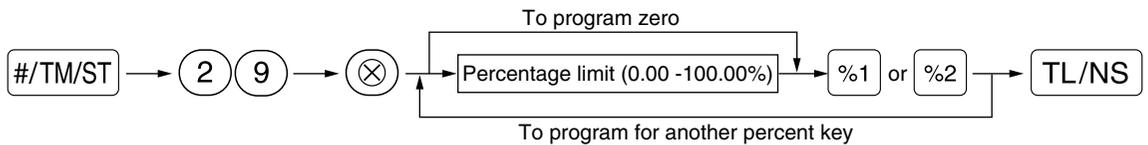
Note • Percent entries that exceed the upper limit may be overridden in the MGR mode.
• 10.00% can be entered as ① ⓪ or ① ⓪ ⋅ ⓪ ⓪. The ⋅ key is needed only for fractional entry.

Key operation example

$\boxed{\#/TM/ST}$ 29 ⊗
15 ⋅ 00 $\boxed{\%1}$
TL/NS

Print

```
*PGM*
F02 %1        000
L 15.00%    -10.25%
```
Percentage limit

■ Function parameters for %1, %2 and ⊖

To program "0" for all items

*ABCD → ⊗ → %1 or %2 → TL/NS

⊖

To program for another key
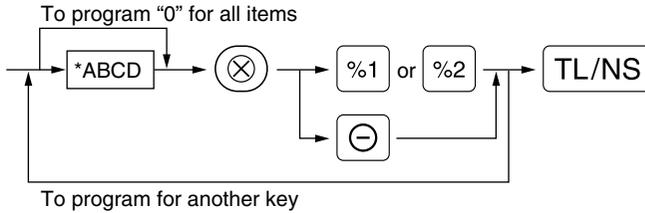
*: Item:		Selection:	Entry:
A	+/- sign	+ (premium) sign	0
		- (discount) sign*	1
B	Item % / Item ⊖	Allow*	0
		Disallow	1
C	Subtotal % / Subtotal ⊖	Allow*	0
		Disallow	1
D	Entry digit limit for discount key		0-8 (default:8)

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

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

Item % / Item ⊖
 • Percent/discount calculation for the individual department and PLU/subdepartment

Subtotal % / Subtotal ⊖
 • Percent/discount calculation for the subtotals

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. When "0" is set, open price entry is prohibited.

Key operation example	Print

1006 ⊗
 ⊖ TL/NS
	PGM
	 F01 （−） 006 — From left, BCD
	               −2.00
	                   └ Sign(A)

■ Function parameters for EX

To program "0" for all items

*ABC → ⊗ → EX → TL/NS

*: Item:		Selection:	Entry:
A	Open rate entry	Allow*	0
		Disallow	1
B	Preset rate entry	Allow*	0
		Disallow	1
C	Position of decimal point (from right) (tab)		0-3 (default:2)

Key operation example	Print
102 ⊗ EX TL/NS	*PGM* F28 EXCH1 102 — From left, ABC 0.939938

■ **Function parameters for** [RA], [RCPT/PO], [CH1], [CH2], [CR1], [CR2] **and** [TL/NS] (when using as TL key)

To program "0" for all items

$\rightarrow$ [*1ABC] $\rightarrow$ [$\otimes$] $\xrightarrow{*2}$ [#/TM/ST], [CH1], [CH2], [CR1], [CR2], [RA] or [RCPT/PO] $\rightarrow$ [TL/NS]

To program for another key

*2: Press [#/TM/ST] key for TL key setting.
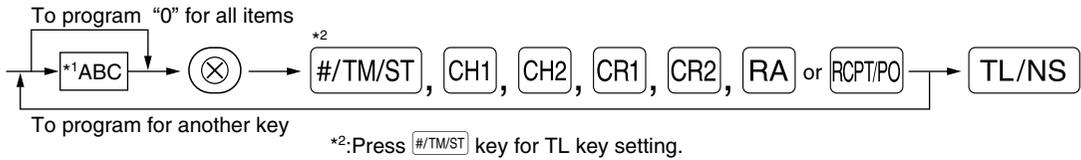
*1: **Item:**		**Selection:**	**Entry:**
A	Footer printing*	Allow	1
		Disallow*	0
B	Amount tendered entry*	Compulsory	1
		Non-compulsory (for [CH1], [CH2] and [TL/NS])*	0
		Inhibit (for [CR1] and [CR2])*	0
C	Entry digit limit	For [CH1], [CH2], [CR1], [CR2] and [TL/NS]	0-8 (default:8)
		For [RA] and [RCPT/PO]	0-9 (default:9)

*When programming for [RA] or [RCPT/PO], always enter 0 for A and B.

Footer printing (only for [CH1], [CH2], [CR1], [CR2] **and** [TL/NS]**)**
 • 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 38.

Amount tendered entry (only for [CH1], [CH2], [CR1], [CR2] **and** [TL/NS]**)**
 • You may select amount tendered, compulsory or optional, for the [TL/NS], [CH1] and [CH2] keys.
 • You may select amount tendered, compulsory or inhibited, for the [CR1] and [CR2] keys.

Entry digit limit
 • For the [CH1], [CH2], [CR1], [CR2], [RA] and [RCPT/PO] keys program upper limit entry amount for the tendered amount. For the [TL/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	**Print**
018 [$\otimes$] [CH1] [TL/NS]	*PGM* F24 CHECK1 018 ─── From left, ABC

4 Text Programming

The register allows you to program text for clerk names, department item names, PLU/subdepartment item names, 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 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/ST key, the cash register will automatically be ready for text entry.

Alphanumeric character code table

Code	Character	Code	Character	Code	Character	Code	Character	Code	Character
001	á	046	.	091	Ä	136	→	193	¡
002	â	047	/	092	Ö	137	⌣	194	Ġ
003	ê	048	0	093	Ü	138	⌣	195	Ş
004	î	049	1	094	^	139	◀	196	Ģ
005	ì	050	2	095	_	140	▶	197	ġ
006	í	051	3	096	'	141	F	198	Ķ
007	ô	052	4	097	a	142	T	199	ķ
008	ó	053	5	098	b	143	↓	200	Ļ
009	û	054	6	099	c	144	ç	201	Ļ
010	ú	055	7	100	d	145	°	202	Ž
011	œ	056	8	101	e	146	¿	203	Đ
012	ű	057	9	102	f	147	ù	204	đ
013	ú	058	:	103	g	148	à	205	Ć
014	ő	059	;	104	h	149	Æ	206	ć
015	ó	060	<	105	i	150	ø	207	€
016	Λ	061	=	106	j	151	Å	208	₧
017	Ψ	062	>	107	k	152	¤	209	`
018	Γ	063	?	108	l	153	é	210	ě
019	¨	064	@	109	m	154	è	211	š
020	Ω	065	A	110	n	155	Pt	212	č
021	Δ	066	B	111	o	156	i	213	ž
022	Θ	067	C	112	p	157	Ñ	214	ý
023	Ξ	068	D	113	q	158	ò	215	ù
024	Π	069	E	114	r	159	£	216	ň
025	Σ	070	F	115	s	160	¥	217	˘
026	ϒ	071	G	116	t	161	°	218	´
027	Φ	072	H	117	u	162	⌐	219	ř
028	Ú	073	I	118	v	163	⌐	224	∗
029	Ú	074	J	119	w	164	`	225	§
030	Ő	075	K	120	x	165	·	226	Ø
031	Ó	076	L	121	y	177	Á	227	^
032	(space)	077	M	122	z	178	Í	228	↑
033	!	078	N	123	{	180	Ā	229	]
034	"	079	O	124			181	ā	230	[
035	#	080	P	125	}	182	Ē	231	"
036	$	081	Q	126	ß	183	ē	232	ä
037	%	082	R	127	¢	184	Ī	233	ö
038	&	083	S	128	!!	185	ī	234	ü
039	'	084	T	129	1	186	Ū	235	æ
040	(	085	U	130	2	187	ū	236	å
041	)	086	V	131	3	188	Ņ	237	É
042	∗	087	W	132	4	189	ņ	238	ñ
043	+	088	X	133	1/2	190	Č	253	*(DC)
044	,	089	Y	134	F T	191	Š		
045	-	090	Z	135	←	192	Ç		

*(DC): Double-size character code

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

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

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■ **Department text (item label)** (12 digits)
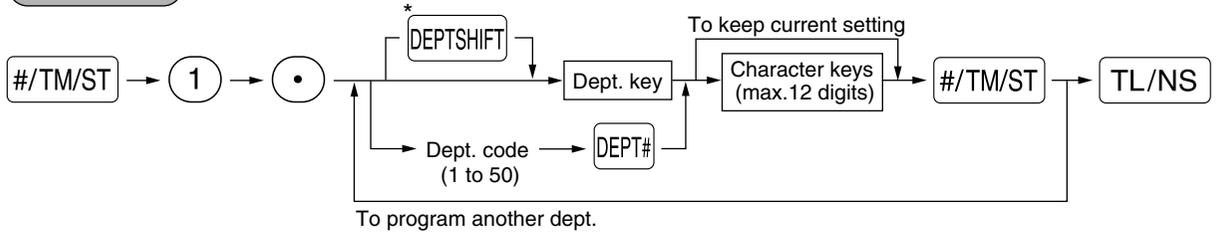
Procedure

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

Key operation example	**Print**

$\boxed{\text{\#/TM/ST}}$ 1 $\odot$
$\boxed{1}^{17}$
FRUIT $\boxed{\text{\#/TM/ST}}$
$\boxed{\text{TL/NS}}$
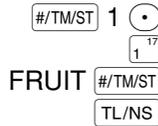
(Programming FRUIT for dept.1)
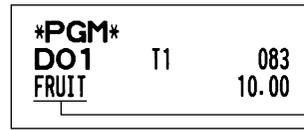
```
*PGM*
D01    T1         083
FRUIT             10.00
```
— Text programmed for dept. 1

