ET5616

OPERATING MANUAL

CODE: DL-2P (2-port)

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.

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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Appendix (Cross reference for System Function Flag)

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 2.4 "Installing and Removing a Paper Roll".

5. 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 "System Programming".

6. 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".

7. 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 Specification

Item	Description		
Power source	AC117V, 220V, 230V or 240VAC ±10% Depends on the country		
Power consumption	Max.35W		
Ambient operating temperature	32°F to 140°F (0°Cto 40°C)		
Memory	C-MOS RAM		
Memory back-up time	Approx. 700 hours		
Printer	Dot matrix printer		
Printing speed	Average 3 lines per sec		
Paper roll	Width	Journal	37.5mm±0.5 mm x Φ60
		Receipt	37.5mm±0.5 mm x Φ60
External dimensions	410 mm (W) x 430 mm (D) x 315 mm (H) (16.4 inch (W) x 16.9 inch (D) x 12.4 inch (H))		
Weight	12.0kg (26.4 lb.)		

1.2 Precautions

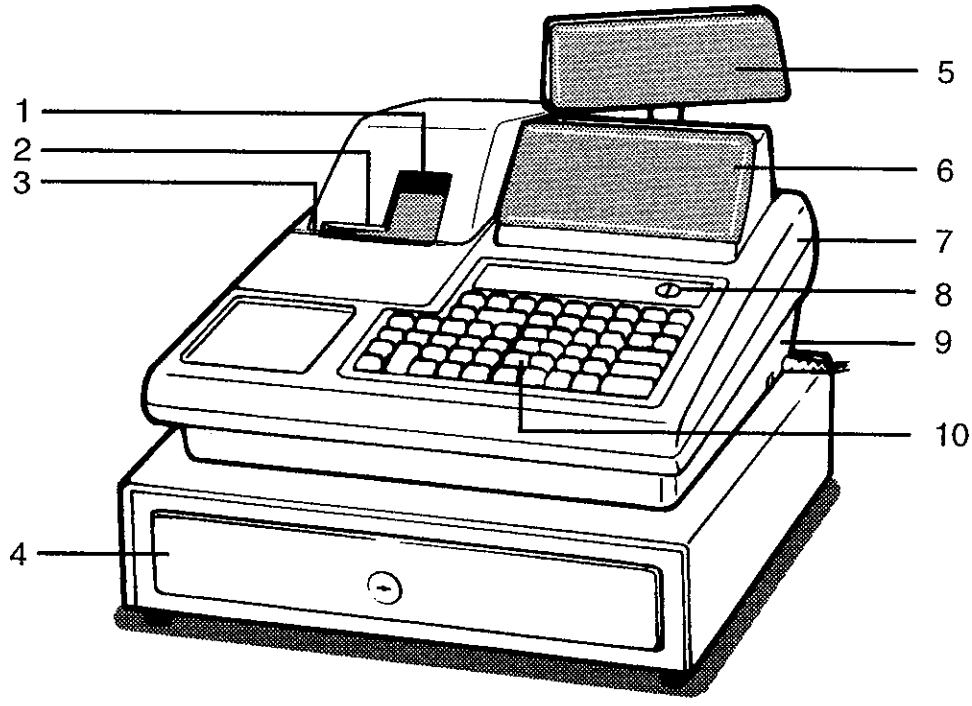
Please note the following items before using the cash register.

- 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.

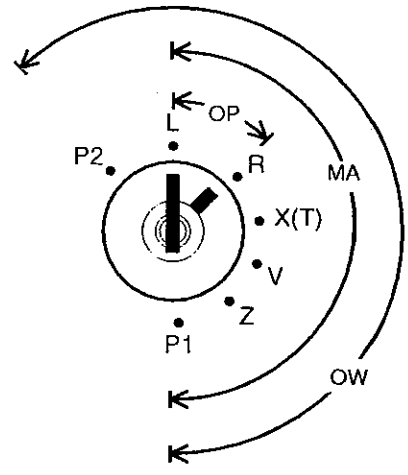
■ An External View



Part names	Functions
1. Printer cover	This cover protects the printer.
2. Receipt dispenser	This is where the receipt comes out.
3. Validation slot	This slot is validation printing. Insert the validation paper here.
4. Drawer	This drawer is used to store cash, checks, coupons, etc. There is a lock on it. Lock or unlock with the drawer open key which came with this cash register.
5. 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.
6. 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.
7. Machine Cover	The cover protect the electronic contents.
8. Control lock	The control lock allows you to change cash register modes.
9. Bottom Cover	This is used to install power unit, printer and etc.,
10. Keyboard	The keyboard includes 29 function keys which allow you to perform various functions. There are also 16 department keys and 11 numeric keys.

■ Control Lock

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



OW : Area the owner's key
MA : Area the manager's key
OP : Area the operator's key

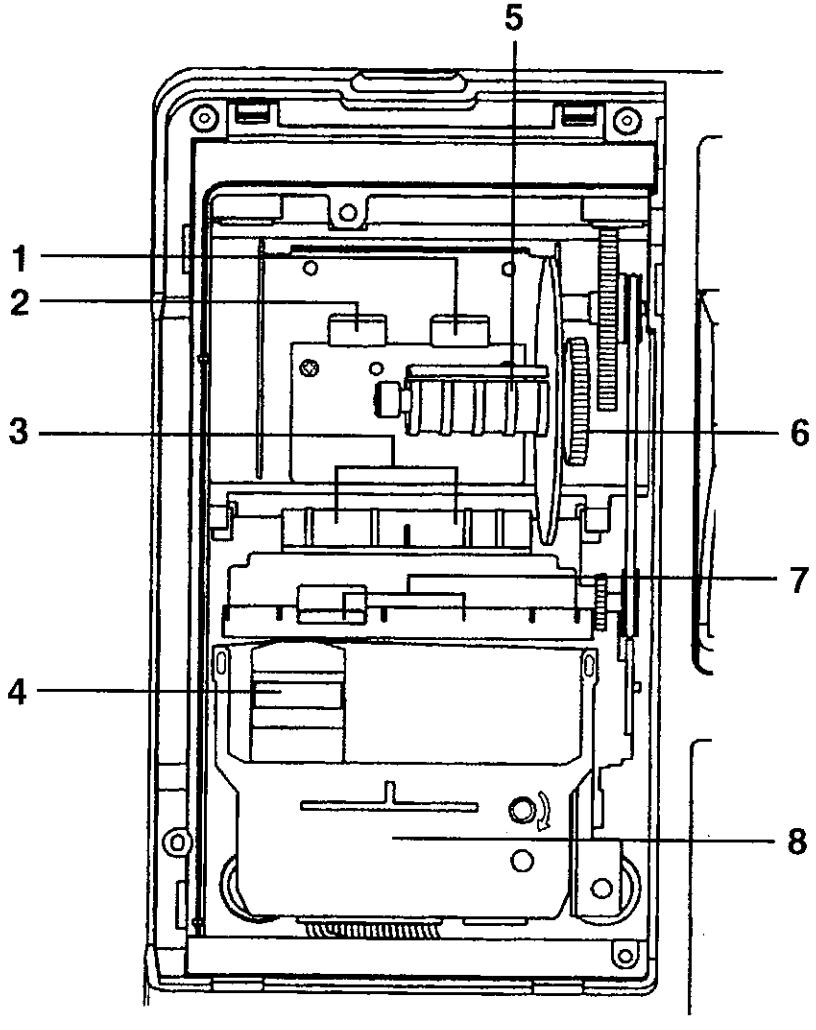
can access

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

Mark	Mode Name	Functions
P2	Program mode position 2	Used to programming system function flag, change of key layout and etc.
L	Lock mode	Used to turn off the cash register. This mode disables all operations.
R	Register mode	Used for normal checkout operations.
X(T)	Read mode	Used to print sales information reports.
Z	Reset mode	Used to read or reset the sales information.
P1	Program mode position 1	Used to programming date, time, name, and unit price of Department and PLU, Tax rate and etc.
V	Void mode	Used to correct registration.

■ Printer

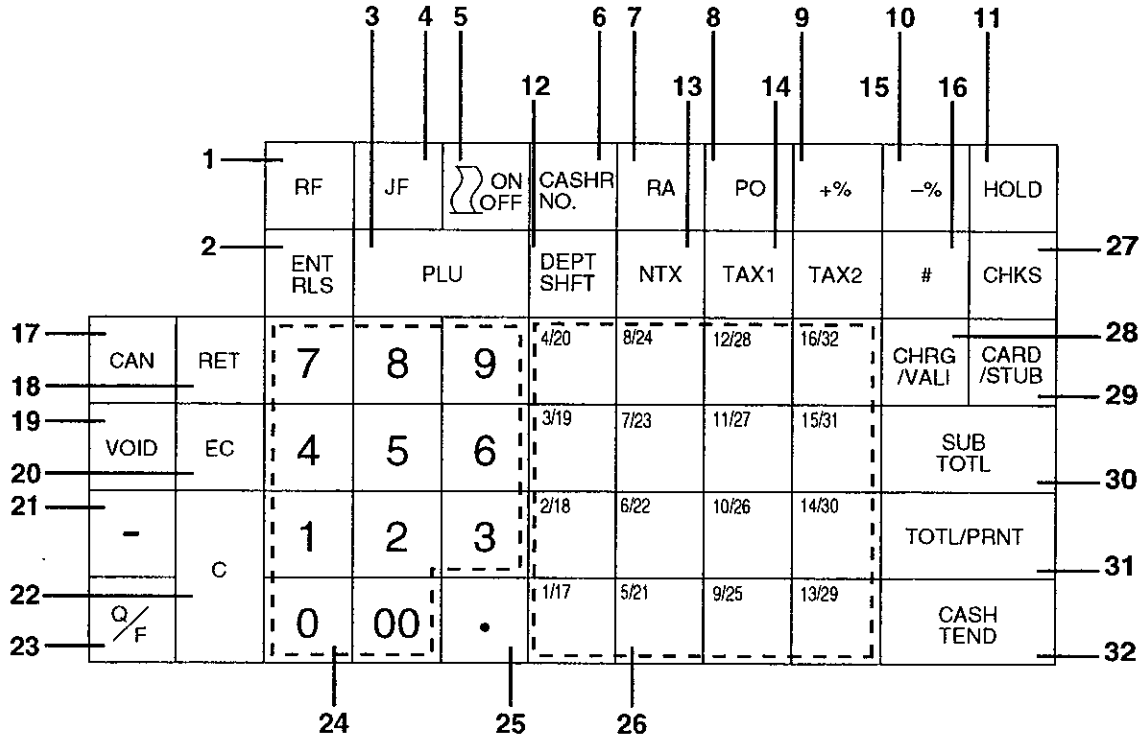
The figure below shows the printer with the cover removed.



Part names	Functions	See page:
1. Journal location	The paper roll for record keeping (the journal) is located here.	
2. Receipt location	The paper roll for receipts is located here.	
3. Paper entrance	The end of paper is inserted into the printer here.	
4. Dot head unit	Print the characters on the receipt and journal.	
5. Take-up reel	Used to take up the paper used for record keeping (the journal).	
6. Support	Allows the take-up reel to rotate.	
7. Paper exit	The paper exits here.	
8. Ink ribbon cassette	Used to supply ink to the printer.	

■ Keyboard

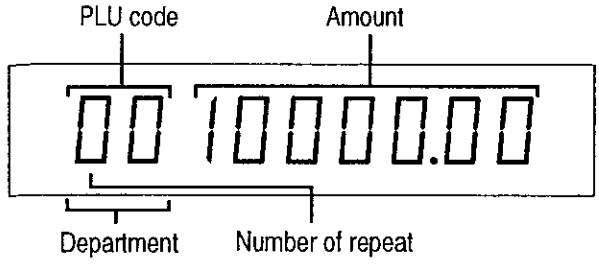
The figure below shows the standard keyboard for this cash register.



Name	Abbreviation	Functions
1. Receipt feed Key	**RF**	Used to advance the receipt paper.
2. PLU price entry Key	**ENT RLS**	Used to over-ride unit pricing which was previously programmed in PLU and DEPARTMENTS. Also used to release single item preset price and high amount lock out.
3. Price look up Key	**PLU**	Used for registering a PLU item.
4. Journal feed Key	**JF**	Used to advance the journal paper.
5. Receipt ON/OFF Key	**ON/OFF**	This key allows you to turn off the receipt printing,to save paper.
6. Cashier No. key	**CASHR NO.**	Used to enter cashier No. (1-10) before starting operation.
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. Premium Key	**[+%]**	Used to add a percentage, such as a premium,to the price of an item.
10. Discount Key	**[-%]**	Used to give a discount as a percentage of the price of an item.

11. Hold Key	**HOLD**	Used to keep the details of the sale in memory to avoid delays, allows next customer to be served.
12. Department Shift Key	**DEPT/SHFT**	Change the code used by the Department Keys. For example, it is pressed to use the 1 key (marked 1/17) for department 17.
13. Non-tax key	**NTX**	Used for registering a taxable item as a nontaxable item.
14. TAX Key 1	**TAX 1**	Used to add tax to the sales amount. The tax rate for this Key can be programmed.
15. TAX Key 2	**TAX 2**	This key has the same function as TX 1 but can have a different tax rate.
16. Non-add Key	**#**	Used to print a non-add code or to open the drawer for the purpose of money change.
17. Cancel Key	**CAN**	Used for cancellation of a current transaction.
18. Return Key	**RET**	Used to register the price of returned items.
19. Void Key	**VOID**	Used to void an amount you have previously entered and stored.
20. Error correction Key	**EC**	Used to void an incorrectly entered item immediately after entering it.
21. Minus/Coupon Key	**[-]**	Used to discount a certain amount or subtract an amount of an item when you receive coupon.
22. Clear Key	**C**	Used to clear an error. The displays the error code or an amount you entered mistakenly.
23. Multiplication Key	**Q / F**	Used when register multiple item.
24. Numeric Keys	**1 to 00**	Used for entering numbers.
25. Point Key	**.**	This key is used to enter decimal values.
26. Department Keys	**1/17 to 16/32**	Used to classify the source of an item from up to 32 departments.You must press one of these keys every time you sell an item assigned to a department key.
27. Check Key	**CHKS**	This key is used when receiving check for a sale.
28. Charge/Validation Key	**CHRG/VALI**	Used to register the amount of charge sale and is also used for validation print.
29. Card/Stub Key	**CARD/STUB**	Used to make payment by credit cards, and also issue a stub receipt after completion of the transaction.
30. Subtotal key	**SUB TOTL**	Used to display a subtotal during operations.
31. Total/Print Key	**TOTL / PRNT**	Used to display a subtotal including tax or to issue a second receipt immediately after issuing the first one.
32. Cash/Tend Key	**CASH TEND**	Used to register the amount of cash tendered by the customer and to complete sales transaction and display the amount of change due. This key is also used for issuing reports.

■ 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

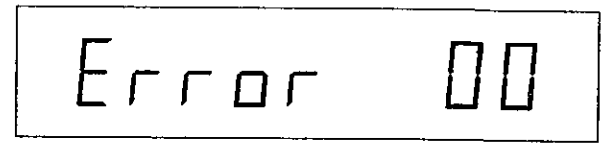
Shows a sale from Department 10.

Shows that two of the same item are being sold.

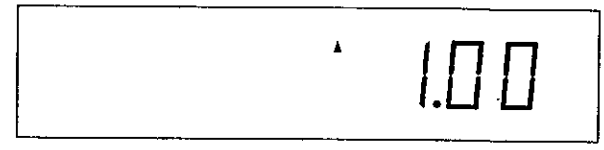
Examples of status symbols

Your register has status symbols: " ▲ ". Each symbol is displayed as shown below:

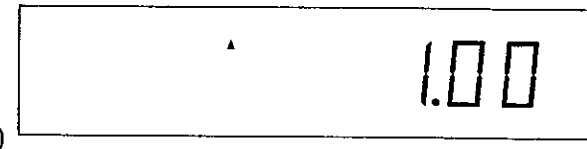
Appears when an error, such as an overflow, occurs.



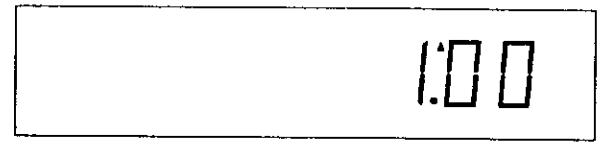
Appears when discounting.
(" ▲ " appears on 4 digit.)



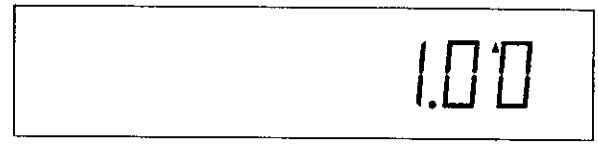
Appears when registering petty cash amount. For example, entering money received on account and entering petty cash removed from the drawer (paid-out).(" ▲ " appears on 6 digit.)



Apeears when the amount received from a customer is less than the sales amount.
(" ▲ " appears on 2 digit.)

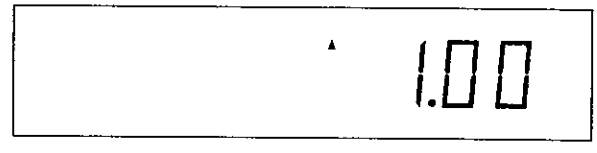


Appears when the amount received from a customer is more than the sales total.
(" ▲ " appears on 1 digit.)

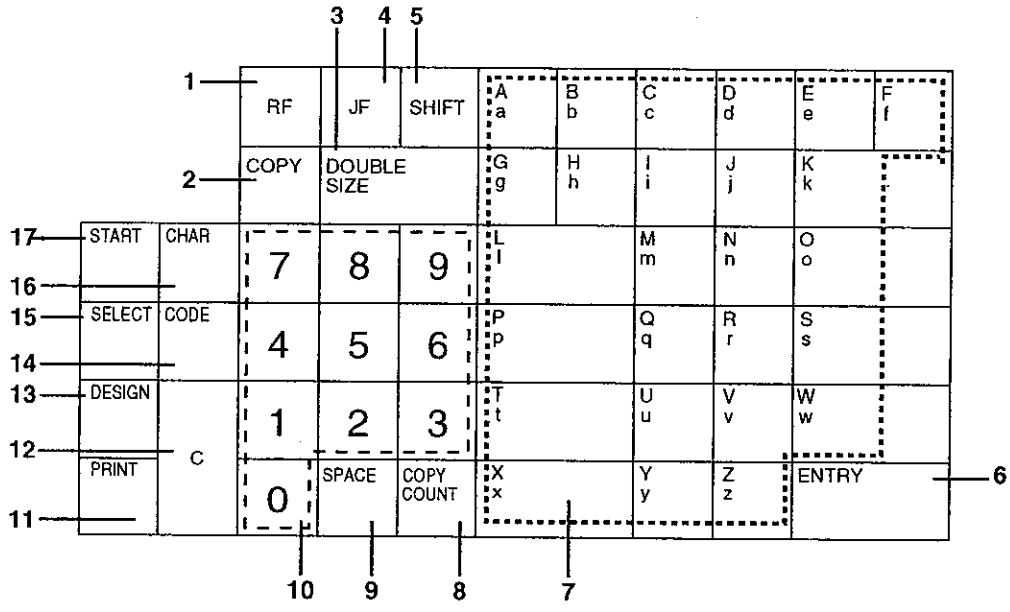


Appears when the cash register calculates the subtotal after pressing the **SUB TOTL** Key.
(" ▲ " appears on 3 digit.)

Appears when voiding and entering returned item from a customer.
(" ▲ " appears on 4 digit.)



■ Programming sheet



Name	Abbreviation	Functions
1. Receipt feed Key	**RF**	Used to advance the receipt paper.
2. Copy data key	**COPY**	Used to copy programmed data.
3. Double size key	**DOUBLE SIZE**	Used to print out the character in double size.
4. Journal feed Key	**JF**	Used to advance the journal paper.
5. Shift Key	**SHIFT**	Used to select for Capital letter or Small letter on Character mode.
6. Data entry Key	**ENTRY**	Used to decide slelecting item or entry data.
7. Alphabet Key	**A/a to Z/z**	These keys are used to input for both capital letter and small letter name.
8. Copy count Key	**COPY COUNT**	Used to copy count of copy programming.
9. Space Key	**SPACE**	Used to enter space data.
10.Numeric keys	**1 to 0**	Used for entering numbers.
11.Preset data print out Key	**PRINT**	Used to print out the programming data.
12.Clear Key	**C**	Used to clear an error code or flag data you entered mistakenly.
13.Designation key	**DESIGN**	Used to designate the numbers.
14.Code mode select key	**CODE**	Used to enter the code number.
15.Select key	**SELECT**	Used to select the programmed item.
16.Character mode select key	**CHAR**	Used to enter A to Z directly.
17.Start key	**START**	Used to start the programming.

■ 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	7	α	≡
1			!	1	A	Q	a	q	ü	æ	í	Ë	Í	8	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	A		Σ	⌠
5			%	5	E	U	e	u	à	ò	Ñ	Ẽ	O		σ	J
6			&	6	F	V	f	v	å	û	ª	Õ	a		μ	÷
7			'	7	G	W	g	w	ç	ù	º	À	o		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	I
B			+	;	K	[	k	{	ï	¢	½	Â	ü		σ	II
C			,	<	L	\	l	¦	î	£	¼	Ê	ö		∞	III
D			—	=	M	]	m	}	ì	¥	¡	î	Æ		φ	IV
E			.	>	N	^	n	~	Ä	Pt	《	Û	V		∈	I3
F			/	?	O	_	o		Å	ƒ	》	Ô	VI		∩	

** AD (12H) : Double size code
SP (20H) : Space code

2 Setting Up

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

2.1 Installing the Cash Register

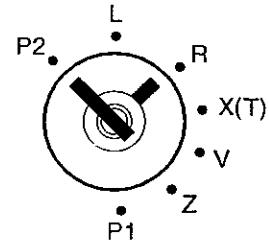
To install the cash register:

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. Plug the power cord into the outlet.
3. Insert the owner's key (marked with "**OW**") into the control lock and turn it to the "**P2**" position.
4. Turn the power switch to "**ON**" position.
5. Make sure that the register display reads "0,".
6. Turn the owner's key to the "**L**" position to turn off the display.



2.2 Initializing Your Cash Register

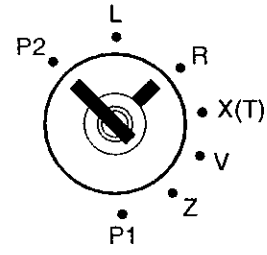
Before programming the cash register, you must initialize the cash register's memory.

CAUTION

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

To initialize the cash register:

1. Set the power switch located on the right hand rear corner of the cabinet to the "**OFF**" position (○ side of the switch).
2. Insert the **[OW]** key into the control lock and turn the key to "**P2**" position.
3. Press and hold both **[RF]** and **[JF]** key, then, turn the power switch to "**ON**" position.



4. Continue to hold both **[RF]** and **[JF]** key, until "000000000" appears on the display. Memory has been reset when the printer begins to operate and "00" appears on the display.

2.3 Explanation of System initialize and system reset

System Initialize

This operation is used to completely clear of all memory in the system and load the default program from the ROM's. This operation should be performed after repairing the Main logic board.

■System Initialize Operation:

1. Set the power switch located on the right hand rear corner of the cabinet to the "**OFF**" position (○ side of the switch).

2. Insert the **[OW]** key into the control lock and turn the key to "**P2**" position.

3. Press and hold both **[RF]** and **[JF]** key, then, turn the power switch to "**ON**" position

4. Continue to Hold both **[RF]** and **[JF]** key, until "000000000" appears on the display. Memory has been reset when the printer begins to operate and "00" appears on the display.

IMPORTANT

■All programming and previously entered data will be lost by operation.

Initialize print on :

Receipt side

```
1ROM          4E2B
2RAM GOOD!
```

Journal side

```
SYSTEM INITIALIZE
```

■ System Reset:

It is possible at some point in the programming or operation of the cash register due to a wrong entry to cause the system to go into a loop. Use the following sequence to return to an operating mode.

System Reset Operation:

1. Insert the **[OW]** Key into the control lock and turn the key to the "**P2**" position.

2. Power switch located on the right hand rear corner of the cabinet to the "**OFF**" position

3. Wait at least 5 seconds before setting the power switch back to the "**ON**" position.

Current transaction data willl be lost, however, you will not lose any of the program or sales data. The only data lost will be any sale not yet finalized by a method of payment.

2.4 Installing and Removing a Paper Roll

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

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

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

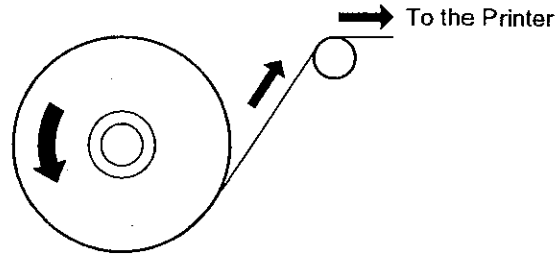


Fig.1

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

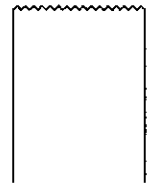


Fig.2

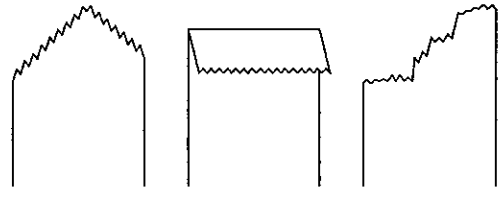


Fig.3

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**.).

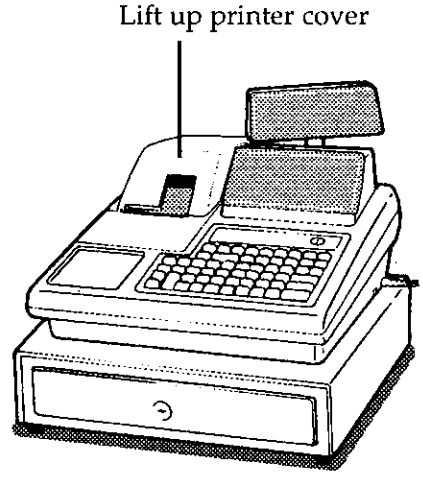


Fig.4

3. Load the paper roll into the receipt location.

4. Insert the end of the paper into the paper entrance. (See **Fig.5**).

5. Press and hold the Receipt feed Key until the paper comes out of the printer

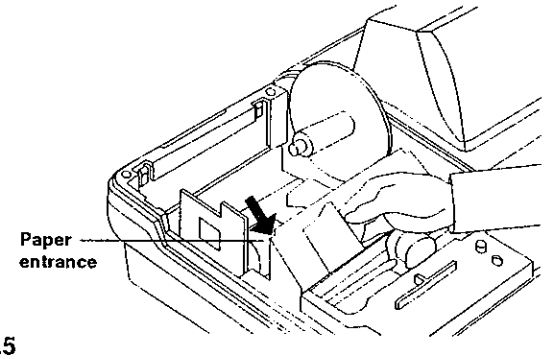


Fig.5

To install a paper roll for your journal:

1. Load a paper roll into the journal location.

2. Insert the end of the paper the same as done for the receipt paper.

3. Press and hold the Journal feed Key until the paper comes out of the printer.

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

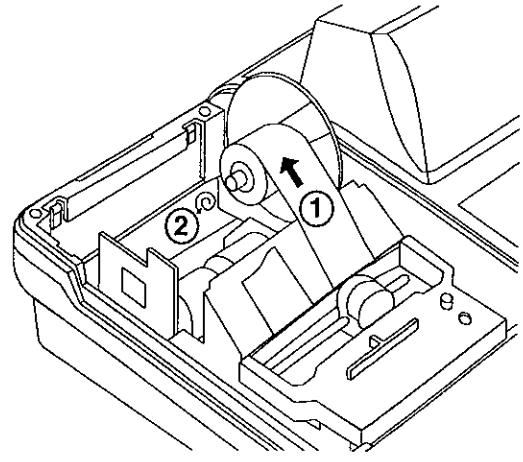


Fig.6

5. Load the take-up reel into the support (See **Fig.7**).

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

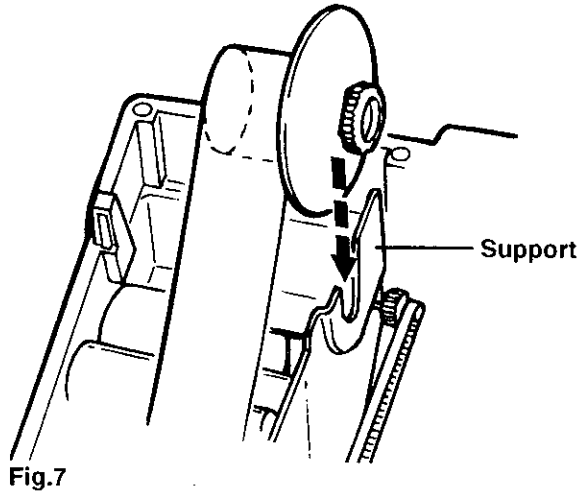


Fig.7

Removing a Paper Roll

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

To remove the paper roll for receipts:

1. Turn the control lock to the "R" position.
2. Open the printer cover.
3. Cut the paper near the roll and remove the remaining paper on the roll.
4. Press and hold the Receipt feed Key until the remaining paper comes out of the printer (See **Fig.8**.).

