SHARP

ELECTRONIC CASH REGISTER

MODEL

ER-A410
ER-A420

INSTRUCTION MANUAL

The above illustration shows the model ER-A410.

CAUTION:

The cash register and the remote drawer should be securely fitted to the supporting platforms to avoid instability when the drawers are open.

CAUTION:

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

VORSICHT:

Die Netzsteckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.

ATTENTION:

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

AVISO:

El tomacorriente debe estar instalado cerca del equipo y debe quedar bien accesible.

VARNING:

Det matande vägguttaget skall placeras nära apparaten och vara lätt åtkomligt.

CAUTION:

For a complete electrical disconnection pull out the mains plug.

VORSICHT:

Zur vollständigen elektrischen Trennung vom Netz den Netzstecker ziehen.

ATTENTION:

Pour obtenir une mise hors-circuit totale, débrancher la prise de courant secteur.

AVISO:

Para una desconexión eléctrica completa, desenchufar el enchufe de tomacorriente.

VARNING:

För att helt koppla från strömmen, dra ut stickproppen.

This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.

Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ενωσης 89/336/ΕΟΚ και 73/23/ΕΟΚ, όπως οι κανονισμοί αυτοί συμπληρώθηκαν από την οδηγία 93/68/ΕΟΚ.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som kompletteras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model ER-A410/A420.
Please read this manual carefully before operating your machine in order to gain full understanding of functions and features.
Please keep this manual for future reference. It will help you, if you encounter any operational problems.

IMPORTANT

- **Install your register in a location that is not subject to direct sunlight, unusual temperature changes, high humidity or exposure to water sources and keep away from heat and magnetic sources.**
  Installation in such locations could cause damage to the cabinet and the electronic components.
- **The register should not be operated by an individual with wet hands.**
  The water could seep into the interior of the register and cause component failure.
- **When cleaning your register, use a dry, soft cloth. Never use solvents, such as benzine and/or thinner.**
  The use of such chemicals will lead to discoloration or deterioration of the cabinet.
- **The register plugs into any standard wall outlet (Official (nominal) voltage).**
  Other electrical devices on the same electrical circuit could cause the register to malfunction.
- **If the register malfunctions, call your local dealer for service - do not try to repair the register yourself.**
- **For a complete electrical disconnection, pull out the mains plug.**

PRECAUTION

This Electronic Cash Register has a built-in memory protection circuit which is operated by rechargeable batteries.
As you know, all batteries will, in time, dissipate their charge even if not used. Therefore to insure an adequate initial charge in the protection circuit, and to prevent any possible loss of memory upon installation, it is recommended that each unit be allowed to recharge for a period of 24 to 48 hours prior to use by the customer.
In order to charge the batteries, the machine must be plugged in. This recharging precaution can prevent unnecessary initial service calls.

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EXTERNAL VIEW OF THE ER-A410

■ Front view

Printer cover

Receipt paper

Journal window

Keyboard

Drawer lock

Drawer

Customer display (Pop-up type)

Operator display

Mode switch

RS-232C connector
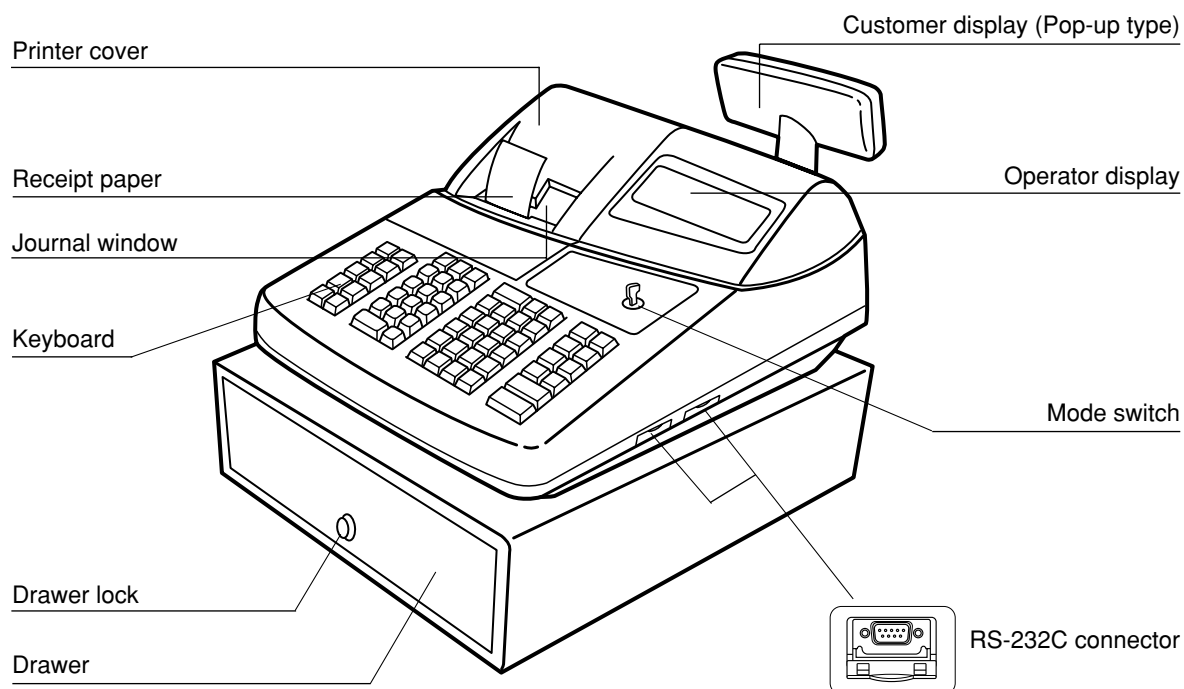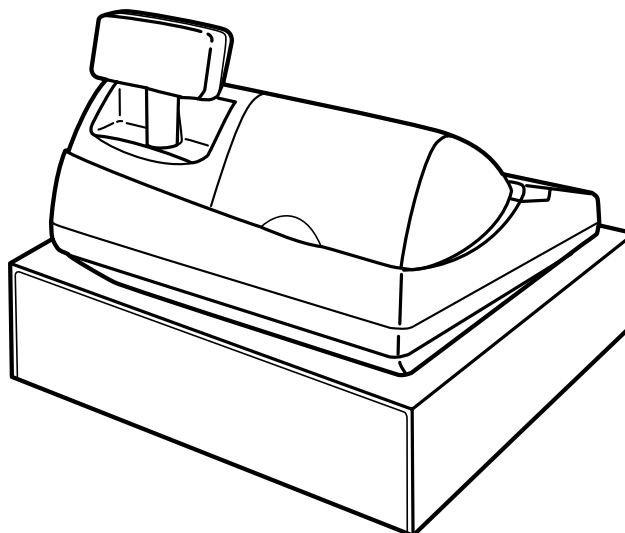
■ Rear view

EXTERNAL VIEW OF THE ER-A420

■ Front view

Printer cover

Customer display (Pop-up type)

Receipt paper

Operator display

Journal window

Keyboard

Mode switch

Drawer lock

Drawer

RS-232C connector

■ Rear view

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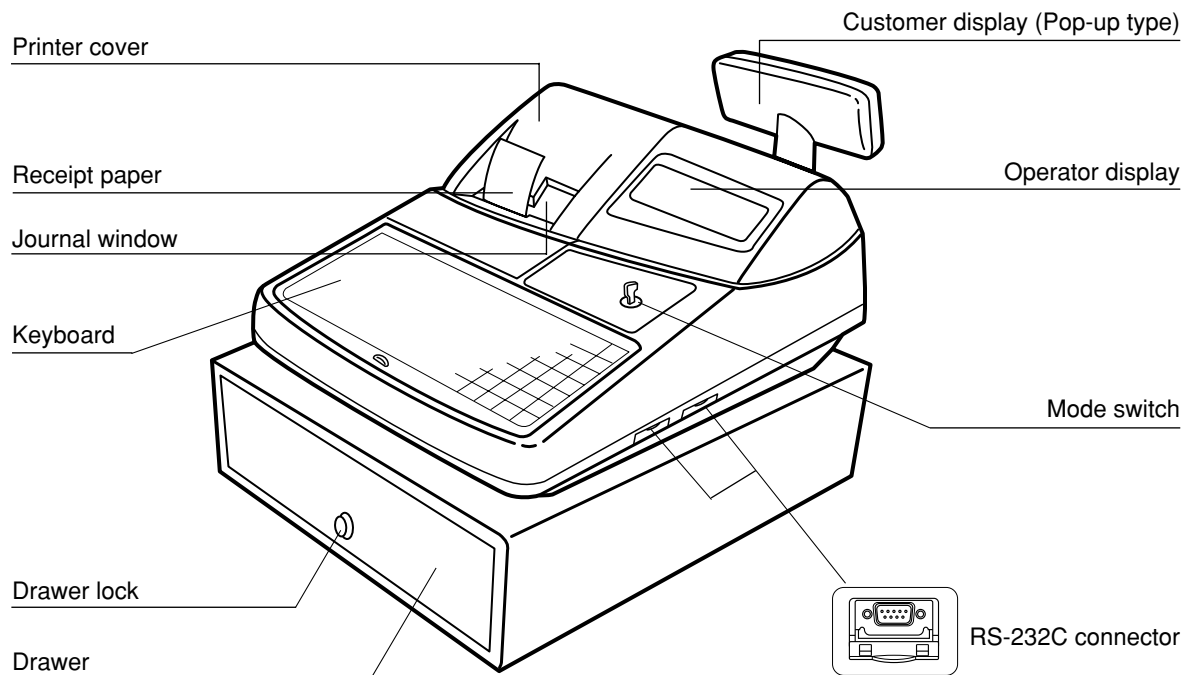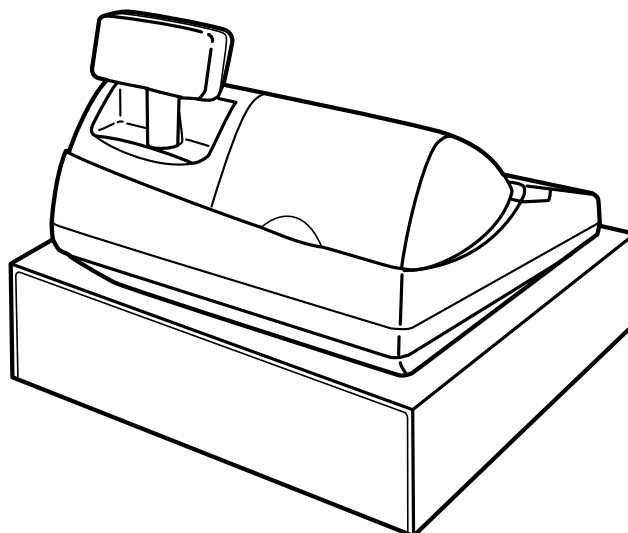
PRINTER

The printer is a receipt/journal dual station type thermal printer, and therefore it does not require any type of ink ribbon or cartridge. The average life of the printer is approximately 5 million lines.

When removing the printer cover, lift up its rear.
When installing the printer cover, hook it on the pawls on the cabinet and shut it.

Caution: **The paper cutter is mounted on the printer (receipt side). Be careful not to cut yourself.**
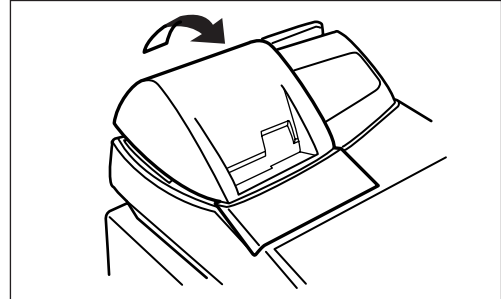
Your register is shipped with the print head release lever held by a white retainer in the lifted up position. Be sure to remove this retainer (see the figure at the right) and push down the print head release lever before you use the register.

Retainer

Take-up spool

Paper roll location

Paper chute

Print head release lever
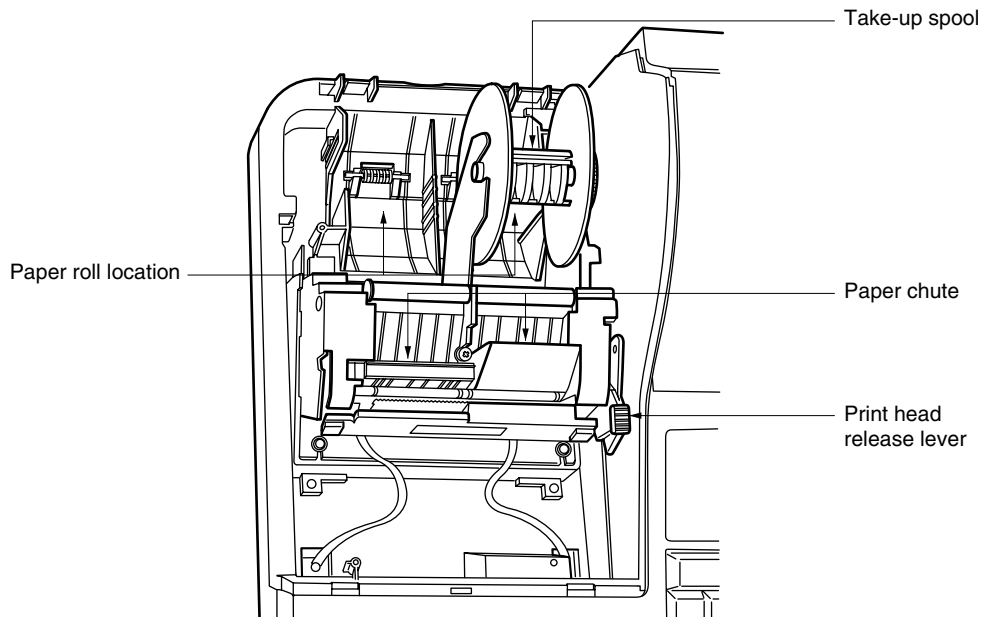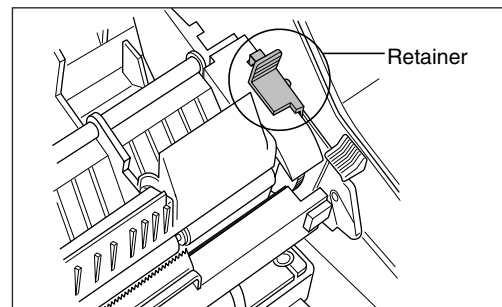
Print head release lever
The print head can be lifted by the green lever on the right side of the printer. Pulling the lever forward lifts the print head up. If the paper becomes jammed and you need to move the head farther forward, you can pull the lever even further toward you and proceed with the removal of the jammed paper.

Note : *Do not attempt to remove the paper roll with the head in the down position. This may result in damage to the printer and print head.*

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KEYBOARD

1 **ER-A410 standard keyboard layout**

NS	#	CASH #
⊗	•	CL
7	8	9
4	5	6
1	2	3
0		00

| PLU/SUB | AMT | DEPT # |

AUTO	VAT
EX1	EX2
CR1	CR2
CH1	CH2
ST	
TL	

Note   *All the keys but the receipt paper feed and journal paper feed keys can be re-positioned. If you want to change the layout, consult your dealer.*

RECEIPT	Receipt paper feed key
JOURNAL	Journal paper feed key
0 ∼ 9 00	Numeric keys
•	Decimal point key
⊗	Multiplication key
CL	Clear key
1 ∼ 20	Department keys
PLU/SUB	Price lookup/ subdepartment key

AMT	Amount entry key
VAT	Value added tax key
CASH #	Cashier code entry key
⊖	Discount key
%	Percent key
EX1 EX2	Foreign currency exchange 1 and 2 keys
CR1 CR2	Credit 1 and 2 keys
CH1 CH2	Cheque 1 and 2 keys
ST	Subtotal key
TL	Total (cash total) key

∽	Void key
RF	Refund key
RA	Received-on-account key
PO	Paid-out key
DEPT #	Department code entry key
#	Non-add code key
NS	No-sale key
DIFFER ST	Difference subtotal key
RCPT	Receipt print key
AUTO	Automatic sequencing key

Optional keys

SLIP	Slip print key
%2	
∫	Percent 2 through 4 keys
%4	
AUTO 2	
∫	Automatic sequencing 2 through 5 keys
AUTO 5	
CA2	Cash total 2 key
CR3	
CR4	Credit 3 and 4 keys
RA2	Received-on-account 2 key
PO2	Paid-out 2 key

VAT SHIFT	Value added tax shift key
VP	Validation print key
CLERK #	Clerk code entry key
GC COPY	Guest check copy key
PBLU	Previous balance lookup key
NBAL	New balance key
FINAL	Final key
DEPO (+)	Deposit entry key
DEPO (-)	Deposit refund key
GC RCPT	Guest check receipt key
CHK PRINT	Check print key
½	Half penny key

L1	
∫	PLU level shift 1 through 3 keys
L3	
PRICE SHIFT	Price level shift key
⊝2	
∫	Discount 2 through 4 keys
⊝4	
CH3	
CH4	Cheque 3 and 4 keys
EX3	
EX4	Foreign currency exchange 3 and 4 keys
000	Triple zero entry key

Note *The department and direct PLU keys can be extended, if you require extension of the department or direct PLU keys, please contact your dealer.*

2 ER-A420 standard keyboard layout

RECEIPT ↑	JOURNAL ↑	2	4	6	L3	PRICE SHIFT	7	14	21	28	35	42	49	56	63	70
RCPT	GC COPY	1	3	5	L2	DEPT #	6	13	20	27	34	41	48	55	62	69
CASH #	VAT	⊗	•	CL	L1	CR2	5	12	19	26	33	40	47	54	61	68
#	AUTO	7	8	9	AMT	CR1	4	11	18	25	32	39	46	53	60	67
⊖	%	4	5	6	PLU/SUB	CH	3	10	17	24	31	38	45	52	59	66
PO	RA	1	2	3	NS	EX	2	9	16	23	30	37	44	51	58	65
∽	RF	0	00	000	ST	TL	1	8	15	22	29	36	43	50	57	64

Note *All the keys but the receipt paper feed and journal paper feed keys can be re-positioned.
If you want to change the layout, consult your dealer.*

Key	Description
RECEIPT ↑	Receipt paper feed key
JOURNAL ↑	Journal paper feed key
0 … 9, 00, 000	Numeric keys
•	Decimal point key
⊗	Multiplication key
CL	Clear key
1 … 6	Department keys
PLU/SUB	Price lookup/subdepartment key
AMT	Amount entry key
VAT	Value added tax key
CASH #	Cashier code entry key
⊖	Discount key
DEPT #	Department code entry key
%	Percent key
L1 … L3	PLU level shift 1 through 3 keys
CR1, CR2	Credit 1 and 2 keys
CH	Cheque key
ST	Subtotal key
TL	Total (cash total) key
∽	Void key
RF	Refund key
RA	Received-on-account key
PO	Paid-out key
GC COPY	Guest check copy key
EX	Foreign currency exchange key
PRICE SHIFT	Price level shift key
NS	No-sale key
#	Non-add code key
RCPT	Receipt print key
AUTO	Automatic sequencing key
1 … 70	Direct price lookup keys

Optional keys

SLIP	Slip print key
%2	Percent 2 through 4 keys
%4	
AUTO 2	Automatic sequencing 2 through 5 keys
AUTO 5	
CA2	Cash total 2 key
CR3	Credit 3 and 4 keys
CR4	
RA2	Received-on-account 2 key
PO2	Paid-out 2 key

VAT SHIFT	Value added tax shift key
DIFFER ST	Difference subtotal key
CLERK #	Clerk code entry key
VP	Validation print key
PBLU	Previous balance lookup key
NBAL	New balance key
FINAL	Final key
DEPO (+)	Deposit entry key
DEPO (-)	Deposit refund key
GC RCPT	Guest check receipt key
CHK PRINT	Check print key
1/2	Half penny key

⊖2	Discount 2 through 4 keys
⊖4	
CH2	Cheque 2 through 4 keys
CH4	
EX2	Foreign currency exchange 2 through 4 keys
EX4	

Note *The department and direct PLU keys can be extended, if you require extension of the department or direct PLU keys, please contact your dealer.*

3 Standard key number layout

These key numbers are used for positioning of department keys and direct PLU keys. Refer to pages 39 and 51. This layout can be changed by your dealer.

For ER-A410

005	010	015	020
004	009	014	019
003	008	013	018
002	007	012	017
001	006	011	016

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For ER-A420

		002	004	006			027	034	041	048	055	062	069	076	083	090
		001	003	005			026	033	040	047	054	061	068	075	082	089
							025	032	039	046	053	060	067	074	081	088
							024	031	038	045	052	059	066	073	080	087
							023	030	037	044	051	058	065	072	079	086
							022	029	036	043	050	057	064	071	078	085
							021	028	035	042	049	056	063	070	077	084

4 Installing the keyboard sheet (ER-A420)

Insert the keyboard sheet between the keyboard cover and the cabinet as illustrated below.
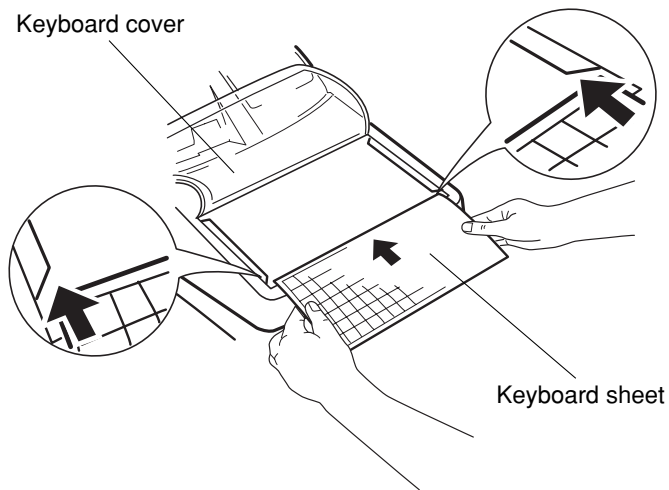
Keyboard cover

① Turn over the keyboard cover.
② Insert the keyboard sheet into a slit.

Keyboard sheet

③ Close the keyboard cover.

Note
- *Do not spread the keyboard cover too far as it might tear the tabs.*
- *Replace the keyboard sheet with a new one if by chance it gets wet. Use of a wet keyboard sheet may cause problems.*
- *Be sure to use only SHARP-supplied keyboard sheets. Thick or hard sheets make key operations difficult.*
- *Place the keyboard sheet evenly under the keyboard cover.*
- *If you require a new keyboard sheet, please contact your dealer.*
- *The keyboard cover will eventually wear out. If your keyboard cover is dirty or broken, replace the cover with a new one. For details, contact your authorized SHARP dealer.*

KEYS AND SWITCHES

1 Mode switch and mode keys

The mode switch can be operated by inserting one of the three supplied mode keys – manager (MA), submanager (SM), and operator (OP) keys. These keys can be inserted or removed only when the switch is in the "REG" or " ⏻ " position.

Operative range
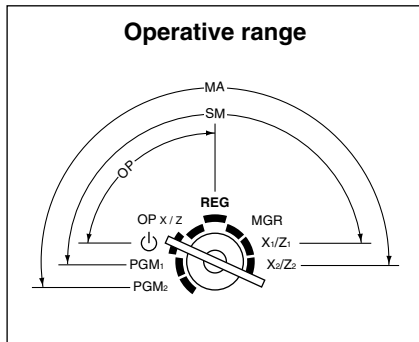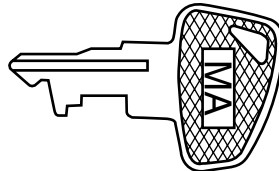
• Manager key (MA)

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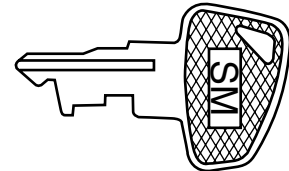
• Operator key (OP)
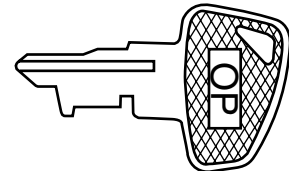
The mode switch has these settings:

⏻ : This mode locks all register operation.
No change occurs to register data.

OP X/Z: This setting allows cashiers/clerks to take X or Z reports for their sales information. It can also be used for displaying the date/time and printing the employee arrival/departure times. And it can be used to toggle receipt state "ON" and "OFF" by pressing the RCPT key. (This setting may be used only when your register has been programmed for "OP X/Z mode available" in the PGM2 mode.)

REG: For entering sales

PGM1: To program those items that need to be changed often: e.g., unit prices of departments or PLUs, and percentages.

PGM2: To program all PGM1 programs and those items that do not require frequent changes: e.g., date, time, or a variety of register functions

MGR: For manager's and submanager's entries
The manager can use this mode to make entries that are not permitted to be made by cashiers/clerks – for example, after-transaction voiding and override entries.

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

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

2 Drawer lock key

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

15
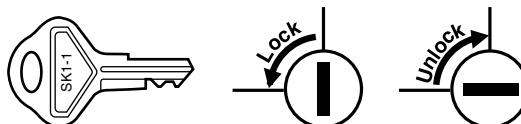
DISPLAYS

1 Operator display

The operator display consists of a 2-line LCD dot-matrix display (16 characters/line).

Price level / PLU level (e.g. P2L3)   Dept. name / PLU name / function text   Cashier / clerk code or mode name

```
DPT.03              0001
3_                 10.00
```

Function message display area

Numeric entry display area

Receipt OFF indicator ("_") / Stock alarm indicator (".")

Repeat / Sentinel mark / Power save mark
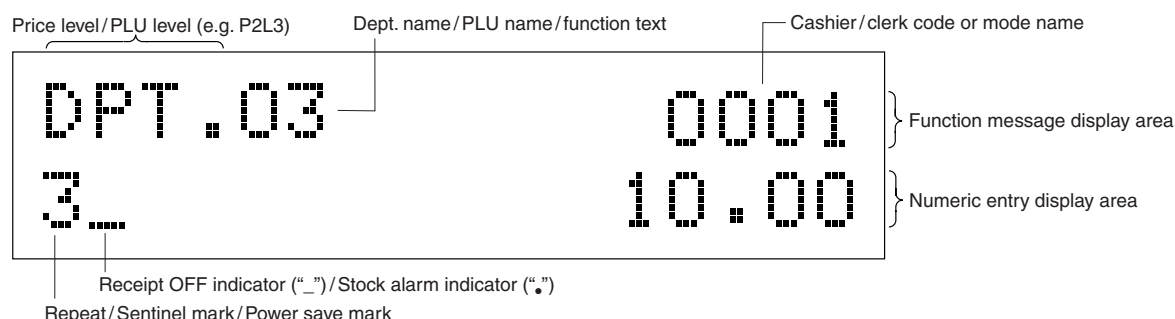
- **Cashier/clerk code or mode name**

    The mode you are in is displayed. When a cashier/clerk is assigned, the corresponding cashier/clerk code is displayed in the REG or OP X/Z mode. For example, "0001" is displayed when cashier 0001 is assigned.

- **Repeat**

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

- **Sentinel mark**

    When the amount in the drawer reaches the amount you preprogrammed, the sentinel mark "X" is displayed to advice you to remove the money to a safe place.

- **Power save mark**

    When the cash register goes into the power save mode, the power save mark (decimal point) is displayed.

- **Stock alarm indicator**

    When the stock of the PLU which you entered is zero or negative, the alarm indicator (decimal point) is displayed.

- **Function message display area**

    Item labels of departments and PLU/subdepartments and function texts you use, such as %1, (−) and CASH are displayed here. For the details of function texts, please refer to page 62 and 63.
    When an amount is to be entered or entered, "AMOUNT" is displayed: When an amount is to be entered, − − − − − − − is displayed in the numeric entry display area with "AMOUNT". When a preset price has been set, the price is displayed in the numeric entry display area with "AMOUNT".

- **Numeric entry display area**

    Numbers entered using numeric keys are displayed here.

Date and time display

    Date and time appear on the display in the OP X/Z, REG, or MGR mode. In the REG or MGR mode, press the # key to display the date and time.

Error message

    When an error occurs, the corresponding error message is displayed in the function message display area. For the details of error messages, please refer to "Error message table" on page 165.

2 Customer display (Pop-up type)

```
4.5678.90
```
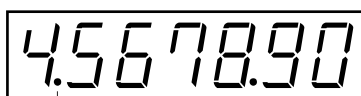
Power save mark (This mark appears only in the power save mode)

16

FOR THE MANAGER

PRIOR TO PROGRAMMING

1   Programming keyboard layout

When you are in the PGM1 or PGM2 mode, the keyboard layout will be set to the one for programming as shown below.

For ER-A410

For ER-A420

> **Note**
> • *The programming keyboard sheet is transparent, allowing placement over the standard keyboard sheet.*
> • *The shaded area contains the character keys which are used for programming characters.*

(DC)   : Used to enter the double-size character.

(SHIFT)   : Used to change a lower-case letter/upper-case letter.

(SHIFT-2)   : Used to select a symbol.

(BACK SPACE)   : Used to back up the cursor for deleting.

(SPACE)   : Used to enter a space.

(NUM)   : Used to enter a numeric character.

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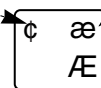
2 How to program alphanumeric characters

You can program alphanumeric characters for departments, PLUs, functions and so on in the character entry mode.
There are two ways for programming characters: using character keys on the keyboard and entering character codes with numeric keys on the keyboard.

■ Using character keys on the keyboard

Enter a character according to the position in the programming keyboard layout.

Entering alphanumeric characters

To enter a character, simply press a corresponding character key.
To enter a numeric character, press (NUM) key and enter a number by ten keys (0 – 9).

    [Ex.] Entering the character "135" :   (NUM) ⟶ 135 ⟶ (NUM)

To enter a space, press (SPACE) key.

Entering double-size characters

(DC) : This key toggles the double-size character mode and normal-size character mode. The default is the normal-size character mode. The double-size character is displayed with the letter "=" (ex. =S).

    [Ex.] To program the name "SHARP" in double size :   (DC) ⟶ SHARP ⟶ (DC)

Entering lowercase letters

(SHIFT) : You can enter a lower-case letter by using this key. Press (SHIFT) key just before you enter the lower-case letter. This key also allows you to enter the characters/symbols shown at the upper right of keys.

    [Ex.] To program the name "Sharp" :   ⟶ S ⟶ (SHIFT) ⟶ harp ⟶ (SHIFT)

"(ˇ)", "(ˆ)", "(¨)", " (`)", "(´)", "(´´)", "(°)", and "(˜)" keys are used only in combination with a character key. If the combination is unavailable, only a character key is entered. [Ex.] "Å" : ⟶ (°) ⟶ A

Editing text

You can edit the text you have entered by deleting characters.

(BACK SPACE) : Backs up the cursor for deleting the character or figure at the left of the cursor.

■ Entering character codes

Numerals, letters and symbols are programmable by entering the (00) key and character codes. See the "Alphanumeric character code table" on the next page. In this way, you can program characters other than the characters shown in the programming keyboard layout.

    XXX ⟶ (00)   XXX: Character code (3 digits)

Note • *Double-size characters can be made by entering the character code 253.*
      [Ex.] To program the name "SHARP" in double size

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

Alphanumeric character code table

Code	Character	Code	Character	Code	Character	Code	Character	Code	Character
001	á	046	.	091	Ä	136	→	193	į
002	â	047	/	092	Ö	137	◡	194	Ġ
003	ê	048	0	093	Ü	138	◡	195	Ş
004	î	049	1	094	^	139	◀	196	Ģ
005	ì	050	2	095	_	140	▶	197	ġ
006	í	051	3	096	'	141	F	198	Ķ
007	ô	052	4	097	a	142	T	199	ķ
008	ó	053	5	098	b	143	↓	200	Ļ
009	û	054	6	099	c	144	ç	201	ļ
010	ú	055	7	100	d	145	°	202	Ž
011	œ	056	8	101	e	146	¿	203	Đ
012	ű	057	9	102	f	147	Ù	204	đ
013	ú	058	:	103	g	148	à	205	Ć
014	ő	059	;	104	h	149	Æ	206	ć
015	ó	060	<	105	i	150	ø	207	€
016	Λ	061	=	106	j	151	Å	208	₽
017	Ψ	062	>	107	k	152	¤	209	`
018	Γ	063	?	108	l	153	é	210	ě
019	¨	064	@	109	m	154	è	211	š
020	Ω	065	A	110	n	155	Pt	212	č
021	Δ	066	B	111	o	156	ı	213	ž
022	Θ	067	C	112	p	157	Ñ	214	ý
023	Ξ	068	D	113	q	158	ò	215	ů
024	Π	069	E	114	r	159	£	216	ň
025	Σ	070	F	115	s	160	¥	217	˘
026	Υ	071	G	116	t	161	°	218	´
027	Φ	072	H	117	u	162	Γ	219	ř
028	Ű	073	I	118	v	163	⌐	224	∗
029	Ú	074	J	119	w	164	`	225	§
030	Ő	075	K	120	x	165	·	226	Ø
031	Ó	076	L	121	y	177	Á	227	^
032	(space)	077	M	122	z	178	Í	228	↑
033	!	078	N	123	{	180	Ā	229	]
034	"	079	O	124	|	181	ā	230	[
035	#	080	P	125	}	182	Ē	231	"
036	$	081	Q	126	ß	183	ē	232	ä
037	%	082	R	127	¢	184	Ī	233	ö
038	&	083	S	128	!!	185	ī	234	ü
039	'	084	T	129	$_1$	186	Ū	235	æ
040	(	085	U	130	$_2$	187	ū	236	å
041	)	086	V	131	$_3$	188	Ņ	237	É
042	∗	087	W	132	$_4$	189	ņ	238	ñ
043	+	088	X	133	1/2	190	Č	253	*(DC)
044	,	089	Y	134	F/T	191	Š		
045	-	090	Z	135	←	192	Ç		

∗(DC) : Double-size character code

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

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

PROGRAMMING

This chapter illustrates how to program your cash register.

