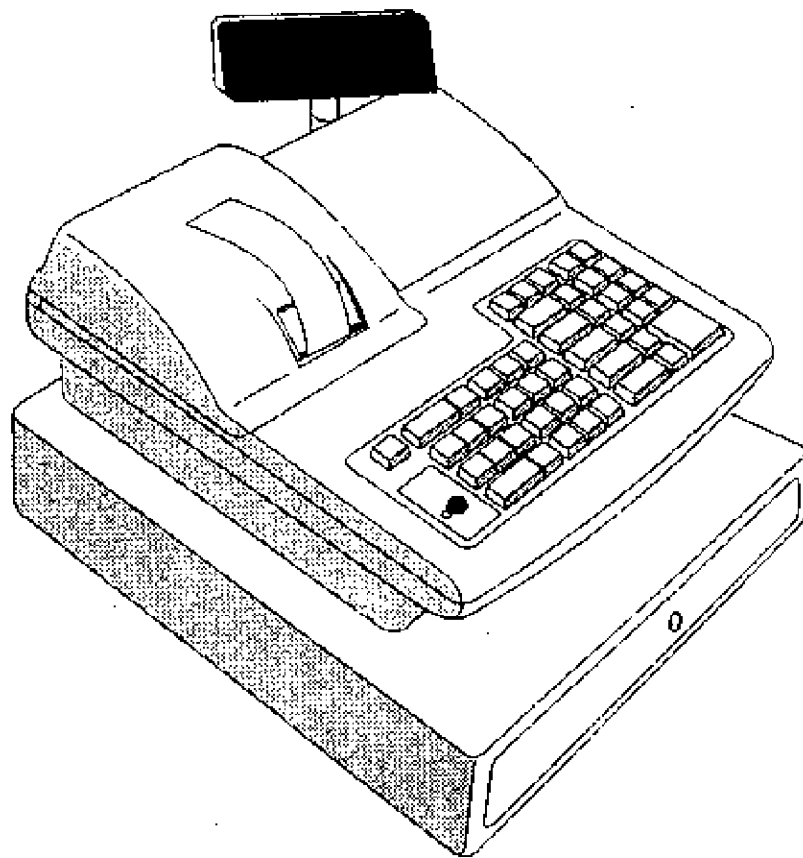


OPERATING MANUAL

ET-3510



NOTICE

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

While every precaution has been taken to make this manual accurate, the Manufacturer shall not be liable for any errors or omissions, nor for any damages resulting from the use of the information herein.

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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NOTICE

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 4 "Programming."

7. Operate the cash register.

Perform the sales transaction according to your programming.

→ See "Chapter 5 Cash Register Operation," "Chapter 6 Making Correction," and "Chapter 7 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 8 "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, AC220V, AC230V, AC240V $\pm 10\%$ Depends on the country
Power consumption	23W
Ambient operating temperature	32°F to 104°F (0°C to 40°C)
Memory	C-MOS RAM
Memory back-up time	Approx. 6 months
Printer	Dot-matrix printer
Printing speed	Approx. 2.5 lines per sec.
Paper roll	Width 57.5 mm (2.25 inches)
	Max diameter 60 mm (2.36 inches)
External dimensions	350mm (W) x 408mm (D) x 262mm (H) (13.7" (W) x 16.0" (D) x 10.3" (H))
Weight	7.5 kg (16.5 lb)

1.2 Precautions

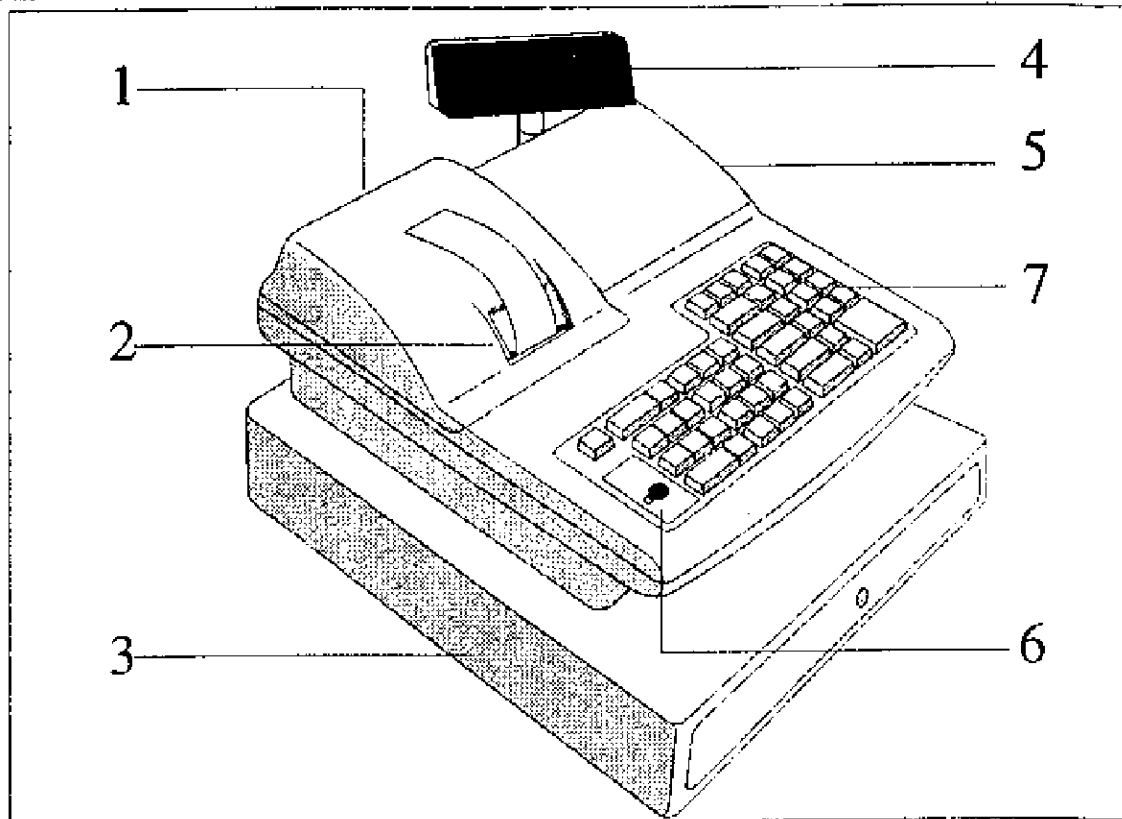
Please note the following items before using the cash register.

- 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.

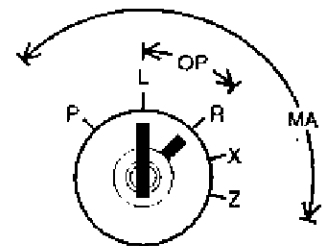
■ An External View



Part names	Functions
1. Printer cover	This cover protects the printer.
2. Receipt dispenser	This is where the receipt comes out.
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.
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.
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.
6. Control lock	The control lock allows you to change cash register modes.
7. Keyboard	The keyboard includes 24 function keys which allow you to perform various functions. There are also 10 department keys and 11 numeric keys.

■ 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

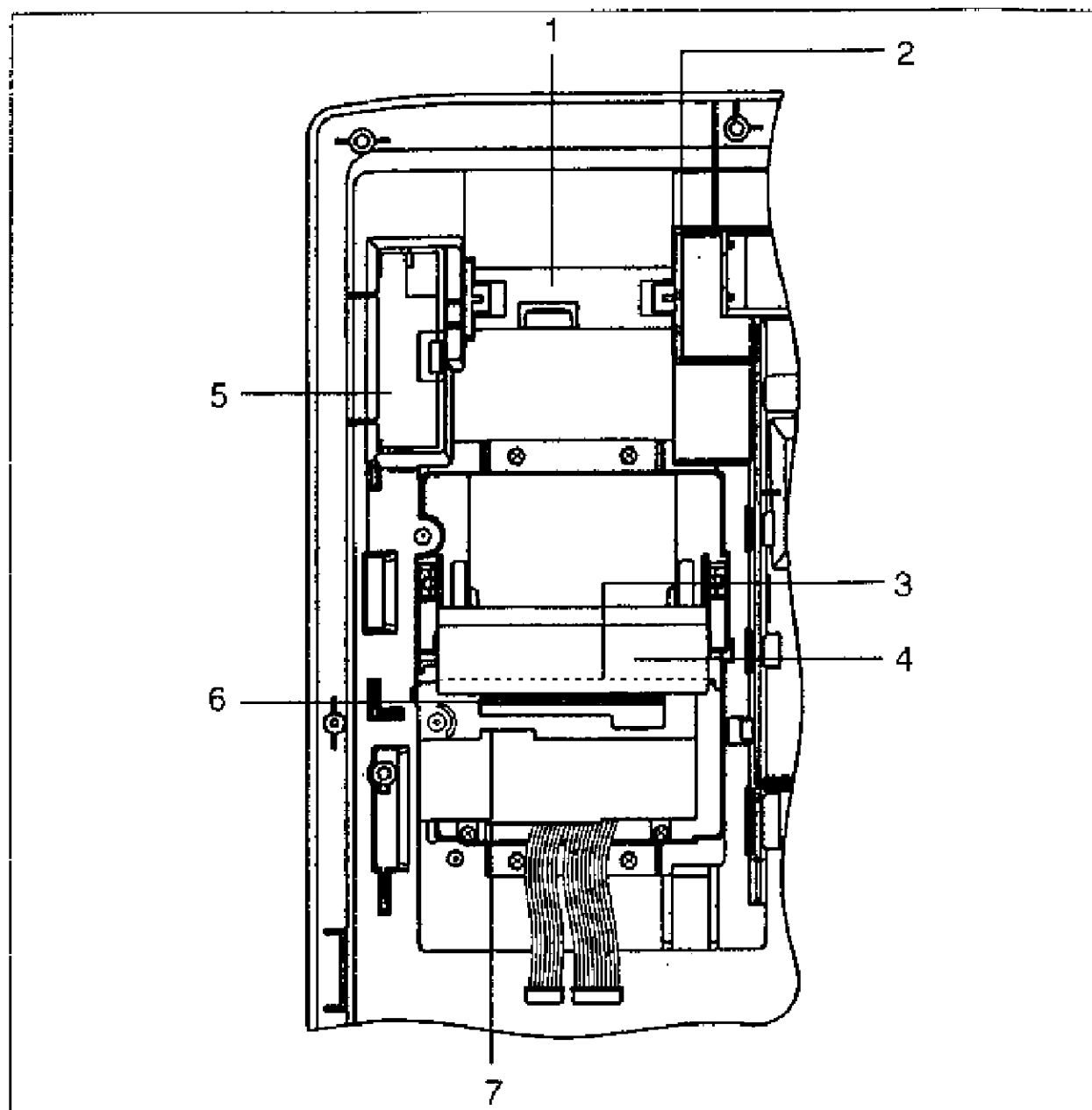
OP: Area the operator's key can access

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.
X	Read mode	Used to print sales information reports.
Z	Reset mode	Used to read and reset the sales information.

■ Printer

The figure below shows the printer with the cover removed.

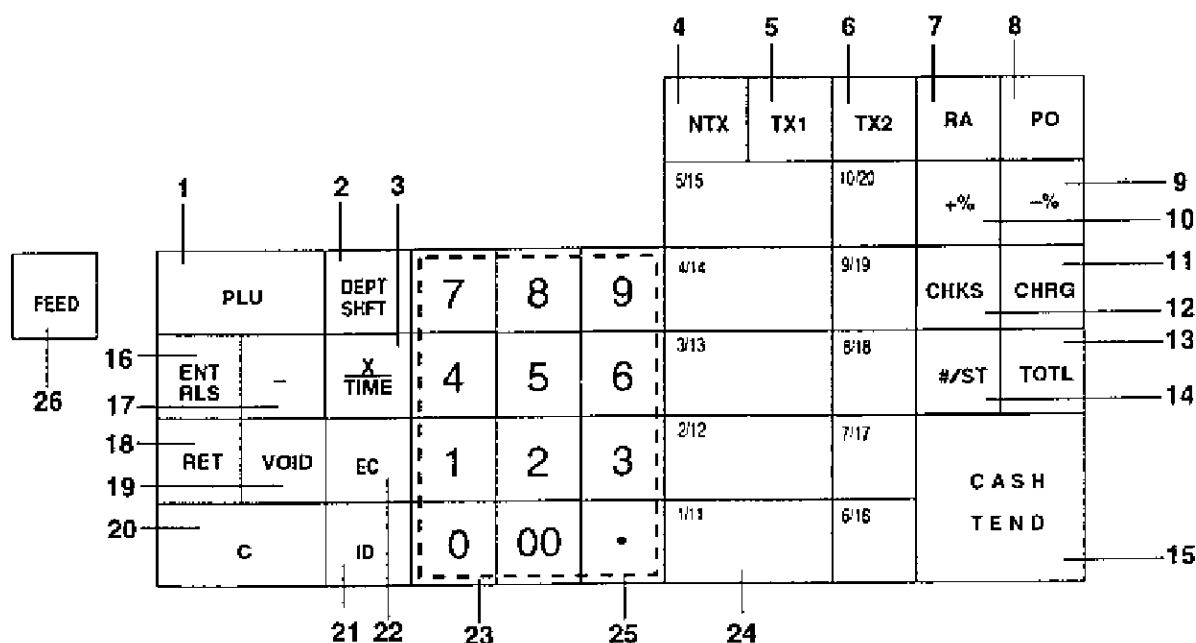


Part names	Functions
1. Receipt journal location	The paper roll is located here.
2. Take-up reel support	Used to take up the paper used for record keeping (the journal) and reel to rotate.
3. Paper entrance	The end of paper is inserted into the printer here.
4. Paper guide	Used to guide the journal paper.
5. Battery	Used to back up the transaction memory.
6. Paper exit	The paper exits here.
7. Ink cassette ribbon	Used to supply ink to the printer.

1 Before Starting Operations

■ Keyboard

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



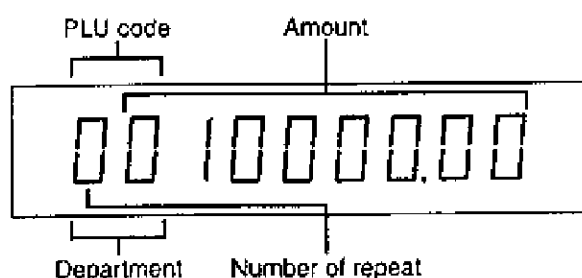
Name	Abbreviation	Functions
1. Price look up Key	PLU	Used for registering a PLU item.
2. Department shift Key	DEPT SHFT	Changes the code used by the Department Keys. For example, it is pressed to use the 1 key (marked 1/11) for department 11.
3. Multiplication/Time Key	X TIME	Used when register multiple items. Also used to display the current time and for programming.
4. Non-tax Key	NTX	Used for registering a taxable item as a nontaxable item.
5. TAX Key 1	TX1	Used to add tax to the sales amount. The tax rate for this Key can be programmed.
6. TAX Key 2	TX2	This key has the same function as TX1 but can have a different tax rate.
7. Received on account Key	RA	Used to register money received on account.
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 petty cash when the store opens.
9. Discount Key	[-%]	Used to give a discount as a percentage of the price of an item.
10. Premium Key	[+%]	Used to add a percentage, such as a premium, to the price of an item.
11. Charge Key	CHRG	This key is used when a customer charges an item.
12. Check Key	CHKS	This key is used when receiving check or card for a sale.