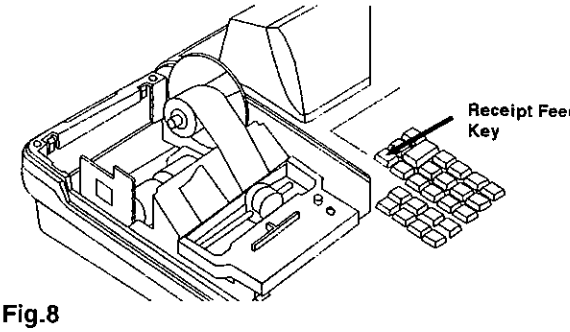


Fig.8

To remove the paper roll for the journal:

1. Turn the control lock to the "R" position.
2. Open the printer cover.
3. Feed the paper two or three lines forward with the Journal feed Key.
4. Remove the take-up reel from the support.
5. Cut the paper after the end of the printing (See **Fig.9**.).
6. Remove the paper record from the take-up reel (See **Fig.10**.).
7. Remove the remaining paper roll the same as done in step 3. and 4. in the instruction for removing the paper roll for receipt.

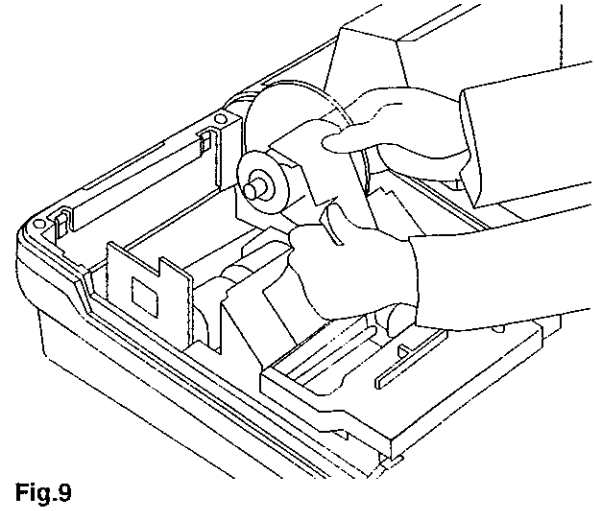


Fig.9

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

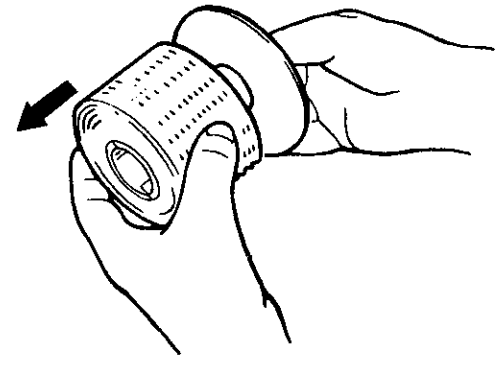


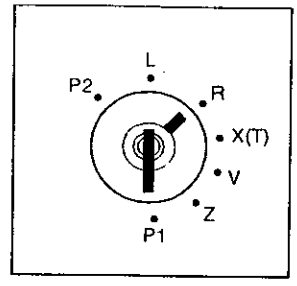
Fig.10

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 **P1** position



Use the programming overlay sheet for the programming.

Setting Date and Time · · · programming example:

Step Key operation

1) [C] ⟶ [1] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [9] [5] [0] [2] [1] [4] ⟶ [ENTRY]

Year Month Day

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

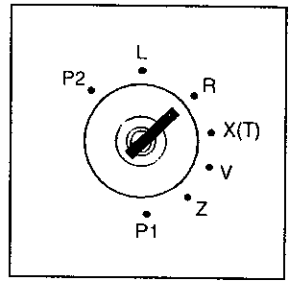
3) [1] [5] [0] [0] ⟶ [ENTRY]

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.

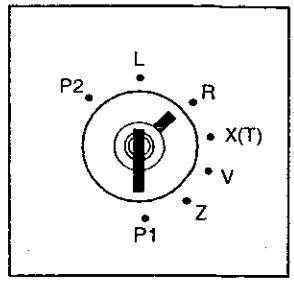


2) [ENT RLS] ⟶ [SUB TOTL]

NOTE

*Time or Date will be appeared on the display board.
*It depends on the programming of system function flag 1 #7 0:Time 1: Date

Programming of Department (Price and Flag)



Set the control lock to **P1** 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) [C] → [2] → [START] → [SELECT] [SELECT] → [ENTRY]
(Select Price of Department)

2) [9] [7] [5] → [ENTRY]
Enter DEPT 1 price

3) [2] [7] [5] → [ENTRY]
Enter DEPT 2 price

4) [4] [0] [0] [0] → [ENTRY]
Enter DEPT 3 price

5) [5] → [DESIGN]

6) [9] [7] [5] → [ENTRY]
Enter DEPT 5 price

7) [SELECT] → [ENTRY]
(Select Flags)

8) [1] → [ENTRY]
Enter DEPT 1 flag 1

9) [1] [0] [0] [0] [0] [0] → [ENTRY]
Enter DEPT 1 flag 2

10) [ENTRY]

11) [1] → [ENTRY]
Enter DEPT 2 flag 1

12) [1] [0] [0] [0] [0] [0] → [ENTRY]

Enter DEPT 2 flag 2

13) [ENTRY]

14) [1] → [ENTRY]

Enter DEPT 3 flag 1

15) [1] [0] [0] [0] [0] [0] → [ENTRY]

Enter DEPT 3 flag 2

16) [ENTRY]

17) [5] → [DESIGN]

18) [1] → [ENTRY]

Enter DEPT 5 flag 1

19) [1] [0] [0] [0] [0] [1] → [ENTRY]

Enter DEPT 5 flag 2

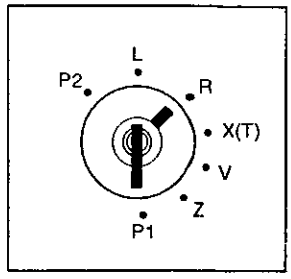
20) [ENTRY]

```
*P1-2*
DEPT
   PRICE
   1        9.75
   2        2.75
   3       40.00
   5        9.75
```

```
*P1-2*
DEPT
   FLAG
   1 1  00000001
   1 2  00100000
   2 1  00000001
   2 2  00100000
   3 1  00000001
   3 2  00100000
   5 1  00000001
   5 2  00100001
```

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

Set the control lock to **P1** 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] → [ENTRY]
(Select price of PLU)

2) [1] [0] [0] [0] → [ENTRY]
Enter PLU unit price

3) [1] [5] [0] → [ENTRY]
Enter PLU unit price

4) [2] [0] [0] → [ENTRY]
Enter PLU unit price

5) [SELECT] → [ENTRY]
(Select Linked Department)

6) [1] → [ENTRY]
Enter PLU 1 linked DEPT #1

7) [2] → [ENTRY]
Enter PLU 2 linked DEPT #2

8) [3] → [ENTRY]
Enter PLU 3 linked DEPT #3

```
*P1-3*
PLU
   PRICE
   1      10.00
   2       1.50
   3       2.00
```

```
PLU
   LINK#
   1      1
   2      2
   3      3
```

Programming of TAX Rate

Programming example: TAX 2 4.0000% (4%)

Step Key operation

1) [C] → [5] → [START] → [SELECT] [SELECT] → [ENTRY]

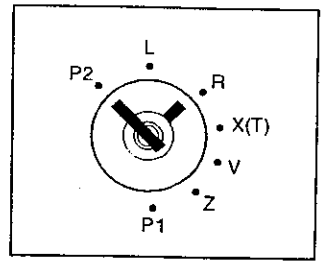
2) [0] → [ENTRY]
Enter TAX sign

3) [4] [0] [0] [0] [0] → [ENTRY]
Enter TAX rate

```
*P1-5*

TAX 2        OS
          4.0000%
```

Programming of TAX Print Style (at System function flag)

Turn the control lock to : **P2** position



Refer to the explanation of section 4.2 "System function flag".

Step Key operation

1) [C] ⟶ [1] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [1] [1] ⟶ [DESIGN]

Enter the Flag Number

3) [1] [1] [1] [0] ⟶ [ENTRY]

Enter the optional flag data

```
* P2-1 *
MAIN FLG
  11   00001110
```

4 Programming

This chapter presents the instructions for programming your cash register.

4.1 Before Programming

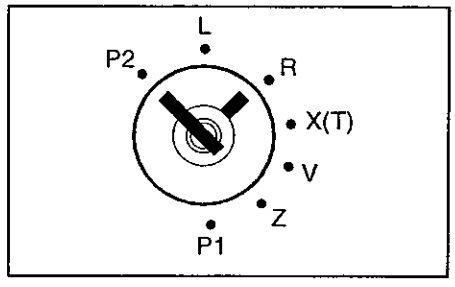
Before using your cash register, you must program certain items for your store into the memory of the cash register. Your cash register allows you to enter the price of an item, the taxes levied on the item, the functions of the keys and other useful functions. The instructions for programming are explained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

When you have finished all the programming you need to do, you can check the contents of your program. See section 4.4, "Checking the Contents of Your Programming".

The following things must be done before programming:

■ Initialize the memory. See section 2.2, "Initializing Your Cash Register."

■ To select the "Program mode," insert the owner's key into the control lock and turn it to the "P2" 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. Insert the **[OW]** key into the control lock and turn to "P2" position.

2. Power switch located on the right hand rear corner of the cabinet to the "**OFF**" position (- side of the switch).

3. Wait at least 5 seconds before setting the power switch back to the "**ON**" position.

4.2 System Programming

■System Function Flag

This section describes how to set the system function flags which control the operation of this cash register, for example, selecting printing format, the method used for rounding and so on. There are 52 system function flags that can be set. Each flag has some options to choose from.
To set system flag, (1) Press starting key steps, (2) Select the flag number, (3) Enter the option number(s) you want for each flag and finalize it system function flag.

Basic key operation sequence

DISPLAY

1) C → 1 → START → SELECT → ENTRY

2) n n → DESIGN

3) B8,B7···B1 → ENTRY ---Enter flag data.

NOTE

■ Next flag number will be proceed after being programmed.
■ When the number is not enter on step (2), the programming will start from 1.

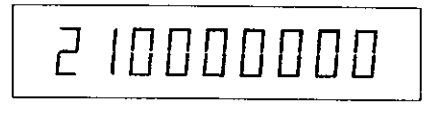
Example : Program "01000010" in System Function flag No. "2".

Key operation

DISPLAY

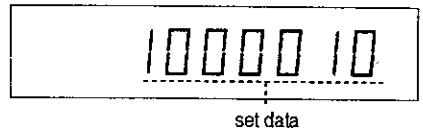
1) C → 1 → START → SELECT

2) 2 → DESIGN Enter flag number.



3) 1 00 00 1 0 → ENTRY

Enter flag data.



set data

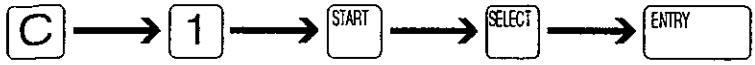
NOTE

■ Entered flag data will be displayed on the display and printed on receipt and journal paper.
■Marked "●" in explanation of system function flag means default setting.

The description of each of the system function flags is on the following pages. The default setting for each flag depends on the country.

■ Flag 1

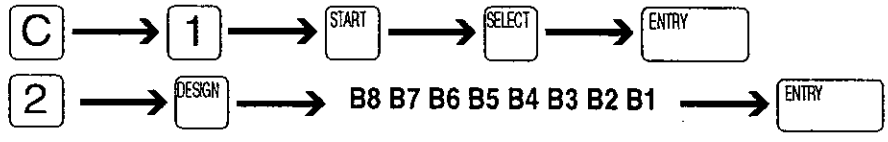
This flag allows you to select the number of decimals to be displayed and printed on a receipt, and also department shift, time display.



Options:	Press:	To:
B7	0	Display the current time when you press the **[ENT/RLS]** key, and then press the **[SUB TOTL]** key.
	1	Display the date when you press the **[ENT/RLS]** key and then press the **[SUB TOTL]** key.
B6	0	Disable switching between the "Department 1 to 16 entry mode" and the "Department 17 to 32 entry mode " when a separate time has been programmed for each mode. (Happy Hour)
	1	Enable switching between the "Department 1 to 16 entry mode "and the Department 17 to 32 entry mode. (Happy Hour)
B5,B4,B3	000	Stay in the same department entry mode as the last until the **[DEPT/SHFT]** key is pressed to change to the other department entry mode.
	001	Return automatically to the "Department 1 to 16 entry mode" after each registration of department item.
	100	Stay in the "Department 17 to 32 entry mode" until the **[DEPT/SHFT]** key is pressed again to chaenge back to the "Department 1 to 16 entry mode".
	101	Return automatically to the "Department 1 to 16 entry mode" when the transaction is finalized.
	010	Return automatically to the "Department 17 to 32 entry mode" after each registration of department item.
	110	Return automatically to the "Department 17 to 32 entry mode" when the transaction is finalized.
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.

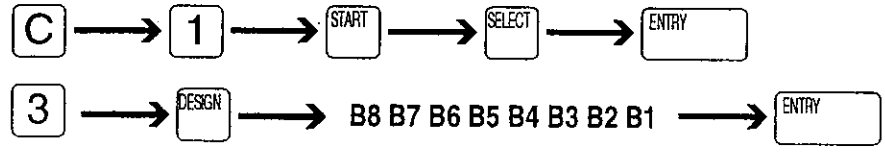
■ Flag 2

This flag allows you to select the printing format for the date time and transaction number.



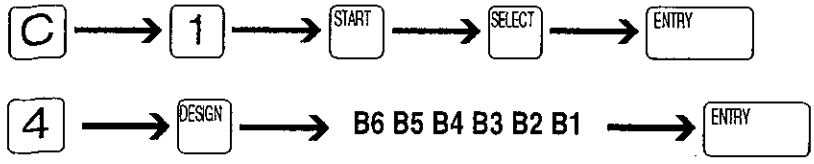
Options:	Press:	To:
B8,B7	00	Year, month, date, in that order
	01	Date, month, year, in that order.
	10 ●	Month, date, year, in that order.
B6	0	Print the date on the journal.
	1	Do not print the date on the journal.
B5	0	Print the date on the receipt and journal.
	1	Do not print the date on the receipt and journal.
B4	0	Print the time on the receipt and journal.
	1	Do not print the date on the receipt and journal.
B3	0	Print the time on the journal.
	1	Do not print the time on the 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 number) on the receipt and journal.
	1	Do not print the transaction number (consecutive number) on the receipt and journal.

■ **Flag 3**



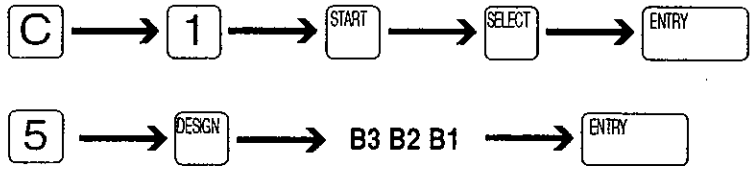
Options:	Press:	To:
B8	0	Disable pressing another Cashier No. key during operation.
	1	Enable pressing another Cashier No. key during operation.
B7	0	Disable one clerk to leave and another to take over during a transaction.
	1	Enable one clerk to leave and another to take over during a transaction by entering a new clerk code.
B6	0	Disable the programmed unit price for a PLU code to be displayed.
	1	Enable the programmed unit price programmed for a PLU code to be displayed. To display the unit price without making a sale (for price check only), press the **[ENT/RLS]** key, enter the PLU code and press the **[PLU]** key while in the register mode.
B5	0	Reset the clerk password after each sales transaction is finished.
	1	Do not reset the clerk password after each sales transaction is finished.
B4	0	Enable issuing a second complete receipt immediately after issuing the first one.
	1	Disable issuing a second complete receipt immediately after issuing the first one.
B3	0	Do not require validation printing during a transaction.
	1	Require validation printing during a transaction.
B2	0	Do not allow multiple validation printing during a transaction.
	1	Allow multiple validation printing during a transaction.
B1	0	Print a programmed message on the header of a receipt.
	1	Print a programmed message on the footer of a receipt.

■ Flag 4



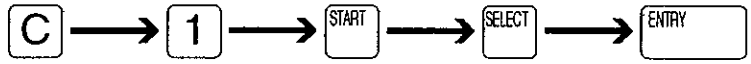
Options:	Press:	To:
B6	0	Allow no-sale operation without clerk-ID number.
	1	Enforce input of clerk-ID number when making a no-sale operation.
B5	0	Allow entry without clerk-ID number.
	1	Enforce input of clerk-ID number before operation.
B4	0	Display the clerk-ID number.
	1	In Register mode, first depress **[CLERK-ID]** key, then, ID number, **[CLERK-ID]** key in that order.
B3,B2	0	Always enter "0".
B1	0	Store the amount calculated by pressing the [+%] or [-%] key immediately after registering a department or PLU item, in separate department or PLU files.
	1	Store the amount calculated by pressing the [+%] or [-%] key immediately after registering a department or PLU item, in the file that stores the amount calculated with the percentage keys.

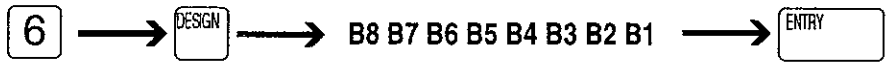
■ Flag 5



Options:	Press:	To:
B3	0	Enable finalizing a sales transaction when the amount registered for the sale is 0.
	1	Disable finalizing a sales transaction when the amount registered for the sale is 0.
B2	0	Enable the **[VOID]**, [-], [-%] keys, used as minus departments, in the "R" mode.
	1	Disable using the **[VOID]**, [-], [-%] keys as minus departments, in the "R" mode.
B1	0	Only regular steps for the training mode work.
	1	When a clerk number in 6 through 10 is designated, the training mode starts automatically.

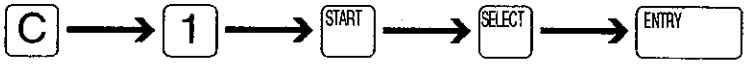
■ Flag 6

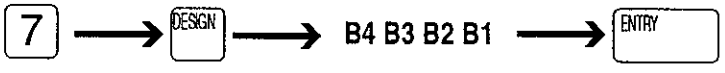




Options:	Press:	To:
B8	0	Open the drawer when you press the [CARD 4] key.
	1	Do not open the drawer when you press the [CARD 4] key.
B7	0	Open the drawer then you press the [CARD 3] key.
	1	Do not open the drawer when you press the [CARD 3] key.
B6	0	Open the drawer when you press the [CARD 2] key.
	1	Do not open the drawer when you press the [CARD 2] key.
B5	0	Open the drawer when you press the [CARD/STUB] key.
	1	Do not open the drawer when you press the [CARD/STUB] key.
B4	0	Always enter "0".
B3	0	Open the drawer when you press the [CHRG/VALI] key.
	1	Do not open the drawer when you press the [CHRG/VALI] 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.

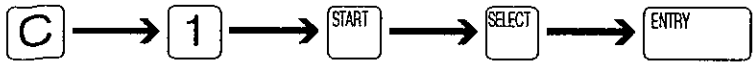
■ Flag 7

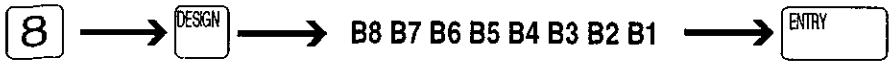




Options:	Press:	To:
B4	0	All the data except the logo and the commercial message are printed on the journal.
	1	All the data including the logo and the commercial message are printed on the journal.
B3	0	Disable calculating the change for a sale by pressing the [CARD/STUB] key.
	1	Enable calculating the change for a sale by pressing the [CARD/STUB] key.
B2	0	Do not require the amount received from a customer to be registered.
	1	Require the amount received from a customer to be registered. (compulsory tendering)
B1	0	Disable entering an amount received from a customer which is less than the total amount for the sale. An error will occur.
	1	Enable entering an amount received from a customer which is less than total amount for the sale.

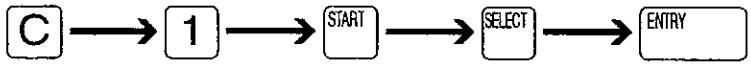
■ Flag 8

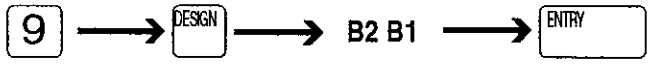




Options	Press:	To:
B8	0	Enable tendering operation when you press the [CARD 4] key.
	1	Disable tendering operation when you press the [CARD 4] key.
B7	0	Enable tendering operation when you press the [CARD 3] key.
	1	Disable tendering operation when you press the [CARD 3] key.
B6	0	Enable tendering operation when you press the [CARD 2] key.
	1	Disable tendering operation when you press the [CARD 2] key.
B5	0	Enable tendering operation when you press the [CARD/STUB] key.
	1	Disable tendering operation when you press the [CARD/STUB] key.
B4	0	Always enter "0".
B3	0	Enable tendering operation when you press the [CHRG/VALI] key.
	1	Disable tendering operation when you press the [CHRG/VALI] key.
B2	0	Enable tendering operation when you press the [CHKS] key.
	1	Disable tendering operation when you press the [CHKS] key.
B1	0	Enable tendering operation when you press the [CASH/TEND] key.
	1	Disable tendering operation when you press the [CASH/TEND] key.

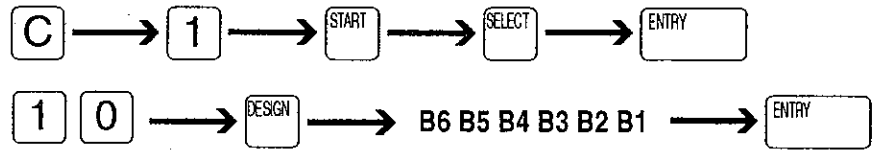
■ Flag 9





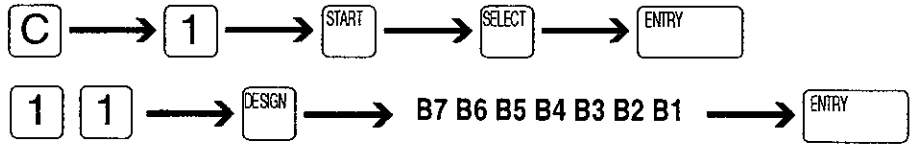
Options:	Press:	To:
B2	0	Disable automatic calculation of a service charge.
	1	Enable automatic calculation of a service charge.
B1	0	Do not require pressing the [SUB TOTL] key before pressing the [CASH] , [CHRG] and [CHKS] key.
	1	Require pressing the [SUB TOTL] key before pressing the [CASH] , [CHRG]and [CHKS] key. If you press the [CASH] , [CHRG] and [CHKS] key without pressing the [SUB TOTL] key, an error will occur.

■ Flag 10



Options:	Press:		To:
B6	0		Print the total amount and type of the transaction such as "CASH", "CHARGE" and "CHECK" in regular size characters.
	1	●	Print the total amount and type of the transactions such as "CASH", "CHARGE" and "CHECK" in double-wide characters.
B5	0		Print the information for transactions in the void mode on the receipt/journal.
	1		Do not print the information for transaction in the void mode on the receipt/journal.
B4	0		Do not print a subtotal at [SUB TOTL] key operation. (Display only)
	1	●	Print a subtotal at [SUB TOTL] key operation.
B3	0		Do not print the PLU code on the receipt/journal.
	1		Print the PLU code on the receipt/journal.
B2	0		Print each item sold on the journal.
	1		Print only the total amount on the journal.
B1	0		Do not print the quantity of each item sold.
	1	●	Print the quantity of each item sold on the receipt and the journal.

■ Flag 11

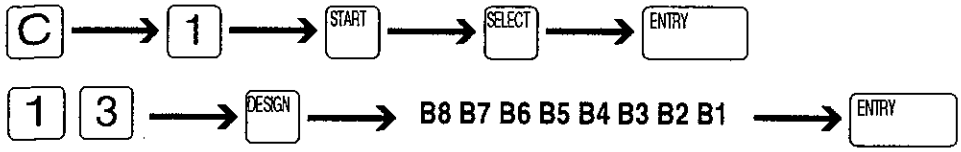


Options:	Press:		To:
B7	0		Enable displaying the tax symbol.
	1		Disable displaying the tax symbol.
B6	0		Print the amount including VAT.
	1		Do not print amount excluding VAT for items which include VAT.
B5	0		Print the VAT separately for items which are taxable.
	1		Do not print the VAT separately for items which are taxable.
B4	0		Do not print the total of all taxes.
	1		Print the total of all taxes.
B3	0		Do not print the total of the individual amounts which the tax is added to.
	1		Print the total of the individual amounts which the tax is added to.
B2	0		Do not print total tax amount.
	1		Print total tax amount.
B1	0		Enable printing the tax symbol.
	1		Disable printing the tax symbol.

■ Flag 12

Options:	Press:	To:
B8-B1	0	Do not use these flags.

■ Flag 13



Options:	Press:	To:
B8	0	Tax 8 for add-on tax mode.
	1	Tax 8 for VAT mode.
B7	0	Tax 7 for add-on tax mode.
	1	Tax 7 for add-on VAT mode.
B6	0	Tax 6 for add-on tax mode.
	1	Tax 6 for VAT mode.
B5	0	Tax 5 for add-on tax mode.
	1	Tax 5 for VAT mode.
B4	0	Tax 4 for add-on tax mode.
	1	Tax 4 for VAT mode.
B3	0	Tax 3 for add-on tax mode.
	1	Tax 3 for VAT mode.
B2	0	Tax 2 for add-on tax mode.
	1	Tax 2 for VAT mode.
B1	0	Tax 1 for add-on tax mode.
	1	Tax 1 for VAT mode.

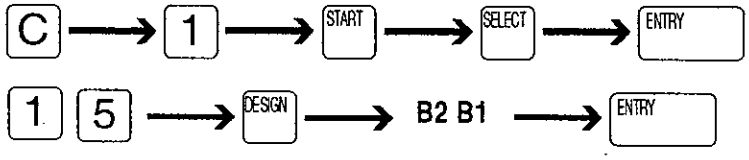
■ Flag 14

13

Options:	Press:	To:
B8-B1	0	Do not use these flags.

■ Flag 15

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. Numbers other than 00, 25, 50, and 75 will be rounded depending on the setting for flag 16.

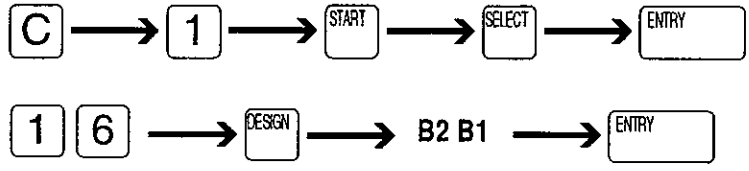


Options:	Press:	To:
B2,B1	2 digits	Rounding of last 2 integers for minimum coin operation.

■ Flag 16

This flag allows you to assign the point number to define the method of rounding.

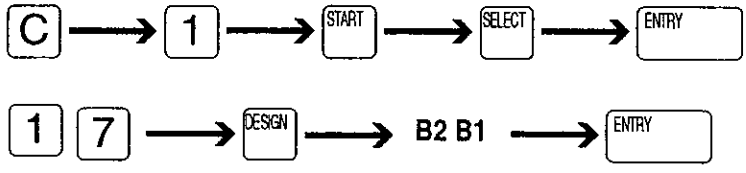
When the difference between the last two digits of an amount and the nearest smaller number of an integral multiple of the number you have assigned for flag 15 is smaller than the point you assign for this flag, it is rounded to the smaller number of the integral multiple of the number.
For example, if you enter "25" in flag 15 and "9" for this flag, "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.

■ Flag 17

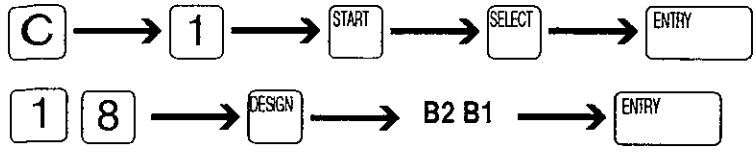
This flag allows you to select method used for rounding in multiplication.