■ Basic instructions

All the programming items can be programmed by the **Job-Code-Based Programming** described later. However, your machine allows you to program some items using the **Direct Programming**, which does not require you to enter the job code.

Job-Code-Based Programming

Simplified procedure : **XXX** ⟶ [•] ⟶ [⊗] ⟶ [Data entry] ⟶ [TL]
(Job code)

Direct Programming

Sample procedure : ⟶ [Data entry] ⟶ [⊖] ⟶ [TL]
(Object key)

■ Preparations for programming

1. Plug your machine into a standard wall outlet.
2. Turn the mode switch to the PGM1 or PGM2 position.
   To set the mode switch to the PGM1 position, use the manager or submanager key; and to set it to the PGM2 position, use the manager key.
3. Check to see whether both journal and receipt rolls are present in the machine. If they are missing, install journal and receipt paper rolls correctly referring to the procedure in "4. Installing and removing the paper roll" under "OPERATOR MAINTENANCE".
4. Program necessary items into your machine.

■ Direct Programming

1 Setting the date and time

■ Date PGM 2

Enter the day (one or two digits), month (two digits), and year (four digits : 2000 – 2099) in this sequence.

Procedure

X X X X X X X X ⟶ [#]
Date (seven or eight digits)

Example

Key operation	Print
26082003 [#]	26/08/2003 0:00 000000#0001 *PGM2* 26/08/2003

■ Time PGM 2

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

Procedure

X X X X ────────▶ #
Time (max. four digits)

Example

Key operation	Print
1430 #	26/08/2003 14:30 000000#0002 *PGM2* 14:30

Note • *For display and print, 24-hour format is applied by default. To change it to 12-hour format, contact your dealer.*

2 Programming for departments

Your machine is equipped with 20 (ER-A410)/6 (ER-A420) standard departments and up to 99 optional departments. Your machine allows you to perform the following programming for each department.

■ Unit price PGM 1 PGM 2

Procedure

To program for another dept.

To program zero

─▶ Unit price (max. 6 digits) ────▶ 1 ～ 99 ────▶ TL

─▶ Dept. code (1 – 99) ───▶ DEPT # ───▶ Unit price (max. 6 digits) ───▶ ST

To program zero

To program for the following dept.
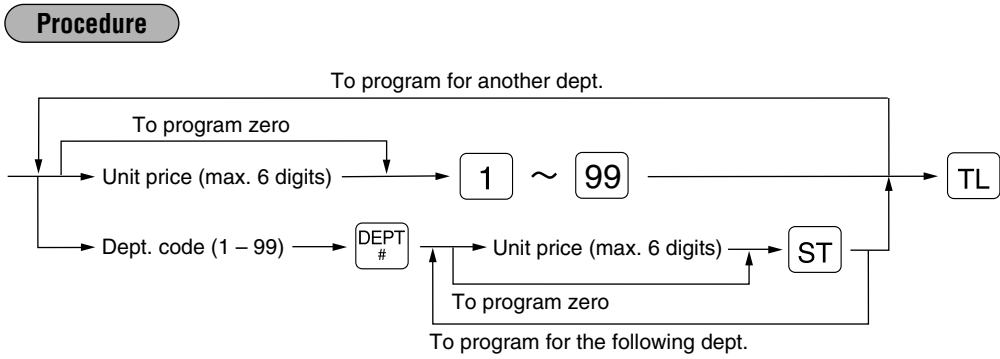
Example

Key operation	Print
1000 1 TL	*PGM2* D01 10.00 DPT.O1 G01 003 COL18

■ Functional selection `PGM 2`

`Procedure`

To program for another dept.

To set all zeros

→ *1 ABCDEFGHIJKL → $\otimes$ → 1 ∼ 99 → TL

→ Dept. code (1 – 99) → DEPT # → *1 ABCDEFGHIJKL → $\otimes$

To set all zeros

To program for the following dept.

*1 Item:		Selection:	Entry:
A	VAT4 or TAX4	Assign "non-taxable"	0
		Assign "VAT4 or TAX4"	1
B	VAT3 or TAX3	Assign "non-taxable"	0
		Assign "VAT3 or TAX3"	1
C	VAT2 or TAX2	Assign "non-taxable"	0
		Assign "VAT2 or TAX2"	1
D	VAT1 or TAX1	Assign "non-taxable"	0
		Assign "VAT1 or TAX1"	1
E	Item validation printing	Non-compulsory	0
		Compulsory	1
F	Registration type	Normal	0
		SICS (Single Item Cash Sale)	1
		SIF (Single Item Finalization)	2
G	Type of unit price entry	Inhibit department key	0
		Open only	1
		Preset only	2
		Open and preset	3
H	Significant digit for HALO		0 through 9
I	Number of zeros to follow the significant digit for HALO		0 through 8
J	Commission group number		0 through 9
KL	Group number	Group 01 – 09 ((+) dept.)	01 through 09
		Group 10 ((−) dept.)	10
		Group 11 ((+) hash dept.)	11
		Group 12 ((−) hash dept.)	12
		Group 13 ((+) bottle return dept.)	13
		Group 14 ((−) bottle return dept.)	14

• **Tax status**

Assign a tax status to each department.

Note

• *The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.*

• *When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (C), TAX3 (B) and TAX4 (A) can be selected in combination with VAT1 (D).*
Example: ABCD = 1001, 0011, 0101

• **Compulsory item validation printing**

If item entries must be validated, program corresponding departments for compulsory item validation printing.

- **Registration type (SICS/SIF/Normal type)**
  SICS: If the first registration is to a department set for SICS, the sale is finalized as soon as the department key is pressed. If the sale is preceded by registrations to departments not set for SICS, a sale to a department set for SICS does not finalize and can be repeated until the TL key is pressed.
  SIF: Whenever a sale is made to a department set for SIF, the sale is finalized as soon as the department key is pressed.
- **Type of unit price entry (open and preset/preset only/open only/inhibit department key)**
  You may select one of four types of unit price entry for each department.
- **HALO (High Amount Lockout)**
  You can set upper limit amounts for each department. The limit is effective for operations in the REG mode and can be overridden in the MGR mode. HALO limit is represented by two figures as follows. Programmed item (H and l) is the same as H x 10^l.
- **Commission group number**
  A commission group number (0 - 9, 0: non commission) can be assigned to each department.
- **Group number**
  You can assign departments to a maximum of 14 groups (1 through 14, 0: non group).

Example

Key operation	Print
000000317001 ⊗ 1 TL	*PGM2* D01 10.00 DPT.01 G01 003 COL17

3 Price lookup (PLU) programming

Your machine is equipped with 500 standard PLUs. Your machine allows you to perform the following programming for each PLU.

■ Unit price   PGM 1   PGM 2
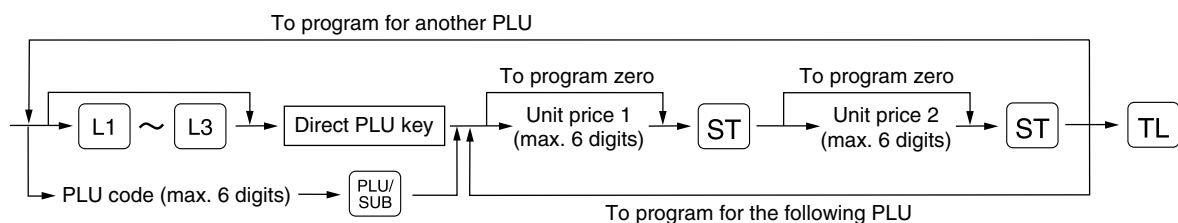
Procedure

Example

Key operation	Print

1 $\boxed{\text{PLU/ SUB}}$ 1000 $\boxed{\text{ST}}$
$\boxed{\text{ST}}$
$\boxed{\text{TL}}$

```
        *PGM2*

P000001(O1)      /00
                10.00
                 0.00
PL000001          C0
2            S   0.000
```

■ Functional selection PGM 2

Procedure

To program for another PLU

To program zero

$\boxed{\text{L1}} \sim \boxed{\text{L3}}$ → Direct PLU key → *1 ABCDEFG → $\boxed{\otimes}$ → $\boxed{\text{TL}}$

PLU code (max. 6 digits) → $\boxed{\text{PLU/ SUB}}$

To program for the following PLU

*1

Item:		Selection:	Entry:
A	Sign (+/-)	Set as a plus PLU	0
		Set as a minus PLU	1
B	VAT4 or TAX4	Assign "non-taxable"	0
		Assign "VAT4 or TAX4"	1
C	VAT3 or TAX3	Assign "non-taxable"	0
		Assign "VAT3 or TAX3"	1
D	VAT2 or TAX2	Assign "non-taxable"	0
		Assign "VAT2 or TAX2"	1
E	VAT1 or TAX1	Assign "non-taxable"	0
		Assign "VAT1 or TAX1"	1
F	Type of unit price entry	Inhibit PLU/subdepartment	0
		Open only	1
		Preset only	2
		Open and preset	3
G	Commission group number		0 through 9

- **Sign (+/-)**
The function of every PLU/subdepartment varies according to the combination of its sign and the sign of its associated department as follows:

Sign		Function of PLU/subdepartment
Department	**PLU/subdepartment**	
+	+	Serves as a normal plus PLU/subdepartment
–	–	Serves as a normal minus PLU/subdepartment
+	–	Accepts store coupon entries, but not split-pricing entries
–	+	Not valid; not accepted

- **Tax status**

  Assign a tax status to each PLU/subdepartment.

  | Note |

  - *The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.*
  - *When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (D), TAX3 (C) and TAX4 (B) can be selected in combination with VAT1 (E). Example: BCDE= 1001, 0011, 0101*
  - *A PLU not programmed for any of these tax statuses is registered depending on the tax status of the department which the PLU belongs to.*

- **Type of unit price entry (open and preset/preset only/open only/inhibit PLU/subdepartment)**

  You may select one of four types of unit price entry for each PLU/subdepartment.

  Inhibit PLU/subdepartment: inhibit the entry of any assigned PLU/subdepartment code. This mode does not clear the PLU/subdepartment program data.

- **Commission group number**

  A commission group number (0 – 9, 0: non commission) can be assigned to each PLU/subdepartment.

Example

Key operation	Print
1 [PLU/SUB] 0000120 [⊗] [TL]	*PGM2* P000001(O1) /00 T1 10.00 0.00 PL000001 C0 2 S 0.000

■ PLU assignment to department PGM 1 PGM 2

Procedure
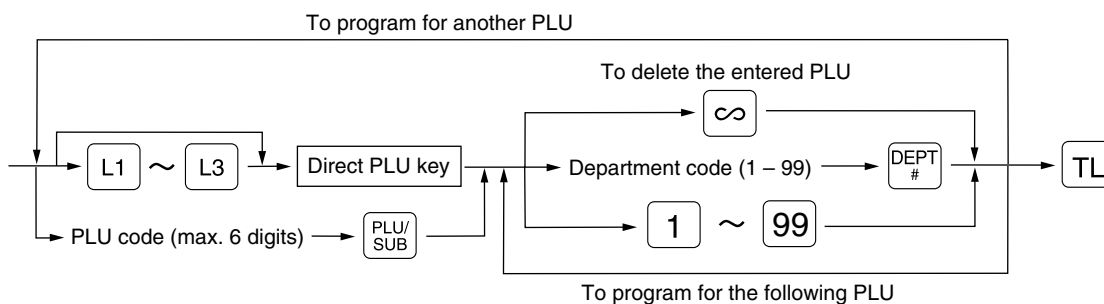
Example

Key operation	Print
1 [PLU/SUB] [1] [TL]	*PGM2* P000001(O1) /00 T1 10.00 0.00 PL000001 C0 2 S 0.000

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4 Programming for discount keys (⊖)

■ Deduction amount PGM 1   PGM 2

Procedure

To program zero

→ Deduction amount (max. 6 digits) → ⊖ ～ ⊖4 → TL
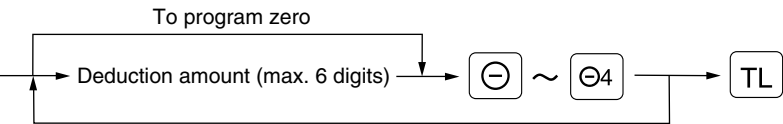
Example

Key operation	Print
1000 ⊖ TL	*PGM2* F001 (─) 1 S -10.00 L18

5 Programming for percent and exchange keys (% and EX)

■ Percent rate and currency exchange rate PGM 1   PGM 2

Procedure

To program zero

→ *Rate → % ～ %4 → TL

EX1 ～ EX3
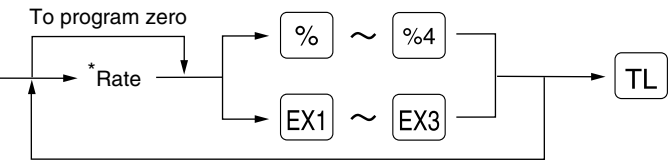
* Rate: Percent rate: 0.00 - 100.00
     Currency exchange rate: 0.000000 – 999.999999

Note   You must use the decimal point key when setting rates that are fractional.

Example

Key operation	Print
10 · 25 % TL	*PGM2* F005 %1 S -10.25% L100.00%

6 **Programming for discount and percent keys ($\ominus$ and $\%$)**

■ **High amount lockout (HALO), item/subtotal selection, and +/- sign** PGM 2

Procedure
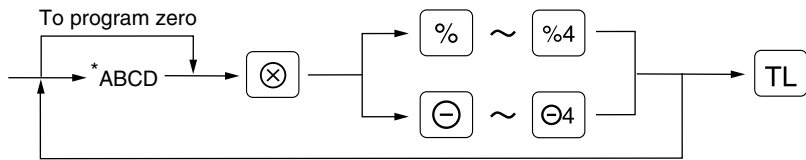
* Item:		Selection:	Entry:
A	Sign (+/-)	Plus	0
		Minus	1
B	Item/subtotal selection	Subtotal (-)/%	0
		Item (-)/%	1
C	Significant digit for HALO (for $\ominus$)		0 through 9
D	Number of zeros to follow the significant digit for HALO (for $\ominus$)		0 through 8

Note

HALO (High amount lockout)
CD is the same as C x 10^D.
For example, presetting 14 (100.00) here means that amount entries of up to 100.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

Example

Key operation	Print
1013 $\otimes$ $\ominus$ TL	*PGM2* F001 (−) 1 S −10.00 L13

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7 Programming for exchange keys (EX)

■ Tab of foreign currency PGM 2

Note When you introduce EURO on your register, this setting for the EX1 is automatically programmed by execution of Job #800 in the X2/Z2 mode.

Procedure

To program zero

→ Tab: Number of digits after decimal point (0 – 3) → ⊗ → EX1 ～ EX4 → TL
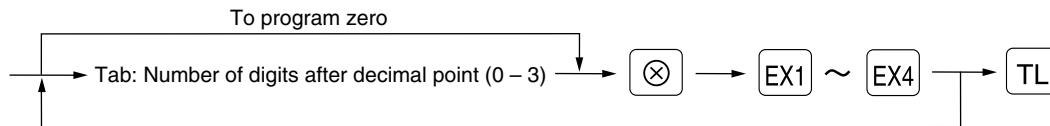
Example

Key operation	Print
2 ⊗ EX1 TL	*PGM2* F062 EXCH1 2 0.000000

8 Programming for the RA and PO keys

■ High amount lockout (HALO) PGM 2

The HALO limit is in effect for the REG mode operations but can be overridden in the MGR mode.
The HALO limit is represented by two figures as follows:

Procedure

To program zero

→ AB → ⊗ → RA or RA2 ┐
                     PO or PO2 ┘ → TL
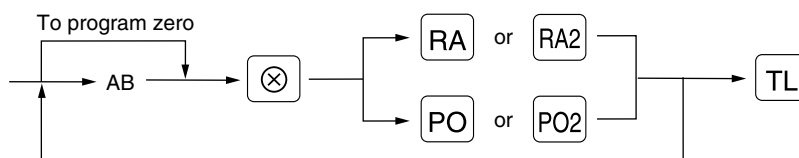
AB is the same as A x 10^B.
A: Significant digit (0 through 9)
B: Number of zeros to follow significant digit (0 through 9)
For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode.
When you preset 19, however, the upper limit amount is 9999999.99.

Example

Key operation	Print
13 ⊗ RA TL	*PGM2* F045 ***RA L13

9 **Programming for the** CH **,** CR **,** CA2 **, and** TL **keys**

■ **High amount lockout (HALO) and functional selection** PGM 2

Procedure
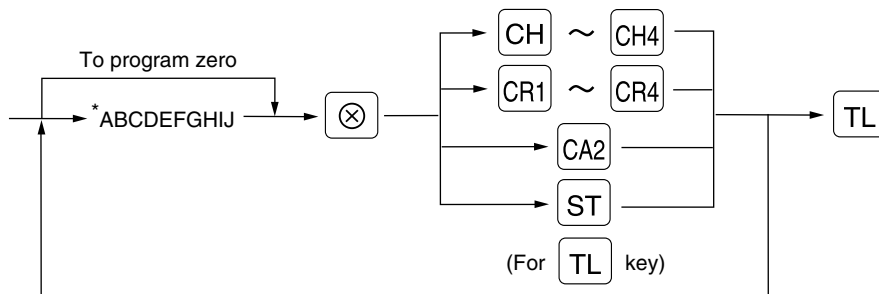
*	Item:	Selection:	Entry:
A	EFT transaction	Select non-compulsory (fixed for the TL and CA2 keys)	0
		Select compulsory	1
B	Slip printing	Select non-compulsory	0
		Select compulsory	1
C	Footer printing on receipt	Select footer printing on selected media No	0
		Select footer printing on selected media Yes	1
D	Non-add code entry	Select non-compulsory	0
		Select compulsory	1
E	Change enable (Over-tender enable)	Select change enable	0
		Select change disable	1
F	Validation printing	Select optional validation	0
		Select compulsory validation	1
G	Drawer opening	Have the drawer open	0
		Have the drawer remain closed	1
H	Compulsory amount tendered	Inhibit amount tendered for CR1 to CR4	0
		Select optional amount tendered for TL, CA2, or CH to CH4	0
		Select compulsory amount tendered	1
I	Significant digit		0 through 9
J	Number of zeros to follow significant digit		0 through 8

Note Item IJ is the same as I x 10 ^{J}. For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

Example

Key operation	Print
0000000115 ⊗ CR3 TL	*PGM2* **F**060 CREDIT3 L15 00000001

10 Programming the tax rate

■ Tax rate PGM 2

Procedure

When the tax rate and lowest taxable amount are zeros.

When the lowest taxable amount is zero.

VAT → *Tax rate no. (1 – 4) → ⊗ → **Sign and tax rate → ⊗ → Lowest taxable amount (max. 5 digits: 0.00 to 999.99) → TL / ST

To delete
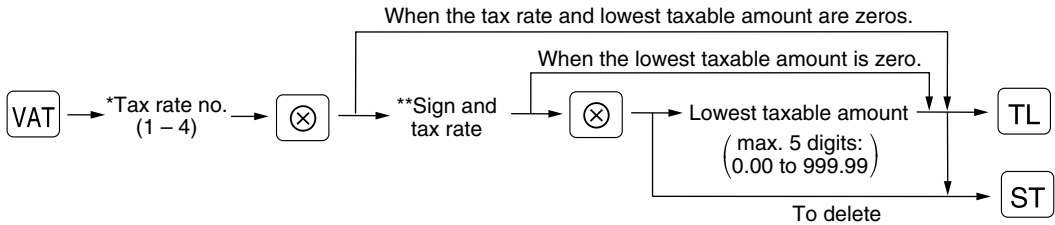
*Tax rate no.: Enter a corresponding tax rate number. For example, when you program a tax rate as tax rate 1, enter "1", and when you program it as tax rate 4, enter "4".

**Sign and tax rate: XYYYY.YYYY

Tax rate = 0.0001 to 100.0000

Sign (+/-) = 0/1

Note
- *The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added tax) system, it is ignored.*
- *If you make an incorrect entry before pressing the second ⊗ key in programming a tax rate, cancel it with the CL key; and if you make an error after pressing the second ⊗ key, cancel it with the ST key. Then program again from the beginning.*
- *If you select VAT system, the sign which you program is ignored.*

Example

Key operation

VAT 2 ⊗
4 ⊗
12 TL

Print

```
        *PGM2*

TAX2          4.0000%
               0.12
```

■ Job-Code-Based Programming

This section illustrates how to program items using job codes. Using job codes allows you to program a wide variety of items in comparison with direct programming.

Start this programming by entering a corresponding job code as shown below.

2110 ⟶ [•] ⟶ [⊗] ⟶
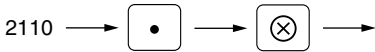
All the items which can be programmed by the job-code-based programming are listed on this page and the following, and those which can also be programmed by the direct programming are marked with the symbol " Direct " that follows job codes.

1 Setting the date and time

■ Setting the date   PGM 2   2610   Direct

Enter day (one or two digits), month (two digits), and year (four digits) in this sequence.

Procedure

2610 ⟶ [•] ⟶ [⊗] ⟶ Date (7 or 8 digits) ⟶ [TL]
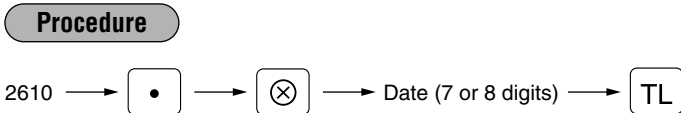
Example

Key operation	Print
2610 [•] [⊗] 26082003 [TL]	26/08/2003 0:00 000000#0001 #2610 *PGM2* 26/08/2003

Date —

■ Setting the time   PGM 2   2611   Direct

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

Procedure

2611 ⟶ [•] ⟶ [⊗] ⟶ Time (max. four digits) ⟶ [TL]

Example   **Key operation**   **Print**

2611 $\cdot$ $\otimes$
1430 TL

```
26/08/2003 14:30
000000#0002


#2611 *PGM2*

            14:30
```
— Time

2 Setting the register and consecutive numbers

■ Setting the register number PGM 2   2612

When your store has two or more registers, it is practical to set separate register numbers for their identification.
You may set them in a maximum of six digits.

Procedure

To set the register number "0"

2612 ⟶ $\cdot$ ⟶ $\otimes$ ⟶ | Register number (one to six digits) | ⟶ TL
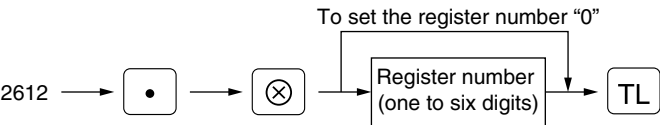
Example   **Key operation**   **Print**

2612 $\cdot$ $\otimes$
123456 TL

```
26/08/2003 14:31
123456#0003


#2612 *PGM2*

           123456
```
— Register number

■ Setting the consecutive number PGM 2   2613

The consecutive number is increased by one each time a receipt is issued.
Enter a number (one to four digits) that is one less than the desired starting number.

Procedure

To begin the count from 0001

2613 ⟶ $\cdot$ ⟶ $\otimes$ ⟶ | A number (one to four digits) that is one less than the desired starting number | ⟶ TL
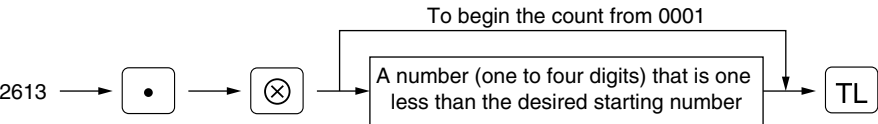
Example	Key operation	Print

2613 ⊡ ⊗
1000 TL

```
26/08/2003 14:32
123456#1000


#2613 *PGM2*

                   1000
```
— Consecutive
number

3 Programming the tax rate

■ **Tax rate** `PGM 2` `2711` `Direct`

Procedure

When the tax rate and lowest taxable amount are zeros.

When the lowest taxable amount is zero

2711 → ⊡ → ⊗ → A*
1 to 4 → ⊗ → **Sign and tax rate → ⊗ → Lowest taxable amount → TL

max. five digits:
0.00 to 999.99

→ ST
To delete
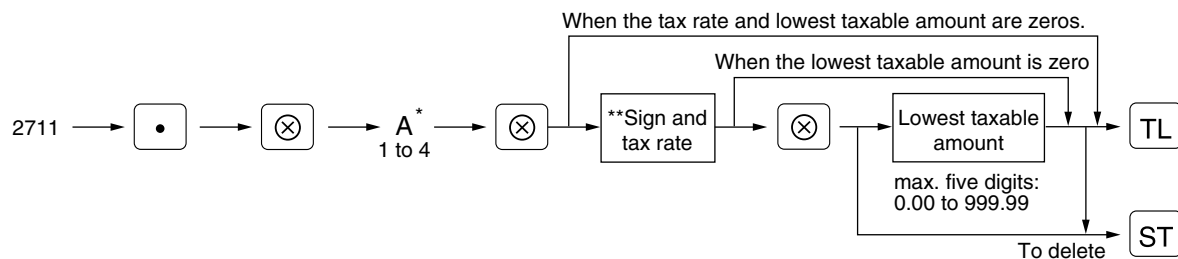
*A: Enter a corresponding tax rate number. For example, when you program a tax rate as tax rate 1, enter 1 and when you program it as tax rate 4, enter 4.
** Sign and tax rate: XYYY.YYYY

└─Tax rate= 0.0001 to 100.0000

└─Sign ⁻/+ = ¹/0

Example	Key operation	Print

2711 ⊡ ⊗
2 ⊗
4 ⊗
12 TL

```
#2711 *PGM2*

TAX2            4.0000%
                 0.12
```
— Tax rate : 4%
— Lowest taxable amount

Tax rate 2

Note
• *The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added system), it is ignored.*
• *If you make an incorrect entry before pressing the third ⊗ key in programming a tax rate, cancel it with the CL key; and if you make an error after pressing the third ⊗ key, cancel it with the ST key. Then program again from the beginning correctly.*
• *If you select VAT system, the sign which you program is ignored.*

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4 Programming for departments

Your machine is equipped with 20 (ER-A410)/6 (ER-A420) standard departments and up to 99 optional departments. Your machine allows you to perform the following programming for each department.

■ Functional programming PGM 2 2110 Direct

You can set each department for:

- **Compulsory item validation printing**
  If item entries must be validated, program corresponding departments for compulsory item validation printing.
- **Registration type (SICS/SIF/Normal type)**
  SICS: If the first registration is to a department set for SICS, the sale is finalized as soon as the department key is pressed. If the sale is preceded by registrations to departments not set for SICS, a sale to a department set for SICS does not finalize and can be repeated until the TL key is pressed.
  SIF: Whenever a sale is made to a department set for SIF, the sale is finalized as soon as the department key is pressed.
- **Type of unit price entry (open and preset/preset only/open only/inhibit department key)**
  You may select one of four types of unit price entry for each department.

Procedure

To program for another dept.

To program zero.

2110 → • → ⊗ → Dept. code (1 - 99) → ⊗ → *ABC → ST → TL

To program for the following dept.

*	Item:	Selection:	Entry:
A	Item validation printing	Non-compulsory	0
		Compulsory	1
B	Registration type	Normal	0
		SICS (Single Item Cash Sale)	1
		SIF (Single Item Finalization)	2
C	Type of unit price entry	Inhibit department key	0
		Open only	1
		Preset only	2
		Open and preset	3

Example

Key operation	Print
2110 · ⊗ 3 ⊗ 003 ST TL	#2110 *PGM2* D03 0.00 DPT.03 G01 003 COL18

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■ **Tax status** PGM 2   **2111**   Direct

Assign a tax status to each department. When entries are made into taxable departments in a transaction, tax is automatically computed according to the associated tax rate as soon as the transaction is completed.

Procedure

To program for another dept.

To program zero.

2111 → • → ⊗ → Dept. code → ⊗ → *ABCD → ST → TL
                    (1 - 99)

To program for the following dept.

*	**Item:**		**Selection:**	**Entry:**
A	VAT4 or TAX4		Assign "non-taxable"	0
			Assign "VAT4 or TAX4"	1
B	VAT3 or TAX3		Assign "non-taxable"	0
			Assign "VAT3 or TAX3"	1
C	VAT2 or TAX2		Assign "non-taxable"	0
			Assign "VAT2 or TAX2"	1
D	VAT1 or TAX1		Assign "non-taxable"	0
			Assign "VAT1 or TAX1"	1

Note
- The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.
- When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (C), TAX3 (B) and TAX4 (A) can be selected in combination with VAT1 (D).
  Example: ABCD = 1001, 0011, 0101

Example

Key operation	Print

Key operation:
2111 • ⊗
4 ⊗ 0110 ST
2 ⊗ 0101 ST
TL

Print:

```
#2111 *PGM2*

D04   T 23        0.00
DPT.04            G01
001               COL18
D02   T1 3        0.00
DPT.02            G01
001               COL18
```

■ A limit amount (HALO) of entry PGM 2 2112 Direct

You can set amounts (HALO: High Amount Lockout) for each department. The limit is effective for the REG mode operations and can be overridden in the MGR mode. HALO limit is represented by two figures as follows:

Procedure

To program for another dept.

To program zero.

$$2112 \longrightarrow \boxed{\cdot} \longrightarrow \boxed{\otimes} \longrightarrow \text{Dept. code} \longrightarrow \boxed{\otimes} \longrightarrow \text{AB} \longrightarrow \boxed{ST} \longrightarrow \boxed{TL}$$
(1 - 99)

To program for the following dept.
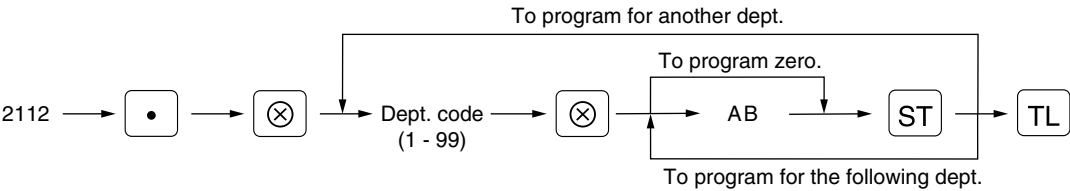
AB is the same as A x 10^B.

    A: Significant digit (0 through 9)
    B: Number of zeros to follow significant digit (0 through 8)

For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

Example

Key operation	Print
2112 $\boxed{\cdot}$ $\boxed{\otimes}$ 1 $\boxed{\otimes}$ 95 $\boxed{ST}$ $\boxed{TL}$	#2112 *PGM2* D01 0.00 DPT. O1 G01 001 COL95

■ Alphanumeric characters PGM 2 2114

You can program a maximum of 16 characters (item label) for each department.
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

Procedure

To program for another dept.

To keep the current setting

$$2114 \longrightarrow \boxed{\cdot} \longrightarrow \boxed{\otimes} \longrightarrow \text{Dept. code} \longrightarrow \boxed{\otimes} \longrightarrow \begin{array}{c} \text{Character keys} \\ \text{(max. 16 digits)} \end{array} \longrightarrow \boxed{ST} \longrightarrow \boxed{TL}$$
(1 - 99)

To program for the following dept.
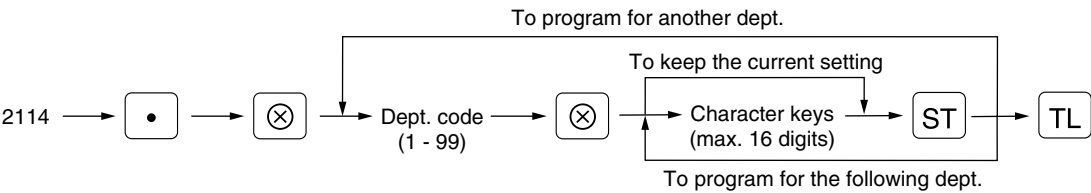
Example

Key operation	Print
2114 $\boxed{\cdot}$ $\boxed{\otimes}$ 1 $\boxed{\otimes}$ FRUITS $\boxed{ST}$ $\boxed{TL}$	#2114 *PGM2* D01 0.00 FRUITS G01 001 COL95

■ Unit price   PGM 1   PGM 2   1110   Direct

You can program unit prices up to a maximum of six digits (9999.99). Even if a department is not programmed to allow the entry of preset unit prices in functional programming (job #2110), the department is automatically changed to allow the entry of preset unit prices by this programming entry.

Procedure

To program for another dept.