■ **PLU text (item label)** (12 digits)

Procedure

Key operation example	**Print**

$\boxed{\text{\#/TM/ST}}$ 2 $\odot$
1 $\boxed{\text{PLU/SUB}}$
MELON $\boxed{\text{\#/TM/ST}}$
$\boxed{\text{TL/NS}}$
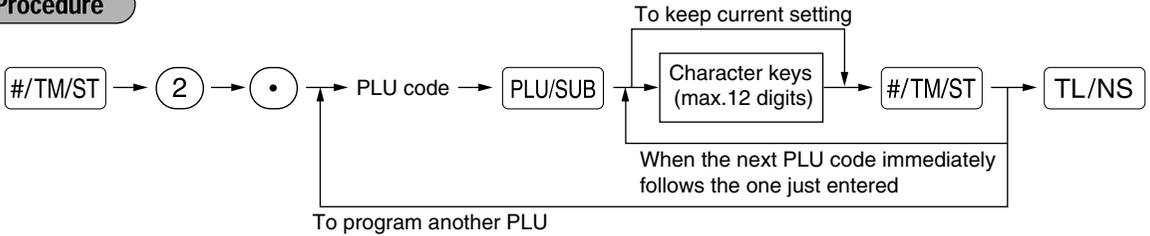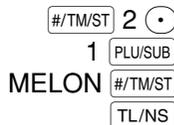
(Programming MELON to PLU1)
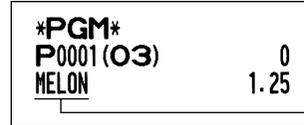
```
*PGM*
P0001(O3)          0
MELON            1.25
```
— Text programmed for PLU code 1

■ **Function text** (12 digits)

Procedure
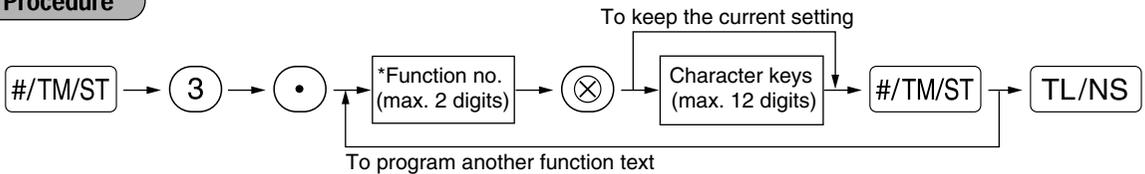
* Function no.: See "List of function texts" shown on the following page.

Key operation example	**Print**

$\boxed{\text{\#/TM/ST}}$ 3 $\odot$
26 $\otimes$
CARD $\boxed{\text{NUMBER}}$ 1 $\boxed{\text{\#/TM/ST}}$
$\boxed{\text{TL/NS}}$

(Programming CARD1 for credit 1)

```
*PGM*
F26 CARD1        008
```

■ List of function texts

Function no.	Key or function	Default setting	Function no.	Key or function	Default setting
1	⊝	**(−)**	33	Cash/cheque in drawer	CA/CH ID
2	%1	**%1**	34	Change for cheque	CHK/CG
3	%2	**%2**	35	Customer	GUEST
4	Differ	DIFFER	36	Paid total	PAID TL
5	Taxable 1 subtotal	TAX1 ST	37	Domestic currency 1	DOM.CUR1
6	Taxable 2 subtotal	TAX2 ST	38	Domestic currency 2	DOM.CUR2
7	Taxable 3 subtotal	TAX3 ST	39	Dom. currency for EX cheque	DOM.CUR1
8	Taxable 4 subtotal	TAX4 ST	40	Dom. currency for EX credit	DOM.CUR1
9	VAT/tax 1	VAT 1	41	Cheque in drawer	✳CH ID
10	VAT/tax 2	VAT 2	42	(+) Dept total	✳DEPT TL
11	VAT/tax 3	VAT 3	43	(-) Dept total	DEPT (-)
12	VAT/tax 4	VAT 4	44	Net 1 (Taxable 1 - VAT/tax 1)	NET 1
13	Net 1	**NET1**	45	Net 2 (Taxable 2 - VAT/tax 2)	NET 2
14	Net 2	**NET2**	46	Net 3 (Taxable 3 - VAT/tax 3)	NET 3
15	Refund	REFUND	47	Net 4 (Taxable 4 - VAT/tax 4)	NET 4
16	Void	⌒	48	Subtotal	SUBTOTAL
17	Void mode total	⌒ MODE	49	Merchandise subtotal	MDSE ST
18	Manager void	MGR ⌒	50	Total	✳✳✳ TOTAL
19	Subtotal void	SBTL ⌒	51	Change	CHANGE
20	No sale	NO SALE	52	Sales q'ty	ITEMS
21	RA	✳✳✳RA	53	Average	AVE.
22	PO	✳✳✳PO	54	Total tax	TTL TAX
23	Cash	**CASH**	55	Net without tax	**NET**
24	Cheque 1	CHECK1	56	Department report title	**DEPT**
25	Cheque 2	CHECK2	57	PLU report title	**PLU**
26	Credit 1	CREDIT1	58	Transaction report title	**TRANS.**
27	Credit 2	CREDIT2	59	Clerk report title	**CLERK**
28	Exchange (Preset rate)	EXCH1	60	Hourly report title	**HOURLY**
29	Exchange (Open rate)	EXCH2	61	Non add symbol (8 chara.)	#
30	Exchange cheque	EX1 CHK	62	Copy receipt title	**COPY**
31	Exchange credit	EX1 CR	63	EJ report title	**EJ**
32	Cash in drawer	✳✳✳✳ CID	64	EJ report end title	**EJ** END

■ **Clerk names** (12 digits)

To keep current setting

$\boxed{\text{#/TM/ST}} \rightarrow \boxed{5} \rightarrow \boxed{\cdot} \rightarrow \boxed{\begin{array}{c}\text{Clerk code}\\\text{(1-20)}\end{array}} \rightarrow \boxed{\otimes} \rightarrow \boxed{\begin{array}{c}\text{Character keys}\\\text{(max. 12 digits)}\end{array}} \rightarrow \boxed{\text{#/TM/ST}} \rightarrow \boxed{\text{TL/NS}}$

To program another clerk

Key operation example	Print
#/TM/ST 5 · 1 ⊗ DAVID #/TM/ST TL/NS	*PGM* C#01 DAVID
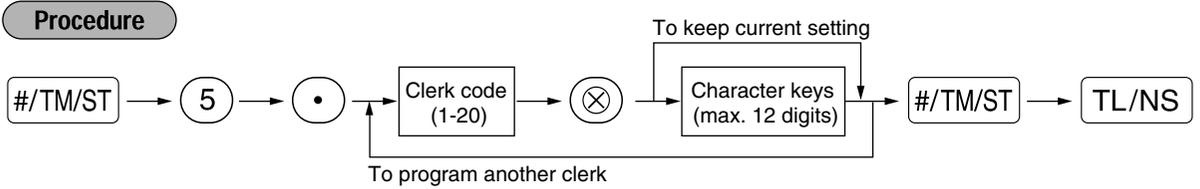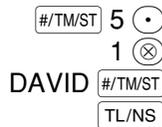
■ **Logo messages** (6 lines and 24 digits for each line)

The register can print programmed messages on every receipt. On the standard model, a 6-line logo message is printed on the receipt. If you want to print in other logo message format, please change the format. (See page 48 for the programming details.) The options are listed below:

Procedure

To keep the current setting

$\boxed{\text{#/TM/ST}} \rightarrow \boxed{4} \rightarrow \boxed{\cdot} \rightarrow \boxed{\begin{array}{c}\text{*Line number}\\\text{(1-6)}\end{array}} \rightarrow \boxed{\otimes} \rightarrow \boxed{\begin{array}{c}\text{Character keys}\\\text{(max. 24 digits)}\end{array}} \rightarrow \boxed{\text{#/TM/ST}} \rightarrow \boxed{\text{TL/NS}}$

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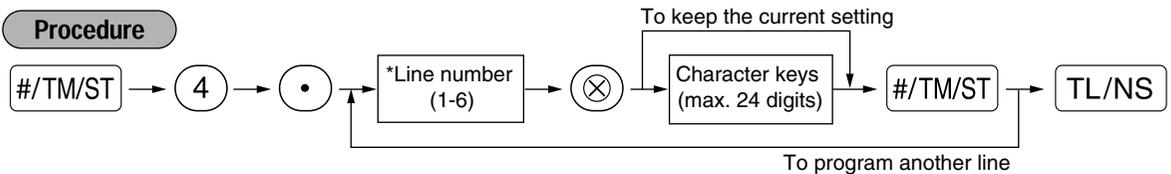
* "Header 3-line message" type: 1 to 3
  "Header 6-line message" type: 1 to 6
  "Header 3-line and footer 3-line message" type: 1 to 6 (1 to 3 as header, 4 to 6 as footer)

Logo message print format (3 types)

Header 1st line		Header 1st line		Header 1st line
Header 2nd line		Header 2nd line		Header 2nd line
Header 3rd line		Header 3rd line		Header 3rd line
		Header 4th line		
		Header 5th line		
		Header 6th line		Footer 4th line
				Footer 5th line
				Footer 6th line
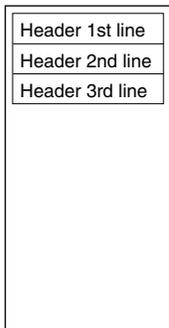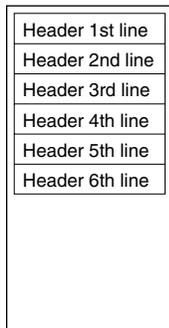
Header 3-line message   Header 6-line message   Header 3-line message and footer 3-line messages
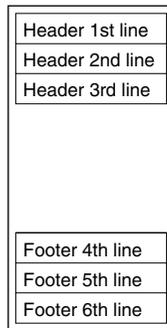
To print the logo message "THANK YOU" using double sized characters and centering on the third line.