Options:	Press:		To:
B2	0		Select the first digit to be rounded in calculations for transaction in which more than one media is received for payment, for example, cash and check.
	1		Select the last digit to be rounded in calculations for transaction in which more than one media is received for payment, for example, cash and check.
B1	0		Round down (1 to 9 becomes 0). The rounding point may be changed by flag.
	5	●	Rounding (1 to 4 becomes 0, 5 to 9 becomes 10)
	9		Round up (1 to 9 becomes 10)

■ Flag 18

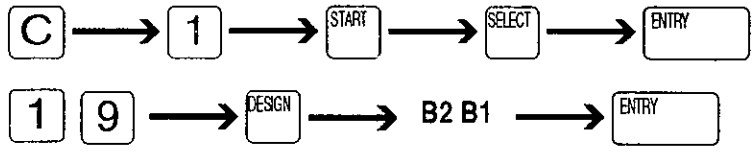
This flag allows you to select the method used for rounding in tax calculations. The point at which rounding takes place depends on the flag.



Options:	Press:	To:
B2	0	Select the first decimal place to be rounded in tax calculations.
	1	Select the units digit to be rounded in tax calculations.
B1	0	Round down (1 to 9 becomes 0). The rounding point may be changed by flag.
	5 ●	Rounding (1 to 4 becomes 0, 5 to 9 becomes 10)
	9	Rounding up (1 to 9 becomes 10)

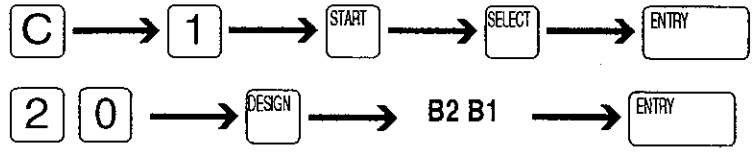
■ Flag 19

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



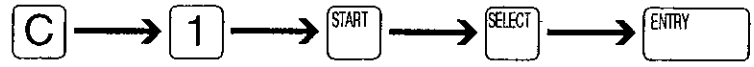
Options:	Press:	To:
B2	0	Select the first decimal place to be rounding point.
	1	Select the units digit to be rounding point.
B1	0	Round down (1 to 9 becomes 0) the rounding point .
	5 ●	Rounding (1 to 4 becomes 0, 5 to 9 becomes 10)
	9	Round up (1 to 9 becomes 10)

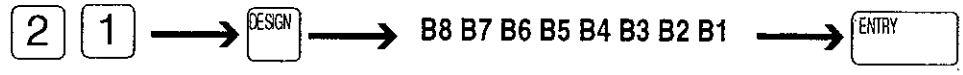
■ Flag 20



Options:	Press:	To:
B2	0	Disable the swiss method of rounding on finalize.
	1	Enable the swiss method of rounding on finalize.
B1	0	Always enter "0".

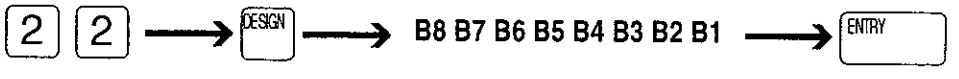
■ Flag 21





Options:	Press:	To:
B8	0	Add gross total amount to Non resettable grand total.
	1 ●	Add net total to Non resettable grand total.
B7	0	Do not print NRGT on Z2 report.
	1	Print NRGT on Z2 report.
B6	0	Print NRGT on X1/Z1 reports.
	1	Do not print NRGT on X1/Z1 reports.
B5	0	Skip printing the clerk code and cashier if the clerk registered 0 for the sales amount.
	1	Print the clerk code and cashier if the clerk registered 0 for the sales amount.
B4	0	Skip printing dept items whose sales amount is 0 on the department report.
	1	Print dept items whose price is entered as 0 on the report.
B3	0	Skip printing PLU items whose sales amount is 0 on the report.
	1	Print PLU items whose sales amount is 0 on the report.
B2	0	Do not reset transaction No. after issuing Z1 report.
	1 ●	Reset transaction No. after issuing Z1 report.
B1	0	Always enter "0".

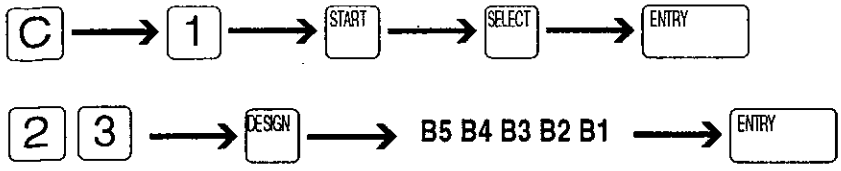
■ Flag 22



Options:	Press:	To:
B8	0	Do not print the sales ratio of Weekly/Monthly report.
	1	Print the sales ratio of Weekly/Monthly report.
B7	0	Do not print training results on the reports.
	1	Print training results on the reports.
B6	0	Allow the quantity in four figures.
	1	Allow the quantity in six figures.
B5	0	Count quantity total and print.
	1	Count sales item total and print.
B4	0	Do not print the sales ratio of Hourly Totals.
	1	Print the sales ratio of Hourly Totals.
B3	0	Do not print the sales ratio of an each department in group department total.
	1	Print the sales ratio of each department in group department total.
B2	0	Do not print the sales ratio of each department in department total.
	1	Print sales ratio of an each department in department total.

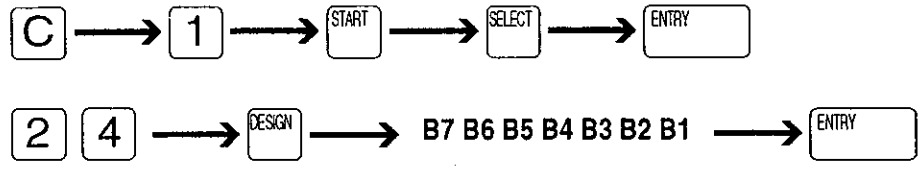
B1	0	Print the sales times of the counter at Hourly report.
	1	Print the number of quantity of the counter at Hourly report.

■ Flag 23



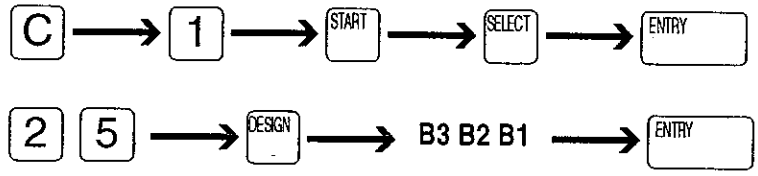
Options:	Press:	To:
B5	0	Skip printing the data whose amount is 0 on the Weekly/Hourly report.
	1	Print the data whose amount is 0 on the Weekly/Hourly report.
B4	0	Do not print average unit price of customer.
	1	Print average unit price of customer.
B3	0	Do not print the department number on the reports.
	1	Print the department number on the reports.
B2	0	Print the total sales for departments on the full report.
	1	Do not print total sales for departments on the full report.
B1	0	Do not print average prices of department in the reports.
	1	Print average prices of department in the reports.

■ Flag 24



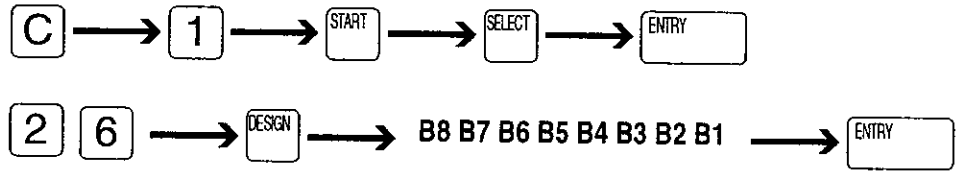
Options:	Press:	To:
B7	0	Do not print the sales ratio of all **PLU's** on the reports.
	1	Print the sales ratio of all **PLU's** on the reports.
B6	0	Always enter "0".
B5	0	Do not print Z report of **PLU** group.
	1	Print Z report of **PLU** group.
B4	0	Always enter "0".
B3	0	Do not print the sales ratio of **PLU** group sales on the reports.
	1	Print the sales ratio of **PLU** group sales on the reports.
B2	0	Print negative item **PLU** amount on the reports.
	1	Do not print negative item **PLU** amount on the reports.
B1	0	Do not print the **PLU** number on the X/Z reports.
	1 ●	Print the **PLU** number on the X/Z reports.

■ Flag 25



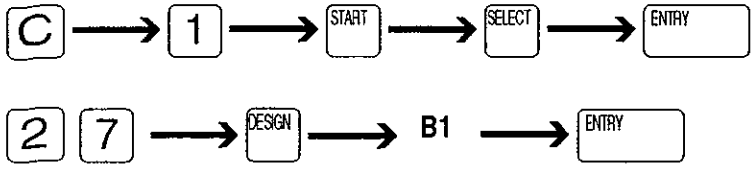
Options:	Press:	To:
B3	0	Do not require the clerk to enter the amount of each type of media in the drawer.
	1	Require the clerk to enter the amount of each type of media in the drawer, such as cash and check totals, before resetting the sales data.
B2	0	Print the cash amount registered in **X 1** reports.
	1	Do not print the cash amount registered in **X 1** reports.
B1	0	Issue a department report which shows sales information from all of the departments in the "**X 1**" mode.
	1	Do not issue a department report which shows sales information from all of the departments in the "**X 1**" mode.

■ Flag 26



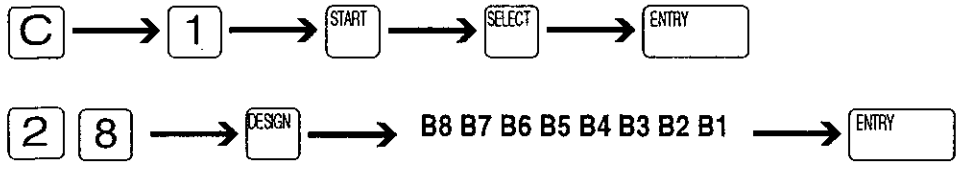
Options:	Press:	To:
B8	0	Display **PLU** number.
	1	Display linked department number.
B7	0	Indicate Error 26 (=request for "**C**" key).
	1	Do not indicate Error 26 (=request for "**C**" key).
B6,B5	0	Always enter "0".
B4	0	Do not print the training information on the journal while in the operator training mode.
	1	Print the training information on the journal while in the operator training mode.
B3,B2	0	Always enter "0".
B1	0	Generate on error when a non preset key is used.
	1	Invalidate the operation when a non preset key is used.

■ Flag 27



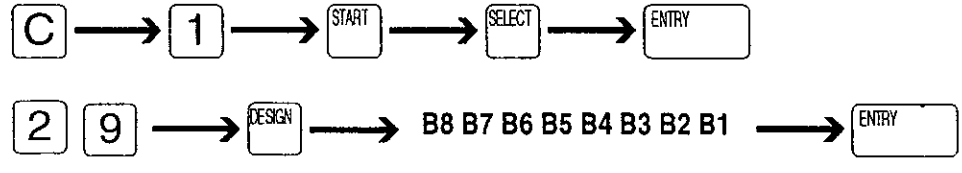
Options:	Press:	To:
B1	0	Indicate Error 14 (=new roll-paper required) at X/Z mode.
	1	Do not indicate Error 14 at X/Z mode.

■ Flag 28



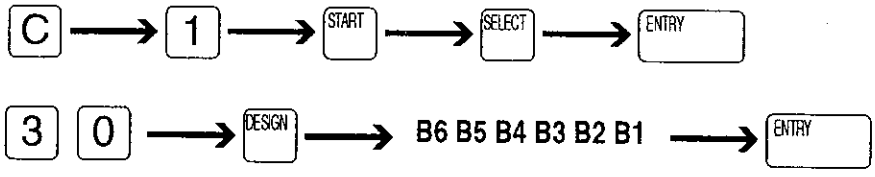
Options:	Press:	To:
B8	0	Do not allow to use a flat bed scanner.
	1	Allow to use a flat bed scanner.
B7,B6	0	Always enter "0".
B5	0	Do not allow to use of mini scanner.
	1	Allow to use of mini scanner.
B4,B3	0	Always enter "0".
B2	0	Do not allow the programming of each PLU item key on the keyboaed.
	1	Allow the programming of each PLU item key on the keyboard.
B1	0	Enter the data for one type, e.g. names or unit prices or flags, for several departments or PLUs using a single programming sequence.
	1	Enter the different pieces of information for a single item, e.g. a name and unit price and flags, etc., in one department or one PLU using a single programming sequence.

■ Flag 29



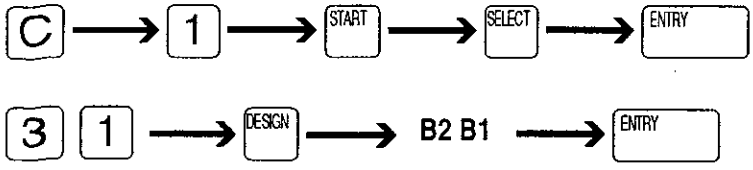
Options:	Press:	To:
B8	0	Print "VOID" and "RETURN" on the transaction reports.
	1	Do not print "VOID" and "RETURN" on the transaction reports.
B7,B6	0	Always enter "0".
B5	0	Print an optional code number (EAN etc..,) of **PLU** on the journal.
	1	Do not print an optional code number (EAN etc..,) of **PLU** on the journal.
B4	0	Print an optional code number (EAN etc..,) of **PLU** on the receipt.
	1	Do not print an optional code number (EAN etc..,) of **PLU** on the receipt.
B3	0	Print an optional code number of **PLU** (EAN etc..,) on the receipt and/or journal.
	1	Do not print an optional code number of **PLU** (EAN etc..,) on the receipt and/or journal.
B2	0	Enable input by **PLU** absolute number.
	1	Enable input by **PLU** code number (EAN etc..,).
B1	0	Print void/return total on clerk report.
	1	Do not print void/return total on clerk report.

■ Flag 30



Options:	Press:	To:
B6,B5	00:	First enter the unit price,then enter quantity.
	01	First enter the quantity, then enter unit price.
	10 ●	First enter the quantity, then enter unit price. (Enable direct multiplication.)
B4	0	Enable **PLU** key entry which has not programmed the unit price.
	1	Disable **PLU** key entry which has not programmed the unit price.,
B3	0	Enable unit price "0" entry on **PLU** operation.
	1	Disable unit price "0" entry on **PLU** operation.
B2	0	Enable department key entry which has not programmed the unit price.
	1	Disable department key entry which has not programmed the unit price.
B1	0	Enable unit price "0" entry on department.
	1	Disable unit price "0" entry on department.

■ Flag 31



Options:	Press:	To:
B2	0	Do not reset PLU sales data after transfering to PC.
	1	Reset PLU sales data after transfering to PC.
B1	0	Do not transfer the sales data to PC at **X/Z** operation.
	1	Transfer the sales data to PC at **X/Z** operation. (Then, do not print the sales data on receipt/journal.)

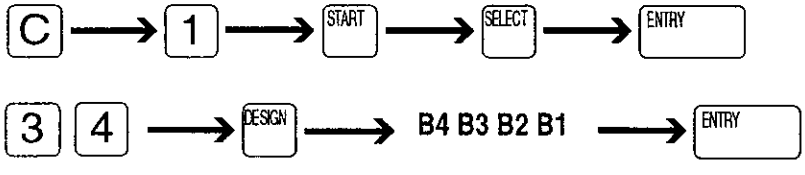
■ Frag 32

Options:	Press:	To:
B8-B1	0	Do not use these flags.

■ Flag 33

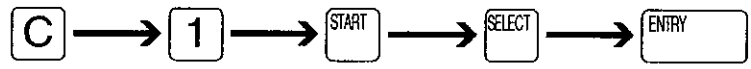
Options:	Press:	To:
B8-B1	0	Do not use these flags.

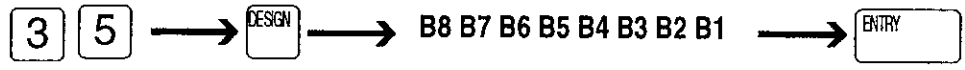
■ Flag 34



Options:	Press:	To:
B4	0	Do not allow to execute "DEL" in PC communication.
	1	Allow to execute "DEL" at "L" key position in PC communication.
B3	0	Print training reports on the journal also.
	1	Do not print training reports on the journal.
B2	0	Issue training reports.
	1	Do not issue training reports.
B1	0	Allow the automatic PLU programming function to work.
	1	Do not allow the automatic PLU programming function to work.

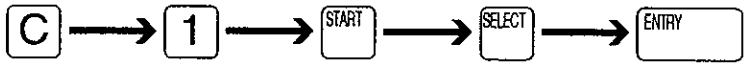
■ Flag 35

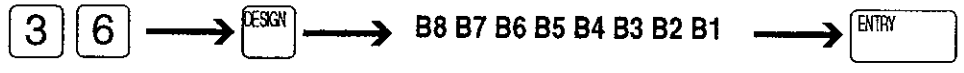




Options:	Press:	To:
B8	1	Add Tax1 to taxable 8.
B7	1	Add Tax1 to taxable 7.
B6	1	Add Tax1 to taxable 6.
B5	1	Add Tax1 to taxable 5.
B4	1	Add Tax1 to taxable 4.
B3	1	Add Tax1 to taxable 3.
B2	1	Add Tax1 to taxable 2
B1	0	Always enter "0".

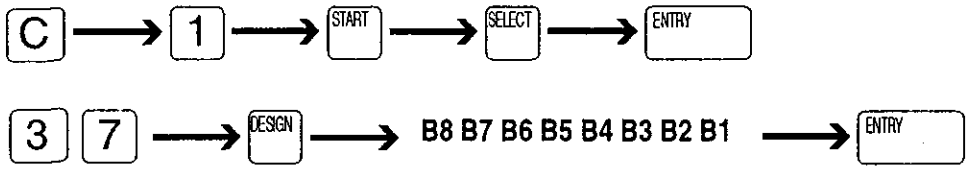
■ Flag 36





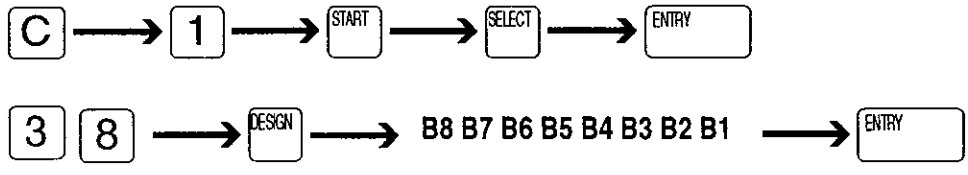
Options:	Press:	To:
B8	1	Add Tax2 to taxable 8.
B7	1	Add Tax2 to taxable 7.
B6	1	Add Tax2 to taxable 6.
B5	1	Add Tax2 to taxable 5.
B4	1	Add Tax2 to taxable 4.
B3	1	Add Tax2 to taxable 3.
B2,B1	0	Always enter "0".

■ Flag 37



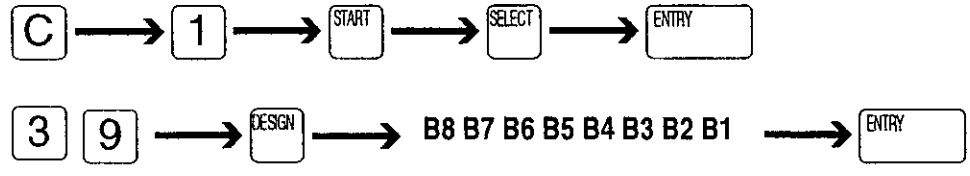
Options:	Press:	To:
B8	1	Add Tax3 to taxable 8.
B7	1	Add Tax3 to taxable 7.
B6	1	Add Tax3 to taxable 6.
B5	1	Add Tax3 to taxable 5.
B4	1	Add Tax3 to taxable 4.
B3,B2,B1	0	Always enter "0".

■ Flag 38



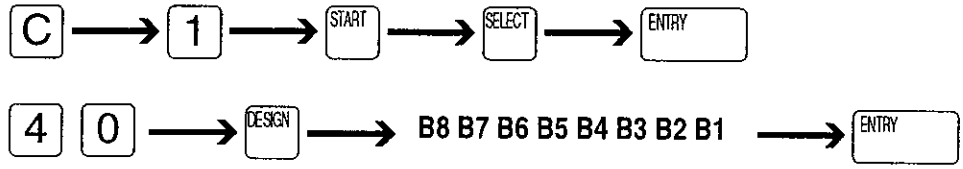
Options:	Press:	To:
B8	1	Add Tax4 to taxable 8.
B7	1	Add Tax4 to taxable 7.
B6	1	Add Tax4 to taxable 6.
B5	1	Add Tax4 to taxable 5.
B4-B1	0	Always enter "0".

■ Flag 39



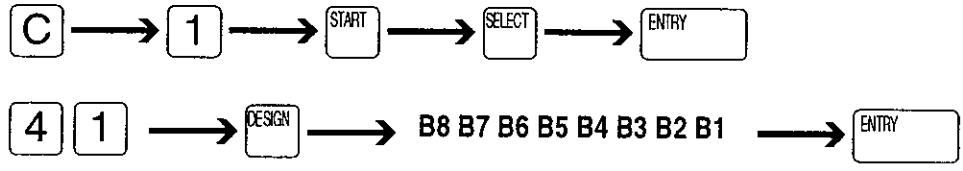
Options:	Press:	To:
B8	1	Add Tax5 to taxable 8.
B7	1	Add Tax5 to taxable 7.
B6	1	Add Tax5 to taxable 6.
B5-B1	0	Always enter "0".

■ Flag 40



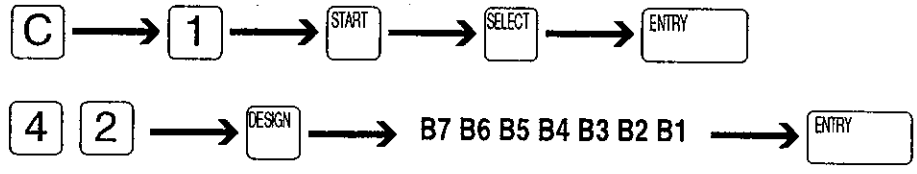
Options:	Press:	To:
B8	1	Add Tax6 to taxable 8.
B7	1	Add Tax6 to taxable 7.
B6-B1	0	Always enter "0".

■ Flag 41



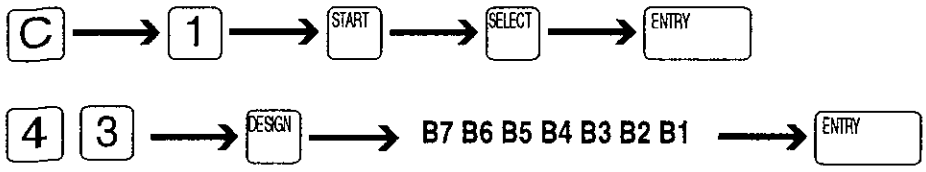
Options:	Press:	To:
B8	1	Add Tax7 to taxable 8.
B7-B1	0	Always enter "0".

■ Flag 42



Options:	Press:	To:
B7	0	Make the programmed unit price available by in-store marking of 000.
	1	Request of input of a unit price each time.
B6	0	On registration of unlinked PLU, linking to maximum department automatically. (See 5.15 Automatic PLU programming function.)
	1	Resquest to input link department No. (See 5.15 Automatic PLU programming function.)
B5	0	Do not store the Bar code data in blank area automatically at "**P1**" mode.
	1	Store the Bar code data in blank area automatically at "**P1**" mode.
B4,B3	0	Always enter "0".
B2	0	Disable input Bar code data by key operations.
	1	Enable input Bar code data by key operations.
B1	0	Disable Bar code scanner operation.
	1	Enable Bar code scanner operation.

■ Flag 43



Options:	Press:	To:
B7	1	Select type 7 Barcode.
B6	1	Select type 6 Barcode.
B5	1	Select type 5 Barcode.
B4	1	Select type 4 Barcode.
B3	1	Select type 3 Barcode.
B2	1	Select type 2 Barcode.
B1	1	Select type 1 Barcode.

PRICE MARKED BARCODE TYPE

	UPC/EAN/JAN (13 DIGITS)	CODE (DIGIT)	PRICE (DIGIT)
TYPE 1	02AAAAASPPPPC	2AAAAA (6)	PPPP (4)
TYPE 2	02AAAASPPPPPC	2AAAA (5)	PPPPP (5)
TYPE 3	02AAAAAPPPPPC	2AAAAA (6)	PPPPP (5)
TYPE 4	2XAAAAASPPPPC	2XAAAAA (7)	PPPP (4)
TYPE 5	2XAAAASPPPPPC	2XAAAA (6)	PPPPP (5)
TYPE 6	2XAAAAAPPPPPC	2XAAAAA (7)	PPPPP (5)
TYPE 7	2XAAAAPPPPPPC	2XAAAA (6)	PPPPPP(6)

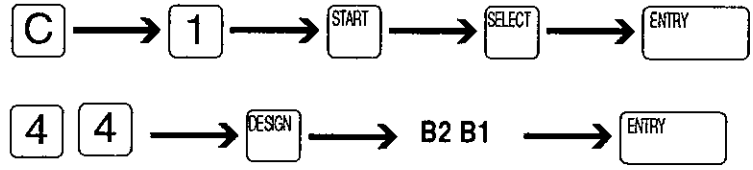
A,X = CODE S = CHECK TEST P = PRICE C = SUM CHECK

NOTE

*Two types are selectable at the same time on condition of below.

One is selected among type 1, type 2 and type 3 and the other is selected among type 4, type 5 type 6 and type 7.

■ Flag 44



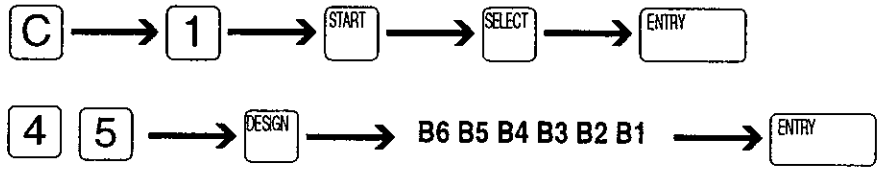
Options:	Press:		To:
B2	1		Select transmission speed 600 bps.
	2		Select transmission speed 1200 bps.
	3		Select transmission speed 2400 bps.
	4		Select transmission speed 4800 bps.
	5	●	Select transmission speed 9600 bps.
	6		Select transmission speed 19200 bps.
	7		Select transmission speed 38400 bps.
B1	1		Select communication with Barcode scanner.
	2		Select communication with Scale.
	3	●	Select communication with P.C.

NOTE

* Use these protocol of system function flag 44 & 45 only for communication with PC, barcode scanner and scale.

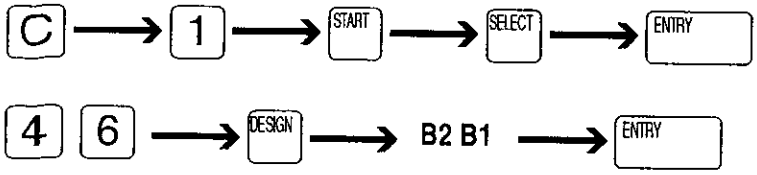
■ Flag 45.

This flag allows you to select the communication method between register and peripheral equipment such as PC, scale or barcode scanner.



Options:	Press:		To:
B6,B5	10		7 bit (character).
	11	●	8 bit (character).
B4,B3	01	●	1 stop bit.
	11		2 stop bit.
B2	0		odd parity.
	1	●	even parity.
B1	0		non parity.
	1	●	parity.

■ Flag 46

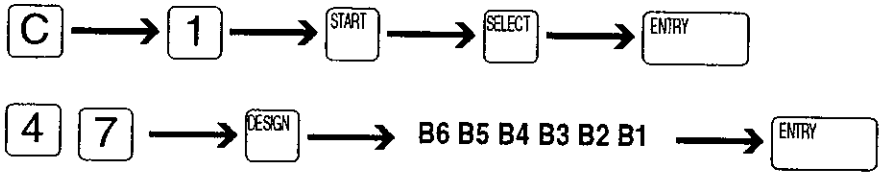


Options:	Press:		To:
B2	1		Select transmission speed 600 bps.
	2		Select transmission speed 1200 bps.
	3		Select transmission speed 2400 bps.
	4		Select transmission speed 4800 bps.
	5	●	Select transmission speed 9600 bps.
	6		Select transmission speed 19200 bps.
	7		Select transmission speed 38400 bps.
B1	0		Select no communication via the port.
	1	●	Select communication with Barcode scanner.
	3		Select communication with P.C.