To program zero

1110 → • → ⊗ → Dept. code (1 - 99) → ⊗ → Unit price (max. 6 digits) → ST → TL

To program for the following dept.
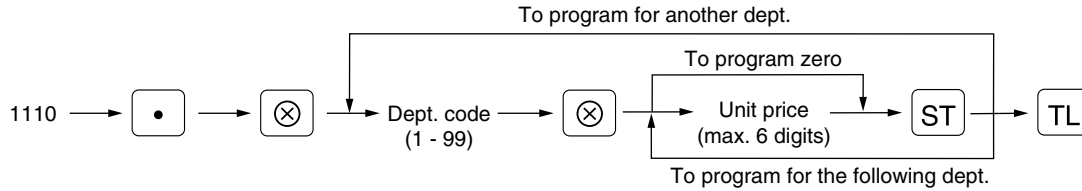
Example

Key operation

1110 • ⊗
1 ⊗
1000 ST
TL

Print

```
#1110 *PGM2*

D01              10.00
FRUITS             G01
003              COL95
```

■ Commission group assignment   PGM 2   2115   Direct

Your machine allows you to assign a commission group (1 – 9) to each department.

Procedure

To program for another dept.

To program zero (for no commission)

2115 → • → ⊗ → Dept. code (1 - 99) → ⊗ → Commission group (1 - 9) → ST → TL

To program for the following dept.
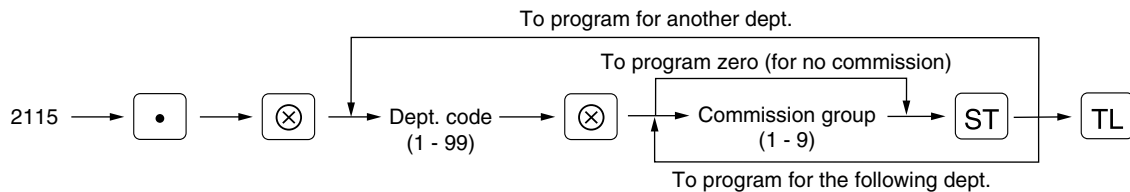
Example

Key operation

2115 • ⊗
1 ⊗ 1 ST
5 ⊗ 2 ST
TL

Print

```
#2115 *PGM2*

D01              10.00
FRUITS             G01
003              C1L95
D05               0.00
DPT.05             G01
001              C2L18
```

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■ Group number PGM 2   2116   Direct

You can assign departments to a maximum of 14 groups (1 through 14).
This programming enables you to take group department sales reports.

Procedure

To program for another dept.

2116 ⟶ • ⟶ ⊗ ⟶ Dept. code ⟶ ⊗ ⟶ *Group no. ⟶ ST ⟶ TL
                        (1 - 99)   (1 - 14)

To program for the following dept.
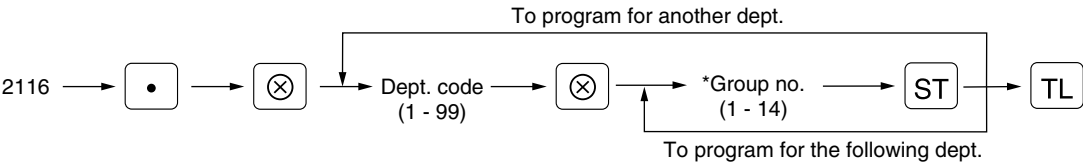
* Group number: Dept. (+)   1 through 9 (groups 1 through 9)
                 Dept. (-)   10
                 Hash (+) dept.   11
                 Hash (-) dept.   12
                 Bottle return (+) dept. 13
                 Bottle return (-) dept. 14

Note   The standard model provides no hash dept./bottle return dept.
          If you need them, please consult your dealer.

Example   **Key operation**   **Print**

                      2116 • ⊗
                      1 ⊗ 1 ST   #2116 *PGM2*
                      2 ST
                      TL   D01   10.00
                                        FRUITS   G01
                                        003   C1L95
                                        D02   T1 3   0.00
                                        DPT.O2   G02
                                        001   COL18

■ Department key positioning PGM 2   2119

You can assign a department number to each key position. Each key position has a corresponding key number.
Departments may be freely selected for the number of department keys and their positions.
To assign the department to a key position, select the key number of the position.
For key number position, refer to section "3 Standard key number layout" in chapter "KEYBOARD".
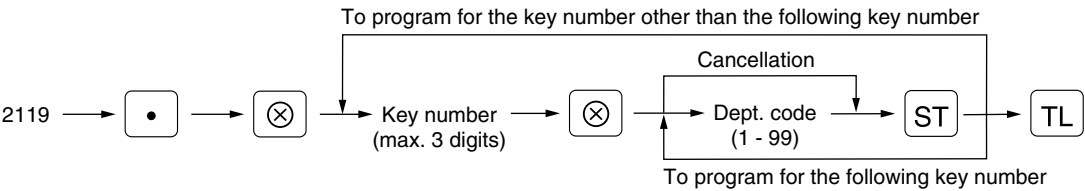
Procedure

To program for the key number other than the following key number

Cancellation

2119 → • → ⊗ → Key number (max. 3 digits) → ⊗ → Dept. code (1 - 99) → ST → TL

To program for the following key number

Note *The key number placement is determined by your local authorized SHARP dealer.*

Example

Key operation

2119 • ⊗
1 ⊗ 1 ST
2 ST
TL

Print

```
#2119 *PGM2*

001  L1      D01          ── Key no.
002  L1      D02          ── Dept. code
```

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5 Price lookup (PLU) programming

Your machine has two kinds of PLU registration methods.
Direct PLU registration: Accomplished by pressing item key (direct PLU key) directly.
Indirect PLU registration: Accomplished by making an entry of PLU code and pressing the [PLU/SUB] key.
Each PLU requires you to program the following:

PLU code (six digits)
Associated department
> When a PLU is associated with a department, the following functions of the PLU depend on the
> programming for the corresponding department.
> • Grouping (Group 1 through14)
> • Single item cash sale/Single item finalization
> • HALO (only for subdepartments)
> • Item validation print compulsory/non-compulsory

Unit price (max. six digits)
> You will usually have unit prices programmed for individual PLUs as PLU unit prices.
> If you program unit price "0" for a PLU, you can enter only the selling quantity into the PLU, i.e. the PLU can
> be used only as a counter.

Base quantity for split-pricing entries – two digits
> Program a base quantity for each PLU/subdepartment dedicated to split-pricing entries.

Type of unit price entry
> • If the PLU mode (preset only) is selected, individual PLU entries can be made by entering the assigned
> code and pressing the [PLU/SUB] key (or by pressing a direct PLU key without any PLU code entry).
> • If the subdepartment mode (open only) is selected, the [AMT] key must be depressed after the price entry
> followed by the PLU code and the [PLU/SUB] entry (, or the unit price must be entered before pressing a direct
> PLU key).
> • If the PLU/subdepartment mode (open and preset) is selected, the entries in both the PLU and
> subdepartment modes are available.
> • If the delete mode is selected, the corresponding program data for each PLU is deleted.
> • If "Inhibit PLU/subdepartment" is selected, the PLU code cannot be entered. This mode does not clear the
> PLU/subdepartment program data.

Sign (+/-)
> The function of every PLU/subdepartment varies according to the combination of its sign and its associate
> department's sign as follows:

Sign		Function of PLU/subdepartment
Dept.	**PLU/subdept.**	
+	+	Serves as a normal plus PLU/subdept.
–	–	Serves as a normal minus PLU/subdept.
+	–	Accepts store coupon entries, but not split-pricing entries.
–	+	Not valid; not accepted.

Tax status
Item label (max. 16 characters)
Commission group (1 to 9)
Set PLU
> You can link a maximum of 5 PLUs to a particular PLU.

Link PLU
> PLU is able to link to any other PLU (e.g. bottle deposit). However, the number of links is a maximum of 5.
> Even if more than 5 PLUs are linked, the six or higher link is not actualized.

PLU level assignment and direct PLU key positioning
Stock quantity

| Note | *For some items, you can program in two ways: programming an individual PLU code and for a range of sequential PLU codes. The procedure marked "For each PLU" shows individual PLU programming. "For a range of PLUs" shows sequential range PLU programming.* |

■ Department assignment PGM 1 PGM 2 1200 2230 Direct

Procedure

For each PLU

To program for another PLU

To program zero.

1200 → [•] → [⊗] → PLU code (1 - 999999) → [⊗] → Associated dept. code (1 - 99) → [ST] → [TL]

To program for the following PLU
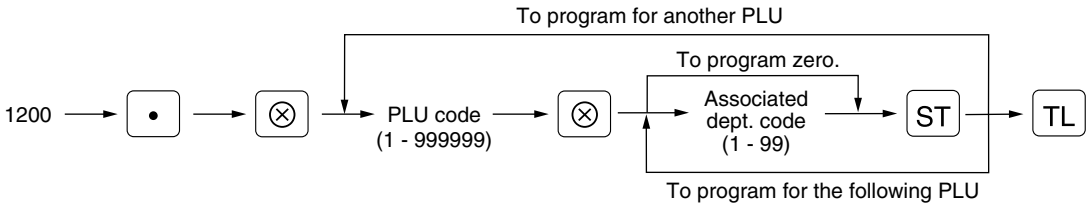
| Note | *As soon as the programming is completed for one PLU, the next PLU code appears in the display.* |

For a range of PLUs

2230 → [•] → [⊗]

To apply the current setting of start PLU code to PLUs within the range

→ Start PLU code (1 - 999999) → [⊗] → End PLU code (1 - 999999) → [⊗] → Associated dept. code (1 - 99) → [ST] → [TL]
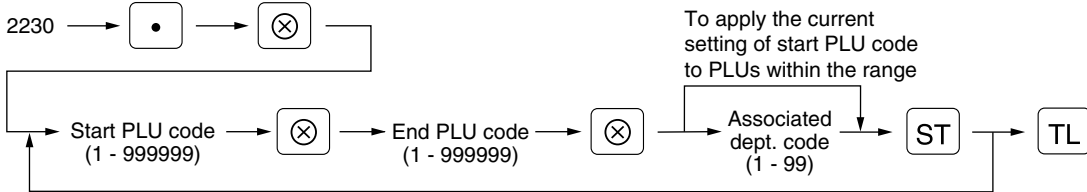
Example

For each PLU

Key operation

1200 [•] [⊗]
1 [⊗] 2 [ST]
2 [ST]
[TL]

Print

```
#1200 *PGM2*

P000001(O2)        /00
                  0.00
                  0.00
PL000001            C0
2              S  0.000
P000002(O2)        /00
                  0.00
                  0.00
PL000002            C0
2              S  0.000
```

For a range of PLUs

Key operation

2230 [•] [⊗]
11 [⊗] 20 [⊗]
3 [ST]
[TL]

Print

```
#2230 *PGM2*

         000011-000020
            (O3)
```

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■ **Unit prices** PGM 1 PGM 2 **1210** Direct

Procedure
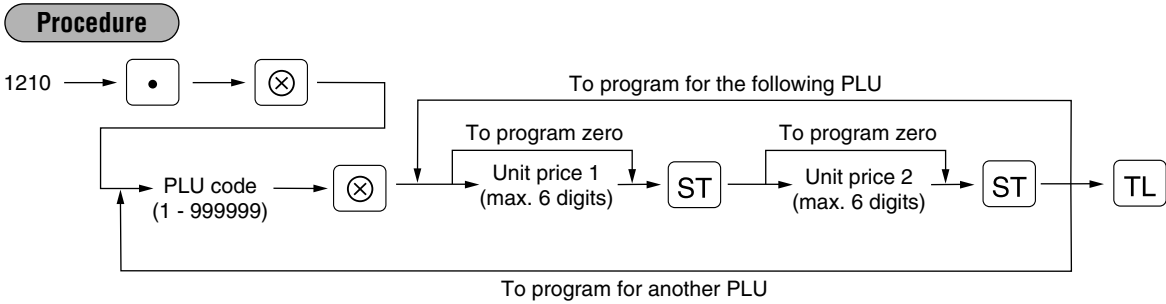
Example

Key operation

1210 · ⊗
1 ⊗ 125 ST
ST
TL

Print

```
#1210 *PGM2*

P000001(02)      /00
                1.25
                0.00
PL000001          C0
2            S  0.000
```

■ **Base quantity** PGM 1 PGM 2 **1211**
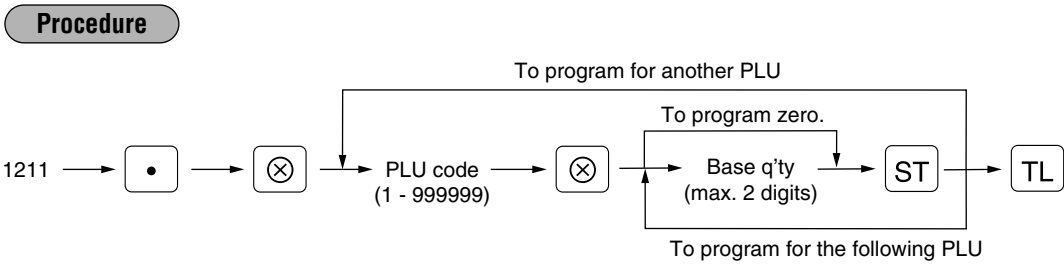
Procedure

Example

Key operation

1211 · ⊗
2 ⊗ 12 ST
TL

Print

```
#1211 *PGM2*

P000002(02)      /12
                0.00
                0.00
PL000002          C0
2            S  0.000
```

■ PLU/subdepartment mode `PGM 2` `2210` `2231` `Direct`

Procedure

For each PLU

To program for another PLU

To program zero.

2210 → `•` → `⊗` → PLU code
(1 - 999999) → `⊗` → *A → `ST` → `TL`

To program for the following PLU

For a range of PLUs

To apply the current
setting of start PLU code
to PLUs within the range

2231 → `•` → `⊗`

Start PLU code
(1 - 999999) → `⊗` → End PLU code
(1 - 999999) → `⊗` → *A → `ST` → `TL`
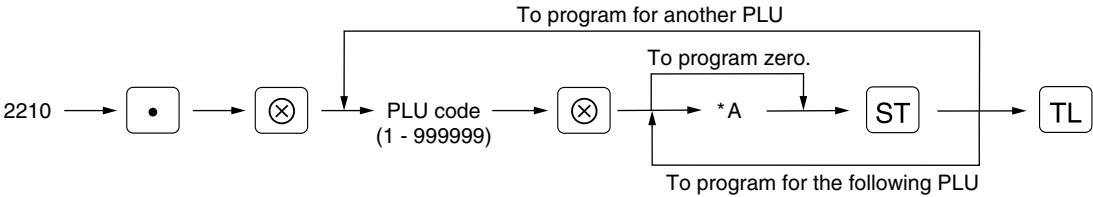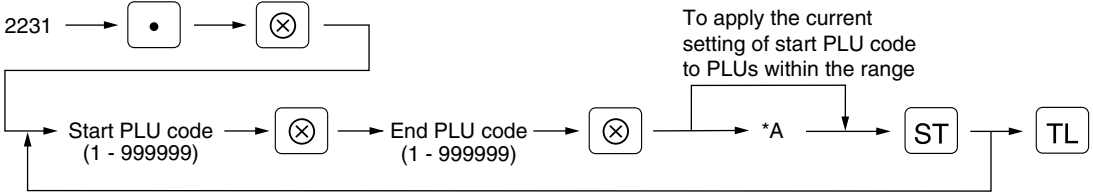
*	Item:	Selection:	Entry:
A	Type of unit price entry	Inhibit PLU/subdepartment	0
		Open only	1
		Preset only	2
		Open and preset	3
		Delete	4

Example

For each PLU

Key operation

2210 `•` `⊗`
1 `⊗` 3 `ST`
`TL`

Print

```
#2210 *PGM2*

P000001(02)      /00
                 1.25
                 0.00
PL000001          C0
3            S  0.000
```

For a range of PLUs

Key operation

2231 `•` `⊗`
11 `⊗` 20 `⊗`
3 `ST`
`TL`

Print

```
#2231 *PGM2*

P000011      -P000020
3
```

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■ Sign (+/-) and tax status `PGM 2` `2211` `2232` `Direct`

Procedure

For each PLU

To program for another PLU

To program zero.

2211 ⟶ [•] ⟶ [⊗] ⟶ PLU code (1 - 999999) ⟶ [⊗] ⟶ *ABCDE ⟶ [ST] ⟶ [TL]

To program for the following PLU

For a range of PLUs

2232 ⟶ [•] ⟶ [⊗]

To apply the current setting of start PLU code to PLUs within the range

⟶ Start PLU code (1 - 999999) ⟶ [⊗] ⟶ End PLU code (1 - 999999) ⟶ [⊗] ⟶ *ABCDE ⟶ [ST] ⟶ [TL]

*	**Item:**		**Selection:**	**Entry:**
A	Sign (+/-)		Set as a plus PLU	0
			Set as a minus PLU	1
B	VAT4 or TAX4		Assign "non-taxable"	0
			Assign "VAT4 or TAX4"	1
C	VAT3 or TAX3		Assign "non-taxable"	0
			Assign "VAT3 or TAX3"	1
D	VAT2 or TAX2		Assign "non-taxable"	0
			Assign "VAT2 or TAX2"	1
E	VAT1 or TAX1		Assign "non-taxable"	0
			Assign "VAT1 or TAX1"	1

Note
- *The tax system of your machine has been factory–set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.*
- *When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (D), TAX3 (C) and TAX4 (B) can be selected in combination with VAT1 (E). Example: BCDE = 1001, 0011, 0101*
- *A PLU not programmed for any of these tax statuses is registered depending on the tax status of the department which the PLU belongs to.*

Example

For each PLU

Key operation		Print
2211 · ⊗		
2 ⊗ 00001 ST		
00000 ST		
TL		

```
#2211 *PGM2*

P000002(02)       /12
 T1              0.00
                 0.00
PL000002           C0
2             S  0.000
P000003(01)       /00
                 0.00
                 0.00
PL000003           C0
2             S  0.000
```

For a range of PLUs

Key operation		Print
2232 · ⊗		
11 ⊗ 20 ⊗		
00001 ST		
TL		

```
#2232 *PGM2*

P000011        -P000020
 T1
```

■ Alphanumeric characters PGM 2 2214

You can program a maximum of 16 characters (item label) for each PLU/subdepartment.
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

Procedure

To program for another PLU

To keep the current setting

2214 → · → ⊗ → PLU code (1 - 999999) → ⊗ → Character keys (max. 16 digits) → ST → TL

To program for the following PLU
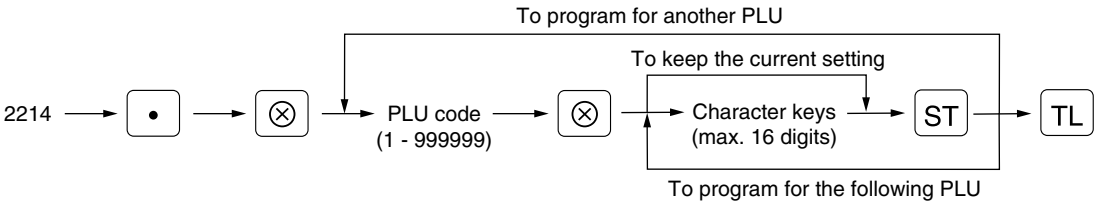
Example

Key operation		Print
2214 · ⊗		
1 ⊗		
MILK ST		
TL		

```
#2214 *PGM2*

P000001(02)       /00
                 1.25
                 0.00
MILK               C0
3             S  0.000
```

■ Assigning of PLUs to commission groups PGM 2   2215   2235   Direct

You can assign PLUs/subdepartments to commission groups.

Procedure

For each PLU

To program for another PLU

To program zero.

2215 → • → ⊗ → PLU code (1 - 999999) → ⊗ → *A → ST → TL

To program for the following PLU

For a range of PLUs

2235 → • → ⊗ →

To apply the current setting of start PLU code to PLUs within the range

→ Start PLU code (1 - 999999) → ⊗ → End PLU code (1 - 999999) → ⊗ → *A → ST → TL
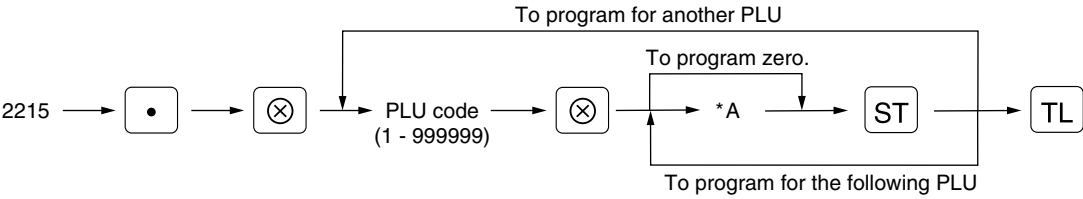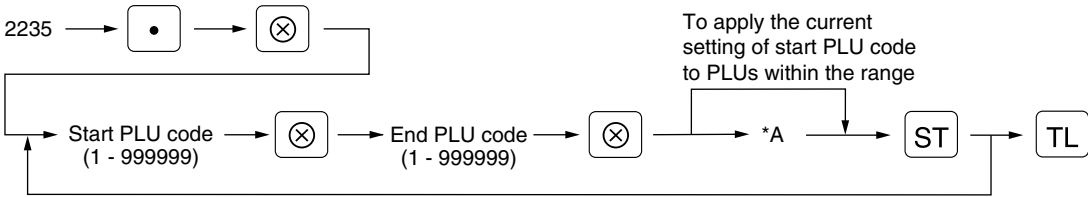
*A: Commission group 0 – 9 (0=no commission)

Example

For each PLU

Key operation	Print

2215 • ⊗
 1 ⊗ 1 ST
 TL
	#2215 *PGM2*
	
	 P000001(02) /00
	                         1.25
	                         0.00
	 MILK C1
	 3 S 0.000

For a range of PLUs

Key operation	Print
2235 • ⊗ 12 ⊗ 14 ⊗ 1 ST TL	#2235 *PGM2* P000012 -P000014 C1

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■ Stock quantity PGM 1   PGM 2   1222   1220   1221

You can assign a stock quantity to each PLU code. When you assign it for the first time, do the following:

Procedure

To program for another PLU

To clear the stock quantity

1222 ⟶ [•] ⟶ [⊗] ⟶ PLU code ⟶ [⊗] ⟶ Stock q'ty ⟶ [ST] ⟶ [TL]
(1 - 999999)   (max. 7 digits)

To program for the following PLU
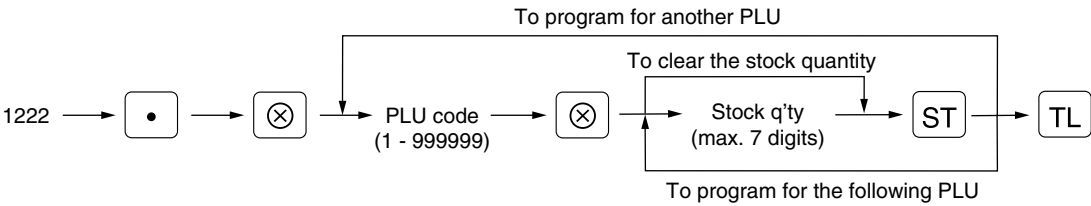
Example

Key operation	Print
1222 [•] [⊗]	#1222 *PGM2*
2 [⊗] 10 [ST]	P000002 0.000
[TL]	10.000
	S 10.000

Note *If you assign another stock quantity to the PLU code which you have assigned a stock quantity to, it will be overridden.*

If you need to add or subtract a stock quantity, do the following:

Procedure

To program for another PLU

Addition: 1220 ⟶ [•] ⟶ [⊗] ⟶ PLU code ⟶ [⊗] ⟶ Stock q'ty ⟶ [ST] ⟶ [TL]
Subtraction: 1221   (1 - 999999)   (max. 7 digits)

To program for the following PLU
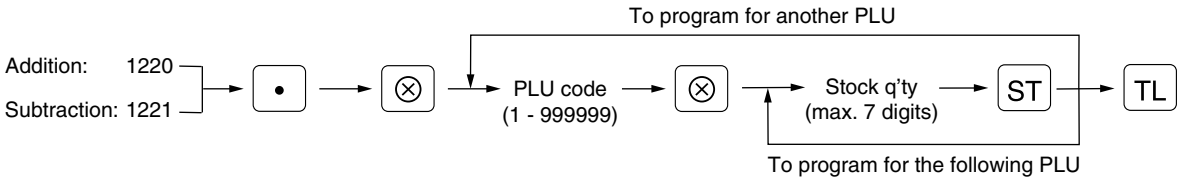
Adding the stock quantity

Example

Key operation	Print
1220 [•] [⊗]	#1220 *PGM2*
2 [⊗] 4 [ST]	P000002 10.000
[TL]	4.000
	S 14.000

Subtracting the stock quantity

Example	Key operation	Print
	1221 · ⊗ 2 ⊗ 1 · 5 ST TL	#1221 *PGM2* P000002 14.000 -1.500 S 12.500

■ Set PLU   PGM 2   2221

Procedure

To program for another set PLU

Cancellation ─────────→ ST

To repeat up to 5 times

2221 ──→ · ──→ ⊗ ──→ PLU code ──→ ⊗ ──→ Tied PLU code ──→ ST ──→ TL
                      (1 - 999999)   (1 - 999999)

                                                                ST

To program for the following PLU
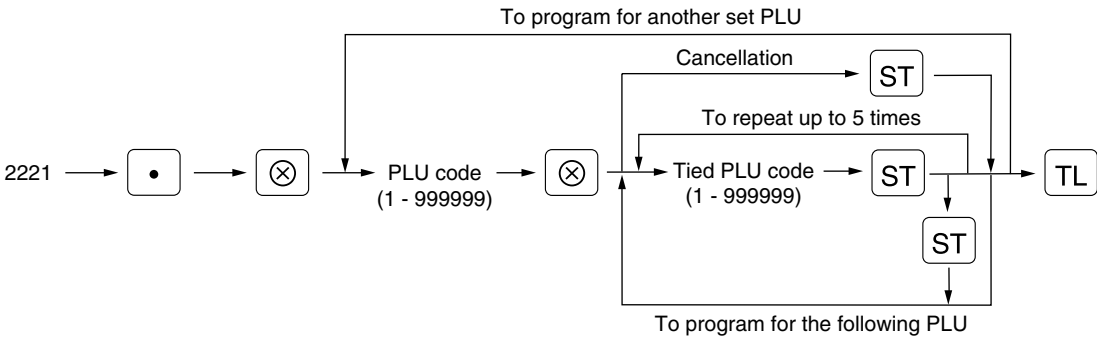
Note — *PLU codes must have already been defined.*
You can program a maximum of 15 set PLUs. A set PLU can be tied to a maximum of 5 PLUs.

Example	Key operation	Print
	2221 · ⊗ 20 ⊗ 201 ST 202 ST TL	#2221 *PGM2* P000020 SP000201 P000202

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■ Link PLU   `PGM 2`   `2220`

Procedure

To program for another PLU

Cancellation

2220 → $\cdot$ → $\otimes$ → PLU code (1 - 999999) → $\otimes$ → Linked PLU code (1 - 999999) → ST → TL

To repeat up to 5 times

ST

ST

To program for the following PLU
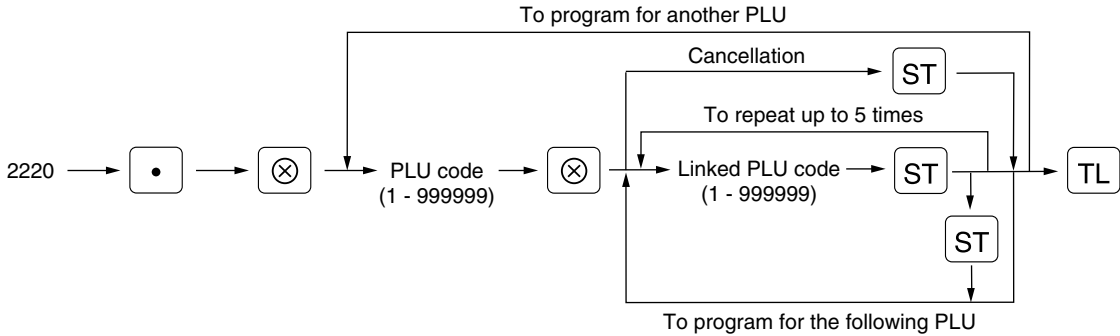
Note   *PLU codes must have already been defined.*
You can program a maximum of 15 link PLUs. A link PLU can be linked to a maximum of 5 PLUs.

Example

Key operation	Print
2220 $\cdot$ $\otimes$ 18 $\otimes$ 25 ST 26 ST 27 ST TL	#2220 *PGM2* P000018 LP000025 P000026 P000027

■ Mix-and-match table   `PGM 2`   `2250`   `2251`   `2254`

The mix-and-match table consists of the discount amount, and the trip level for discount (satisfying count of entered items) and the table text. You can program a maximum of 10 mix-and-match tables. One table can be assigned maximum 5 kind of items.

Programming of trip level and discount amount

Procedure

To program for another table

Cancellation

2250 → $\cdot$ → $\otimes$ → Table no. (1 - 10) → $\otimes$ → *ABCDEFGH → ST → TL
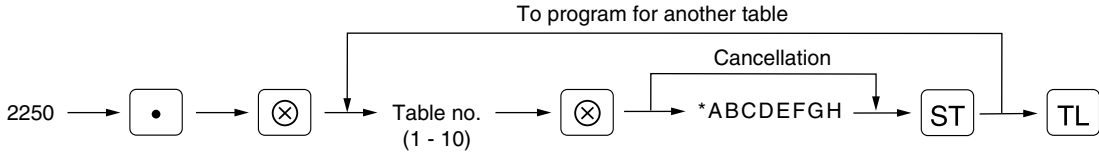
* AB: Trip level for discount (1 – 99)
  CDEFGH: Discount amount (max. 6 digits)

Example

Key operation	Print

2250 $\cdot$ $\otimes$
1 $\otimes$ 3000100 ST
TL
	#2250 *PGM2*
	
	#01
	              -1.00/03
	                   ---- 	

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Assigning items to the mix-and-match table

Procedure

To program for another table

Cancellation → ST

To repeat up to 5 times

2251 → • → ⊗ → Table no. (1 - 10) → ⊗ → PLU code (1 - 999999) → ST → ST → TL

To program for the following table
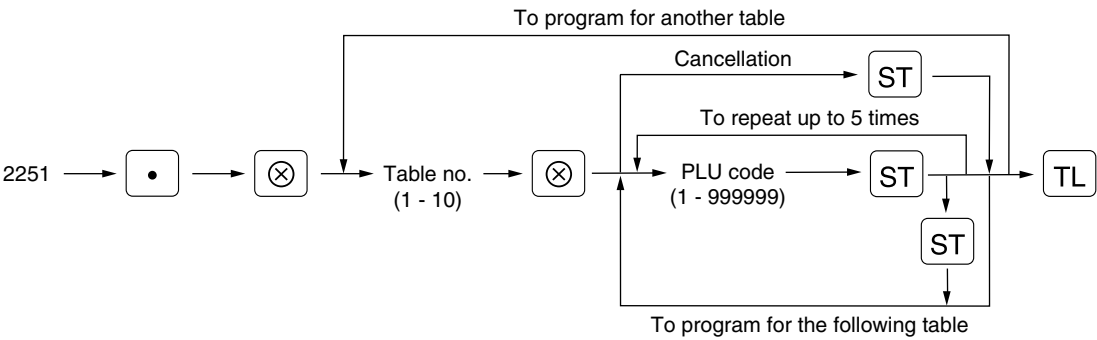
Example

Key operation	Print
2251 • ⊗	#2251 *PGM2*
1 ⊗ 10 ST	#01
11 ST	-1.00/03
TL	P000010
	P000011

Programming of table text

Procedure

To program for another table

To keep the current setting

2254 → • → ⊗ → Table no. (1 - 10) → ⊗ → Character keys (max. 12 digits) → ST → TL

To program for the following table
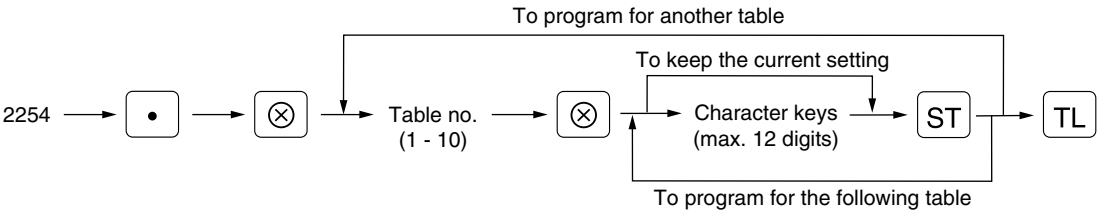
Example

Key operation	Print
2254 • ⊗	#2254 *PGM2*
1 ⊗	#01
DISC1 ST	DISC1 -1.00/03
TL	

■ **Programming of PLU levels and direct PLU keys** PGM 2   2219

You can assign PLU codes to fixed keys in each PLU level and use those keys as direct PLU key.
For assigning a PLU level, press the ⌊L1⌋, ⌊L2⌋ or ⌊L3⌋ key. For example, if you want to assign PLU level 1 and key no. 1 to a PLU code, press the ⌊L1⌋ key and enter 1 before entering the PLU code. For key no. position, refer to section "3 Standard key number layout" in chapter "KEYBOARD".
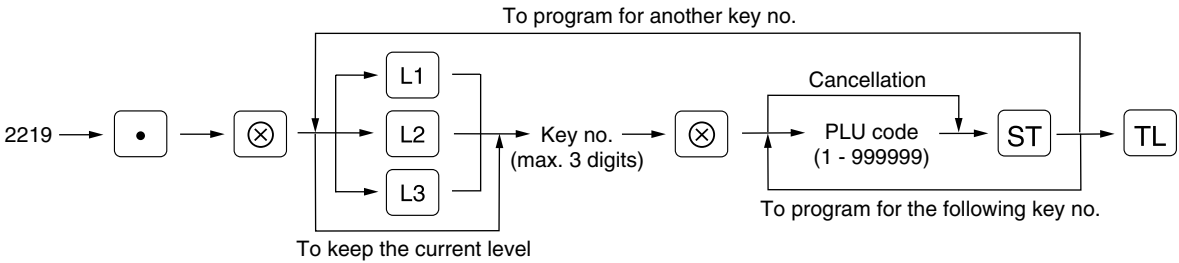
Procedure

To program for another key no.

```
2219 ──→ [ • ] ──→ [ ⊗ ] ──┬──→ [ L1 ]
                          │    [ L2 ] ──→ Key no. ──→ [ ⊗ ] ──→ PLU code ──→ [ ST ] ──→ [ TL ]
                          │    [ L3 ]         (max. 3 digits)          (1 - 999999)
                          To keep the current level
```

Cancellation

To program for the following key no.