Name	Abbreviation	Functions
13. Total Key	TOTL	Used to display a subtotal including tax.
14. Non-add/Subtotal Key	#ST	Used to print a non-add code and to display a subtotal during operations.
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.
16. PLU price entry and release key	ENT RLS	Used for entering the price of PLU items and used to release the department function.
17. Minus Key	—	Used to discount a certain amount or subtract an amount of an item when you receive coupon.
18. Return Key	RET	Used to register the price of returned items.
19. Void Key	VOID	Used to void an amount you have entered and stored.
20. Clear Key	C	Used to clear an error that displays the error code "E" or an amount you entered mistakenly.
21. Clerk ID Key	ID	Used for entering individual clerk ID code. This key is also used to control printing of receipts.
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.
25. Point Key	•	This key is used to enter decimal values.
26. Feed Key	FEED	Used to advance the receipt/journal paper.

1 Before Starting Operations

■ 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.



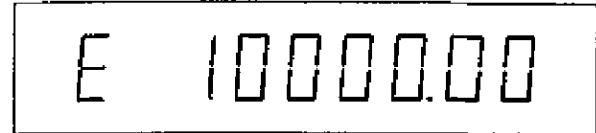
Shows that two of the same item are being sold.

Examples of status symbols

Your register has eight types of status symbols: E, -, [, [, o, U, ^, ^.

Each symbol is displayed as shown below:

Appears when an error, such as an overflow, occurs.



Appears when discounting.



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.



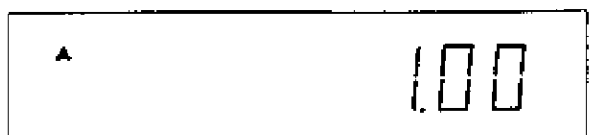
Appears when voiding and entering returned item from a customer.



Appears 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



2 Setting Up

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

2.1 Installing the Cash Register

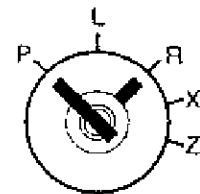
To install the cash register:

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.

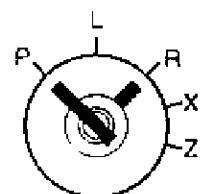
And you have to choice your country's character code as initialize.

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(Standard English mode):

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 or 1 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.



NOTE

Language Selection

- Your cash register can set your convenient language from the four kinds of language, **English**, **French**, **Germany** or **Spanish**. When you choice another language instead of **English** which mentioned in the above, you have to press, **2** key for **Spanish**, **3** key for **French**, and **4** key for **Germany**.

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 and 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.

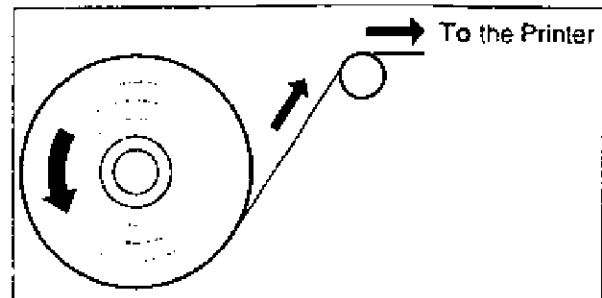


Fig.1

- The end of the paper which will be inserted into the printer must look like the one shown in Fig.2. Do not insert a paper end that looks like the ones shown in Fig.3.

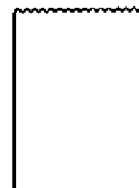


Fig.2

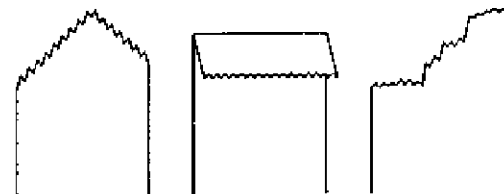


Fig.3

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.).

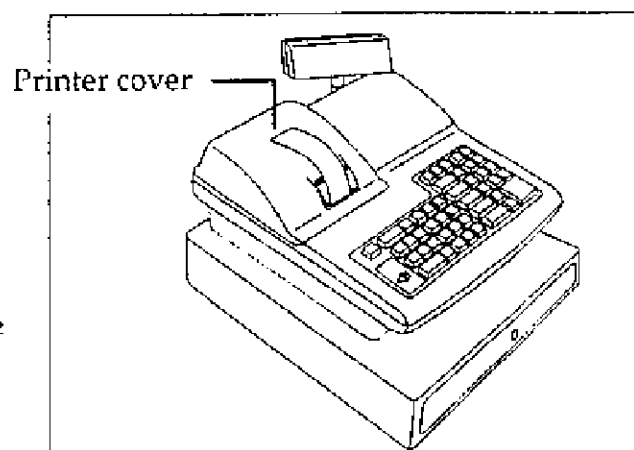


Fig.4

2 Setting Up

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.).
6. Insert the end of the paper into the slot in the take-up reel and wind two or three turns of paper around the reel. (See Fig.7.).

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

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

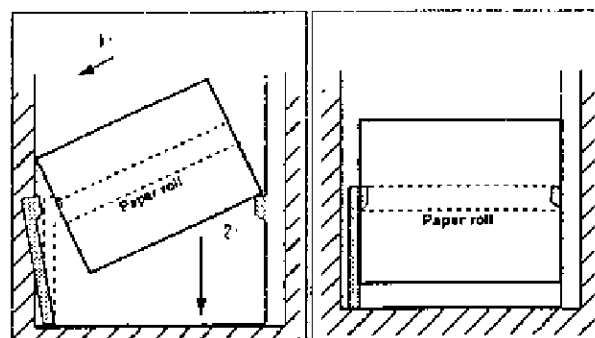


Fig.5

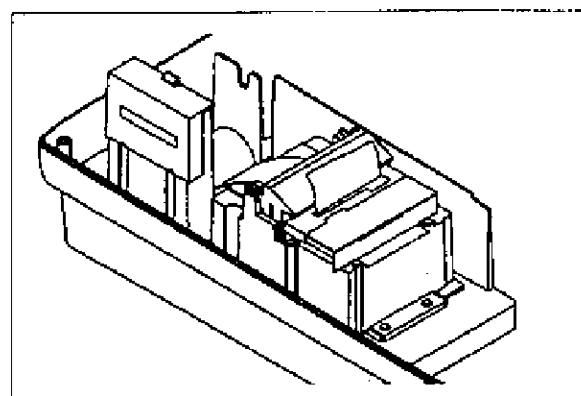


Fig.6

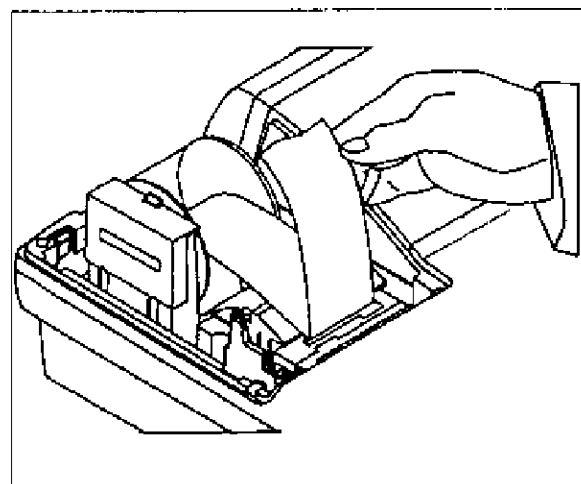


Fig.7

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.

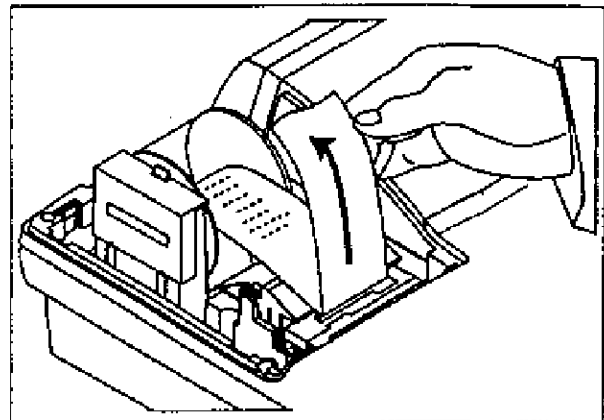


Fig.8

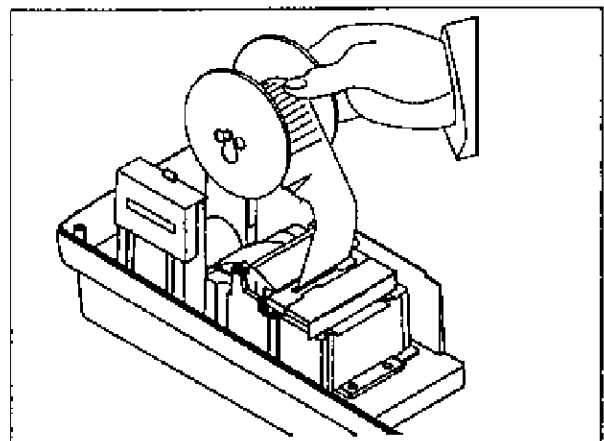


Fig.9

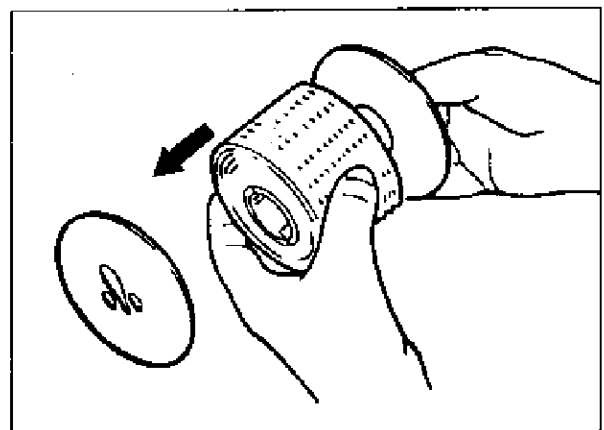


Fig.10

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 register for a long period, remove the batteries.
- * Replace the batteries at least once every year.
- * Make sure that (+) and (-) ends of the batteries.
- * Replace your battery while the power switch on.

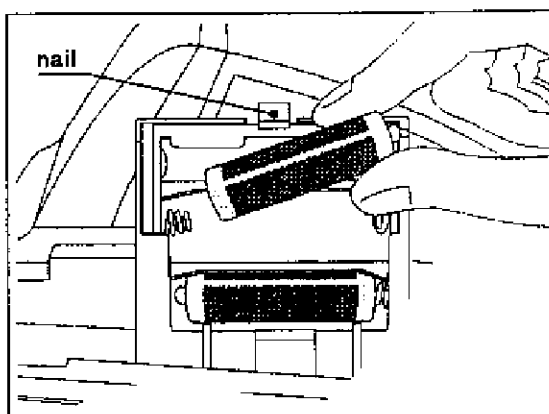


Fig.1

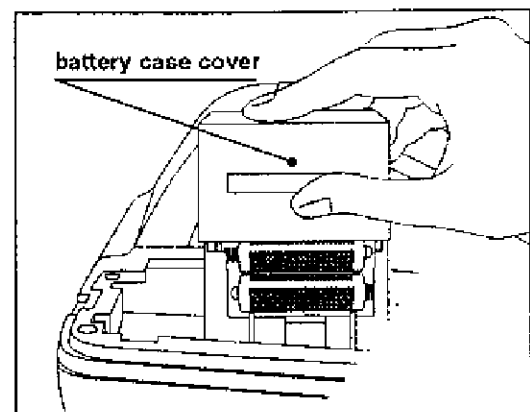


Fig.2

3.Quick Start Programming

The quick start programming is designed to help you quickly "get started" with basic functions you need to load into your cash register.

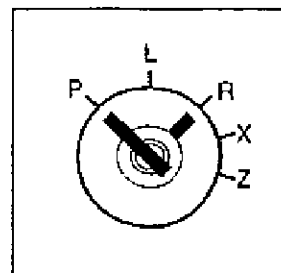
This program covers the Date, Time, Tax, Rate, Department/PLU Status for taxing.

Follow the quick start straight through, however, skip any steps which are not required by your business.

Quick start programming example

Set the control lock to "P" position

Use the programming layout.



■ Setting Date and Time . . . programming example:

Step Key operation

1) [c] → [1] → [START] → [SELECT] → [INPUT]

2) [9][9] [0][2] [1][4] → [INPUT]
 Year Month Day

(Enter 2 digits each for year, month and day in that order.)

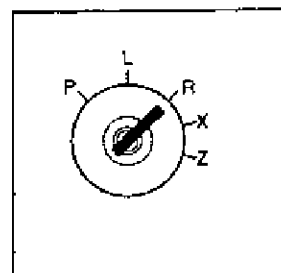
3) [1][5] [0][0] → [INPUT]
 Hour minute

(24 hour system is used. Enter 2 digits each for hour and minute in that order.)

Confirmation of setting time (date) on the display.

1) Set the control lock to "R" position.

2) [X
TIME]



NOTE

*Time or Date will be appeared on the display board.

*It depends on the programming of System Flag 1 #4 0:Time 1: Date

■ Programming of Department (Price and Flag)

Set the control lock to "P" position

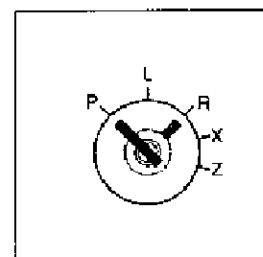
Programming Example: DEPT 1 \$ 9.75 TAX 1

DEPT 2 \$ 2.75 TAX 1

DEPT 3 \$ 40.00 TAX 1

DEPT 5 \$ 9.75 TAX 1

Programmed for single item sales



- | Step | Key operation |
|------|---|
| 1) | <input type="button" value="c"/> → <input type="button" value="2"/> → <input type="button" value="START"/> → <input type="button" value="SELECT"/> <input type="button" value="SELECT"/> → <input type="button" value="INPUT"/>
(Select Price of Department) |
| 2) | <input type="button" value="9"/> <input type="button" value="7"/> <input type="button" value="5"/> → <input type="button" value="INPUT"/>
Enter DEPT 1 price |
| 3) | <input type="button" value="2"/> <input type="button" value="7"/> <input type="button" value="5"/> → <input type="button" value="INPUT"/>
Enter DEPT 2 price |
| 4) | <input type="button" value="4"/> <input type="button" value="0"/> <input type="button" value="0"/> <input type="button" value="0"/> → <input type="button" value="INPUT"/>
Enter DEPT 3 price |
| 5) | <input type="button" value="5"/> → <input type="button" value="DSGN"/> |
| 6) | <input type="button" value="9"/> <input type="button" value="7"/> <input type="button" value="5"/> → <input type="button" value="INPUT"/>
Enter DEPT 5 price |
| 7) | <input type="button" value="SELECT"/> → <input type="button" value="INPUT"/>
(Select Flags) |
| 8) | <input type="button" value="1"/> → <input type="button" value="INPUT"/>
Enter DEPT 1 flag 1 |
| 9) | <input type="button" value="INPUT"/> <input type="button" value="INPUT"/> |
| 10) | <input type="button" value="1"/> → <input type="button" value="INPUT"/>
Enter DEPT 2 flag 1 |
| 11) | <input type="button" value="INPUT"/> <input type="button" value="INPUT"/> |

3. Quick Start Program

12) **1** → **INPUT**
Enter DEPT 3 flag 1

13) **5** → **DSGN**

14) **1** → **INPUT**
Enter DEPT 5 flag 1

15) **1** → **INPUT**
Enter DEPT 5 flag 2

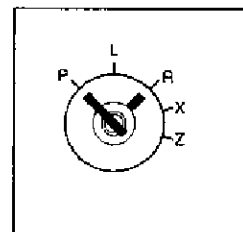
* PO2 *		
DEPT	PRICE	
01		9.75
02		2.75
03		40.00
05		9.75

* PO2 *		
DEPT	FLAG	
01	F1	1
02	F1	1
03	F1	1
05	F1	1
05	F2	1

■ Programming of PLU and Linked Department (Tax Flag and HALO of DEPT)

Set the control lock to "P" position

Programming example: PLU 1 \$ 10.00 Linked DEPT #1
PLU 2 \$ 1.50 Linked DEPT #2
PLU 3 \$ 2.00 Linked DEPT #3



- | Step | Key operation |
|------|--|
| 1) | C → 3 → START → SELECT SELECT → INPUT
(Select price of PLU) |
| 2) | 1 0 0 0 → INPUT
Enter PLU 1 unit price |
| 3) | 1 5 0 → INPUT
Enter PLU 2 unit price |
| 4) | 2 0 0 → INPUT
Enter PLU 3 unit price |
| 5) | SELECT → INPUT
(Select Linked Department) |

- 6) **1** → **INPUT**
Enter PLU 1 linked DEPT #1
- 7) **2** → **INPUT**
Enter PLU 2 linked DEPT #2
- 8) **3** → **INPUT**
Enter PLU 3 linked DEPT #3

* P03 *	
PLU	PRICE
001	10.00
002	1.50
003	2.00

* P03 *	
PLU	LINK#
001	01
002	02
003	03

■ Programming of TAX Rate

Programming example: TAX 2 4.0000% (4%)

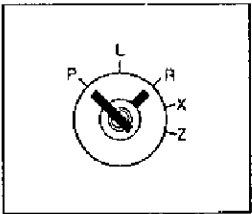
- Step Key operation
- 1) **c** → **5** → **START** → **SELECT** **SELECT** → **INPUT**
- 2) **0** → **INPUT**
Enter TAX sign
- 3) **4** **0** **0** **0** **0** → **INPUT**
Enter TAX rate

* P05 *	
TAX-2	05
TAX-2	4.0000%

■ Programming of TAX Print Style (at Setting System Flag)

Turn the control lock to : "P" position

Refer to the explanation of section 4.3.1 "Setting System Flag".



