NT1110

OPERATING MANUAL

NOTICE

The information and specifications in this manual are subject to change without notice.

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This manual may not be copied or transmitted by any means, in whole or in part, without prior written consent from the Manufacturer.

FEDERAL COMMUNICATIONS COMMISSION NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to section J in Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause disruptive interference of radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the problem at his own expense

Introduction

We very much appreciate your purchase of this cash register. This cash register is equipped with function keys which allow you to program and use various functions and with numeric keys for entering numbers.

This manual explains the methods for programming and entering transactions with this cash register and it describes precautions and accessory items necessary to use it. This manual also shows examples of the receipts that will be printed out for each case described.

Before using the cash register, please read this manual so that you understand its operation.

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FEDERAL COMMUNICATIONS COMMISSION NOTICE

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Overview of Steps Required to Use This Cash Register

1. Understand your cash register.

Before using your cash register, check the specifications and part names, and confirm the precautions for using it.

→ See Chapter 1, "Before Starting Operations."

2. Install your cash register.

Place the cash register in a location near a wall outlet and plug the power cord into the outlet.

→ See section 2.1 "Installing the Cash Register."

3. Initialize the cash register.

Initialize the cash register's memory, before programming the cash register.

→ See section 2.2 "Initializing Your Cash Register."

4. Install the paper roll.

Install paper rolls for the receipt and journal correctly.

→ See section 2.3 "Installing and Removing a Paper Roll."

5.Installing/Changing memory backup batteries.

→ See section 2.4 "Batteries."

6. Program your cash register.

Program certain items for your store into the memory of the cash register, for example, the price of an item, the taxes levied on the item, the functions of the keys and so on.

→ See Chapter 3 "Programming."

7. Operate the cash register.

Perform the sales transaction according to your programming.

→ See "Chapter 4 Cash Register Operation," "Chapter 5 Making Correction," and "Chapter 6 Special Functions."

8. Check and reset the sales information.

Review and reset the daily sales information. You can also check the information from a certain period of time, such as a week and a month. After resetting the information, you can enter the new information from the next day.

→ See Chapter 7 "Checking and Resetting the Sales Information."

1 Before Starting Operations

This chapter describes the specifications, precautions and part names of this cash register.

1.1 General Specifications

Item	Description	
Power source	AC117V, 220V, 2	230V or 240V ±10% Depends on the country
Power consumption	23W	
Ambient operating temperature	32°F to 104°F (0°	Cto 40°C)
Memory	C-MOS RAM	
Memory back-up time	Approx. 6 month	hs
Printer	1 station print wheel selective impact type	
Printing speed	Approx. 3 lines	per sec.
Paper roll	Width	57.5 mm (2.25 inches)
	Max diameter	70 mm (2.74 inches)
External dimensions	350mm (W) x 408mm (D) x 321mm (H) (13.7" (W) x16.0" (D) x12.6" (H))	
Weight	7.5kg (16.5lb)	

1.2 Precautions

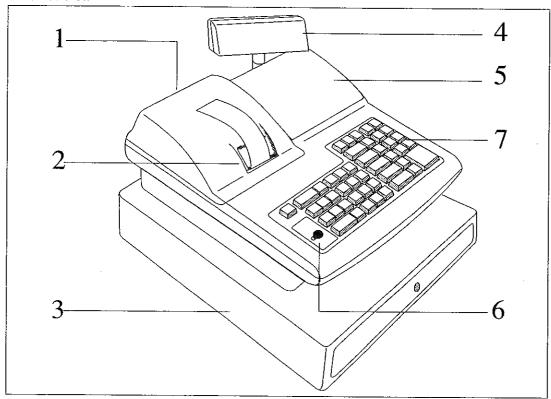
Please note the following items before using the cash register.

- Avoid using the cash register in the following conditions:
 - Exposed to direct sunlight or water
 - Hot or humid environments
 - Near equipment that generates strong electromagnetic fields
 - Anywhere there may be sudden changes in temperature
- Do not touch the cash register if your hands are wet.
- If the register malfunctions, do not attempt to repair the cash register by yourself.
- Plug your cash register into any standard wall outlet. Other electrical devices on the same circuit may damage the cash register.
- The main outlet for this cash register must be located near the unit and easily accessible.

1.3 Part names and Functions

This section shows part names and describes the function of each part of the cash register.

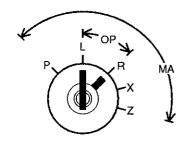
■ An External View



Part names	Functions	See page:
1. Printer cover	This cover protects the printer.	11
2. Receipt dispenser	This is where the receipt comes out.	11
3. Drawer	This drawer is used to store cash, checks, coupons, etc. There is a lock on it. Lock or unlock with the drawer key which came with this cash register.	59 69,70
4. Display (Customer's side)	This display shows the customer the price, total, change due, department codes, PLU codes and various types of symbols during sales transaction.	8
5. Display (Operator's side)	This display shows the operator the price, total, change due, department codes, PLU codes and various types of symbols during sales transaction.	8 9
6. Control lock	The control lock allows you to change cash register modes.	4, 15, 47
7 . Keyboard	The keyboard includes 24 function keys which allow you to perform various functions. There are also 16 department keys and 11 numeric keys.	6

■ Control Lock

The control lock allows you to change the cash register mode. Your register is equipped with five modes. The cash register is always in one of these five modes for any operation. To change modes, use the manager's key (marked with "MA") and the operator's key (marked with "OP") which came with this cash register. Insert the manager's key or the operator's key into the control lock and turn it to a required position. The manager's key can select any mode. The operator's key can select the "L" or "R" positions.



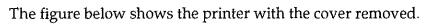
MA: Area the manager's key can access

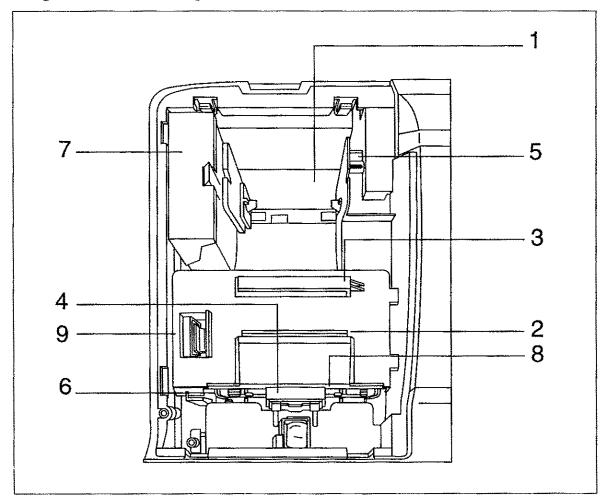
OP: Area the operator's key can access

The following table shows the modes the cash register is equipped with.

Mark	Mode Name	Functions	
P	Program mode	Used to programming various cash register functions.	
L	Lock mode	Used to turn off the cash register. This mode disables all operations.	
R	Register mode	Used for normal checkout operations.	
Х	Read mode	Used to print sales information reports.	
Z	Reset mode	mode Used to read and reset the sales information.	

■ Printer

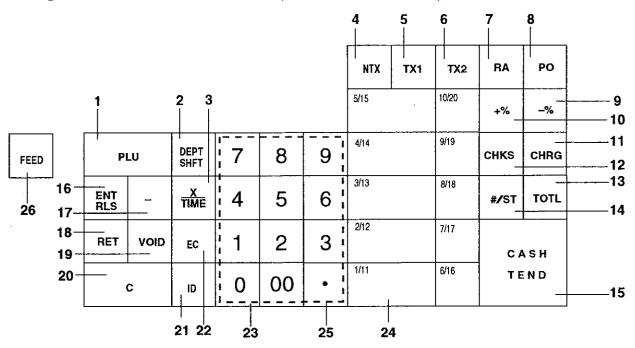




Part names	Functions	See page:
1. Receipt journal location	The paper roll is located here.	11, 12, 13
2. Paper entrance	The end of paper is inserted into the printer here.	11, 12
3. Paper separator	Used to protect the printer and paper jamming	
4. Logo stamp	Automatically prints the message "YOUR RECEIPT THANK YOU", for customer on the receipt.	
5. Take-up reel support	Used to take up the paper used for record keeping (the journal) and reel to rotate.	12
6. Paper exit	The paper exits here.	12, 13
7. Battery	Used to back up the transaction memory.	14
8. Ink ribbon	Used to supply ink to the printer.	
9. Ink ribbon cover	Used to protect the printer and ink ribbon	71

■ Keyboard

The figure below shows the standard keyboard for this cash register.



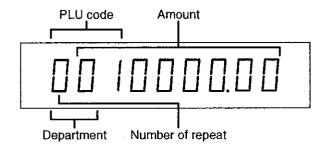
Name	Abbreviation	Functions	See page:
1. Price look up Key	PLU	Used for registering a PLU item.	20,49, 50
2. Department shift Key	DEPT/SHFT	Changes the code used by the Department Keys. For example, it is pressed to use the 1 key (marked 1/11) for department 11.	17, 48
3. Multiplication/Time Key	Χ	Used when register multiple items. Also	16, 20, 28,
	TIME	used to display the current time and for programming.	29, 40, 41, 50, 64, 67,
4. Non-tax Key	NTX	Used for registering a taxable item as a nontaxable item.	57
5. TAX Key 1	TX1	Used to add tax to the sales amount. The tax rate for this Key can be programmed.	56, 57
6. TAX Key 2	TX2	This key has the same function as TX1 but can have a different tax rate.	57
7. Received on account Key	RA	Used to register money received on account. This key is also used for programming.	30, 58, 69
8. Paid-out Key	PO	Used to register a non-sales amount of cash removed from the drawer. For example, you can register an amount of perry cash when the store opens. This key is also used for programming.	42, 58, 67
9. Discount Key	[-%]	Used to give a discount as a percentage of the price of an item.	28, 54,

Name	Abbreviation	Functions	See page
10. Premium Key	[+%]	Used to add a percentage, such as a premium, to the price of an item.	28,
11. Charge Key	CHRG	This key is used when a customer charges an item.	52,62
12. Check Key	CHKS	This key is used when receiving check or card for a sale.	42, 52, 58, 68
13. Total Key	TOTL	Used to display a subtotal including tax This key is also used for programming and for issuing training reports.	25, 57, 68
14 . Non-add/Subtotal Key	#/ST	Used to print a non-add code and to display a subtotal during operations. This key is also used for programming.	20,25, 55, 59, 69
15 .Cash/Tender Key	CASH TEND	Used to register the amount of cash tendered by the customer, complete the sales transaction and display the amount of change due. This key is also used for programming and for issuing reports.	43, 64
16 . PLU price entry and release	key ENT RLS	Used for entering the price of PLU items and usd to release the department function. This key is also used for programming.	19, 42, 48, 60, 63
17 . Minus Key		Used to discount a certain amount or subtract an amount of an item when you receive coupon.	27, 54
18 . Return Key	RET	Used to register the price of returned items.	40, 58
19 . Void Key	VOID	Used to void an amount you have entered and stored.	40, 42, 61, 69
20 . Clear Key	С	Used to clear an error that displays the error code "E" or an amount you entered mistakenly.	47, 60
21 . Clerk ID Key	ID	Used for entering individual clerk ID code. This key is also used to control printing of receipts.	42, 51
22. Error correction Key	EC	Used for voiding an incorrectly entered item immediately after entering it.	
23 . Numeric Keys	1 to 00	Used for entering numbers.	
24 . Department Keys ·	1/11 to 10/20	Used to classify the source of an item from up to 20 departments. You must press one of these keys every time you sell an item assigned to a department key.	17, 48
25 . Point Key	•	This key is used to enter decimal values.	22, 28
26 . Feed Key	FEED		12, 13

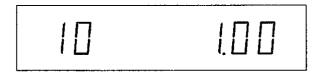
Section of the Committee of the Committe

■ Display

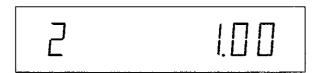
Your cash register has two seven-segment displays: one for the operator and one for the customer. They display prices, subtotals, change due, status codes and so on. Each display can show up to nine digits. The figure below shows the display positions for each type of item.



Examples of display conditions



Shows a sale from Department 10.



Shows that two of the same item are being sold.