Note *The key number placement is determined by your local Authorized SHARP Dealer.*

Example Programming so that PLU code 1 (level 1) and 65 (level 2) are assigned to key no. 21

Key operation

2219 [•] [⊗]
[L1] 21 [⊗]
1 [ST]
[L2] 21 [⊗]
65 [ST]
[TL]

Print

```
#2219 *PGM2*

021   L1      P000001
021   L2      P000065
```

Key no.
PLU code

6 Programming for miscellaneous keys

Only function keys which you have programmed on the keyboard will allow the programming.

■ **Programming the rate ($\%$, EX, commission) and the deduction ($\ominus$)** PGM 1
PGM 2   1310   Direct

You can program percent rates, currency exchange rates, deduction amounts and commission rates.

Procedure

To program zero
*1   *2
1310 → $\cdot$ → $\otimes$ → Function no. → $\otimes$ → Rate or amount → ST → TL
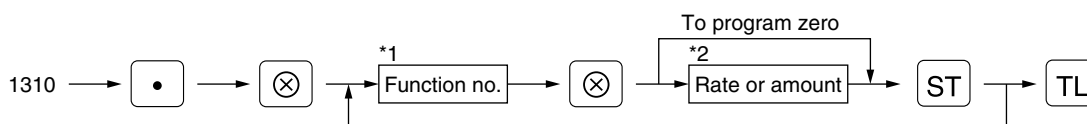
*1: Function no.
  1: For the $\ominus$ key   8: For the $\%4$ key   96: For the commission sale 4
  2: For the $\ominus2$ key   62: For the $EX1$ key   97: For the commission sale 5
  3: For the $\ominus3$ key   63: For the $EX2$ key   98: For the commission sale 6
  4: For the $\ominus4$ key   64: For the $EX3$ key   99: For the commission sale 7
  5: For the $\%$ key   93: For the commission sale 1   100: For the commission sale 8
  6: For the $\%2$ key   94: For the commission sale 2   101: For the commission sale 9
  7: For the $\%3$ key   95: For the commission sale 3

*2: Rate or amount
    0 — 999999 (Deduction amount)
    0.00 — 100.00 (% rate)
    0.000000 — 999.999999 (Currency exchange rate)
    0.00 — 999.99 (Commission rate)

Note
• When you introduce EURO, set the EURO conversion rate on the $EX1$ key for the period 1 and the period 2.
• You must use a decimal point when setting percentage rates that are fractional.

Example

Key operation

```
1310 · ⊗
1 ⊗ 1000 ST
5 ⊗ 10 · 25 ST
62 ⊗ 0 · 6068 ST
TL
```

Print

```
#1310 *PGM2*

F001 (-) 1
S            -10.00      — Deduction amount
                L18
F005 %1
S            -10.25%     — Percent rate
             L100.00%
F062 EXCH1
       2      0.606800   — Currency exchange rate
```

■ Programming the tab of foreign currency (EX) PGM 2 2330 Direct

Note *When you introduce EURO on your register, this setting for the EX1 is automatically programmed by execution of Job #800 in the X2/Z2 mode.*

Procedure

To program zero

2330 → • → ⊗ → *Function no. → ⊗ → Number of digits after decimal point (0-3) → ST → TL
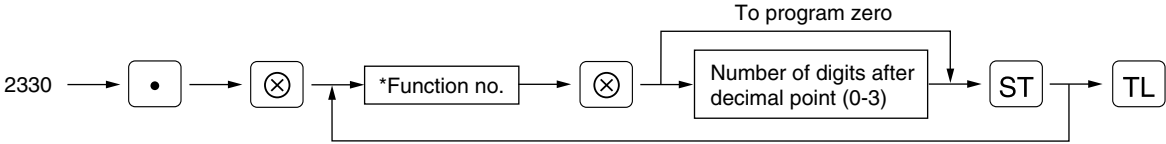
*: Function no.

62: For the EX1 key   64: For the EX3 key
63: For the EX2 key   65: For the EX4 key

Example   **Key operation**   **Print**

2330 • ⊗
62 ⊗
2 ST
TL

#2330 *PGM2*

F062 EXCH1
2   0.606800

Number of digits
after decimal point

■ Currency description text programming (EX) PGM 2 2334

You can program a maximum of 4 characters for each of the EX1 through EX4 keys.

Procedure
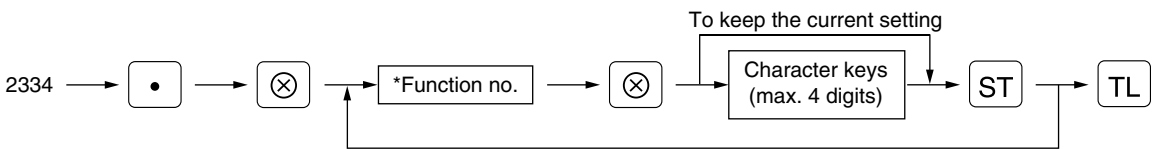
To keep the current setting

2334 → • → ⊗ → *Function no. → ⊗ → Character keys (max. 4 digits) → ST → TL

*: Function no.

62: For the EX1 key   64: For the EX3 key
63: For the EX2 key   65: For the EX4 key

Example   **Key operation**   **Print**

2334 • ⊗
62 ⊗
SPACE SPACE SPACE ✱ ST
TL

#2334 *PGM2*

F062 EXCH1   ✱
2   0.606800

Currency
description text

53

■ Assigning the drawer number to the drawer for foreign currency PGM 2 2680

You can assign a number of the drawer which opens when one of the following operations is performed.
• One of EX1 through EX4 is pressed without any entry.
• A transaction is completed with a payment entry of foreign currency.
• An X/Z report is issued.

Procedure

To program zero

2680 ⟶ [•] ⟶ [⊗] ⟶ [*Drawer no.] ⟶ [TL]
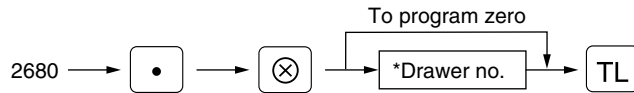
*Drawer no.:
 0: Inhibit (No drawer opens.)
 1: Drawer no. 1
 2: Drawer no. 2

Example   **Key operation**   **Print**

2680 [•] [⊗]
2 [TL]

```
#2680 *PGM2*

                  2
```

Note To perform this programming, an optional drawer must be connected with your register.

■ A limit amount (HALO) of entry (⊖, DEPO(+), DEPO(-), RA, PO) PGM 2 2312 Direct

The HALO limit is in effect for the REG-mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

Procedure

To program zero
*1   *2

2312 ⟶ [•] ⟶ [⊗] ⟶ [Function no.] ⟶ [⊗] ⟶ [AB] ⟶ [ST] ⟶ [TL]

*1: Function no.
   1: For the ⊖ key   45: For the RA key   50: For the DEPO(+) key
   2: For the ⊖2 key   46: For the RA2 key   51: For the DEPO(-) key
   3: For the ⊖3 key   47: For the PO key
   4: For the ⊖4 key   48: For the PO2 key

*2: AB is the same as A x 10^B.
   A: Significant digit (0 through 9)
   B: Number of zeros to follow significant digit (0 through 8)

For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

Example   **Key operation**   **Print**

2312 $\boxed{\cdot}$ $\boxed{\otimes}$
1 $\boxed{\otimes}$ 13 $\boxed{\text{ST}}$
$\boxed{\text{TL}}$

```
#2312 *PGM2*

F001 (-) 1
S              -10.00
                 L13  ———— HALO limit
```

■ +/- sign ($\boxed{\%}$, $\boxed{\ominus}$) PGM 2   2311   Direct

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

Procedure

To program zero

2311 → $\boxed{\cdot}$ → $\boxed{\otimes}$ → *1 $\boxed{\text{Function no.}}$ → $\boxed{\otimes}$ → *2 $\boxed{\text{A}}$ → $\boxed{\text{ST}}$ → $\boxed{\text{TL}}$
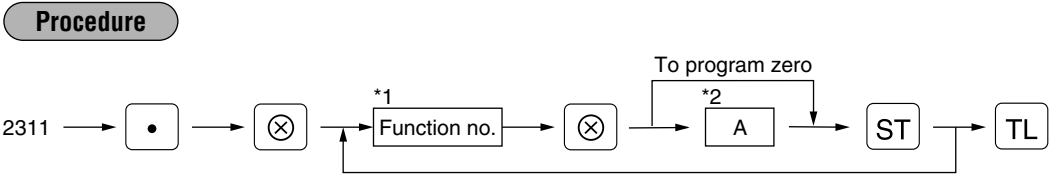
*1: Function no.
    1: For the $\boxed{\ominus}$ key   5: For the $\boxed{\%}$ key
    2: For the $\boxed{\ominus2}$ key   6: For the $\boxed{\%2}$ key
    3: For the $\boxed{\ominus3}$ key   7: For the $\boxed{\%3}$ key
    4: For the $\boxed{\ominus4}$ key   8: For the $\boxed{\%4}$ key

*2:

Item:		Selection:	Entry:
A	+/- sign	+ (premium) sign	0
		- (discount) sign	1

Example   **Key operation**   **Print**

2311 $\boxed{\cdot}$ $\boxed{\otimes}$
5 $\boxed{\otimes}$ 0 $\boxed{\text{ST}}$
6 $\boxed{\otimes}$ 1 $\boxed{\text{ST}}$
$\boxed{\text{TL}}$

```
#2311 *PGM2*

F005 %1
S              10.25%
              L100.00%

F006 %2
S              -0.00%   ———— "-": Discount
              L100.00%
```

55

■ Item % or subtotal % selection (%) `PGM 2` `2315` `Direct`

Item %

Select this when a percent calculation is desired for the individual department and PLU.

Subtotal %

Select this when a percent calculation is desired for subtotals.

Procedure
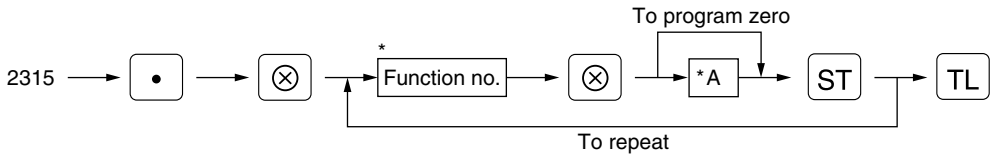
*: Function no.

    5: For the % key
    6: For the %2 key
    7: For the %3 key
    8: For the %4 key

*A:

    0: Subtotal %
    1: Item %

Example

Key operation

```
2315 · ⊗
5 ⊗ 1 ST
6 ⊗ 0 ST
        TL
```

Print

```
#2315 *PGM2*

F005 %1
 I               10.25%
              L100.00%           Item %

F006 %2
 S              -0.00%
              L100.00%           Subtotal %
```

■ Percent rate limitation (%) `PGM 2` `2313`

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

(Percent entries that exceed the upper limit may be overridden in the MGR mode.)

Procedure
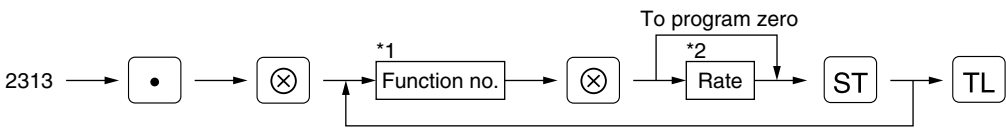
*1: Function no.

    5: For the % key
    6: For the %2 key
    7: For the %3 key
    8: For the %4 key

*2: Rate

    0.00 – 100.00 (Entering 0.00 inhibits the
                   open percent rate entry.)

Note 10.00% can be entered as 1 0 or 1 0 · 0 0. The · key is needed only for fractional entry.

Example	Key operation	Print

Key operation

2313 ⟐ ⊗
5 ⊗ 15 ⟐ 00 ST
TL

Print

```
#2313 *PGM2*

F005 %1
 I              10.25%
             L 15.00%  ——— Percentage limit
```

■ Item ⊖ or subtotal ⊖ selection (⊖) PGM 2 2316 Direct

Item ⊖

Select this when a deduction calculation is desired for the individual department and PLU.

Subtotal ⊖

Select this when a deduction calculation is desired for subtotals.

Procedure

To program zero

2316 ⟶ • ⟶ ⊗ ⟶ *Function no. ⟶ ⊗ ⟶ *A ⟶ ST ⟶ TL

*: Function no.   *A:
   1: For the ⊖ key   0: Subtotal ⊖
   2: For the ⊖2 key   1: Item ⊖
   3: For the ⊖3 key
   4: For the ⊖4 key

Example	Key operation	Print

Key operation

2316 ⟐ ⊗
1 ⊗ 1 ST
2 ⊗ 0 ST
TL

Print

```
#2316 *PGM2*

F001 (−) 1
 I           -10.00
               L13      ——— Item⊖

F002 (−) 2
 S            -0.00
               L18      ——— Subtotal⊖
```

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7 Programming for the TL, CA2, CH through CH4, and CR1 through CR4 keys

■ Functional programming PGM 2   2320   Direct

You can set each media for:

EFT transaction
Slip printing
> If media entries must be printed on the slip printer, set the corresponding media for compulsory slip printing.

Footer printing
> This programming decides whether or not your machine should print a message at the foot of a receipt when a specified media key is used.

Non-add code compulsory
> You can enforce the non-add code entry when a media entry is made.

Change enable (over-tender)
> Either change enable or disable can be selected for a corresponding media key.

Compulsory validation print
> If media entries must be validated, set the corresponding media for compulsory validation print.

Drawer open
> You can program each media key to or not to open the drawer.

Amount tendered compulsory
> You may select amount tendered compulsory or optional for the TL, CA2 and CH through CH4 keys.
> You may select amount tendered compulsory or inhibited for the CR1 through CR4 keys.

Procedure

To program zero.

2320 → • → ⊗ → *1 Function no. → ⊗ → *2 ABCDEFGH → ST → TL

*1: Function no.

52: For the TL key	56: For the CH3 key	60: For the CR3 key
53: For the CA2 key	57: For the CH4 key	61: For the CR4 key
54: For the CH key	58: For the CR1 key	
55: For the CH2 key	59: For the CR2 key	

*2

Item:		Selection:	Entry:
A	EFT transaction	select compulsory	1
		select non-compulsory	0
B	Slip printing	select compulsory	1
		select non-compulsory	0
C	Footer printing	select footer printing on selected media Yes	1
		select footer printing on selected media No	0
D	Non-add code compulsory	select compulsory non-add code entry	1
		select optional non-add code entry	0
E	Change enable (over-tender enable)	select change disable	1
		select change enable	0
F	Validation print compulsory	select compulsory validation	1
		select optional validation	0
G	Drawer open	have the drawer remain closed	1
		have the drawer open	0
H	Compulsory amount tendered	select compulsory amount tendered	1
		select optional amount tendered for the TL, CA2 or CH to CH4 keys	0
		Inhibit amount tendered for CR1 to CR4 keys	0

Example

Key operation

2320 `·` `⊗`
60 `⊗` 00000001 `ST`
`TL`

Print

```
#2320 *PGM2*

F060 CREDIT3      L18
            00000001
```

■ High amount lockout (HALO) for cheque cashing, cheque change and cash in drawer PGM 2 2321

You can program the upper limit amounts for cheque cashing, cheque change and cash in drawer.

Procedure

To program zero.

2321 ⟶ • ⟶ ⊗ ⟶ *1 Function no. ⟶ ⊗ ⟶ *2 Limit amount ⟶ ST ⟶ TL
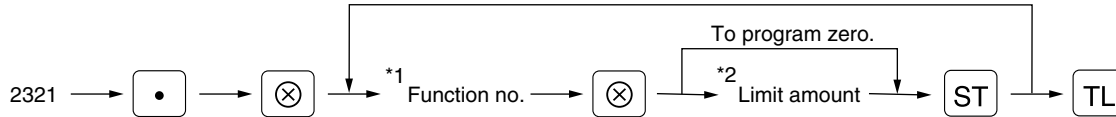
*1: Function no.
49: For cheque cashing
77: For cheque change
74: For cash in drawer (sentinel)

*2: Limit amount
0 through 999999.99
0 through 999999.99
0 through 9999999.99

Example

Key operation

2321 • ⊗
49 ⊗ 9999 ST
TL

Print

#2321 *PGM2*

F049 CA/CHK
                    99.99

■ High amount lockout (HALO) of entry for media keys PGM 2 2322 Direct

The HALO limit is in effect for REG-mode operations but can be overridden in the MGR mode.
The HALO limit is represented by two figures as follows:

Procedure

To program zero.

2322 ⟶ • ⟶ ⊗ ⟶ *1 Function no. ⟶ ⊗ ⟶ *2 AB ⟶ ST ⟶ TL
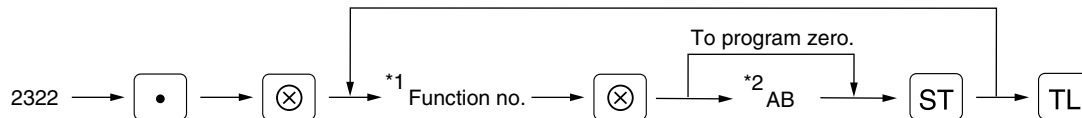
*1: Function no.
52: For the TL key
53: For the CA2 key
54: For the CH key
55: For the CH2 key

56: For the CH3 key
57: For the CH4 key
58: For the CR1 key
59: For the CR2 key

60: For the CR3 key
61: For the CR4 key

*2: AB is the same as A x 10^B.   A: Significant digit (0 through 9)
B: Number of zeros to follow significant digit (0 through 8)

When you program 18, however, the upper limit amount is 999999.99.

Example

Key operation	Print
2322 · ⊗ 60 ⊗ 15 ST TL	#2322 *PGM2* F060 CREDIT3 L15 00000001

8 Programming of function text

■ Programming PGM 2   2314

You can program a maximum of 12 characters for each function key and other functions using the list on the following pages. Select the characters you want to program referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

Procedure

To keep the current setting

2314 → · → ⊗ → * Function no. → ⊗ → Character keys → ST → TL
              (max. 3 digits)   (max. 12 digits)
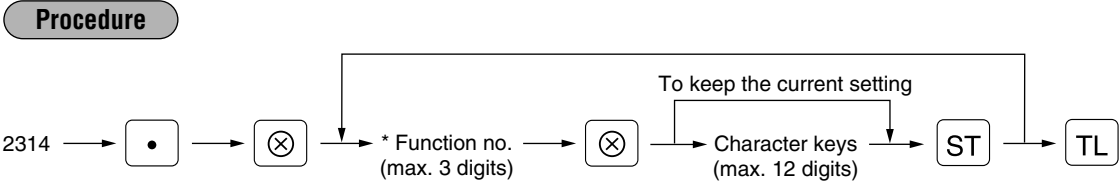
* Function no.: See "List of function texts" on the following pages.

Example

Key operation	Print
2314 · ⊗ 56 ⊗ CHECK3 ST TL	#2314 *PGM2* F056 CHECK3 L18 00000000

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■ List of function texts

Function no.	Key or function	In default of proramming	Function no.	Key or function	In default of proramming
1	⊖1	(–) 1	48	PO2	✱✱✱PO2
2	⊖2	(–) 2	49	Cheque cashing	CA/CHK
3	⊖3	(–) 3	50	Deposit (+)	DEPOSIT
4	⊖4	(–) 4	51	Deposit (–)	DEPO.(–)
5	%1	% 1	52	Cash	**C** ASH
6	%2	% 2	53	Cash 2	**C** ASH2
7	%3	% 3	54	Cheque 1	CHECK1
8	%4	% 4	55	Cheque 2	CHECK2
9	Net 1	N E T 1	56	Cheque 3	CHECK3
10	Differ	DIFFER	57	Cheque 4	CHECK4
11	Taxable 1 subtotal	TAX1 ST	58	Credit 1	CREDIT1
12	Taxable 2 subtotal	TAX2 ST	59	Credit 2	CREDIT2
13	Taxable 3 subtotal	TAX3 ST	60	Credit 3	CREDIT3
14	Taxable 4 subtotal	TAX4 ST	61	Credit 4	CREDIT4
15	VAT/tax 1	VAT 1	62	Exchange 1	EXCH1
16	VAT/tax 2	VAT 2	63	Exchange 2	EXCH2
17	VAT/tax 3	VAT 3	64	Exchange 3	EXCH3
18	VAT/tax 4	VAT 4	65	Exchange 4	EXCH4
19	Total tax	TTL TAX	66	Exchange 1 cheque	EX1 CHK
20	Net without tax	N E T	67	Exchange 1 credit	EX1 CR
21	VAT shift	VAT SFT	68	Domestic currency 1	DOM.CUR1
22	VAT/tax delete	TAX DELE	69	Domestic currency 2	DOM.CUR2
23	Net 2	N E T 2	70	Domestic currency 3	DOM.CUR3
24	Set PLU discount	SETPLU–	71	Domestic currency 4	DOM.CUR4
25	Promotion discount	DISCOUNT	72	Domestic currency for EX1 chque	DOM.CUR1
26	Coupon-like PLU	CP PLU	73	Domestic currency for EX1 credit	DOM.CUR1
27	Refund	REFUND	74	Cash in drawer	✱✱✱✱CID
28	Void	∽	75	Cheque in drawer	✱CH ID
29	Void mode total	∽ MODE	76	Cash/cheque in drawer	CA/CH ID
30	MGR void	MGR ∽	77	Change for cheque	CHK/CG
31	Subtotal void	SBTL ∽	78	Group 1 for department	**G** ROUP01
32	Hash void	HASH ∽	79	Group 2 for department	**G** ROUP02
33	Hash refund	HASH RF	80	Group 3 for department	**G** ROUP03
34	VP counter	VP CNT	81	Group 4 for department	**G** ROUP04
35	Bill counter	BILL CNT	82	Group 5 for department	**G** ROUP05
36	No sale	NO SALE	83	Group 6 for department	**G** ROUP06
37	PBAL	✱✱✱PBAL	84	Group 7 for department	**G** ROUP07
38	NBAL	✱✱✱NBAL	85	Group 8 for department	**G** ROUP08
39	Guest check copy counter	G.C.COPY CNT	86	Group 9 for department	**G** ROUP09
40	Customer (transaction count)	GUEST	87	(+) Dept total	✱DEPT TL
41	Order total	ORDER TL	88	(–) Dept total	DEPT(–)
42	Paid total	PAID TL	89	Hash (+) total	✱HASH TL
43	Average	AVE.	90	Hash (–) total	HASH(–)
44	Order total – Paid total	O – P	91	Bottle return (+) total	✱BTTL TL
45	RA	✱✱✱RA	92	Bottle return (–) total	BTTL(–)
46	RA2	✱✱✱RA2	93	Commission sale 1	COM.SAL1
47	PO	✱✱✱PO	94	Commission sale 2	COM.SAL2

Function no.	Key or function	In default of proramming	Function no.	Key or function	In default of proramming
95	Commission sale 3	COM.SAL3	128	PLU zero sales report title	ZERO SALES
96	Commission sale 4	COM.SAL4	129	Price category report title	CATEGORY
97	Commission sale 5	COM.SAL5	130	Transaction report title	**T R A N S.**
98	Commission sale 6	COM.SAL6	131	Total in drawer report title	**T L – I D**
99	Commission sale 7	COM.SAL7	132	Commission sales report title	SALES
100	Commission sale 8	COM.SAL8	133	CCD report title	**C C D**
101	Commission sale 9	COM.SAL9	134	Clerk report title	**C L E R K**
102	Non commission sale	NON COM.	135	Cashier report title	CASHIER
103	Commission amount 1	COM.AMT1	136	Hourly report title	**H O U R L Y**
104	Commission amount 2	COM.AMT2	137	Daily net report title	**D A I L Y**
105	Commission amount 3	COM.AMT3	138	Balance report title	BALANCE
106	Commission amount 4	COM.AMT4	139	PBLU report title	**P B L U**
107	Commission amount 5	COM.AMT5	140	PBLU code text	PBLU#
108	Commission amount 6	COM.AMT6	141	Non-add code text	#
109	Commission amount 7	COM.AMT7	142	English check print	CHECK PR
110	Commission amount 8	COM.AMT8	143	PLU subtotal	PLU ST
111	Commission amount 9	COM.AMT9	144	Sales q'ty	ITEMS
112	Commission amount total	COM.TTL	145	Merchandise subtotal	MDSE ST
113	Cash/cheque is	CA/CH IS	146	Net 1 (Taxable 1 - VAT/tax 1)	NET 1
114	Exchange 1 is	EXCH1 IS	147	Net 2 (Taxable 2 - VAT/tax 2)	NET 2
115	Exchange 2 is	EXCH2 IS	148	Net 3 (Taxable 3 - VAT/tax 3)	NET 3
116	Exchange 3 is	EXCH3 IS	149	Net 4 (Taxable 4 - VAT/tax 4)	NET 4
117	CCD differ	CCD DIF.	150	Difference subtotal	DIFF ST
118	CCD differ total	DIF. TL	151	Due	DUE
119	Total	✱✱✱TOTAL	152	Change	CHANGE
120	Subtotal	SUBTOTAL	153	Copy receipt title	**C O P Y**
121	Old balance	OLD BAL.	154	Guest check copy title	G.C COPY
122	New balance	BALANCE	155	Guest check receipt title	**B I L L**
123	Department report title	**D E P T**	156	Slip print journal message	SLIP PR.
124	Group report title	**G R O U P**	157	Slip next page	NEXT P.
125	PLU report title	**P L U**	158	Town name 1	TOWNNAMETOWN
126	Set PLU report title	SET PLU	159	Town name 2 (4 characters)	NAME
127	PLU stock report title	STOCK	160	Exchange 1 change (display)	EX1 CHG

9 Cashier and clerk programming

■ Cashier code PGM 1 PGM 2 1500

You can assign a cashier code to each cashier.

Procedure

To program zero

1500 → • → ⊗ → Cashier no. (1 - 20) → ⊗ → * Cashier code (1 - 9999) → ST → TL
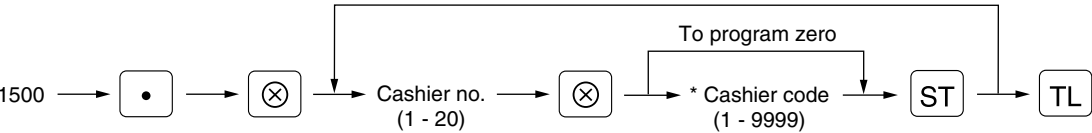
* Programming cashier code "0" inhibits entries of the cashier code.

Example

Key operation

1500 • ⊗
1 ⊗ 1111 ST
4 ⊗ 1014 ST
TL

Print

```
#1500 *PGM2*

01CSR# CASHIER01    1111
0001-9999          000D1
04CSR# CASHIER04    1014
0001-9999          000D1
```

■ Cashier name PGM 1 PGM 2 1514

You can program a maximum of 12 characters (cashier name) for each cashier. Select the characters you want to program referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

Procedure

To keep the current setting

1514 → • → ⊗ → Cashier code (1 - 9999) → ⊗ → Character keys (max. 12 digits) → ST → TL
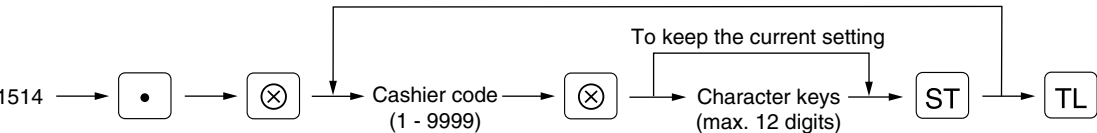
A cashier code you have programmed for the cashier by job code #1500.

Example

Key operation

1514 • ⊗
1111 ⊗ MAYER ST
TL

Print

```
#1514 *PGM2*

01CSR# MAYER        1111
0001-9999          000D1
```

■ Functional programming for cashiers   PGM 2   2510

Procedure

To program zero

2510 ⟶ | • | ⟶ | ⊗ | ⟶ Cashier code ⟶ | ⊗ | ⟶ * ABCD ⟶ | ST | ⟶ | TL |
(1 - 9999)
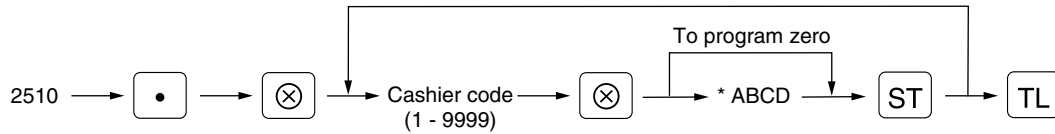
A cashier code you have programmed for the cashier by job #1500.

*	Item:		Selection:	Entry:
A	Guest check copy	Disable	1
		Enable	0
B	VAT shift	Yes	1
		No	0
C	Price level	Price level 2	1
		Price level 1 (ordinary level)	0
D	Drawer	Set the drawer no. 1 or 2	1 or 2
		Use no drawer	0

Example   **Key operation**   **Print**

2510 | • | | ⊗ |
1111 | ⊗ | 0001 | ST |
| TL |

```
#2510 *PGM2*

01CSR# MAYER        1111
0001-9999          000D1
```

■ Programming of PBLU code   PGM 2   2511

Procedure

2511 ⟶ | • | ⟶ | ⊗ | ⟶

To inhibit the PBLU entry

To program only one code

⟶ Cashier code ⟶ | ⊗ | ⟶ Start PBLU code ⟶ | ⊗ | ⟶ End PBLU code ⟶ | ST | ⟶ | TL |
(1 - 9999)   (max. 4 digits)   (max. 4 digits)
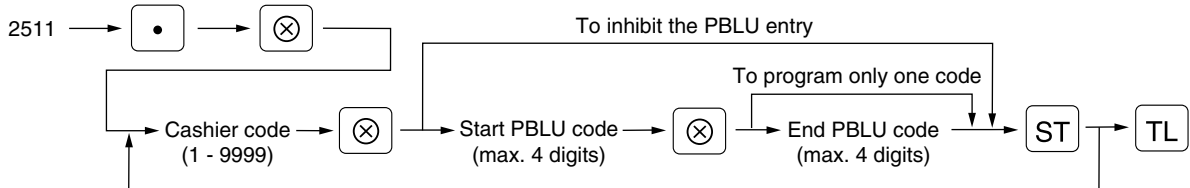
Example   **Key operation**   **Print**

2511 | • | | ⊗ |
1111 | ⊗ | 20 | ⊗ |
30 | ST |
| TL |

```
#2511 *PGM2*

01CSR# MAYER        1111
0020-0030          000D1
```

■ Clerk code PGM 1 PGM 2 1400

You can assign a clerk code to each clerk.

Procedure

To program zero

1400 → • → ⊗ → Clerk no. → ⊗ → * Clerk code → ST → TL
                (1 - 20)   (1 - 9999)
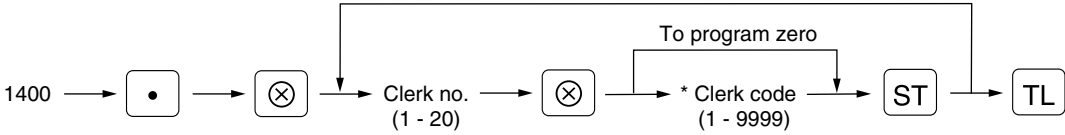
* Programming clerk code "0" inhibits entries of the clerk code.