- Step Key operation
- 1) **c** → **2** **1** → **START** → **SELECT** → **INPUT**
- 2) **5** → **DSGN**
Enter the Flag Number
- 3) **1** **1** **1** **0** → **INPUT**
Enter the optional flag data

* P21 *	
MAINFLAG	
05	1110

4 Programming

This chapter presents the instructions for programming your cash register.

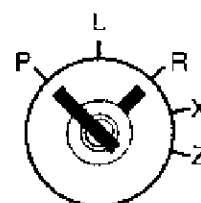
4.1 Before Programming

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.

The following steps 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.

NOTE

When you initialized your cash register memory, See section 2.2 Initializing Your cash register.

4.2 Programming Layout

4.2.1 Programming Layout

FEED						F				
						E				
						D				
						C				
START	PRINT		7	8	9	B			INPUT	
SELECT	DSGN		4	5	6	A				
C			1	2	3					
			0	00						

Name	Abbreviation	Functions
1. Feed Key	FEED	Used to advance the receipt paper.
2. Start Key	START	Used to start the programming.
3. Preset data print out Key	PRINT	Used to print out the programming data.
4. Designation Key	DSGN	Used to designate the numbers.
5. Select Key	SELECT	Used to select the programmed item.
6. Clear Key	C	Used to clear an error code or flag data you entered mistakenly.
7. Data input Key	INPUT	Used to decide selecting item or input data.

4.2.2 Character Code Table

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0			SP	0	@	P	'	p	Ç	É	á	§	Á		α	≡
1			!	1	A	Q	a	q	ü	æ	í	Ë	Í		β	±
2		AD	"	2	B	R	b	r	é	Æ	ó	▼	Ú		Γ	≥
3			#	3	C	S	c	s	â	ô	ú	◊	Ó		π	≤
4			\$	4	D	T	d	t	ä	ö	ñ	Ã	Ä		Σ	↑
5			%	5	E	U	e	u	à	ò	Ñ	Ë	Ö		σ	↓
6			&	6	F	V	f	v	à	û	ª	Õ	ä		μ	÷
7			'	7	G	W	g	w	ç	ù	º	À	ó		τ	≈
8			(	8	H	X	h	x	ê	ÿ	¿	È	~		Φ	°
9			)	9	I	Y	i	y	ë	Ö	┐	Ù	Ü		θ	·
A			*	:	J	Z	j	z	è	Ü	┐	ò	Ö		Ω	ℓ
B			+	;	K	[	k	{	ï	¢	½	Â	ü		σ	ℓ
C			,	<	L	\	l	|	î	£	¼	Ê	ö		∞	ℓ
D			-	=	M	]	m	|	ì	¥	ı	Î	æ		φ	ℓ
E			.	>	N	^	n	~	Ä	ℓ	《	Û	Ů		ε	
F			/	?	O	_	o		Å	f	》	Ô			∩	

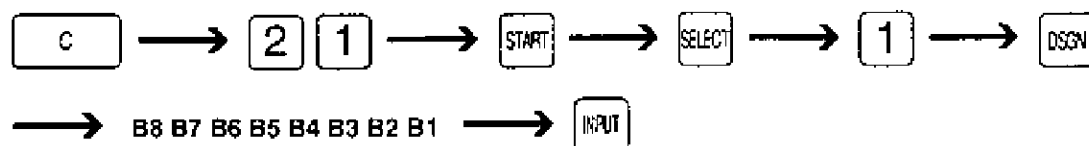
AD(12H) : Double size code

SP(20H) : Space code

4.3 System Programming

4.3.1 Setting System Flag

■ Flag1

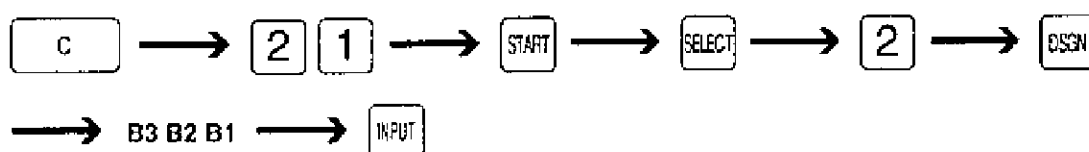


Options:	Press:	To:
B8	0	Always enter 0
B7	0	Select the journal print mode.
	1	Select the receipt print mode.
B6	0	Always enter 0
B5	0	Print " , " as punctuation symbol.
	1	Print " . " as punctuation symbol.
B4	0	Display the current time when you press the [X/TIME] key.
	1	Display the date when you press the [X/TIME] key.
B3	0	First enter the quantity, then enter the price
	1	First enter the price, then enter the quantity
B2,B1	00	0 Decimal position for monetary system
	01	0.0 Decimal position for monetary system
	10	0.00 Decimal position for monetary system
	11	0.000 Decimal position for monetary system

■ Flag2

This flag allows you to select the method used for rounding in percentage and multiplications.

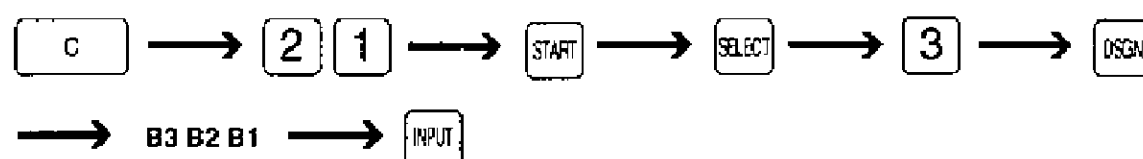
The point at which rounding takes place depends on this flag B2.



Options:	Press:	To:
B3	0	Not Select Swiss method of rounding.
	1	Select Swiss method of rounding.
B2	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.
B1	0	Rounding down (0.1 to 0.9 become 0.0)
	5	Rounding (0.1 to 0.4 becomes 0.0, 0.5 to 0.9 becomes 1.0)
	9	Rounding up (0.1 to 0.9 becomes 1.0)

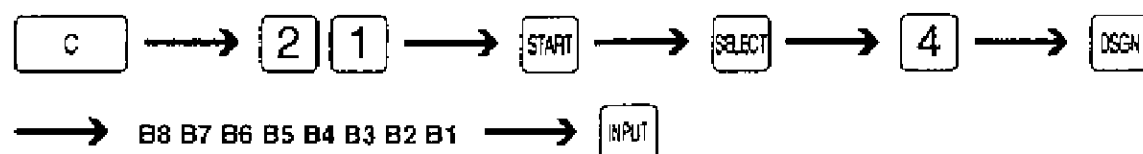
■ Flag3

This flag allows you to select method used for rounding in tax calculations.
The point at which rounding takes place depends on the B2.



Options:	Press:	To:
B3	0	Not Select Swiss method of rounding.
	1	Select Swiss method of rounding.
B2	0	Select the first digit in the decimal to be rounded in tax calculations.
	1	Select the last digit in the decimal to be rounded in tax calculations.
B1	0	Rounding down (0.1 to 0.9 become 0.0)
	5	Rounding (0.1 to 0.4 becomes 0.0, 0.5 to 0.9 becomes 1.0)
	9	Rounding up (0.1 to 0.9 becomes 1.0)

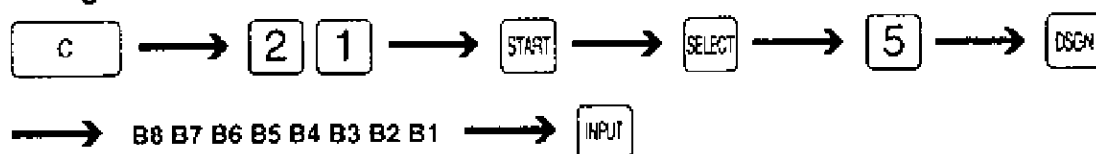
■ Flag4



Options:	Press:	To:
B8	0	Print the item count on the receipt/journal.
	1	Do not print the item count on the receipt/journal.
B7	0	Print the Logo stamp in the receipt mode.
	1	Do not print the Logo stamp in the receipt mode.
B6,B5	00	Year,month,date, in that order
	01	Month,date,year, in that order
	10	Date,month,year, in that order
B4	0	Print the date on the receipt/journal
	1	Do not print the date on the receipt/journal
B3	0	Print the time on the receipt/journal
	1	Do not print the time on the receipt/journal
B2	0	Display and print the time in 12-hour (AM/PM) format
	1	Display and print the time in 24 hour format
B1	0	Print the transaction number(consecutive No.) on the receipt/journal.
	1	Do not print the transaction number(consecutive No.) on the receipt/journal.

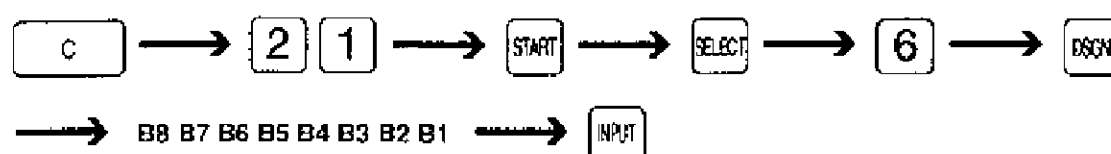
4 Programming

■ Flag5



Options:	Press:	To:
B8,B7	0	Always enter 0.
B6	0	Do not print the tax rate when print the individual tax amounts on the receipt/journal.
	1	Print the tax rate when print the individual tax amounts on the receipt/journal.
B5	0	Enable printing the tax symbol.
	1	Disable printing the tax symbol.
B4	0	Do not print the taxable amount.
	1	Print the taxable amount.
B3	0	Print the summary tax amount of tax 1, 2, 3, 4.
	1	Print the individual tax amount of tax 1, 2, 3, 4.
B2	0	Do not print the Value Added Tax (VAT) on the receipt/journal.
	1	Print the Value Added Tax (VAT) on the receipt/journal.
B1	0	Do not print the VAT separately for items which are taxable.
	1	Print the VAT separately for items which are taxable.

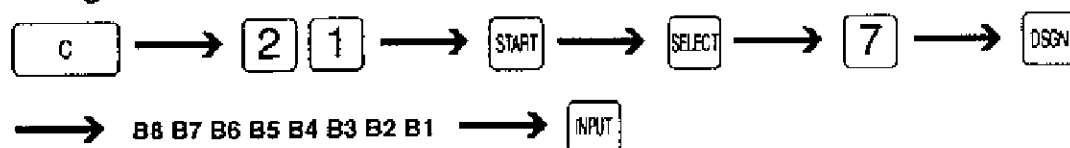
■ Flag6



Options:	Press:	To:
B8	0	Always enter 0
B7	0	Disable unit price "0" entry on Department and PLU operation.
	1	Enable unit price "0" entry on Department and PLU operation.
B6	0	Add net total amount to Non resettable grand total.
	1	Add gross total amount to Non resettable grand total.
B5	0	Print the sales items of the counter at Hourly report.
	1	Print the number of quantity of the counter at Hourly report.
B4	0	Print the department total sales amount as a gross amount on the report: the total amount including calculations made with the [-] key.
	1	Print the department total sales amount as a gross amount on the report: the total amount not including calculations made with the [-] key.
B3	0	Print the department total sales amount as a gross amount on the report: the total amount including calculations made with the [+%] and [- %] keys.
	1	Print the department total sales amount as a gross amount on the report: the total amount not including calculations made with the [+%] and [- %] keys.
B2	0	Do not automatically add the preset percentage for the [+%] key to the sales amount
	1	Automatically add the preset percentage for the [+%] key to the sales amount
B1	0	Disable pressing another clerk ID password during operation.
	1	Enable pressing another clerk ID password during operation.

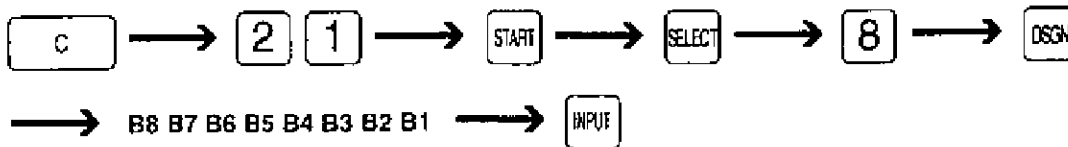
4 Programming

■ Flag7



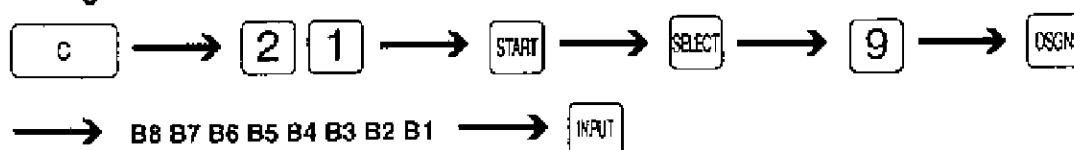
Options:	Press:	To:
B8	0	Always enter 0
B7	0	Enable using [RA][PO] keys, in the "R"(register) mode.
	1	Disable using [RA][PO] keys, in the "R" (register) mode.
B6	0	Enable the [VOID][-][-%][RET] keys, used as minus departments, in the "R" mode.
	1	Disable the [VOID][-][-%][RET] keys, used as minus departments, in the "R" mode.
B5	0	Enable pressing just the [#ST] key
	1	Disable pressing just the [#ST] key
B4	0	Enable pressing the [#ST] Key immediately after entering numeric Keys.
	1	Disable pressing the [#ST] Key immediately after entering numeric Keys.
B3	0	Enable registering transactions which more than one media is received, for example, cash and a check (Split tendering)
	1	Disable registering transactions which more than one media is received, for example, cash and a check (Split tendering)
B2	0	Enable registering the amount received from a customer and the calculation of the change.
	1	Disable registering the amount received from a customer and the calculation of the change.
B1	0	Do not require the amount received from a customer to be registered. (Compulsory tendering)
	1	Require the amount received from a customer to be registered.