NOTE

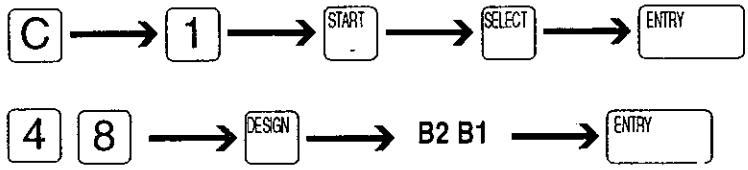
* Use these protocol of system function flag 46 & 47 only for communication with PC and barcode scanner.

■ Flag 47



Options:	Press:		To:
B6,B5	10	●	7 bit
	11		8 bit
B4,B3	01		1 stop bit
	11	●	2 stop bit
B2	0		odd parity
	1	●	even parity
B1	0		non parity
	1	●	parity

■ Flag 48

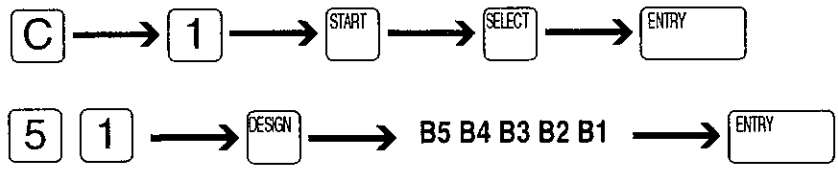


Options:	Press:		To:
B2	0		Send DC1 at starting P.C. communication.
	1	●	Do not send DC1 at starting P.C. communication.
B1	0		Send sales data to P.C. even if no sales result exists.
	1	●	Do not send sales data if no sales result exists.

■ Flag 49, Flag 50

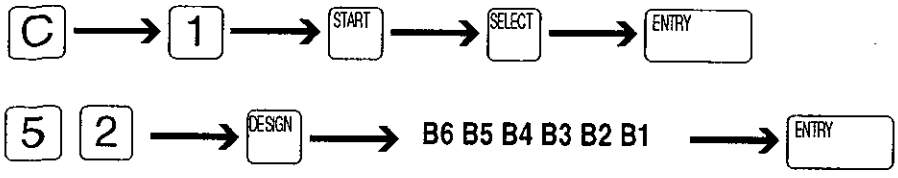
Canadian Tax Mode (=Always enter "0" in other countries.)

■ Flag 51



Options:	Press:	To:
B5	0	Print the total amount excluding VAT when "TAXPRINT" key is operated.
	1	Do not print the total amount excluding VAT when "TAXPRINT" key is operated.
B4	0	Print the taxable amount and VAT when "TAXPRINT" key is operated.
	1	Do not print the taxable amount and VAT when "TAXPRINT" key is operated.
B3	0	Do not print the total of all taxes when "TAXPRINT" key is operated.
	1	Print the total of all taxes when "TAXPRINT" key is operated.
B2	0	Do not print total of the taxable amounts for each tax when "TAXPRINT" key is operated.
	1	Print total of the taxable amounts for each tax when "TAXPRINT" key is operated.
B1	0	Print the total tax amount when "TAXPRINT" key is operated.
	1	Do not print the total tax amount when "TAXPRINT" key is operated.

■ Flag 52



Options:	Press:	To:
B6	1	Send communication data as the Data of 13-dight barcode which Starts from 02 or 2.
B5	1	Enable to repeat the scale operation . (Following TERAOKA models only)
B4,B3	00	Be weighed and printed in kg.
	01	Be weighed and printed in lbs.
	10	Be weighed and printed in g.
	11	Be weighed and printed in 100g.
B2	1	Be linked with an OZ scale.
B1	1	Be linked with a TERAOKA scale. (Model : DS-640, DS-735)

■ 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.

Basic key operation sequence

1) [C] ⟶ [2] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) n n ⟶ [DESIGN] ---Enter desired key number. When the number is not entered, the programming will start from 1.

3) n n ⟶ [ENTRY] ---Enter key code.

■Key number of the key layout

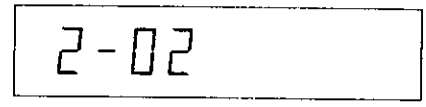
		RF	JF	04	05	06	07	08	09	10
		14	15	(16)	17	18	19	20	21	(22)
24	25	26	27	28	29	30	31	32	33	(34)
36	37	38	39	40	41	42	43	44	45	(46)
48	(49)	50	51	52	53	54	55	56	57	(58)
60	61	62	63	64	65	66	67	68	69	(70)

Example : Program "Dept No" to "17" number key.

Use the programming sheet. (See sec. 1.3.)

Key operation **DISPLAY**

1) [C] ⟶ [2] ⟶ [START] ⟶ [SELECT]



2) [1] [7] ⟶ [DESIGN] ---Enter key number.

3) [7] [F f] ⟶ [ENTRY] ---Enter the code of "Dept No".

refer "Keycode table"

NOTE

- [RF] [JF] Keys can not be changed, they are fixed on the key layout.
- Entered data will be printed on the receipt and journal.

■Key Code Table

NO.	KEY FUNCTION		NO.	KEY FUNCTION	
00	NOP		20	NON TAXABLE	[NTX]
01	0	[0]	21	TAXABLE 1	[TAX1]
02	1	[1]	22	TAXABLE 2	[TAX2]
03	2	[2]	23	TAXABLE 3	
04	3	[3]	24	TAXABLE 4	
05	4	[4]	25		NOT USE
06	5	[5]	26		NOT USE
07	6	[6]	27		NOT USE
08	7	[7]	28		NOT USE
09	8	[8]	29	COVERS NUMBER	
0A	9	[9]	2A	CLERK-ID	
0B	00	[00]	2B		NOT USE
0C	000		2C		NOT USE
0D	•	[•]	2D		NOT USE
0E	CLEAR	[C]	2E		NOT USE
0F	ENTRY/RELEASE	[ENT/RLS]	2F	CANCEL	[CAN]
10	PLICE LOOK UP	[PLU]	30	RECEIVED ON ACCOUNT	[RA]
11	CASH TENDER/CHANGE	[CASH/TEND]	31	PAID OUT	[PO]
12	CHECK TENDER	[CHKS]	32	-N	
13	CHARGE/VALIDATION	[CHRG/VALI]	33	-%N	
14	CARD/STUB	[CARD/STUB]	34	-%	[-%]
15	CARD 2		35	+%	[+%]
16	CARD 3		36	-	[-]
17	CARD 4		37	-2	
18		NOT USE	38	-3	
19		NOT USE	39	-4	
1A	TOTAL/2ND RECEIPT	[TOTAL/PRINT]	3A		NOT USE
1B	SUB TOTAL	[SUB TOTL]	3B		NOT USE
1C	ERROR CORRECTION	[EC]	3C		NOT USE
1D	VOID	[VOID]	3D	DEPT SHIFT	[DEPT SHIFT]
1E	RETURN	[RET]	3E		NOT USE
1F	MULTIPLE/SPRIT PRICE	[Q/F]	3F		NOT USE

NO.	KEY FUNCTION	NO.	KEY FUNCTION
40	MANUAL TAX	60	MACRO 1
41	NOT USE	61	MACRO 2
42	NOT USE	62	MACRO 3
43	NOT USE	63	MACRO 4
44	NOT USE	64	MACRO 5
45	NOT USE	65	MACRO 6
46	NOT USE	66	MACRO 7
47	NOT USE	67	MACRO 8
48	NOT USE	68	MACRO 9
49	NOT USE	69	MACRO 10
4A	NOT USE	6A	MACRO 11
4B	EXCHANGE	6B	MACRO 12
4C	NON ADD/NON SALE [#]	6C	MACRO 13
4D	X 1000	6D	MACRO 14
4E	X 10000	6E	MACRO 15
4F	NOT USE	6F	MACRO 16
50	TAXABLE 5	70	NOT USE
51	TAXABLE 6	71	HOLD [HOLD]
52	TAXABLE 7	72	NOT USE
53	TAXABLE 8	73	-%N
54	NOT USE	74	NOT USE
55	NOT USE	75	FOREIGN CURRENCY #
56	NOT USE	76	FOREIGN CURRENCY 1
57	NOT USE	77	FOREIGN CURRENCY 2
58	NOT USE	78	FOREIGN CURRENCY 3
59	NOT USE	79	FOREIGN CURRENCY 4
5A	NOT USE	7A	FOREIGN CURRENCY 5
5B	NOT USE	7B	CASHIER NUMBER [NO]
5C	NOT USE	7C	RECEIPT ON/OFF [ON OFF]
5D	NOT USE	7D	NOT USE
5E	NOT USE	7E	NOT USE
5F	NOT USE	7F	DEPARTMENT NUMBER

NO.	KEY FUNCTION	NO.	KEY FUNCTION
80	DEPT. 1 [1]	A0	DEPT. 33(PLU. 17) *
81	DEPT. 2 [2]	A1	DEPT. 34(PLU. 18) *
82	DEPT. 3 [3]	A2	DEPT. 35(PLU. 19) *
83	DEPT. 4 [4]	A3	DEPT. 36(PLU. 20) *
84	DEPT. 5 [5]	A4	DEPT. 37(PLU. 21) *
85	DEPT. 6 [6]	A5	DEPT. 38(PLU. 22) *
86	DEPT. 7 [7]	A6	DEPT. 39(PLU. 23) *
87	DEPT. 8 [8]	A7	DEPT. 40(PLU. 24) *
88	DEPT. 9 [9]	A8	DEPT. 41(PLU. 25) *
89	DEPT. 10 [10]	A9	DEPT. 42(PLU. 26) *
8A	DEPT. 11 [11]	AA	DEPT. 43(PLU. 27) *
8B	DEPT. 12 [12]	AB	DEPT. 44(PLU. 28) *
8C	DEPT. 13 [13]	AC	DEPT. 45(PLU. 29) *
8D	DEPT. 14 [14]	AD	DEPT. 46(PLU. 30) *
8E	DEPT. 15 [15]	AE	DEPT. 47(PLU. 31) *
8F	DEPT. 16 [16]	AF	DEPT. 48(PLU. 32) *
90	DEPT. 17(PLU. 1) *	B0	DEPT. 49(PLU. 33) *
91	DEPT. 18(PLU. 2) *	B1	DEPT. 50(PLU. 34) *
92	DEPT. 19(PLU. 3) *	B2	(PLU. 35) *
93	DEPT. 20(PLU. 4) *	B3	(PLU. 36) *
94	DEPT. 21(PLU. 5) *	B4	(PLU. 37) *
95	DEPT. 22(PLU. 6) *	B5	(PLU. 38) *
96	DEPT. 23(PLU. 7) *	B6	(PLU. 39) *
97	DEPT. 24(PLU. 8) *	B7	(PLU. 40) *
98	DEPT. 25(PLU. 9) *	B8	(PLU. 41) *
99	DEPT. 26(PLU. 10) *	B9	(PLU. 42) *
9A	DEPT. 27(PLU. 11) *	BA	(PLU. 43) *
9B	DEPT. 28(PLU. 12) *	BB	(PLU. 44) *
9C	DEPT. 29(PLU. 13) *	BC	(PLU. 45) *
9D	DEPT. 30(PLU. 14) *	BD	(PLU. 46) *
9E	DEPT. 31(PLU. 15) *	BE	(PLU. 47) *
9F	DEPT. 32(PLU. 16) *	BF	(PLU. 48) *

NO.	KEY FUNCTION	NO.	KEY FUNCTION
C0	(PLU. 49) *	E0	(PLU. 81) *
C1	(PLU. 50) *	E1	(PLU. 82) *
C2	(PLU. 51) *	E2	(PLU. 83) *
C3	(PLU. 52) *	E3	(PLU. 84) *
C4	(PLU. 53) *	E4	(PLU. 85) *
C5	(PLU. 54) *	E5	(PLU. 86) *
C6	(PLU. 55) *	E6	(PLU. 87) *
C7	(PLU. 56) *	E7	(PLU. 88) *
C8	(PLU. 57) *	E8	(PLU. 89) *
C9	(PLU. 58) *	E9	(PLU. 90) *
CA	(PLU. 59) *	EA	(PLU. 91) *
CB	(PLU. 60) *	EB	(PLU. 92) *
CC	(PLU. 61) *	EC	(PLU. 93) *
CD	(PLU. 62) *	ED	(PLU. 94) *
CE	(PLU. 63) *	EE	(PLU. 95) *
CF	(PLU. 64) *	EF	(PLU. 96) *
D0	(PLU. 65) *	F0	(PLU. 97) *
D1	(PLU. 66) *	F1	(PLU. 98) *
D2	(PLU. 67) *	F2	(PLU. 99) *
D3	(PLU. 68) *	F3	(PLU. 100) *
D4	(PLU. 69) *	F4	NOT USE
D5	(PLU. 70) *	F5	NOT USE
D6	(PLU. 71) *	F6	NOT USE
D7	(PLU. 72) *	F7	NOT USE
D8	(PLU. 73) *	F8	NOT USE
D9	(PLU. 74) *	F9	NOT USE
DA	(PLU. 75) *	FA	NOT USE
DB	(PLU. 76) *	FB	NOT USE
DC	(PLU. 77) *	FC	NOT USE
DD	(PLU. 78) *	FD	NOT USE
DE	(PLU. 79) *	FE	NOT USE
DF	(PLU. 80) *	FF	NOT USE

NOTE

■ 〔**PLU.nn**〕 * are available when #2 of System function flag 28 is programmed at 1.

■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. The following example shows how to change transaction name "**CARD1**" to "VISA".

Basic key operation sequence

1) [C] ⟶ [3] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) n n n ⟶ [DESIGN] ---Enter desired Transaction number.
When the number is not entered, the programming will start from 1.

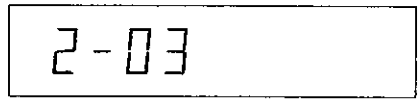
3) X···X ⟶ [ENTRY] ---Enter a character.

Example : Program "VISA" to "CARD1" of No.49.

Key operation

DISPLAY

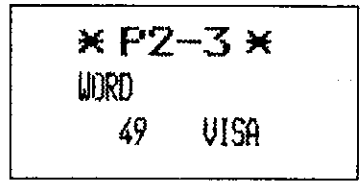
1) [C] ⟶ [3] ⟶ [START] ⟶ [SELECT]



2) [4] [9] ⟶ [DESIGN] ---Enter Transaction number.

3) [V v] [I i] [S s] [A a] ---Enter a character of "Dept No".

4) [ENTRY]



NOTE

- Entered data will be printed on the receipt and journal.
- Please refer Transaction Name Table in the next page.
- Display will show the character code equivalent to the transaction name to be programmed.

Transaction name table

NUMBER	TRANSACTION NAME	NUMBER	TRANSACTION NAME		
1	DEPT TTL	51	CARD3	101	-VOID-
2	NOTXBL	52	CARD	102	ITEM CT
3	TXBL-1	53	FSID	103	N Q X Q
4	TXBL-2	54	FC1	104	PSG PSG
5	TXBL-3	55	FC2	105	SUM.GRP
6	TXBL-4	56	FC3	106	SUM.PRS
7	TAX-1	57	FC4	107	RA
8	TAX-2	58	FC5	108	PO
9	TAX-3	59	TAXPNO	109	TRAINING
10	TAX-4	60	NTXPNO	110	TOTAL
11	MNTAX	61	NRGT	111	*CANCEL*
12	+%G	62	NET TL	112	FF**
13	+%N	63	TAX	113	
14	TOTAL	64	NET*	114	
15	GROSS	65	CAID	115	
16	VOID-R	66	CKID	116	
17	RETURN	67	CDID	117	
18	-N	68	FSID	118	
19	-%N	69	CA TIP	119	
20	-%G	70	TIP	120	
21	-%NII	71	VOID	121	
22	-1	72	RETURN	122	MONDAY
23	-2	73	SHIFT 1	123	TUESDAY
24	-3	74	SHIFT 2	124	WEDNESDAY
25	ROUND	75	SHIFT 3	125	THURSDAY
26	NET TL	76	DEPT-TTL	126	FRIDAY
27	NET *	77	DEPT NET	127	SATURDAY
28	CASH	78	DEPT GRP	128	SUNDAY
29	CHECK	79	PLU -TTL	129	
30	CHARG	80	PLU TTL	130	
31	CARD*	81	PLU NET	131	
32	FS-TL	82	PLU GRP1	132	CASH
33	CA-TIP	83	PLU GRP2	133	CHECK
34	TIP	84	GRP TTL	134	CHARG
35	SRVCH	85	RPRT CNT	135	CARD*
36	MSC-V	86	CASH TD	136	
37	MSC-R	87	CHECK TD	137	
38	TAX EX	88	CHARG TD	138	
39	-TTL	89	CARD1 TD	139	
40	-TAX	90	CARD2 TD	140	
41	NOSALE	91	CARD3 TD	141	
42	R/A CA	92	CARD4 TD	142	TXBL-5
43	R/A CK	93	SUB-TL	143	TXBL-6
44	R/A CARD	94	CHANGE	144	TXBL-7
45	P/O CA	95	FS-TL	145	TXBL-8
46	P/O CK	96	FS-TD	146	TAX-5
47	CAID	97	FS-CG	147	TAX-6
48	CKID	98	COVERS	148	TAX-7
49	CARD1	99	HOLD ST	149	TAX-8
50	CARD2	100	*TAX*	150	

■Limit Count (Maximum Number)

The memory required for departments, PLU and clerk-ID exists on the main logic board. Each unit is built with all two levels for the departments programmed in and with the maximum clerks already assigned. However, the departments can be expanded further.

1)Department size : Maximum 50 departments
2)PLU size : Maximum 1700 PLUs
3)Clerk-ID size : Maximum 30 clerks

Basic key operation sequence

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

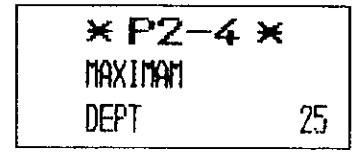
2) **n n n** ⟶ [ENTRY]

Example : Setting department size 50 instead of 32.

Key operation

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [2] [5] ⟶ [ENTRY]



4.3 Function programming (at "P1" position)

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. There are 15 proceedings that can be set.
Section example below requiring the use of programming overlay sheet. (see section 1.3 programming sheet.)

4.3.1 Setting the Basic Data

This section explains how to set the current date and time. Your cash resister 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 "Feb 08, 99" set the time "15:30" and day symbol.

1) [C] → [1] → [START] → [SELECT] → [ENTRY]

2) [9][9][0][2][0][8] → [ENTRY]

Year Month Day

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

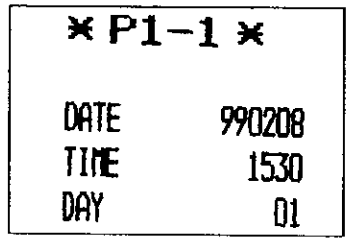
3) [1][5][3][0] → [ENTRY]

Hour Minute

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

4) [1] → [ENTRY]

Enter Day-Symbol.
(1=Monday . 2=Tuesday . 3=Wednesday . 4=Thursday .
5=Friday . 6=Saturday . 7=Sunday)



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.

C → 1 → START → SELECT (Depress 4 times) → ENTRY

→ 1 2 3 4 → ENTRY

```
* P1-1 *

CSCN          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 → ENTRY

Depress 'SELECT' key, 5 Times

2) 1 2 → ENTRY

```
* P1-1 *

MCNO          12
```

Opening Hour

You can set the opening hour and minutes using the 24 hour system for the automatic hourly report. The following example shows how to set the time to "10:00".

1) C → 1 → START → SELECT . . . SELECT → ENTRY

Depress 'SELECT' key, 6 Times

2) 1 0 0 0 → ENTRY

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

Hour Minute

Opening Hour

```
* P1-1 *

OPENING       1000
```

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] ⟶ [ENTRY]

Depress 'SELECT' key, 7 Times

2) [9][9][9] ⟶ [ENTRY]

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

[9][9][9] ⟶ [CHRG/VALI] at "X" position

Training Number

Managers password

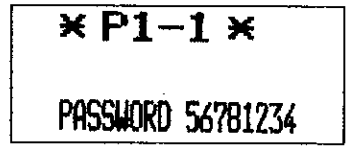
You can enter a maximum of 4 digits in the password which will allow you to operate the periodical and daily reports. After you program a password, you cannot operate the cash register in this mode without entering the correct password.
The following example shows how to set the password for periodical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

1) [C] ⟶ [1] ⟶ [START] ⟶ [SELECT] . . . [SELECT] ⟶ [ENTRY]

Depress 'SELECT' key, 8 Times

2) [5][6][7][8][1][2][3][4] ⟶ [ENTRY] (Enter 4 digits each for periodical report password and daily report password.)

X2,Z2 password X 1,Z1 password



Entry the password in order to issue the report.

[CASH/TEND][1][2][3][4] ⟶ [#] (at "X" or "Z" position) And then proceed to the issuing operations.

X1,Z1 password

[PO] ⟶ [CASH/TEND] ⟶ [5][6][7][8] ⟶ [#]

X2,Z2 password (at "X" or "Z" position) And then proceed to the issuing operations.

For more information about X1, X2, Z1, Z2 reports, see section 8.1.

4.3.2 Department Programming

This section describes how to program departments. You can distinguish between 32 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 32". 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, non-add sales and tax status.

Setting the Name

You can set the department name for each department 1 to 32 up to 12 characters.
The following example shows how to enter "Drink" to "department 10".

1) [C] → [2] → [START] → [SELECT] → [ENTRY]

2) [1] [0] → [DESIGN]

3) [D d] [SHIFT] [R r] [I i] [N n] [K k] → [ENTRY]

Programmed all department name data is printed by [PRINT] key.

```
*P1-2*
DEPT
    NAME
10Drink
```

Setting the Price

You can set a unit price up to eight 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 4.2 "System Function Flags". The following example shows that $ 10.00 is entered for Department 10.

NOTE

When you want to set a unit price for Department 17 to 32, press the **DEPT/SHFT** Key. This key toggles the "Department 1 to 16 set mode" and "Department 17 to 32".

1) C → 2 → START → SELECT SELECT → ENTRY

2) 1 0 → DESIGN

3) 1 0 00 → ENTRY

```
* P1-2 *
DEPT
   PRICE
10      10.00
```

Setting Function Flags

There are two 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 - TAX8 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.
This flag also allows you to register non-add items and price preset functions.

The following example shows how to set "taxable 2" function to "Department 10".

1) [C] → [2] → [START] → [SELECT] [SELECT] [SELECT] → [ENTRY]

Depress 'SELECT' key, 3 Times

2) [1] [0] → [DESIGN]

3) [1] [0] → [ENTRY] Programming of Flag 1

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

The assigment for each flag is as follows.

Flag 1

Options:	Press:	To:
B8	1	Taxable 8
B7	1	Taxable 7
B6	1	Taxable 6
B5	1	Taxable 5
B4	1	Taxable 4
B3	1	Taxable 3
B2	1	Taxable 2
B1	1	Taxable 1

Flag 2

Options:	Press:	To:
B8	1	Be a department for scale.
B7	1	Price can not be entered . (Refer main flag 30 bit 6)
B6	1	Preset Unit price is available.
B5,B4	0	Always enter 0.
B3	1	Non-add sale
B2	1	Negative item.
B1	1	Single item sale

Setting High Amount Lock Out No.

You can set High Amount Lock Out No. for each Department along with HALO table program. For details of HALO, see section 4.3.6 "HALO table program".
The following example shows how to enter "HALO table No.2" to "Department 10".

1) [C] → [2] → [START] → [SELECT] . . [SELECT] → [ENTRY]

Depress 'SELECT' key, 4 Times

2) [1] [0] → [DESIGN]

3) [2] → [ENTRY]

```
* P1-2 *
DEPT
   HALO#
  10        2
```

Setting Group Number

You can assign a department to a group up to 99. 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".

1) [C] → [2] → [START] → [SELECT] . . . [SELECT] → [ENTRY]

Depress'SELECT'key, 5 Times

2) [1] [0] → [DESIGN]

3) [5] → [ENTRY]

```
* P1-2 *
DEPT
   GROUP
  10        5
```

4.3.3 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 1,700 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.

1) [C] → [3] → [START] → [SELECT] → [ENTRY]

2) [2] [0] → [DESIGN]

3) [O o] → [SHIFT] → [R r] [A a] [N n] [G g] [E e] → [CODE] → [2] [D d]
→ [CHAR] → [SHIFT] → [S s] → [SHIFT] → [O o] [D d] [A a]
→ [ENTRY]

```
* P1-3 *
PLU
   NAME
   20Orange-Soda
```

Setting a Unit Price

You can set a unit price up to eight digits long.
The following example shows that $ 1.35 is entered for "PLU 20".

1) [C] → [3] → [START] → [SELECT] [SELECT] → [ENTRY]

2) [2] [0] → [DESIGN]

3) [1] [3] [5] → [ENTRY]

```
* P1-3 *
PLU
   PRICE
   20        1.35
```

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] → [ENTRY]

Depress 'SELECT' key, 3 Times

2) [2] [0] → [DESIGN]

3) [1] [0] → [ENTRY]

```
* P1-3 *
PLU
   LINK#
   20        10
```

Setting Group Number

You can assigns a PLU to a group. Classifying PLU in groups allows you to get the group report and check the sales for each group. Group number setting are available up to 99. The following example shows how to set "Group No.5" to "PLU 20".

1) [C] → [3] → [START] → [SELECT] . . . [SELECT] → [ENTRY]

2) [2] [0] → [DESIGN]

Depress 'SELECT' key, 4 Ttimes

3) [5] → [ENTRY]

```
*P1-3*
PLU
   GROUP
20          5
```

Programming PLU codes

You can program a PLU code or Bar code number by key input or scan the Bar code data by Scanner. Bar code number of up to 13 digits can be used in a PLU code. (EAN, UPC A, UPC E, NW7 &, CODE 39)
For details about Bar code, see system function flag 32, 33, and 42.
The following example shows how to program Bar code number "4891080060017" to "PLU 20".

1) [C] → [3] → [START] → [SELECT] . . . [SELECT] → [ENTRY]

Depress 'SELECT' key, 5 Times

2) [2] [0] → [DESIGN]

3) [4] [8] [9] [1] [0] [8] [0] [0] [6] [0] [0] [1] [7] → [ENTRY]

Numeric key input

or

Scanning bar code itself

```
*P1-3*
PLU
   CODE
20    48910
      80060017
```

4.3.4 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 "Key layout" in section 4.2 "System programming".

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 manualy 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 two function flags. For the details of function flags, see "Setting function flags" in section 4.3.2 "Department Programming". The following example shows how to set the **[-%]** Key for a discount of "10.00%" at taxable 1.

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [1] [0] [00] ⟶ [ENTRY] Enter the -% rate

3) [1] ⟶ [ENTRY] Enter Flag

```
* P1-4 *

-%G  R    10.00%
-%G  F  00000001
```

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) Service charge 4) -%N 5. **[-%NII]** 6) **[-]** 7) **[-2]** 8) **[-3]** 9) **[-4]** 10) **[-N]**

Program "12.00%" to "+%" at taxable 1.

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] [SELECT] ⟶ [ENTRY]

2) [1] [2] [00] ⟶ [ENTRY] Enter the +% rate

3) [1] ⟶ [ENTRY] Enter Flag

```
* P1-4 *

+%G  R    12.00%
+%G  F  00000001
```

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

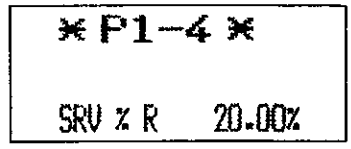
SERVICE CHARGE RATE

Program "20.00%" to "SERVICE CHARGE" at Non taxable.

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] [SELECT] [SELECT] ⟶ [ENTRY]

2) [2] [0] [00] ⟶ [ENTRY]

3) [ENTRY]



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

NOTE

The automatic calculation is effective when System function flag 9 #2 is set as 1.

-%N RATE

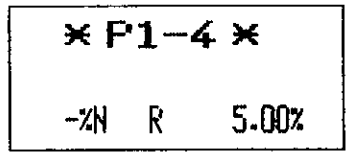
Program "5.00%" to "**-%N**" at Non taxable.

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] . . [SELECT] ⟶ [ENTRY]

Depress enter 'SELECT 'key,
4 Times

2) [5] [00] ⟶ [ENTRY] Enter the [-%N] rate

3) [ENTRY] Enter Flag (skip :non taxable)



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

-%NII RATE

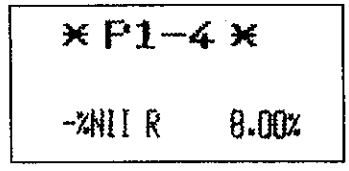
Program "8.00%" to "**-%NII**" at Non taxable.

1) [C] ⟶ [4] ⟶ [START] ⟶ [SELECT] . . . [SELECT] ⟶ [ENTRY]

Depress 'SELECT' key,
5 Times

2) [8] [00] ⟶ [ENTRY] Enter the [-%NII] rate

3) [ENTRY] Enter Flag (skip :non taxable)



"-3" DISCOUNT PRICE

Program "$0.50" to "-3" at Non taxable and HALO No.1.

1) [C] → [4] → [START] → [SELECT] . . . [SELECT] → [ENTRY]

Depress 'SELECT' key, 8 Times

2) [5] [0] → [ENTRY] Enter the Discount price

3) [0] → [ENTRY] Enter Flag 1 (skip : non taxable)

4) [1] [00] [00] [0] → [ENTRY] Enter Flag 2

5) [1] → [ENTRY] Enter the HALO table number