Example

Key operation	Print
1400 • ⊗	#1400 *PGM2*
1 ⊗ 2111 ST	
4 ⊗ 2014 ST	01CLK# CLERK01 2111
TL	04CLK# CLERK04 2014

■ Clerk name PGM 1 PGM 2 1414

You can program a maximum of 12 characters (clerk name) for each clerk. Select the characters you want to program referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

Procedure

To keep the current setting

1414 → • → ⊗ → Clerk code → ⊗ → Character keys → ST → TL
                (1 - 9999)   (max. 12 digits)
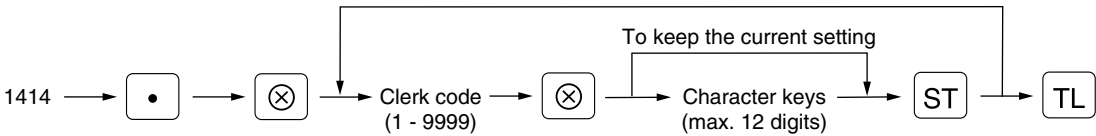
A clerk code you have programmed for the clerk by the job #1400.

Example

Key operation	Print
1414 • ⊗	#1414 *PGM2*
2111 ⊗ NILS ST	
TL	01CLK# NILS 2111

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10 Programming various functions

■ Programming for optional feature selection PGM 2 2616

Your register enables you to select the following options.

OP X/Z mode availability

When a cashier need to take the cashier/clerk X/Z report, he or she will use the OP X/Z mode.
This programming determines whether he or she will be allowed to use this mode.

Note *You can take cashier/clerk X and Z reports in the X1/Z1 mode regardless of the above programming.*

Paid-out in the REG mode
Refund in the REG mode
Direct void in the REG mode
Indirect void in the REG mode
Subtotal void in the REG mode
Validation printing in a refund entry
First item direct void
PLU level shift mode

- Automatic return mode: This mode automatically shifts the PLU level back to level 1 (ordinary level) after a direct PLU entry.
- Lock shift mode: This mode holds the current PLU level until making a PLU level shift operation (pressing a PLU level shift key).

Available mode for PLU level shift
Printing of the number of purchased items
Time printing on the receipt/journal
Journal print form

You may choose either of the following forms.

- Detailed journal print that shows the details of all entries – the same information as printed on the receipt.
- Summary journal print that shows information about all entries other than normal department entries (entries into "+" departments and their associated "+" PLUs).

Availability of the item validation printing
Validation printing in a deduction (⊖) entry
Zero skip for various reports
VAT/tax amount, taxable amount and net amount printing on the receipt/journal
Automatic return timing for PLU level

- By one receipt: Returns the PLU level to level 1 by one receipt.
- By one item: Returns the PLU level to level 1 by one item entry.

VAT shift method

- VAT shift by cashier: VAT shift is performed by the operation of a cashier who has been assigned to do the VAT shift operation (Refer to job #2510).
- VAT shift by shift key: VAT shift is performed by pressing the VAT shift key.

PLU price shift method

- Price shift by cashier: Price shift is performed by the operation of a cashier who has been assigned to do the price shift operation (Refer to job #2510).
- Price shift by shift key: Price shift is performed by pressing the price level shift key.

Available mode for PLU price shift
PLU price shift mode

- Automatic return mode: This mode automatically shifts the price level back to price 1 (ordinary level) after the entry.
- Lock shift mode: This mode holds the current price level until making a price shift operation (pressing the price level shift key).

Automatic return timing for PLU price level
- By one receipt: Returns the price level to price 1 by one receipt.
- By one item: Returns the price level to price 1 by one item entry.

VAT/tax amount, taxable amount and net amount printing on the slip
Time printing on the slip
No sale in REG mode
Finalization when the subtotal amount is zero in the REG mode
Exchange 1 calculation method (for EURO settings)

When you do not introduce EURO, keep the default setting (multiplication).

When you introduce EURO, this setting is automatically set by the operation of job #800 in the X2/Z2 mode.

The calculation method is as follows:

In case that "Division" is selected for the period 1.

Domestic (national) currency amount ÷ Exchange 1 rate (EURO conversion rate) =

Exchange 1 amount (EURO amount)

In case that "Multiplication" is selected for the period 2.

Domestic currency amount (EURO amount) × Exchange 1 rate (EURO conversion rate) =

Exchange 1 amount (national currency amount)

Cheque/credit operation for exchange 1

You can set whether you receive foreign currency (exchange 1) amount by cheque or credit or not.

Printing of the exchange 1 total amount and change amount on the receipt/journal

Total and change amounts in exchange 1 currency are printed respectively below each of the total and exchange amounts in domestic currency.

When you introduce EURO, this setting is automatically set by the operation of job #800 in the X2/Z2 mode as follows:

On the period 1, EURO amount converted from national currency is printed below the national currency.

On the period 2, national currency converted from EURO amount is printed.

Printing of the exchange 1 total amount at the total (payment) validation printing
Footer graphic logo printing
Credit counting when RA/PO entry is finalized with the credit key
Separator line in the report
Link PLU printing format

Procedure

2616 → • → ⊗ → ** P (1 - 13) → ⊗ → *ABCDEFGH → ST → TL

To program zero
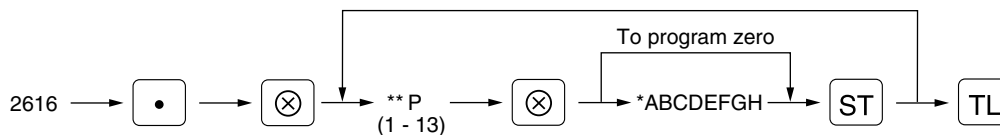
Example

Key operation

2616 • ⊗
3 ⊗ 00000010 ST
TL

Print

```
#2616 *PGM2*

  03          00000010
```

**P: 1

*	Item:	Selection:	Entry:
A	OP X/Z mode	Enable	0
		Disable	1
B	Paid-out in REG mode	Enable	0
		Disable	1
C	Always enter 0.		0
D	Refund in the REG mode	Enable	0
		Disable	1
E	Direct void in the REG mode	Enable	0
		Disable	1
F	Indirect void in the REG mode	Enable	0
		Disable	1
G	Subtotal void in the REG mode	Enable	0
		Disable	1
H	Validation printing in a refund entry	Non-compulsory	0
		Compulsory	1

**P: 2

*	Item:	Selection:	Entry:
A	The first item direct void	Enable	0
		Disable	1
B	PLU level shift mode	Automatic return mode	0
		Lock shift mode	1
C	Available mode for PLU level shift	REG and MGR modes	0
		MGR mode only	1
D	Printing of the number of purchased items	No	0
		Yes	1
E	Time printing on the receipt/journal	Yes	0
		No	1
F	Journal print form	Detailed	0
		Limited	1
G	Availability of the item validation printing	Enable	0
		Disable	1
H	Validation printing in a deduction (⊖) entry	Non-compulsory	0
		Compulsory	1

**P: 3

*	Item:	Selection:	Entry:
A	Always enter 0.		0
B	Zero skip in clerk report	Yes	0
		No	1
C	Zero skip in cashier report	Yes	0
		No	1
D	Zero skip in transaction report	Yes	0
		No	1
E	Zero skip in department report	Yes	0
		No	1
F	Zero skip in PLU report	Yes	0
		No	1
G	Zero skip in hourly report	Yes	0
		No	1
H	Zero skip in daily net report	Yes	0
		No	1

**P: 4

* Item:		Selection:	Entry:
A	Always enter 0.		0
B	Always enter 0.		0
C	VAT/tax amount printing on the receipt/journal	Print	0
		Do not print	1
D	Taxable amount printing on the receipt/journal	Print	0
		Do not print	1
E	Net amount printing on the receipt/journal	Print	0
		Do not print	1
F	Always enter 0.		0
G	Always enter 0.		0
H	Automatic return timing for PLU level	By one item	0
		By one receipt	1

**P: 5

* Item:		Selection:	Entry:
A	Always enter 0.		0
B	Always enter 0.		0
C	Always enter 0.		0
D	VAT shift method	By cashier	0
		By shift key	1
E	PLU price shift method	By shift key	0
		By cashier	1
F	Available mode for PLU price shift	REG and MGR modes	0
		MGR mode only	1
G	PLU price shift mode	Automatic return mode	0
		Lock shift mode	1
H	Automatic return timing for PLU price level	By one item	0
		By one receipt	1

**P: 6

* Item:		Selection:	Entry:
A	VAT/tax amount printing on the slip	Print	0
		Do not print	1
B	Taxable amount printing on the slip	Print	0
		Do not print	1
C	Net amount printing on the slip	Print	0
		Do not print	1
D	Time printing on the slip	Print	0
		Do not print	1
E	Always enter 0.		0
F	Always enter 0.		0
G	Always enter 0.		0
H	Always enter 0.		0

**P: 7

* Item:		Selection:	Entry:
A	Always enter 0.		0
B	Always enter 0.		0
C	No sale in REG mode	Enable	0
		Disable	1
D	Finalization when the subtotal amount is zero	Enable	0
	in the REG mode	Disable	1
E	Always enter 0.		0
F	Always enter 0.		0
G	Always enter 0.		0
H	Always enter 0.		0

**P: 8 (ABCDEFGH: Always enter 0.)

**P: 9

* Item:		Selection:	Entry:
A	Always enter 0.		0
B	Exchange 1 calculation method (for EURO settings)	Multiplication	0
		Division	1
C	Cheque/credit operation for exchange 1	No	0
		Yes	1
D	Printing of the exchange 1 total amount and	No	0
	change amount on the receipt/journal	Yes	1
E	Printing of the exchange 1 total amount at	No	0
	the total (payment) validation printing	Yes	1
F	Always enter 0.		0
G	Always enter 0.		0
H	Footer graphic logo printing	No	0
		Yes	1

Note *The items B and D are automatically set by the operation of job #800 in the X2/Z2 mode.*

**P: 10 to 12 (ABCDEFGH: Always enter 0.)

**P: 13

* Item:		Selection:	Entry:
A	Credit counting when RA/PO entry is finalized with	No	0
	the credit key	Yes	1
B	Separator line in the report	1 line space	0
		Separator line	1
C	Link PLU printing format	Master PLU with total amount	0
		Each PLU	1
D	Always enter 0.		0
E	Always enter 0.		0
F	Always enter 0.		0
G	Always enter 0.		0
H	Always enter 0.		0

■ Programming alarm length of time with drawer opening   PGM 2   2617

If the drawer still remains open when a specified length of time has elapsed, your machine gives the alarm.

Procedure

To disable the alarm function

2617 ⟶ ⌈ • ⌉ ⟶ ⌈ ⊗ ⌉ ⟶ | Time 1 to 255 seconds | ⟶ ⌈ TL ⌉
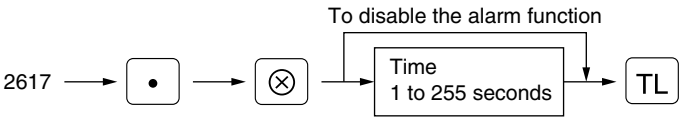
Example

Key operation	Print
2617 ⌈·⌉ ⌈⊗⌉ 30 ⌈TL⌉	#2617 *PGM2* 030

Note *Your machine starts to monitor how long the drawer is kept open the moment the drawer is opened at the end of a transaction in the REG/VOID mode. It stops the time monitoring when a valid key (except the ⌈VP⌉ and ⌈RCPT⌉ keys) is pressed for the next transaction. It restarts the time monitoring after that transaction is ended. You can stop the buzzer alarm by closing the drawer. No key entries can be made while the buzzer is sounding.*

■ Programming of validation printing, slip printing, and difference subtotal printing   PGM 2   2615

Procedure

To program zero

2615 ⟶ ⌈ • ⌉ ⟶ ⌈ ⊗ ⌉ ⟶ *ABCDEF ⟶ ⌈ TL ⌉
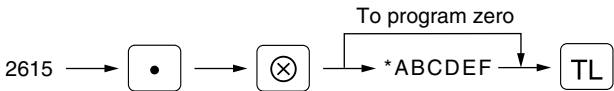
* AB: Initial line feed for a slip (0 – 64 lines)
  CD: Maximum number of lines printable on a slip (0 – 99)
   E: Number of times of validation printing (0 – 9)
   F: Feed lines after printing of a difference subtoal (0 – 9 lines)

Example	**Key operation**	**Print**
	2615 ⌈·⌉ ⌈⊗⌉ 009910 ⌈TL⌉	#2615 *PGM2* 00 99 1 0

■ Programming of logo messages PGM 2   2614

Your register can print programmed messages for customers on every receipt. On the standard model, only graphic logo (ER-A410)/only header 3-line message (ER-A420) is printed on the receipt. (If you want a graphic logo customerized for your store, please consult your dealer.)
If you want to print logo message, please consult your dealer too. You have five options described below.
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

Procedure

To keep the current setting

2614 ⟶ [·] ⟶ [⊗] ⟶ *Line number (1 to 6) ⟶ [⊗] ⟶ Character keys (max. 24 digits) ⟶ [ST] ⟶ [TL]
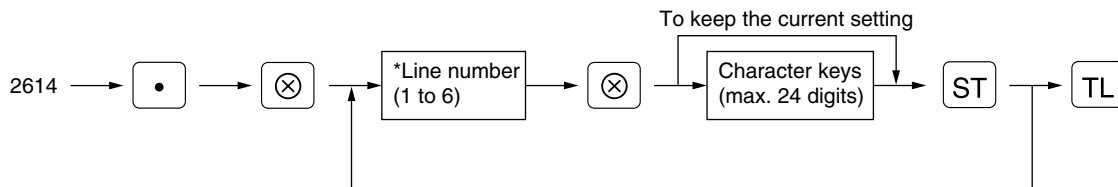
* "Header 3-line message" type: 1 to 3
  "Footer 3-line message" type : 4 to 6
  "Header 6-line message" type: 1 to 6
  "Header 3-line and footer 3-line message" type: 1 to 6 (1 to 3 as header, 4 to 6 as footer)

| Graphic logo | Text 1st line / Text 2nd line / Text 3rd line | Graphic logo ... Text 1st line / Text 2nd line / Text 3rd line | Graphic logo ... Text 4th line / Text 5th line / Text 6th line | Text 1st line / Text 2nd line / Text 3rd line / Text 4th line / Text 5th line / Text 6th line | Text 1st line / Text 2nd line / Text 3rd line ... Text 4th line / Text 5th line / Text 6th line |

Graphic logo only | Header 3-line message | Footer 3-line message | Header 6-line message | Header 3-line message and footer 3-line messages

Example   To program the following logo messages by using 3 lines:

=== YOUR ===
== STORE ==
 MESSAGE

Key operation	Print
2614 [·] [⊗]	#2614 *PGM2*
1 [⊗] (SPACE) (SPACE) (SPACE) (SPACE) (SPACE) (SPACE) (SPACE)	
(DC) Y O U R (DC)	YOUR
(SPACE) (SPACE) (SPACE) (SPACE) [ST]	STORE
2 [⊗] (SPACE) (SPACE) (SPACE) (SPACE) (SPACE) (SPACE)	MESSAGE
(DC) S T O R E (DC)	
(SPACE) (SPACE) (SPACE) [ST]	
3 [⊗] (SPACE) (SPACE) (SPACE) (SPACE)	
(DC) M E S S A G E (DC)	
[ST]	
[TL]	
((SPACE):Space key)	

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■ Programming of error messages PGM 2   2641

Your register has standard error messages shown in the following table. For more information about the alphanumeric characters programming, see section "2 How to program alphanumeric characters" under the chapter "PRIOR TO PROGRAMMING".

Procedure

2641 ⟶ [•] ⟶ [⊗] ⟶ * Text no. (1 - 95) ⟶ [⊗] ⟶ To keep the current setting ⟶ Character keys (max. 12 digits) ⟶ [ST] ⟶ [TL]
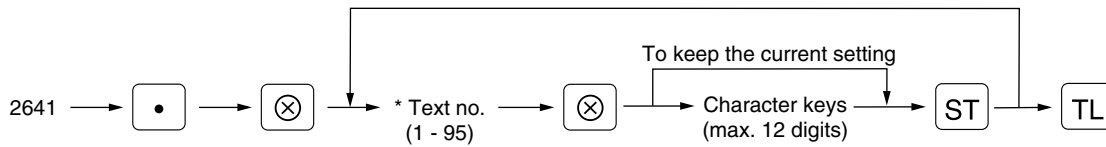
* Text no.: See "Error message table" shown below.

Example

Key operation

2641 [•] [⊗]
1 [⊗]
ENTRY [SPACE] ERROR [ST]
[TL]

Print

```
#2641 *PGM2*

01        ENTRY ERROR
```

■ Error message table

Text no.	Description	In default of programming
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPERATION
3	Desired code is not programmed yet.	NO RECORD
4	(Reserved)	
5	Secret code error	SECRET CODE
6	(Reserved)	
7	Memory is full.	MEMORY FULL
8	Insert slip paper.	INSERT SLIP
9	The entered cashier code is not authorized.	NO AUTHORITY
10	Stock is empty.	OUT OF STOCK
11	Compulsory pushing the subtotal key	SBTL COMPUL.
12	Compulsory tendering	TEND COMPUL.
13	Compulsory PBAL	PB COMPUL.
14-21	(Reserved)	
22	Overlapped cashier error	CASHIER ERR.
23	Cashier resetting over error	ENTRY ERR CA
24-26	(Reserved)	
27	Power off	POWER OFF
28-30	(Reserved)	
31	Compulsory non-add code	# COMPULSORY
32	The cashier/clerk is not assigned.	NOT ASSIGNED
33	(Reserved)	
34	Overflow limitation	OVER LIMIT.

Text no.	Description	In default of programming
35	The open price entry is inhibited.	INH. OPEN PR
36	The unit price entry is inhibited.	INH. UNIT PR
37	The direct non-tendering finalization after previous tender entry is inhibited.	NOT NON-TEND
38-66	(Reserved)	
67	REG buffer is full.	BUFFER FULL
68-71	(Reserved)	
72	EFT error	EFT ERROR
73	EFT connection is broken.	EFT BREAK
74-75	(Reserved)	
76	Closing the drawer is compulsory.	CLOSE DRAWER
77-80	(Reserved)	
81	Entry of secret code is needed.	ENTR SECRET#
82-83	(Reserved)	
84	Data backup send success	SEND OK
85	Data backup receive success	RECEIVE OK
86	Data backup communication error	COM. ERROR
87	Backup data format error	DATA ERROR
88	Data backup time out error	TIME OUT
89-94	(Reserved)	
95	EURO change compulsory	EURO CHANGE

■ Programming of texts of validation printing PGM 2 2642

You can program the texts (3 lines) to be printed on validation slip. Up to 24 characters can be programmed per line.

Procedure

2642 → • → ⊗ → No. of lines (1 - 3) → ⊗ → Character keys (max. 24 digits) → ST → TL

To keep the current setting

Example

Key operation
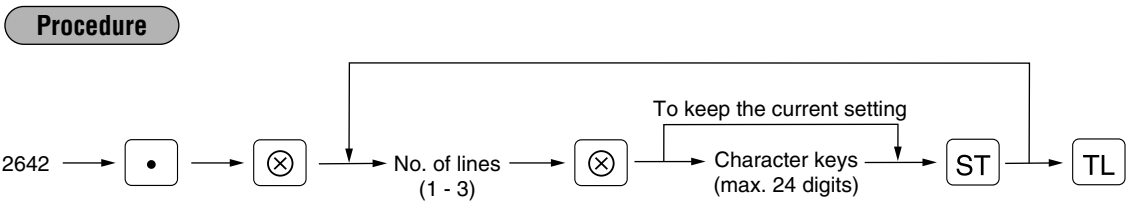
2642 • ⊗
3 ⊗
FOR (SPACE) DEPOSIT (SPACE) ONLY ST
TL

Print

```
#2642 *PGM2*

FOR DEPOSIT ONLY
```

■ Programming of texts of slip printing PGM 2 2643

You can program the texts (3 lines) to be printed on slip. Up to 24 characters can be programmed per line.

Procedure

2643 → • → ⊗ → Line no. (1 - 3) → ⊗ → Character keys (max. 24 digits) → ST → TL

To keep the current setting

Example

Key operation

2643 • ⊗
1 ⊗
TEXT1 ST
TL

Print

```
#2643 *PGM2*

TEXT1
```
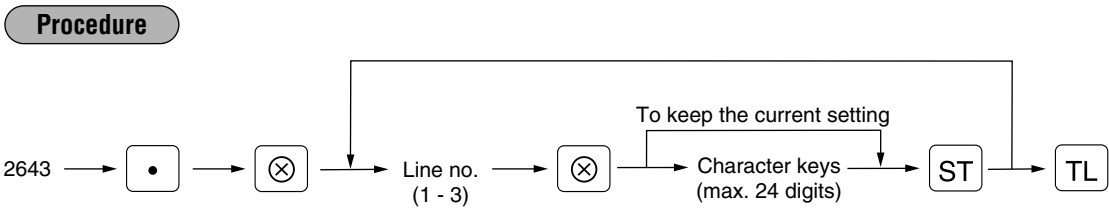
■ Programming of payee name (for English cheque) PGM 2   2646

You can program payee name (2 lines) for English cheque to be printed on the cheque. Up to 21 characters can be programmed per line.

Procedure

2646 ⟶ • ⟶ ⊗ ⟶ No. of lines ⟶ ⊗ ⟶ Character keys ⟶ ST ⟶ TL
(1 - 2)   (max. 21 digits)

To keep the current setting
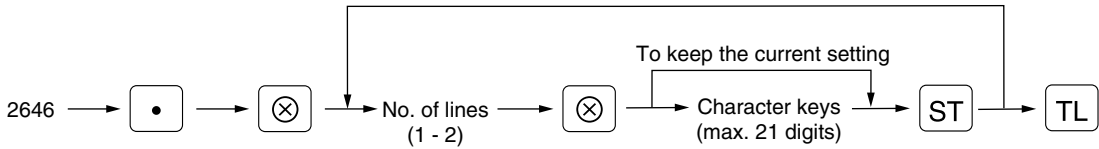
Example

Key operation	Print
2646 • ⊗ 1 ⊗ NAME1 ST TL	#2646 *PGM2* NAME1

■ Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence PGM 2 2620

Your register is equipped with the stacked report printing function that enables multiple X/Z reports to be printed in sequence with only a single request.

Procedure

2620 → [•] → [⊗]
To cancel the stacked report sequence
For full reporting (non-range report)
For individual reporting
*1 Job no. → [⊗] → *2 Start range parameter → [⊗] → *2 End range parameter → [ST] → [TL]
To program for another Job no.
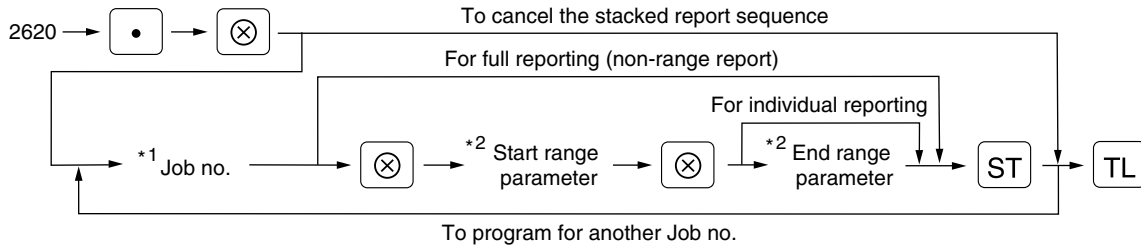
| Note | • Maximum 70 steps are programmable. "1 step" means the memory size used for one no-range type job no. The range type job no. needs "8 steps".
• When Z of stacked report is initiated, X only reports will be skipped. |

Job code numbers to be used are as follows.

*1: Job no.	Report name	*2: Start/End range parameter	Note
00	General		
10	Full department		
13	Full department group		
20	PLU	*3 Start PLU code/End PLU code (1 through 999999)	
24	PLU stock	*3 Start PLU code/End PLU code (1 through 999999)	
27	PLU zero sales		
29	PLU price category	*3 Start price amount/End price amount	
30	Transaction		
31	Total in drawer		
32	Commission sales		
40	Full clerk		
50	Full cashier		
60	Hourly sales information	*3 Start time/End time (0 through 2330)	Range report is available only in the X1 mode.
70	Daily net report		
80	PBLU report	*3 Start PLU code/End PLU code (1 through 9999)	
82	Balance report		

*3: Both range setting and full setting are allowed.

Example

Key operation	Print
2620 [•] [⊗] 10 [ST] 13 [ST] [TL]	#2620 *PGM2* 10 13

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■ Setting the time range for hourly reports PGM 2 2619

You can set the time range for an hourly report.

Procedure

When A through C are all zeros

2619 → [•] → [⊗] → *ABC → [TL]
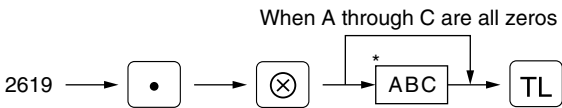
*A: Time range
To set the time range to 30 minutes (in the 24-hour system), enter 0.
To set the time range to 60 minutes (in the 24-hour system), enter 1.
BC: Starting time (hour = 00 to 23)

Example

Key operation	Print
2619 [•] [⊗] 107 [TL]	#2619 *PGM2* 1 07

Note   To perform this setting, an hourly Z report (# 160) must be printed in advance.

■ Programming of power saving mode PGM 2 2689

Procedure

2689 → [•] → [⊗] → *ABCD → [TL]
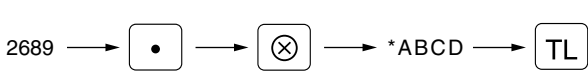
* Item:		Selection:	Entry:
A	Entering power save mode when time is displayed.	Enable	0
		Disable	1
BCD	Time (min.) to entering power save mode since no operation is made.		1 through 254 (min.) (999: the power save mode is inhibited.)

Example

Key operation	Print
2689 [•] [⊗] 0030 [TL]	#2689 *PGM2* 0 030

■ Functional programming for the printer `PGM 2` `2990`

Procedure

To program zero

$2990 \longrightarrow \boxed{\bullet} \longrightarrow \boxed{\otimes} \longrightarrow *AB \longrightarrow \boxed{TL}$
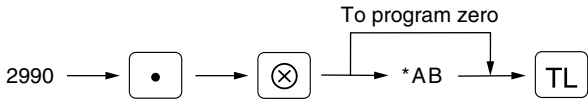
*AB: Printing density (00 – 99)

    00 =   80% for standard density
    50 =   90% for standard density
    99 = 100% for standard density

Example

Key operation	Print
2990 $\boxed{\bullet}$ $\boxed{\otimes}$ 50 $\boxed{TL}$	#2990 *PGM2* 50

■ Programming for EURO change job `PGM 2` `2681` `2682` `2683`

Functional programming

Procedure

To program zero

$2681 \longrightarrow \boxed{\bullet} \longrightarrow \boxed{\otimes} \longrightarrow *ABC \longrightarrow \boxed{TL}$
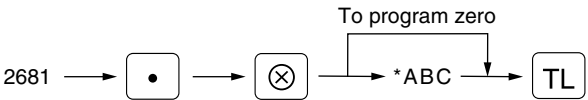
* Item:		Selection:	Entry:
A	Automatic conversion of unit prices into EURO	Yes	0
		No	1
B	The EURO change job at programmed	Compulsory	0
	date/time (#2682, 2683)	Non-compulsory	1
C	Fractional treatment of Exchange 1	Raising to unit	0
		Round off (4 - down, 5 - up)	1

Example

Key operation	Print
2681 $\boxed{\bullet}$ $\boxed{\otimes}$ 010 $\boxed{TL}$	#2681 *PGM2* 010

Date/time of EURO change

Procedure

2682 ⟶ • ⟶ ⊗ ⟶ Date ⟶ TL
(7 or 8 digits)

To program zero
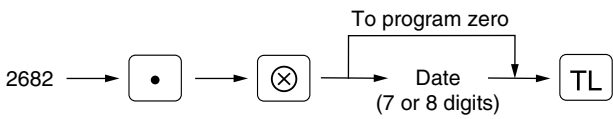
Example

Key operation

2682 • ⊗
26112003 TL

Print

```
#2682 *PGM2*

             26/11/2003
```

Procedure

2683 ⟶ • ⟶ ⊗ ⟶ Time ⟶ TL
(Hour: 0 - 23)

To program zero
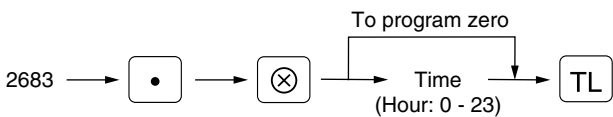
Example

Key operation

2683 • ⊗
23 TL

Print

```
#2683 *PGM2*

                  23:00
```

■ RS-232C channel assignment   PGM 2   2690

Your register is equipped with two RS-232C interfaces. If you use the on-line communication function, the channel number of each RS-232C interface must be programmed by using the following procedure.
To activate the on-line communication, consult your dealer.

Procedure

$$2690 \longrightarrow \boxed{\cdot} \longrightarrow \boxed{\otimes} \longrightarrow \begin{array}{c} \text{** P} \\ (1\text{ - }3) \end{array} \longrightarrow \boxed{\otimes} \xrightarrow[\text{To program zero}]{} \text{*ABCD} \longrightarrow \boxed{\text{ST}} \longrightarrow \boxed{\text{TL}}$$

** P: 1
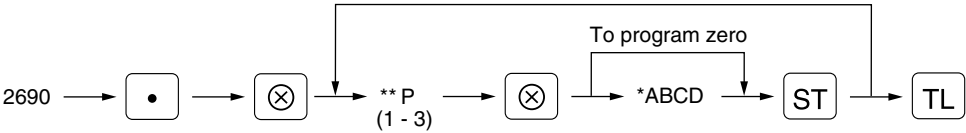
* Item:		Selection:	Entry:
A	Channel no. for the ON-LINE communication	Not connected	0
		Standard channel 1	1
		Standard channel 2	2
B	Always enter 0.		0
C	Always enter 0.		0
D	Always enter 0.		0

** P: 2 (ABCD: Always enter 0.)

** P: 3

* Item:		Selection:	Entry:
A	Always enter 0.		0
B	Channel no. for the slip printer	Not connected	0
		Standard channel 1	1
		Standard channel 2	2
C	Always enter 0.		0
D	Always enter 0.		0

Note
- *Never enter any number other than 0, 1 and 2.*
- *EFT function always uses standard channel 2.*
- *Data backup function always uses standard channel 1.*

Example

Key operation

2690 ⌷ ⊗
3 ⊗ 0100 ST
TL

Print

```
#2690 *PGM2*

    3              0100
```

■ Programming of RS-232C interface   PGM 2   6110   6111   6112   6113   6115   6220

Terminal number

Procedure

6110 ⟶ [•] ⟶ [⊗] ⟶ Terminal no. ⟶ [TL]
(max. 6 digits)

To program zero
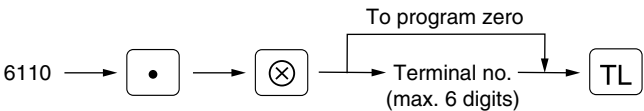
Transmission line form

Procedure

6111 ⟶ [•] ⟶ [⊗] ⟶ *AB ⟶ [TL]

To program zero
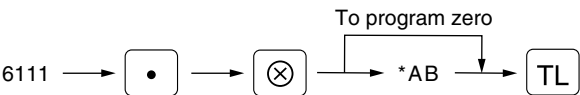
* Item:		Selection:	Entry:
A	Sensing of the CI signal	No	0
		Sensing	1
B	Line form	Full duplex system	0
		Half duplex system	1

Functional programming

Procedure

6112 ⟶ [•] ⟶ [⊗] ⟶ *AB ⟶ [TL]

To program zero
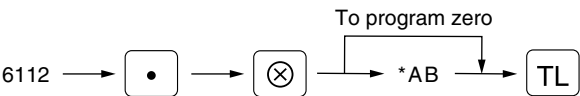
* Item:		Selection:	Entry:
A	Selection of print data sending/data sending and receiving	Data sending and receiving	0
		Print data sending	1
B	Baud rate (38400/19200/9600/4800 bps)	4800 bps	4
	The selected baud rate is used for on-line communications	9600 bps	5
	and print data sending. It is not used for the data backup	19200 bps	6
	function.	38400 bps	7

Start code and end code

Procedure

6113 ⟶ [•] ⟶ [⊗] ⟶ *ABCDEF ⟶ [TL]

To program zero
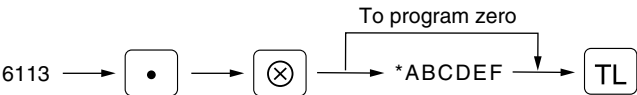
* ABC: Start code (000 – 127)
  DEF: End code (000 – 127)

Time out time

Procedure

6115 ⟶ [•] ⟶ [⊗] ⟶ Time out time ⟶ [TL]
(1 – 255 sec)
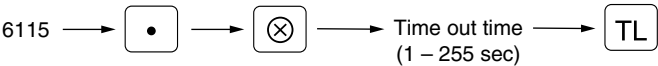
Programming for print data sending

Procedure

To program zero

6220 → • → ⊗ → *ABC → TL
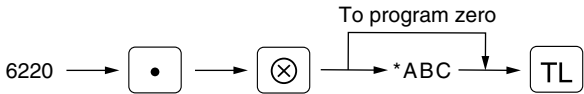
* Item:		Selection:	Entry:
A	Sensing of DR signal	Yes	0
		No	1
B	Sensing of CS signal	Yes	0
		No	1
C	Sending of all print data	Disable	0
		Enable	1

■ Secret codes to control access to PGM1 mode, X1/Z1 mode and X2/Z2 mode PGM 2 2630 2631 2632

You must enter a secret code according to the following procedure before performing any PGM1-mode, X1/Z1-mode or X2/Z2-mode operation when a secret code has been set for that specific mode operation.