■ Flag8



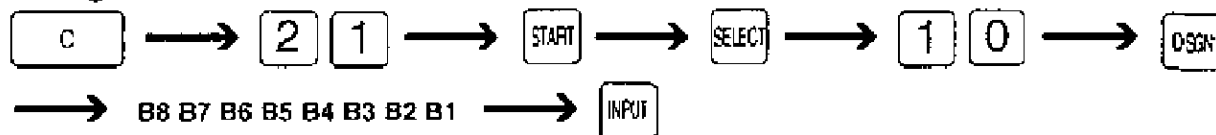
Options:	Press:	To:
B8	0	Enable issuing stub receipt (printed total only).
	1	Disable issuing stub receipt (printed total only).
B7	0	Disable issuing a second complete receipt immediately after issuing the first one.
	1	Enable issuing a second complete receipt immediately after issuing the first one.
B6	0	Change the "Department 11 to 20 entry mode" back to the "Department 1 to 10 entry mode" when the current sales transaction is finished.
	1	Stay in the "Department 11 to 20 entry mode" until the [DEPT/SHFT] Keys pressed again to change back to the "Department 1 to 10 entry mode".
B5	0	Change the "Department 11 to 20 entry mode" back to the "Department 1 to 10 entry mode" when the registration of an each item is finished.
	1	Stay in the "Department 11 to 20 entry mode" until the [DEPT/SHFT] Keys pressed again to change back to the "Department 1 to 10 entry mode".
B4	0	Do not reset the transaction number (consecutive number) after issuing the Z report.
	1	Reset the transaction number (consecutive number) after issuing the Z report.
B3	0	Do not require registering the cash amount in the drawer before resetting the sales.
	1	Require registering the cash amount in the drawer before resetting the sales.
B2	0	Print a programmed Date,time,transaction,clerk name, on the trailer position on the receipt.
	1	Print a programmed Date,time,transaction,clerk name, on the header position on the receipt.
B1	0	Print a programmed Logo message on the header position on the receipt.
	1	Print a programmed Logo message on the trailer position on the receipt.

■ Flag9



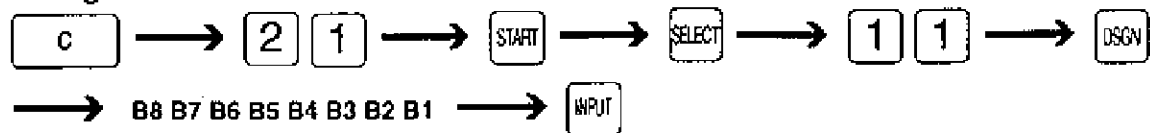
Options:	Press:	To:
B8	0	Print the training information on the receipt/journal while in the operator training mode.
	1	Do not print the training information on the receipt/journal while in the operator training mode.
B7	0	Print the training mode symbol "TRAINING" on the receipt/journal while in the operator training mode.
	1	Do not print the training mode symbol "TRAINING" on the receipt/journal while in the operator training mode.
B6	0	Enable reports for training.
	1	Disable reports for training.
B5	0	Do not count the training operations as transaction numbers.
	1	Count the training operations as transaction numbers.
B4	0	Always enter 0
B3	0	Do not require Manager password when issue an individual clerk report.
	1	Require Manager password when issue an individual clerk report.
B2	0	Do not reset the clerk password after each sales transaction is finished.
	1	Reset the clerk password after each sales transaction is finished.
B1	0	Do not reset the clerk password each time the position of the Control Lock is changed.
	1	Reset the clerk password each time the position of the Control Lock is changed.

■ Flag10



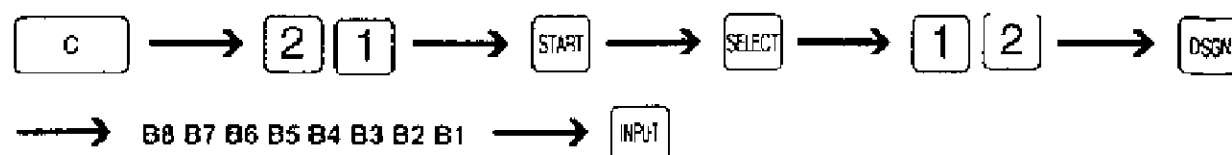
Options:	Press:	To:
B8	0	Skip printing PLU items whose sales amount as 0 on the reports.
	1	Print PLU items whose sales amount as 0 on the reports.
B7	0	Skip printing items whose sales amount as 0 on the reports.
	1	Print items whose sales amount as 0 on the reports.
B6	0	Print Cash amount and Check in the drawer on the reports.
	1	Do not print Cash amount and Check in the drawer on the reports.
B5	0	Print Non taxable amount on the reports.
	1	Do not print Non taxable amount on the reports.
B4	0	Print the total sales for departments on the reports.
	1	Do not print the total sales for departments on the reports.
B3	0	Print the gross sales on the reports.
	1	Do not print the gross sales on the reports.
B2	0	Print a grand total amount on the reports.
	1	Do not print a grand total amount on the reports.
B1	0	Print voided amounts and so on, on the reports.
	1	Do not print voided amounts and so on, on the reports.

■ Flag11



Options:	Press:	To:
B8	0	Do not print duplicate of the full report on resetting the sales.
	1	Print duplicate of the full report on resetting the sales.
B7	0	Print the total amount and type of the transaction such as "CASH", "CHARGE" and "CHECK" in double-wide characters.
	1	Do not print the total amount and type of the transaction such as "CASH", "CHARGE" and "CHECK" in double-wide characters.
B6	0	Always enter 0
B5	0	Print a PLU code number on PLU reports.
	1	Do not print a PLU code number on PLU reports.
B4	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 (Z2 report).
B3	0	Print the report number on the daily report which is issued after resetting (Z1 report).
	1	Do not print the report number on the daily report which is issued after resetting (Z1 report).
B2	0	Print the report number of the periodic report (X2 report).
	1	Do not print the report number of the periodic report (X2 report).
B1	0	Print the report number of the daily report (X1 report).
	1	Do not print the report number of the daily report (X1 report).

■ Flag12

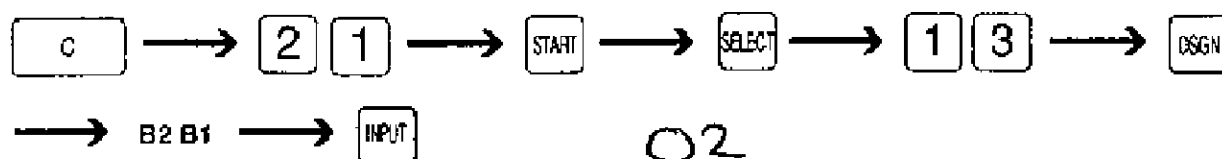


Options:	Press:	To:
B8-B6	0	Always enter 0
B5	0	Include TAX1(GST) in TAX4(PST): Only add TAX4 to items for which both TAX1 and TAX4 are set.
	1	Do not include TAX1(GST) in TAX4(PST): Only add TAX4 to items for which both TAX1 and TAX4 are set.
B4	0	Include TAX1(GST) in TAX3(PST): Only add TAX3 to items for which both TAX1 and TAX3 are set.
	1	Do not include TAX1(GST) in TAX3(PST): Only add TAX3 to items for which both TAX1 and TAX3 are set.
B3	0	Include TAX1(GST) in TAX2(PST): Only add TAX2 to items for which both TAX1 and TAX2 are set.
	1	Do not include TAX1(GST) in TAX2(PST): Only add TAX2 to items for which both TAX1 and TAX2 are set.
B2	0	Add PST to any items which includes GST. This setting is valid only when you select "1" for B1.
	1	Add GST and PST to an items separately. This setting is valid only when you select "1" for B1.
B1	0	Do not select the Canadian taxation system.
	1	Select the Canadian taxation system.

■ Flag13

This flag allows you to assign the point number to define the method of rounding. When the difference between the last two digits of an amount and the nearest smaller number of an integral multiple of the number you have assigned for flag 14 is smaller than the point you assign for this flag, it is rounded to the smaller number of the integral multiple of the number.

For example, if you enter "25" in flag 14 and "9" for this flag, 40 will be rounded to 50, because "40 - 25 x 1 = 15", and 15 is larger than 9. 52 will be rounded to 50 because "52 - 25 x 2 = 2", and 2 is smaller than 9.



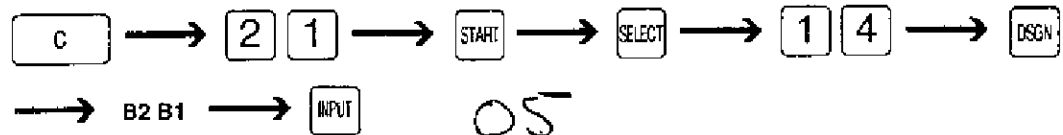
Options:	Press:	To:
B2,B1	2 digits	Rounding of last 2 integers for maximum round down of an amount.

4 Programming

■ Flag14

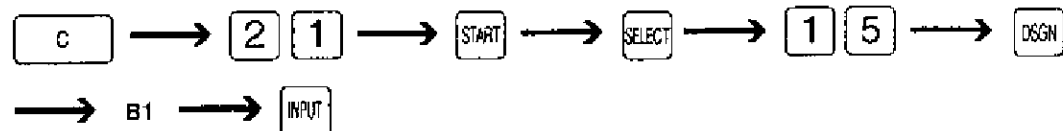
This flag allows you to assign the unit number used for rounding. You can enter up to two digits.

For example, if you enter "25", any amount whose last two digits are integral multiples of 25: 00,25,50 and 75 will not be rounded. Number other than 00,25,50 and 75 will be rounded depending on the setting for Flag 13.



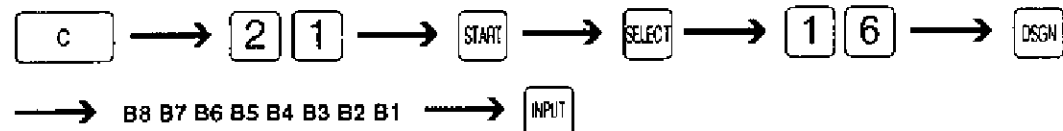
Options:	Press:	To:
B2,B1	2 digits	Rounding of last 2 integers for minimum coin operation.

■ Flag15



Options:	Press:	To:
B1	0-9	Set the number of paper line feed after finished sales transaction.

■ Flag16



Options:	Press:	To:
B8	0	Disable to use free keylayout function
	1	Enable to use free keylayout function
B7	0	Make a key stroke sound.
	1	Do not make a key stroke sound.
B6	0	Open the drawer when you press the [CHRG4] Key.
	1	Do not open the drawer when you press the [CHRG4] Key.
B5	0	Open the drawer when you press the [CHRG3] Key.
	1	Do not open the drawer when you press the [CHRG3] Key.
B4	0	Open the drawer when you press the [CHRG2] Key.
	1	Do not open the drawer when you press the [CHRG2] Key.
B3	0	Open the drawer when you press the [CHRG] Key.
	1	Do not open the drawer when you press the [CHRG] Key.
B2	0	Open the drawer when you press the [CHKS] Key.
	1	Do not open the drawer when you press the [CHKS] Key.
B1	0	Open the drawer when you press the [CASH/TEND] Key.
	1	Do not open the drawer when you press the [CASH/TEND] Key.

4.3.2 Key Layout

This section describes about useful programmable keyboards due to this model has an ability to move the key functions around to create custom applications.

The following example shows the steps how to create new key or custom key on the keyboards.

Caution : System Flag16 B8 must be set to "1" before operating the following key layout change.

Basic key operation sequence

- 1)

C

 →

2

2

 →

START

 →

SELECT

 →

INPUT
- 2)

nn

 →

DSGN

 ---Enter desired key number.
When the number is not entered, the programming will start from 1.
- 3)

nn

 →

INPUT

 ---Enter key code.
Refer to key code table.

■Key number of the key layout

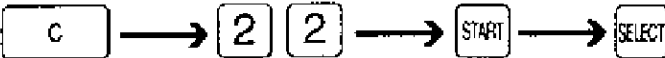
FEED						25	31	37	43	48
						26		38	44	49
	1		9	13	17	21	27	39	45	50
	2	6	10	14	18	22	28	40	46	51
	3	7	11	15	19	23	29	41	47	
4		12	16	20	24	30	42			

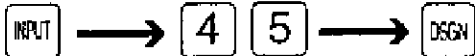
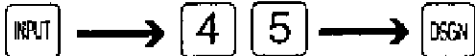
4 Programming

Example : Program "CHARGE 2" to "45" number key.

Use the programming layout.

Key operation

1)  1) 

2)  2)  ---Enter key number.

3)  3)  ---Enter the code of
"CHARGE 2".

NOTE

- { FEED } Key can not be changed, it is fixed on the key layout.
- Entered data will be printed on the receipt and journal.

■ Key Code Table

NO.	KEY FUNCTION	NO.	KEY FUNCTION	NO.	KEY FUNCTION
0	ERROR	20	NON TAX	51	DEPT 01
1	0	21	TAX 1	52	DEPT 02
2	1	22	TAX 2	53	DEPT 03
3	2	23	TAX 3	54	DEPT 04
4	3	24	TAX 4	55	DEPT 05
5	4	25	NOT USE	56	DEPT 06
6	5	26	NOT USE	57	DEPT 07
7	6	27	NOT USE	58	DEPT 08
8	7	28	NOT USE	59	DEPT 09
9	8	29	NOT USE	5A	DEPT 10
A	9	2A	CLERK	5B	DEPT 11
B	00	2B	NOT USE	5C	DEPT 12
C	000	2C	NOT USE	5D	DEPT 13
D	.	2D	NOT USE	5E	DEPT 14
E	CLEAR	2E	NOT USE	5F	DEPT 15
F	PLU ENTRY/RELEASE	2F	NOT USE	60	DEPT 16
10	PLU	30	RA	61	DEPT 17
11	CASH	31	PO	62	DEPT 18
12	CHECK	32	NOT USE	63	DEPT 19
13	CHARGE	33	- %	64	DEPT 20
14	CHARGE 2	34	- %2		
15	CHARGE 3	35	+ %		
16	CHARGE 4	36	-		
17	NOT USE	37	NOT USE		
18	NOT USE	38	NOT USE		
19	NOT USE	39	NOT USE		
1A	TOTAL	3A	NOT USE		
1B	SUB TOTAL	3B	NOT USE		
1C	E/C	3C	NOT USE		
1D	VOID	3D	DEPT SHIFT		
1E	RETURN	3E	NOT USE		
1F	X/TIME	3F	NOT USE		

4.3.3 Changing Transaction Name

Transaction name is the description applied to function key and others on reports. These are eight digits length, can be upper or lower case at single size and four digits length at double size. You can change transaction name easily. The following example shows how to change transaction name "CHARGE" to "VISA".

Basic key operation sequence

Set the control lock to "P" position.

- 1) C → 2 3 → START → SELECT → INPUT
- 2) n n n → DSGN ---Enter desired Transaction number.
When the number is not entered, the programming will start from 1.
- 3) x...x → INPUT ---Enter the name.

Example : Program "CHARGE" to "VISA".

- 1) C → 2 3 → START → SELECT → INPUT
- 2) 2 6 → DSGN ---Enter Transaction number for "CHARGE".
- 3) 5 6 4 9 5 3 4 1 → INPUT ---Enter the name.

V
I
S
A

NOTE

- Entered data will be printed on the receipt and journal.
- Please refer Transaction Name Table in the next page.