```
* P1-4 *

-3   P      0.50
-3   F1 00000000
-3   F2 00100000
-3   H         1
```

NOTE

Programmed all data is printed by [PRINT] key.

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 manualy entering a discount amount on the keyboard.

Setting the Discount Amount and Function Flag

You can enter a discount amount up to eight digits long with HALO No., see "Setting the Function flags" in section 4.3.2 "Department Programming".
The following example shows that the [-] Key is set for a discount of "$0.50" to [-1] at Non taxable and HALO No.1.

1) [C] → [4] → [START] → [SELECT] . . . . [SELECT] → [ENTRY]

Depress 'SELECT' key, 6 times (-1)

Programming for "-1"

2) [1] [00] → [ENTRY] Enter the Discount price

3) [0] → [ENTRY] Enter Flag 1 (skip : non taxable)

4) [1] [00] [00] [0] → [ENTRY] Enter Flag 2

5) [1] → [ENTRY] Enter the HALO table number

```
* P1-4 *

-1   P      1.00
-1   F1 00000000
-1   F2 00100000
-1   H         1
```

```
*P1-4*

-%G    R    10.00%
       F  00000001
+%G    R    12.00%
       F  00000001
SRV %  R    20.00%
       F  00000000
-%N    R     5.00%
       F  00000000
-%NII  R     8.00%
       F  00000000
-1     P     1.00
       F1 00000000
       F2 00100000
       H        1
-2     P     2.00
       F1 00000000
       F2 00100000
       H        1
-3     P     0.50
       F1 00000000
       F2 00100000
       H        1
-4     P     4.00
       F1 00000000
       F2 00100000
       H        1
-N     P     0.50
       F1 00000000
       F2 00100000
       H        1
```

NOTE

If you set the discount amount to an optional [-2] - [-4] Key, depress "SELECT" Key 7 times for [-2], 8 times for [-3] and 9 times for [-4] at discount setting.

4.3.5 Tax programming

You can program up to eight types of tax to be added to each item. We call these eight taxes TAX 1 · · · TAX 7 and TAX 8. 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 Flags" in section 4.3.2 "Department Programming".

Selecting a Tax Style

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

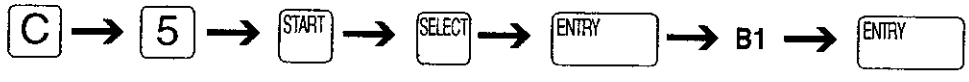
Rate tax

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

Tax table

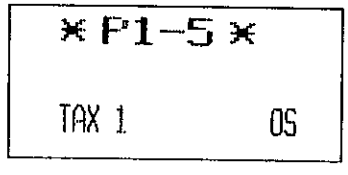
This system calculates the tax by using a tax table that you enter. The tax table depends on the location of the store. Use the tax tables provided by the local tax office to enter the numbers. For instructions on entering a tax table, see "Tax table" in this section.

To assign a tax style to a tax (TAX 1-TAX 8), enter the type number (0-2).



Numbers:	Press:	To:
B1	0	Rate Tax
	1	Tax Table
	2	Special Tax Table

Programmed data is printed by [PRINT] key.



Setting the Tax rate

To set the tax rate for a Tax (Tax 1 - Tax 8), 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 7.5% has been programmed for Tax 1.

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

1) [C] ⟶ [5] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

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)
depress 'SELECT' key 5 Times (TAX 5)
depress 'SELECT' key 6 Times (TAX 6)
depress 'SELECT' key 7 Times (TAX 7)
depress 'SELECT' key 8 Times (TAX 8)

2) [0] ⟶ [ENTRY]

Enter Tax Sign
(0 = Rate Tax
1 = Table Tax = Table is made automatically.
2 = Special Table Tax 2)

10.0000

3) [4] [2] [5] [00] ⟶ [ENTRY]

Enter the Rate (4.25%).

4) [0] ⟶ [ENTRY]

Enter the limit amount for non taxable.

※To Tax Sign of Tax 2 automatically.

```
* P1-5 *

TAX 1          05
          4.2500%
                00
```

NOTE

*When selected Tax sign 1 or 2, tax table will be proceeded after being programmed.
Does not program Table Tax until Tax 5-Tax 8.

Example 2: Program table tax "4.0000%" to "TAX 2".

Table example

An example tax table

Rate: 4%

Sales amount range			Tax amount	Difference
$0.00	to	$0.09	None	10
$0.10	to	$0.25	0.01	16
$0.26	to	$0.50	0.02	(25) Irregular
$0.51	to	$0.75	0.03	25
$0.76	to	$1.09	0.04	(34) (Point A)
$1.10	to	$1.25	0.05	16
$1.26	to	$1.50	0.06	(25) Regular
$1.51	to	$1.75	0.07	25
$1.76	to	$2.09	0.08	(34) (Point B)
$2.10	to	$2.25	0.09	16
$2.26	to	$2.50	0.10	25
$2.51	to	$2.75	0.11	25
$2.76	to	$3.09	0.12	34
$3.10	to	$3.25	0.13	16
$3.26	to	$3.50	0.14	25
$3.51	to	$3.75	0.15	25
$3.76	to	$4.09	0.16	34
$4.10	to	$4.25	0.17	16
$4.26	to	$4.50	0.18	25
$4.51	to	$4.75	0.19	25
$4.76	to	$5.09	0.20	34
$5.10	to	$5.25	0.21	16

Minimum Break Value

Maximum Break Value

1) C → 5 → START → SELECT SELECT → ENTRY

2) 1 → ENTRY

3) 4 00 00 → ENTRY

4) 0 → ENTRY

5) 1 0 → ENTRY

6) 2 6 → ENTRY

7) [5] [1] → [ENTRY]

8) [7] [6] → [ENTRY]

9) [1] [1] [0] → [ENTRY]

10) [1] [2] [6] → [ENTRY]

11) [1] [5] [1] → [ENTRY]

12) [1] [7] [6] → [ENTRY]

13) [2] [1] [0] → [ENTRY]

NOTE

* Machine will find the end of table automatically and return to the Tax Sign of TAX 2.

```
*P1-5*

TAX 2          1S
          4.0000%
               0@
 0.00   0
 0.10   1      10
 0.26   2      16
 0.51   3      25
 0.76   4      25
 1.10   5      34
 1.26   6      16
 1.51   7      25
 1.76   8      25
 2.10   9      25
```

Example 3: Program special table tax "4.0000%" to "TAX 3".
Table is same as TAX 2.

1) [C] → [5] → [START] → [SELECT] → [ENTRY]
Depress 3 times 'SELECT' key

2) [2] → [ENTRY] Enter Tax sign

3) [4] [00] [00] → [ENTRY] Enter the Rate (4.00%)

4) [0] → [ENTRY] Enter "0" to the limit amount for non taxable

5) [1] [0] → [ENTRY] Enter the 1st break

6) [1] [6] → [ENTRY] Enter the 2nd break

7) [2] [5] → [ENTRY] Enter the 3rd break

8) [2] [5] → [ENTRY] Enter the 4th break

9) [3] [4] → [ENTRY] Enter the 5th break

10) [9] [9] [9] [9] → [ENTRY] Enter 9999 to end Irregular table

11) [1] [6] → [ENTRY] Enter the 6th break

12) [2] [5] → [ENTRY] Enter the 7th break

13) [2] [5] → [ENTRY] Enter the 8th break

13) [3] [4] → [ENTRY] Enter the 10th break

14) [9] [9] [9] [9] → [ENTRY] Enter 0 to end Regular table

```
*P1-5*

TAX 3                25
                  4.0000%
                     0@
 0.00   0
 0.10   1            10
 0.26   2            16
 0.51   3            25
 0.76   4            25
 1.10   5            34
 1.10   6          9999
 1.26   7            16
 1.51   8            25
 1.76   9            25
 2.10  10            34
 2.10  11          9999
```

Taxation System

There are two types of tax: the **Tax 1** and **Tax 2. Tax 1** are taxes collected by the country. Tax are taxes collected by the province. How the **Tax 1** and **Tax 2** are added to an item depends on the item. There are two methods as follows:

Tax on Tax

a) First, the **Tax 1** is calculated, based on the cost of the item. Then the **Tax 2** is calculated, based on the total cost of the item, including the **Tax 1** which has already been added. For example, if a **Tax 2** of 10% is calculated on a Departmeent 1 item (originally $10.00) to which a 7% **Tax 1** has already been added, first the 7% ($0.70) is added to reach $10.70. Then the 10% **Tax 2** ($1.07) is added to the $10.70 to arrive at $11.77.

Both Tax

b) The **Tax 1** and **Tax 2** are added to an item separately, based only on the original price of the item. For example, if a 10% **Tax 1** and a 7% **Tax 2** are added to a Department 1 item (originally $10.00), 10% ($1.00) and 7% ($0.70) are each added separately to the $10.00, making a total of $11.70.

To select the taxation system and to choose method set System function flag 35-41, described in section 4.2."Setting System Flags".

4.3.6 High Amount Lock Out Table

Your cash register allows you to set High Amount Lock Out table No. for each Department, PLU, [-].
The following example shows that how to set amount data "$50.00" to high amount lock out Table "No.5".

1) [C] → [6] → [START] → [SELECT] → [ENTRY]

2) [5] → [DESIGN] Enter the HALO table number

3) [5] [0] [00] → [ENTRY] Enter the amount DATA

```
*P1-6*
HALO
   5      50.00
```

4.3.7 Cashier Name

You can have a maximum 10 different cashier names in the memory of your cash register each name can be up to 8 characters.

To enter "MARY" for "Cashier 1".

1) [C] → [7] → [START] → [SELECT] → [ENTRY]

2) [M m] [A a] [R r] [Y y] → [ENTRY] Enter the Cashier Name

```
*P1-7*
CASHER
   1   MARY
```

```
*P1-7*
CASHER
   1   MARY
   2   cashier2
   3   cashier3
```

```
   8   cashier8
   9   cashier9
  10   cashierA
```

4.3.8 Clerk-ID

You can program a maximum six of digits clerk-ID number and eight characters clerk name for each clerk-ID up to 30 servers.
The following example shows how to program "clerk-ID No.101" and server name "TOM" to server 1.

1) [C] → [8] → [START] → [SELECT] → [ENTRY]

2) [1] [0] [1] → [ENTRY] Enter the CLERK-ID Number.

3) [SELECT] → [ENTRY]

4) [T t] [O o] [M m] → [ENTRY] Enter the server name.

```
* P1-8 *
CLERK-ID
   NAME
   1   TOM
```

4.3.9 Logo message

You can preset maximum 8 lines of printing on the receipt. Printing parameters are (1) 16 single or 8 double characters or combination (2) Programmed 2 steps of 8 character equal 2 single spaces.
The following example shows how to preset store name, address, on 5 lines with "TOWA" double wide.

1) [C] → [9] → [START] → [SELECT] → [ENTRY]

2) [5] → [ENTRY] Enter the total required lines for print message. (max. 8 lines)

3) [1] → [DESIGN] Enter the Programming Line number.

"TOWA CORP."

4) [DOUBLE SIZE] → [T t] [O o] [W w] [A a] → [ENTRY] Enter the "TOWA".

Shift to Double size character

5) [DOUBLE SIZE] → [SPACE] → [C c] [O o] [R r] [P p] → [CODE]
→ [2] [E e] → [CHAR] → [SPACE] [SPACE] → [ENTRY]

Release the Double size

"35-1 KAM ITODA"

6) [3] [5] → [CODE] → [2] → [D d] → [CHAR] → [1]
→ [SPACE] → [K k] [A a] [M m] → [ENTRY]

7) [I i] [T t] [O o] [D d] [A a] → [SPACE] [SPACE] → [ENTRY]

"TODA CITY"

8) [SPACE] [SPACE] [SPACE] → [T t] [O o] [D d] [A a] → [SPACE] → [ENTRY]

9) [SPACE] → [C c] [I i] [T t] [Y y] → [SPACE] [SPACE] → [ENTRY]

"SAITAMA JAPAN"

10) [S s] [A a] [I i] [T t] [A a] [M m] [A a] → [SPACE] → [ENTRY]

11) [SPACE] → [J j] [A a] [P p] [A a] [N n] → [SPACE] [SPACE] → [ENTRY]

"END CONS UMER"

12) [E e] [N n] [D d] → [SPACE] → [C c] [O o] [N n] [S s] → [ENTRY]

13) [U u] [M m] [E e] [R r] → [SPACE] [SPACE] [SPACE] [SPACE] → [ENTRY]

```
*P1-9*
LOGO
                5
  1 L TOWA
  1 R CORP.
  2 L 35-1 KAM
  2 R ITODA
  3 L   TODA
  3 R CITY
  4 L SAITAMA
  4 R JAPAN
  5 L END CONS
  5 R UMER
```

NOTE

After you have plotted the number of spaces required on each side 0 center the line, you do not have to enter those spaces in the left side portion of the line program.

4.3.10 Commercial Message

Your cash register allows you to program maximum 16 characters on 5 lines commercial message for advertising. It is controlled by "System Function Flag", section 4.2.
The following example shows how to program 4 lines of commercial message.

1) [C] → [1] [0] → [START] → [SELECT] → [ENTRY]

2) [4] → [ENTRY] Enter the total required lines for print message.(max.5 lines)

3) [2] → [DESIGN] Enter the Programming Line number.

"DISCOUNT SALE"

4) [D d] [I i] [S s] [C c] [O o] [U u] [N n] → [ENTRY]

5) [T t] → [SPACE] → [S s] [A a] [L l] [E e] → [SPACE]
→ [SPACE] → [ENTRY]

"20-50% OFF !"

6) [SPACE] [SPACE] → [2] [0] → [CODE] → [2] [D d]
→ [CHAR]
→ [5] [0] → [CODE] → [2] [5] → [ENTRY]

7) [CHAR] → [SPACE] → [O o] [F f] [F f] → [CODE] → [2] [1] → [CHAR]
→ [SPACE] [SPACE] [SPACE] → [ENTRY]

```
* P1-10 *
MESSAGE
                4
  2 L  DISCOUN
  2 R  T SALE
  3 L    20-50%
  3 R  OFF!
  4 L  SEP  1 -
  4 R  SEP 10
```

"SEP/ 1- SEP/ 10"

8) [S s] [E e] [P p] → [CODE] → [2] [F f] → [CHAR] → [SPACE] → [1]
→ [SPACE] → [CODE] → [2] [D d] → [ENTRY]

9) [CHAR] → [SPACE] → [S s] [E e] [P p] → [CODE] → [2] [F f] → [CHAR]
→ [1] [0] → [SPACE] → [ENTRY]

4.3.11 Automatic X/Z report

Your cash register can issue various kinds of preset report. In order to shorten the time required to attend the register while it is printing its reports. You can create up to 16 different report tables where the reports you need can be printed by a single command. For example, all PLU reports could be done on report 1, all financial reports are on report 3.
The following example shows how to create "Table No.2".

1) [C] → [1] [1] → [START] → [SELECT] → [ENTRY]

2) [2] → [DESIGN] Enter the Programming Table Number.

3) [0] → [ENTRY]

4) [1] [1] [1] [0] [0] [1] → [ENTRY] Enter the Flag 2

```
* P1-11 *
REPORT
  2 1  00000000
  2 2  00111001
```

The assignment for each flag is as follows:

Flag 1

Options:	Press:	To:	Control Lock position:
B8	1	Full PLU sales.	X,Z
B7	0	Always enter 0.	
B6	1	Full PLU group 1 total.	X
B5	0	Always enter 0.	
B4	1	Full PLU group 1 sales.	X
B3	1	Full department total.	X
B2	1	Full dept group total.	X
B1	1	Full dept group sales	X

Flag 2

Options:	Press:	To:	Control Lock position:
B6	1	Covers total	X,Z
B5	1	Houly net sales total	X,Z
B4	1	Full sales report	X,Z
B3	0	Always enter 0.	X,Z
B2	1	All Clerk-ID sales	X,Z
B1	1	All cashiers sales	X,Z

4.3.12 Group Name for X/Z Reports

Available to preset 16 group titles of up to 12 characters for each group. Both department and PLU groups are eligible for a title and the report can be programmed to print at either receipt and journal.
The example shows how to preset the title "CANDY" to "Group code No.2 of PLU".

Example: Program "CANDY" to "Group code No.2 of PLU".

1) [C] ⟶ [1] [2] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [2] [1] [2] ⟶ [ENTRY]
Enter the group No.and Code No.

3) [C c] [A a] [N n] [D d] [Y y] ⟶ [ENTRY]

```
* P1-12 *
TITLE
   1          212
  1CANDY
```

Contents of group number

Options:	Press:	To:
B4,B3		Group number (1 to 99)
B2,B1	01	Group for department
	12	Group for PLU

4.3.13 Time table for Automatic Department Shift

You can program a time table in order to automatically shift from one price level to another. These shifts can occur at up to 16 different times during the day. This will effect both department.
The following example shows how to program a time table and automatic department shift.

1) [C] ⟶ [1] [3] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [1] [0] [0] [0] ⟶ [ENTRY]
Enter desired time

3) [1] ⟶ [ENTRY]
Enter department shift 1 or 2

4) [1] [2] [0] [0] ⟶ [ENTRY]
Enter desired time

5) [2] → [ENTRY]

Enter department shift 1 or 2

6) [1] [3] [0] [0] → [ENTRY]

Enter desired time

7) [1] → [ENTRY]

Enter department shift 1 or 2

8) [1] [7] [0] [0] → [ENTRY]

Enter desired time

9) [2] → [ENTRY]

Enter department shift 1 or 2

10) [1] [8] [0] [0] → [ENTRY]

Enter desired time

11) [1] → [ENTRY]

Enter department shift 1 or 2

Programmed data is printed by [PRINT] key.

```
TOWA CORP.
35-1 KAMITODA
   TODA CITY
SAITAMA JAPAN
END CONSUMER
* P1-13 *
SHIFT
    1      1 1000
    2      2 1200
    3      1 1300
    4      2 1700
    5      1 1800
```

NOTE

It would fit appications such as Bar/Restaurants with regular prices, happy hour prices, and entertainment prices, fast food operations where the breakfast menu ends at one time period and the lunch menu.

4.3.14 Foreign Currency

Your cash register allows you to convert your currency to a foreign currency with a currency exchange key (**FC** Key).

To use the **FC** key, you must enter a currency exchange rate. You can preset up to five exchange rates. These rates are stored as values **FC 1** to **FC 5** inside this register. If you normally enter your sales as US$, you must set an exchange rate so that US$ can be converted to another currency. You must enter exchange rates as eight numbers, four digits for the interger and four digits for the decimal portion. Do not press the decimal point key while entering these eight digits.
You do not have to enter leading zeroes. For example, if the current exchange rate between the US$ and the British pound is "$ 1.51" enter "15100".

There is no pre-defined **FC** Key on the keyboard. So, to convert currency, you must program another key to be used as the **FC** Key. The following example shows how you assign the exchange rate "FF 5,80" to **FC 1** "DM 1.6111" to **FC 2** and "£ 0.58 " to **FC 3**.
For the details of programming a key to be used as **FC** Key, see "Key code table" in section 4.2 "System Programming".

1) [C] ⟶ [1] [4] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [5] [8] [0] [0] [0] ⟶ [ENTRY]

Enter the constant rate

3) [1] [6] [1] [1] [1] ⟶ [ENTRY]

Enter the constant rate

4) [5] [8] [0] [0] ⟶ [ENTRY]

Enter the constant rate

```
* P1-14 *
CHG RATE
   1      58000
   2      16111
   3       5800
```

4.3.15 Setting the Macro Key

Your cash register allows you to program "Macro Key" up to 16 kinds. To use **[MACRO]** Key, you can operate plural operation on one key operaion instead of 8 times key operation.

There is no pre-defined **[MACRO]** Key on the keyboard. So, to operates plural step at one key, you must program the other key to be used as the **[MACRO]** Key.
The following example shows how to make MACRO steps to **[MACRO 1]** key. For the details of programming a key to be used as the **[MACRO]** Key, see "Key code table" in section 4.2.

NOTE

* 1 Macro Key Table is programmable up to 8 keys.

Example: Program "SUB TOTAL" , "5" , "+%" , "SUB TOTAL" , "TOTAL" to **MACRO** 1.

1) [C] ⟶ [1] [5] ⟶ [START] ⟶ [SELECT] ⟶ [ENTRY]

2) [1] ⟶ [DESIGN]

Enter the Macro Key table number

3) [1] [B b] ⟶ [ENTRY]

Enter the key code of "SUB TOTAL"

4) [0] [6] ⟶ [ENTRY]

Enter the key code of "5"

5) [3] [5] ⟶ [ENTRY]

Enter the key code of "+%"

6) [1] [B b] ⟶ [ENTRY]

Enter the key code of "SUB TOTAL"

7) [1] [A a] ⟶ [ENTRY]

Enter the key code of "TOTAL"

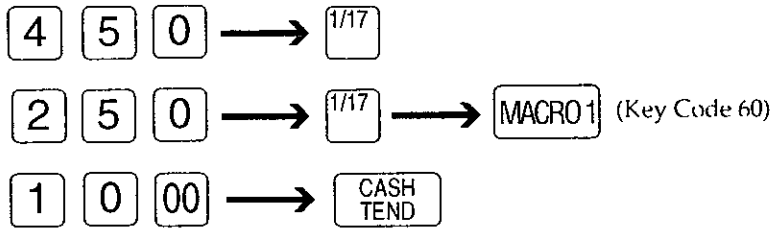
Please refer to the Key Code Table at section 4.2.

```
* P1-15 *
MACROKEY
 1  1  SBTL  1B
 1  2  5     06
 1  3  +%G   35
 1  4  SBTL  1B
 1  5  TOTL  1A
```

NOTE

*By programming Macro Key using key table, macro key operation is available.
*Macro key code is available from 60 to 6F.

Example: Register mode Operation



DEPT001	4.50
DEPT001	2.50
SUB-TL	7.00
5 +%G	0.35
SUB-TL	7.35
ITEM CT	2
TOTAL	
	7.35
CASH TD	10.00
CHANGE	2.65

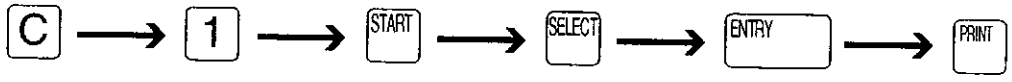
4.4 Checking the Contents of Your Programming

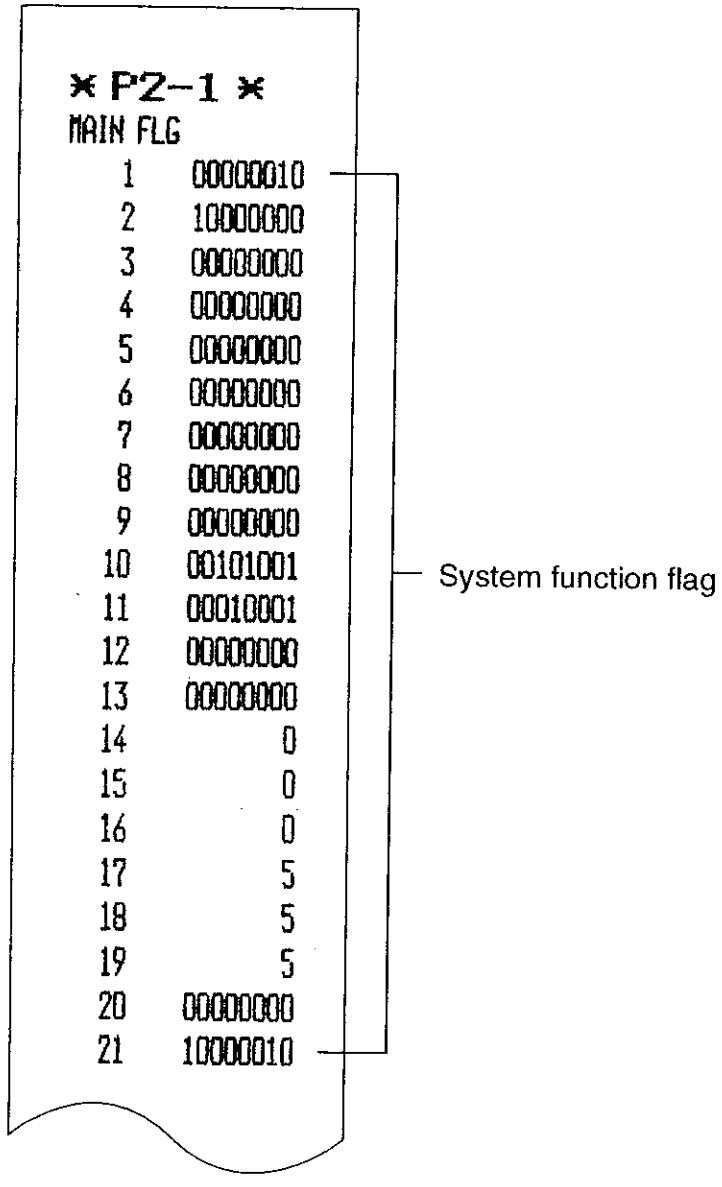
When you have finished all the programming you need to do, or at anytime while you are programming the cash register, you can check the contents of your program.
The following steps shows how to print your program.

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 function flags.

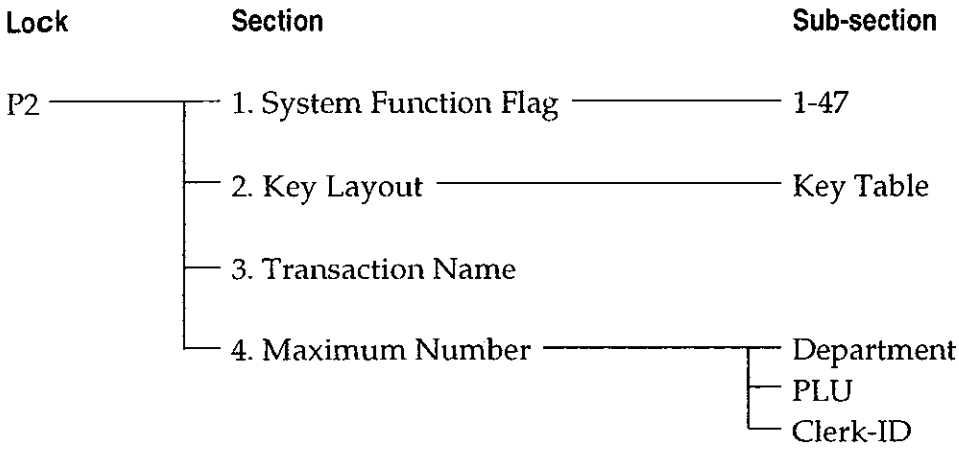
Control lock : **P2**



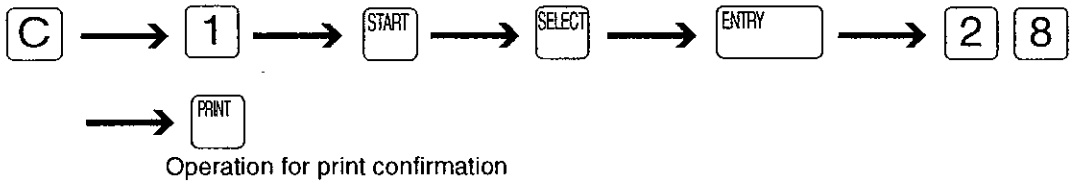


Section Address of P2 and P1

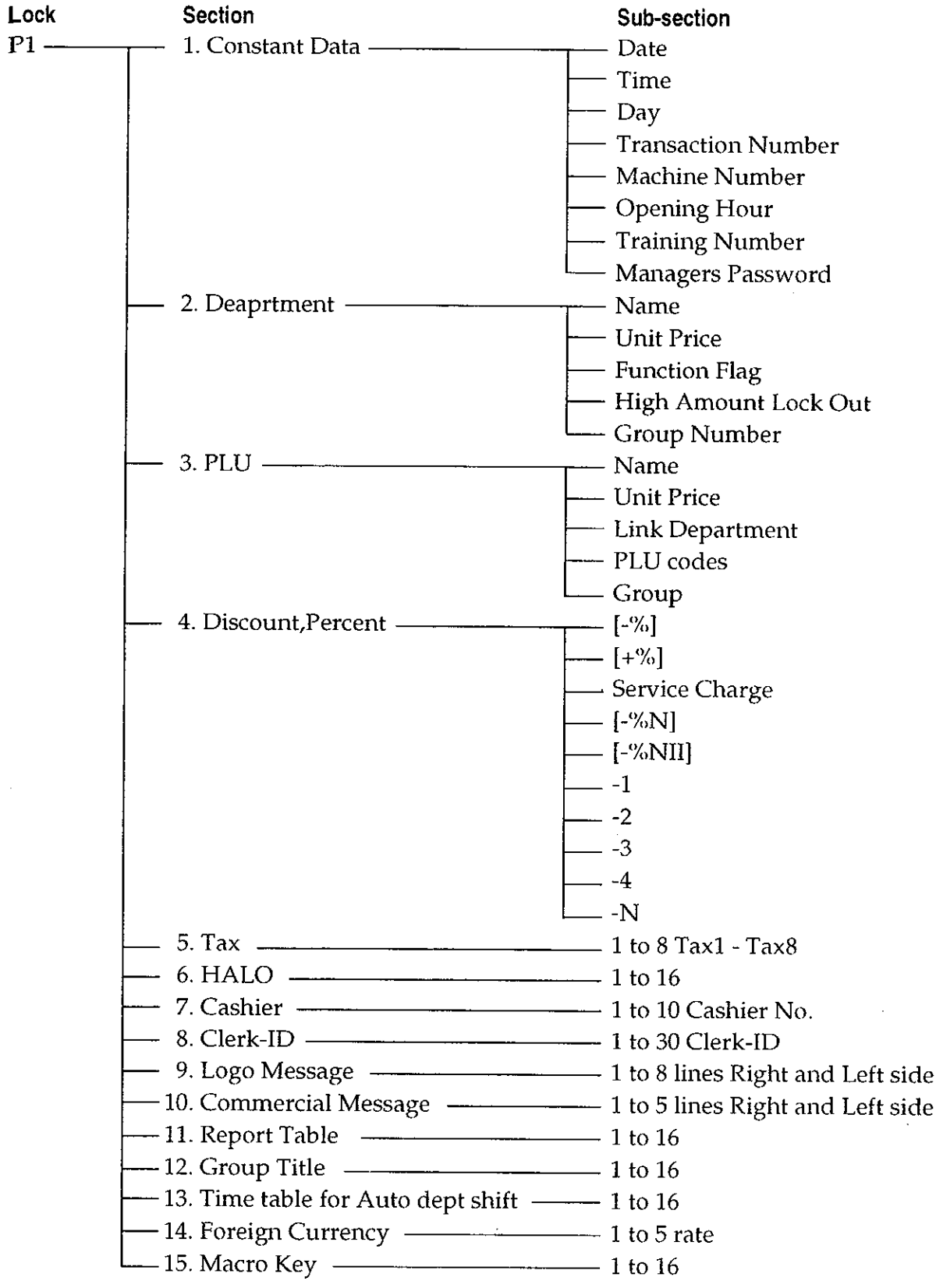
For easy check the contents of your programming, the following list shows each section and its sub-sections.



Example: Checking the contents of System function flag 28 at P2 lock position.



Operation for print confirmation



Example: Checking the contents of Tax 2 setting at P1 lock position.

C → 5 → START → SELECT SELECT → ENTRY → PRINT

5 Cash Register Operation

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

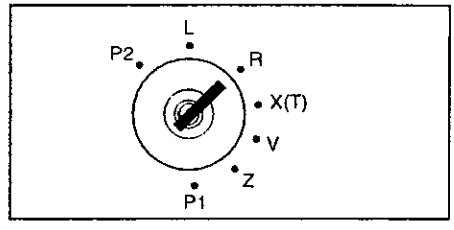
5.1 Before Operating Your Cash Register

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 receipt and journal paper rolls are set in the correct positions. See section 2.4, "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".



- To entry cashier No. , enter the numeric keys and press the **CASHR NO.** Key.

- If necessary, you can turn off receipt printing. To turn it off, press the Receipt ON/OFF Key. A period "▲" will appear on left side of the display. While the "▲" is displayed, receipt printing is turned off.

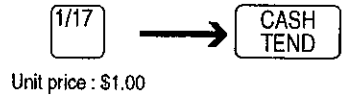
If an error code (see section 9.6 "Error Message") appears during operation, press the **C** Key to clear it and start the operation again. If the cash register hangs (won't accept any key presses), reset the cash register computer system as described in section 2.3, "System Reset".

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.



Unit price : $1.00

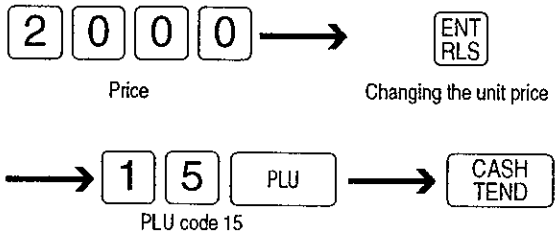
PRINT