Examples of status symbols

Your register has eight types of status symbols: Each symbol is displayed as shown below:	:"E,""-,"" <u>-</u> ,""[,"" ₋ ,""[,""*,""*,"	
Appears when an error, such as an overflow, occurs.	E 10000.00	
Appears when discounting.	- 1.00	
Appears when registering non-sales amount. For example, entering money received on account and entering petty cash removed from the drawer (paid-out).		
Appears when the amount received from a customer is more than the sales total.		
Appears when the cash register calculates the subtotal after pressing the #/ST Key or when the amount received from a customer is less than the sales amount.	o !.OO	
Appears when voiding and entering returned item from a customer.	L 1.00	
Appears a period "." at the 6th digit to the left of the decimal point when the DEPT/SHFT Key is pressed.	. !	
Appears when the cash register is in Receipt Off mode. Each time you press an ID key directly, the Receipt On/Off mode will change	1.00	

2 Setting Up

This chapter explains what steps are required before programming the cash register.

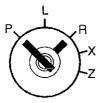
2.1 Installing the Cash Register

To install the cash register:

1. Place the cash register in a location near a wall outlet.

CAUTION

- Be sure not to locate the cash register in any of the conditions described in section 1.2, "Precautions".
- 2. Insert the manager's key (marked with "MA") into the control lock and turn it to the "P" position.
- 3. Plug the power cord into the outlet.
- 4. Make sure that the register display reads "0,".
- **5**. Turn the manager's key to the "L" position to turn off the display.



2.2 Initializing Your Cash Register

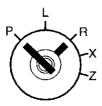
Before programming the cash register, you must initialize the cash register's memory.

CAUTION

■ Do not perform the following steps during programming or normal operation. These steps will clear all of the settings you have programmed and erase all sales information in the register.

To initialize the cash register:

- 1. Turn the manager's key to the "L" position.
- 2. Remove the power cord from the outlet.
- 3. Turn the manager's key to the "P" position.
- 4. Plug the power cord while pressing the **C** Key and hold the key down for at least two seconds. When you release the key, "0," will appear in the display. At this point, the register has been initialized.
- 5. Turn the manager's key to the "L" position to turn off the display.



2.3 Installing and Removing a Paper Roll

This section describes how to install and remove a paper roll. When you install two ply paper rolls in your cash register. One is for receipts. The other is for your records (journal).

Before installing a paper roll, be sure to do the following to avoid causing a paper jam:

■ Orient the paper roll so that it rotates in a counterclockwise direction, as shown in Fig.1.

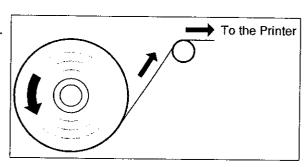


Fig.1

■ The end of the paper which will be inserted into the printer must look like the one shown in Fig2. Do not insert a paper end that looks like the ones shown in Fig.3.



Fig.2

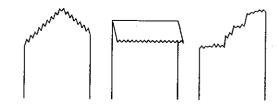
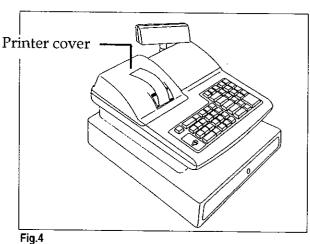


Fig.3

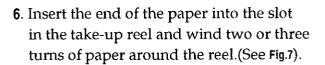
Installing a Paper Roll

To install a paper roll for receipts:

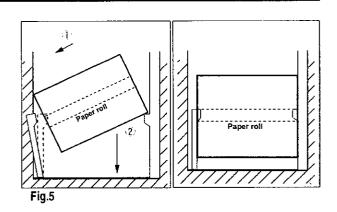
- 1. Make sure the control lock is in the "R" position.
- 2. From the front of the cash register, grab the rear of the printer cover and lift it up (See Fig.4.).



- 3. Set the roll paper gently into the paper location which has two spindles and slip the center hubs of the roll. (See Fig.5)
- **4.** Insert the end of the paper into the paper entrance.(See Fig.6.).
- **5**. Press and hold the **FEED** key until about 30 cm of the paper comes out from the printer.(See Fig.7.).



When you have finished installing the paper roll, close the printer cover.



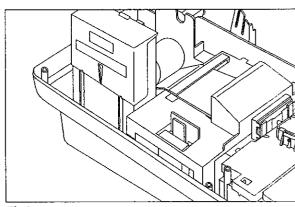
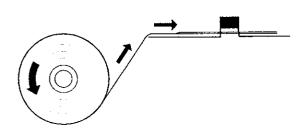


Fig.6

If you set 2 ply paper roll, make sure that the setting as follows.



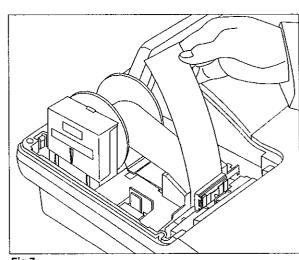


Fig.7

Removing a Paper Roll

When the paper begins to have a red area on it, replace the paper roll.

To remove the paper roll.

- 1. Turn the control lock to the "R" position.
- 2. Open the printer cover.
- **3**. Feed the paper about ten lines forward with the **FEED** key.(See **Fig.8**)
- 4. Remove the take-up reel from the support.
- **5.** Cut the paper after the end of printing (See Fig.9)..
- **6.**Remove the stopper from the take-up reel.
- 7. Remove the paper record from the take-up reel. (See Fig. 10.).
- **8**. Remove the remaining paper roll by pressing **FEED** key.

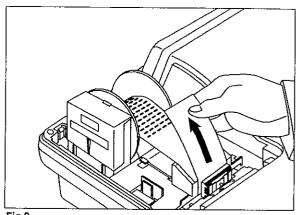


Fig.8

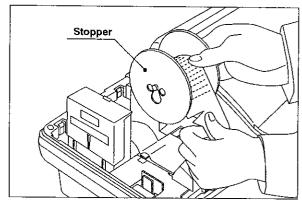
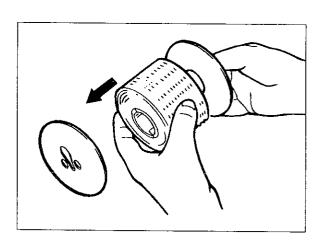


Fig.9



When you have finished removing the paper, install a new one and close the printer cover. See "Installing a Paper Roll."

2.4 Batteries

To protect your programming and sales data, this cash register uses Electronic backup systems.

Three SUM-3(UM-3) batteries are required to protect memory in case of power failure and while the cash register is unplugged.

Installing/Changing memory backup batteries

- 1. Make sure the control lock is in the "R" position and the power cord is plugged in.
- 2. Grab the rear of the printer cover and lift it up.(See. Installing the paper roll)
- 3. Push off the nail and slide up the battery case cover.
- 4. Position three fresh SUM-3(UM-3) batteries, making sure that the positive (+) and negative (-) poles are aligned correctly. (See. Fig 1)
- 5. Replace the battery case cover (See. Fig 2)
- 6. Replace the printer cover.



CAUTION

- * Never mix old or used batteries with fresh ones.
- * Never leave dead on in the battery case.
- * Never mix batteries of different types.
- * If you do not use the cash regsiter for a long period, remove the batteries.
- * Replace the batteries at least once every year.
- * Make sure that (+) and (-) ends of the batteries.

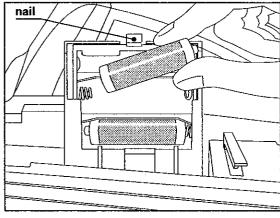


Fig.1

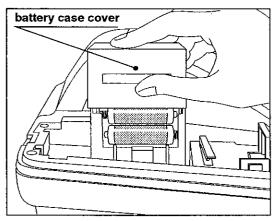


Fig.2

3 Programming

This chapter presents the instructions for programming your cash register.

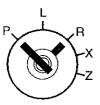
3.1 Before Programming

Before using your cash register, you must program certain items for your store into the memory of the cash register. Your cash register allows you to enter the price of an item, the taxes levied on the item, the functions of the keys and other useful functions. The instructions for programming are explained the following sections.

When you have finished all the programming you need to do, you can check the contents of your program. See section 3.11, "Checking the Contents of Your Program."

The following things must be done before programming:

- Initialize the memory. See section 2.2, "Initializing Your Cash Register."
- To select the "Program mode," insert the manager's key into the control lock and turn it to the "P" position. For more information about the control lock, see the "Control Lock" in section 1.3, "Part Names and Functions."



If the cash register hangs during programming, reset the cash register computer system as follows:

- 1. Turn the manager's key to the "L" position.
- **2**. Remove the power cord from the outlet.
- **3**. Turn the manager's key to the "P" position.
- 4. After waiting at least five seconds, plug in the register.

3.2 Setting the Date and Time

This section explains how to set the current date and time. Your cash register has a clock/calender memory. Once you set the date and time, you do not need to change the settings.

Setting the Date

The following example shows how to enter "December 10th 1999."



NOTE

- Enter the year, month and date in that order.
- If necessary, press the **C** Key to clear the display contents.

Setting the Time

The following example shows how to set the time to "15:10".

$$2 \longrightarrow \underset{\text{Time}}{\overset{X}{\longrightarrow}} 1 \underbrace{5} 1 \underbrace{0} \longrightarrow \underset{\text{TEND}}{\overset{\text{CASH}}{\longrightarrow}}$$

NOTE

- When you want to set the time to 3:10 PM, enter "1510". Do not enter "310".
- To check the time, turn the manager's key to the "R" position and press the X/TIME Key.

3.3 Setting the Machine Number

You can set machine number for your cash register to identify it. For example, if your store is a chain store, a unique number can be used for each cash register in each store. You can enter a maximum of two digits.

$$\begin{array}{c} 4 \longrightarrow \begin{array}{c} X \\ \hline \text{TIME} \end{array} \longrightarrow \begin{array}{c} 1 \\ \hline \text{Machine number} \end{array}$$

3.4 Setting the Transaction Number

You can set the starting transaction number printed on each receipt/journal. Once you set it, the number is increased by one for each transaction. You can enter a maximum of four digits.

$$9 \longrightarrow \underbrace{\frac{X}{\text{TiME}}} \longrightarrow 1 \quad 0 \quad 0 \quad 0 \longrightarrow \underbrace{\text{CASH}}_{\text{TEND}}$$
Starting transaction number

3.5 Department Programming

This section describes how to program departments. You can distinguish between 20 departments with Department keys on the keyboard. To use departments, you must classify the items for sale by assigning them to a department, from "Department 1" to "Department 20". To enter an item in your register, you must press the Department Key for the department the item belongs to. The sales amount, the sales quantity and so on, are stored in separate Department files. When you print out a sales report, the sales amount and the number of sales for each Department will appear in the report.

To program a department, you must set a unit price for each department. And if necessary, you can change the function flags settings for each department. The function flags control the "single-item cash sale" function, the maximum number of digits for a sales amount that can be entered in the register, assigning departments to a group, and selecting a tax status.

Setting a Unit Price

You can set a unit price up to seven digits long. If necessary, you can insert the decimal point in the displayed and printed amount before setting a unit price. For example, if you set unit prices in U.S. dollars and cents, insert the decimal point so that the number of decimal places are two digits. For inserting the decimal point, see section 3.9, "Setting System Flags." The following example shows that "\$1.00" and "\$1.50" are entered for Department 1 and Department 18 respectively.

NOTE

■ When you want to set a unit price for Departments 11 to 20, press the **DEPT/SHFT** Key before pressing the Department Key. This key toggles the "Department 1 to 10 set mode" and "Department 11 to 20 set mode."



Setting Function Flags

There are five function flags you can set for each department. Function flags are flags to impose limitations on the use of each Department Key. Each flag has some options to be selected. For example, Flag 2, which limits the number of digits you can enter, has seven possibilities. If you assign a limit of six digits to Flag 2 in Department 1, you can only enter an amount up to six digits long when selling an item from Department 1. If you enter seven digits, an overflow error will occur and the error code "E" will appear on the display.

You can set the following function flags:

■ Flag 1

This flag allows you to create a "single-item cash sale" function for a department. The "single-item cash sale" function is used to shorten the number of key strokes when registering a single item sale for cash. When you press a Department Key which has "single-item cash sale" function, the transaction ends automatically without pressing the CASH/TEND Key.