■ Transaction Name Table

Number	Transaction Name	Function	Number	Transaction Name	Function
1	DEPT TTL	Department Total	33	R/A CK	R/A Check
2	NOTXBL	No Taxable	34	R/O CA	P/O Cash
3	TXBL-1	Taxable 1	35	R/O CK	P/O Check
4	TXBL-2	Taxable 2	36	CAID	Cash In Drawer
5	TXBL-3	Taxable 3	37	CKID	Check In Drawer
6	TXBL-4	Taxable 4	38	NRGT	Non Resettable Grand Total
7	TAX-1	TAX 1	39	TAX	Tax
8	TAX-2	TAX 2	40	NET *	Taxable Net
9	TAX-3	TAX 3	41	MSC-V	Minus Void
10	TAX-4	TAX 4	42	MSC-R	Minus Return
11	NOT USE		43	SHIFT	Shift
12	+%G	+% Gross	44	NET SALE	Net Sales
13	+%N	+% Net	45	CASH TD	Cash Tend
14	TOTAL	Total	46	CHECK TD	Check Tend
15	GROSS	Gross	47	VOID	Void
16	VOID-R	Void	48	TAXTOTAL	Tax Total
17	RETURN	Return	49	NET-TAX	Net - Tax
18	-G	- Gross	50	DEPT GRP	Department Group
19	-N	- Net	51	RPRT CNT	Report Counter
20	-%G	-% Gross	52	SUB-TTL	Sub Total
21	-%N	-% Net	53	CHANGE	Change
22	ROUND	Rounding	54	- VOID -	Void symbol
23	NET TL	Net Total	55	RETURN	Return symbol
24	CASH	Cash Amount	56	ITEM CT	Item Count
25	CHECK	Check Amount	57	NET	Net
26	CHARGE	Charge	58	R/A	R/A
27	CHARGE2	Charge 2	59	P/O	P/O
28	CHARGE3	Charge 3	60	-%2G	-%2 GROSS
29	CHARGE4	Charge 4	61	-%2N	-%2 NET
30	NOT USE		62	NOT USE	
31	NOSALE	No Sale	63	NOT USE	
32	R/A CA	R/A Cash	64	NOT USE	

4.4 Function Programming

This section describes how to set the constant data which control the operation of this cash register, for example, Date/Time, Name and flag setting of the Departments, PLUs and so on.

4.4.1 Setting the Basic Data

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

Setting the Date and Time

The following example shows how to enter "February 14th 1999." and "15:00".

1) → → → →

2) →
 Year Month Day

(Enter 2 digits each for year, month and day in that order.)

3) →
 Hour minute

(24 hour system is used. Enter 2 digits each for hour and minute in that order.)

NOTE

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

PRINT

	* P01 *	
DATE		990214
TIME		1500

Setting Transaction Number

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

1) **C** → **1** → **START** → **SELECT** **SELECT** **SELECT** → **INPUT**

2) **1** **2** **3** **4** → **INPUT**

PRINT

CSCN	* PO1 *	1234
------	---------	------

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.

1) **C** → **1** → **START** → **SELECT** . . . **SELECT** → **INPUT**

Depress 'SELECT' key,
4 Times

2) **1** **2** → **INPUT**

PRINT

MCNO	* PO1 *	12
------	---------	----

Setting Training Number

You can set the training number up to 9999 in order to train a operator in the X position. The following example shows that "999" has been entered for training.

1) **C** → **1** → **START** → **SELECT** . . . **SELECT** → **INPUT**

Depress 'SELECT' key, 5 Times

2) **9** **9** **9** → **INPUT**

PRINT

TRAINING	* PO1 *	0999
----------	---------	------

* To start training operation is as follows. (To end training operation is same.)

9 **9** **9** → **CHRG**

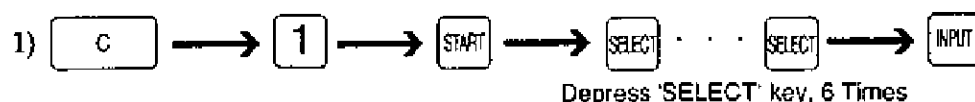
at "X" position

Training Number

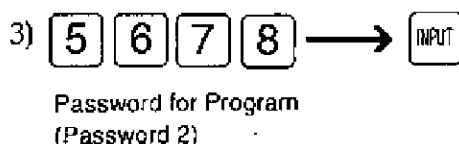
Managers Password

You can enter a maximum of 4 digits in the password which will allow you to operate the periodical and daily reports. After you program a password, you cannot operate the cash register in this mode without entering the correct password.

The following example shows how to set the password for report.



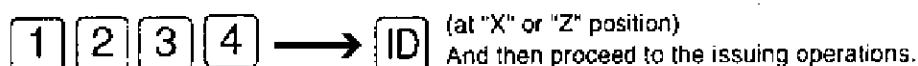
The following example shows how to set the password for programming.



PRINT

	* P01 *	
PASSWORD		1234
PASSWORD2		5678

Entry the password in order to issue the report.



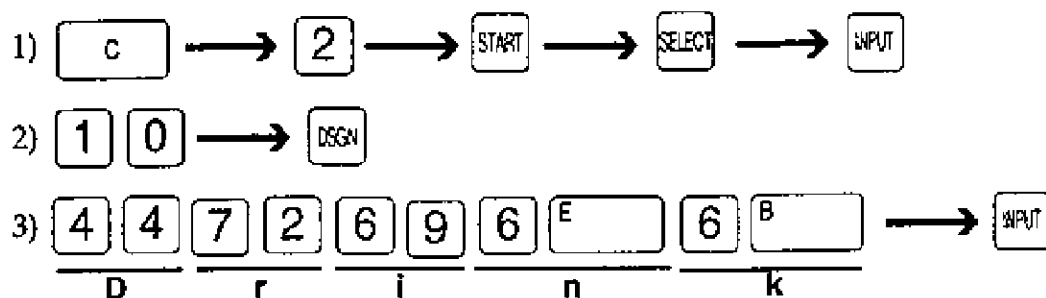
4.4.2 Department Programming

This section describes how to program departments. You can distinguish between 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 the name, unit price, flag, high amount lock out, and group No. for each department. If necessary, you can change the function flags settings for each department. The function flags control the "single-item cash sale" function, preset price, and tax status.

Setting the Name

You can set the department name for each department 1 up to 12 characters. The following example shows how to enter "Drink" to "department 10".



Programmed all department name data is printed by key.

PRINT

* P02 * DEPT NAME 10 Dr i n k
--

Setting a Unit Price

You can set a unit price up to six 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 for the correct the number of decimal points, see section 4.3.1 "Setting System Flag". The following example shows that \$ 10.00 is entered for Department 10.

NOTE

When you want to set a unit price for Department 11 to 20, press the **DEPT/SHIFT** Key. This key toggle the "Department 1 to 10 set mode" and "Department 11 to 20".

1) **C** → **2** → **START** → **SELECT** **SELECT** → **INPUT**

2) **1** **0** → **DSGN**

3) **1** **0** **00** → **INPUT**

PRINT

* P02 *	
DEPT PRICE	
10	10.00

Setting Function Flags

There are three function flags you can set for each department. Each flag has some options to be selected.

You can set the following functions.

■ Flag 1

This flag allows you to add TAX1 - TAX4 to sales from that department. For details about taxes, see section 4.3.5 "Tax Programming".

■ Flag 2

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 passing the **CASH/TEND** Key.

■ Flag 3

Limit the number of digit. If you enter 1 to 6, one digit to six digits are allowed. If you press 0, seven digits will be allowed.

4. Programming

The following example shows how to set "taxable 1" function to "Department 10".

- 1) → → → →
- 2) →
- 3) → Programming of Flag 1

PRINT

```

* P02 *
DEPT FLAG
10 F1      1

```

After programming of Flag 1, next programming (Flag 2) will be selected automatically.

The assignment for each flag is as follows.

Flag 1 B4 B3 B2 B1 →

Options:	Press:	To:
B4	1	Taxable 4
B3	1	Taxable 3
B2	1	Taxable 2
B1	1	Taxable 1

Flag 2 B4 0 0 B1 →

Options:	Press:	To:
B4	1	Gallunage mode
B3,B2	0	Always enter 0.
B1	1	Single item sale

Flag 3 0 to 6 →

Options:	Press:	To:
B1	0 to 6	Set the number of limit amount digits

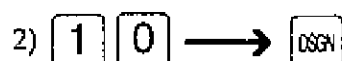
Setting Group Number

You can assign a department to a group up to 9. Classifying departments into 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 ball point pens and Department 2 for selling mechanical pencils, when they are assigned to the same group, you can check the sales of "Pens".

Example between shows how to set "Group No.5" to "Department 10".



Depress 'SELECT' key,
4 Times



PRINT

* P02 *	
DEPT GROUP	
10	5

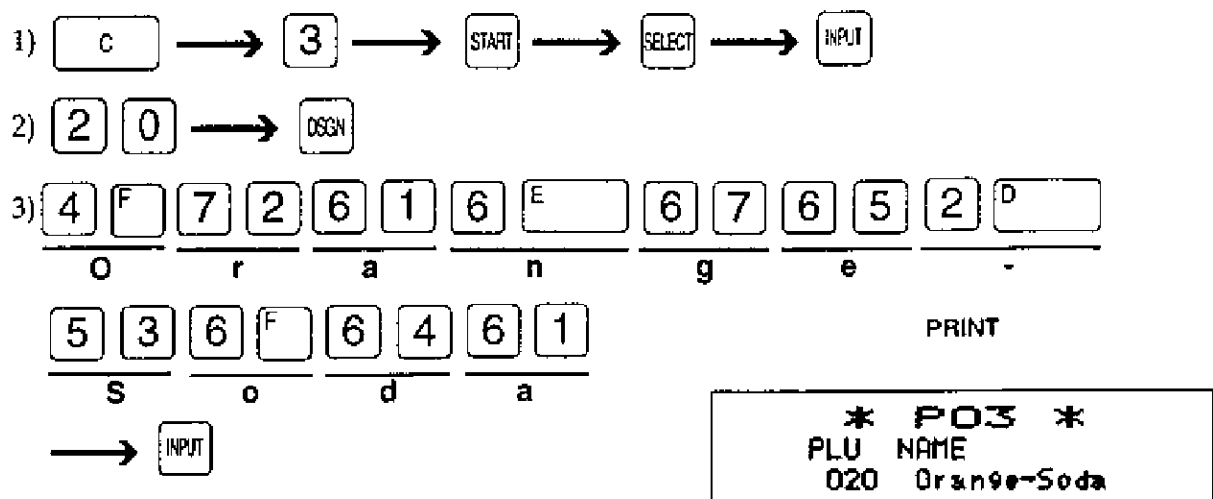
4.4.3 Programming the PLU Function

This section describes the PLU function and how to program it. PLU is a function which allows department to be subdivided.

For example, with PLU, you can have different prices for one department. A maximum of 500 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.

Setting the Name

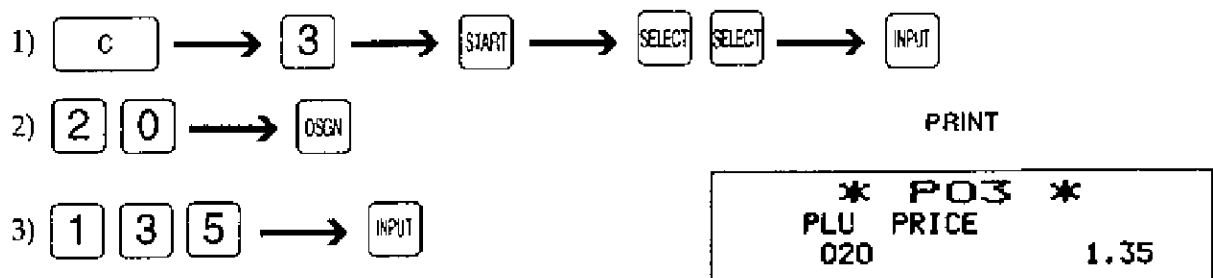
You can set PLU name for each PLU code up to 12 characters. The following example shows how to enter "Orange-soda" to PLU code 20.



Setting a Unit Price

You can set a unit price up to six digits long.

The following example shows that \$ 1.35 is entered for "PLU 20".



Setting Link Department

This setting assigns a PLU to a department. Classifying PLU's in departments allows you to get a department sales report.

The following example shows how to link "PLU 20" to "Department 10".

- 1) C → 3 → START → SELECT SELECT SELECT → INPUT
- 2) 2 0 → DSGN
- 3) 1 0 → INPUT

PRINT		
* P03 *		
PLU	LINK#	
020		10

4.4.4 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. If necessary, you can program other keys to be used as the [-%] and [-] Keys, as described in section 4.3.2, "Key Layout".

Programming the [%] and [-%] Keys

The [%] and [-%] Keys are used to add or subtract a percentage or service charge to the price of an item. For example, you can use the [%] Key to add a premium, and [-%] 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 preset percentage or you can manually enter the percentage on keyboard at the time of the sales transaction.

Setting the Percentage and Function Flag

You can enter a preset (0.01-99.99%) for the [-%] and [%] Keys and taxable flags (Taxable 1, 2, 3, 4). These taxable flags are same format as Department flag 1. The following example shows how to set the [-%] Key for a discount of "10.00%" at taxable 1.

1) → → → →

2) → Enter the -% rate

3) → Enter Flag 1: Taxable 1

PRINT

* P04 *
-x 10.00%
-x F1 1

After entering the -% rate and Flag, [%] you can continue as indicated to program the [%].

NOTE

You can scroll the programming display using the "SELECT" key in the following order.

1) [-%] 2) [%] 3) [-] 4) [%2]

Program "12.00%" to "[%]" at taxable 1.

1) → → → → →

2) → Enter the +% rate

3) → Enter Flag 1: Taxable 1

PRINT

* P04 *
+x 12.00%
+x F1 1

The assignment for flag is the same as [-%].

Programming the [-] Key

The [-] Key is used to discount by monetary value, 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 manually entering a discount amount on the keyboard.

Setting the Discount Amount and Function Flag

You can enter a discount amount up to six digits long with HALO, see "Setting Function Flag" in section 4.4.2 "Department Programming".

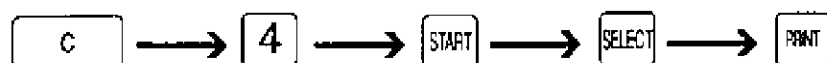
The following example shows that the [-] Key is set for a discount of "\$1.00" to [-] at Non taxable and 3 digits limit.

- 1) C → 4 → START → SELECT SELECT SELECT → INPUT
- 2) 1 00 → INPUT Enter the Discount price
- 3) 0 → INPUT Enter Flag 1
(skip : non taxable)

PRINT

*	P04	*
-		1.00
-	F1	0

Print the Contents of Programming Data



PRINT

* P04 *	
-x	10.00x
-x F1	1
-x F2	0
+x	12.00x
+x F1	1
+x F2	0
-P	1.00
- F1	0
- F2	0
- L	00
-x2	8.00x
-x2F1	0
-x2F2	0

4.4.5 Tax programming

You can program up to four types of tax to be added to each item. We call these four taxes TAX 1 . . . TAX 4. To program a tax, you must select a taxation system and enter the tax rate for that tax. For the instructions how to add those programmed taxes to an item, see "Setting Function Flag" in section 4.4.2 "Department Programming".

Selecting a Tax Style

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

Rate tax

This system calculates tax by automatically adding the preset tax rate to the unit price or the price entered.

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 tax style to a tax (TAX 1-TAX 4), enter the type number (0-2).



Numbers:	Press:	To:
B1	0	Rate tax-Add On
	1	Rate tax-VAT (Value added tax)
	2	Tax Table

Setting the Tax Rate

To set the tax rate for a Tax (Tax 1 - Tax 4), select the Tax number in accordance with basic programming method. Up to 99.9999% can be programmed for the tax rate.

The following example shows that 4.25% has been programmed for Tax 1.