Key operation example

[#/TM/ST] 4 (·)
3 (⊗)
[SPACE] [SPACE] [SPACE]
[DC] THANK [SPACE] YOU [DC]
[SPACE] [SPACE] [SPACE]
[#/TM/ST] [TL/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** (4 digits)

Foreign currency symbol for the [EX] key is printed with a foreign currency exchange amount obtained using a preset rate.

Procedure

To keep the current setting

[#/TM/ST] → (6) → (·) → Character keys (max. 4 digits) → [#/TM/ST] → [TL/NS]

Key operation example

[#/TM/ST] 6 (·)
US [SPACE]
Entry using ⟶ 036 (00)
character code   [#/TM/ST] [TL/NS]

Print

```
*PGM*
F28 EXCH1        102
 US $      0.939938
```
— Foreign currency symbol

■ **Domestic currency symbol** (4 digits)

"✱" is set as a default setting. When you want to change the domestic currency symbol, change the setting.

Procedure

To keep the current setting

[#/TM/ST] → (8)(5) → (·) → Character keys (max. 4 digits) → [#/TM/ST] → [TL/NS]

Key operation example

[#/TM/ST] 85 (·)
[SPACE] [SPACE] [SPACE]
Entry using ⟶ 207 (00)
character code   [#/TM/ST] [TL/NS]

Print

```
*PGM*
#85                ₵
```
— Domestic currency symbol

■ Training mode text (12 digits)

For every receipts issued in the training mode, **TRAINING** is printed by default. When you want to change the text, follow the procedure below.

Procedure

To keep the current setting

$\boxed{\text{\#/TM/ST}} \longrightarrow (8)(7) \longrightarrow (\cdot) \longrightarrow \boxed{\begin{array}{c}\text{Character keys}\\\text{(max. 12 digits)}\end{array}} \longrightarrow \boxed{\text{\#/TM/ST}} \longrightarrow \boxed{\text{TL/NS}}$

Key operation example

[#/TM/ST] 87 (·)
[SPACE] [SPACE] TRAINING [SPACE] [SPACE]
[#/TM/ST] [TL/NS]

Print

```
*PGM*
#87            TRAINING
```
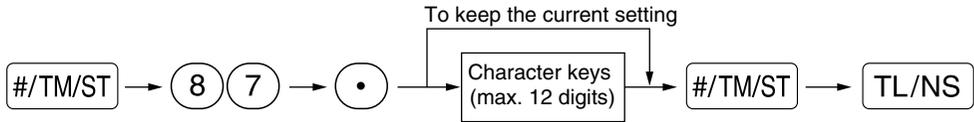
Note *The programmed text is printed in double-size characters on the receipts issued in the training mode.*

ADVANCED FUNCTION 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 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

To set the register number "0"

$\boxed{\text{\#/TM/ST}} \longrightarrow (1) \longrightarrow (\otimes) \longrightarrow \boxed{\text{Register number (one to six digits)}} \longrightarrow \boxed{\text{\#/TM/ST}} \longrightarrow \boxed{\text{TL/NS}}$

Key operation example

[#/TM/ST] 1 (⊗)
123456 [#/TM/ST] [TL/NS]

Print

```
*PGM*
#1            123456
```
— Register number
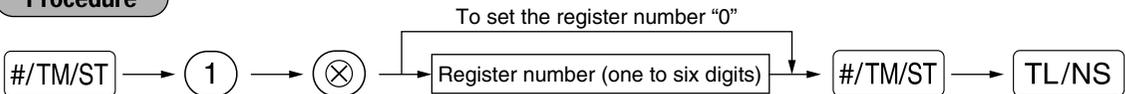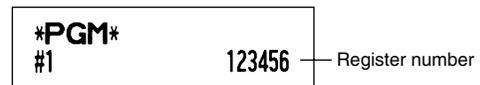
■ Setting consecutive numbers

Procedure

To begin the count from 0001

$\boxed{\text{\#/TM/ST}} \longrightarrow (2) \longrightarrow (\otimes) \longrightarrow \boxed{\begin{array}{c}\text{A number (one to four digits) that is one}\\\text{less than the desired starting number}\end{array}} \longrightarrow \boxed{\text{\#/TM/ST}} \longrightarrow \boxed{\text{TL/NS}}$

Key operation example

[#/TM/ST] 2 (⊗)
1000 [#/TM/ST] [TL/NS]

Print

```
*PGM*
#2            1000
```
— Consecutive number
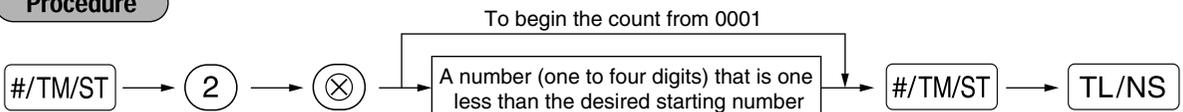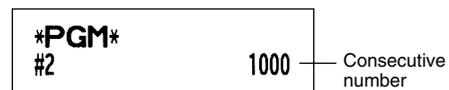
2 Electronic Journal (EJ) Programming

The cash register provides the electronic journal (EJ) function. By default, a maximum of 3000 lines can be stored in memory. By decreasing the storable line numbers to 2000 lines you can expand the available number of PLU codes to 1200.

For reading journal data, refer to "EJ REPORT READING AND RESETTING" (page 61).

■ 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 $#/TM/ST \rightarrow (9)(0) \rightarrow (\otimes) \rightarrow *A \rightarrow TL/NS$

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

Key operation example	Print
#/TM/ST 90 ⊗ 0 TL/NS	*PGM* #90 O

■ Function parameters for EJ

Procedure

To set "00000000"

$#/TM/ST \rightarrow (6)(8) \rightarrow (\otimes) \rightarrow *ABCDEFGH \rightarrow #/TM/ST \rightarrow TL/NS$
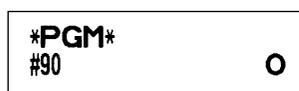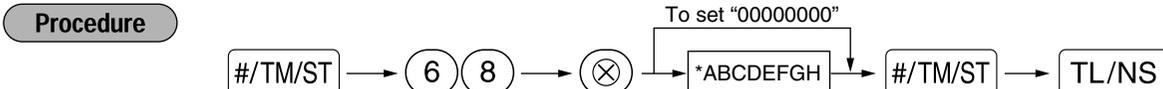
*	Item:		Selection:	Entry:
A	Always enter 0.			0
B	Always enter 0.			0
C	Temporary EJ printing during a transaction		Disable	0
			Enable*	1
D	EJ printing and clearing EJ data when issuing general Z1 report		No*	0
			Yes	1
E	PGM mode operation records type		Details*	0
			Header information only	1
F	REG/MGR/VOID 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
			Continue and warning (near full warning)*	1
			Lock and warning (with near full warning)	2