Operating

Procedure

TL → Secret code → TL
         Max. 4 digits
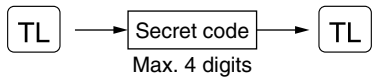
Note Once a secret code is entered, it does not need to be entered again unless the mode switch setting is changed and any operation is performed.

Programming

Procedure

*
2630
2631 → • → ⊗ → No code (zero)
2632   Secret code → TL
                         Max. 4 digits
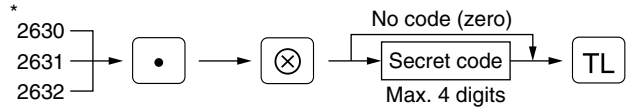
* 2630 for the PGM1 mode
  2631 for the X1/Z1 mode
  2632 for the X2/Z2 mode

Example

Key operation	Print
2631 • ⊗	#2631 *PGM2*
1234 TL	1234

■ Setting the AUTO key — Automatic sequencing key — X2/Z2   2900

If you program frequently performed transactions or report sequences for the AUTO keys, you can call those transactions and/or reports simply by pressing the corresponding AUTO keys in key operations. This programming can be done when your machine is in the X2/Z2 mode.

Procedure
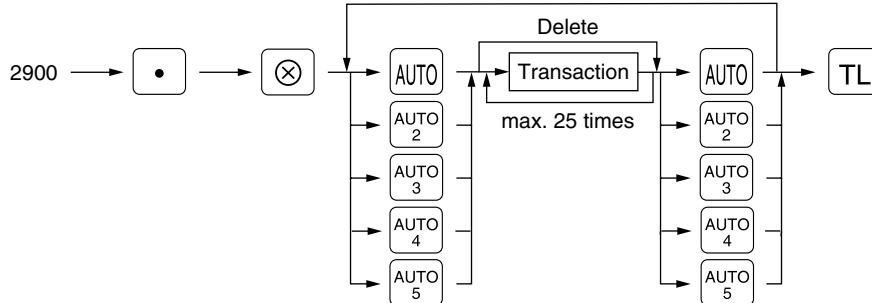
Example

Programming for [AUTO] key and [AUTO 2] key as follows:

[AUTO]; entering a PLU 2 item (programmed unit price: 1.50) and a dept. 6 item (unit price: 1.00)
[AUTO 2]; selling a dept. 2 item (programmed unit price: 5.00) for cash

Key operation	Print
2900 [·] [⊗]	#2900 *PGM2*
[AUTO]	
AUTO1 → 2 [PLU/SUB] 100 [6]	#1
setting	2 KEY
[AUTO]	PLU
[AUTO 2]	1 KEY
AUTO2 → 2 [TL]	0 KEY
setting	0 KEY
[AUTO 2]	L1 D06
[TL]	#2
	L1 D02
	TOTAL

Note

When the AUTO key has been programmed to execute a report job function etc., the mode switch must be in the corresponding position (X1/Z1 or X2/Z2).

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11 TRAINING mode

The training mode is used when the operator or the manager practices register operations.

When a cashier set in training is selected, the machine automatically enters the training mode. When a cashier not set in training is selected, the machine automatically enters the ordinary REG mode. (For programming of training cashier, consult your local dealer.)

The training operations is valid only in REG, MGR, and VOID mode.
The cashier memory is updated in the training mode. Other memories are not updated.

Key operation		Print
Selecting the cashier set in training	1000 6 3 ⊗ 7 TL	26/08/2003 10:48 1014 123456#1110 TOM 2111 NILS **TRAINING** DPT.06 *10.00 3x 24.00 DPT.07 *72.00 CASH *82. 00

12 Reading stored programs

Your machine allows you to read every program stored in the PGM1 and PGM2 modes.

■ Program details and procedures for their reading

	Program for:	Mode switch position	Job code no.	Procedure	Related job code nos.
1	Departments	PGM2 or PGM1	1100	→ 1100 → ⊗ ┐ For reading all codes For individual reading Start dept. code → ⊗ → End dept. code → TL	1110, 2110, 2111, 2112, 2114, 2115, 2116
2	PLUs/ subdepartments	PGM2 or PGM1	1200	→ 1200 → ⊗ ┐ For reading all codes For individual reading Start PLU code → ⊗ → End PLU code → TL	1200, 1210, 1211, 1220, 1221, 1222, 2210, 2211, 2214, 2215, 2230, 2231, 2232, 2235
3	Key nos. for departments and PLUs	PGM2	2119	→ 2119 → ⊗ → TL	2119, 2219
4	Link PLUs	PGM2	2220	→ 2220 → ⊗ ┐ For reading all codes For individual reading Start PLU code → ⊗ → End PLU code → TL	2220
5	Set PLUs	PGM2	2221	→ 2221 → ⊗ ┐ For reading all codes For individual reading Start PLU code → ⊗ → End PLU code → TL	2221
6	Mix-and-match table	PGM2	2250	→ 2250 → ⊗ → TL	2250, 2251, 2254
7	Cashiers	PGM2 or PGM1	1500	→ 1500 → ⊗ → TL	1500, 1514, 2510, 2511
8	Clerks	PGM2 or PGM1	1400	→ 1400 → ⊗ → TL	1400, 1414
9	Function preset 1	PGM2 or PGM1	1300	→ 1300 → ⊗ → TL	1310, 2311, 2312, 2313, 2314, 2315, 2316, 2320, 2321, 2322, 2334

	Program for:	Mode switch position	Job code no.	Procedure	Related job code nos.
10	Function preset 2	PGM2	2600	⟶ 2600 ⟶ ⊗ ⟶ TL	2614, 2615, 2616, 2617, 2619, 2620, 2630, 2631, 2632, 2680, 2681, 2682, 2683, 2689, 2690
11	Messages	PGM2	2640	⟶ 2640 ⟶ ⊗ ⟶ TL	2641, 2642, 2643, 2646
12	Tax rates	PGM2	2700	⟶ 2700 ⟶ ⊗ ⟶ TL	2711
13	Auto keys	PGM2	2900	⟶ 2900 ⟶ ⊗ ⟶ TL	2900
14	Thermal printer	PGM2	2990	⟶ 2990 ⟶ ⊗ ⟶ TL	2990
15	On-line preset	PGM2	6110	⟶ 6110 ⟶ ⊗ ⟶ TL	6110, 6111, 6112, 6113, 6115, 6220

■ Sample printouts

1 Reading of programmed items for departments
(Reading in the PGM1 and PGM2 modes)

2 Reading of programmed items for
PLUs/subdepartments
(Reading in the PGM1 and PGM2 modes)

```
26/08/2003 11:01
123456#1114


#1100 *PGM2*                    Mode switch
                                position*
                   01-20
D01                10.00        Unit price
FRUITS              G01         Group no.
003                C1L95        Tax status
D02   T1 3          0.00
DPT.02              G02
001                COL18
D03                0.00         HALO limit.
DPT.03              G01
003                COL18        Commission group
D04   T 23          0.00        Function
DPT.04              G01         programming
001                COL18
                               0 0 3
                               Type of unit
                               price entry
                               Type
                               (SIF/SICS/Normal)
                               Item validation

D09                0.00
DPT.09              G01
001                COL18
D10               -0.00         Minus department
DPT.10              G10
001                COL18
D11                0.00


D20                0.00
DPT.20              G01
001                COL18
```

Job code no. — #1100
Range — 01-20
Dept. code — D01
Item label — FRUITS

```
26/08/2003 11:10
123456#1116


#1200 *PGM2*                    Mode switch
                                position*
              000001-000020     Range
P000001(02)         /00
                   1.25         Unit price
                   0.00
MILK                C1          Associated
3              S   0.000        dept. code
P000002(02)         /12         Base q'ty
T1                 0.00
                   0.00         3
PL000002            C0          Mode
2              S  12.500        parameter
P000003(O1)         /00
                   0.00
                   0.00
PL000003            C0          Commission
2              S   0.000        group
P000004(O1)         /00
                   0.00


P000018(O3)L        /00
T1                 0.00         Link PLU
                   0.00
PL000018            C0
3              S   0.000
P000019(O3)         /00
T1                 0.00
                   0.00
PL000019            C0
3              S   0.000
P000020(O3)S        /00
T1                 0.00
                   0.00
PL000020            C0
3              S   0.000
```

PLU code — P000001
Item label — MILK
Tax status — T1

* When you take this report in the PGM1 mode, the PGM2
indication is replaced by a "PGM1".

3 Reading of programmed key nos. for departments and PLUs (Reading in the PGM2 mode)

```
26/08/2003 11:13
123456#1117


#2119 *PGM2*

001  L1      D01          ── Key no.
002  L1      D02          ── Dept. code
003  L1      D03
004  L1      D04
005  L1      D05
006  L1      D06
007  L1      D07
008  L1      D08
009  L1      D09
010  L1      D10
011  L1      D11
012  L1      D12
013  L1      D13
014  L1      D14
015  L1      D15
016  L1      D16
017  L1      D17
018  L1      D18
019  L1      D19
020  L1      D20
021  L1      P000001      ── PLU code
     L2      P000065
022  L1      P000002
023  L1      P000003
024  L1      P000004
025  L1      P000005
026  L1      P000006
027  L1      P000007
028  L1      P000008
029  L1      P000009
030  L1      P000010
031  L1      P000011
032  L1      P000012
033  L1      P000013
034  L1      P000014
```

```
117  L1      ----
118  L1      ----
119  L1      ----
```

4 Reading of programmed items for link PLUs (Reading in the PGM2 mode)

```
26/08/2003 11:20
123456#1121


#2220 *PGM2*

                    000001-999999   ── Range
P000018   LP000025  ── Linked PLU code
          P000026
          P000027
```

Leading PLU code

5 Reading of programmed set PLUs (Reading in the PGM2 mode)

```
26/08/2003 11:23
123456#1123


#2221 *PGM2*

                    000001-999999
P000020     SP000201   ── Tied PLU code
            P000202
```

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6 Reading of mix-and-match table
   (Reading in the PGM2 mode)

```
26/08/2003 12:06
123456#1130


#2250 *PGM2*            Report type

#01                    Mix-and-match
DISC1        -1.00/03  table no.
             P000010   Discount amount
             P000011   Trip level

#02                    Text
             -0.00/00
#03
             -0.00/00
#04
             -0.00/00
#05
             -0.00/00
#06
             -0.00/00
#07
             -0.00/00
#08
             -0.00/00
#09
             -0.00/00
#10
             -0.00/00
```

7 Reading of programmed items for cashiers
   (Reading in the PGM1 and PGM2 modes)

```
26/08/2003 12:07
123456#1131


#1500 *PGM2*            Mode switch
                       position*
01CSR# MAYER    1111   Cashier code
0001-9999      000D1
02CSR# CASHIER02 0002  Drawer no.
0001-9999      000D1
03CSR# CASHIER03 0003
0001-9999      000D1
04CSR# TOM      1014
0001-9999      000D1

20CSR# CASHIER20  0020
0001-9999      000D1
```

Cashier name
Cashier no.

* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

8 Reading of programmed items for clerks
   (Reading in the PGM1 and PGM2 modes)

```
26/08/2003 12:07
123456#1132


#1400 *PGM2*            Mode switch
                       position*
01CLK# NILS     2111   Clerk code
02CLK# CLERK02  0002
03CLK# CLERK03  0003
04CLK# BETH     2014
05CLK# CLERK05  0005

19CLK# CLERK19  0019
20CLK# CLERK20  0020
```

Clerk name
Clerk no.

* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

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9 Reading of programmed items for functions - 1
(Reading in the PGM1 and PGM2 modes)

```
26/08/2003 12:20
123456#1136


#1300 *PGM2*

F001 (-) 1
I                -10.00
                    L13
F002 (-) 2
S                 -0.00
                    L18
F003 (-) 3
S                 -0.00
                    L18
F004 (-) 4
S                 -0.00
                    L18
F005 %1
I                 10.25%
              L 15.00%
F006 %2
S                -0.00%
              L100.00%
F007 %3
S                -0.00%
              L100.00%
F008 %4
S                -0.00%
              L100.00%
F009 NET 1
F010 DIFFER
F011 TAX1 ST
F012 TAX2 ST
F013 TAX3 ST
F014 TAX4 ST
F015 VAT 1
F016 VAT 2
F017 VAT 3
F018 VAT 4
F019 TTL TAX
F020 NET
F021 VAT SFT
F022 TAX DELE
F023 NET2
F024 SETPLU-
F025 DISCOUNT
F026 CP PLU
F027 REFUND
```

```
F028 s
F029 s MODE
F030 MGR s
F031 SBTL s
F032 HASH s
F033 HASH RF
F034 VP CNT
F035 BILL CNT
F036 NO SALE
F037 ***PBAL
F038 ***NBAL
F039 G.C.COPY CNT
F040 GUEST
F041 ORDER TL
F042 PAID TL
F043 AVE.
F044 O-P
F045 ***RA          L19
F046 ***RA2         L19
F047 ***PO          L19
F048 ***PO2         L19
F049 CA/CHK
                  99.99
F050 DEPOSIT        L18
F051 DEPO. (-)      L18
F052 CASH           L18
                00000000
F053 CASH2          L18
                00000000
F054 CHECK1         L18
                00000000
F055 CHECK2         L18
                00000000
F056 CHECK3         L18
                00000000
F057 CHECK4         L18
                00000000
F058 CREDIT1        L18
                00000000
F059 CREDIT2        L18
                00000000
F060 CREDIT3        L15
                00000001
F061 CREDIT4        L18
                00000000
F062 EXCH1           *
     2          0.606800
F063 EXCH2
     2          0.000000
```

```
F064 EXCH3
     2          0.000000
F065 EXCH4
     2
F066 EX1 CHK
F067 EX1 CR
F068 DOM.CUR1
F069 DOM.CUR2
F070 DOM.CUR3
F071 DOM.CUR4
F072 DOM.CUR1
F073 DOM.CUR1
F074 ****CID
              9999999.99
F075 *CH ID
F076 CA/CH ID
F077 CHK/CG
               999999.99
F078 GROUP01
F079 GROUP02
F080 GROUP03
F081 GROUP04
F082 GROUP05
F083 GROUP06
F084 GROUP07
F085 GROUP08
F086 GROUP09
F087 *DEPT TL
F088 DEPT (-)
F089 *HASH TL
F090 HASH(-)
F091 *BTTL TL
F092 BTTL (-)
F093 COM.SAL1
                   0.00%
F094 COM.SAL2
                   0.00%
F095 COM.SAL3
                   0.00%
F096 COM.SAL4
                   0.00%
F097 COM.SAL5
                   0.00%
F098 COM.SAL6
                   0.00%
F099 COM.SAL7
                   0.00%
F100 COM.SAL8
                   0.00%
F101 COM.SAL9
                   0.00%
F102 NON COM.
F103 COM.AMT1
```

* When you take this report in the PGM1 mode,
  the PGM2 indication is replaced by a "PGM1".

```
F104 COM.AMT2
F105 COM.AMT3
F106 COM.AMT4
F107 COM.AMT5
F108 COM.AMT6
F109 COM.AMT7
F110 COM.AMT8
F111 COM.AMT9
F112 COM.TTL
F113 CA/CH IS
F114 EXCH1 IS
F115 EXCH2 IS
F116 EXCH3 IS
F117 CCD DIF.
F118 DIF. TL
F119 ***TOTAL
F120 SUBTOTAL
F121 OLD BAL.
F122 BALANCE
F123    DEPT
F124   GROUP
F125    PLU
F126   SET PLU
F127    STOCK
F128  ZERO SALES
F129   CATEGORY
F130  TRANS.
F131  TL-ID
F132    SALES
F133    CCD
F134  CLERK
F135   CASHIER
F136 HOURLY
F137 DAILY
F138   BALANCE
F139   PBLU
F140 PBLU#
F141        #
F142 CHECK PR
F143 PLU ST
F144 ITEMS
F145 MDSE ST
F146 NET 1
F147 NET 2
F148 NET 3
F149 NET 4
F150 DIFF ST
F151 DUE
F152 CHANGE
F153 COPY
F154 G.C COPY
F155 BILL
F156 SLIP PR.
F157 NEXT P.
F158 TOWNNAMETOWN
F159 NAME
F160 EX1 CHG
```

10 Reading of programmed items for functions - 2 (Reading in the PGM2 mode)

```
26/08/2003 12:39
123456#1137


#2600 *PGM2*

#2614                          Logo message
      YOUR
      STORE
     MESSAGE
#2615        00 99 1 0         Line feed for differ ST
#2616
   01        00000000
   02        00000000
   03        00000010
   04        00000000
   05        00000000
   06        00000000
   07        00000000          Optional feature selection
   08        00000000
   09        00100000
   10        00000000
   11        00000000
   12        00000000
   13        00000000
#2617             030          Drawer open alarm time
#2619            1 07          Hourly report format/start
#2620                          hour
                  10
                  13           Stacked report
#2630            0000
#2631            1234          Secret code
#2632            0000
#2680               2          Drawer no. for the drawer
#2681             010          for foreign currency
#2682      26/11/2003
#2683           23:00
#2689           0 030          Power saving mode
#2690
    1            2000
    2            0000          RS-232C channel data
    3            0100
```

11 Reading of programmed messages
(Reading in the PGM2 mode)

```
26/08/2003 12:40
123456#1138


#2640 *PGM2*

#2641 ─────────────────  ── Error
  01      ENTRY ERROR         messages
  02      MISOPERATION
  03      NO RECORD
  04
  05      SECRET CODE
  06
  07      MEMORY FULL
  08      INSERT SLIP
  09      NO AUTHORITY
  10      OUT OF STOCK
  11      SBTL COMPUL.
  12      TEND COMPUL.
  13      PB COMPUL.
  14
  15
  16
  17
  18
  19
  20
  21
  22      CASHIER ERR.
  23      ENTRY ERR CA
  24
  25
  26
  27      POWER OFF
  28
  29
  30
  31      # COMPULSORY
  32      NOT ASSIGNED
  33
  34      OVER LIMIT.
  35      INH.OPEN PR
  36      INH.UNIT PR
  37      NOT NON-TEND
  38
  39
  40
  41
  42
  43
  44
  45
  46
  47
  48
  49
```

To be continued

```
  50
  51
  52
  53
  54
  55
  56
  57
  58
  59
  60
  61
  62
  63
  64
  65
  66
  67      BUFFER FULL
  68
  69
  70
  71
  72      EFT ERROR
  73      EFT BREAK
  74
  75
  76      CLOSE DRAWER
  77
  78
  79
  80
  81      ENTR SECRET#
  82
  83
  84      SEND OK
  85      RECEIVE OK
  86      COM.ERROR
  87      DATA EROR
  88      TIME OUT
  89
  90
  91
  92
  93
  94
  95      EURO CHANGE
  96
  97
  98
  99
#2642


FOR DEPOSIT ONLY
#2643
TEXT1


#2646
  NAME1
```

12 Reading of programmed tax rates
   (Reading in the PGM2 mode)

```
26/08/2003 12:54
123456#1145


#2700 *PGM2*

TAX1          5.0000%     ──── Tax rate
              0.12        ──── Lowest taxable
TAX2          4.0000%           amount
              0.12
TAX3          6.0000%
              0.20
TAX4          ----
```

14 Reading of programmed items for the thermal
   printer (Reading in the PGM2 mode)

```
26/08/2003 12:58
123456#1148


#2990 *PGM2*
                          ──── Printing density
              50          ──── Entered Value

10 : 0123456789ABCDEF
20 : 0123456789ABCDEF
30 : 0123456789ABCDEF
40 : 0123456789ABCDEF
50 : 0123456789ABCDEF     }── Printing density
60 : 0123456789ABCDEF         example
70 : 0123456789ABCDEF
80 : 0123456789ABCDEF
90 : 0123456789ABCDEF
```

13 Reading of programmed items for auto keys
   (Reading in the PGM2 mode)

```
26/08/2003 12:57
123456#1147


#2900 *PGM2*

#1
                    2  KEY
              PLU
                    1  KEY
                    0  KEY
                    0  KEY
        L1    DO6
#2
        L1    DO2
              TOTAL
#3
              ----
#4
              ----
#5
              ----
```

15 Reading of ON-LINE preset
   (Reading in the PGM2 mode)

```
26/08/2003 12:59
123456#1150


#6110 *PGM2*

#6110
TERMINAL NO.      000001
#6111
MODEM CONTROL        00
#6112
TYPE                  0
BPS                   6
#6113
START CODE          002
END  CODE           013
#6115
TIME OUT            007
#6220
PROGRAM            000
```

READING (X) AND RESETTING (Z) OF SALES TOTALS

- Use the reading function (X) when you need to take a reading of sales information entered since the last resetting. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function (Z) when you need to clear the register's memory. Resetting prints all sales information and clears the entire memory except for the GT1 through GT3 and training GT, reset count, and consecutive number.
- If you want to stop the printing report, turn the mode switch to the MGR position. The symbol ("∗∗∗∗∗∗") is printed.

1 Summary of reading (X) and resetting (Z) reports and the key operations to obtain the reports

X1 and Z1 reports: Daily sales reports
X2 and Z2 reports: Periodic (monthly) consolidation reports

Item	Mode switch position		Job code	Key operation
	X1/Z1	**X2/Z2**		
Flash report: (Only display) To clear the display, press the CL key or turn the mode switch to another position.	X1	—	—	Dept. key (1 to 99) Dept. code → DEPT # : Department total amount ⊗ key: Amount of cash in drawer ST key: Paid total
General report	X1, Z1	X1, Z1	100	100 / 200 → (Reading) • (Resetting) → ⊗ → TL
		X2, Z2	200	
Individual clerk report	X1, Z1	X1, Z1	141	141 / 241 → (Reading) • (Resetting) → ⊗ → (For assigned clerk) Clerk code → TL
		X2, Z2	241	
	<OP X/Z> X, Z		41	41 → (Reading) • (Resetting) → ⊗ → TL
Individual cashier report	X1, Z1	X1, Z1	151	151 / 251 → (Reading) • (Resetting) → ⊗ → (For assigned cashier) Cashier code → TL
		X2, Z2	251	
	<OP X/Z> X, Z		51	51 → (Reading) • (Resetting) → ⊗ → TL
Full clerk report	X1, Z1	X1, Z1	140	140 / 240 → (Reading) • (Resetting) → ⊗ → TL
		X2, Z2	240	
Full cashier report	X1, Z1	X1, Z1	150	150 / 250 → (Reading) • (Resetting) → ⊗ → TL
		X2, Z2	250	
Full department report	X1	X1	110	110 / 210 → ⊗ → TL
		X2	210	
Individual group total report on department	X1	X1	112	112 / 212 → ⊗ → Group no. → TL
		X2	212	

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Item	Mode switch position		Job code	Key operation
	X1/Z1	**X2/Z2**		
Full group total report on department	X1	X1	113	113 213 → ⊗ → TL
		X2	213	
PLU/subdepartment report by designated range	X1, Z1	X1, Z1	120	120 220 → [Reading / Resetting •] → ⊗ → All PLUs / Start PLU code → ⊗ → End PLU code → TL
		X2, Z2	220	
PLU/subdepartment report by associated department	X1, Z1	X1, Z1	121	121 221 → [Reading / Resetting •] → ⊗ → Dept. code → TL
		X2, Z2	221	
PLU/subdepartment zero sales report	X1	X1	127	127 227 → ⊗ → TL
		X2	227	
PLU/subdepartment price category report	X1	X1	129	129 229 → ⊗ → All prices / Start price amount → ⊗ → End price amount → TL
		X2	229	
PLU/subdepartment stock report	X1		124	124 → ⊗ → All PLUs / Start PLU code → ⊗ → End PLU code → TL
PBLU report	X1, Z1		180	180 → [Reading / Resetting •] → ⊗ → All PBLUs / Start PBLU code → ⊗ → End PBLU code → TL
PBLU report by cashier	X1, Z1		181	181 → [Reading / Resetting •] → ⊗ → For assigned cashier / Cashier code → TL
Balance report	X1	X1	182	182 282 → ⊗ → TL
		X2	282	

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
Commission sales report	X1	X1	132	132 232 → ⊗ → TL
		X2	232	
Transaction report	X1	X1	130	130 230 → ⊗ → TL
		X2	230	
Total in drawer report	X1	X1	131	131 231 → ⊗ → TL
		X2	231	
Hourly report	X1		160	Reading: 160 (For individual time range) → ⊗ → Start* time → ⊗ → End* time → TL * Enter the time in the 24-hour system.
	X1, Z1			Reading and Resetting: 160 → • (Reading / Resetting) → ⊗ → TL
Stacked report	X1, Z1	X1, Z1	190	190 290 → • (Reading / Resetting) → ⊗ → TL When Z of stacked report is initiated, X only reports will be skipped.
		X2, Z2	290	
Daily net report		X2, Z2	270	270 → • (Reading / Resetting) → ⊗ → TL

Note Individual and full clerk reading and resetting are available only in the cashier and clerk system. In the factory setting, the register provides the "cashier only" system. So, if you want to change the system, consult your dealer.

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2 Daily sales totals

■ General report

You can take X and Z reports in the X1/Z1 mode. The use of the decimal key (·) determines when the report will actually reset the sales totals.

• Sample X report

```
28/08/2003 12:59    1111
123456#2981 MAYER
2111 NILS

#100  *X1*                    ──── Report no.
TR      *00000000031.78       ──── Read symbol


*  DEPT  *                    ──── Dept. code
D02     141.000 Q             ──── Sales q'ty
DPT.02         *680.62        ──── Sales amount
               86.85%         ──── Ratio of dept.2
D15       8.000 Q                  sales amount to
DPT.15         *103.08             group 1 total
               13.15%
GROUP01  149.000 Q            ──── Group1 sales q'ty
               *783.70        ──── Group1 sales amount
                7.55%         ──── Ratio of dept. group1
                                   sales amount to "+"
                                   department total
D03     153.000 Q
DPT.03        *2649.58
```

```
D20       4.000 Q
DPT.20         *255.75
               58.60%
GROUP08  13.000 Q
               *436.45
                4.21%


D07       4.000 Q
DPT.07          *10.24
              100.00%
GROUP09   4.000 Q
               *10.24
                0.10%


*DEPT TL  614.000 Q           ─┐ "+" dept. counter
             *10373.48         ┘ and total
              100.00%
```

To be continued on the next page

• Sample Z report

```
29/08/2003 22:05    1111
123456#3065 MAYER
2111 NILS

#100  *Z1*                    ──── Reset symbol
              Z1   0002       ──── Reset counter
GT1   *00000086222.98         ──── Net grand total
GT2   *00000086376.09              (GT2 - GT3)
GT3   -00000000153.11         ──── Grand total of
BAL   *00000000065.38              plus registration
TR    *00000000165.00         ──── Grand total of
                                   minus registration

                              ──── Grand total of training
                                   mode registration
```

The subsequent printout occurs in the same format as in the X report.

Note *Not all reports provide the resetting capability. Please refer to the chart on pages 95 through 97.*

```
D10        3.000 Q
DPT.10          -7.64
DEPT(-)    3.000 Q
                -7.64
```
} "-" dept. counter and total

```
D11        2.000 Q
DPT.11         *71.80
*HASH TL   2.000 Q
               *71.80
```
} "+" hash dept. counter and total

```
D12        8.000 Q
DPT.12         -68.48
HASH(-)    8.000 Q
               -68.48
```
} "-" hash dept. counter and total

```
D13       20.000 Q
DPT.13         *14.80
*BTTL TL  20.000 Q
               *14.80
```
} "+" bottle return dept. counter and total

```
D14       21.000 Q
DPT.14         -16.80
BTTL(-)   21.000 Q
               -16.80
```
} "-" bottle return dept. counter and total

```
*TRANS. *
  (−)3        5 Q
                -4.91
```
} Subtotal ⊖3 counter and total

```
  (−)4        6 Q
                -4.08
SETPLU-         -3.19
```
— Set PLU discount total

```
%1           4 Q
               -35.75
```
} Subtotal percent 1 counter and total

```
%2           4 Q
               -66.80
NET1      *10249.11
```
— Net sales total

```
TAX1 ST     *312.48
```
— Taxable 1 total
```
VAT 1        *14.88
```
— VAT 1 total
```
TAX2 ST     *261.98
VAT 2        *10.08
TAX3 ST     *258.91
VAT 3        *14.66
TAX4 ST     *149.26
VAT 4         *9.76
TTL TAX      *49.38
```
— Tax total
```
NET       *10199.73
```
— Net total without tax
```
VAT SFT      *36.51
```
— VAT shift total
```
TAX DELE     *65.21
```
— Tax delete total

```
  (−)1        5 Q
                -5.10
```
} Item ⊖1 counter and total

```
  (−)2        6 Q
                -4.73
```

To be continued on the next page

%3	5 Q	Item percent 3 counter and total
	-11.43	
%4	8 Q	
	-12.12	
DISCOUNT	7 Q	Mix-and-match discount counter and total
	-8.40	
CP PLU	3 Q	Coupon PLU discount counter and total
	-6.39	
REFUND	2 Q	Refund counter and total
	*36.12	
∽	4 Q	REG-mode void counter and total
	*1001.62	
∽ MODE	2 Q	Void-mode transaction counter and total
	*38.95	
MGR ∽	4 Q	Manager item void counter and total
	*38.95	
SBTL ∽	1 Q	Subtotal void counter and total
	*25.63	
HASH ∽	1 Q	Hash dept. void counter and total
	*2.63	
HASH RF	1 Q	Hash refund counter and total
	*1.75	
VP CNT	0 Q	Validation print counter
BILL CNT	3 Q	Bill counter
NO SALE	3 Q	No-sale (exchange) counter
***PBAL	3 Q	PBAL counter
***NBAL	2 Q	NBAL counter
G.C.COPY CNT	2 Q	Gest check copy counter
GUEST	136 Q	Customer counter
ORDER TL	*10252.43	Order total
PAID TL	*10188.74	Paid total
AVE.	*74.92	Paid total average per costomer
O-P	*63.69	Order total – Paid total
***RA	4 Q	Received on account 1 counter and total
	*212.00	
***RA2	2 Q	
	*161.50	
***PO	2 Q	Paid out 1 counter and total
	*33.00	
***PO2	2 Q	
	*35.00	
CA/CHK	2 Q	Cheque cashing counter and total
	*120.00	
DEPOSIT	2 Q	Deposit (+) counter and total
	*100.00	
DEPO. (-)	2 Q	Deposit (–) counter and total
	-50.00	
CASH	95 Q	Cash counter and total
	*8509.36	
CASH2	4 Q	
	*131.54	
CHECK1	3 Q	Cheque 1 sales counter and total
	*101.08	

```
CHECK2          3 Q
                *89.47
CHECK3          2 Q
                *79.51
CHECK4          3 Q
               *100.27
CREDIT1         6 Q
                *81.35 ─┐ Credit 1 sale and tendering counter and total
CREDIT2         4 Q
                *42.91
CREDIT3         3 Q
               *160.54
CREDIT4         1 Q
               *140.43
EXCH1           4 Q ─┐ Exchange 1 counter and total
                156.49
DOM.CUR1       *257.84 ── Exchange 1 in domestic currency
EX1 CHK         3 Q ─┐ Exchange 1 cheque 1-4 counter and total
                111.58
DOM.CUR1       *183.87 ── Exchange 1 cheque 1-4 total in domestic currency
EX1 CR          2 Q ─┐ Exchange 1 credit 1-4 counter and total
                 60.94
DOM.CUR1       *100.42 ── Exchange 1 credit 1-4 total in domestic currency
EXCH2           2 Q
                180.00
DOM.CUR2       *119.79
EXCH3           2 Q
                 50.00
DOM.CUR3        *65.93
EXCH4           1 Q
                 80.00
DOM.CUR4        *51.53

****CID       *8799.30 ── Cash in drawer
*CH ID         *490.33 ── Cheque in drawer
CA/CH ID      *9289.63 ── Cash + cheque in drawer
CHK/CG          *43.49 ── Change total for cheque tendering
```

■ Cashier report

Using this function, you can take X and Z reports for individual cashiers or all cashiers.