■ Flag 2

This flag limits the number of digits you can enter for a sale from that department. If you enter more digits than the setting allows, an overflow error will occur.

■ Flag 3

This flag assigns a department to a group. Classifying departments in groups allows you to get the group report and check the sales for each group. For example, if your store uses Department 1 for selling onions and Department 2 for selling pencil, when they are assigned to the same group, you can check the sales of stationary.

= Flag 4

This flag allows you to add TAX4 to sales from that department. For details about taxes, see section 3.7, "Tax Programming".

■ Flag 5

This flag allows you to add TAX1, TAX2 or TAX3 to sales from that department. For details about taxes, see section 3.7, "Tax Programming".

To set the function flags for a department, press the **ENT/RLS** Key, use the numeric keys to enter the option number you want for each flag and then press the Department Key. In the default setting, F1 to F5 are all zeros.



Select the option you want from the table shown below.

Flags	Press:	To:
F1	0	Disable single-item cash sales
	1	Enable single-item cash sales
F2	0 to 6	Limit the number of digits. If you enter 1 to 6, one digit to six digits are allowed. If you press 0, seven digits will be allowed.
F3	0 to 9	Assign the department to one of 10 groups.
F4	0	Do not add TAX4 for the department.
	1	Add TAX4 to the department.
F5	0	Add no TAX.
	1	Add TAX1.
	2	Add TAX2.
	3	Add TAX1 and TAX2.
	4	Add TAX3.
	5	Add TAX1 and TAX3.
	6	Add TAX2 and TAX3.
	7	Add TAX1, TAX2 and TAX3.

NOTE

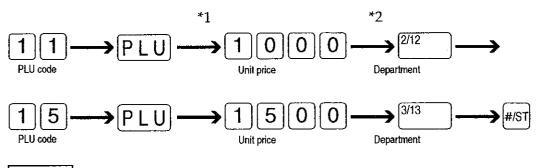
[■] The top zeros for F1 to F5 do not need to be entered. For example, you want to set "00010," enter "10."

3.6 Programming the PLU Function

This section describes the PLU function and how to program it. PLU is a function which allows departments to be subdivided. For example, with PLU, you can have different prices for one department. A maximum of 320 PLU codes can be programmed. To program a PLU code, you must enter a unit price and assign the department to which the PLU code belongs. When you enter a PLU code, the unit price which is programmed for the code is automatically recalled.

Programming PLU Codes

To program a PLU code, enter the unit price and assign it to a department. The following example shows how PLU code 11 and PLU code 15 are programmed. Unit prices of up to six digits can be used in a PLU code.

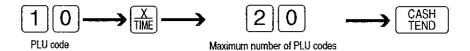


NOTE

- To enter a number of PLU codes at one time, repeat steps *1 and *2.
- To cancel a PLU code, enter PLU code number with PLU key, press the Dept key without entering a unit price and press the #/ST Key.

Setting the Maximum Number of PLU Codes

You can limit the number of PLU codes in use. The following example shows that only "20" PLU codes are allowed.



3.7 Tax Programming

You can program up to four types of tax to be added to each item. We call these four taxes TAX1, TAX2, TAX3 and TAX4. To program a tax, you must select a taxation system and enter the tax rate for that tax. For the instructions how to add these programmed taxes to an item, see "Setting Function Flags" in section 3.5, "Department Programming".

Selecting a Taxation System

Your cash register has three taxation systems. They are described as follows:

■ Add-on tax

This system calculates tax by using a tax rate you enter and it automatically adds the tax to the unit price or the price entered.

■ VAT

The Value Added Tax is a European tax system. It calculates tax by using the tax rate you enter and includes the calculated tax in the unit price or the price entered from the keyboard.

■ Tax table

This system calculates the tax by using a tax table that you enter. The tax table depends on the location of the store. Use the tax tables provided by the local tax office to enter the numbers. For instructions on entering a tax table, see "Tax Table" in this section.

To assign a taxation system to a tax (TAX1-TAX4), enter the tax number (1-4), press the **PO** Key, enter the number for the taxation system you want and then press the **CASH/TEND** Key.

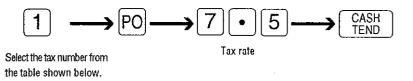
→ [$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
on from on below.	Select an option from the table shown below.	
Press:	То:	
5	Select TAX1	
6	Select TAX2	
7	Select TAX3	
8	Select TAX4	
0	Select Add-on tax	
1	Select VAT	
2	Select Tax table	
	Press: 5 6 7 8 0 1	Select an option from the table shown below. Press: 5 Select TAX1 6 Select TAX2 7 Select TAX3 8 Select TAX4 0 Select Add-on tax 1 Select VAT

NOTE

[■] You cannot assign the tax table system to TAX4.

Setting the Tax Rate

To set the tax rate for a tax (TAX1-TAX4), enter the tax number (1-4), press the **PO** Key, enter the rate and press **CASH/TEND** Key. Up to 99.9999% can be entered for the tax rate. The following example shows that 7.5 % has been entered for TAX1.

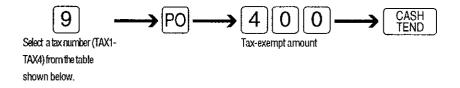


Press:	To:	
1	Select TAX1	
2	Select TAX2	
3	Select TAX3	
4	Select TAX4	

Maximum Tax-exempt Amount

If necessary, you can set a maximum Tax-exempt amount for a given tax number (TAX1-TAX4). If you enter "\$4.00" for TAX1, when you sell an item which TAX1 will be added to, up to "\$4.00" will be Tax-exempt.

To set a maximum Tax-exempt amount, select the tax number (TAX1-TAX4), press the **PO** Key, enter an amount and press the **CASH/TEND** Key. Up to \$999.99 can be made Tax-exempt. The following example shows that "\$4.00" is entered for TAX1.



Press:	To:	
9	Select TAX1	
10	Select TAX2	
11	Select TAX3	
12	Select TAX4	

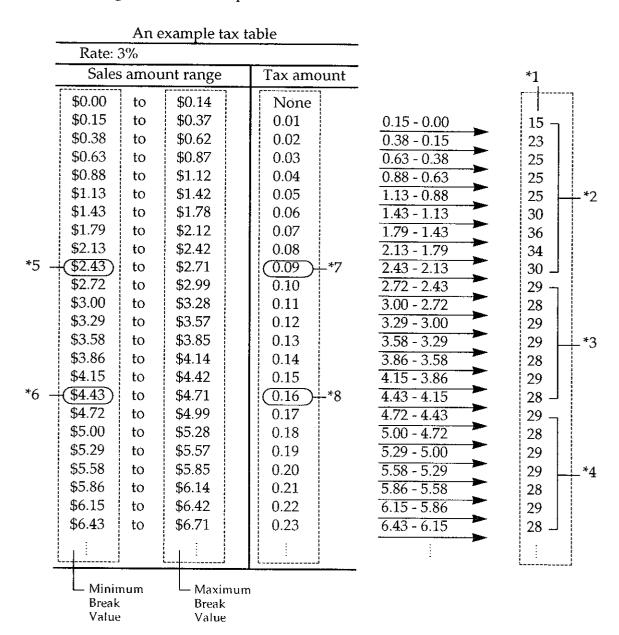
Entering a Tax Table

If you select the "tax table system" for a tax number (TAX1-TAX3), you must enter a tax table for that tax. Enter the tax table provided by the local tax office.

About tax tables

A Tax table is a table which lists the applicable taxes for the amount of a sale. These can include city, state and federal taxes. The table lists sales amount ranges, and the tax to be levied on each amount, as a range of sales prices. Your cash register enables you to enter this table and then it will automatically calculate the tax.

The following table is an example of a state tax table.



3 Programming

The tax table includes the following items:

■ Tax rate

■ Sales amount range

This range is the range of prices to which the tax amount given must be added. The minimum amount of each range is called the minimum break value, and the maximum amount is called the maximum break value.

■ Tax amount

This is the amount of tax that must be added to each sale within the corresponding range.

To enter the tax table, follow the steps below by using the items mentioned above.

- 1. Find the following items using the sample table:
- a) Minimum break difference

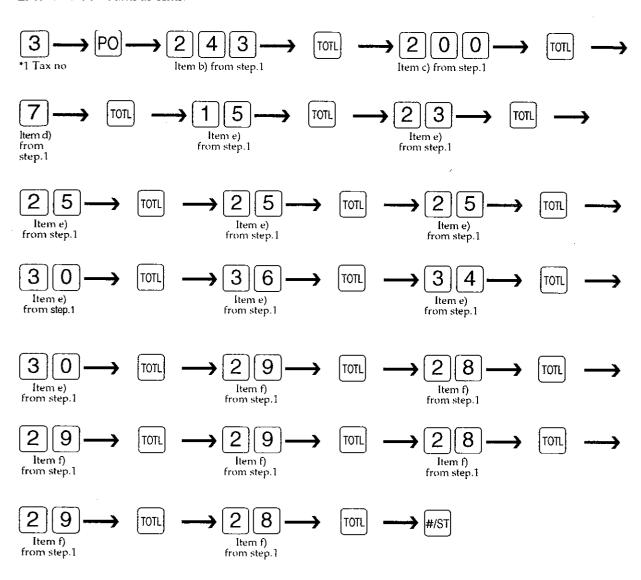
This is the difference between the minimum break value of a range and the next minimum break value (marked with *1). Find the irregular cycles (marked with *2) and the regular cycles (marked with *3 and *4) for the minimum break values.

- b) The first minimum break value in a regular cycle (marked with *5)
- c) The difference between the first minimum break value (marked with *5) and the last one (marked with *6) for the first regular cycle
- d) The difference between the first tax amount (marked with *7) and the last one (marked with *8) for the first regular cycle
- e) The values of the irregular cycle (marked with *2)
- f) The values of first regular cycle (marked with *3)

2. Use the items found in step 1 and enter them as follows:

NOTE

Enter all the amounts as cents.



NOTE

■ The applicable tax rate and "tax table system" must be set for the tax number which is used in this sequence (marked with *1). For the instructions of these settings, see "Setting the Tax Rate" and "Selecting a Taxation System" in section 3.7, "Tax Programming."

Canadian Taxation System

In Canada, there are two types of tax: the GST and PST. GST are taxes collected by the country. PST are taxes collected by the province. How the GST and PST are added to an item depends on the item. There are two methods as follows:

a) First, the GST is calculated, based on the cost of the item. Then the PST is calculated, based on the total cost of the item, including the GST which has already been added. For example, if a PST of 10% is calculated on a Department 1 item (originally \$10.00) to which a 7% GST has already been added, first the 7% (\$0.70) is added to reach \$10.70. Then the 10% PST (\$1.07) is added to the \$10.70 to arrive at \$11.77.

b)The GST and PST are added to an item separately, based only on the original price of the item. For example, if a 10% PST and a 7% GST are added to a Department 1 item (originally \$10.00), 10% (\$1.00) and 7% (\$0.70) are each added separately to the \$10.00, making a total of \$11.70.

To select the taxation system used in Canada, and to choose method a) or b), set System Flag 20, described in section 3.10, "Setting System Flags". If you select the Canadian taxation system, TAX1 will be used for GST, and TAX2, TAX3 and TAX4 are used for PST, automatically. You can also set the GST (TAX1) so that it is included in the PST, by setting System Flag 21, as described in section 3.9.

3.8 Programming the [-] Key, [+%] Key, and the [-%] Key

This section describes how to program the [-], [+%] and [-%] Keys. These keys are used for discounting or adding a premium to the price of an item.

Programming the [-] Key

The [-] Key is used to discount a certain amount. You can enter the discount amount and change the function flags settings for this key. You can use this key with a preset discount amount or by entering a discount amount on the keyboard.

Setting the Discount Amount

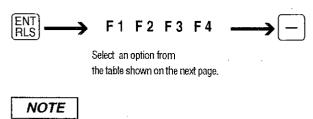
You can enter a discount amount up to seven digits long. The following example shows that the [-] Key is set for a discount of "\$0.50".



Setting Function Flags

There are three function flags you can set for the [-] Key. For function flags details, see "Setting the Function Flags" in section 3.5, "Department Programming".

To set the function flags for the [-] Key, press the **ENT/RLS** Key, enter the selected option number for each flag and press the [-] Key.