Temporary EJ printing during transaction

• If selecting "enable", 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 must be
programmed to print the receipt and set the 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)

```
26/08/2003 14:08      01
123456#0419 DAVID
*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 must issue an EJ report (Z1 report) at this time.

Key operation example	Print
[#/TM/ST] 68 ⊗ 00100002 [#/TM/ST] [TL/NS]	```*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
• Others

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

Procedure

[#/TM/ST] → *1Job code → ⊗ → (To set "00000000") *2ABCDEFGH → [#/TM/ST] → [TL/NS]
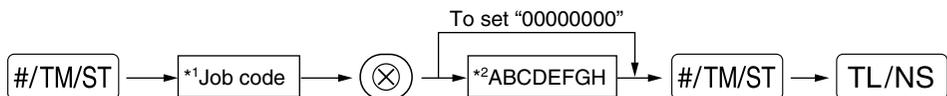
*1 Enter job code using numeric keys specified in each section below.
*2 Data entry details are listed on each table in each section below. An asterisk is entered for factory setting.

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

Key operation example	Print
[#/TM/ST] 5 ⊗ 00000100 [#/TM/ST] [TL/NS]	```*PGM*``` ```#5 00000100```

■ Function selection for miscellaneous keys

Job code: 5

*	Item:	Selection:	Entry:
A	Paid-out in the REG-mode	Enable*	0
		Disable	1
B	Received on account in the REG-mode	Enable*	0
		Disable	1
C	Subtotal void in the REG-mode	Enable*	0
		Disable	1
D	Indirect void in the REG-mode	Enable*	0
		Disable	1
E	Direct void in the REG-mode	Enable*	0
		Disable	1
F	Refund entry in the REG-mode	Enable*	0
		Disable	1
G	No sale in the REG-mode	Enable*	0
		Disable	1
H	Fractional quantity entry	Enable (3 digit decimal place)	0
		Disable*	1

■ Print format

Job code: 6

*	Item:	Selection:	Entry:
A	Printing style	Journal printing	0
		Receipt printing*	1
B	Receipt print form	Total	0
		Detailed*	1
C	Time print on receipts/journals	Yes*	0
		No	1
D	Date print on receipts/journals	Yes*	0
		No	1
E	Consecutive no. print	Yes*	0
		No	1
F	Separator line in reports	One line space	0
		Separator line*	1
G	Zero skip in PLU report	No	0
		Yes*	1
H	Zero skip in full sales/clerk/hourly report	No	0
		Yes*	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.		0
B	Always enter 0.		0
C	Subtotal print with a press of subtotal key	No*	0
		Yes	1
D	Always enter 0.		0
E	VAT/tax amount print	Yes*	0
		No	1
F	Taxable amount print	Yes*	0
		No	1
G	Net amount print	Yes*	0
		No	1
H	Purchase no. print	Yes*	0
		No	1

■ Other programming

Job code: 61

* Item:		Selection:	Entry:
A	Always enter 0.		0
B	Always enter 0.		0
C	Minus dept. and PLU/subdept.	Disable	0
		Enable*	1
D	Fractional treatment	Round off (4 down, 5 up)*	0
		Raising to unit	1
		Disregarding fractional treatment	2
E	Use of ⑩ key	As 00 key*	0
		As 000 key	1
F	Time format	12-hour format	0
		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.		0
B	Error beep for misoperation	Lock error	0
		Misoperation*	1
C	Key catch sound	Yes*	0
		No	1
D	Buffered keyboard	Yes*	0
		No	1
E	Void mode	Enable*	0
		Disable	1
F	Printing of void mode in X2/Z2 report	Yes*	0
		No	1
G	Printing of void mode in X1/Z1 report	Yes*	0
		No	1
H	Addition to the hourly total in VOID mode	No*	0
		Yes	1

Job code: 63

* Item:		Selection:	Entry:
A	Receipting at the time of "no sale" entry	Yes*	0
		No	1
B	No sale after non-add code entry	Disable	0
		Enable*	1
C	Non-add code entry	Enable*	0
		Disable	1
D	Copy receipt	No*	0
		Yes	1
E	Entry that causes the merchandise subtotal to be smaller than zero	Enable*	0
		Disable	1
F	Subtotal entry before tendering	Noncompulsory*	0
		Compulsory	1
G	Subtotal entry before direct non-tender finalization	Noncompulsory*	0
		Compulsory	1
H	Direct non-tender finalization after tendering	Disable	0
		Enable*	1

Job code: 64

* Item:		Selection:	Entry:
A	Printing of GT1 on Z report	Yes*	0
		No	1
B	Printing of GT2 on Z report	Yes*	0
		No	1
C	Printing of GT3 on Z report	Yes*	0
		No	1
D	Printing of Training GT on Z report	Yes*	0
		No	1
E	Printing of Z counter on Z report	Yes*	0
		No	1
F	Printing of DATA on PLU resetting report	Yes*	0
		No	1
G	Resetting of GT1, 2, 3 at the general Z1 report	No*	0
		Yes	1
H	OP X/Z report	Enable*	0
		Disable	1

Job code: 66

* Item:		Selection:	Entry:
A	After transaction receipt	Total only	0
		Details*	1
B	Amount printing when PLU unit price is zero	No*	0
		Yes	1
C	Conversion SBTL printing of native SBTL	Yes*	0
		No	1
D	VAT/tax assignment print	Yes	0
		No*	1
E	Compression print on journal at PGM, X1/Z1 and X2/Z2 modes	No (normal size)	0
		Yes (small size)*	1
F	Compression print on journal at REG, MGR and VOID modes	No (normal size)	0
		Yes (small size)*	1
G	Logo text print on journal	No*	0
		Yes	1
H	Footer print control	All receipts*	0
		Only on selected function key at the time of finalization	1

Compression print on journal at REG, MGR and VOID modes

• This selection is valid only when "Printing style" (job code 6) is set as "journal printing".

Job code: 67

*	Item:	Selection:	Entry:
A	Rounding amount printing	No*	0
		Yes (for Australian system)	1
B	Total amount rounding when a transaction is finalized directly by CH1, CH2, CR1 or CR2 key.	Rounding*	0
		Not rounding (for Australian system)	1
C	Rounding up of the unit digit of amount		0 - 9 (default: 0)
D	Rounding down of the unit digit of amount		0 - 9 (default: 0)
E	Application of rounding	Item and payment*	0
		Payment	1
F	Limit of the least significant digit in entering amount of item	Arbitrary*	0
		0 only	1
		0 and 5 only	2
G	Memory of difference due to rounding	No*	0
		Yes	1
H	Limit of the least significant digit in entering amount of payment	Arbitrary*	0
		0 only	1
		0 and 5 only	2

Rounding amount printing (A)

Total amount rounding when a transaction is finalized directly by CH1, CH2, CR1 or CR2 key(B)

• When you live in Australia, set as shown on the tale below for the parameters A and B.

Rounding up of the unit digit of amount (C)

Rounding down of the unit digit of amount (D)

• Handle C and D as a pair. When you live in Australia, Switzerland, Norway or South Africa set as shown on the table below for the parameters C and D.

  The rounding is performed as follows:

  In case C = 0: Unit digit of amount < or = Value of D — rounding down

  Value of D < or = Unit digit of amount — rounding to 5

  In other cases: Unit digit of amount < or = Value of D — rounding down

  Value of D < Unit digit of amount < Value of C — rounding to 5

  Value of C < or = Unit digit of amount — rounding up

Application of rounding (E)

Limit of the least significant digit in entering amount of item (F)

Memory of difference due to rounding (G)

Limit of the least significant digit in entering amount of payment (H)

• When you live in Australia, Switzerland, Norway or South Africa set as shown on the table below for the parameters E through H.

	CD	E	F	G	H
Switzerland	82	Item & payment	0 and 5 only	No	0 and 5 only
Norway	54	Payment	Arbitrary	Yes	0 only
South Africa	05	Payment	Arbitrary	Yes	0 and 5 only

	A	B	CD	E	F	G	H
Australia	Yes	Not rounding	82	Payment*	Arbitrary	Yes	0 and 5 only

* Applied to payment by cash and change amount.

Job code: 69

*	Item:	Selection:	Entry:
A	Always enter 0.		0
B	Always enter 0.		0
C	Always enter 1.		1
D	Rounding of foreign currency for EX	Rising to unit*	0
		Round off (4 down/5 up)	1
E	Tax system	Auto tax 1-4	0
		Auto VAT 1-4*	1
		Manual VAT 1-4	2
		Manual VAT 1	3
		Manual tax 1-4	4
		Auto VAT 1 & Auto tax 2-4	5
F	Tax print when taxable subtotal is zero	No*	0
		Yes	1
G	Tax print when tax is zero	Yes*	0
		No	1
H	Rounding system	Normal*	0
		Sweden	1
		Denmark	2

Rounding system
 • When you live in Sweden or Denmark, change the default setting (H=0) to the corresponding setting.

---

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 after 30 minutes)
 • Logo message print format (Header 6-line message)
 • Thermal printer density (standard density)
 • 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 do not affect sales totals. For details, refer to TRAINING MODE section.

■ **Power save mode**

Procedure

$\boxed{\text{\#/TM/ST}} \rightarrow \bigcirc{1}\bigcirc{0} \rightarrow \boxed{\otimes} \rightarrow \boxed{\text{*ABCD}} \rightarrow \boxed{\text{\#/TM/ST}} \rightarrow \boxed{\text{TL/NS}}$
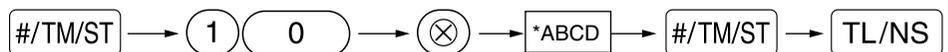
*	Item:	Selection:	Entry:
A	Entering power save mode when time is displayed	Yes*	0
		No	1
B-D	Time(min.) to entering power save mode since no operation is made	001-254 or 999 (Default 030)	

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

Key operation example	Print
#/TM/ST 10 ⊗ 0060 #/TM/ST TL/NS	***PGM*** #10 **0060**

■ Logo message print format

You can select the number of lines for your logo message, and the position to print it on receipt.
For details of the logo message type, please refer to "Logo messages" on page 38.

Procedure

To set "0"
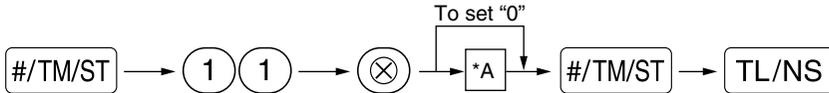
#/TM/ST → (1)(1) → ⊗ → *A → #/TM/ST → TL/NS

*A: Logo message type
    0: Header 3-line message
    3: Header 6-line message (default)
    5: Header 3-line message and footer 3-line message

Key operation example	Print
#/TM/ST 11 ⊗ 0 #/TM/ST TL/NS	***PGM*** #11 **0**

■ Thermal printer density

Procedure

To set "0"

#/TM/ST → (5)(0) → ⊗ → *Printer density (00-99) → #/TM/ST → TL/NS
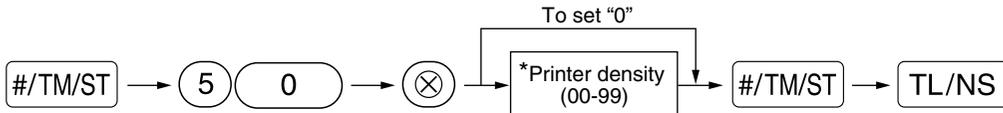
* 50 (100%) is the default setting. To make the print darker, set a larger number, and to make the print lighter, set a smaller number.

Key operation example	Print
#/TM/ST 50 ⊗ 70 #/TM/ST TL/NS	***PGM*** #50 70

■ Language selection

Procedure

To set "0"

#/TM/ST → (8)(8) → ⊗ → *Language (0-3) → TL/NS
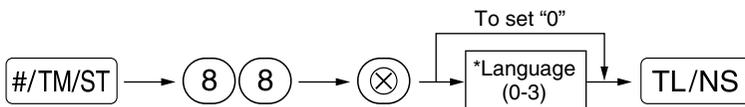
*Language: 0: English   1: German   2: French   3: Spanish (default: English)

Key operation example

$\boxed{\text{\#/TM/ST}}$ 88 $\circledtimes$
1 $\boxed{\text{TL/NS}}$

Print