Example 1: Program rate tax "4.2500%" to "TAX 1".



depress 'SELECT' key, 1 Time (TAX 1)

depress 'SELECT' key, 2 Times (TAX 2)

depress 'SELECT' key, 3 Times (TAX 3)

depress 'SELECT' key, 4 Times (TAX 4)

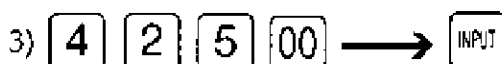


Enter Tax Sign

0 = Add On

1 = VAT

2 = Table Tax



Enter the Rate (4.25%).



Enter the limit amount for non taxable.

PRINT

	* P05 *	
TAX-1		05
TAX-1	4.2500%	
TAX-1	00.00	

Entering a Tax Table

If you select the "tax table system" for a tax number (TAX1-TAX4), 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.

Rate: 3.5%			
Sales amount range			Tax amount
\$0.00	to	\$0.14	None
\$0.15	to	\$0.37	0.01
\$0.38	to	\$0.62	0.02
\$0.63	to	\$0.87	0.03
\$0.88	to	\$1.12	0.04
\$1.13	to	\$1.42	0.05
\$1.43	to	\$1.78	0.06
\$1.79	to	\$2.12	0.07
\$2.13	to	\$2.42	0.08
*5 → \$2.43	to	\$2.71	0.09 → *7
\$2.72	to	\$2.99	0.10
\$3.00	to	\$3.28	0.11
\$3.29	to	\$3.57	0.12
\$3.58	to	\$3.85	0.13
\$3.86	to	\$4.14	0.14
\$4.15	to	\$4.42	0.15
*6 → \$4.43	to	\$4.71	0.16 → *8
\$4.72	to	\$4.99	0.17
\$5.00	to	\$5.28	0.18
\$5.29	to	\$5.57	0.19
\$5.58	to	\$5.85	0.20
\$5.86	to	\$6.14	0.21
\$6.15	to	\$6.42	0.22
\$6.43	to	\$6.71	0.23

Minimum Break Value Maximum Break Value

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.

Step 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**

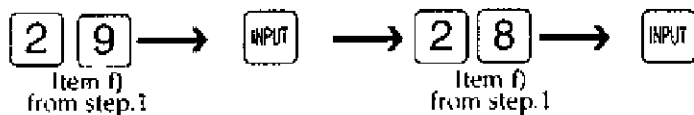
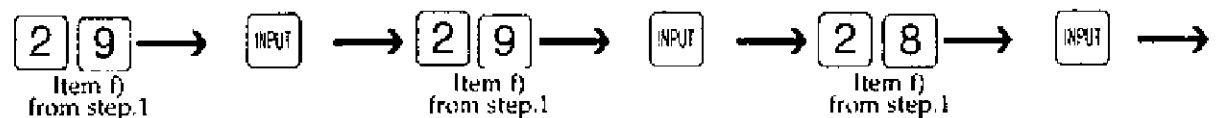
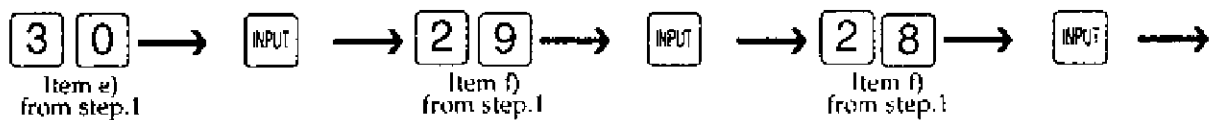
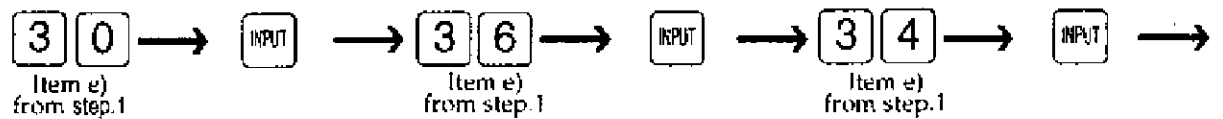
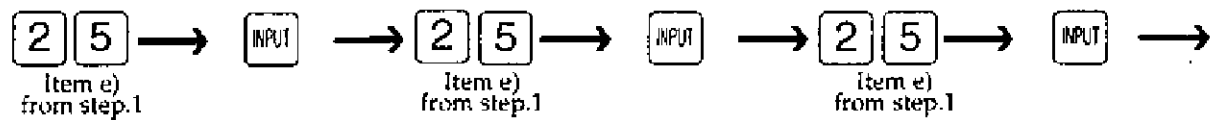
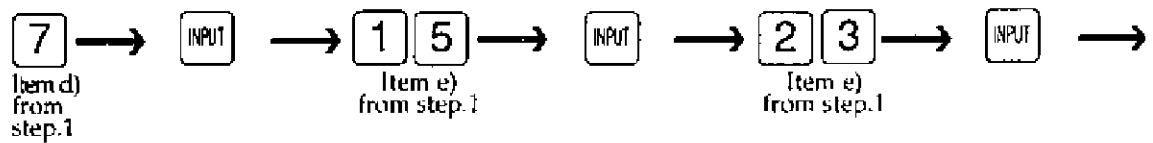
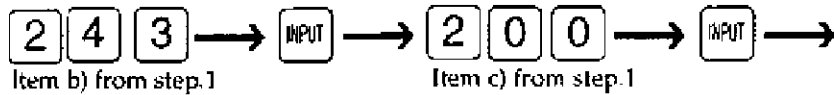
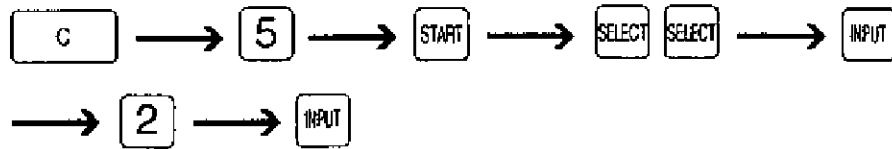
e) **The values of the irregular cycle (marked with *2)**

f) **The values of first regular cycle (marked with *3)**

4 Programming

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

Example : Program table tax "3.5000%" to "TAX 2"



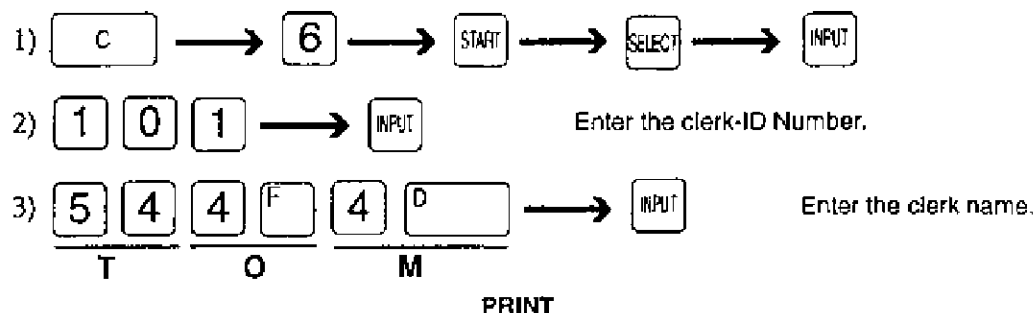
PRINT

* POS *		
TAX-2		25
TAX-2	01	243
TAX-2	02	200
TAX-2	03	7
TAX-2	04	15
TAX-2	05	23
TAX-2	06	25
TAX-2	07	25
TAX-2	08	25
TAX-2	09	30
TAX-2	10	36
TAX-2	11	34
TAX-2	12	30
TAX-2	13	29
TAX-2	14	28
TAX-2	15	29
TAX-2	16	29
TAX-2	17	28
TAX-2	18	29
TAX-2	19	28

4.4.6 Clerk-ID

You can program a maximum four of digits clerk-ID number and twelve characters clerk name for each clerk-ID up to 10 clerks.

The following example shows how to program "clerk-ID No.101" and server name "TOM" to clerk 1.

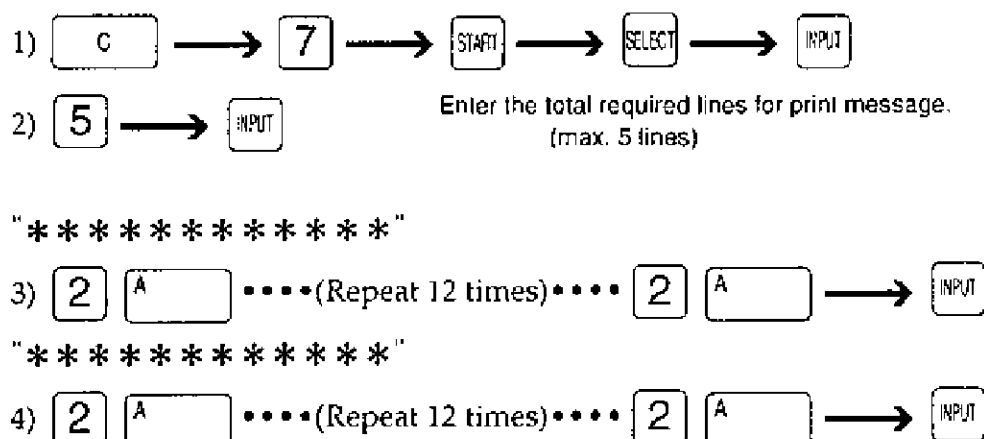


```

      * P06 *
      1      101
      1 TOM
  
```

4.4.7 Logo Stamp (Logo Message)

You can preset maximum 5 lines of printing on the receipt. Printing parameters are (1) 24 single or 12 double characters or combination (2) Programmed 2 steps of 12 character equal 2 single spaces.



"YOUR (2 spaces) R"

5)

1	2	5	9	1	2	4	F
---	---	---	---	---	---	---	---

1	2	5	5	1	2	5	2
---	---	---	---	---	---	---	---

2	0	2	0	1	2	5	2
---	---	---	---	---	---	---	---

 →

INPUT

"ECEIPT"

6)

1	2	4	5	1	2	4	3	1	2	4	5	1	2	4	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

1	2	5	0	1	2	5	4
---	---	---	---	---	---	---	---

 →

INPUT

" (2 spaces) Thank "

7)

2	0	2	0	1	2	5	4	1	2	6	8	1	2	6	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

1	2	6	E
---	---	---	---

1	2	6	B
---	---	---	---

 →

INPUT

" (2 spaces) You (4 spaces) "

8)

2	0	2	0	1	2	5	9	1	2	6	F
---	---	---	---	---	---	---	---	---	---	---	---

1	2	7	5
---	---	---	---

2	0	2	0	2	0	2	0
---	---	---	---	---	---	---	---

 →

INPUT

" (2 spaces) Call (2 spaces) "

9)

2	0	2	0	1	2	4	3	1	2	6	1	1	2	6	C
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

1	2	6	C
---	---	---	---

2	0	2	0
---	---	---	---

 →

INPUT

"Again (2 spaces) "

10)

1	2	4	1	1	2	6	7	1	2	6	1	1	2	6	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

1	2	6	E
---	---	---	---

2	0	2	0
---	---	---	---

 →

INPUT

"*****"

11)

2	A
---	---

(Repeat 12 times).....

2	A
---	---

 →

INPUT

"*****"

12)

2	A
---	---

(Repeat 12 times).....

2	A
---	---

 →

INPUT

```

PRINT
* POT *
L 5
1 L *****
1 R *****
2 L YOUR R
2 R ECEIPT
3 L Thank
3 R You
4 L Call
4 R Again
5 L *****
5 R *****

```

4.4.8 Commercial Message

Your cash register allows you to program maximum 24 characters on 5 lines commercial message for advertising.

The following example shows how to program 3 lines of commercial message.

1) → → → →

2) → Enter the total required lines for print message.(max.5 lines)

"(4 spaces) DISCOUNT"

3)
 →

"(1 space) SALE (7 spaces)"

4)
 →

"(6 spaces) 20-50 (1 space)"

5)
 →

"% (1 space) OFF ! (6 spaces)"

6)

2	5	2	0	4		4	6	4	6	2	1	2	0	2	0
---	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---

2	0	2	0	2	0	2	0
---	---	---	---	---	---	---	---

 →

INPUT

"(4 spaces) SEP. (1 space) 1 (2 spaces)"

7)

2	0	2	0	2	0	2	0	5	3	4	5	5	0	2	E	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--

2	0	3	1	2	0	2	0
---	---	---	---	---	---	---	---

 →

INPUT

"- (1 space) SEP. (1 space) 10 (3 spaces)"

8)

2	D		2	0	5	3	4	5	5	0	2	E		2	0
---	---	--	---	---	---	---	---	---	---	---	---	---	--	---	---

3	1	3	0	2	0	2	0	2	0
---	---	---	---	---	---	---	---	---	---

 →

INPUT

PRINT

* POS *		
MESSAGE		
1	L	DISCOUNT
1	R	SALE
2	L	20-50
2	R	* OFF!
3	L	SEP. 1
3	R	- SEP. 10

4.5 Checking the Contents of Your Programming

When you have finished all the programming you need to do, or at anytime while you are programming the cash register, you can check the contents of your program.

The following steps shows how to print 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 program mode.

An example of a report for checking system flag.

Control lock : P



* P21 *		
MAINFLAG		
01		10
02		00
03		00
04		100000
05		0
06		0
07		0
08		0
09		0
10		0
11		0
12		0
13		00
14		00
15		00
16		0
17		0
18		0
19		0
20		0
21		0
22		0
23		0
24		0

System flag

Section Address

For easy check the contents of your programming, the following list shows each section and its sub-sections.

Lock P	Section	Sub-Section
	1.Constant Data	Date Time Transaction Number Machine Number Training Number Report Password Programming Password
	2.Department	Name Unit Price Function Flag Group Number
	3.PLU	Name Unit Price Link Department
	4.Discount, Percent	[-%] [+%] [-] [-%2]
	5.Tax	1 to 4 Tax1 - Tax4
	6.Clerk-ID	1 to 10 Clerk-ID
	7.Logo Stamp	1 to 5 lines Right and Left side
	8.Commercial Message	1 to 5 lines Right and Left side
	21.System Flag	1 - 16
	22.Key Layout	Key Table
	23.Transaction Name	

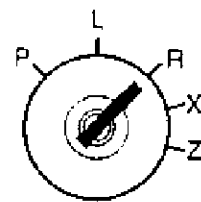
5 Cash Register Operation

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

5.1 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 4, "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 4.1, "Before Programming."

5.2 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.



Department 1
Unitprice : \$1.00

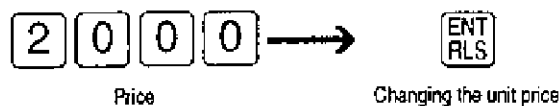
PRINT

DEPT01	1.00
ITEM CT	1
CASH	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.

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.



Price

Changing the unit price



PLU code 15

PRINT

PLU 015	20.00
ITEM CT	1
CASH	20.00

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 Flag" in section 4.4.2, "Department Programming."

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

5/15
Unit price : \$2.00

PRINT

DEPT05	2.00
ITEM CT	1
CASH	2.00

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.

5 0 0 → 3/13 → DEPT SHFT
Price Department 3

→ 3/13 → 1 1 PLU
Department 13 PLU code 11

→ CASH TEND

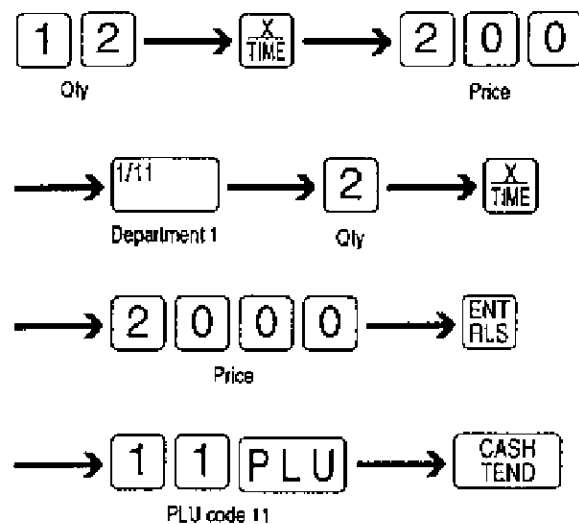
PRINT

DEPT03	5.00
DEPT13	20.00
PLU 011	10.00
ITEM CT	3
CASH	35.00

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.