■ In the default setting, F1 to F4 are all zeros.

3 Programming

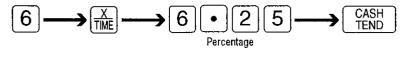
Flags	Press:	To:
F1	0 to 6	Set a limit on the number of digits that can be entered with the [-] Key. If you enter 1 to 6, the limit is set for one to six digits. If you enter 0, seven digits can be entered.
F2	0	Always enter 0.
F3	0	Do not add TAX4 to the discount amount calculated with this key.
	1	Add TAX4 to the discount amount calculated with this key.
F4	0	Add no TAX to the discount amount calculated with this key.
	1	Add TAX1 to the discount amount calculated with this key.
5	2	Add TAX2 to the discount amount calculated with this key.
	3	Add TAX1 and TAX2 to the discount amount calculated with this key.
	4	Add TAX3 to the discount amount calculated with this key.
	5	Add TAX1 and TAX3 to the discount amount calculated with this key.
	6	Add TAX2 and TAX3 to the discount amount calculated with this key.
	7	Add TAX1, TAX2 and TAX3 to the discount amount calculated with this key.

Programming the [+%] and [-%] Keys

The [+%] and [-%] Keys are used to add or subtract a percentage of the price of an item. For example, you can use the [+%] Key to add a premium, and the [-%] Key to give a discount. You can enter the percentage and change the function flags settings for these keys. You can use these keys with a preset percentage or you can enter the percentage from the keyboard at the time of the sales transaction.

Setting the Percentage

You can enter a preset percentage (up to 100.0000%) for the [+%] and [-%] Key. The following example shows how to set the [-%] Key for a discount of "6.25%."



NOTE

■ To set the percentage for the [+%] Key, press 5 instead of 6 before pressing the X/TIME Key.

Setting Function Flag

There are three function flags you can set for the [+%] or [-%] Keys. For function flags details, see "Setting the Function Flags" in section 3.5, "Department Programming". To set the function flags for the [-%] Key, do the following:



NOTE

- To set the flags for the [+%] Key, press 7 instead of 8, before pressing the X/TIME Key.
- The default for F1, F2 and F3 is zero.

Flags Press:		To:	
F1	0	Add or subtract the amount calculated with this key to or from the total original price of the items. When this setting is enabled, taxes are calculated based on the first price after the calculations from this key operation have been performed. The settings in F2 and F3 are ignored.	
		Add or subtract the amount calculated with this key to or from the total original price of items. When this setting is enabled, taxes are added as follows: Any tax which is specified in F2 or F3 is calculated based on the first price after the calculations from this key operation have been performed.	
		Any tax which is not specified in F2 or F3 is calculated directly on the original price of the item.	
F2	0	Do not specify TAX4.	
	1	Specify TAX4.	
F3	0	Specify no TAX.	
	1	Specify TAX1.	
	2	Specify TAX2.	
	3	Specify TAX1 and TAX2.	
	4	Specify TAX3.	
	5	Specify TAX1 and TAX3.	
	6	Specify TAX2 and TAX3.	
	7	Specify TAX1, TAX2 and TAX3.	

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3.9 Setting System Flag

■Flag 1

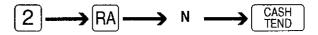
This flag allows you to select the number of decimals to be displayed and printed on a receipt, and to select the method used for registering multiple items.



Press:	To display and print:	register:	
0	0	First enter the unit price, then enter the quantity	
1	0.0	First enter the unit price, then enter the quantity	
2	0.00	First enter the unit price, then enter the quantity	
3	0.000	First enter the unit price, then enter the quantity	
4	0	First enter the quantity, then enter the unit price	
5	0.0	First enter the quantity, then enter the unit price	
6	0.00	First enter the quantity, then enter the unit price	
7	0.000	First enter the quantity, then enter the unit price	

■ Flag 2

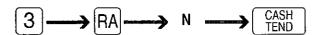
This flag allows you to select the printing format for the date.



Press:	To print:	
0	Year, month, date, in that order.	
1	Date, month, year, in that order.	
2	Month, date, year, in that order.	

■ Flag 3

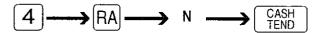
This flag allows you to select the method used for rounding in percentage and multiplication calculations. The point at which rounding takes place depends on the Flag 5 setting.



Press:	To select:	
0	Round down (0.1 to 0.9 becomes 0.0) The rounding point may be changed by Flag 5.	
5	Rounding (0.1 to 0.4 becomes 0.0, 0.5 to 0.9 becomes 1.0)	
9	Round up (0.1 to 0.9 becomes 1.0)	

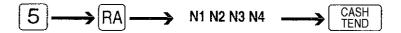
■ Flag 4

This flag allows you to select method used for rounding in tax calculations. The point at which rounding takes place depends on the Flag 5 setting.



Press:	To select:	
0	Round down (0.1 to 0.9 becomes 0.0)	
	The rounding point may be changed by Flag 5	
5	Rounding (0.1 to 0.4 becomes 0.0, 0.5 to 0.9 becomes 1.0)	
9	Round up (0.1 to 0.9 becomes 1.0)	

■ Flag 5

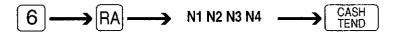


Options	Press:	To:	See page:
N1	0	Do not enter a number.	_
N2	0	Disable the Swiss method of rounding For information about the Swiss method, consult your dealer.	40
	1	Enable the Swiss method of rounding	40
N3	0	Select the first digit in the decimal to be rounded in tax calculations.	-
-	1	Select the last digit to be rounded in tax calculations.	-
N4	0	Select the first digit in the decimal to be rounded in percentage and multiplication calculations.	-
	1	Select the last digit to be rounded in percentage and multiplication calculations.	-

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■ Flag 6



Options	Press:	To:	See page:
N1	0	Print the quantity of each item sold on the receipt and the journal.	<u>.</u>
	1	Do not print the quantity of each item sold.	-
N2	0	Print the transaction number (Consecutive number) on the receipt and the journal.	16
	1	Do not print the transaction number on the receipt and the journal.	16
N3	0	Print the date on the receipt and journal.	16
	1	Do not print the date on the receipt and journal.	16
N4	0	Print the time on the receipt and journal.	16
	1	Do not print the time.	16

■ Flag 7



Options	Press:	To:	See page:
N1	0	Do not print the individual tax amounts on the receipt and journal.	-
	1	Print the individual tax amounts on the receipt and journal.	~
N2	0	Do not print the amount which the tax is added to.	
	1	Print the amount which the tax is added to.	
N3	0	Do not print the Value Added Tax (VAT) on the receipt and journal.	21,56
	1	Print the Value Added Tax (VAT) on the receipt and journal.	21,56
N4	0	Do not print the amount excluding VAT for items which include VAT.	21, 56
	1	Print the amount excluding VAT for items which include VAT.	21, 56

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■ Flag 8



Options	Press:	To:	See page:
N1	0	Print the non taxable amounts, on the X/Z reports.	64
	1	Do not print the non taxable amounts, on X/Z reports.	64
N2	0	Print the gross sales on the reports.	65
	1	Do not print the gross sales on the reports.	65
N3	0	Print a grand total amount on the reports.	65
···	1	Do not print a grand total amount on the reports.	65
N4	0	Print voided amounts and so on, on the reports.	65
	1	Do not print voided amounts and so on, on the reports.	65



Options	Press:	To:	See page:
N1	0	Printing j mark.	-
	1	Printing 1, 1 mark.	-
N2	0	2nd Receipt issue by TOTL key depends on N3.	51
	1	2nd Receipt issue by TOTL key is prohibited regardless of the Receipt On/Off mode.	51
N3	0	2nd Receipt issue by TOTL key is enabled when the register is in Receipt Off mode.	51
	1	2nd Receipt issue by TOTL key is enabled regardless of the Receipt On/Off mode.	51
N4	0	Enable printing the tax symbol "TX".	-
	1	Disable printing the tax symbol "TX".	-

3 Programming

■ Flag 10



Options	Press:	To:	See page:
N1	0 1	Select the journal mode. Select the receipt mode.	-
N2	0	Print the department total sales amount as a net amount on the report: the total amount not including calculations made with the [-] Key.	64
	1	Print the department total sales amount as a gross amount on the report: the total amount including calculations made with the [-] Key.	64
N3	0	Print the department total sales amount as a net amount on the report: the total amount including calculations made with the [+%] and [-%] Keys:	64
	1	Print the department total sales amount as a gross amount on the report: the total amount not including calculations with the [+%] and [-%] Keys.	64
N4	0	Disable pressing another clerk ID password during operation.	42
	1	Enable pressing another clerk ID password during operation.	42

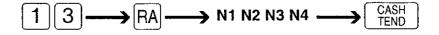


Options	Press:	To:	See page:
N1	0	Do not automatically add the preset percentage for the [+%] Key to the sales amount.	28
	1	Automatically add the preset percentage for the [+%] Key to the sales amount.	28
N2	0	Print the grand total as a net sales amount on the Z report: the report which is issued after resetting the sales.	-
	1	Print the grand total as a gross sales amount on the Z report: the report which is issued after resetting the sales.	_
N3	0	Print the number of transactions on the hourly report.	67
	1	Print the number of items on the hourly report.	67
N4	0	Enable setting, the maximum number of PLUs to be used is 320. (exculding periodic report).	20
	1	Enable setting, the maximum number of PLUs to be used is 160. (including periodic report)	20

■ Flag 12



Options	Press:	To:	See page:
N1	0	Enable registering transactions which more than one media is received, for example, cash and a check (Split tendering).	53
	1	Disable registering transactions which more than one media is received.	53
N2	0	Enable registering the amount received from a customer and the calculation of the change.	52
	1	Disable registering the amount received from a customer.	52
N3	0	Do not require the amount received from a customer to be registered. (Compulsory tendering)	53
	1	Require the amount received from a customer to be registered.	53
N4	0	Disable registering items whose price is entered as 0.	_
	1	Enable registering items whose price is entered as 0.	_



Options	Press:	To:	See page:
N1	0	Print the time, transaction number, machine number, clerk, in the order at trailer.	
	1	Print the time, transaction number, machine number, clerk, in the order at header.	
N2	0	Enable to issue cash in drawer report.	67
	1	Disable to issue cash in drawer report.	67
N3	0	Skip printing items whose price is entered as 0 on the reports.	
	1	Print items whose price is entered as 0 on the reports.	-
N4	0	Skip printing PLU items whose sales amount as 0 on the reports.	67
	1	Print PLU items whose sales amount as 0 on the reports.	67

3 Programming

■ Flag 14



<u>Options</u>	Press:		See page:
N1	0	Print the report number on the periodic report which is issued after resetting (Z2 report).	
	1	Do not print the report number on the periodic report which is issued after resetting (Z2report).	41
N2	0	Print the report number of the daily report which is issued after resetting (Z1 report).	41
	1	Do not print the report number of the daily report which is issued after resetting (Z1 report).	41
N3	0	Print the report number of the periodic report (X2 report).	64
	1	Do not print the report number of the periodic report (X2 report).	64
N4	0	Print the report number which shows the number of counts of printing the daily report (X1 report).	64
	1	Do not print the report number on the daily report (X1 report).	64



Options	Press:	To:	See page:
N1	0	Make a key stroke sound.	-
	1	Do not make a key stroke sound.	_
N2	0	Open the drawer when you press the CASH TEND Key.	-
	1	Do not open the drawer when you press the CASH TEND Key.	
N3	0	Open the drawer when you press the CHRG Key.	-
	1	Do not open the drawer when you press the CHRG Key.	-
N4	0	Open the drawer when you press the CHKS Key.	-
	1	Do not open the drawer when you press the CHKS Key.	-

■ Flag 16



Options	Press:	To:	See page:
N1	0	Print the training information on the receipt.	
	1	Do not print the training information on the receipt.	
N2	0	Print the training mode symbol "." on the receipt while in the operator training mode.	68
	1	Do not print the training mode symbol "." on the receipt while in the operator training mode.	68
N3	0	Enable reports for training (Net total)	68
	1	Disable reports for training(Net total)	68
N4	0	Do not count the training operations as transaction numbers.	62
	1	Count the training operations as transaction numbers.	62
		0.1.	- 1

■ Flag 17



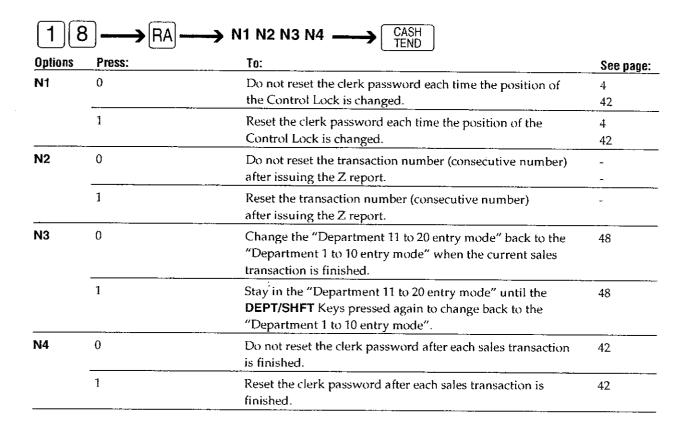
Options	Press:	To:	See page:
N1	1	Set 8 line feed after finished sales transaction.	
N2	1	Set 4 lines feed after finished sales transaction.	-
N3	1	Set 2 lines feed after finished sales transaction.	-
N4	1	Set 1 lines feed after finished sales transaction.	-

NOTE

■ Actual number of line feed is total set from N1 to N4.