```
DEPT001      1.00
ITEM CT      1
CASH 1.00
11:59AM 27-07-95
0001  1 cashier1
```

NOTE

- When you want to register items for Departments 17 to 32, press the **DEPT/SHFT** Key before pressing the Department Key you need. A period "▲" will appear on the display. While the "▲" is displayed, the department keys will enter the price for items in Departments 17 to 32.

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

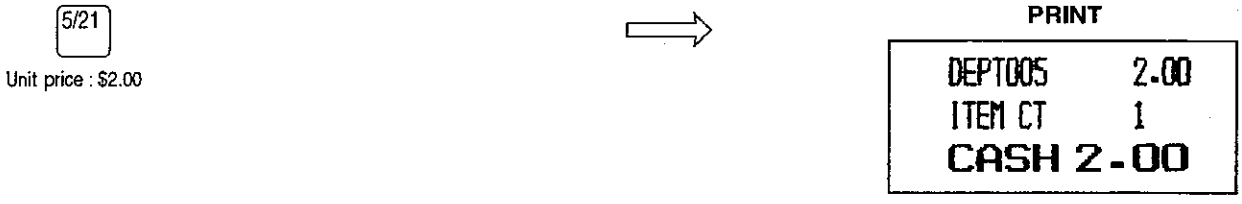
PRINT

```
PLU0015      20.00
ITEM CT      1
CASH
        20.00
```

Single-Item Cash Sale

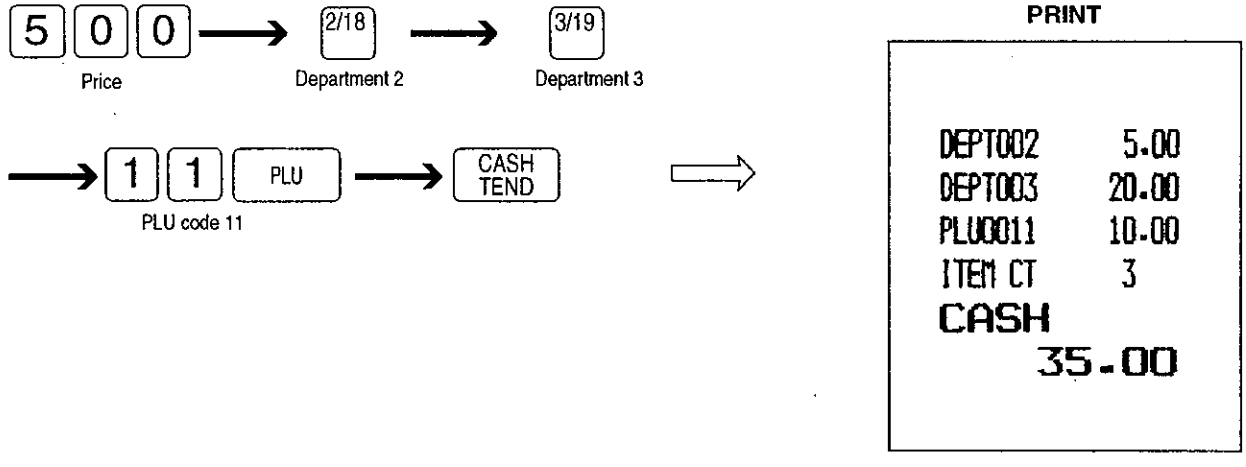
The single-item cash sale is a function which allows you to shorten the number of key strokes when registering a single item for a cash sale. To register an item as a "single-item cash sale", just press the department key. When you press a department key which has a "single-item cash sale" function, 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 Flags" in section 4.3.2, "Department Programming."

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



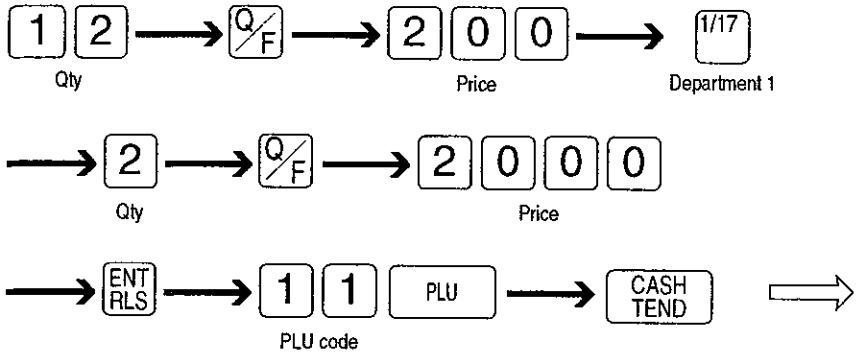
Multiple Item Entries

You can register a number of items in a single transaction. The following example shows how you sell a Department 2 item with a price of $5.00, a Department 3 item for the unit price of $20.00, and an item with PLU code 11 when PLU code 11 is programmed for the unit price of $10.00.

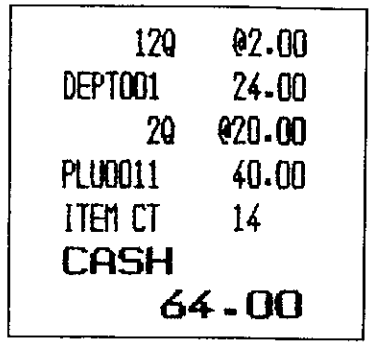


Multiplication Entries

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



PRINT

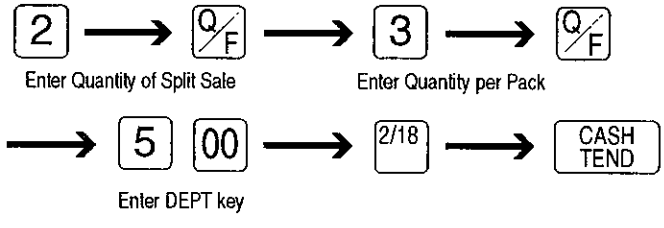


NOTE

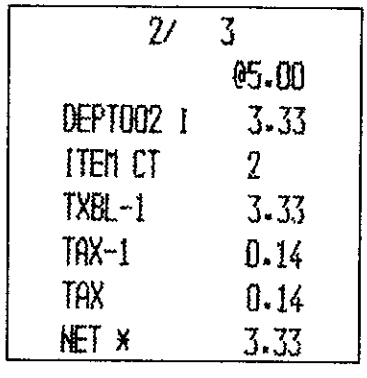
- If the system flag has been set for the "First enter unit price, then enter quantity" option, first enter the unit price, press the **Q/F** Key, and then enter the number of the item. To select the order in which information is entered for multiplication, see section 4.2, "System function Flags."

Multiplication and Split Pricing

Operation of Split Pricing



PRINT

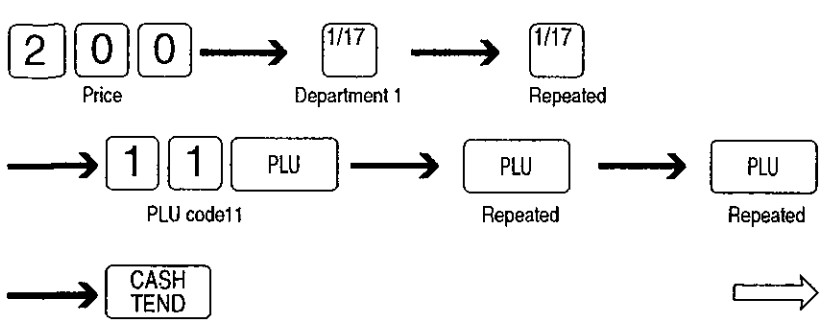


NOTE

*Key operation of split pricing
(Quantity of split sale) => [Q/F] => (Quantity per Pack) => (Unit price per pack) => [DEPARTMENT] or [PLU] key.

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

DEPT001	2.00
DEPT001	2.00
PLU0011	10.00
PLU0011	10.00
PLU0011	10.00
ITEM CT	5
CASH	
	34.00

Displaying the Subtotal

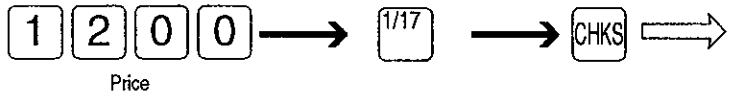
You can display the current subtotal during the sales transaction. Just press the **SUB TOTL** Key.

5.3 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.

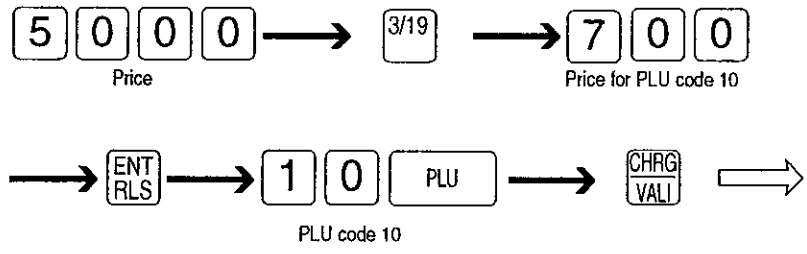


PRINT

DEPT001	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/VALI** 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.

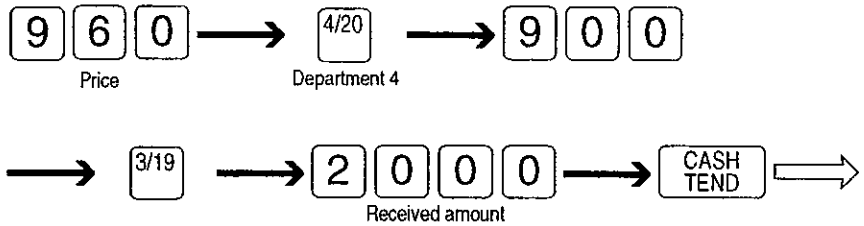


PRINT

```
DEPT003      50.00
PLU0010       7.00
ITEM CT          2
CHARG
            57.00
```

5.4 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.

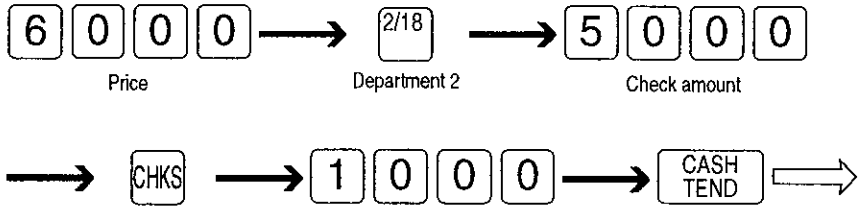


PRINT

```
DEPT004       9.60
DEPT003       9.00
ITEM CT          2
TOTAL
            18.60
CASH TD      20.00
CHANGE        1.40
```

5.5 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

```
DEPT002      60.00
ITEM CT          1
TOTAL
            60.00
CHECK TD     50.00
CASH TD      10.00
```

NOTE

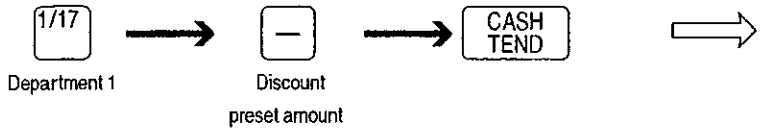
*Set the system function flag 7#1=1.

5.6 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 4.3.4, "Programming the [-] Key, [+%] Key, and the [-%] Key."

For Each Item

When you want to discount a preset amount "$0.50" from an item, do the following.

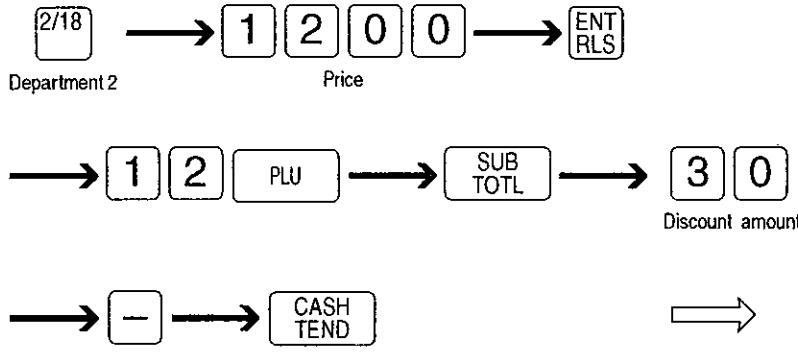


PRINT

```
DEPT001        1.00
-1             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

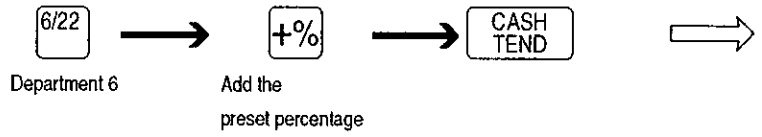
```
DEPT002        5.00
PLU0012       12.00
SUB-TL        17.00
-1             0.30
ITEM CT        2
CASH
              16.70
```

5.7 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 4.3.4, "Programming the [-] Key, [+%] Key, and the [-%] Key."

For Each Item

When you want to add a preset percentage "5%" to the price of an item, do the following.



Department 6

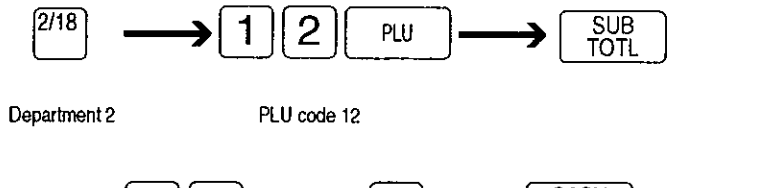
Add the preset percentage

PRINT

```
DEPT006      30.00
   5 +%N      1.50
ITEM CT          1
CASH
          31.50
```

For the Total

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



Department 2

PLU code 12

Discount percentage

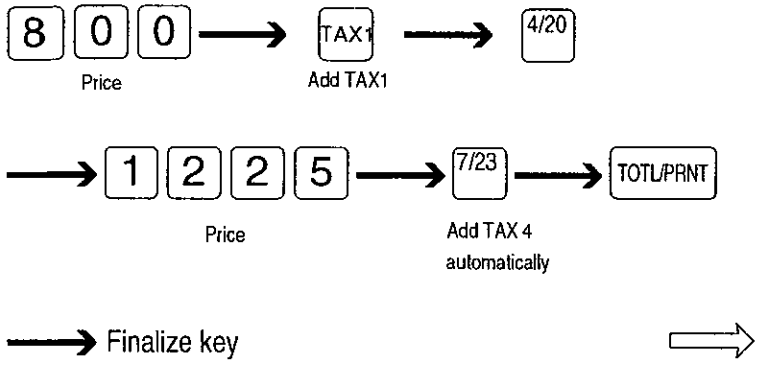
```
DEPT002       5.00
PLU0012      10.00
SUB-TL       15.00
  10 -%G      1.50
ITEM CT          2
CASH
          13.50
```

5.8 Tax Calculations

This section shows examples of selling items to which tax is added. For details about programming taxes, see section 4.3.5, "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 you add TAX4 (Set for 5%).

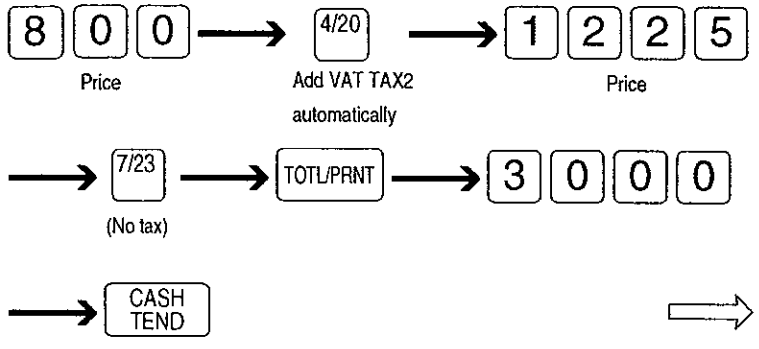


PRINT

```
DEPT004 I        8.00
DEPT007 N       12.25
ITEM CT             2
TXBL-1           8.00
TAX-1            0.60
TXBL-4          12.25
TAX-4            0.61
TAX              1.21
NET *           20.25
TOTAL
          21.46
```

VAT system

The following example shows how you sell a Department 4 item which has TAX2 (Set for 5.00%) included in the price actually shown on the receipt and a Department 7 item which does not.

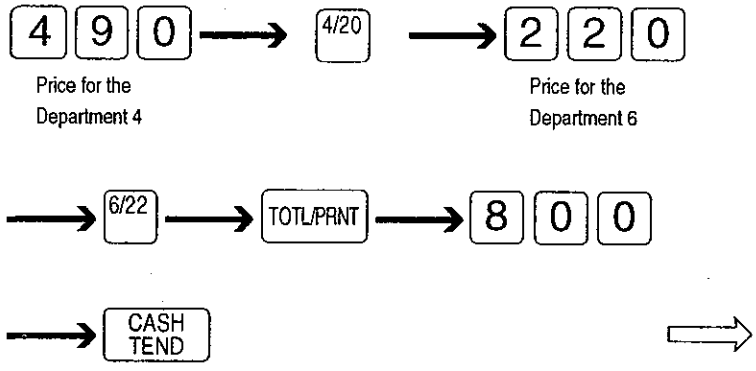


PRINT

```
DEPT004 II       8.00
DEPT007         12.25
ITEM CT             2
TXBL-2           8.00
TAX-2            0.38
TAX              0.38
NET *           19.87
TOTAL
          20.25
CASH TD         30.00
CHANGE           9.75
```

Tax table system

The following example shows how you sell a Department 4 item (**TAX3** is added) and a Department 6 item (**TAX3** is added). It is supposed that the **TAX3** has been entered the Tax table shown on "Entering a Tax Table" in "4.3.5 Tax Programming" section.

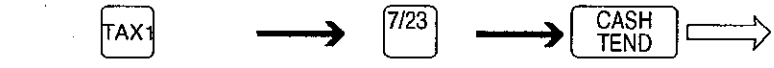


PRINT

```
DEPT004 @      4.90
DEPT006 @      2.20
ITEM CT        2
TXBL-3         7.10
TAX-3          0.29
TAX            0.29
NET *          7.10
TOTAL
          7.39
CASH TD        8.00
CHANGE         0.61
```

Tax Shift

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



To change the department 7 tax status from TAX4 to TAX1

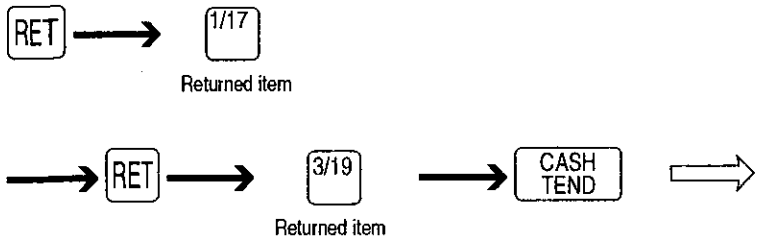
TAX4 is preset

PRINT

```
DEPT007 I     30.00
ITEM CT        1
TXBL-1        30.00
TAX- 1         1.50
TAX            1.50
NET *         30.00
CASH
         31.50
```

5.9 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

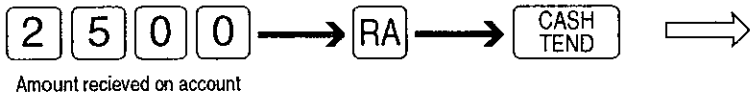
```
RETURN
DEPT001        1.00
RETURN
DEPT003       20.00
CASH
          -21.00
```

5.10 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.

Received on Account

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

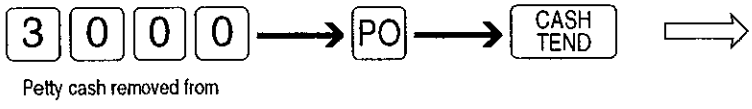


PRINT

```
RA            25.00
R/A CA
          25.00
```

Paid Out

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



PRINT

```
PO            30.00
P/O CA
          30.00
```

5.11 Changing Money and Opening the Drawer

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

Opening the Drawer

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

[#] ⟶ The drawer will open. ⇨

PRINT

NOSALE 0.00

NOTE

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

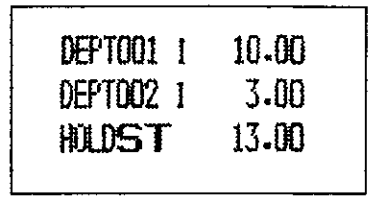
5.12 Hold Function

This section explains how to hold current registration for the guest leaves tentatively. The **HOLD** Key can jump cut current registration and for the next waiting customer can be performed.

1) [1] [0] [00] ⟶ [1/17]

2) [3] [00] ⟶ [2/18]

3) [HOLD]



4) Normal Registration for next customer.

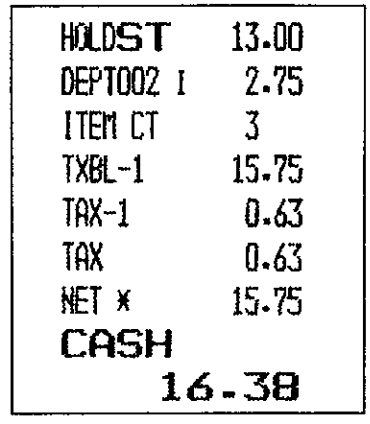
When the former guest returns, depress the **HOLD key again.

5) [HOLD]

6) [2/18]

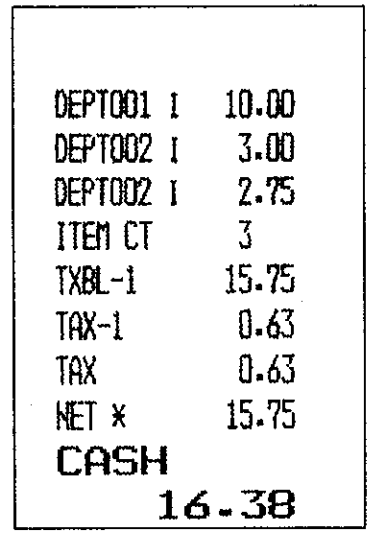
7) [TOTL/PRNT]

8) [CASH TEND]



Transaction detailes will be printed on one receipt by depressing the **TOTL/PRNT key after **CASH/TEND** key operation.

9) [TOTL/PRNT]



5.13 Cancellation

This **CAN** key can cancel all registered items of current operation.

1) [3] [00] → [1/17]

2) [1] [0] [00] → [2/18]

3) [CAN]

```
DEPT001 1    3.00
DEPT002 1   10.00
*CANCEL*
```

5.14 Currency conversion

This section explains how to convert your currency into a foreign currency, use the programmed currency exchange key : the **FC** key. To program the **FC** key, see "Key layout" in section 4.2 "System Programming".

The **FC** key can contain up to five preset exchange rates. They are stored as values FC1 to FC5 inside this register. To use one of these rates, enter the rate number and press the **FC** key. For example, to use FC1 rate, enter "1" and press the **FC** key. To set a currency exchange rate, see section 4.3.14 "Foreign Currency". The following example presupposes that you normally enter your sales as US$ in your store, and that you need to know how many French franc your customer must pay. It is also assumed that the current exchange rate between the US$ and FF is "5.80" and that the rate is stored in FC1.

1) [9] [7] [5] → [1/17]

2) [2] [7] [5] → [2/18]

3) [FC 1]
Key code 76

4) [1] [00] [00] → [CASH TEND]

```
DEPT001      9.75
DEPT002      2.75
ITEM CT      2
TOTAL
       12.50
FC1
TOTAL       72.50
FC1        100.00
CHANGE       4.74
```

5.15 Automatic PLU programming Function

This section describes how to use the Automatic PLU Programming Function.