PRINT

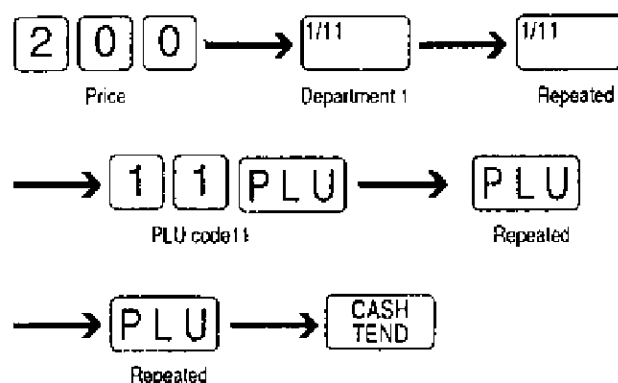
120	02.00
DEPT01	24.00
20	020.00
PLU 011	40.00
ITEM CT	14
CASH	64.00

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 4.3.1, "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.



PRINT

DEPT01	2.00
DEPT01	2.00
PLU 011	10.00
PLU 011	10.00
PLU 011	10.00
ITEM CT	5
CASH	34.00

Displaying the Subtotal

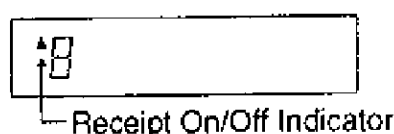
You can display the current subtotal during the sales transaction. Just press the **#/ST** Key.

5.3 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 56 for details).

Second Receipt (Receipt after Sale)

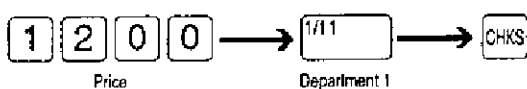
Even when the cash register is operating in Receipt Off mode, you can issue a receipt by pressing the **TOTL** key after a transaction is finalized (This feature is called 'Receipt after Sale'). Optionally, if the receipt is On, a second (additional) receipt may also be issued. Up to 31 lines at maximum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

5.4 Check and Charge

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

Check Sale

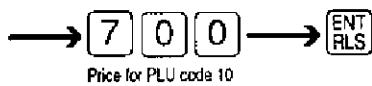
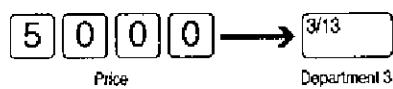
You can register sale paid by check with the **CHKS** Key. The following example shows how you enter the sales information when the customer pays by check for a \$12.00 item from Department 1.



PRINT	
DEPT01	12.00
ITEM CT	1
CHECK	12.00

Charge Sale

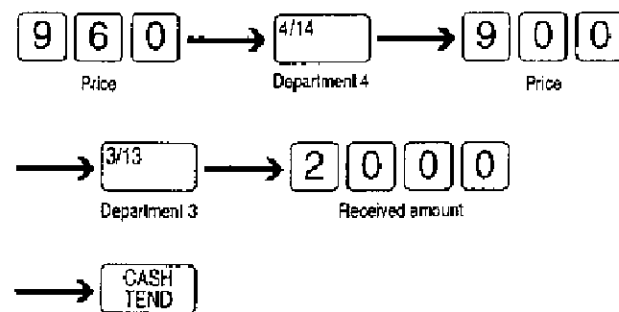
When your customer charges his purchase, you can enter the sales amount charged by the customer with the **CHRG** Key. The following example shows that the customer is charging a \$50.00 item from Department 3 and a \$7.00 item with PLU code 10.



PRINT	
DEPT03	50.00
PLU 010	7.00
ITEM CT	2
CHARGE	57.00

5.5 Change Calculations

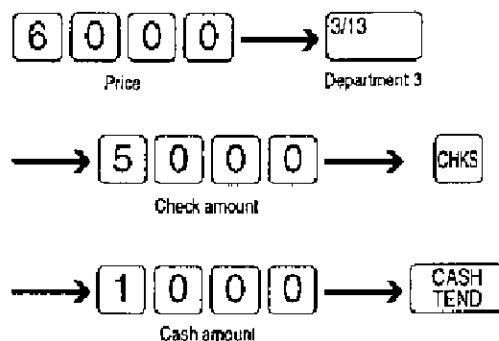
Your register can calculate the change due when the amount received from a customer is more than the sales amount. The following example shows how you enter an amount of \$20.00 received from a customer when you are selling an item from Department 4 for \$9.60 and Department 3 for \$9.00.



PRINT	
DEPT04	9.60
DEPT03	9.00
ITEM CT	2
TOTAL	18.60
CASH TD	20.00
CHANGE	1.40

5.6 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 \$10.00 bill for a \$60.00 total amount.



PRINT	
DEPT03	60.00
ITEM CT	1
TOTAL	60.00
CHECK TD	50.00
CASH TD	10.00
CHANGE	0.00

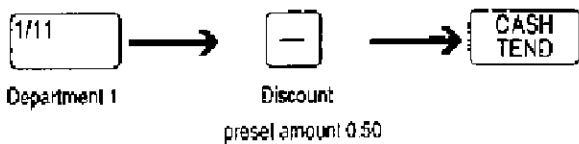
The cash register will show \$10.00 as the change to be given to the customer and the receipt will show a payment of \$50.00 by check and \$10.00 by cash.

5.7 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 4.4.4, "Programming the [-%] Key, [+%] Key, and the [-] Key."

For Each Item

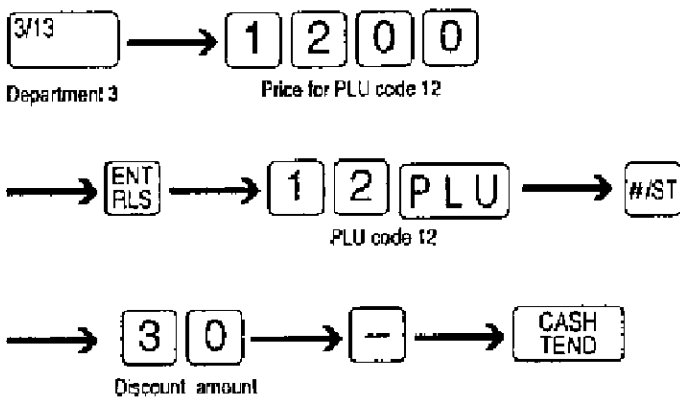
When you want to discount a preset amount from an item, do the following.



PRINT	
DEPT01	1.00
-N	0.50
ITEM CT	1
CASH	0.50

For the Total

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



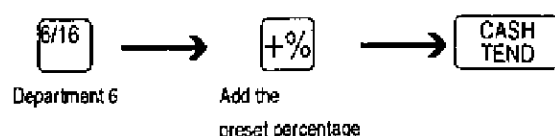
PRINT	
DEPT03	5.00
PLU 012	12.00
SUB-TTL	17.00
-G	0.30
ITEM CT	2
CASH	16.70

5.8 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 4.4.4, "Programming the [- %] Key, [+ %] Key, and the [-] Key."

For Each Item

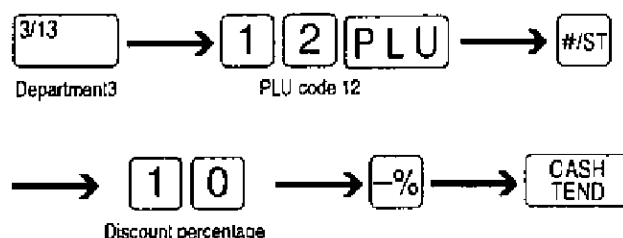
When you want to add a preset percentage to the price of an item, do the following.



PRINT	
DEPT06	5.00
10 +xN	0.50
ITEM CT	1
CASH	5.50

For the Total

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



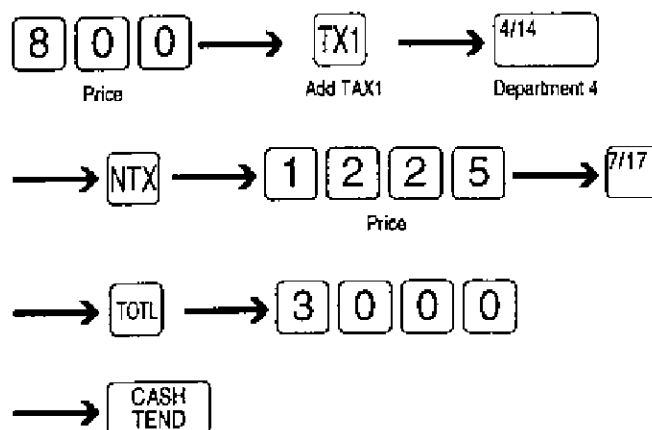
PRINT	
DEPT03	5.00
PLU 012	10.00
SUB-TTL	15.00
10 -xG	1.50
ITEM CT	2
CASH	13.50

5.9 Tax Calculations

This section shows examples of selling items to which tax is added. For details about programming taxes, see section 4.4.5, "Tax Programming."

Add-on tax system

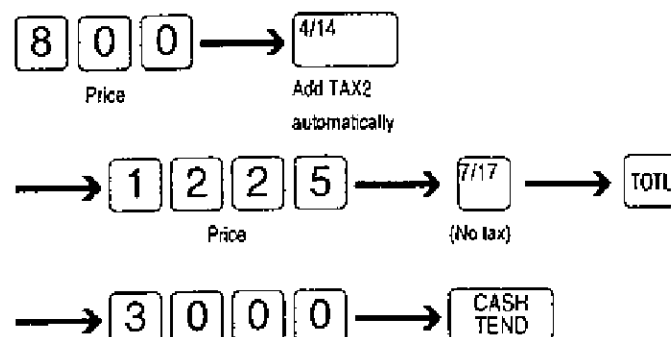
The following example shows how you sell a Department 4 item by manually adding TAX1 (Set for 7.5%) to its price and a Department 7 item to which is non-taxable item.



PRINT	
DEPT04 I	8.00
DEPT07	12.25
ITEM CT	2
TXBL-1	8.00
TAX-1 7.5%	0.60
NET	20.25
TOTAL	20.85
CASH TD	30.00
CHANGE	9.15

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 is non-taxable item.

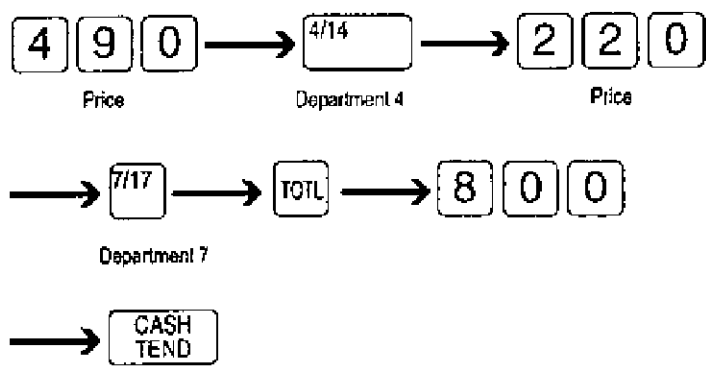


PRINT	
DEPT04 II	8.00
DEPT07	12.25
ITEM CT	2
TXBL-2	8.00
TAX-2 5%	0.38
NET	19.87
TOTAL	20.25
CASH TD	30.00
CHANGE	9.75

5 Cash Register Operation

Tax table system

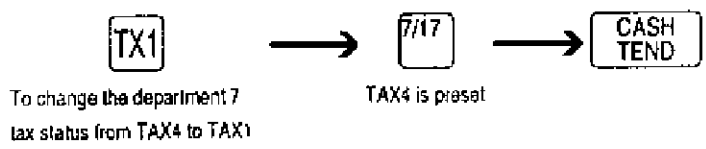
The following example shows how you sell a Department 4 item (TAX3 is added) and a Department 7 item (TAX3 is added). It is supposed that the TAX3 has been entered the Tax table shown on "Entering a Tax Table" in 4.4.5, "Tax Programming" section.



PRINT	
DEPT04	4.90
DEPT07	2.20
ITEM CT	2
TXBL-3	7.10
TAX-3	0.25
NET	7.10
TOTAL	7.35
CASH TO	8.00
CHANGE	0.65

Tax Shift

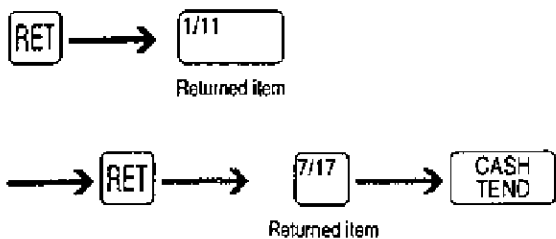
You can change the current tax status of a department temporarily with the **NTX**, **TX1** or **TX2** Key. When you use the **NTX** Key, the department to which you have added a tax will be nontaxable. When you use the **TX1** or **TX2** Key, only **TAX1** or **TAX2** will be added to the department. 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).



PRINT	
DEPT07	2.50
ITEM CT	1
TXBL-1	2.50
TAX-1 7.5%	0.18
NET	2.50
CASH	2.68

5.10 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:



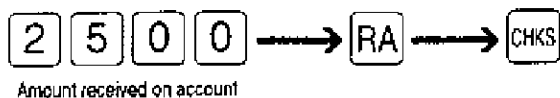
PRINT		
DEPT01	RETURN	1.00
DEPT07	RETURN	2.50
ITEM CT	0	
NET		-3.50
CASH		-3.50

5.11 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

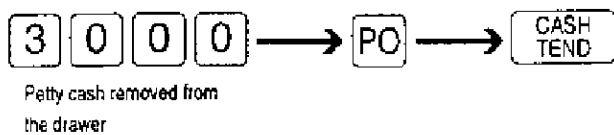
The following example shows how you register the \$25.00 received on account by check.



PRINT		
R/A		25.00
R/A CK		25.00

Paid Out

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



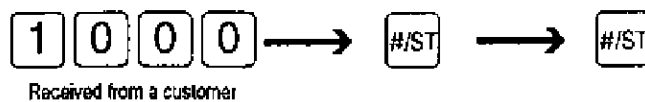
PRINT		
P/O		30.00
P/O CA		30.00

5.12 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

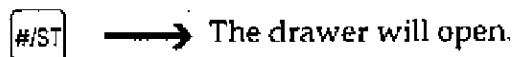
When a customer requests change, you can enter the amount received from the customer. The amount will be printed in the reports but it is not added to total sales amount.



PRINT	
NOSALE	1000# 0#

Opening the Drawer

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



PRINT	
NOSALE	0#

NOTE

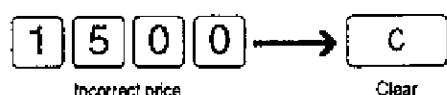
- You can also open the drawer with the lever on the bottom of the drawer. See section 9.2, "Opening the Drawer Manually."

6 Making Corrections

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

6.1 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.



PRINT

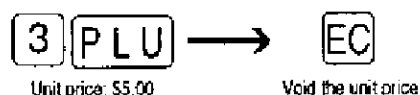
DEPT01	10.50
ITEM CT	1
NET	10.50
CASH	10.50

NOTE

- You cannot correct the number with the **C** Key after the department has been pressed.

6.2 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.