3 Programming

■ Flag 18



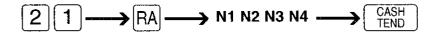
Options	Press:	To:	See page:
N1	0	Enable pressing just the #/ST Key.	59
	1	Disable pressing just the #/ST Key.	59
N2	0	Enable pressing the #/ST Key immediately after entering numeric Keys.	59
	1	Disable pressing the #/ST Key immediately after entering numeric Keys.	59
N3	0	Add PST to net tax exempt amount which includes GST This setting is valid only when you select "1" for N4. (See Canadian taxation system (b)	
	1	Add PST to gross tax exempt amount which does not includes GST This setting is valid only when you select "1" for N4. (See Canadian taxation system (a)	
N4	0	Do not select the Canadian taxation system.	26
	1	Select the Canadian taxation system.	26

■ Flag 20



Options	Press:	To:	See page:
N1	0	Enable [-],[-%] key operation in register mode.	54
	1	Disable [-],[-%] key operation in register mode.	54
N2 0		Include TAX1 (GST) in TAX4 (PST): Only add TAX4 to items for which both TAX1 and TAX4 are set.	26
	1	Do not include TAX1 (GST) in TAX4 (PST): Add TAX1 and TAX4 respectively to any item for which TAX1 and TAX4 are set.	26
N3	0	Include TAX1 (GST) in TAX3 (PST): Only add TAX3 to items for which both TAX1 and TAX3 are set.	26
	1	Do not include TAX1 (GST) in TAX3 (PST): Add TAX1 and TAX3 respectively to any item for which TAX1 and TAX3 are set.	26
N4	0	Include TAX1 (GST) in TAX2 (PST): Only add TAX2 to any item for which both TAX1 and TAX2 are set.	26
	1	Do not include TAX1 (GST) in TAX2 (PST): Add TAX1 and TAX2 respectively to any item for which TAX1 and TAX2 are set.	26

■ Flag 21



Options	Press:	To:	See page:
N1	0	Enable RA/PO operation in register mode.	+
	1	Disable RA/PO operation in register mode.	<u>.</u> .
N2	0	Print Net Tax amount on clerk report.	_
	1	Print the number of Non-sale and Non-sale amount on clerk report.	-
N3	0	Do not compulsory cash declaration when you isuue X report.	, <u>+</u>
	1	Compulsory cash declaration when you issue X report.	-
N4	0	Always enter "0".	·
	1	Always enter "0".	

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3.10 Programming Other Functions

Disabling the Return and Void Function

You can disable the use of both the **RET** and **VOID** Keys. To disable these keys, do the following:

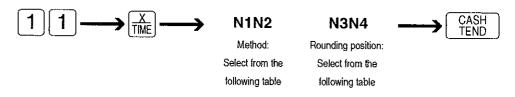
- 1. Turn the control lock to the "X" position.
- 2. Press the 1 Key and then press the VOID Key.

To re-enable their use, do the following:

- **1**. Turn the control lock to the "X" position.
- 2. Press the 9 Key and then press the VOID Key.

Rounding Method

Your cash register allows you to select the method used for rounding when a sales transaction is finished. There are five methods for rounding: round up, rounding (If the 0.00 is displayed and printed, 0.01 to 0.04 becomes 0.00, 0.05 to 0.09 becomes 0.10), round down, the Swiss method and the Danish method. For information about the Swiss and Danish methods, consult your dealer. Select the rounding method as follows:

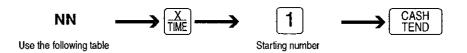


Press:	To:
00	Select rounding up.
04	Select rounding.
09	Select rounding down.
02	Select the Swiss method of rounding.
12	Select the Danish method of rounding.
10	Round the last digit.
05	Round the position according to the Swiss method of rounding.
25	Round the position according to the Danish method of rounding.
	00 04 09 02 12 10 05

[■] You can select the method of rounding to be used in calculating percentages, taxes and multiplications using System Flags described in section 3.9, "Setting System Flags".

The Starting Number of Reports

You can set the starting number used when printing a full report. There are four types of full report: X1, X2, Z1 and Z2. Once you set it, the number is increased by one each time a full report is printed out. You can enter a maximum of four digits(0-9999). For more information about X1, X2, Z1 and Z2, see chapter 7, "Reading and Resetting Sales Amounts". The following example shows how to enter "0001" for the starting number.



To:	
Set the starting number for the X1 report	
Set the starting number for the X2 report	
Set the starting number for the Z1 report	
Set the starting number for the Z2 report	
	Set the starting number for the X1 report Set the starting number for the X2 report Set the starting number for the Z1 report

The Grand Total

You can preset the grand total in the memory of your cash register. If you mistakenly initialize the cash register's memory, you can enter a grand total that you have written down. If you enter a grand total, all future sales will be added to it. To enter a grand total, first enter the most significant five digits, then enter the seven least significant digits (12 digits in all). Please note that four digits and then eight digits (also 12 digits) will be printed in sequence on the report generated when you check your program.

a)To enter 12345 for the first five digits, do the following:

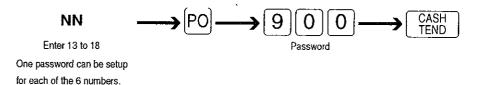
$$\begin{array}{c}
1 & 6 \longrightarrow X \\
\hline
\text{TIME} \longrightarrow 1 & 2 & 3 & 4 & 5 \longrightarrow CASH \\
\hline
First five digits
\end{array}$$
CASH TEND

b)To enter 6789000 for the next seven digits, do the following:

$$\begin{array}{c} 1 \\ 7 \\ \longrightarrow \\ \hline \text{TIME} \end{array} \longrightarrow \begin{array}{c} 6 \\ 7 \\ \hline \end{array} \begin{array}{c} 8 \\ 9 \\ \hline \end{array} \begin{array}{c} 0 \\ \hline \end{array} \begin{array}{c} 0 \\ \hline \end{array} \begin{array}{c} O \\ \hline \end{array} \longrightarrow \begin{array}{c} CASH \\ TEND \\ \hline \end{array}$$

Clerk Password

You can have a maximum of six different clerk passwords which will allow operators to operate the cash register in the "R" mode. If you enable the use of passwords, an operator cannot operate the cash register without entering a correct password. Passwords can contain four digits. In the "R" mode, an operator can operate the cash register after entering a valid password and pressing the **ID** Key.



Manager's Password

You can enter a manager's password which will allow you to operate the cash register in the "P", "X" and "Z" modes. After you program in a manager's password, you cannot operate the cash register in those modes without entering the correct password. The password can contain four digits. In the "P", "X" and "Z" modes, you can operate the cash register after entering a valid password and pressing the **ID** Key. If you don't need to perform operations in the "P", "X" and "Z" modes, you can still operate the cash register by pressing the **ID** Key and entering a valid clerk password.



To access the Manager's password, the key sequence is:

$$9999 \longrightarrow \square$$

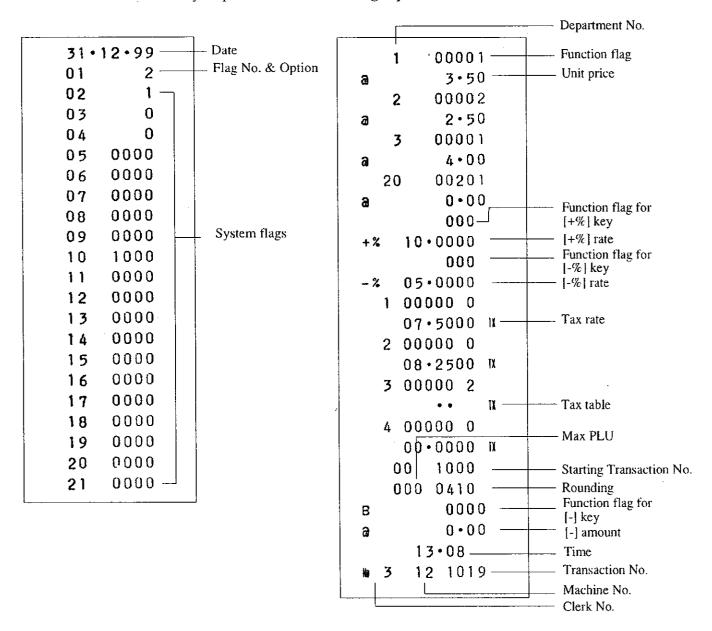
3.11 Checking the Contents of Your Programming

When you have finished all the programming you need to do, or anytime while you are programming the cash register, you can check the contents of your program. To check the contents, request a report which prints out the programming contents.

You can issue four types of reports to check the contents of your program. The following receipts are examples of these report types. Before trying to print one of these reports, make sure the control lock is in the "P" position.

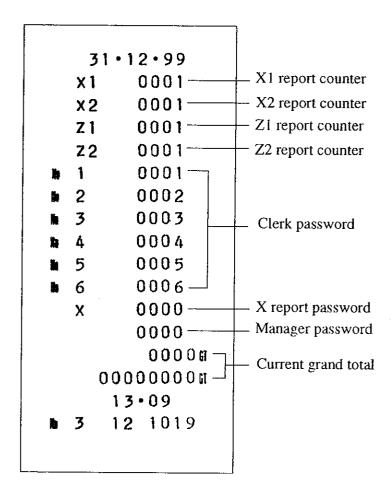
An example of a report for checking system flags, departments, [-], [-%] and [+%] Keys assignments and settings, tax settings, etc.

Press the **CASH/TEND** Key to print out the following report:



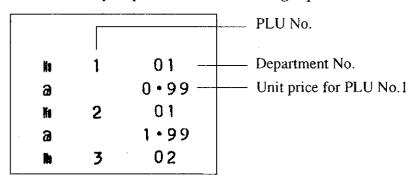
An example of a report for checking the starting report number, passwords, currency exchange key, optional keys etc.

Press the **CHRG** Key to print out the following report:



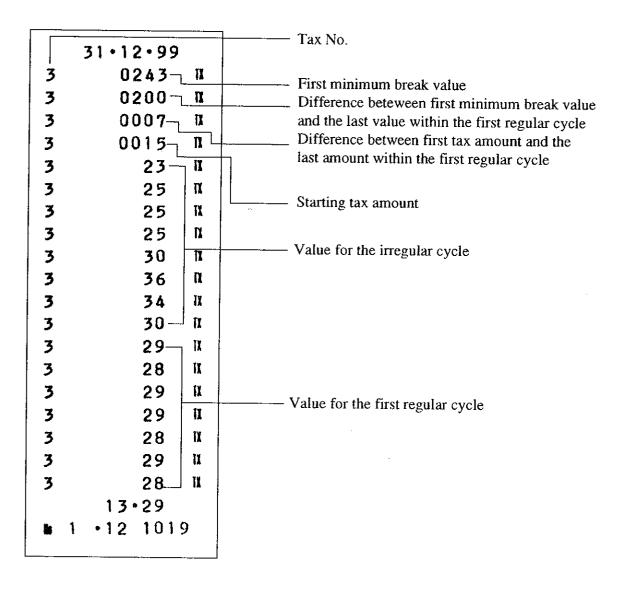
An example of a report for checking PLU settings

Press the **PLU** Key to print out the following report:



An example of a report for checking the Tax table settings

Enter the tax number which tax table is assigned to, press the **PO** Key and then press the **SUB/TOTL** Key to print out the following report:



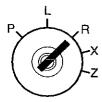
4 Cash Register Operation

This chapter presents examples of cash register operation and shows example receipts.