Individual cashier reading and resetting

| Note | *The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for "OP X/Z mode available" in the PGM2 mode.* |

• Sample X report

```
28/08/2003 13:17    1111
123456#2986 MAYER
2111 NILS

#151  *X1*
*  CASHIER   *
01CSR#1111  MAYER
ORDER TL       *9051.38
PAID TL        *8985.34
AVE.             *77.46
O-P              *66.04
REFUND          3 Q
                 *37.87
∽               5 Q
               *1004.25
∽ MODE          2 Q
                 *38.95
MGR ∽           4 Q
                 *38.95
SBTL ∽          1 Q
                 *25.63
***PBAL         3 Q
***NBAL         2 Q
G.C.COPY CNT    2 Q
GUEST         116 Q

***RA           4 Q
                *212.00
***RA2          2 Q
                *161.50
***PO           2 Q
                 *33.00
***PO2          2 Q
                 *35.00
CA/CHK          2 Q
                *120.00
DEPOSIT         2 Q
                *100.00
DEPO.(-)        2 Q
                -50.00

CASH           75 Q
               *7305.96
CASH2           4 Q
                *131.54
CHECK1          3 Q
                *101.08
CHECK2          3 Q
                 *89.47
CHECK3          2 Q
                 *79.51
```

— Cashier no./cashier code
└ Cashier name
— Order total
— Paid total
— Average

• Sample Z report

```
29/08/2003 22:09    1111
123456#3067 MAYER
2111 NILS

#151  *Z1*
*  CASHIER   *
01CSR#1111  MAYER
```
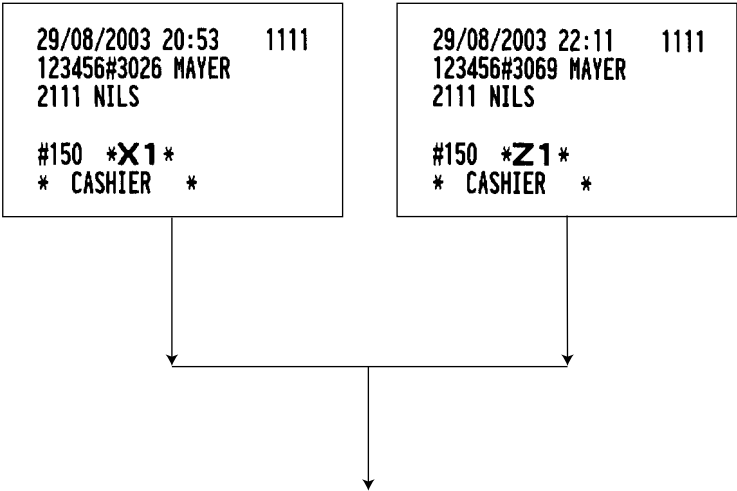
The subsequent printout occurs in the same format as in the sample X report.

* When you take these reports in the OP X/Z mode, the X report shows an "OP X" and the Z report shows an "OP Z".

To be continued on the next page

```
CHECK4          3 Q
               *100.27
CREDIT1         6 Q
               *81.35
CREDIT2         4 Q
               *42.91
CREDIT3         3 Q
               *160.54
CREDIT4         1 Q
               *140.43
EXCH1           4 Q
                156.49
DOM.CUR1       *257.84
EX1 CHK         3 Q
                111.58
DOM.CUR1       *183.87
EX1 CR          2 Q
                 60.94
DOM.CUR1       *100.42
EXCH2           2 Q
                180.00
DOM.CUR2       *119.79
EXCH3           2 Q
                 50.00
DOM.CUR3        *65.93
EXCH4           1 Q
                 80.00
DOM.CUR4        *51.53

****CID       *7595.90
*CH ID         *490.33
CA/CH ID      *8086.23
CHK/CG          *43.49
```

Full cashier reading and resetting

```
29/08/2003 20:53    1111
123456#3026 MAYER
2111 NILS

#150  *X1*
*  CASHIER  *
```

```
29/08/2003 22:11    1111
123456#3069 MAYER
2111 NILS

#150  *Z1*
*  CASHIER  *
```

The subsequent printout occurs in the same format as in the sample reports of individual cashier reading and resetting, and sales data for cashiers print in this sequence.

■ Clerk report

Using this function, you can take X and Z reports for individual clerks or all clerks.

Individual clerk reading and resetting

Note | *The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for "OP X/Z mode available" in the PGM2 mode.*

• Sample X report

```
28/08/2003 10:10    1111
123456#2830 MAYER
2111 NILS

#141 *X1*
* CLERK *
01CLK#2111  NILS ─────── Clerk no./clerk code
                          └ Clerk name
ORDER TL        *1814.52 ─ Order total
                          (Net sales total)
COM.SAL1        *134.14 ── Commission 1
COM.AMT1          *6.71    (sales total)
COM.SAL2        *134.16 ─┐ Commission 1
COM.AMT2          *4.02  └ (amount)
```

```
COM.SAL9         *23.75
COM.AMT9          *1.19
COM.TTL          *28.09 ── Commission amount total
NON COM.       *1018.51 ── Non-commission sales
```

• Sample Z report

```
29/08/2003 22:13    1111
123456#3070 MAYER
2111 NILS

#141 *Z1*
* CLERK *
01CLK#2111  NILS
```

The subsequent printout occurs in the same format as in the sample X report.

Full clerk reading and resetting

```
29/08/2003 21:01    1111
123456#3029 MAYER
2111 NILS

#140 *X1*
* CLERK *
```

```
29/08/2003 22:15    1111
123456#3073 MAYER
2111 NILS

#140 *Z1*
* CLERK *
```

The subsequent printout occurs in the same format as in the reports of individual clerk reading and resetting, and sales data for clerks print in this sequence.

* When you take these reports in the OP X/Z mode, the X report shows an "OP X" and the Z report shows an "OP Z".

■ Hourly report

You can take X and Z reports for sales totals and transaction (customer) counters for 48 half hours, or 24 hours.
If both quantity and amount are zero, their print is skipped.

• Sample X report

```
31/08/2003 18:46    1111
123456#4531 MAYER
2111 NILS

#160  *X1*
*HOURLY*
  10:00         47 Q
              *2740.18
AVE.            *58.30
  10:30         55 Q
              *3130.10
AVE.            *56.91
SUBTOTAL       102 Q
              *5870.28

  11:00         41 Q
              *1083.63
AVE.            *26.43
  11:30         64 Q
              *3267.10
AVE.            *51.05
SUBTOTAL       105 Q
              *4350.73

  12:00         55 Q
              *1940.20
AVE.            *35.28
  12:30         80 Q
              *3925.85
AVE.            *49.07
SUBTOTAL       135 Q
              *5866.05
```

```
  17:30         63 Q
              *2390.35
AVE.            *37.94
SUBTOTAL       117 Q
              *5015.53

  18:00         66 Q
              *3365.33
AVE.            *50.99
  18:30         48 Q
              *3791.38
AVE.            *78.99
SUBTOTAL       114 Q
              *7156.71
```

— Customer counter
— Sales total
— Average sales amount per customer (sales total ÷ customer counter)

• Sample Z report

```
31/08/2003 18:51    1111
123456#4533 MAYER
2111 NILS

#160  *Z1*
*HOURLY*
```

The subsequent printout occurs in the same format as in the sample X report.

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■ Full department report

```
29/08/2003 21:05    1111
123456#3031 MAYER
2111 NILS

#110 *X1*
* DEPT *
DO2    291.000 Q
DPT.O2        *888.09
              96.16%
D15      8.000 Q
DPT.15        *35.50
              3.84%
GROUP01 299.000 Q
              *923.59
              5.09%

DO3    197.000 Q
DPT.O3        *4586.17
              98.31%
D16      9.000 Q
DPT.16        *78.90
              1.69%
GROUP02 206.000 Q
              *4665.07
              25.69%

DO1    296.000 Q
DPT.O1        *2133.74
              97.92%
D17      7.000 Q
DPT.17        *45.24
              2.08%
GROUP03 303.000 Q
              *2178.98
              12.00%

DO6     24.000 Q
DPT.O6        *819.14
              100.00%
GROUP04  24.000 Q
              *819.14
              4.51%

DO4    107.000 Q
DPT.O4        *3459.16
              99.43%
D18      6.000 Q
DPT.18        *20.00
              0.57%
GROUP05 113.000 Q
              *3479.16
              19.16%
```

Sales q'ty and total
Ratio of dept. 2 sales amount to group 1 total

```
*DEPT TL  1297.000 Q
              *18155.71
              100.00%

D10      3.000 Q
DPT.10        -4.31
DEPT(-)  3.000 Q
              -4.31

D11      4.000 Q
DPT.11        *33.67
*HASH TL  4.000 Q
              *33.67

D12      3.000 Q
DPT.12        -3.66
HASH(-)  3.000 Q
              -3.66

D13     14.000 Q
DPT.13        *10.22
*BTTL TL 14.000 Q
              *10.22

D14     12.000 Q
DPT.14        -7.20
BTTL(-) 12.000 Q
              -7.20

SETPLU-          -5.50
```

■ Individual group total report on department

```
29/08/2003 21:09     1111
123456#3033 MAYER
2111 NILS

#112  *X1*
* GROUP *

D03      197.000 Q
DPT.03        *4586.17
D16        9.000 Q
DPT.16          *78.90
GROUP02  206.000 Q
              *4665.07
```
Group 2 sales q'ty and total

■ Full group total report on department

```
29/08/2003 21:11     1111
123456#3034 MAYER
2111 NILS

#113  *X1*
* GROUP *

GROUP01  299.000 Q
              *923.59
               5.09%
GROUP02  206.000 Q
              *4665.07
              25.69%
GROUP03  303.000 Q
              *2178.98
```
Group 1 sales q'ty and total

```
*DEPT TL  1297.000 Q
              *18155.71
              100.00%

DEPT(-)      3.000 Q
               -4.31

*HASH TL     4.000 Q
              *33.67

HASH(-)      3.000 Q
               -3.66

*BTTL TL    14.000 Q
              *10.22

BTTL(-)     12.000 Q
               -7.20
```

■ PLU/subdepartment report by designated range

This function provides you with X and Z reports for sales information of a certain range of PLUs/subdepartments. You must enter the start and end PLU/subdepartment code of the range. Of course, the range may represent all of the PLUs/subdepartments in your register.

• Sample X report

```
29/08/2003 21:14    1111
123456#3036 MAYER
2111 NILS

#120  *X1*
*   PLU   *
            000001-000020        Range
P000001   15.000 Q
PL000001         *31.50         Sales q'ty and total
     L2    5.000 Q
                  *6.25
P000002   18.000 Q
PL000002         *71.13
     L2   10.000 Q
                 *36.20
P000003   27.000 Q
PL000003         *69.38
     L2    7.000 Q
                 *59.57
P000004   17.000 Q
PL000004         *87.93
     L2   11.000 Q
                 *63.91
P000005   25.000 Q
PL000005        *153.90
     L2    8.000 Q
                 *44.96
```

PLU code — P000001
Item label — PL000001

```
P000020   13.000 Q
PL000020         *99.04
     L2    4.000 Q
                 *26.12

***TOTAL 228.000 Q
                *1126.96         Range sum
     L2   57.000 Q
                *312.01

SETPLU-           -5.50

*  SET PLU  *
P000010    5.000 Q
PL000010         *22.50

***TOTAL   5.000 Q
                 *22.50
     L2    0.000 Q
                  *0.00
```

• Sample Z report

```
29/08/2003 22:17    1111
123456#3075 MAYER
2111 NILS

#120  *Z1*
*   PLU   *
```

The subsequent printout occurs in the same format as in the sample X report.

■ PLU/subdepartment report by associated department

• Sample X report

```
28/08/2003 10:29    1111
123456#2840 MAYER
2111 NILS

#121  *X1*
*  PLU  *
DPT.05          D05 ──── Associated dept.code
P000003      3.000 Q  ──── PLU code
PL000003        *39.41 ┐ Sales q'ty and total
      L2     1.000 Q  ┘
               *9.56

P000007      4.000 Q
PL000007        *99.02
      L2     2.000 Q
               *3.16

***TOTAL     7.000 Q
              *138.43
      L2     3.000 Q
              *12.72

SETPLU-         *2.31

*  SET PLU  *

***TOTAL     0.000 Q
               *0.00
      L2     0.000 Q
               *0.00
```

(PLU code → P000003)
*(Sales q'ty and total → PL000003 *39.41)*

• Sample Z report

```
28/08/2003 10:54    1111
123456#2844 MAYER
2111 NILS

#121  *Z1*
*  PLU  *
```

The subsequent printout occurs in the same format as in the sample X report.

■ PLU/subdepartment zero sales report

```
29/08/2003 21:21    1111
123456#3042 MAYER
2111 NILS

#127  *X1*
* ZERO SALES *
P000021  ──── PLU code
PL000021  ──── Item label
P000022
PL000022
P000023
PL000023
```

■ PLU/subdepartment price category report

```
28/08/2003 10:32    1111
123456#2843 MAYER
2111 NILS

#129  *X1*
*  CATEGORY  *
         0.00 -  9999.99 ──── Price amount range
P000001
PL000001
      L1     2.000 Q
              *14.98 ┐ Sales q'ty and total
      L2     2.000 Q ┘
              *27.99

P000002
PL000002
      L1     2.000 Q
              *37.92
      L2     1.000 Q
              *63.25
```

```
***TOTAL
      L1    90.000 Q
             *1821.96
      L2    33.000 Q
             *343.88

*  SET PLU  *
P000010
PL000010
      L1     5.000 Q
              *22.50
      L2     2.000 Q
               *7.81

***TOTAL
      L1     5.000 Q
              *22.50
      L2     2.000 Q
               *7.81
```

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■ PLU/subdepartment stock report

```
 29/08/2003 21:25    1111
 123456#3045 MAYER
 2111 NILS

 #124  *X1*
 *  STOCK   *
                000001~000010          —— Range
 P000001
 PL000001        65.000 S             —— Current stock
 P000002
 PL000002        41.000 S
 P000003
 PL000003        46.000 S
 P000004
 PL000004        32.000 S
 P000005
 PL000005        17.000 S
 P000006
 PL000006        28.000 S
 P000007
 PL000007        31.000 S
 P000008
 PL000008        37.000 S
 P000009
 PL000009        32.000 S
 P000010
 PL000010         0.000 S
```

■ PBLU report

• Sample X report

```
 28/08/2003 11:09    1111
 123456#2848 MAYER
 2111 NILS

 #180  *X1*
 *  PBLU  *
                0001-9999
 1000#
 ***PBAL         *21.27
 DEPOSIT         *50.00
 DEPO.(-)       -30.00

 ***TOTAL
 ***PBAL         *21.27
 DEPOSIT         *50.00
 DEPO.(-)       -30.00
```

• Sample Z report

```
 28/08/2003 11:13    1111
 123456#2854 MAYER
 2111 NILS

 #180  *Z1*
 *  PBLU  *
```

The subsequent printout occurs in the same format as in the sample X report.

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■ PBLU report by cashier

• Sample X report

```
28/08/2003 11:11    1111
123456#2853 MAYER
2111 NILS

#181 *X1*
*  PBLU  *
01CSR#1111  MAYER
1000#
***PBAL         *21.27
DEPOSIT         *50.00
DEPO.(-)        -30.00

***TOTAL
***PBAL         *21.27
DEPOSIT         *50.00
DEPO.(-)        -30.00
```

• Sample Z report

```
28/08/2003 11:16    1111
123456#2857 MAYER
2111 NILS

#181  *Z1*
*  PBLU  *
```

The subsequent printout occurs in the same format as in the sample X report.

■ Balance report

```
29/08/2003 21:27    1111
123456#3046 MAYER
2111 NILS

#182 *X1*
* BALANCE   *
OLD BAL.
                -10.00
ORDER TL    *18154.65
PAID TL     *18079.27
BALANCE
                *65.38
```

— Grand total balance of the previous day
— Order total
— Paid total
— Old balance + today's balance

■ Commission sales report

```
28/08/2003 11:18     1111
123456#2860 MAYER
2111 NILS

#132  *X1*
*   SALES    *
COM.SAL1        *171.72 ──── Commission 1
COM.AMT1          *8.59 ┐    (sales total)
COM.SAL2        *206.64 ┘─── Commission 1
COM.AMT2          *6.20          (amount)
COM.SAL3        *173.38
COM.AMT3          *3.47
COM.SAL4        *108.24
COM.AMT4          *3.25
COM.SAL5        *150.19
COM.AMT5          *3.00
COM.SAL6        *224.37
COM.AMT6         *15.71
COM.SAL7         *63.66
COM.AMT7          *3.18
COM.SAL8         *42.74
COM.AMT8          *1.28
COM.SAL9         *43.91
COM.AMT9          *2.20 ┐
COM.TTL          *46.88 ┘─── Commission amount
NON COM.       *1021.38 ──── Non-commission sales

NET 1          *2206.23 ──── Net sales total
```

■ Total in drawer reading

```
29/08/2003 21:30     1111
123456#3052 MAYER
2111 NILS

#131  *X1*
* TL-ID *
EXCH1           2 Q ──── Exchange 1 counter
              130.00 ──── Currency
DOM.CUR1       *117.92 ┐     exchange 1
EX1 CHK         1 Q    │     total
               30.00   ┘── Domestic
DOM.CUR1        *27.20       currency for
EX1 CR          1 Q          currency
               38.80         exchange 1
DOM.CUR1        *35.20       total
EXCH2           1 Q
               50.00
DOM.CUR2        *32.25
EXCH3           1 Q
               50.00
DOM.CUR3        *82.38
EXCH4           2 Q
              150.00
DOM.CUR4       *134.92

****CID       *16971.89 ──── Cash in drawer
*CH ID          *502.07 ──── Cheque in drawer
CA/CH ID      *17473.96 ──── Cash/Cheque
CHK/CG          *26.77        in drawer
```

■ Transaction report

```
29/08/2003 21:29     1111
123456#3050 MAYER
2111 NILS

#130  *X1*
*TRANS. *
```

In this report the same transaction data as those printed when full reading is taken are printed except department sales totals.

■ X1/Z1 stacked report

You can print multiple X1/Z1 reports in sequence at a time. In this case, you need to program in advance what X1/Z1 reports should be printed in the stacked report sequence.

Note *The following job code numbers alone can be used for stacked report printing.*
Job code number: 100, 110, 113, 120, 124, 127, 129, 130, 131, 132, 140, 150, 160, 180, 182
Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for details.

3 Periodic consolidation

Your register allows you to take consolidation X and Z reports of a chosen period (normally one week or a month).

■ Generality

The periodic reading or resetting reports are the same in format as those in the X1/Z1 report for daily total except job code no. (#2xx) and mode indication ("X2" or "Z2".)

• **Sample X report**

```
30/08/2003 23:11    1111
123456#4111 MAYER
2111 NILS

#200  *X2*                        ──── Read symbol
TR     *00000000165.00
```

• **Sample Z report**

```
30/08/2003 23:14    1111
123456#4115 MAYER
2111 NILS
                                   ──── Reset symbol
#200  *Z2*
                Z1  0002           ──── Reset counter
                                        of daily total
                Z2  0001           ──── Reset counter
GT1   *00000086222.98                   of periodic
GT2   *00000086376.09                   consolidation
GT3   -00000000153.11              ──── Grand total
BAL   *00000000065.38
TR    *00000000165.00
```
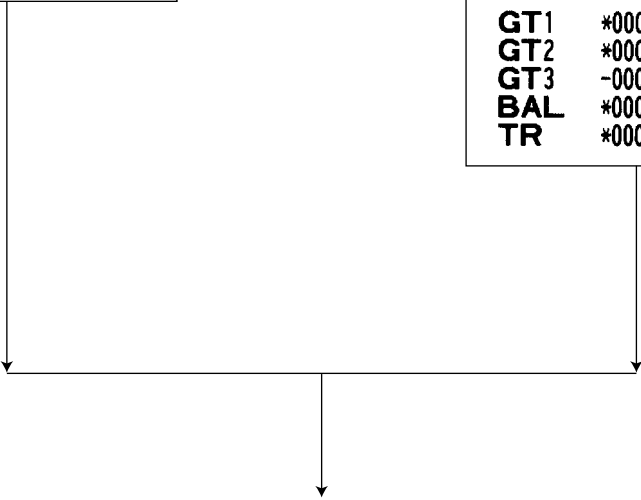
The subsequent printouts are the same in format as those in the X/Z report for daily total.

■ Daily net report

• Sample X report

```
31/10/2003 23:32    1111
123456#8751 MAYER
2111 NILS

#270  *X2*
*DAILY*
01/10        49 Q
           *1041.39
02/10        78 Q
           *1813.20
03/10       158 Q
           *3468.67
04/10       190 Q
           *3715.31
05/10       196 Q
           *4280.99
```

```
30/10       115 Q
           *2438.19
31/10       126 Q
           *3022.19

***TOTAL   1891 Q
          *67299.84
```

• Sample Z report

```
01/11/2003  1:30    1111
123456#8811 MAYER
2111 NILS

#270  *Z2*
```

The subsequent printout occurs in the same format as in the sample X report.

■ X2/Z2 stacked report

You can print multiple X2/Z2 reports in sequence at a time. In this case, you need to program in advance what X2/Z2 reports should be printed in the stacked report sequence.

Note

The following job code numbers alone can be used for stacked report printing.
Job code number: 200, 210, 213, 220, 227, 229, 230, 231, 232, 240, 250, 270, 282
Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for details.

COMPULSORY CASH/CHEQUE DECLARATION

If you want to make mandatory the declaration of the cash and cheque amount in the drawer before outputting cashier Z reports, consult your dealer and have your register programmed for compulsory cash/cheque declaration.
If your register is programmed for compulsory cash/cheque declaration (CCD), a cashier must first count and declare the cash and cheque amounts (of domestic and foreign currency) in the drawer, before he or she can output a cashier report. The procedure for outputting a CCD report is shown below.

Types of compulsory cash/cheque declaration
• Compulsory declaration prior to individual cashier resetting
• Compulsory declaration prior to full cashier resetting

Note	• *Compulsory cash/cheque declaration is available in the above two types. You can choose either of these. Consult your dealer for details.* • *When cash/cheque declaration is compulsory, flash reports are not available.*

Key operation
After the first [TL] key is pressed, the register prompts the cashier to input the cash and cheque accounts for both domestic and foreign currency. The cashier can simply input the total amounts of each currency unit, or the number of bills or coins of each denomination of each currency unit.
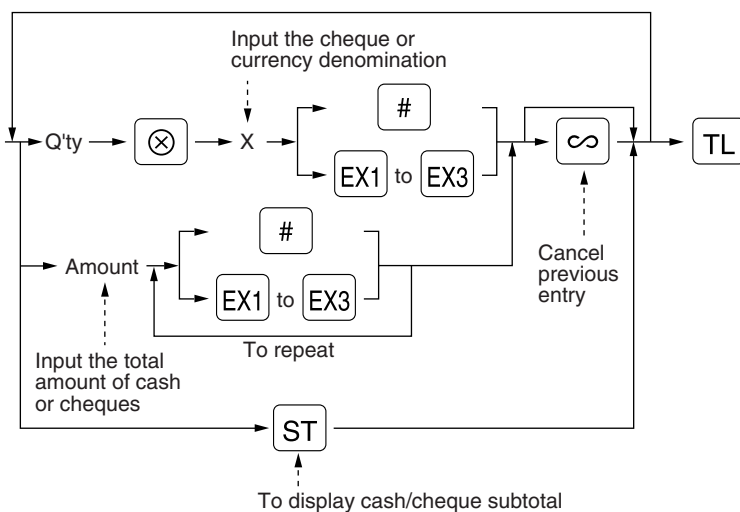
[#] :When inputting the cash or cheque amount (domestic currency) in the drawer
[EX1] to [EX3] :When inputting the amount of a foreign currency in the drawer

```
28/08/2003 13:59    1111
123456#2990 MAYER
2111 NILS

#151  *Z1*
*   CCD   *
CA/CH IS      *8086.23
EXCH1 IS       156.49    ⎤
EXCH2 IS       180.00    ⎬──CCD entry amount
EXCH3 IS        50.00    ⎦

*  CASHIER   *
01CSR#1111  MAYER
ORDER TL      *9051.38
```

```
CREDIT4        1 Q
              *140.43
EXCH1          4 Q
               156.49   ──Currency exchange 1 cash in drawer to be obtained
EXCH1 IS       156.49   ──Total of entered (declared) exchange 1 in drawer
CCD DIF          0.00   ──Difference
DOM.CUR1      *257.84
EX1 CHK        3 Q
               111.58
DOM.CUR1      *183.87
EX1 CR         2 Q
                60.94
DOM.CUR1      *100.42
EXCH2          2 Q
               180.00
EXCH2 IS       180.00
CCD DIF          0.00
DOM.CUR2      *119.79
EXCH3          2 Q
                50.00
EXCH3 IS        50.00
CCD DIF          0.00
DOM.CUR3       *65.93
EXCH4          1 Q
                80.00
DOM.CUR4       *51.53

****CID       *7595.90   ──Cash in drawer to be obtained
*CH ID         *490.33   ──Cheque (in domestic currency) in drawer to be obtained
CA/CH ID      *8086.23   ──Cash/cheque in drawer to be obtained
CA/CH IS      *8086.23   ──Total of entered (declared) cash/cheque in drawer
CCD DIF          *0.00   ──Difference
DIF. TL          *0.00   ──Total of difference
CHK/CG          *43.49   ──Change total for cheque tendering
```

PROGRAMMING FOR EURO

Your register can be modified to correspond with each period set for the introduction of EURO, and in your register each currency is treated as shown on the table below depending on which period you are in.
Basically your register can be automatically modified to correspond to the introduction of EURO by executing the operation of Job #800 in X2/Z2 mode. However, there are several options you must set depending on your needs.

How currencies are treated in your register

	Period 1	Period 2	Period 3
	After the introduction of EURO, and before EURO banknotes and coins begin to circulate	After EURO banknotes and coins begin to circulate, and before national currency is withdrawn from circulation. (Co-existence of EURO and national currency)	After the national currency is withdrawn from circulation
EURO	Exchange 1	Domestic currency	Domestic currency
National currency (DM, F, etc.)	Domestic currency	Exchange 1	
Foreign currency	Exchange 2 to Exchange 4	Exchange 2 to Exchange 4	Exchange 1 to Exchange 4

Receipt samples:

Period 1

```
DPT.01          *1.00
DPT.02          *2.00

***TOTAL      *3. 00  ───── Sales total amount in national currency (as domestic currency)
               €1.53  ───── Sales total amount in EURO*
CASH           *5.00  ───── Tendered amount in national currency
CHANGE         *2.00  ───── Change in national currency
               €1.02  ───── Change in EURO*
```
*: They are printed for information purposes only.

Period 2

```
DPT.01          €0.51
DPT.02          €1.02

***TOTAL      €1. 53  ───── Sales total amount in EURO (as domestic currency)
               *2.99  ───── Sales total amount in national currency*
CASH           €2.00  ───── Tendered amount in EURO
CHANGE         €0.47  ───── Change in EURO
               *0.92  ───── Change in national currency*
```
*: They are printed for information purposes only.

Period 3

```
DPT.01          €0.51
DPT.02          €1.02

***TOTAL      €1. 53
CASH           €2.00
CHANGE         €0.47
```

■ Automatic modification of register system for introduction of EURO

`X2/Z2` `800`

To make your register correspond to the introduction of EURO, your register system can be automatically modified when the procedure shown below is executed in the X2/Z2 mode. According to the steps of the introduction, you can make your register correspond to EURO.

Procedure

800 ⟶ ⟨ • ⟩ ⟶ ⟨⊗⟩ ⟶ | *A(1,2 or 3) | ⟶ ⟨TL⟩
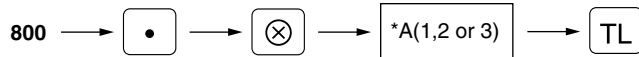
*A=1: Applicable for the period 1
*A=2: Applicable for the period 2
*A=3: Applicable for the period 3

Note • *You can perform the each operation only once with the substitution of "A=1", "A=2" and "A=3". If you performed the operation with the substitution of "A=2" first, you cannot perform the operation with the substitution of "A=1". If you performed the operation with the substitution of "A=3" first, you cannot perform the operation with the substitution of "A=1" and "A=2".*

The details of the register system modification are as follows:

When "1" is substituted to "A":
1. Issuing a general Z1 report (Job #100)
2. Issuing a general Z2 report (Job #200)
3. Setting "Yes" for a PGM function "Printing exchange 1 total amount and change amount on receipt and journal" (Job #2616)
4. Setting "Division" for a PGM function "Exchange 1 calculation method" (Job #2616)
5. Setting the EURO symbol (€) for the currency description text (Job #2334), and setting "2" for the number of digits after decimal point (Job #2330) of exchange 1
6. Setting the round-off function enable for currency exchange

After the execution of the procedure with the substitution of "1", treat EURO as foreign currency using Exchange 1 (⟨EX1⟩).

When "2" is substituted to "A":
1. Issuing a general Z1 report (Job #100)
2. Issuing a general Z2 report (Job #200)
3. Resetting GT1, GT2, GT3 and training GT
4. Converting the unit prices of department and PLU to EURO currency.
5. Setting "Yes" for a PGM function "Printing exchange 1 total amount and change amount on receipt and journal" (Job #2616)
6. Setting "Multiplication" for a PGM function "Exchange 1 calculation method" (Job #2616)
7. Changing the domestic currency symbol to the EURO symbol (€) and setting the number of digits after decimal point of the domestic currency to 2
8. For the setting of the currency description text and the number of digits after decimal point of exchange 1, the ones that had been set to the domestic currency are set. (Job #2330 and #2334)
9. Setting the round-off function enable for currency exchange

Note *When any special setting has been applied for the rounding system to make it suit your domestic (national) currency, the setting is cancelled to make it suit your new domestic currency, EURO.*

After the execution of the procedure with the substitution of "2", treat EURO as domestic currency, and national currency as foreign currency using Exchange 1 (EX1).

With the execution of the procedure with the substitution of "2", your domestic currency becomes EURO. While unit prices of departments and PLUs are automatically converted to EURO currency, you must change the rates or amounts for the miscellaneous keys so that they are based on amounts in EURO.

When "3" is substituted to "A":
1. Issuing a general Z1 report (Job #100)
2. Issuing a general Z2 report (Job #200)
3. Resetting GT1, GT2, GT3 and training GT
4. Converting the unit prices of department and PLU to EURO currency.
5. Setting "No" for a PGM function "Printing exchange 1 total amount and change amount on receipt and journal" (Job #2616)
6. Setting "Multiplication" for a PGM function "Exchange 1 calculation method" (Job#2616)
7. Changing the domestic currency symbol to the EURO symbol and setting the number of digits after decimal of the domestic currency to 2
8. Setting the round-off function enable for currency exchange

| *Note* | *When the operation is performed from the status of substitution "1", and when any special setting has been applied for the rounding system to make it suit your domestic (national) currency, the setting is cancelled to make it suit your new domestic currency, EURO.* |

After the execution of the procedure with the substitution of "3", treat EURO as domestic currency.
When the operation with the substitution of "2" has been performed already, "3. Resetting GT1, GT2, GT3 and training GT" and "4. Converting the unit prices of department and PLU to EURO currency" are not executed.
When the operation with the substitution of "1" or "2" has been performed already, the currency description text of exchange 1 is overwritten with a space.

■ Optional programming for the introduction of EURO PGM 1   PGM 2

Programming relating with the function of exchange 1(EX1) cannot be changed automatically with the execution of Job #800 described in the previous section. After the execution on each period, conduct the following programming depending on your needs.

Programming for Exchange 1 (EX1)

Currency exchange rate (Job #1310)
For the period 1 and period 2, set the EURO conversion rate.

Cheque/credit operation (Job #2616)

Assigning the drawer number to the drawer for foreign currency (Job #2680)
It may be convenient to have two drawers for EURO (as domestic currency) and national currency (as the foreign currency set in exchange 1) when both of these currencies are co-existing (period 2). In this case, conduct this programming.

OVERRIDE ENTRIES

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

Procedure

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

Example In this example, the register has been programmed not to allow deduction entries over 2.00.

Key operation	Print
1500 [2]	
REG-mode 250 [⊖] ...Error	DPT.**02** ∗15.00
entries [CL]	(−) **1** -2.50
	CASH ∗12.50
Turn the mode switch	
to the MGR position.	
250 [⊖]	
Return the mode switch	
to the REG position.	
[TL]	

CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT)

When you need to void incorrect entries that cashiers cannot correct (incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void), follow this procedure in the MGR mode.

1. Turn the mode switch to the MGR position.
2. Press the ⬚ key to put your register in the VOID mode.
3. Repeat the entries that are recorded on an incorrect receipt. (All data for the incorrect receipt are removed from register memory; the voided amounts are added to the void register totalizer.)

Incorrect receipt	Cancellation receipt

```
28/08/2003  0:15    1111
123456#1175 MAYER
2111 NILS

DPT.02        *10.00
DPT.03         *1.50

CASH    *11.50
```

➡

```
28/08/2003  0:15    1111
123456#1176 MAYER
2111 NILS

     *² MODE      *
DPT.02        *10.00
DPT.03         *1.50

CASH    *11.50
```

> **Note** *Your machine leaves the VOID mode whenever a transaction is cancelled (i.e. finalized in the VOID mode.) To void additional transactions repeat steps 2. and 3. above.*

PRIOR TO ENTRIES

1 Preparations for entries

Before registrations, insert the operator key into the mode switch and turn it to the REG position and check the following items:

■ Receipt and journal paper rolls

If the receipt and journal paper rolls are not set in the machine or there are low rolls, install new ones according to section "4. Installing and removing the paper rolls" under "OPERATOR MAINTENANCE."