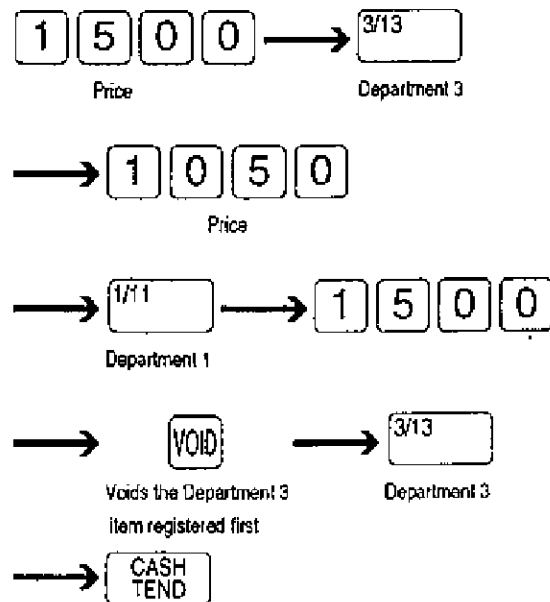


PRINT

PLU 003	5.00
-VOID-	
PLU 003	5.00
PLU 003	10.00
ITEM CT	1
NET	10.00
CASH	10.00

6.3 Voiding Earlier Entries

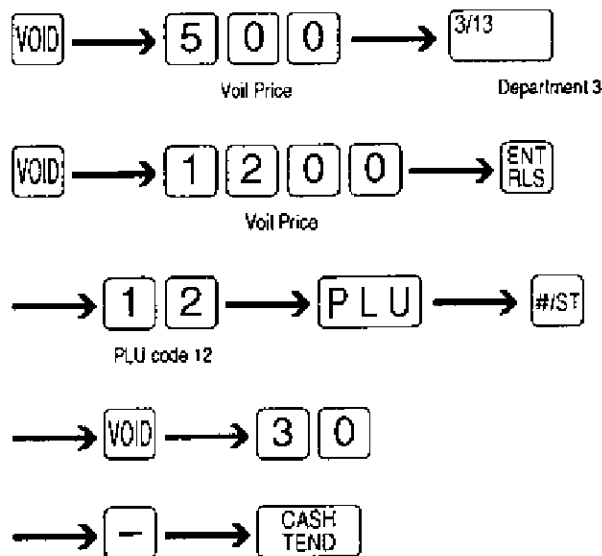
You can also void items you have registered prior to the last item. To void items entered earlier, use the **VOID** Key. The following example shows how to void the first item registered during this transaction.



PRINT	
DEPT03	15.00
DEPT01	10.50
-VOID-	
DEPT03	15.00
ITEM CT	1
NET	10.50
CASH	10.50

6.4 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".



A)

PRINT

DEPT03	5.00
PLU 012	12.00
SUB-TTL	17.00
-G	0.30
ITEM CT	2
NET	16.70
CASH	16.70

PRINT

DEPT03	-VOID-	5.00
PLU 012	-VOID-	12.00
SUB-TTL	-VOID-	-17.00
-G	-VOID-	0.30
ITEM CT	-2	
NET		-16.70
CASH		-16.70

7 Special Functions

This chapter describes various special functions of this cash register. The settings for these functions are described in section 4.3.1, "Setting System Flags."

7.1 Training 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 training password and press the "CHRG" Key.

9 9 9 → CHRG

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.

1 2 0 0 → 3/13

→ 6/16 → CASH TEND

PRINT

TRAINING

DEPT03	12.00
DEPT06	5.00
ITEM CT	2
NET	17.00
CASH	17.00

To leave the training mode:

1. Turn the control lock to the "X" position.
2. Enter the same number when you go to the training mode and press the "CHRG" Key.

9 9 9 → CHRG

3. Turn the control lock to the "R" position.
4. Resume normal operation.

8 Checking and Resetting the Sales Information

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

8.1 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 14 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 "PO" 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").

8 Checking and Resetting the Sales Information

■ Report Table

A) The following table "A" shows how you can issue various reports.

REPORT NAME	X1	X2	Z1	Z2	TR	KEY OPERATION
FULL DEPT GROUP SALES	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	DEPT
FULL DEPARTMENT TOTAL	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	ENT RLS → DEPT
IND. PLU SALES	<input type="radio"/>	<input type="radio"/>				N N N (PLU No.) ENT RLS → N N N (PLU No.) PLU
FULL PLU SALES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		ENT RLS → PLU
IND. LINK DEPT PLU	<input type="radio"/>	<input type="radio"/>				X TIME → N N → PLU
FULL LINK DEPT PLU	<input type="radio"/>	<input type="radio"/>				X TIME → PLU
INDIVIDUAL CLERK SALES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	ENT RLS → N N N N → ID
ALL CLERK SALES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	ENT RLS → ID
FULL REPORT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	CASH TEND
IN DRAWER TOTAL	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	CASH
NAGT REPORT			<input type="radio"/>			ENT RLS → YOD
HOURLY SALES TOTAL	<input type="radio"/>		<input type="radio"/>			ENT RLS → X TIME
CASH DECLARATION			<input type="radio"/>		<input type="radio"/>	EC → N (Count) → X TIME → N (Unit) RA ↔ CASH TEND
MARK N : NUMERIC KEY DEPT : Any voltage department key is available instead of above DEPT 1 key. TR : TRAINING REPORT X2/Z2 : Require before [PO] key.						

The following table "B" shows the types of total amounts that can be displayed.
B)

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	PO total
4 and X/TIME	Check total	8 and X/TIME	Cash in drawer total

8.2 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 4.3.1, "Setting System Flags."

■ Full report

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

* X 1 *			
FULL REPORT			
DEPT01	33Q		Number of sales for department 1
	221.50		Total sales amount for department 1
DEPT02	2Q		
	7.00		
DEPT03	10Q		
	185.80		
DEPT04	7Q		
	10,046.50		
DEPT05	1Q		
	2.00		
DEPT06	2Q		
	6.60		
DEPT07	5Q		
	51.20		
DEPT13	1Q		
	20.00		
DEPT TTL	61Q		Gross total number of sales for departments
	10,540.60		Total sales amount for departments
NOTXBL	30N		
	495.70		Total nontaxable amount
TXBL-1	4N		Number of taxable amount for Tax 1
	19.50		Taxable amount for Tax 1
TAX-1			Total amount for Tax 1
TXBL-2	3N		
	18.00		
TAX-2			
TXBL-3	2N		
	0.85		
TAX-3			
	10,007.10		
TAX-3	350.25		
+%G	1N		Number of times the +% was used
	0.05		Total amount for the +%
GROSS			Gross total amount
VOID-R	4N		Number of voids
	37.00		Total amount of void
RETURN	2N		Number of items returned
	3.50		
-G	3N		Number of [-G]
	0.30		Total amount of [-G]
-%G	1N		Number of times the -% was used
	1.50		Total amount for the -%
NET TL			Total amount of net sales
	10,290.55		

8 Checking and Resetting the Sales Information

CASH	32N	Number of cash sales
	10,771.55	Total amount of cash sales
CHECK	2N	Number of check sales
	62.00	Total amount of check sales
CHARGE	1N	Number of charge sales
	57.00	Total amount of charge sales
+xN	2N	Number of +%
	0.60	Total amount of +%
-N	1N	Number of [-N]
	0.50	Total amount of [-N]
-xN	1N	Number of -%
	0.20	Total amount of -%
HSC-U	1N	Number of [-] void
	0.30	Total amount of [-] void
R/A CA	1N	Number of RA (Cash)
	12.00	Amount of Received on Account (Cash)
R/A CK	1N	Number of RA (Check)
	25.00	Amount of Received on Account (Check)
P/O CA	1N	Number of PO (Cash)
	30.00	Amount of Paid Out (Cash)
P/O CK	1N	Number of PO (Check)
	10.00	Amount of Paid Out (Check)
TAXTOTAL	352.55	Gross tax total
NET-TAX	10,538.00	Net sales excluding tax
CAID	34N	
	10,753.55	Cash in Drawer
CKID	4N	
	77.00	Check in Drawer
NOSALE	2N	Number of non-sales
	10.00	Non-sales total
RPRT CNT	0002	Number of X1 report

TOM		
NET TL	33N	Number of net sales for clerk 1
	10,847.60	Net sales total for clerk 1
VOID	6N	Number of voids for clerk 1
	40.50	Void amount for clerk 1
TAX	8N	Number of total tax for clerk 1
	352.55	Tax amount for clerk 1
NOSALE	2N	Number of non-sale for clerk 1
	10.00	Non-sales amount for clerk 1
CLERK 2		
NET TL	2N	
	42.95	
08-02-99 06:27PM		
12 0033 CLERK 2		

■ PLU report

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

* X 1 *			
PLU REPORT			
3			
PLU 003	1N	10.00	Number of sales for PLU 3
10			
PLU 010	1N	7.00	Total sales amount for PLU 3
11			
PLU 011	6N	80.00	
12			
PLU 012	2N	22.00	
15			
PLU 015	1N	20.00	

■ Hourly report

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

* X 1 *			
HOURLY REPORT			
10:00	130	55.95	Number of sales from 10:00 to 10:59
11:00	400	147.97	Total sales amount from 10:00 to 10:59
12:00	580	715.72	
13:00	360	512.28	
14:00	330	366.63	
15:00	210	192.99	
16:00	290	189.37	
17:00	490	544.39	

■ Link department plu report

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

* X 1 *			
LINK DEPT PLU REPORT			
01	DEPT01		Link department
3			
PLU 003	1N	10.00	Number of PLU 3
			Total sales of PLU 3
10			
PLU 010	1N	7.00	
11			
PLU 011	6N	80.00	
12			
PLU 012	2N	22.00	
04	DEPT04		
15			
PLU 015	1N	20.00	

■ Cash in drawer report

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

* X 1 *			
IN DRAWER REPORT			
CRID	34N		Cash in drawer
		10,753.55	
CKID	4N		Check in drawer
		77.00	

8 Checking and Resetting the Sales Information

■ Group report

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

* X 1 *			
GROUP REPORT			
DEPT GRP 0			Number of group
DEPT01	330		Number of sales for Department 1
	221.50		Total sales of Department 1
DEPT02	20	7.00	
DEPT03	100	185.80	
DEPT04	70	10,046.50	
GROUP TTL	520		Total number of sales for Group 0
	10,460.80		Total sales amount of Group 0
DEPT GRP 1			
DEPT05	10	2.00	
DEPT06	20	6.60	
DEPT07	50	51.20	
GROUP TTL	80	59.80	
DEPT GRP 2			
DEPT13	10	20.00	
GROUP TTL	10	20.00	

■ Department sales report

To issue this report, press the **ENT RLS**, and **Department** Key while in the "X" mode.

* X 1 *			
FULL DEPT SALES			
DEPT01	33N		Number of sales for Department 1
	221.50		Total amount of sales for Department 1
DEPT02	2N	7.00	
DEPT03	10N	185.80	
DEPT04	7N	10,046.50	
DEPT05	1N	2.00	
DEPT06	2N	6.60	
DEPT07	5N	51.20	
DEPT13	1N	20.00	
DEPT TTL	61N	10,540.60	

■ Training report

To issue this report, press the **CASH** Key while in the Training mode.

TRAINING			
* X 1 *			
FULL REPORT			
DEPT03	1Q	—	Number of sales for Department 3
		12.00	Total sales amount of Department 3
DEPT06	1Q	5.00	
DEPT TTL	2Q	—	Number of sales amount for Department
		17.00	Total sales amount for Department
NOTXBL	1N	—	Number of sales amount for taxable
		17.00	Total sales amount for taxable
GROSS		17.00	Total amount for gross sales
NET TL		17.00	Total amount for net sales
CASH	1N	—	Number of cash sales
		17.00	Total amount of cash sales
CASH	1N	—	Cash in drawer
		17.00	
RPRT CNT		0003	Number of report

CLERK 2			
NET TL	2N	17.00	

■ Clerk report

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

* X 1 *			
CLERK REPORT			
TOM			
NET TL	33N	—	Number of net sales
		10,847.60	Net sales total
VOID	6N	—	Number of voids
		40.50	Total amount of void
TAX	8N	—	Number of tax
		352.55	Total amount of tax
NOSALE	2N	—	Number of non-sales
		10.00	non-sales total
CLERK 2			
NET TL	2N	42.95	

8.3 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 **E/C** 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 8 to "Require registering 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.

EC

→ 3 9 **X TIME** → 1 0 0 0 0 → **RA**

→ 1 0 5 **X TIME** → 5 0 0 0 → **RA**

→ 1 1 1 **X TIME** → 1 0 0 0 → **RA**

→ 2 9 1 **X TIME** → 1 0 0 → **RA**

→ 8 7 **X TIME** → 2 5 → **RA**

→ 9 1 **X TIME** → 1 0 → **RA**

→ 9 7 **X TIME** → 5 → **RA**

→ 4 1 1 **X TIME** → 1 → **RA**

→ **CASH
TEND**

PRINT

* Z 1 *	
CASH DECLARATION	
390	0100.00
R/A	3,900.00
1050	030.00
R/A	5,250.00
150	020.00
R/A	300.00
1110	010.00
R/A	1,110.00
2910	01.00
R/A	291.00
870	00.25
R/A	21.75
910	00.10
R/A	9.10
970	00.05
R/A	4.85
4110	00.01
R/A	4.11

TOTAL	10,890.81
CASH	10,753.55
	137.26

FULL REPORT	
DEPT01	330
	221.50
DEPT02	20
	7.00

9 Maintenance

This chapter explains the maintenance operations you can perform yourself.

9.1 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.

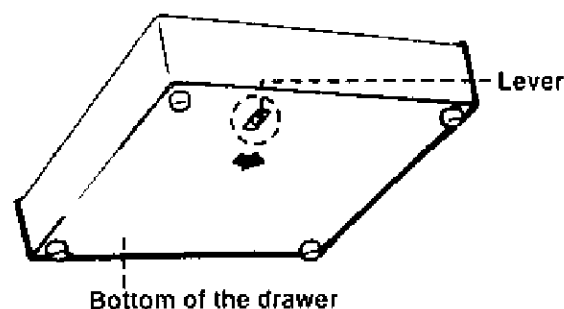
Do not use any volatile chemicals, such as benzine or thinner, or a chemically treated cloth. The cash register might be damaged.

9.2 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.



9.3 Replacing the Ink Ribbon Cassette

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 cassette and place it along with paper guide. (See Fig.1.)
5. Set the paper roll divider and close the printer cover.

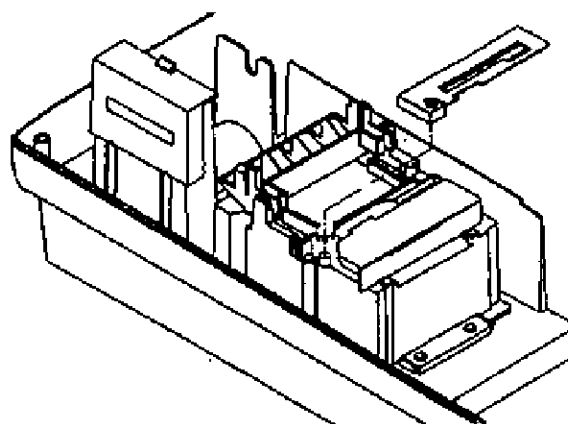


Fig.1

9.4 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.

9.5 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 ID" in section 4.4.6.

- If the clerk key assigned to you has not been pressed, press it.

See "5.1 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 ribbon is in place.

- Replace the ink ribbon.

See "9.3 Replacing the ink ribbon cassette."

If you cannot solve your problem after reading and following the instructions above, reset the cash register computer system as described in "4.1 Before Programming" section. If the problem is not solved after resetting the system, turn the control lock to the "L" position and remove the power cord from the wall. Then contact your local dealer.

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9701