4.1 Before Operating Your Cash Register

Before operating your cash register, you must do the following:

- Make sure all the programming you need to do is complete. For various programming instructions, see Chapter 3, "Programming."
- Make sure that the paper roll is set in the correct positions. See section 2.3, "Installing and Removing a Paper Roll."
- To select the "Register mode," insert the manager's key or operator's key into the control lock and turn it to the "R" position. For more information about the control lock, see the "Control Lock" in section 1.3, "Part Names and Functions"



■ If the clerk password function has been enabled, enter the password using the numeric keys and press the ID Key. If you don't, an error code will appear.

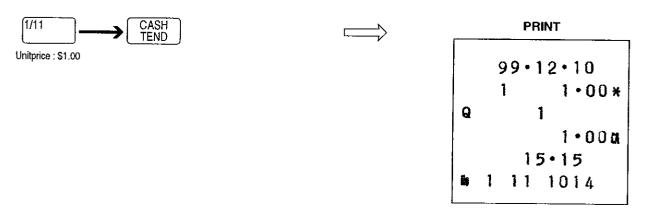
If an error code appears during operation, press the **C** Key to clear it and start the operation again. If the cash register hangs (won't accept any key presses), reset the cash register computer system as described in section 3.1, "Before Programming."

4.2 Basic Operation

This section shows how basic cash register operation are performed: selling a single item, multiple item sales, etc.

Single Item Entries

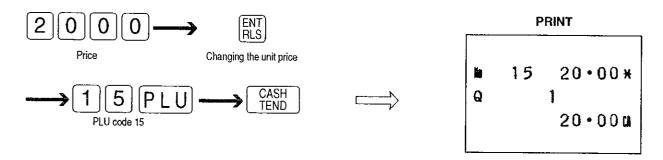
When you are registering a department item, press the department key or enter the price and then press the department key. If the preset unit price for the department is the correct price for the item, you do not need to enter the price. The following example shows that you are selling a Department 1 item for the unit price of \$1.00.



NOTE

■ When you want to register items for Departments 11 to 20, press the **DEPT SHFT** Key before pressing the Department Key you need. A period "" will appear on the display. While the "" is displayed, the department keys will enter the price for items in Departments 11 to 20.

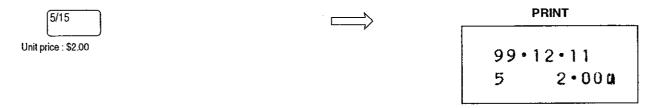
When you sell an item that has a PLU code, enter the PLU code and press the PLU Key. The unit price which is programmed for the code is automatically recalled. You can also temporarily change the unit price of a PLU code. To change the unit price, first enter the price and press the **ENT/RLS**. Then enter the PLU code and press the PLU Key. The following example shows how you sell an item PLU code 15 for \$20.00 which is not the unit price.



Single-Item Cash Sale

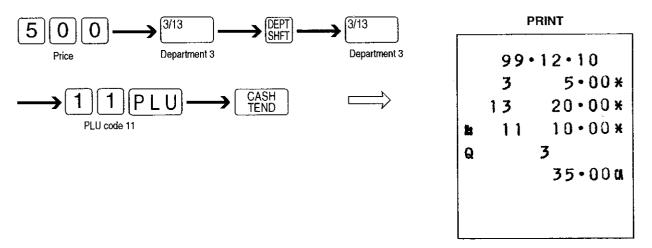
The single-item cash sale is a function which allows you to shorten the number of key strokes when registering a single item for a cash sale. To register an item as a "single-item cash sale", just press the department key. When you press a department key which has a "single-item cash sale" function, the transaction ends automatically without pressing the **CASH/TEND** Key. This function provides quick operation if your store sells a lot of items for cash. To use this function, the function flag must be set for the department. See "Setting Function Flags" in section 3.5, "Department Programming."

The following example shows how you sell a Department 5 (Unit price : \$2.00) item with the "Single-item cash sale" function.



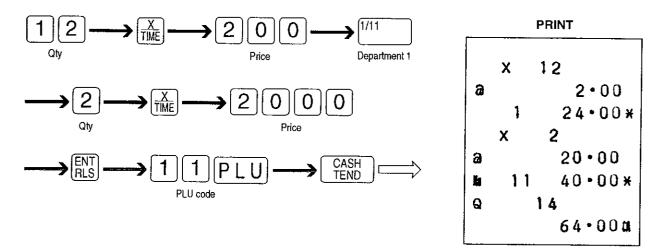
Multiple Item Entries

You can register a number of items in a single transaction. The following example shows how you sell a Department 3 item with a price of \$5.00, a Department 13 item for the unit price of \$20.00, and an item with PLU code 11 when PLU code 11 is programmed for the unit price of \$10.00.



Multiplication Entries

Your register can perform multiplication to register multiple identical items. The following example shows how you sell 12 of the same item for \$2.00 each and 2 of the same item with a PLU code 11.

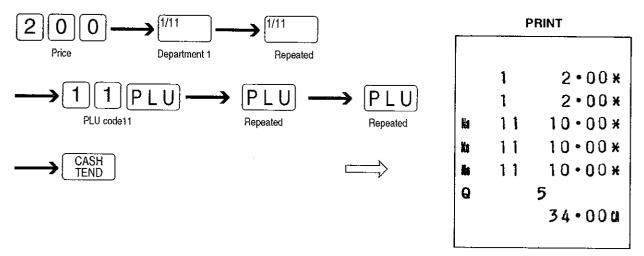


NOTE

■ If the system flag has been set for the "First enter unit price, then enter quantity" option, first enter the unit price, press the **X/TIME** Key, and then enter the number of the item. To select the order in which information is entered for multiplication, see "Flag 1" in section 3.9, "Setting System Flags."

Repeated Entries

Your register allows you to perform repeated entries. The following example shows how you can sell 2 of Department 1 items for \$2.00 each and 3 items with PLU code 11.



Displaying the Subtotal

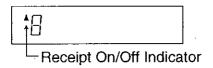
You can display the current subtotal during the sales transaction. Just press the #/ST Key.

4.3 Receipt On or Off Mode

You can control printing of receipts by setting your cash register in Receipt On or Off mode. The ID key works as Receipt On/Off key when it is pressed directly without any numeric key input. Each time you press an ID key directly, the Receipt On or Off mode will change.

Receipt On/Off Indicator

The triangle indicator on the left side of the display tube lights when the cash register is in Receipt Off mode. When the indicator is off, the cash register is in Receipt On mode.



NOTE

When you key in any number up to maximum of four digits followed by an ID key, the key works as Clerk Identification key (see page 42 for details).

Second Receipt (Receipt after Sale)

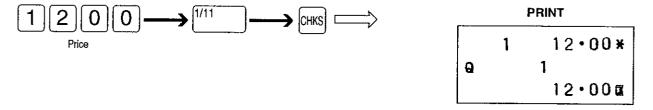
Even when the cash register is operating in Receipt Off mode, you can issue a receipt by pressing the **TOTL** key after a transaction is finalized (This feature is called 'Receipt after Sale'). Optionally, if the receipt is On, a second (additional) receipt may also be issued. Up to 31 lines at maximum can be printed on the Receipt after Sale.

4.4 Check and Charge

This section explains how to operate the cash register when you do not receive cash for the sale.

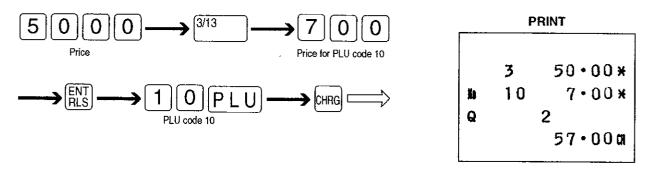
Check Sale

You can register sale paid by check with the **CHKS** Key. The following example shows how you enter the sales information when the customer pays by check for a \$12.00 item from Department 1.



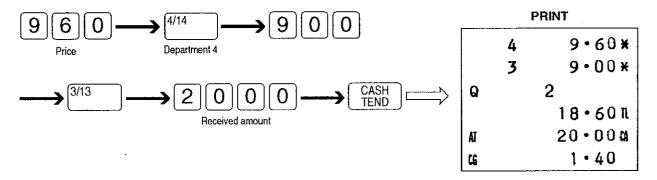
Charge Sale

When your customer charges his purchase, you can enter the sales amount charged by the customer with the **CHRG** Key. The following example shows that the customer is charging a \$50.00 item from Department 3 and a \$7.00 item with PLU code 10.



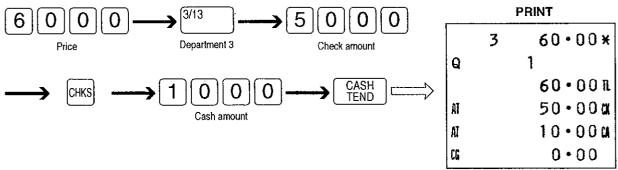
4.5 Change Calculations

Your register can calculate the change due when the amount received from a customer is more than the sales amount. The following example shows how you enter an amount of \$20.00 received from a customer when you are selling an item from Department 4 for \$9.60 and Department 3 for \$9.00.



4.6 Tendered Amount Entries

Your register allows you to enter the amount received from a customer. You can enter each of the amounts paid by cash, check or charge in a single sales transaction. The following example shows that the customer gives the operator a \$50.00 check and a \$20.00 bill for a \$60.00 total amount.



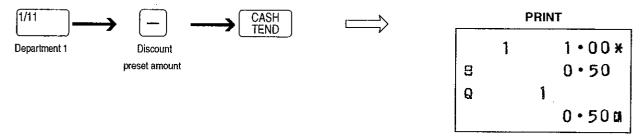
The cash register will show \$10.00 as the change to be given to the customer and the receipt will show a payment of \$50.00 by check and \$10.00 by cash.

4.7 Discounting with the [-] Key

This section describes how to operate the cash register when discounting a certain amount from the price of an item. You can either use the preset discount amount or you can enter the amount of the discount from the keyboard. For instructions about setting the discount amount, see section 3.8, "Programming the [-] Key, [+%] Key, and the [-%] Key."

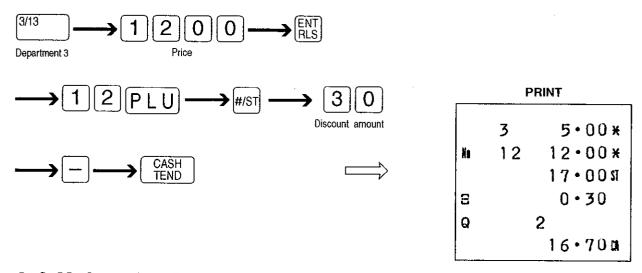
For Each Item

When you want to discount a preset amount from an item, do the following.



For the Total

When you want to discount an amount from the total amount, do the following.

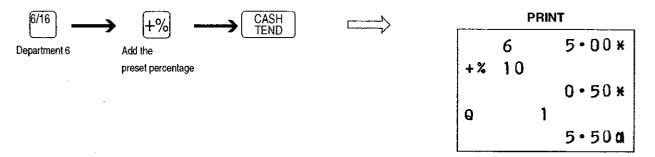


4.8 Using the [+%] Key and [-%] Key

This section describes how to operate the cash register when giving a percentage discount or adding a percentage to the price of an item. You can use the preset percentage or you can enter the percentage to use with numeric keys. For instructions about setting discount percentage amount, see section 3.8, "Programming the [-] Key, [+%] Key, and the [-%] Key."

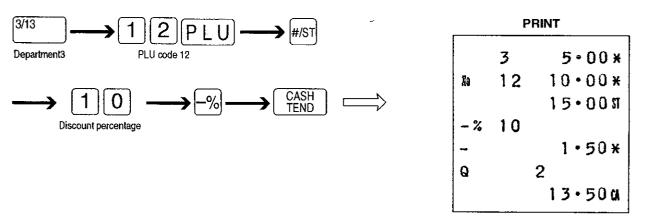
For Each Item

When you want to add a preset percentage to the price of an item, do the following.