```
*PGM*
#88              1
```

Caution *When you change the language, the texts such as clerk names, logo messages and function texts (refer to page 37), 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 57.

Procedure

```
                                         To cancel
  #/TM/ST ─→ (8)(6) ─→ ⊗ ─┬─ Clerk code ──┬─→ #/TM/ST ─→ TL/NS
                           │  (1 to 20)    │
```
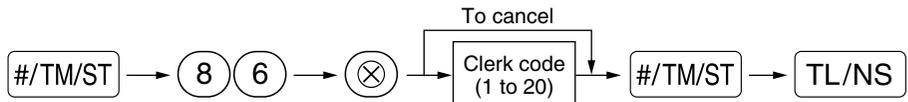
Key operation example

$\boxed{\text{\#/TM/ST}}$ 86 $\circledtimes$
20 $\boxed{\text{\#/TM/ST}}$ $\boxed{\text{TL/NS}}$

Print

```
*PGM*
#86             20
```

■ AUTO key programming — Automatic sequencing key

If you program frequently performed transactions or report sequences for the $\boxed{\text{AUTO}}$ key, you can recall those transactions and/or reports simply by pressing the $\boxed{\text{AUTO}}$ key in key operations.

Procedure

```
                    Delete
  AUTO ─→ ┬─ Transaction ─┬─→ AUTO ─→ TL/NS
          │  (key entry)  │
          └───────────────┘
            max. 25 times
```
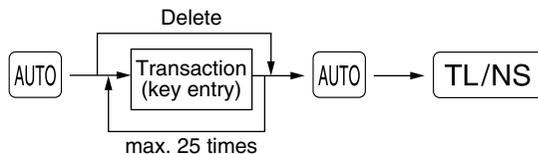
Programming for $\boxed{\text{AUTO}}$; entering a PLU 2 item and a dept. 6 item (unit price: 1.00)

Key operation example

AUTO ──→ 2 $\boxed{\text{PLU/SUB}}$ 100 $\boxed{6^{22}}$
setting

$\boxed{\text{AUTO}}$
$\boxed{\text{AUTO}}$
$\boxed{\text{TL/NS}}$

Print

```
*PGM*
#01
                 2
               PLU
                 1
                 0
                 0
               D06
```

Note *When the $\boxed{\text{AUTO}}$ 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 EURO Programming

For details of EURO migration operation, please refer to "EURO MIGRATION FUNCTION".

■ EURO system settings

Procedure

To set "0" for all items

$\boxed{\text{\#/TM/ST}} \longrightarrow \boxed{8} \longrightarrow \boxed{\otimes} \longrightarrow \boxed{\text{*ABCD}} \longrightarrow \boxed{\text{\#/TM/ST}} \longrightarrow \boxed{\text{TL/NS}}$

* Item:		Selection:	Entry:
A	Printing exchange total amount and change amount on receipt or journal	No*	0
		Yes	1
B	Always enter 0.		0
C	Cheque and credit operation when tendering in foreign currency	No*	0
		Yes	1
D	Exchange calculation method	Multiplication*	0
		Division	1

Printing exchange total amount and change amount on receipt or journal
 • Total and change amounts in exchange currency are printed respectively below each of the total and exchange amounts in domestic currency.

Exchange calculation method
 • "Division" or "Multiplication" can be selected for the conversion method from domestic currency to exchange currency, and the calculation is performed as follows:
 In case that "Division" is selected:
 Domestic currency amount ÷ Exchange rate = Exchange amount
 In case that "Multiplication" is selected
 Domestic currency amount × Exchange rate = Exchange amount

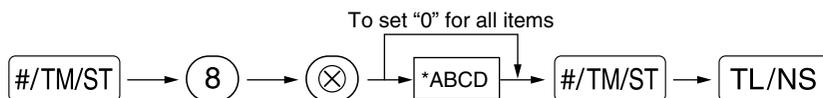| **Key operation example**	**Print**
$\boxed{\text{\#/TM/ST}}$ 8 $\boxed{\otimes}$ 1000 $\boxed{\text{\#/TM/ST}}$ $\boxed{\text{TL/NS}}$	***PGM*** #8 **1000**

■ Automatic EURO modification operation settings

Procedure

To set "00"

$\boxed{\text{\#/TM/ST}} \longrightarrow \boxed{1}\boxed{2} \longrightarrow \boxed{\otimes} \longrightarrow \boxed{\text{*AB}} \longrightarrow \boxed{\text{\#/TM/ST}} \longrightarrow \boxed{\text{TL/NS}}$
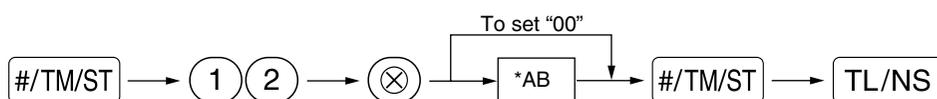
* Item:		Selection:	Entry:
A	Converting the preset unit price of Dept./PLU in the automatic modification operation for EURO (job #800 in the X2/Z2 mode)	Yes*	0
		No	1
B	Automatic modification operation for EURO (job #800 in the X2/Z2 mode) at the preset date	Compulsory*	0
		Non-compulsory	1

Key operation example	**Print**
$\boxed{\text{\#/TM/ST}}$ 12 $\boxed{\otimes}$ 01 $\boxed{\text{\#/TM/ST}}$ $\boxed{\text{TL/NS}}$	***PGM*** #12 **01**

Note	*If you have already made the Job #800 operation with the substitution of 3 for "A" in the X2/Z2 mode, this programming is disabled.*

■ Date setting for EURO modification operation

To set all zeros

$\boxed{\text{#/TM/ST}}$ ⟶ ①③ ⟶ ⊗ ⟶ | Date (Day-Month-Year) (seven or eight digits) | ⟶ $\boxed{\text{#/TM/ST}}$ ⟶ $\boxed{\text{TL/NS}}$

Key operation example

#/TM/ST 13 ⊗
01072005 #/TM/ST
TL/NS

Print

```
*PGM*
#13          01/07/2005
```

> **Note**
> • In case you changed the date format using job code 61, follow the format you selected for setting the date.
> • If all zeros are set, this programming is disabled.
> • If you have already made the Job #800 operation with the substitution of 3 for "A" in the X2/Z2 mode, this programming is disabled.

■ Time setting for EURO modification operation

$\boxed{\text{#/TM/ST}}$ ⟶ ①④ ⟶ ⊗ ⟶ | Time (Hour) (00-23) | ⟶ $\boxed{\text{#/TM/ST}}$ ⟶ $\boxed{\text{TL/NS}}$
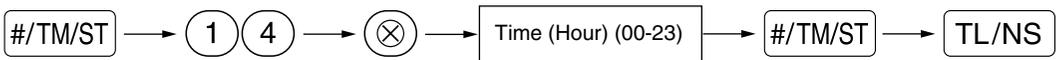
Key operation example

#/TM/ST 14 ⊗
10 #/TM/ST
TL/NS

Print

```
*PGM*
#14             10:00
```

> **Note**
> • If you have already made the Job #800 operation with the substitution of 3 for "A" in the X2/Z2 mode, this programming is disabled.
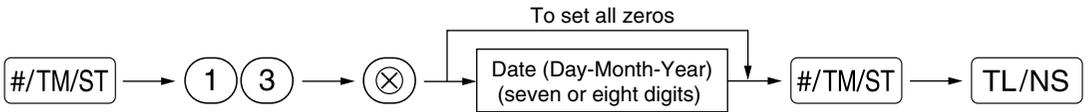
The machine allows you to read every program stored in the PGM mode.

■ Key sequence for reading stored program

Report name	Key sequence
Programming report 1	TL/NS
Programming report 2	(2) ⟶ TL/NS
Auto key programming report	(1) ⟶ TL/NS
Printer density programming report	(3) ⟶ TL/NS
Department programming report	(4) ⟶ TL/NS
PLU programming report	Start PLU code ⟶ (⊗) ⟶ End PLU code ⟶ PLU/SUB

Note | *To stop reading programming report, turn the mode switch to the MGR position.*

■ Sample printouts

1 Programming report 1

```
*PGM*                              ┐── Mode
F01 (−)          006               ── Function no.& its text
                                   ── Function parametrs (B-D)
                 -2.00             ── Discount amt. w/sign
F02 %1           000               ── Function parametrs (B-D)
L 15.00%         -10.25%           ── Percent rate with sign
F03 %2           000
L100.00%         -0.00%            ── Percent limit
F04 DIFFER
F05 TAX1 ST
F06 TAX2 ST
F07 TAX3 ST
F08 TAX4 ST
F09 VAT 1
F10 VAT 2
F11 VAT 3
F12 VAT 4
F13 NET1
F14 NET2
F15 REFUND
F16 ∽
F17 ⊆ MODE
F18 MGR ∽
F19 SBTL ∽
F20 NO SALE
F21 ***RA          9              ┐── Entry digit limit
F22 ***PO          9              ┘
F23 CASH         008              ── Function parameters (A-C)
F24 CHECK1       018
F25 CHECK2       008
F26 CREDIT1      008
F27 CREDIT2      008
F28 EXCH1        102
  US $       0.939938             ── Foreign currency symbol/Rate
F29 EXCH2
F30 EX1 CHK
F31 EX1 CR
```