Your cash register allows you to program a new item by Barcode scanner during normal registration on register mode.
There are 3 steps for programming (1) Barcode scanning (2) Inputting the price (3) Inputting the link department No.
The following example shows how to program a new item of "$ 12.50" which has a previously printed barcode symbol, to "Department No.5".

Barcode

1) 

If the Barcode data has not been programmed, the cash register will be request the inputting of price and a link department number.

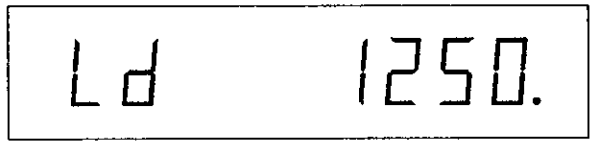
2) **display**

3) **key**

[1] [2] [5] [0]

Price

4) **display**



The cash Register requests the inputting of link department number.

5) [5/21]

Press the department button which correspondents to the department to which you want to link the PLU.

The PLU is programmed and the data (barcode, price and link department number) is programmed.

Short cut operation

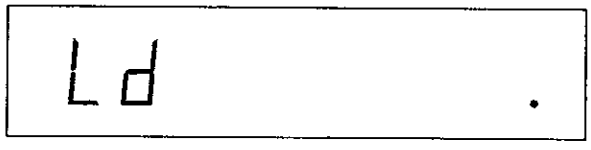
Instead of operations (3) (4) (5), you can press department button directly.

[1] [2] [5] [0] ⟶ [5/21]

Link Department

If you set only PLU code No. and price itself, your cash register requests the inputting of link department No. during registration. For detail information, see section 4.2. System function flag.
The following example shows how to link to the department number.

1) **display**



The cash register requests inputting link department number

2) [DEPT]

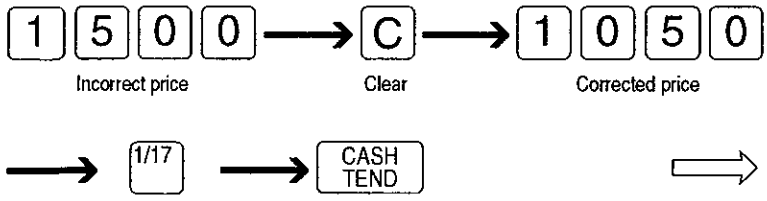
Press the department button which correspondents to the department to which you want to link the PLU

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

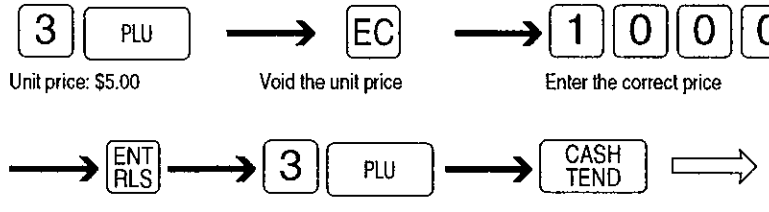
```
DEPT001      10.50
ITEM CT       1
CASH
        10-50
```

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.

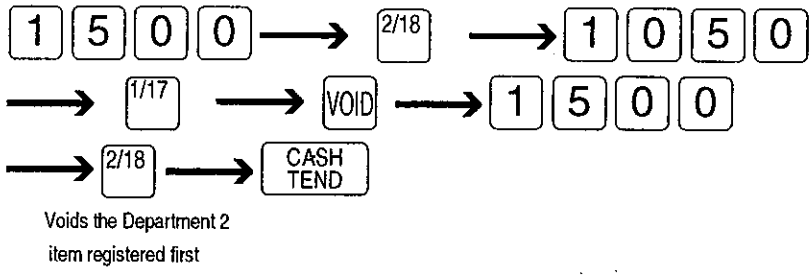


PRINT

```
PLU00003      5.00
 - VOID -
PLU00003      5.00
PLU00003     10.00
ITEM CT       1
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.



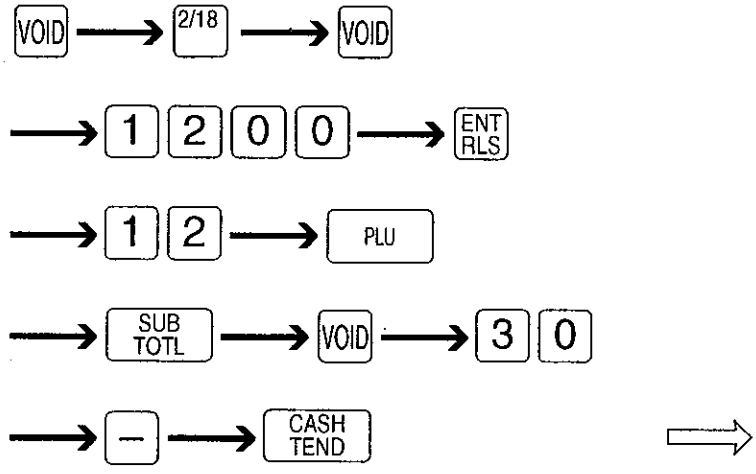
Voids the Department 2 item registered first

PRINT

```
DEPT002        15.00
DEPT001        10.50
 - VOID -
DEPT002        15.00
ITEM CT            1
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.



PRINT

```
 - VOID -
DEPT002         5.00
 - VOID -
PLU0012        12.00
SUB-TL        -17.00
 - VOID -
-1              0.30
ITEM CT           -2
CASH
         -16.70
```

7 Special Functions

This chapter describes various special functions of this cash register.

7.1 Validation Printing Function

Your cash register allows you to do validation printing. Validation printing is a function which prints the sales amount on the validation paper immediately after you finalize a sales transaction. This function also prints the date and so on. So, you can use this function for validation of the sales you have registered, validating parking tickets, and so on.

CAUTION

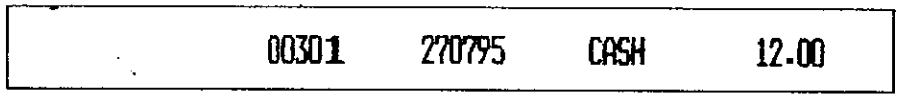
- Do not try to validate a paper that is narrower or shorter than the validation slot. The paper will jam in the machine.

To print the sales amount on the validation paper:

1. Perform the normal sales transaction operations.

2. Insert the paper straight, all the way into the validation slot.

3. Press the **CHRG/VALI** Key to print the contents of the transaction.

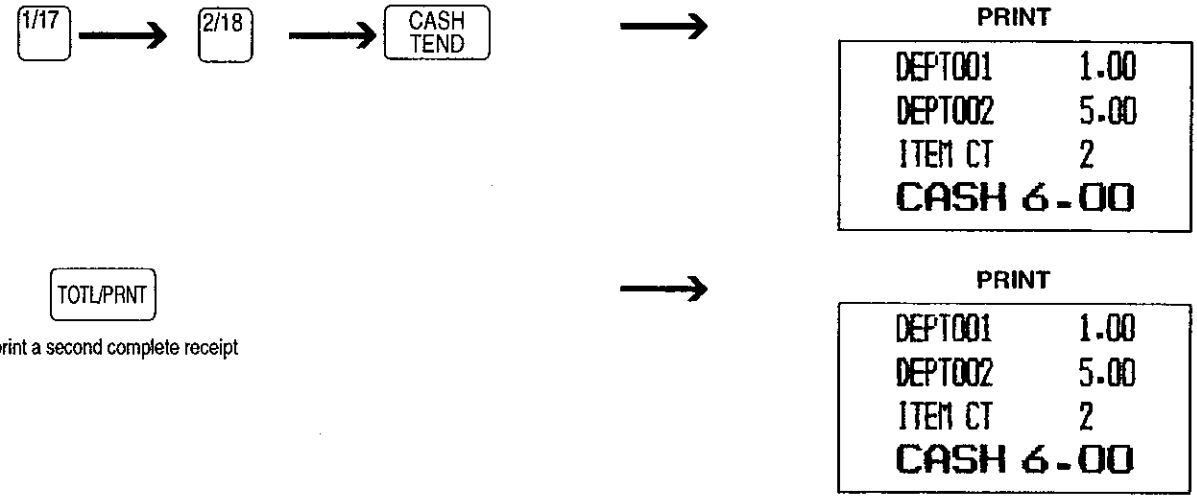


7.2 Printing a Second Receipt

Your cash register allows you to print a second receipt. The second receipt is a receipt which is issued immediately after the first receipt (normal receipt) is printed. There are two types of second receipt: a complete receipt and a stub receipt. A complete receipt shows all of the same sales information as the first one. A stub receipt only shows the total amount of the sales.

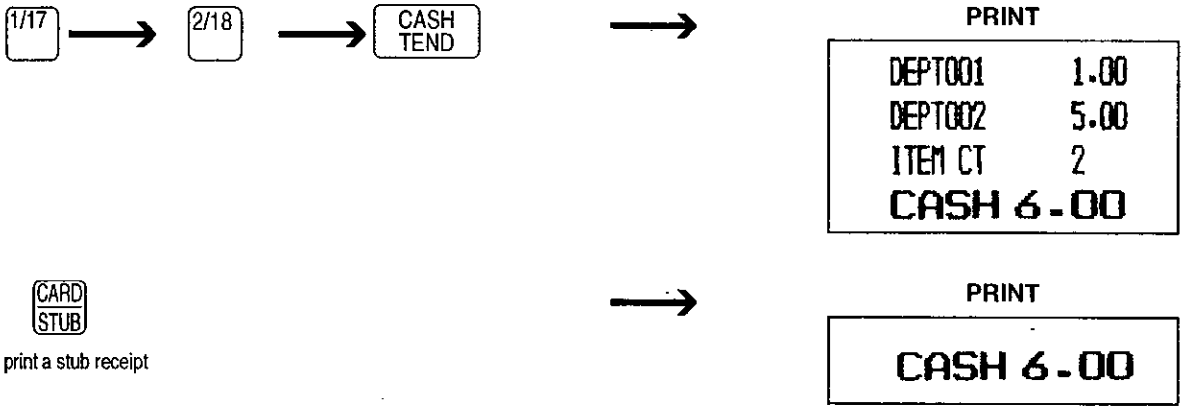
A Second Complete Receipt

To issue a second complete receipt, press the **TOTL/PRNT** Key after finalizing the sales. The following example shows how you issue a second complete receipt.



A Stub Receipt

To issue a stub receipt, press the **CARD/STUB** Key after finalizing the sales. The following example shows how you issue a stub receipt.



7.3 Changing Cashier No. During Operation

Your cash register allows one operator to leave and another to take over in the middle of a sale. If Flag 3-8 has been set to "Enable pressing another cashier No. during operation", the new operator can press their assigned cashier No. and complete the sales. The sales information will all be printed out on one receipt for the customer, but the cashier No. information will be stored in separate files and will show up on separate cashier reports. The following example shows that a operator pressed Cashier No. "2" to take over operations from the previous operator who had pressed Cashier No. "1".

1 8 0 0 → 1/17 → 2 CASHR NO.

→ 3/19 → CASH TEND →

PRINT

```
DEPT001 I    18.00
DEPT003 I    40.00
ITEM CT       2
TXBL-1       58.00
TAX-1         0.00
CASH
        58.00
```

NOTE

■ The cashier number of the operator who finalizes the transaction will be not printed on the receipt.

7.4 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:

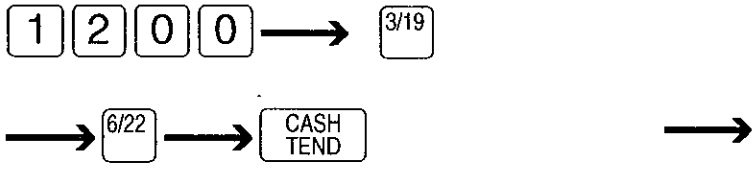
1. Turn the control lock to the "**X**" position.

2. Enter "Training Number"(See 4.3.1 Training Number) and press the **CHRG/VALI** Key.

3. Turn the control lock to the "**R**" position.

4. Start training.

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



PRINT

```
      TRAINING
DEPT003      12.00
DEPT006      30.00
ITEM CT          2
CASH
            42.00
```

NOTE

■ The training symbol "TRAINING" will appear on the receipt.

To leave the training mode:

1. Turn the control lock to the "**X**" position.

2. Enter "TRAINING NUMBER" and press the **CHRG/VALI** Key.

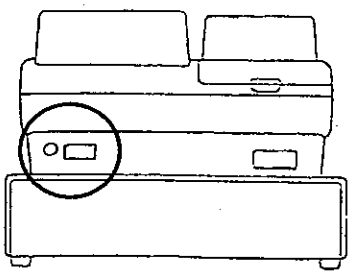
3. Turn the control lock to the "**R**" position.

4. Resume normal operation.

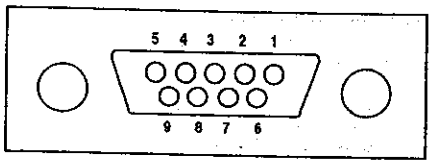
7.5 Interface with P.C., Barcode Scanner and Scale

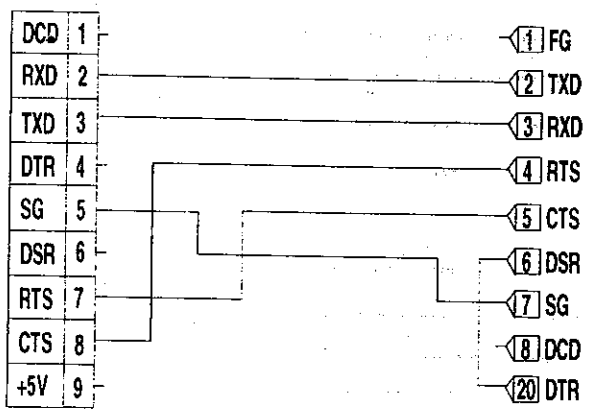
Connection

Port 1 w/rectangle socket: for connection with PC, Barcode scanner, and Scale.
Port 2 w/round socket: PC and Barcode scanner.

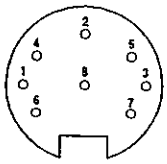


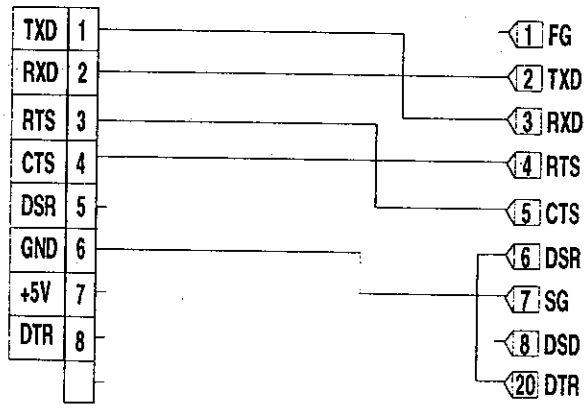
Port 1





Port 2





Signal	I/O	Port 1 (9-PIN)	Port 2 (DIN8)
TXD	OUT	3	1
RXD	IN	2	2
RTS	OUT	7	☆ 3 (NC)
CTS	IN	8	☆ 4 (NC)
DSR	OUT	☆ 6 (NC)	☆ 5 (NC)
DTR	IN	☆ 4 (NC)	☆ 8 (NC)
+5V	OUT	9	7

☆: short circuited

Initial programming

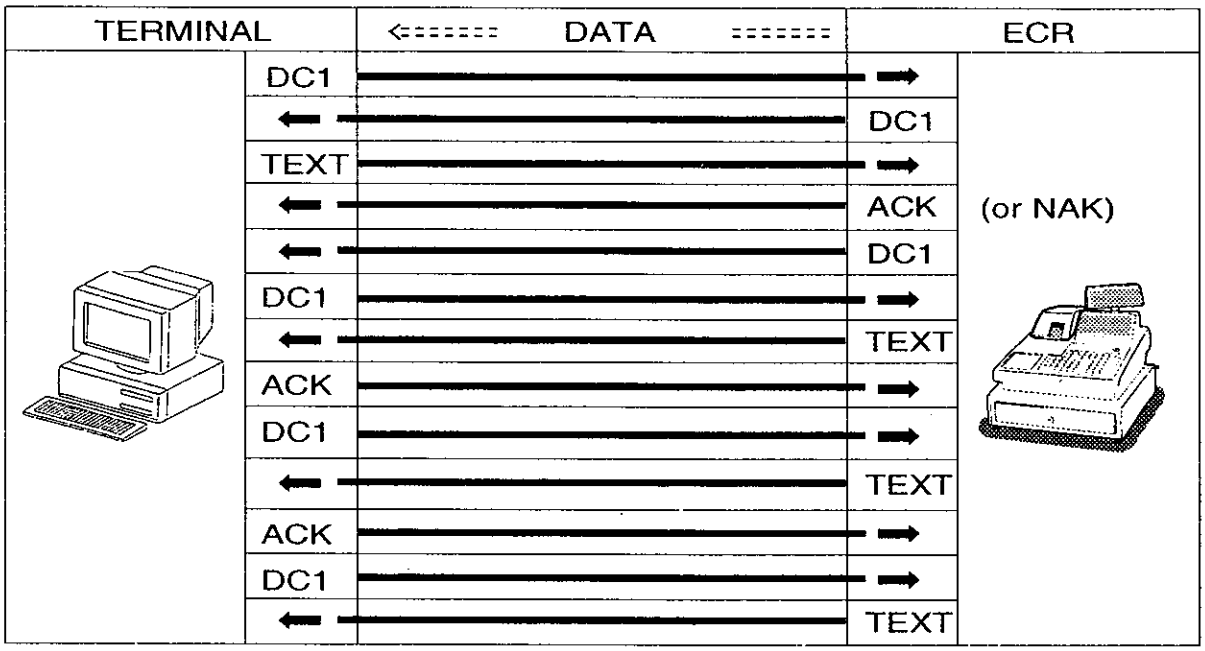
See System function flag 32 and 33 in that order.

NOTE

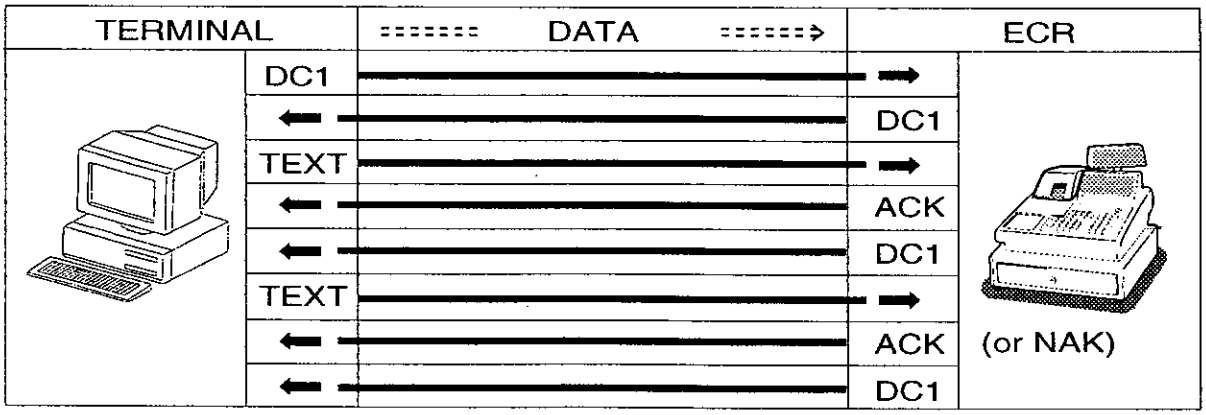
■ After programmed, turn off and give an interval of about 5 seconds befor power on.

Communication protocol

(1) Transmission protocol from ECR to Terminal



(2) Receiving protocol from Terminal



Text format

(1) Requirement data format

STX	ID	NO.	?	CR	LF
O2H			3FH	ODH	OAH

(Request 1 text)

STX	ID	?	CR	LF
O2H		3FH	ODH	OAH

(Request all text)

(2) Transmission data format

STX	ID	NO.	DATA	CR	LF
O2H				ODH	OAH

(3) Transmission final data format

STX	ID	ETX	CR	LF
O2H		O3H	ODH	OAH

Supplement (modified system for 2-port)

1. Movement and creation of system function flags for system programming

(1) Movement of the flags for the existing port

Old		New
Flag 32	→	Flag 44 (Options unchanged)
Flag 33	→	Flag 45 (Ditto)

Flag 32 and 33 will not be used.

(2) Creation of the flags for the new port
Please note the new port cannot be used as a port to the scale.

Flag 46	Transmission speed, peripheral 1: Barcode scanner 3: PC
Flag 47	Parities, character, stop bit

2. Deletion of function

Due to the increase of a port, the changeover function of linkage with either PC or barcode scanner has been deleted.

3. Programming for linkage with a scale

(1) Flag 44

B2	5:	9600bps.
B1	2:	Scale

Programming in the OZ scale:
F4: 4 (=9600bps.)

(2)Flag45

B6, B5	10:	7bit (character)
B4, B3	01:	1stop bit
B2	1:	even parity
B1	1:	parity

Programming in the OZ scale:
F3: 2 (Parities, character, stop bit)

(3) Flag 52

B5	1:	to enable to repeat the scale operation (TERAOKA scale only)
B4, B3	00:	in kg
	01:	in lbs
	10:	in gram
	11:	in 100g
B2	1:	linkage with an OZ scale
B1	1:	linkage with a TERAOKA Model, DS-640/DS-735

(4) Department Function Flag 2

B8	1:	department for scale
B7	1:	preset price unchanged at registration
B6	1:	preset until price available (Unit price must be preset.)

PS.
a. The department which are not linked with the scale cannot be registered with the scale.
b. The departments which are linked with the scale can be registered only with the scale.
c. The final-digit figure is omitted in the reports.

4. In linkage with an OZ scale , in case that the communication data are sent as those in 13-digit barcode which starts from 02 or 2 :

(1) Flag 44	B2	5: 9600bps
	B1	1: barcode scanner
(2) Flag 45	B6,B5	10: 7bit (character)
	B4, B3	01: 1 stop bit
	B2	1: even parity
	B1	1: parity
(3) Flag 42	B1	1: to enable barcode scanner operation
(4) Flag 52	B6	1: to send communication data as the data of 13-digit barcode which starts from 02 or 2.
(5) Flag 43	B7	1: to select type 7 barcode

PS. Please note that the weight is not managed by this programming.

Programiming in the OZ scale: F3: 1 (transmitting format 2)

I.D. Code

ID	NO.	CONTENTS		DATA LENGTH
30h	0001 ~ 0050	Department	Programming Data	38 byte
31h	000001 ~ 000100	PLU	Programming Data	44 byte
33h	0001 ~ 0010	Cashier	Programming Data	14 byte
34h	0001 ~ 0030	Clerk-ID	Programming Data	20 byte
35h	01 ~ 10	+%,-%,-1,etc	Programming Data	12/20 byte
36h	01 ~ 02	Main Flag	Programming Data	70 byte
37h	01 ~ 03	Key layout	Programming Data	70 byte
38h	0001 ~ 0150	Transaction Word	Programming Data	16 byte
39h	01	Maximum Size	Programming Data	20 byte
3Ch	01 ~ 16	High Amount Lock	Programming Data	14 byte
3Eh	01 ~ 16	Print Logo Message	Programming Data	22 byte
3Fh	01	Tax Rate	Programming Data	94/70 byte

42h	0001 ~ 0050	Department	Daily&Periodical sales	44 byte
43h	000001 ~ 000100	PLU	Daily&Periodical sales	46 byte
45h	01 ~ 01	Cashier	Daily&Periodical sales	44 byte
46h	01 ~ 30	Clerk-ID	Daily&Periodical sales	44 byte
48h	0001 ~ 0102	Covers	Daily&Periodical sales	44 byte
49h	01 ~ 24	Hourly	Daily&Periodical sales	42 byte
4Ah	01 ~ 70	Transaction	Daily&Periodical sales	42 byte
4Ch	0001 ~ 0050	Department	Daily sales	26 byte
4Dh	000001 ~ 000100	PLU	Daily sales	28 byte
4Fh	01 ~ 10	Cashier	Daily sales	26 byte
50h	01 ~ 30	Clerk-ID	Daily sales	26 byte
52h	0001 ~ 0102	Covers	Daily sales	26 byte
53h	01 ~ 24	Hourly	Daily sales	24 byte
54h	01 ~ 70	Transaction	Daily sales	24 byte
55h	0001 ~ 0050	Department	Periodical sales	26 byte
56h	000001 ~ 000100	PLU	Periodical sales	28 byte
58h	01 ~ 24	Cashier	Periodical sales	26 byte
59h	01 ~ 70	Clerk-ID	Periodical sales	26 byte
5Bh	0001 ~ 0102	Covers	Periodical sales	26 byte
5Ch	01 ~ 24	Hourly	Periodical sales	24 byte
5Dh	01 ~ 70	Transaction	Periodical sales	24 byte

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 30 types of reports (See Table) by Key operation and issue some kinds of different reports by report table. 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) 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" in next page).

Table shows the type of reports, the keys used to issue them, the symbols printed on each one, and the contents of each type.

■ Operation for report table

1) Operating in accordance with the instruction as "KEY OPERATION" in the report table.

Example

[Q/F] ⟶ [PLU] ---FULL PLU GROUP SALES(REPORT NO.12)

2) Easy to issue the report by report No. input.
· Issuing operation of X1/Z1 report.

REPORT NO. ⟶ [CASH TEND]

Example

[2] [1] [CASH TEND] ---FULL REPORT(REPORT NO.21)

· Issuing operation of X2/Z2 report.

[PO] ⟶ **REPORT NO.** ⟶ [CASH TEND]

Example

[PO] ⟶ [1] [6] ⟶ [CASH TEND] ---FULL PLU TOTAL (REPORT NO.16)

■ Table

NO.	REPORT NAME	X1	X2	Z1	Z2	*S	KEY OPERATION
1	INDIVIDUAL DEPARTMENT SALES	O	O	—	—		N N (DEPT No.) → *DEPT1 ···N N → *DEPT1 → CASH TEND
2	DEPARTMENT SHIFT 1 SALES	O	O	—	—	O	1 → DEPT SHIFT
3	DEPARTMENT SHIFT 2 SALES	O	O	—	—	O	2 → DEPT SHIFT
4	DEPARTMENT SHIFT 3 SALES	O	O	—	—	O	3 → DEPT SHIFT
5	INDIVIDUAL DEPT GROUP SALES	O	O	—	—	O	%/F → N N (GROUP No.) → *DEPT1
6	FULL DEPT GROUP SALES	O	O	—	—	O	%/F → *DEPT1
7	FULL DEPT GROUP TOTAL	O	O	—	—		%/F → TOTL/PRNT → *DEPT1
8	FULL DEPARTMENT TOTAL	O	O	—	—	O	ENT/CLS → *DEPT1
9	INDIVIDUAL PLU SALES	O	O	—	—		N N (PLU No.) → PLU → CASH TEND
10	INDIVIDUAL PLU GROUP SALES	O	O	—	—	—	%/F → N N (GROUP No.) → PLU
12	FULL PLU GROUP SALES	O	O	—	—	O	%/F → PLU
14	FULL PLU GROUP TOTAL	O	O	—	—	O	%/F → TOTL/PRNT → PLU
16	FULL PLU TOTAL	O	O	O	O	O	ENT/CLS → PLU
17	INDIVIDUAL CASHIER SALES	O	O	O	—		N N (Cashier No.) → SUB TOTL
18	ALL CASHIERES SALES	O	O	O	O		ENT/CLS → SUB TOTL
19	INDIVIDUAL CLERK-ID SALES	O	O	O	—		NNNNNN (Clerk-ID No.) → CLK/ID
20	ALL CLERK-ID SALES	O	O	O	O		ENT/CLS → CLK/ID
21	FULL SALES REPORT	O	O	O	O		CASH TEND
22	FULL TRANSACTION TOTAL	O	O	—	—		CHRG/VALI
23	IN DRAWER TOTAL	O	O	—	—		CHKS
24	NON RESETTABLE GRAND TOTAL	O	O	O	O		VOID
25	NRGT TOTAL with RESET	—	—	—	O		ENT/CLS → VOID
26	HOURLY NET SALES TOTAL	O	O	O	O	O	CARD
27	COVERS TOTAL	O	O	O	O	—	CVRS
29	WEEKLY SALES TOTAL	O	—	O	—	O	2 9 → CASH TEND
30	MONTHLY SALES TOTAL	O	—	O	—	O	3 0 → CASH TEND
TRAINING MODE		O					Programmed Training Number → CHRG/VALI
CASH DECLARATION (FULL REPORT, INDEIVIDUAL CHASHIER)				O			EC → nnn (count) → %/F → nnnn (kind of money) → RA → ··· CASH TEND

N : NUMERIC KEY
MARK : *S : Sales ratio calculation is available by System function flag setting.
*DEPT : Any voluntary department key is available instead of above DEPT1 key.