For the Total

When you want to discount a percentage from the total amount, do the following.

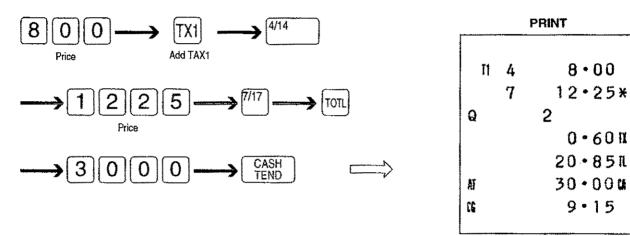


4.9 Tax Calculations

This section shows examples of selling items to which tax is added. For details about programming taxes, see section 3.7, "Tax Programming."

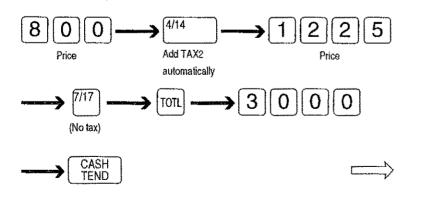
Add-on tax system

The following example shows how you sell a Department 4 item by manually adding TAX1 (Set for 7.5%) to its price and a Department 7 item to which you add TAX4 (Set for 5%).



VAT system

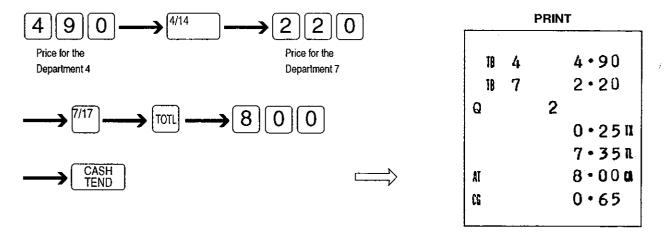
The following example shows how you sell a Department 4 item which has TAX2 (Set for 5%) included in the price actually shown on the receipt and a Department 7 item which does not.



		PRINT
12	4	8 • 00
	7	12.25*
Q		2
2		8 • 00 II
		0.381
		19 · 82 W
		20·25 N
AI		30 • 00 m
CG		9 • 7 5

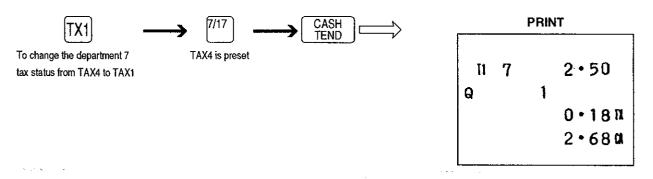
Tax table system

The following example shows how you sell a Department 4 item (TAX3 is added) and a Department 7 item (TAX3 is added). It is supposed that the TAX3 has been entered the Tax table shown on "Entering a Tax Table" in "3.7 Tax Programming" section.



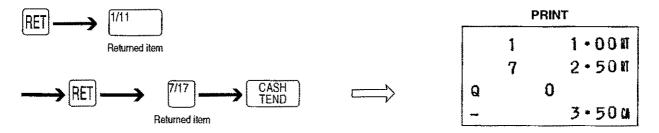
Tax Shift

You can change the current tax status of a department temporarily with the **NTX**, **TX1** or **TX2** Key. When you use the **NTX** Key, the department to which you have added a tax will be nontaxable. When you use the **TX1** or **TX2** Key, only **TAX1** or **TAX2** will be added to the department. If some taxes have been added to the department, they are not calculated. When you finish this tax shift transaction, the department's tax status will be reset. The following example shows that you change the tax status of Department 7 (TAX4).



4.10 Receiving a Returned Item

This section describes how to operate the cash register when your customer return an item which he or she has bought. If you register the item returned, it will be printed on the reports as a returned item and subtract the amount from the total sales amount. To register the returned item, do the following:

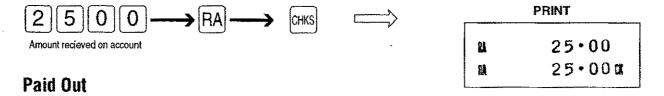


4.11 Received on Account and Paid Out

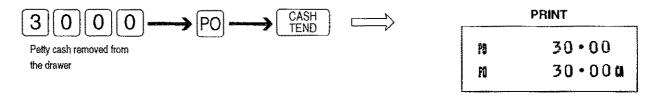
This section describes how to operate when you enter an amount received on account (RA) and a non-sales amount removed from the drawer (PO). For example, you can enter the amount which has been charged by a customer with the **RA** Key. And you can enter an amount of petty cash when the store opens with the **PO** Key. The RA or PO is entered either as cash or as check according to the media you received or paid. When the RA or PO is entered as cash, the mark "CA" will appear at the right of the mark "RA" or "PO", and as check, "CK" will appear.

Received on Account

The following example shows how you register the \$25.00 received on account by check.



The following example shows how you register the \$30.00 petty cash removed from a drawer.

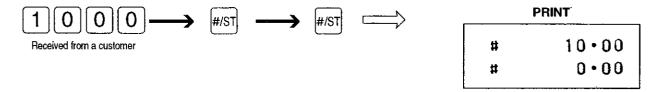


4.12 Changing Money and Opening the Drawer

This section explains how you operate when changing money. This section describes how to open the drawer without making a sale.

Changing Money

When a customer requests change, you can enter the amount received from the customer. The amount will be printed in the reports but it is not added to total sales amount.



Opening the Drawer

You can open the drawer without making a sale. To open the drawer, just press the **#/ST** Key.



NOTE

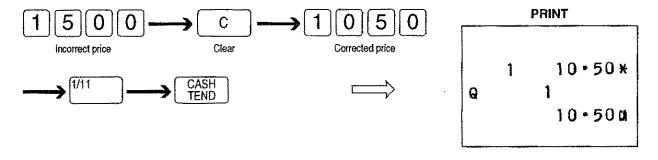
[■] You can also open the drawer with the lever on the bottom of the drawer. See section 8.2, "Opening the Drawer Manually."

5 Making Corrections

This chapter explains how to make corrections to sales information that has been entered or registered.

5.1 Correcting Numbers That Have Been Entered

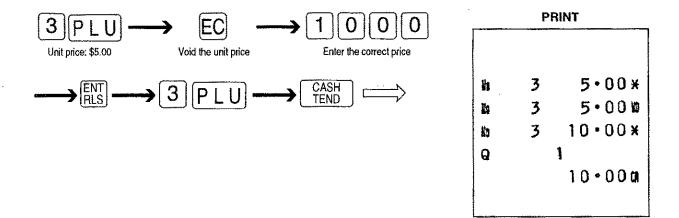
This cash register allows you to correct the numbers you enter with the numeric keys. To correct a wrong number, press the **C** Key immediately after entering the number. The following example shows how you correct a mistakenly entered amount.



NOTE

5.2 Voiding the Last Entry

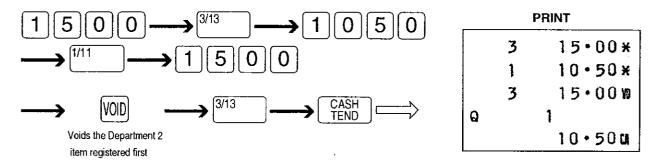
You can void an item you have registered immediately after you register it. To void the mistakenly registered item, press the **EC** Key immediately after registering the item. The following example assumes that you entered a PLU code using the \$5.00 of unit price when you wanted to change price. It shows how to void the registered unit price and enter the price you want.



[■] You cannot correct the number with the C Key after the department has been pressed.

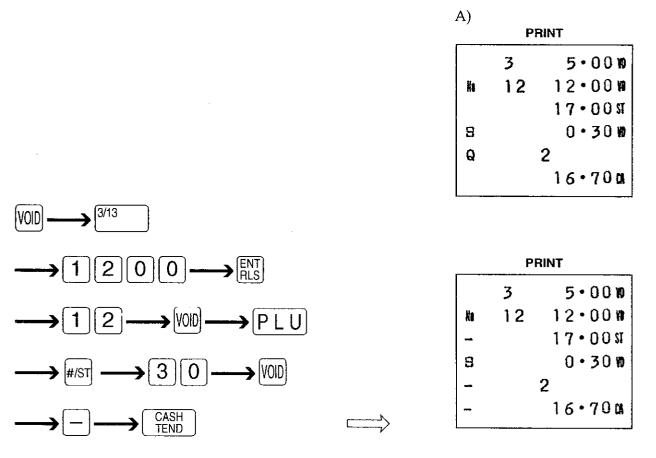
5.3 Voiding Earlier Entries

You can also void items you have registered prior to the last item. To void items entered earlier, use the **VOID** Key. The following example shows how to void the first item registered during this transaction.



5.4 Voiding a Sales After the Transaction Has Been Finalized

You can void a sales transaction registered earlier. To void the earlier sales transaction, use the **VOID** Key. The following example shows how you void the sales shown by the receipt "A".



6 Special Functions

This chapter describes various special functions of this cash register. The settings for these functions are described in section 3.9, "Setting System Flags."

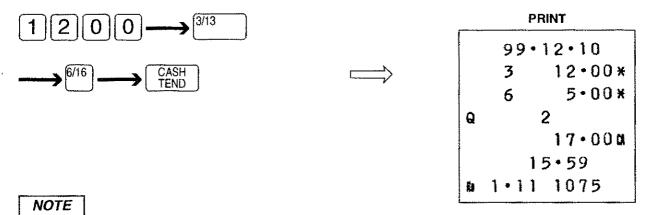
6.1Training Mode

This cash register allows you to train a operator to operate the cash register. To train a operator, first enter the training mode and then let the operator do simulated operations. When the training is finished, be sure to return to the normal operation mode.

To go to the training mode:

- **1**. Turn the control lock to the "X" position.
- **2**. Enter "11" and press the **CHRG** Key.
- **3**. Turn the control lock to the "R" position.
- 4. Start training.

The following example shows a simulated operation in training mode and the receipt printed by these operations.



■ The training symbol "*" will appear between the machine number and the clerk number on the receipt.

To leave the training mode:

- **1**. Turn the control lock to the "X" position.
- **2**. Enter "99" and press the **CHRG** Key.
- **3**. Turn the control lock to the "R" position.
- 4. Resume normal operation.

7 Checking and Resetting the Sales Information

This chapter describes how to check and reset the sales information and shows sample reports.

7.1 Overview of Checking and Resetting Sales Information

You can review daily sales information. There are two methods for checking this information: issue one of the seven types of reports (See Table "A") or you can display eight different totals without issuing a report (See Table "B"). The daily report for checking sales is called the "X1" report. To issue an X1 report, while in the "X" mode, press the key corresponding to the report you want, as shown in the table.

You can also check the information covering a certain period of time, such as by the week or by the month. To check the information from a certain period, issue an "X2" report (See Table "A") while in the "X" mode. Press the **ENT/RLS** Key and the corresponding key, as shown in the table.

After checking the sales information, you can reset it. In the "Z" mode, you can reset the daily and a certain periods of statistics. Then issue reports, such as the "Z1" (Daily) report and the "Z2" (fixed interval) reports. To reset them, in the "Z" mode, do the same way as issuing X1 and X2 reports (See Table "A").