```
F62 COPY
F63 EJ
F64 EJ END
    SHARP              ┐
  PRESENTS THE         │
  XE-A202              │
    SHARP              ├── Logo Message
     IS                │
  THE BEST             ┘
#5      00000100       ── Function selection for miscellaneous keys (A-H)
#6      11000111       ── Print format (A-H)
#7      00000000       ── Receipt print format(A-H)
#8         0010        ── EURO system settings (A-D)
#10        0060        ── Power save mode(A-D)
#11           3        ── Logo message print format
#12          01        ── Automatic EURO modification operation settings (AB)
#13   01/07/2005       ── Date setting for EURO modification operation
#14       10:00        ── Time setting for EURO modification operation
#30      000001        ┐
#31           0        │── *Job code #30 to #35 are fixed settings, for which you
#32          06        │   cannot change the settings.
#33     002 013        │
#35         007        ┘
T1        ------
T2      4.0000%        ── Tax rate
         0.12          ── Min. taxable amount
T3        ------
T4        ------
C#01    DAVID          ── Clerk code/name
C#02    CLERK 02
```

```
C#19    CLERK 19
C#20    CLERK 20
```

2 Programming report 2

```
*PGM*
#61 ── 00100112 ──────── Job code
#62    01000000 ──────── A to H from the left
#63    01000001 ──────── * Job code #65, 70, 71, 72,
#64    00000000              76, 77 and 95 are fixed
#65    00000000              settings, for which you
#66    10011100              cannot change the
#67    00000010              settings.
#68    00100002
#69    00101000
#70    00000000
#71
GT2   *00000000000.00
#72
GT3   *00000000000.00
#76        Z1  0000
#77        Z2  0000
#85           *
#86          20 ──────── Training clerk specification
#87   **TRAINING** ───── Training mode text
#88           O ──────── Language selection
#90           O ──────── EJ memory type
#95          50
```

3 Auto key programming report

```
*PGM*
#O1
           2
         PLU
           1
           O
           O
         DO6
```

4 Printer density programming report

```
*PGM*
#50              50 ───── Entered value
                         Printer density
    10 : 0123456789AB
    20 : 0123456789AB
    30 : 0123456789AB
    40 : 0123456789AB
    50 : 0123456789AB   Printing density
    60 : 0123456789AB   example
    70 : 0123456789AB
    80 : 0123456789AB
    90 : 0123456789AB
```

5 Department programming report

```
               *PGM*
Dept. code ─── DO1    T1    083 ──── Dept. function
Dept. text ─── FRUIT        10.00 ── Dept. unit price
               DO2    T1    183         w/sign
               DEPT.02     -13.10 ──── Minus department
               DO3    T1    083
               DEPT.03      1.50 ───── Tax status

               D49    T1    081
               DEPT.49      0.00
               D50    T1    081
               DEPT.50      0.00
```

6 PLU programming report

```
               *PGM*
                        0001-0015 ──── Range
PLU code ─── P0001(O3)         0 ────── Mode parameter
PLU text ─── MELON          1.25 ────── Unit price
             P0002(O1)         1
             PLU.0002        2.15
             P0003(32)          1
             PLU.0003       -0.15 ───── Associated
                                        dept. code
             PLU.0014        1.00
             P0015(O1)          1
             PLU.0015        1.50
```

EURO MIGRATION FUNCTION

Note	• EURO programming described in this section are for users in the countries which will join to the members of the European Currency Union, not for the users in the countries already have joined the Union.

Your register can be modified to correspond with each period set for the introduction of EURO, and in your register each currency is treated as shown on the table below depending on which period you are in. Basically your register can be automatically modified to correspond to the introduction of EURO by executing automatic EURO modification operation shown below in the X2/Z2 mode. However, there are several options you must set depending on your needs. So, please carefully conduct necessary settings.

How currencies are treated in your register

		Period 1	Period 2	Period 3
		After the introduction of EURO, and before EURO banknotes and coins begin to circulate	After EURO banknotes and coins begin to circulate, and before national currency is withdrawn from circulation. (Co-existence of EURO and national currency)	After the national currency is withdrawn from circulation
Currency	EURO	Exchange key (Preset rate entry)	Domestic currency	Domestic currency
	National currency	Domestic currency	Exchange key (Preset rate entry)	
	Foreign currency	Exchange key (Manual rate entry)	Exchange key (Manual rate entry)	Exchange key

Automatic EURO modification operation

Make sure the mode switch is in the X2/Z2 mode first, then perform the following procedure. Please note that you can perform each operation only once with the substitution of "A=1", "A=2" and "A=3". For example if you performed the operation with the substitution of "A=2" first, you cannot perform the operation with the substitution of "A=1".

$$ 8 \quad 00 \longrightarrow \bullet \longrightarrow \otimes \longrightarrow \boxed{*A} \longrightarrow \boxed{TL/NS} $$

*A=1: Applicable for period 1
*A=2: Applicable for period 2
*A=3: Applicable for period 3

The details of the register system modification are as shown below:

Items	A=1 (EURO status 1)	A=2 (EURO status 2)	A=3 (EURO status 3)
General Z1 report	Issue	Issue	Issue
General Z2 report	Issue	Issue	Issue
GT memories (GT1, GT2, GT3 and Training GT)	-	Clear	Clear*1
Conversion of preset prices of Dept./PLU	-	Yes	Yes*1
Conversion of entry digit/amount limit	-	Yes	Yes*1
Exchange amount printing for total and change	Yes	Yes	No
Exchange calculation method	Division	Multiplication	Multiplication
Domestic currency symbol	-	[EURO]	[EURO]
Domestic currency decimal point position	-	2	2
Exchange currency symbol	[EURO]	Previous domestic currency symbol	-*2
Exchange currency decimal point position	2	Previous domestic currency decimal point position	-
Rounding system (Denmark/Sweden/Normal)	-	Normal	Normal*1
Rounding up/down of the unit digits of amount	-	No	No*1
Lowest digit entering limitation of item	-	Arbitrary	Arbitrary*1
Lowest digit entering limitation of payment	-	Arbitrary	Arbitrary*1
Memory of difference due to rounding	-	No	No*1
Rounding of exchange currency	Round off (4 down/5 up)	Round off	Round off

• The item marked with "-" remains the same as the previous data.

*1: When you perform from EURO status 2, previous data remains unchanged.

*2: When you perform from EURO status 1 or 2, "space" is set.

IMPORTANT

• Conversion of the preset unit prices of departments and PLUs
 Note that the conversion rate of the preset rate of the [EX] key is applied for the conversion, and the method is set to "division". When the conversion is performed, the message "PRICE CONVERTED" will be printed on the #800 report.

• After the execution of the procedure with "A=1", treat EURO as foreign currency using the exchange key ([EX]) with the preset rate entry. Set the EURO conversion rate as the currency exchange rate for the exchange key.

• After the execution of the procedure with "A=2", treat EURO as domestic currency, and national currency as foreign currency using the exchange key ([EX]) with the preset rate entry. Set the EURO conversion rate as the currency exchange rate for the exchange key.

• As for the percent rate for [%1], [%2] and [⊖], the automatic conversion is not made. So, when your domestic currency becomes EURO, you must change these settings so that they are base on EURO currency.

Note	*You can manually make these settings. For programming details, please refer to "EURO Programming" section.*

Checking the current EURO status

You can check the EURO status currently set on the cash register. Set the manager key (MA) to the X2/Z2 position, and perform the following sequence. The current EURO status will be printed on the receipt/journal.

$(8)(00) \longrightarrow (\times) \longrightarrow \boxed{\text{TL/NS}}$

```
*X2*
#800                2
```
— EURO status
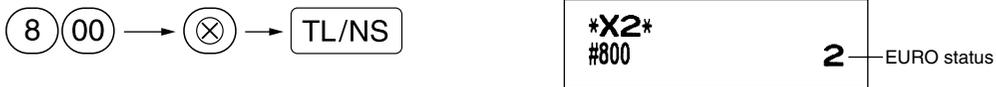
■ Optional Programming for the Introduction of EURO

Some programming relating with the function of exchange key ($\boxed{\text{EX}}$) cannot be changed automatically with the execution of modification operation described in the previous section. After the execution on each period, conduct the following programming depending on your needs.

Programming for Exchange Key ($\boxed{\text{EX}}$)

Currency exchange rate
For period 1 and period 2, set the EURO conversion rate.
For programming details, refer to "Rate for $\boxed{\%1}$, $\boxed{\%2}$ and $\boxed{\text{EX}}$" on page 30.

Exchange rate entry selection
When you treat EURO currency in the exchange key, you must apply preset rate entry. So, make enable for preset rate entry for period 1 and period 2. For programming details, refer to "Function parameters for $\boxed{\text{EX}}$" on page 32.
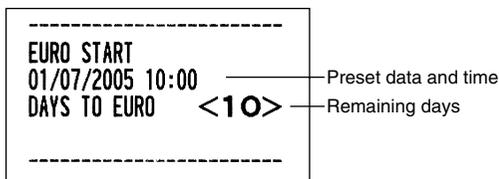
Cheque/credit operation
For period 1 and period 2, enable cheque/credit operation when tendering in foreign currency so that you can treat cheque and credit for EURO currency and national currency. For programming details, refer to "EURO system settings" on page 50.

Setting the date and time when the automatic modification operation for EURO should be executed
Selection of compulsory/non-compulsory of execution of the automatic modification operation for EURO
You can program the scheduled date and time to execute the automatic EURO modification operation .
From ten days before the preset date, the remaining days are printed at the bottom of the daily full resetting (Z1) report as follows.