8.2 Sample Reports

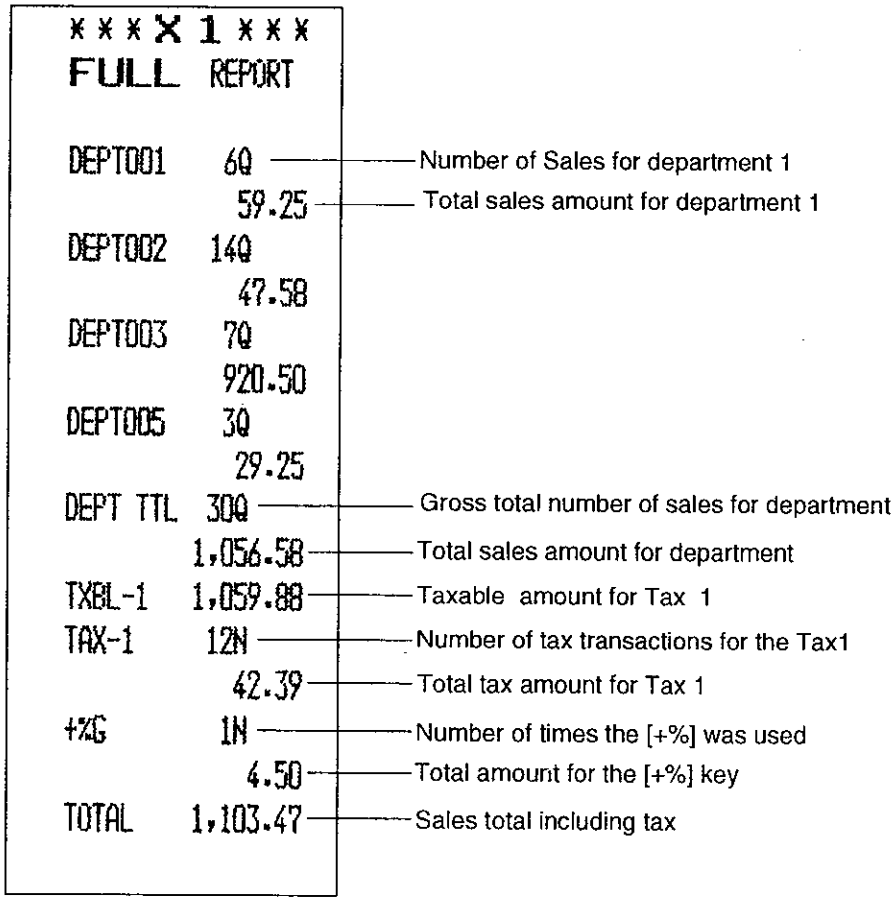
The following examples show each type of X1 report. The printing format for each report can be set with the system flags described in section 4.2, "Setting System Flags."

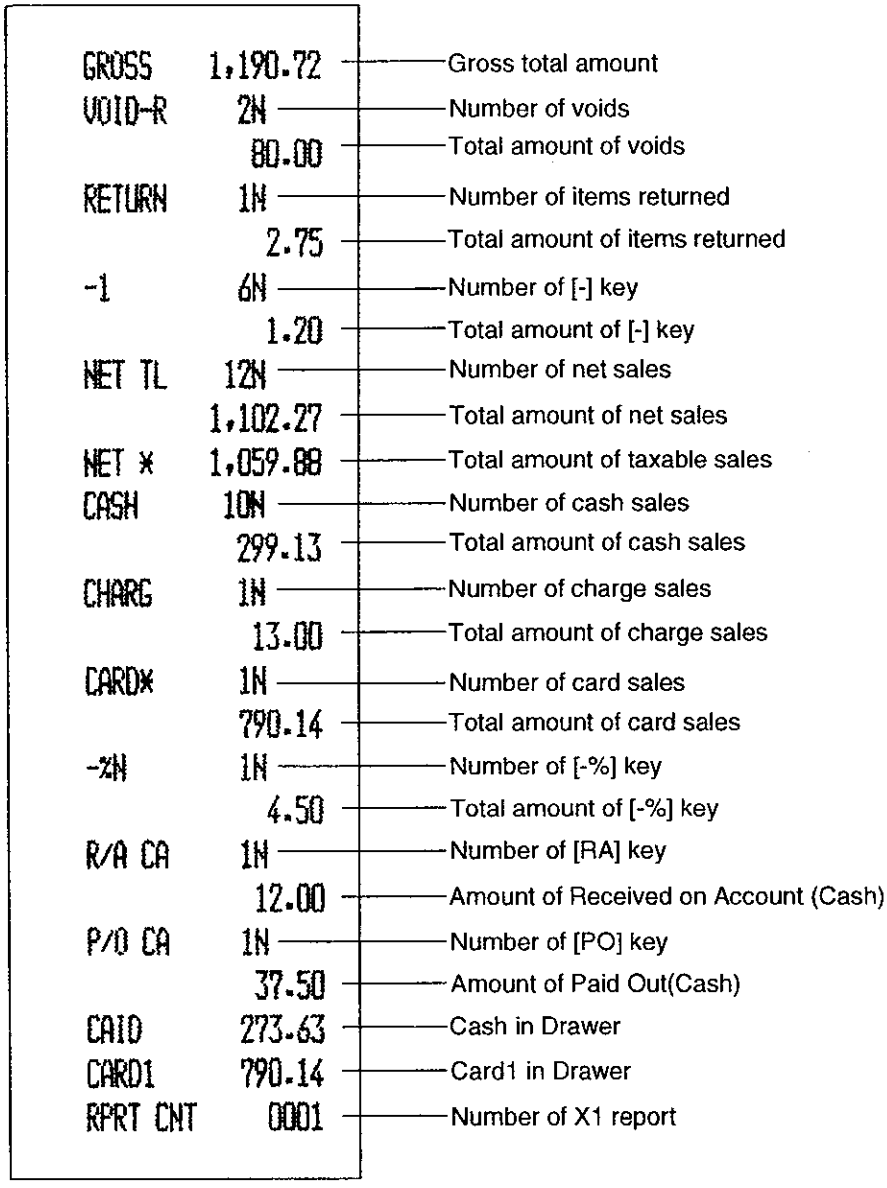
■ Full report

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

2 1 → CASH TEND or CASH TEND

Enter report number.




GROSS 1,190.72
Gross total amount
VOID-R 2N
Number of voids
80.00
Total amount of voids
RETURN 1N
Number of items returned
2.75
Total amount of items returned
-1 6N
Number of [-] key
1.20
Total amount of [-] key
NET TL 12N
Number of net sales
1,102.27
Total amount of net sales
NET * 1,059.88
Total amount of taxable sales
CASH 10N
Number of cash sales
299.13
Total amount of cash sales
CHARG 1N
Number of charge sales
13.00
Total amount of charge sales
CARD* 1N
Number of card sales
790.14
Total amount of card sales
-%N 1N
Number of [-%] key
4.50
Total amount of [-%] key
R/A CA 1N
Number of [RA] key
12.00
Amount of Received on Account (Cash)
P/O CA 1N
Number of [PO] key
37.50
Amount of Paid Out(Cash)
CAID 273.63
Cash in Drawer
CARD1 790.14
Card1 in Drawer
RPRT CNT 0001
Number of X1 report

■ Individual Department sales report

To issue this report, take the following steps while in the "**X**" mode.

[1] → [CASH TEND]
Enter report number
[1] → [CASH TEND]
Enter department number
[2] → [CASH TEND]
Enter department number
[5] → [CASH TEND]
Enter department number
[CASH TEND]
(End of report)

or

[1] → **DEPT n**
Enter department number, any department key
[2] → **DEPT n**
Enter department number, any department key
[5] → **DEPT n**
Enter department number, any department key
[CASH TEND]
(End of report)

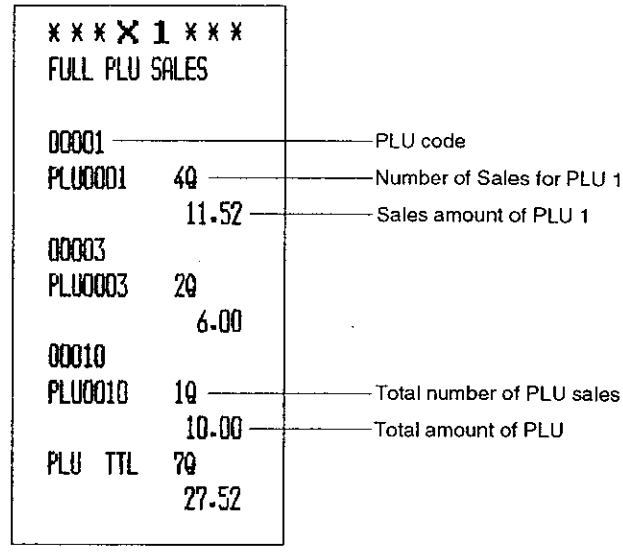
```
##################
  YOUR RECEIPT
   Thank You
   Call Again
##################
***X 1 ***
INDV. DEPT SALES

DEPT001    6Q
             59.25
DEPT002   14Q
             47.58
DEPT005    3Q
             29.25
 3:13PM  14-02-95
0015  1 cashier1
```

Number of sales for Department 1
Total amount of sales for Department 1

■ PLU report

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

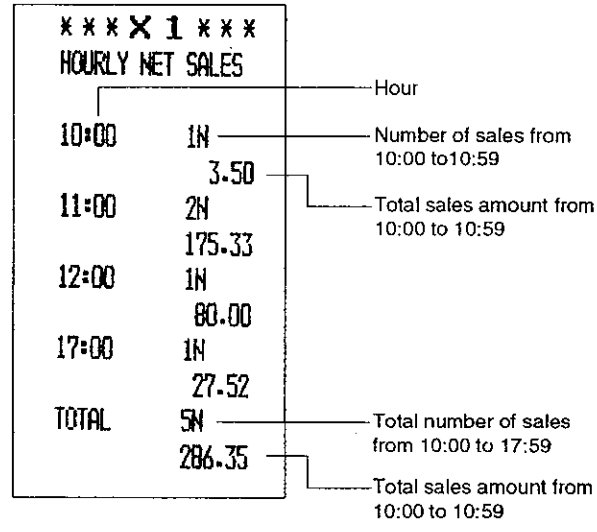
ENT/RLS → PLU



■ Hourly report

To issue this report, press the **CARD/STUB** while in the "**X**" mode.

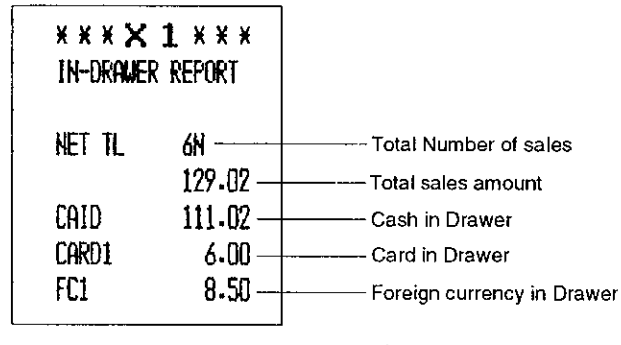
CARD/STUB



■Cash in drawer report

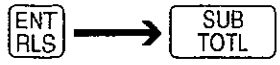
To issue this report, press the **CHKS** Key while in the "**X**" mode.

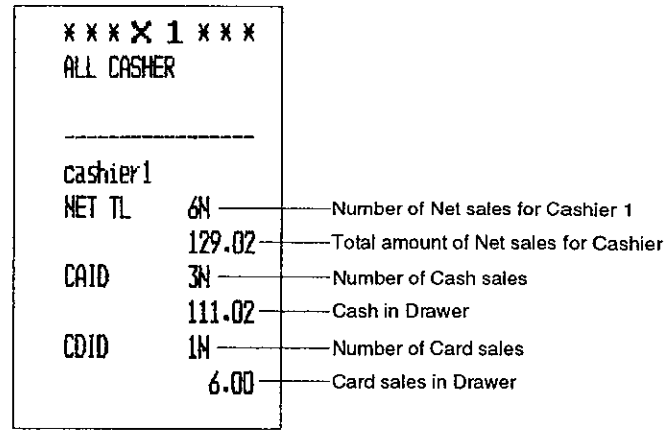
CHKS



■ Cashier report

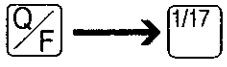
To issue this report, press the **ENT/RLS** Key and press the **SUB TOTL** Key while in the "**X**" mode.

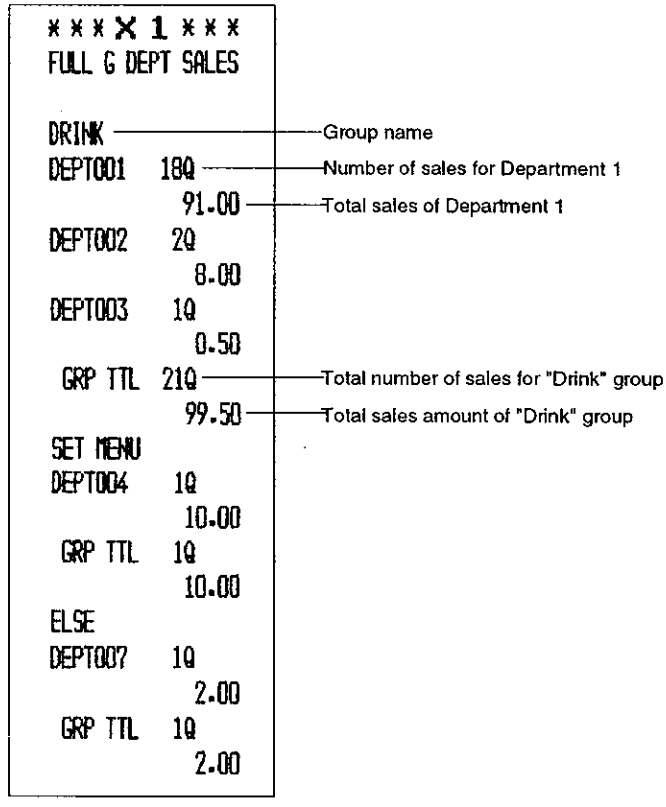




■ Group report

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



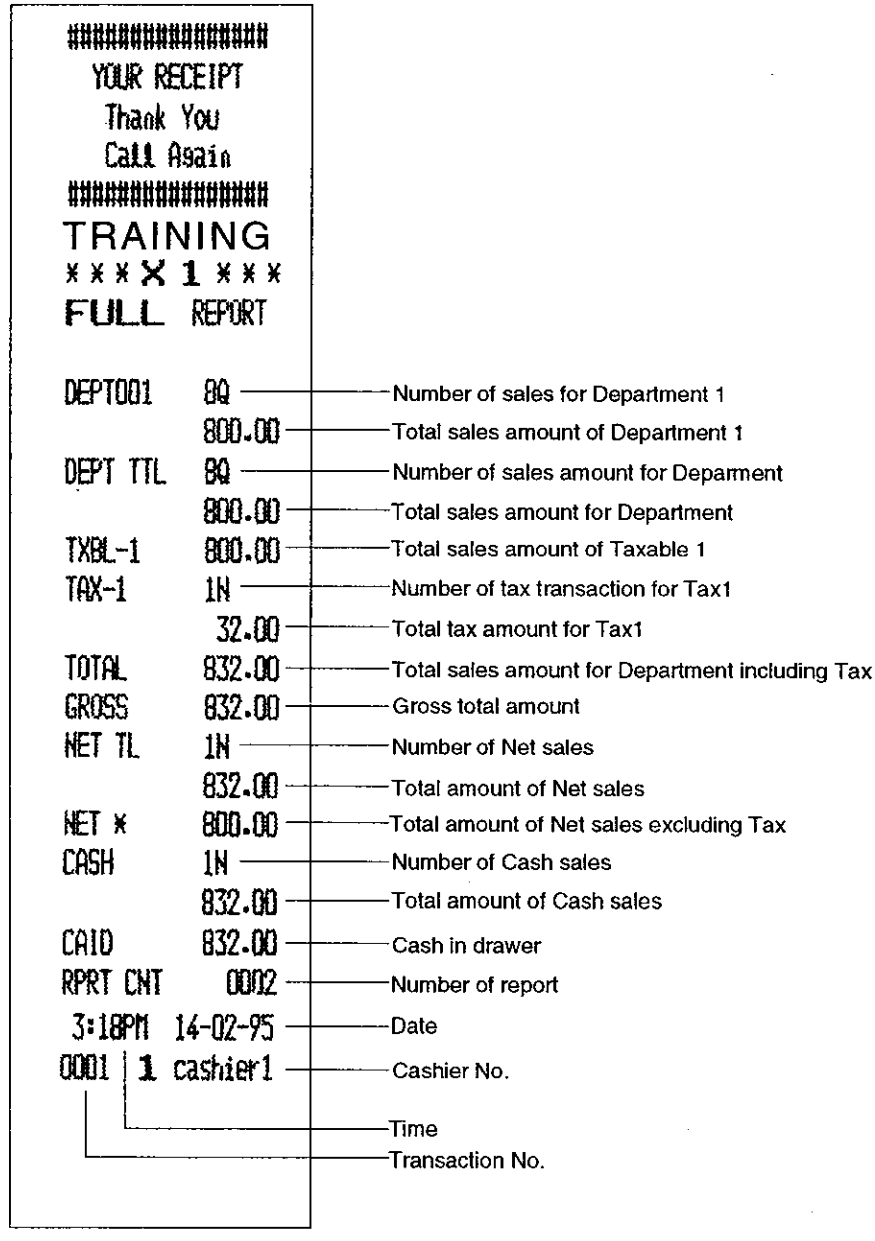


■ Training report

To issue this report, press the programmed training number first, and then press the **CASH/TEND** Key while in the "**X**" mode. (See section 8.4 "Training report".)

[CASH TEND] or [RA] [CASH TEND]

(Training mode) (Normal Register mode)



8.3 Automatic report issue by table

This section describes automatic X/Z report issue, in accordance with the report table which programmed in sec.4.3.11. Automatic X/Z report table.

1)**X1/Z1 report by Table**

n n (Programmed Table No.) ⟶ [EC] ⟶ [CASH TEND]

2)**X2/Z2 report by table**

[PO] ⟶ n n (Same as above.) ⟶ [EC] ⟶ [CASH TEND]

Example

[1] ⟶ [EC] ⟶ [PLU]

NOTE

■ See section 4.3.11 Automatic X/Z report table.

8.4 Training report

Issuing operation of X1 report

[RA] ⟶ n n (report No.) ⟶ [CASH TEND]

When training mode, it is not neccesarry to depress [RA] key.

Example

[RA] ⟶ [8] ⟶ [CASH TEND]

NO.	REPORT NAME	X1	X2	Z1	Z2	*S	KEY OPERATION
8	FULL DEPARTMENT TOTAL	○	—	—	—	○	[ENT RLS] ⟶ *[DEPT1]
21	FULL SALES TOTAL	○	—	○	—		[CASH TEND]
22	FULL TRANSACTION TOTAL	○	—	—	—		[CHRG VALI]
23	IN DRAWER TOTAL	○	—	—	—		[CHKS]
25	NRGT TOTAL WITH RESET	—	—	—	○		[ENT RLS] ⟶ [VOID]

9 Maintenance

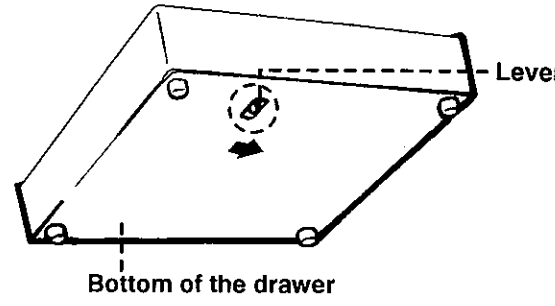
This chapter explains the maintenance operations you can perform yourself.

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.)

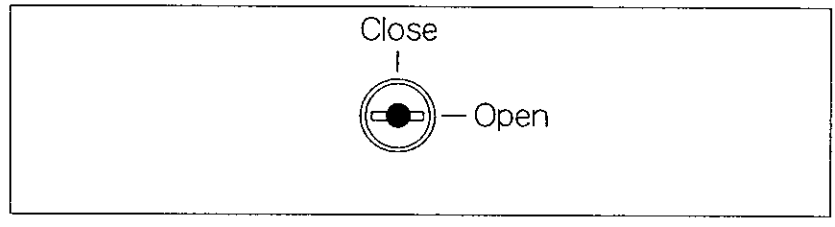


NOTE

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

9.3 Drawer Key

Insert the key into the keyhole and turn it clockwise.



9.4 Replacing the Ink Ribbon Cassette

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

To replace the ink ribbon cassette:

1. Open the printer cover.
2. Push to left then lift up right side.
3. Remove the used ribbon cassette by holding the cassette.
4. Hold the new ink ribbon cassette and fit left side ear of the cassette to cassette holder and then, press down a top of ribbon cassette.
   (See **Fig.1**.)

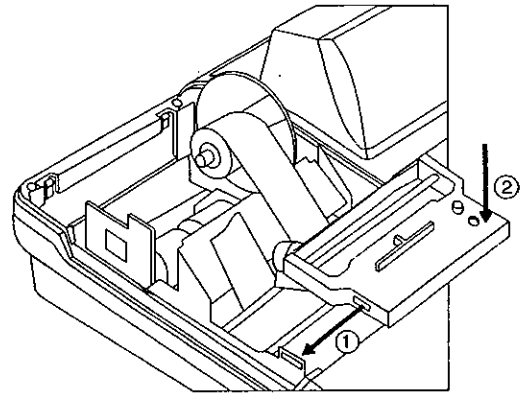


Fig.1.

5. Give one turn to the ribbon pinch in the direction of arrow direction of arrow so that the ribbon moves smoothly and that it is not bent.

9.5 In Case of a Paper Jam

If a paper jam occurs, remove the paper roll as explained in "Removing the Paper Roll" in section 2.4, "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.

9.6 Error Message

CODE NO.	ERROR INSTRACTION
01	KEY SEQUENCE ERROR
02	KEY ENTRY OVER ERROR
03	KEY ENTRY ERROR
04	MEMORY OVER
05	CLERK-ID ENTRY REQUEST
06	NOT USE
07	AMOUNT ENTRY REQUEST
08	COVERS NO. ENTRY REQUEST
09	NOT USE
10	NOT USE
11	NO REGISTRATION NUMBER
12	NOT USE
13	NOT USE
14	NOT USE
15	LIMIT OF REGISTRATION
16	NO CASHIER KEY
17	OPERATION REQUEST FOR DECLARATION
18	NOT USE
19	OPERATION REQUEST FOR VALIDATION
20	ALREADY ISSUED VALIDATION
21	CHECK REQUEST FOR PRINTER
22	NOT USE
23	CHECK REQUEST
24	SPLIT TENDER DISABLE
25	POWER OFF REQUEST (5 SECONDS)
26	REQUEST FOR "C" KEY
27	WAIT REQUEST FOR KEY OPERATION
28	NOT USE
29	NOT USE
30	NOT USE
31	REQUEST FOR "ST" KEY
32	OTHER

9.7 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 "**OFF**" position, plug in the power cord, then turn the control lock to the required operating position. See "Installing a Paper Roll" in section 2.4.

Problem: Sales transaction operations cannot be performed.

Action: ■ If the control lock is not in the "**REG**" position, turn it to the "**REG**" position.
See "Control Lock" in section 1.3.

Problem: Receipts are not issued.

Action: ■ Make sure the Receipt ON/OFF Key is ON.
See "5.1 Before Operating Your Cash Register."
■ If a paper jam occurs, remove the paper roll.
See "Removing a Paper Roll" in section 2.4.

Problem: The journal does not rotate.

Action: ■ Make sure the take-up reel is placed correctly on the support.
■ If a paper jam occurs, remove the paper roll.
See "2.4 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 "2.4 Installing and Removing a Paper Roll."

Problem: Printing is not performed correctly.

Action: ■ Make sure the ink roller is in place.
■ Replace the ink roller.
See "9.4 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 "**OFF**" position and remove the power cord from the wall. Then contact your local dealer.

APPENDIX

	PRINT	FUNCTION
PRINT	Decimal Point Position.....MF1 #1,2 Print Consective No. .....MF2 #1 Print Time.....MF2 #3,#4 Print Date.....MF2 #5,#6 Commercial Message.....MF3 #1 Print Sales Items.....MF10 #1 Print Detail on Journal.....MF10 #2 Print at VOID.....MF10 #5 Print during Training.....MF26 #4	Date Print Format . .....MF2 #7,8 Multi Validation .....MF3 #2 Compulsory Validation.....MF3 #. Double Receipt.....MF3 #4 Time Mode(AM/PM,24hours).....MF2 #.
DISPLAY		Display TIME or DATE.....MF1 #7 Error of Non Preset Key..... .....MF26 #1 Display Error code..... .....MF26 #7
DEPARTMENT		Department Shift..... ..... MF1 #3,#5,#6 Programming Proceed.....MF28 #1 Forbit 0 Entry.....MF30 #1 Forbit 0 Programmed Dept ....MF30 #2
PLU	Print PLU No.....MF10 #3 Display of PLU No. .....MF26 #8 Print PLU Code .....MF29 #3,#4,#5	Check Unit Price .....MF3 #6 PLU Layout .....MF28 #2 PLU Code Entry .....MF29 #. Forbit 0 entry.....MF30 #3 Forbit 0 programmed PLU .....MF30 #4 Operation of Barcode.....MF42 #2 Program Barcode.....MF42 #5 Entry of unlinked PLU .....MF42 #6
CASHIER		Changeable Cashier No. .....MF3 #8
CLERK	Indicate Clerk No. .....MF4 #4	Maintain Clerk No. .....MF3 #5 Changeable Clerk No. .....MF3 #7 Compulsory CLK No.....MF4 #5,#6
TAX	Print Tax Symbol .....MF11 #1 Print Tax Amount TOTAL .....MF11 #2 Print Taxable Amount..... MF11 #3 Print Tax Amount ..... MF11 #4 Print Tax and Taxable.....MF11 #5 Print NET Amount(VAT).....MF11 #6 Indicate Tax Symbol..... MF11 #7	Select Tax Mode.....MF13 Rounding.....MF18
+%,-%		+%,-% Link to DEPT/PLU..... MF4 #1 Service Charge..... MF9 #2 Rounding.....MF19

APPENDIX

	PRINT	FUNCTION
DISCOUNT		Allow Minus Factor.....MF5 #2
Q/F		Rounding.....MF17 Fix 1 for Multiplication.....MF22 #5 Multiple operation.....MF30 #5,6
FINALIZE	Print Sub Total.....MF10 #4 Print Total in Double .....MF10 #6	Error 0 total.....MF5 #3 Drawer not open.....MF6 Split Tendering.....MF7 #1 Compulsory tendering.....MF7 #2 Change for Card..... MF7 #3 Prohibit Tendering..... .... MF8 Compulsory [SUBTOTL].....MF9# 1 Rounding MF15,MF16
REPORT	DEPT Print Sales Ratio.....MF22 #2 Print Sales Ratio(GROUP).....MF22 #3 Print Average..... MF23 #1 Print on Full report .....MF23 #2 Print Department NO.....MF23 #3	Skip 0 data .....MF21 #4 Prohibit DEPT Report .....MF25 #1
PLU *Report	Print PLU No. .....MF24 #1 Print Negative PLU .....MF24 #2 Print Sales Ratio(Group) .....MF24 #3 Print sales Ratio.....MF24 #7	Skip 0 data.....MF21 #3 Enable PLU Group Z .....MF24 #5 Clear after Transmission .....MF31 #2
ELSE *Report	Print Void/Return(Clerk) .....MF29 #1 Print Sales Ratio (Hourly) .....MF22 #4 Print Sales Ratio(Weekly/Monthly).... MF28 Print NRGT on Z2-report ..... MF21 #7 Print Average Customer ..... MF23 #4 Print Cash in Drawer .....MF25 #2	Skip 0 data (Cashier/Clerk) .....MF21 #5 Skip 0 data (Weekly/Montly) .....MF23 #5 Reset Consecutive No. .....MF21 #2 GROSS or NET for NEGT .....MF21 #8 Counter at Hourly Report..... MF22 #1 Compulsory Cash Declaration ..... MF25 #3 Transmit X-data to PC.....MF31 #1
P.C.		Set I/O Port ..... MF32,MF33 Protocol for PC MF44,MF45
BARCODE		Set I/O Port..... MF32,MF33 Mini Barcode Scanner.....MF28 #5 Instore Marking Type.....MF43 Operate Barcode Scanner.....MF42 #1 Protocol for Barcode.....MF46,MF47

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