Table "A" shows the types of report, the keys used to issue them, the symbols printed on each one, and the contents of each type. You cannot print any report marked with a dash "_"

7 Checking and Resetting the Sales Information

A)			
No. Type	Keys	Symbols for each report: X1 X2 Z1 Z2	Information contents:
1. Full	CASH TEND	1X1 2X1 1Z1 2Z1	All of the sales information such as the total sales amount, department sales, taxes, etc
2. PLU	PLU	1X2 (2X2)1Z2 (2Z2)	The PLU sales information
3. Hourly	X/TIME	1X3 - 1Z3 -	The sales information for each hour
4. Cash in Drawer	PO	1X4	Information about the cash and check in the drawer
5. Clerk	CHKS	1X5 2X5 1Z5 2Z5	The sales information for each clerk
6. Group	One of the Dept Keys	1X6 2X6	The sales information for each group

Туре	Keys	Symbols for each report:	Information contents:
*Training	TOTL/PRNT	1X0 2X0 1Z0 2Z0	The operation information from the
•			training mode

The following table "B" shows the types of total amounts that can be displayed. B) $\dot{}$

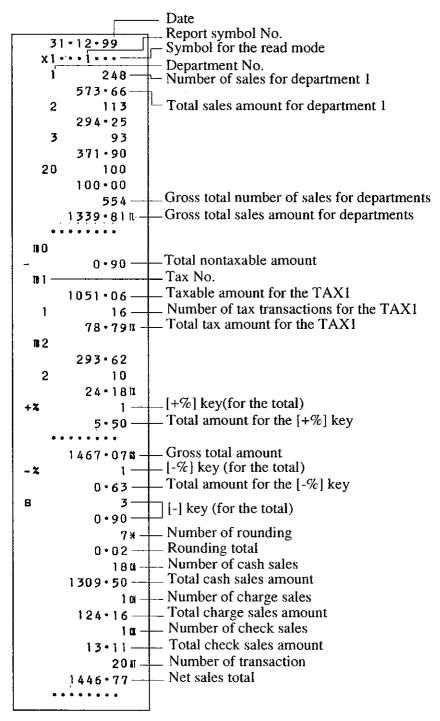
Press:	To display:	Press:	To display:
1 and X/TIME	Net sales total	5 and X/TIME	Non-sales item total
2 and X/TIME	Cash total	6 and X/TIME	RA total
3 and X/TIME	Change due total	7 and X/TIME	ΓO total
4 and X/TIME	Check total	8 and X/TIME	Cash in drawer total

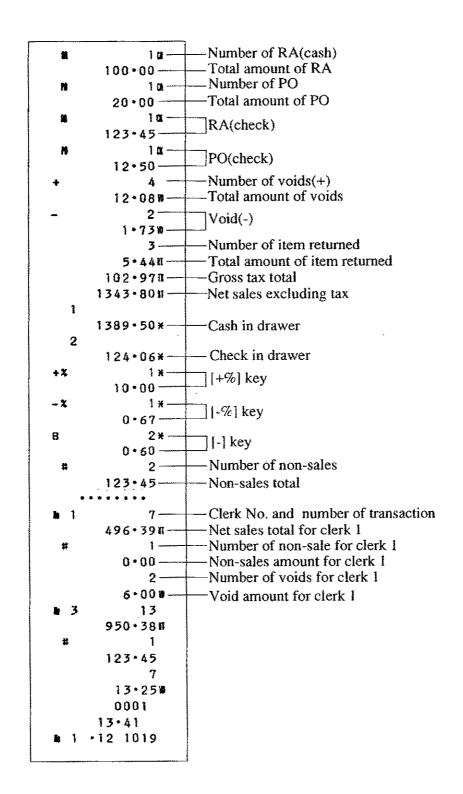
7.2 Sample Reports

The following examples show each type of X1 report. The printing format for each report can be set with the system flags described in section 3.9, "Setting System Flags."

■ Full report

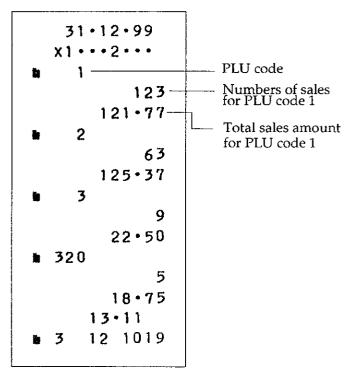
To issue this report, press the **CASH/TEND** Key while in the "X" mode.





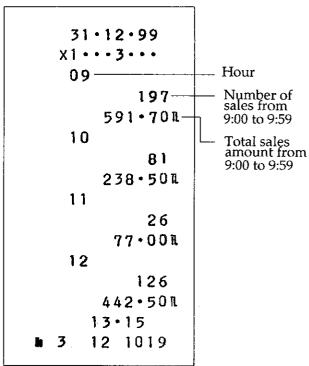
■ PLU report

To issue this report, press the **PLU** Key while in the "X" mode.



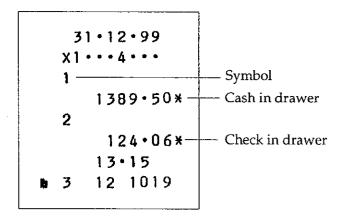
■ Hourly report

To issue this report, press the **X/TIME** Key while in the "X" mode.



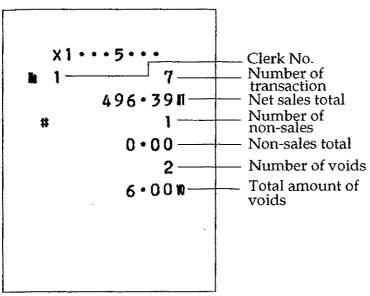
■ Cash in drawer report

To issue this report, press the **PO** Key while in the "X" mode.



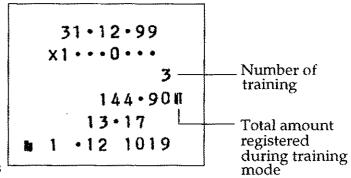
■ Clerk report

To issue this report, press the clerk No. (or clerk password) and **CHKS** Key while in the "X" mode.



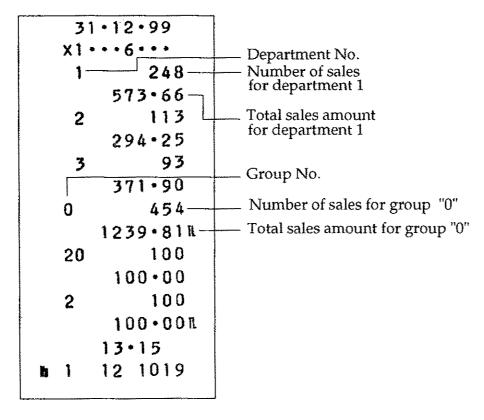
■ Training report

To issue this report, press the **TOTL** Key while in the "X" mode.



Group report

To issue this report, press any Department Key while in the "X" mode.

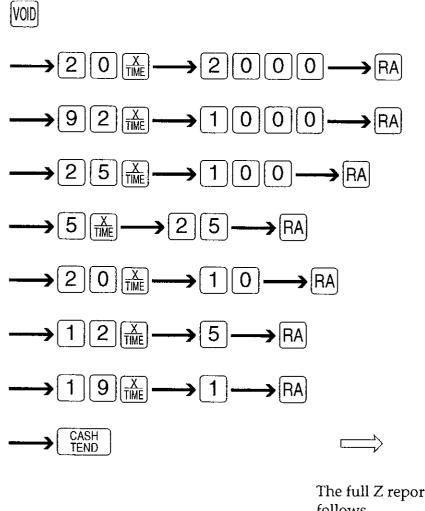


7.3 Declaring the Amount of Cash in the Drawer

Your cash register allows you to check the difference between the cash amount entered from the keyboard and the real cash amount stored in the drawer. To check the difference, before issuing the Full Z1 report, press the VOID Key and enter the real cash amount you counted. Then press the CASH/TEND Key to issue the Full Z1 report. You will see the difference between these amounts printed at the top of the Full Z1 report.

If you set Flag 21 to "Require entering the cash amount in the drawer before resetting the sales", you must enter the real cash amount before issuing the Full Z1 report. If you do not, an error will occur.

To check the difference, first press the #/ST Key to open the drawer and count the bills and coins in the drawer. The following example assumes that there are 20 \$20.00 bills, 92 \$10.00 bills, 25 \$1.00 bills, 5 quarters, 20 dimes, 12 nickels and 19 pennies. When you finished counting the real amount, do the following.



The full	Z report
ollows.	•

	PRINT	
	Z1 • • • 1 • • •	
	x 20	
a	20.00	
	400-00	
	X 92	
a	10.00	
	920 • 00	
	X 25	
а	1 • 00	
	25.00	
	X 5	
a	0 • 25	
	1 • 25	
	X 20	
а	0 • 10	ĺ
	2 • 00	
	X 12	
а	0.05	
	0 • 60	
	x 19	
a	0.01	ł
	0.19	
	1349 • 041	ij
	1349 • 040	ı
	0.00	
	• • • • • • •	
		١

8 Maintenance

This chapter explains the maintenance operations you can perform yourself.

8.1 Cleaning Your Cash Register

Clean the cash register with a dry, soft cloth. If it cannot be cleaned with a dry cloth, use a damp cloth after wringing it out well.

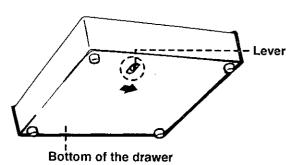
Do not use any volatile chemicals, such as benzine or thinner, or a chemically treated cloth. The cash register might be damaged.

8.2 Opening the Drawer Manually

In the event of a power failure or a problem with the cash register, the drawer may not open. To open the drawer manually, move the lever on the bottom of the drawer in the direction shown by the arrow in the drawing. (See the figure on the right.)

NOTE

If the drawer is locked, you cannot open it with the method described above.



8.3 Adding Ink to the Logo Stamp

If the Logo Stamp printing becomes faint, add ink to the stamp. Purchase the ink from your local dealer.

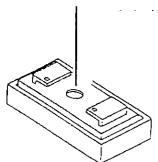
NOTE

- Use only the ink which your local dealer provides.
- Several hours after adding ink, the printing may become faint. Add ink after about ten hours of constant use.
- Do not add excess ink and do not put ink on the Ink roller.

To add ink to the stamp:

- 1. Open the printer cover.
- **2**. Find the Logo Stamp in front of the paper despensor. Grab the plastic case of the stamp and pull it out.
- **3**. Pour two or three drops of ink through the holes on the bottom of the stamp.
- **4**. Replace the stamp.

Pour ink through this hole



8.4 Replacing the Ink Ribbon

If the receipt printing becomes faint, replace the ink roller with a new one. Purchase these from your local dealer.

To replace the ink ribbon:

- 1. Open the printer cover.
- 2. Grab the paper roll divider and lift it up.
- **3**. Grab the plastic cover of the ink ribbon and take it off.
- **4**. Hold the new ink ribbon and place it along with paper guide. (See Fig.1.)
- **5**. Set the paper roll divider and close the printer cover.

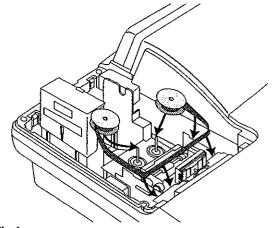


Fig.1

8.5 In Case of a Paper Jam

If a paper jam occurs, remove the paper roll as explained in "Removing the Paper Roll" in section 2.3, "Installing and Removing the Paper Roll". If you cannot clear the jam, please contact your local dealer.

CAUTION

■ Do not remove the jammed paper with a sharp instrument. You may scratch the printer.

8.6 Troubleshooting

If you have a problem while operating your cash register, refer to the following steps for a possible remedy.

Problem: Nothing is displayed in any mode.

Action: The power cord may not be plugged in. Turn the control lock to the "L" position, plug in the power cord, then turn the control lock to the required operating position.

See "Installing a Paper Roll" in section 2.3.

Problem: Sales transaction operations cannot be performed.

Action: ■ If the control lock is not in the "R" position, turn it to the "R" position.

See "Control Lock" in section 1.3.

- If you enabled clerk passwords, you must enter a valid password and press the ID Key. See "Clerk Password" in section 3.11.
- If the clerk key assigned to you has not been pressed, press it.

See "4.1 Before Operating Your Cash Register."

Problem: The paper does not rotate or not issued.

Action: Make sure the take-up reel is placed correctly on the support.

■ If a paper jam occurs, remove the paper roll.

See "2.3 Installing and removing a Paper Roll."

Problem: A paper jam occurs.

Action: Make sure the paper roll rotates in a correct direction.

■ Make sure the end of the paper inserted into the printer is cut correctly.

See "2.3 Installing and Removing a Paper Roll."

Problem: Printing is not performed correctly.

Action: Make sure the ink roller is in place.

■ Replace the ink roller.

See "8.4 Replacing the ink roller."

If you cannot solve your problem after reading and following the instructions above, reset the cash register computer system as described in "3.1 Before Programming" section. If the problem is not solved after resetting the system, turn the contribute to the "L" position and remove the power cord from the wall. Then contact your local dealer.