```
------------------------
EURO START
01/07/2005 10:00          ——— Preset data and time
DAYS TO EURO    <10>       ——— Remaining days

------------------------
```

When the above-mentioned preset date and time has come, and also when you start an entry in the REG/MGR mode, the error message "E-EU" is displayed. You cannot make any operation in the REG/MGR mode until you execute the automatic modification operation for EURO (job #800) in the X2/Z2 mode.
You can program so that you can make entries in the REG/MGR mode even when the error message is displayed.
Date and time setting will be reset after the execution of the automatic modification operation and you can program again the date and time for the next automatic modification operation.

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 FUNCTION PROGRAMMING" in page 49.
The training operation is valid only in REG, MGR and ⌧ mode.
The corresponding clerk memory is only updated in the training mode.

Key operation example	Print

A clerk set in training ⟶ 20 CLK#
1000 [5²¹]
3 ⊗
[3¹⁹]
TL/NS

```
06/08/2003 15:50        20
123456#1051 CLERK 20

**TRAINING**
DEPT.05           *10.00
3x 24.00
DEPT.03           *72.00

ITEMS       40
CASH  *82. 00
```

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 an 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 ⒸⓁ 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}) ⎦ ⓧ key: Amount of cash in drawer TL/NS key: Sales total
Full sales report	—	X1, Z1	X2, Z2	Reading: TL/NS Resetting: • ⟶ TL/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 ⟶ ⓧ ⟶ End PLU code (All PLUs) ⟶ PLU/SUB Resetting: ⟶ Start PLU code ⟶ ⓧ ⟶ End PLU code (All PLUs) ⟶ • ⟶ PLU/SUB
Hourly report	—	X1, Z1	—	Reading: #/TM/ST Resetting: • ⟶ #/TM/ST

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.
- The drawer does not open when you take X/Z reports. The drawer can be opened by pressing the TL/NS key to remove the till after closing your business.
- When printing is performed continuously, the printing may be intermitted several seconds. After the intermission, the printing will be restarted.

■ Full sales report

• Sample report

Receipt line	Description
*2 ***Z1***	Mode title*1
Z1 0001	Reset counter
GT1 *00000001198.48	Net grand total (GT2-GT3)
GT2 *00000001341.11	Grand total of plus registration
GT3 -00000000142.63	Grand total of minus registration
TR *00000000109.53	Grand total of training mode registration
------------------------	
* DEPT *	
DO1 38 Q	Dept. code
DEPT.01 *335.34	
DO2 4 Q	Sales q'ty
DEPT.02 *31.09	Sales amount
DO3 1 Q	
DEPT.03 *40.00	
DO4 3 Q	
DEPT.04 *20.30	

Receipt line	Description
DEPT.35 *27.00	
D50 7 Q	
DEPT.50 *105.00	
*DEPT TL 134 Q	"+" dept. counter and total
*1250.38	

D32 5 Q	
DEPT.32 -47.49	
DEPT(-) 5 Q	"-" dept. counter and total
-47.49	
------------------------	
*TRANS. *	
(—) 2 Q	Subtotal ⊖ counter and total
-2.30	
%1 3 Q	Subtotal percent 1 counter and total
-5.46	
%2 1 Q	
*3.35	
NET 1 *1198.48	Net sales total
------------------------	← *3
TAX1 ST *1105.39	Taxable 1 total
VAT 1 *164.63	VAT 1 total
TAX2 ST *159.45	
VAT 2 *14.50	
TAX3 ST *184.38	
VAT 3 *30.73	
TAX4 ST *164.57	
VAT 4 *11.48	
TTL TAX *221.34	Tax total
NET *977.14	Net total without tax
------------------------	← *4

Receipt line	Description
(—) 1 Q	Item ⊖ counter and total
-0.75	
%1 1 Q	Item percent 1 counter and total
-0.60	
%2 1 Q	
*0.75	
REFUND 5 Q	Refund counter and total
*22.20	
∽ 8 Q	REG-mode void counter and total
*36.88	
∽ MODE 1 Q	Void-mode transaction counter and total
*24.45	
MGR ∽ 2 Q	Manager item void counter and total
*24.45	
SBTL ∽ 4 Q	Subtotal void counter and total
*173.80	

NO SALE 2 Q	No-sales counter
***RA 4 Q	Received on account counter and total
*120.00	
***PO 2 Q	Paid out counter and total
*68.00	

GUEST 53 Q	Customer counter
PAID TL *1209.54	Paid total
AVE. *22.82	Paid total average per customer

CASH 43 Q	Cash counter and total
*809.62	
CHECK1 3 Q	Cheque 1 sales counter and total
*35.15	
CHECK2 1 Q	
*15.00	
CREDIT1 2 Q	Credit 1 sale and tendering counter and total
*72.50	
CREDIT2 1 Q	
*40.00	
EXCH1 1 Q	Exchange counter and total (in preset rate entry)
US \$100.00	
DOM.CUR1 *106.38	Domestic currency
EXCH2 1 Q	Exchange manual rate entry counter and total
100.00	
DOM.CUR2 *78.42	
EX1 CHK 1 Q	Exchange check (in preset rate entry)
US \$66.08	
DOM.CUR1 *70.30	
EX1 CR 1 Q	Exchange credit (in preset rate entry)
US \$32.90	
DOM.CUR1 *35.00	

****CID *808.79	Cash in drawer
*CH ID *50.15	Cheque in drawer
CA/CH ID *858.94	Cash + cheque in drawer
CHK/CG *7.03	Change total for cheque tendering

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

*2: Printed in the Z1 report only.

*3: When "Memory of difference due to rounding" is set to "yes" the following is displayed here.

DIFFER	-0.05

*4: When manual tax 1-4 system or auto tax 1-4 system is selected, the following is displayed here.

NET2	*1209.54

Sales total including tax

■ Clerk reports

Individual clerk report
• Sample report

```
*OPX*                         ── Mode title*
* CLERK *                     ── Report title
O1#      DAVID                ── Clerk code / Clerk name
GUEST         47 Q            ── Customer counter
PAID TL    *1122.89           ── Paid total
AVE.         *23.89           ── Average
-------------------------
  ∽           8 Q
             *36.88
  ∽ MODE      1 Q
             *24.45
MGR ∽         2 Q
             *24.45
SBTL ∽        4 Q
            *173.80
-------------------------
EXCH1         1 Q
         US $100.00
DOM.CUR1    *106.38
EXCH2         1 Q
             100.00
DOM.CUR2     *78.42
****CID     *722.14
*CH ID       *50.15
CA/CH ID    *772.29
-------------------------
```

Labels (right side, top to bottom): Mode title*, Report title, Clerk code, Clerk name, Customer counter, Paid total, Average

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

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 #20).

■ PLU sales report
• Sample report

```
*X1*                          ── Mode title*
*   PLU   *                   ── Report title
              0001-0015        ── Range
P0001         19 Q             ── PLU code
PLU.0001      *29.83           ── Item label / Sales q'ty and total
P0002         21 Q
PLU.0002      *31.50
P0010          4 Q
PLU.0010      *28.60
P0011         11 Q
PLU.0011      *99.30
P0012          8 Q
PLU.0012      *18.88
P0013         -7 Q
PLU.0013     -14.70
P0015          1 Q
PLU.0015       *5.75
-------------------------
***TOTAL      57 Q             ── Range sum
             *199.16
```

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

■ Hourly report
• Sample report

```
*X1*                          ── Mode title*
*HOURLY*                      ── Report title
 10:00        12 Q             ── Customer counter
             *119.98           ── Sales total
 11:00        18 Q
             *186.89
 12:00        25 Q
             *199.91
 13:00         7 Q

 17:00        18 Q
             *126.69
 18:00        16 Q
              *92.26
```

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

3 Periodic Consolidation

■ Full sales report
• Sample report

```
*Z2*                          ── Mode title*1
         Z1  0001             ── Reset counter of daily total
         Z2  0001             ── Reset counter of periodic    *2
GT1  *00000002104.45
GT2  *00000002219.23
GT3  -00000000114.78         ── Grand total
TR   *00000000089.85
```

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, ⌫ , X1/Z1 and X2/Z2 modes. By default, a maximum of 3000 lines are stored in the memory. For details of EJ programming, please refer to "Electronic Journal (EJ) Programming" section (page 41).

■ 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    *              ──── EJ report title
26/08/2003 13:59     01
123456#0398 DAVID
DEPT.07        *10.00
DEPT.08        *25.00
*  EJ END  *            ──── 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:

$$7 \to 00 \to \otimes \to \boxed{TL/NS}$$

To reset all of the data:

$$7 \to 00 \to \bullet \to \otimes \to \boxed{TL/NS}$$
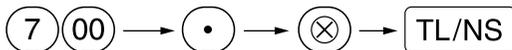
To read the last 10 records:

$$7 \to 1 \to 0 \to \otimes \to \boxed{TL/NS}$$

| **Note** |

• *To stop reading or resetting the data, turn the mode switch to "MGR" position. The data will not be erased when resetting.*
• *On the EJ memory, a maximum of 3000 (or 2000, depending on programming) lines of data can be stored. When executing all data reading, all of the data stored in the EJ memory will be printed.*
• *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    *
26/08/2003 14:07     01
123456#0412 DAVID
DEPT.12        *12.50
ITEMS         1Q
CASH  *12.50
26/08/2003 14:07     01
123456#0413 DAVID
DEPT.07         *2.45
DEPT.08         *7.85
```

```
26/08/2003 14:08     01
123456#0418 DAVID
***RA          *25.00
26/08/2003 14:08     01
123456#0419 DAVID
*X1*
*  DEPT  *
*TRANS. *              ──── Header
26/08/2003 14:08     01      information
123456#0420 DAVID            print
DEPT.10        *12.56
DEPT.15        *12.69
ITEMS         2Q
CASH  *25.25
26/08/2003 14:08     01
123456#0421 DAVID
DEPT.04         *1.25
3x 1.50
DEPT.13         *4.50
ITEMS         4Q
CASH   *5.75
*  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.
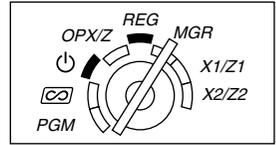
Example

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

Key operation example		Print

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.
[TL/NS]

```
DEPT.03          *15.00
 (—)             -2.50

ITEMS      1Q
CASH  *12.50
```

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 [⊘] 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 on the incorrect receipt is removed from register memory; the voided amounts are added to the void mode transaction totalizer.)
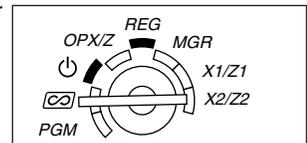
Incorrect receipt

```
DEPT.04          *10.00
DEPT.03          *1.50

ITEMS      2Q
CASH  *11.50
```

➡

Cancellation receipt

```
    *⊘ MODE      *
DEPT.04          *10.00
DEPT.03          *1.50

ITEMS      2Q
CASH  *11.50
```

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.)

```
F06 TAX2 ST
F07 TAX3 ST
 = = = = = = = = = = = =
F08 TAX4 ST
F09 VAT 1
```
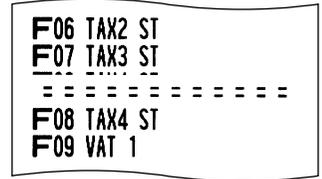
2 In Case of Printer Error

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 ⒸⓁ 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 ⒸⓁ 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 ($\llcorner$) when the batteries are low, and displays a no battery symbol ($\llcorner$) 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:
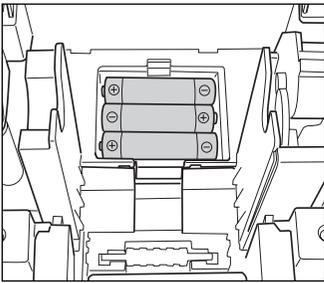
1. **Make sure that the cash register is plugged in.**
2. Turn the mode switch to the REG position.
3. Remove the printer cover.
4. Open the battery compartment cover next to the paper roll cradle and remove the old batteries.
5. Install three new R6 or LR6 batteries ("AA" size) in the battery compartment. Be sure the positive and negative poles of each battery are facing in the proper direction. When they are installed correctly, the " $\llcorner$ " or " $\llcorner$ " 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: 57.5 ± 0.5 mm
Max. outside diameter: 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)

To the printer   To the printer

Correct   Incorrect

■ 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.
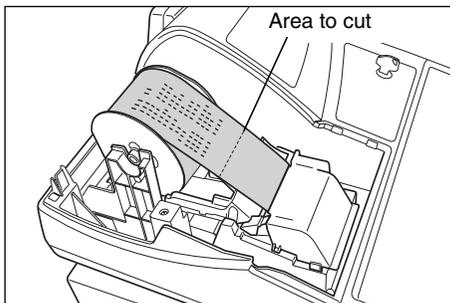
When not using the take-up spool (using as receipt paper):
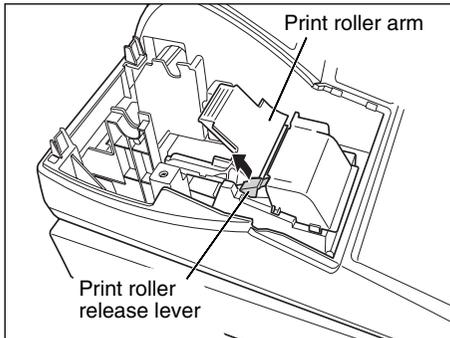
Print roller arm

Print roller
release lever

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):

Area to cut

1. Turn the mode switch to a position other than " ⏻ " 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.* |
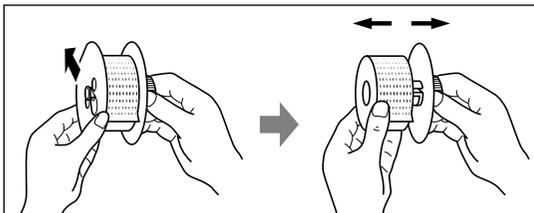
7. Remove the outer side of the take-up spool as shown on the left.
8. Remove the printed journal roll from the take-up spool.

■ 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:

Paper positioning guides

1. Turn the mode switch to a position other than " ⏻ " 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 per the diagram. 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:
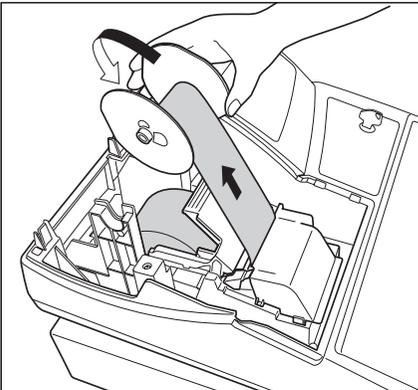
1. Turn the mode switch to a position other than " ⏻ " with the power cord connected.
2. Remove the printer cover.
3. Lift up the print roller release lever to unlock and open the print roller arm.
4. Set the paper correctly in the paper roll cradle.
5. Feed the end of the paper along with the paper 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 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.
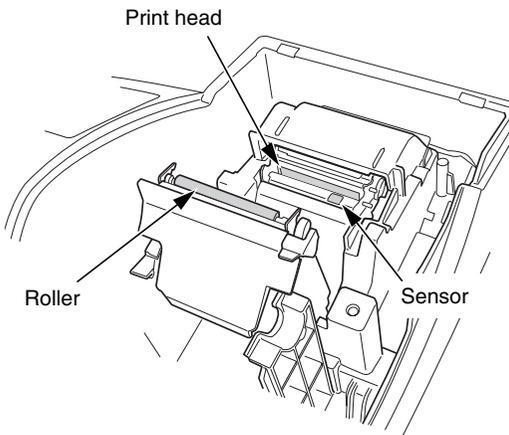
1. Remove the printer cover.
2. Lift up the print roller release lever to unlock and open the print roller arm.
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Reset the paper roll correctly by following the steps in "Installing the paper roll".

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.**

Print head
Roller
Sensor

1. Turn the mode switch to the " ⏻ " 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 print 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. The 8-denomination coin case is also detachable from the till. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.

Till   Coin case
Bill case
8-denomination coin case (detatchable)
Drawer

① ②
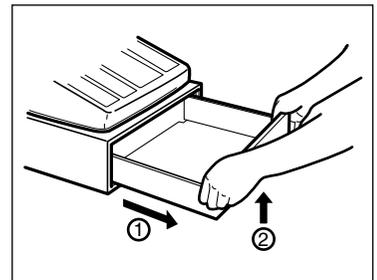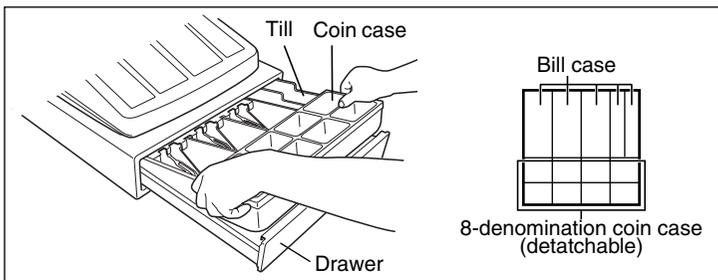
9 Opening the Drawer by Hand
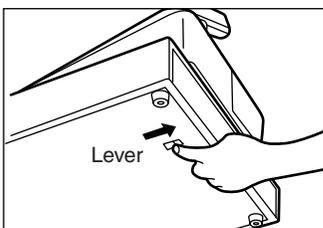
Lever

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 diagram 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 in "GETTING STARTED"? (Note that initialization clears all the data and programmed settings stored in memory.)
(2) The display won't illuminate even when the mode switch is turned to any other position than "⏻".	• Is power supplied to the electrical outlet? • Is the power cord plug out or loosely connected to the AC 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? Open the print roller arm, and lock the arm by following the instruction of installation. • Is the paper roll properly installed? • Are the print head/sensor/roller clean?
(7) Continuous printing stops.	• Display shows "– – – – –". Printing will automatically restart after several seconds.

■ Error code table

When the following error codes are displayed, press the Ⓒ🄻 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/ST] key for direct finalization	Press the [#/TM/ST] 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 ⌯ mode.

Environment Protection
The device is supported by a battery. To dispose the battery safely to protect the environment, please note the following points:
• Take the used battery to your local waste depot, dealer or customer service centre for recycling.
• Do not throw the used battery into fire, into water or into the household waste!

Umweltschutz
Das Gerät wird durch eine Batterie gestützt. Um die Batterie sicher und umweltschonend zu entsorgen, beachten Sie bitte folgende Punkte:
• Bringen Sie die leere Batterie zu Ihrer örtlichen Mülldeponie, zum Händler oder zum Kundenservice-Zentrum zur Entsorgung.
• Werfen Sie die leere Batterie niemals ins Feuer, ins Wasser oder in den Hausmüll.

Protection de l'environnement
L'appareil est supporté sur pile. Afin de protéger l'environnement, nous vous recommendons de traiter la pile usagée la façon suivante:
• Apporter la pile usagée à votre centre de traitement des ordures ménagères le plus proche ou, à votre revendeur ou, au service après-vente, pour recyclement.
• Ne jamais jeter la pile usagée dans une source de chaleur, dans l'eau ou dans les vide-ordures.

Miijöskydd
Denna produkt nöddrivs av batteri.
Vid batteribyte skall följande iakttagas:
• Det förbrukade batteriet skall inlämnas till er lokala handlare eller till kommunal miljöstation för återinssamling.
• Kasta ej batteriet i vattnet eller i hushållssoporna. Batteriet får ej heller utsätttas för öppen eld.

Bescherming van het milieu
Deze kassa gebruikt een batterij. Bescherm het milieu en gooi een gebruikte batterij op de juiste manier weg. Let op de volgende punten:
• Breng een lege batterij naar de lokale verzamelplaats voor klein chemisch afval, terug naar de winkel of gooi in een batterijbak.
• Gooi een gebruikte batterij niet in een vuur of water en gooi niet met het gewone huisafval weg.

Geräuschpegel: 81,1 dB (A)
Gemessen nach DIN 45635 bzw. EN27779

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