■ Receipt ON/OFF function

You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the [RCPT] key in the OP X/Z position. This key toggles the receipt printing status ON and OFF. To check the receipt printing status, turn the mode switch to the OP X/Z position or press the [CL] key in the REG mode. When the function is in the OFF status, the receipt off indicator "_" illuminates.

Note | *Your register will print reports regardless of the receipt state. This means that the receipt roll must be installed even when the receipt state is "OFF".*

■ Cashier and clerk assignment

Prior to any item entries, cashiers must enter their cashier codes into the register, and may also be required to enter a clerk code. However, these code entries may not be necessary when the same cashier or clerk code is used in the next transaction.

Cashier codes and clerk codes are available in two variants: Variant 1, in which they are displayed ("0000" to "9999"), and Variant 2, in which they are not displayed (always "∗∗∗∗").

When the cashier or clerk code is assigned by the following procedure, the register prints the four-digit cashier code or clerk code (variant 2: "∗∗∗∗") and the cashier or clerk name both on the receipt and journal for every transaction.

Note | *All of these settings depend on how the register has been programmed. For the selection of these settings, consult your local dealer.*

```
        YOUR RECEIPT
         THANK YOU
   26/08/2003  0:07    1111
   123456#0107 MAYER
   2111 NILS

   DPT.01         *10.00

   CASH    *10.00
```

Clerk code ("∗∗∗∗" is printed in Variant 2.)
Clerk name
Cashier code ("∗∗∗∗" is printed in Variant 2.)
Cashier name
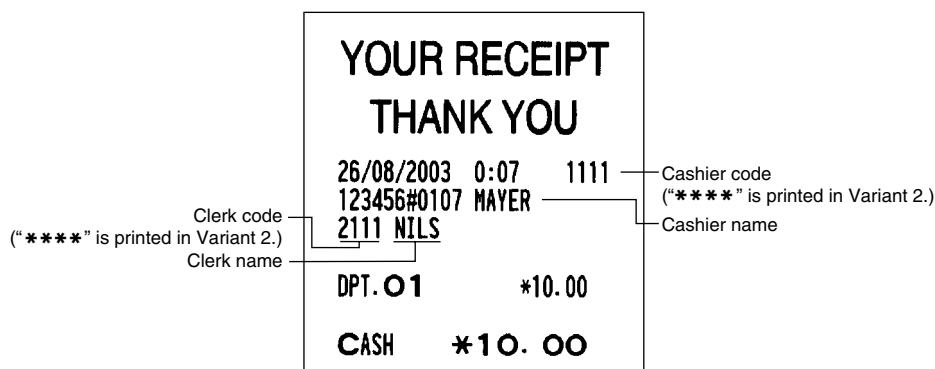
Procedure

Cashier assignment

■ Sign-on
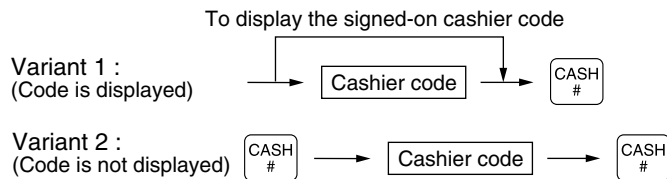
To display the signed-on cashier code

Variant 1 :
(Code is displayed)

Cashier code → [CASH #]

Variant 2 :
(Code is not displayed) [CASH #] → Cashier code → [CASH #]

■ Sign-off

Variant 1 / Variant 2 :

[CASH #] → [CASH #]

Clerk assignment

■ Sign-on

To display the signed-on clerk code

Variant 1 :
(Code is displayed)

Clerk code → [CLERK #]

Variant 2 :
(Code is not displayed) [CLERK #] → Clerk code → [CLERK #]
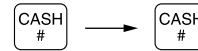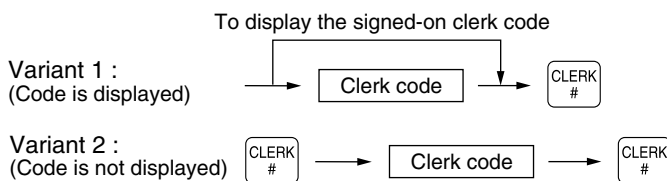
■ Sign-off

Variant 1 / Variant 2 :
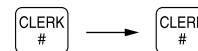
[CLERK #] → [CLERK #]

Note
- *On the current factory setting, only the entry of the cashier code is required. When cashier & clerk codes entries are desirable for your register, consult your dealer.*
- *If you want to enter cashier and/or clerk codes before every transaction, consult your dealer.*
- *For the display type selection of cashier code and clerk code, "Variant 1" has been preset. For the selection of "Variant 2," consult your dealer.*
- *The cashier can be changed during a transaction. Consult your dealer.*

■ Power saving mode

The register will enter into power saving mode when no entries are performed based on the pre-programmed time limit (by default, 30 minutes).
When the register goes to the power save mode, all display lights will turn off except the decimal point at the left most position of the lower line. The register will return to normal operation mode when any key is pressed or a mode is changed with the mode key. Please note when the register is recovered by a key entry, it is invalid. After the recovery, start the key entry from the beginning.

2 Error warning

In the following examples, your register will go into an error state accompanied with a warning beep and a corresponding error message. Clear the error state by pressing the [CL] key and take proper action.
Please refer to the error message table on page 165.
- When you enter an over 32-digit number (entry limit overflow): Cancel the entry and re-enter a correct number.
- When you make an error in key operation: Clear the error and continue operation.
- When you make an entry beyond a programmed amount entry limit: Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.
- When an including-tax subtotal exceeds eight digits: Delete the subtotal by pressing the [CL] key and press the [TL], [CA2], [CH] through [CH4], or [CR1] through [CR4] key to finalize the transaction.

ENTRIES

1 Item entries

■ Single item entries

Procedure

Department entries (direct department entries)

Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.

When using a programmed unit price
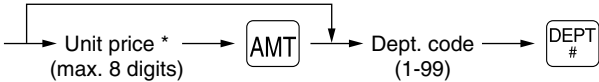
Unit price * ➔ Department key
(max. 8 digits)
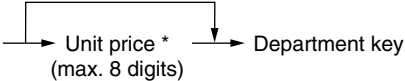
*Less than the programmed upper limit amounts

Note *When those departments for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.*

Department entries (indirect department entries)

When using a programmed unit price

Unit price * ➔ |AMT| ➔ Dept. code ➔ |DEPT #|
(max. 8 digits)   (1-99)

*Less than the programmed upper limit amounts

PLU entries (indirect PLU entries)

Enter a PLU code and press the |PLU/SUB| key.

➔ PLU code ➔ |PLU/SUB|
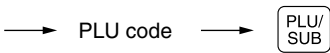
Note *When those PLUs for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.*

Subdepartment (open PLU) entries

➔ Unit price * ➔ |AMT| ➔ PLU code ➔ |PLU/SUB|
(max. 8 digits)
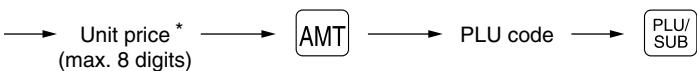
*Less than the programmed upper limit amounts

PLU entries (direct PLU entries)

When using a programmed price

Unit price ➔ Direct PLU key
(for subdept.)
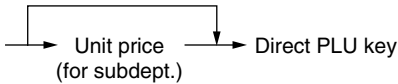
Example	Key operation	Print
	1200 3 5 8 DEPT# 680 AMT 5 DEPT# 2 PLU/SUB 1200 AMT 11 PLU/SUB 8 TL	DPT.**03** *12.00 DPT.**05** *5.00 DPT.**08** *2.00 DPT.**05** *6.80 PL000002 *1.50 PL000011 *12.00 PL000008 *3.50 CASH ***42. 80**

■ Repeat entries

You can use this function for entering a sale of two or more same items.

Example	Key operation	Print
Repeated department entry (direct)	200 8 8 8	DPT.**08** *2.00 DPT.**08** *2.00 DPT.**08** *2.00
Repeated department entry (indirect)	680 AMT 5 DEPT# DEPT#	DPT.**05** *6.80 DPT.**05** *6.80
Repeated PLU entry (indirect)	10 PLU/SUB PLU/SUB PLU/SUB	PL000010 *7.15 PL000010 *7.15 PL000010 *7.15
Repeated PLU entry (direct)	51 51	PL000051 *2.85 PL000051 *2.85
Repeated subdepartment entry	500 AMT 60 PLU/SUB PLU/SUB TL	PL000060 *5.00 PL000060 *5.00 CASH ***56. 75**

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■ Multiplication entries

Use this feature when you need to enter two or more same items.
This feature helps when you sell a large quantity of items or need to enter quantities that contain decimals.

<div style="border:1px solid;display:inline-block;padding:2px 10px">Procedure</div>

When you use a programmed
unit price

$\boxed{\text{Q'ty}} \rightarrow \boxed{\otimes} \rightarrow$

→ $\boxed{\text{Unit price}}$ → $\boxed{\text{Department key}}$	·················· Dept. entry (direct)
→ $\boxed{\text{Unit price}}$ → $\boxed{\text{AMT}}$ → $\boxed{\text{Dept. code}}$ → $\boxed{\text{DEPT \#}}$	··········· Dept. entry (indirect)
→ $\boxed{\text{PLU code}}$ → $\boxed{\text{PLU/ SUB}}$	·················· PLU entry (indirect)
→ $\boxed{\text{Unit price}}$ → $\boxed{\text{Direct PLU}}$	························ PLU/subdept. entry (direct)
→ $\boxed{\text{Unit price}}$ → $\boxed{\text{AMT}}$ → $\boxed{\text{PLU code}}$ → $\boxed{\text{PLU/ SUB}}$	··········· Subdept. entry
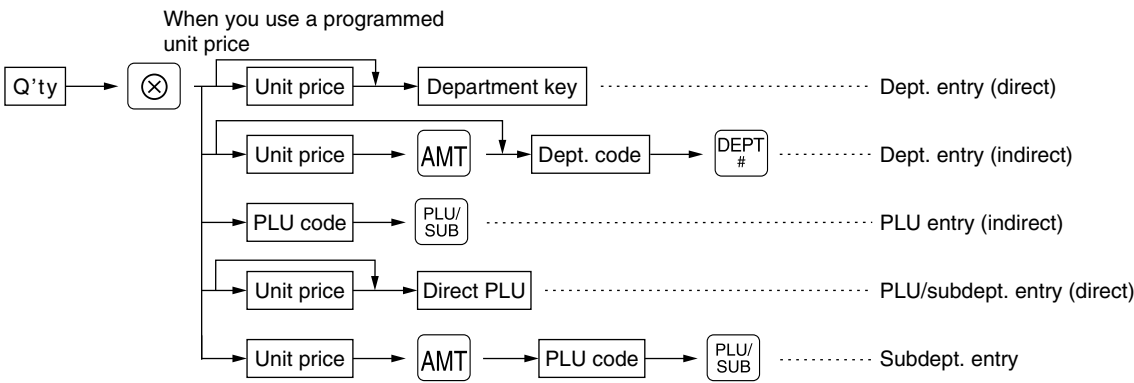
- Q'ty: Up to four digits integer + three digits decimal
- Unit price: Less than a programmed upper limit
- Q'ty x unit price: Up to eight digits

<div style="border:1px solid;display:inline-block;padding:2px 10px">Example</div>

	Key operation	**Print**
Department entry (direct)	7 · 5 ⊗ 165 8	7.5x 1.65 DPT.**08** *12.38
Department entry (indirect)	2 ⊗ 250 AMT 5 DEPT#	2x 2.50 DPT.**05** *5.00
PLU entry	15 ⊗ 13 PLU/SUB	15x 2.10 PL000013 *31.50
Direct PLU entry	8 · 25 ⊗ 58	8.25x 3.00 PL000058 *24.75
Subdepartment entry	3 ⊗ 100 AMT 60 PLU/SUB TL	3x 1.00 PL000060 *3.00 CASH **∗76. 63**

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■ Successive multiplication entries

This function is practical for example when you enter a sale of items sold by area (square meter).

When you use a programmed
unit price

| Length | → | $\otimes$ | → | Width | → | $\otimes$ | → | Unit price | → | Department key | ····· Dept. entry (direct) |

| → | Unit price | → | AMT | → | Dept.code | → | DEPT # | ············· Dept. entry (indirect) |

| → | PLU code | → | PLU/ SUB | ···································· PLU entry (indirect) |

| → | Unit price per m² | → | Direct PLU | ····································· PLU/subdept. entry (direct) |

| → | Unit price per m² | → | AMT | → | PLU code | → | PLU/ SUB | ············· Subdept. entry |
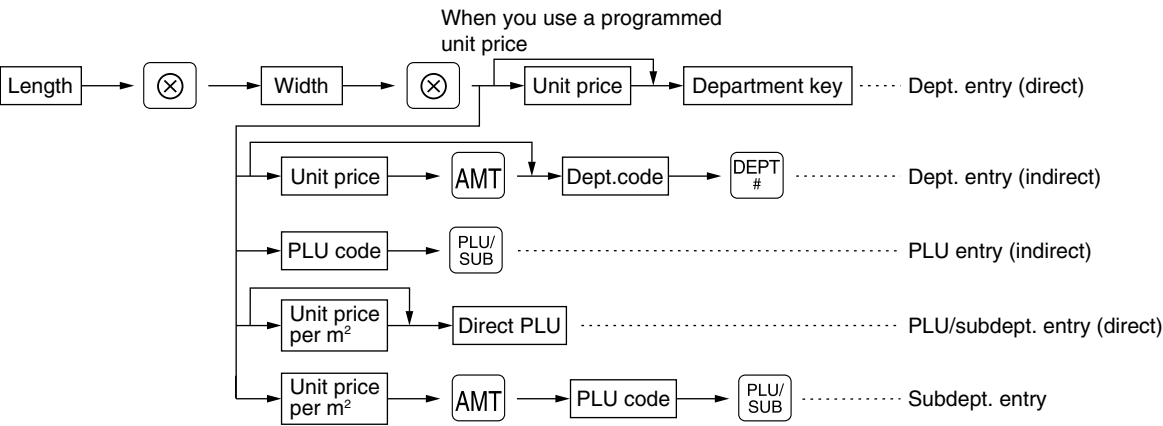
• Length or width: up to seven digits (4-digit integer + 3-digit decimal)
• Unit price: less than a programmed upper limit
• Length x Width x Unit price: up to eight digits

Note *For actual use of this function, consult your dealer.*

Key operation

Department entry
- 3 $\otimes$
- 4 $\otimes$
- 400 5

PLU entry
- 1 · 5 $\otimes$
- 2 · 5 $\otimes$
- 8 PLU/ SUB

Subdepartment entry
- 1 · 75 $\otimes$
- 1 · 75 $\otimes$
- 600 AMT
- 6 PLU/ SUB
- TL

Print

```
3x 4x 4.00
DPT.05        *48.00
1.5x 2.5x 3.00
PL000008      *11.25
1.75x 1.75x 6.00
PL000006      *18.38

CASH    *77.63
```

■ **Split-pricing entries**

You will use this function when your customer wants to purchase items normally sold in bulk.

Procedure

When you use a programmed
unit price

| Selling q'ty | → | $\otimes$ | → | Base q'ty | → | $\otimes$ | → | Unit price per base q'ty | → | Department key |

→ | Unit price | → | AMT | → | Dept.code | → | DEPT # |

→ | PLU code | → | PLU/ SUB |

→ | Unit price per base q'ty | → | Direct PLU |

→ | Unit price per base q'ty | → | AMT | → | PLU code | → | PLU/ SUB |

Only when you use a
base q'ty programmed
for PLU code

→ | PLU code | → | PLU/ SUB |

→ | Unit price per base q'ty | → | Direct PLU |

→ | Unit price per base q'ty | → | AMT | → | PLU code | → | PLU/ SUB |
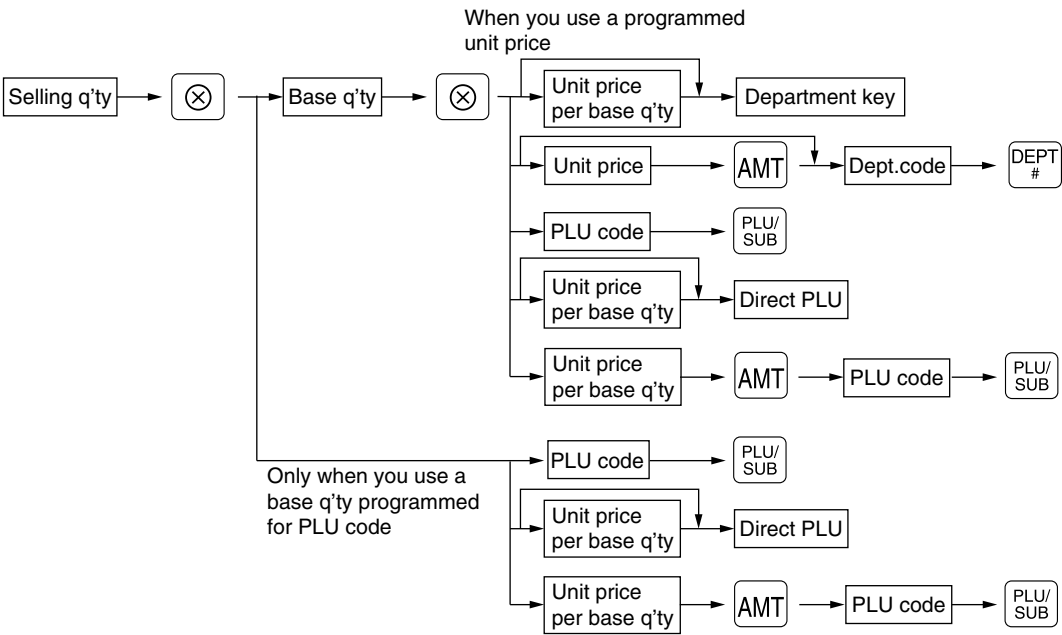
• Selling quantity: Up to four digits integer + three digits decimal
• Base quantity: Up to two digits (integer)

Note *For actual use of this function, consult your dealer.*

Example

Key operation		Print
Department entry	7 $\otimes$ 10 $\otimes$ 600 7	7x 10/ 6.00 DPT. O7 *4.20 8x 5/ 3.00
PLU entry	8 $\otimes$ 5 $\otimes$ 35 PLU/ SUB TL	PL000035 *4.80 CASH *9. OO

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■ Single item cash sale (SICS)/single item finalize (SIF) entries

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

Example	**Key operation**	**Print**
	250	DPT. **09** *2.50
	For finishing ⟶ [9]	
	the transaction	CASH *2. 50

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

SIF entries
• If a ring-up to a department or PLU/subdepartment set for SIF follows the ones to departments or PLUs/subdepartments not set for SIF, the transaction is finalized immediately as a cash sale.
• Like the SICS function, this function is available for single-item cash settlement.

Example	**Key operation**	**Print**
	1745 [8]	DPT. **08** *17. 45
	1500	DPT. **09** *15. 00
	For finishing ⟶ [9]	
	the transaction	CASH *32. 45

2 Special entries for PLUs

■ PLU level shift (for direct PLU)

This shift can double or triple the number of PLUs on your register without adding additional direct PLU keys. You can use direct PLUs in three levels by utilizing shift keys L1 , L2 , and L3 . These keys have the following functions.

L1 : Shifts the PLU level from level 2 or 3 to level 1 (ordinary level).
L2 : Shifts the PLU level from level 1 or 3 to level 2.
L3 : Shifts the PLU level from level 1 or 2 to level 3.

You must program your machine in the PGM mode to select one of the two PLU level shift modes — automatic return mode* and lock shift mode** — and decide whether to allow PLU level shift in both the REG and MGR modes or in the MGR mode alone.
* The automatic return mode automatically shifts the PLU level back to level 1 after a direct PLU key is pressed. You can select whether the PLU level should return each time you enter one item or each time you finalize one transaction.
** The lock shift mode holds the current PLU level until pressing of a PLU level shift key.

Automatic return mode
If you shift the PLU level in the automatic return mode, press a desired PLU level shift key before numeric entry.

Procedure

• each item
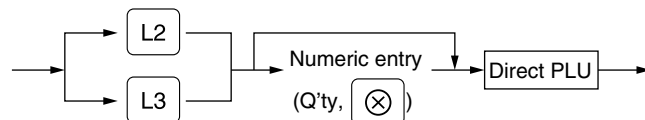
• each transaction
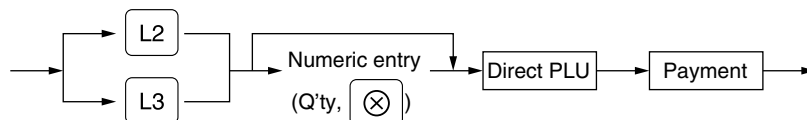
Lock shift mode
If you shift the PLU level in the lock shift mode, press a desired PLU level shift key before numeric entry.

Procedure
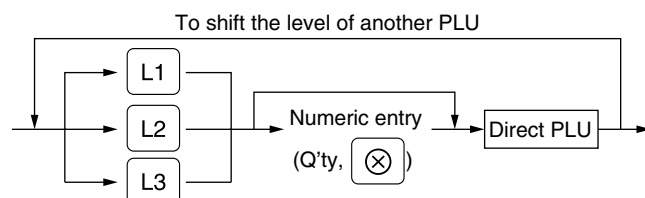
Note | *If you select the automatic return mode, it is not necessary to use the L1 key on the keyboard, but if you select the lock shift mode, it is necessary to use the key.*

Example

• When your machine has been programmed for the automatic return mode:

Key operation	Print
1 L2 1 2 1 TL	PL000001 *1.25 PL000065 *12.00 PL000002 *1.50 PL000001 *1.25 CASH *16. 00

• When your machine has been programmed for the lock shift mode:

Key operation	Print
L1 1 L2 1 2 1 TL	PL000001 *1.25 PL000065 *12.00 PL000066 *30.00 PL000065 *12.00 CASH *55. 25

■ Price level shift

Two different price levels can be programmed for each PLU.
The price levels can be changed for PLU registrations.
You can shift the PLU price level (level 1 or 2) by utilizing the price level shift key (PRICE SHIFT).
You must program a price level shift mode (i.e. automatic return mode* or lock shift mode**) and the operating
mode to be used for the price level shift (i.e. both REG/MGR modes or MGR mode alone).

* The automatic return mode automatically shifts the PLU price level back to level 1 after a PLU shift entry. You
   can select whether the price level should return each time you enter one item or each time you finalize one
   transaction.
** The lock shift mode holds the current PLU price level until pressing the price level shift key.

Automatic return mode (for price level)
If your register has been programmed for the price level shift in the automatic return mode, press the price level
shift key before a numeric entry.

Procedure

(each item)
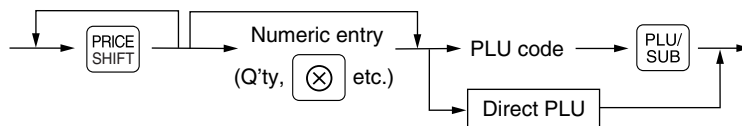
(each transaction)
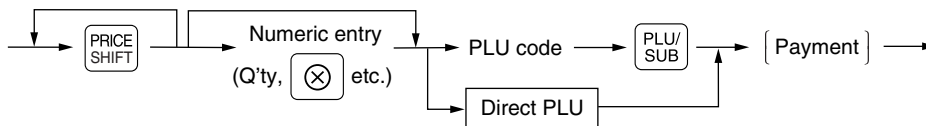
Lock shift mode (for price level)
If your register has been programmed for the price level shift in the lock shift mode, press the price level shift
key before a numeric entry.

Procedure
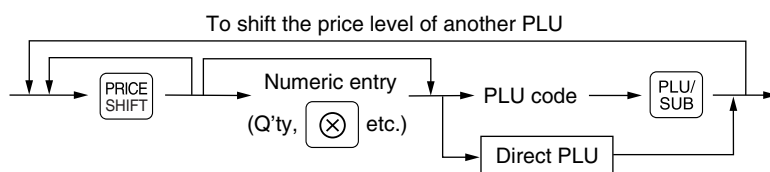
Example   PLU price level 1: PLU code 1 (@1.91), PLU code 2 (@0.79)
PLU price level 2: PLU code 1 (@2.00), PLU code 2 (@0.99)

• When your register has been programmed for the automatic return mode (by one item):

Key operation	Print

1 PLU/SUB
PRICE SHIFT 1 PLU/SUB
2 PLU/SUB
TL

```
PL000001      *1.91
PL000001      *2.00
PL000002      *0.79

CASH      *4.70
```

• When your register has been programmed for the lock shift mode:

Key operation	Print

1 PLU/SUB
PRICE SHIFT 1 PLU/SUB
2 PLU/SUB
TL

```
PL000001      *1.91
PL000001      *2.00
PL000002      *0.99

CASH      *4.90
```

■ Set PLU entries

Operation is the same as normal PLU's.
When a set PLU is entered, an entered or preset amount is printed as the unit price and then those PLUs linked to the set PLU are printed automatically.

Example

Key operation	Print

20
TL

```
PL000020      *2.50
 PL000201
 PL000202

CASH      *2.50
```

Note The unit price of the set PLU (ex. PLU 20) is the registered amount of the set PLU. The reduced amount of the unit price of the set PLU is subtracted from the total of the unit prices of linked PLUs and registered in the set PLU discount memory.

■ **Link PLU entries**

Operation is the same as normal PLU's. The action which is caused by the link PLU entry varies according to the PGM2 programming (#2616).

Printing detailed information
When a link PLU is entered, the linked PLUs' total amount and text and their individual amounts are printed automatically.

Example

Key operation	Print

21
TL

```
PL000021          *3.50     ──Link PLU
PL000025          *3.00    ┐
PL000026          *2.00    ├─Linked PLUs
PL000027          *8.00    ┘

CASH      *16. 50
```

Printing text for the link PLU and total sales amount
When a link PLU is entered, only the linked PLUs' text and the total sales amounts (the sum of prices for PLUs which are included in the link PLU) are printed.

Example

Key operation	Print

21
TL

```
PL000021         *16.50     ──Total amount
                            ──Link PLU text

CASH      *16. 50
```

Note If a discount entry is made for a link PLU, the discount amount is calculated based on the total sales amount. However, the discount amount is subtracted only from a price of a PLU whose text is printed on the receipt.

■ Mix-and-match function

This function is convenient when selling same or different PLU items in a transaction and keeping a discount for them. Operation is the same as for normal PLUs. The mix-and-match table consists of the discount amount, the trip level for discount (satisfying count of entered item), and the text for a table. One table can be assigned max. 5 kinds of items. If the transaction that the mix-and-match item is registered is finalized, the sales amount may be discounted as follows:

Mix-and-match items of table no. 1 : Item-A (*2.30), Item-B (*3.10), Item-C (*2.50)
Trip level for discount: 3
Discount amount: *1.00

<Sale 1>		<Sale 2>	
Item-A	*2.30	Item-C	*2.50
Item-B	*3.10	Item-C	*2.50
Item-C	*2.50	Item-C	*2.50
Subtotal	*7.90	Subtotal	*7.50
Discount	−1.00	Discount	−1.00
Total	*6.90	Total	*6.50

Example • In the case of <Sale 1> above

Key operation

(Treated as *2.30 item) → 40 [PLU/SUB]
(Treated as *3.10 item) → 41 [PLU/SUB]
(Treated as *2.50 item) → 42 [PLU/SUB]
[TL]

Print

```
PL000040          *2.30
PL000041          *3.10
PL000042          *2.50
DISC1      1Q     -1.00

CASH       *6. 90
```

3 Displaying and printing subtotals

Your machine provides the following two types of subtotals:

■ Normal subtotal

This is a subtotal which is displayed and printed by pressing the [ST] key. When you press it, the subtotal of all entries which have been made is displayed.

Example

Key operation	Display	Print
100 [10]	DPT.10 1111 1.00	
200 [11]	DPT.11 1111 2.00	
700 [12]	DPT.12 1111 7.00	
[ST]	SUBTOTAL 1111 10.00	
[TL]	CASH 1111 10.00	

```
DPT.10        *1.00
DPT.11        *2.00
DPT.12        *7.00
SUBTOTAL     *10.00
TAX1 ST       *1.00
VAT 1         *0.05
NET 1         *0.95
TAX2 ST       *7.00
VAT 2         *0.27
NET 2         *6.73

CASH      *10.00
```

■ Difference subtotal (Differ ST)

This is a subtotal which is printed by pressing the [DIFFER ST] key. You can get two or more difference subtotals in one transaction.
When you press it first, the subtotal of all entries which have been made is displayed and printed. If you press it second, you will get the subtotal of entries which have been made after you last got it. Taxes are calculated each time you press the [DIFFER ST] key, and taxes and taxable subtotals are printed on the receipt according to the job# 2616.

Example

Key operation	Display	Print
100 [10]	DPT.10 1111 1.00	
200 [11]	DPT.11 1111 2.00	
[DIFFER ST]	DIFF ST 1111 3.00	
700 [12]	DPT.12 1111 7.00	
[TL]	CASH 1111 10.00	

```
DPT.10        *1.00
DPT.11        *2.00
SUBTOTAL      *3.00
TAX1 ST       *1.00
VAT 1         *0.05
NET 1         *0.95
DIFF ST       *3.00
DPT.12        *7.00
SUBTOTAL      *7.00
TAX2 ST       *7.00
VAT 2         *0.27
NET 2         *6.73
DIFF ST       *7.00

CASH      *10.00
```

4 Finalization of transaction

■ Cash or cheque tendering

Press the [ST] key to get a subtotal, enter the amount tendered by your customer, then press the [TL] or [CA2] key if it is a cash tender or press one of the [CH] through [CH4] key if it is a cheque tender. When the amount tendered is greater than the amount of the sale, your register will show the change due amount and the text "CHANGE". Otherwise your register will show the text "DUE" and a deficit. Make a correct tender entry.

Example

Cash tendering

Key operation	Print
) [ST] 1000 [TL]	***TOTAL *7. 35 CASH *10.00 CHANGE *2.65

Cheque tendering

Key operation	Print
) [ST] 1000 [CH]	***TOTAL *7. 35 CHECK1 *10.00 CHANGE *2.65

■ Mixed tendering (cheque + cash)

Example	Key operation	Print
	) [ST] 1000 [CH] 500 [TL]	***TOTAL *14. 56 CHECK1 *10.00 CASH *5.00 CHANGE *0.44

■ Cash or cheque sale that does not need any tender entry

Enter items and press the TL or CA2 key if it is a cash sale or press one of the CH through CH4 keys if it is a cheque sale. Your register will display the total sale amount.

Example	Key operation	Print

Key operation:
```
300 6
10 PLU/SUB
   TL
```

Print:
```
DPT.06        *3.00
PL000010      *7.15

CASH       *10. 15
```

In the case of cheque sale

```
CHECK1     *10. 15
```

■ Credit sale

Enter items and press the corresponding credit keys.

Example	Key operation	Print

Key operation:
```
2500 6
3250 7
     CR2
```

Print:
```
DPT.06        *25.00
DPT.07        *32.50

CREDIT2    *57. 50
```

Amount tendering operations (i.e., change calculations) can be achieved by the CR1 through CR4 key when a PGM2 programming allows them.

■ Mixed-tender sale (cash or cheque tendering + credit tendering)

Example	Key operation	Print

Key operation:
```
       ⟩
     ST
950 TL
    CR2
```

Print:
```
***TOTAL  *49. 50
CASH         *9.50
CREDIT2      *40.00
```

Note *Press one of the* CH *through* CH4 *keys or the* CR1 *through* CR4 *keys in place of the* TL *key when your customer makes payment in cheques or by credit account.*

5 Computation of VAT (Value Added Tax)/tax

■ VAT/ tax system

The machine may be programmed for the following six tax systems by your dealer.

Automatic VAT 1 - 4 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates VAT for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals by using the corresponding programmed percentages.

Automatic tax 1 - 4 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates taxes for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals by using the corresponding programmed percentages, and also adds the calculated taxes to those subtotals, respectively.

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

Procedure

⟶ ST ⟶ VAT
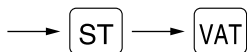
This system provides the VAT calculation for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals. This calculation is performed using the corresponding programmed percentages when the VAT key is pressed just after the ST key.

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

Procedure

To use a programmed rate
⟶ ST ⟶ VAT rate ⟶ VAT
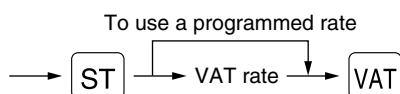
This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 programmed percentages when the VAT key is pressed just after the ST key. For this system, the keyed-in tax rate can be used.

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

Procedure

⟶ ST ⟶ VAT
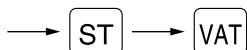
This system provides the tax calculation for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals. This calculation is performed using the corresponding programmed percentages when the VAT key is pressed just after the ST key.
After this calculation, you must finalize the transaction.

Automatic tax 2 - 4 and VAT1 system

This system enables the calculation in the combination with automatic tax 2 through 4 and VAT1. This combination can be any of tax 2 through 4 and VAT1. The tax amount is calculated automatically with the percentages previously programmed for these taxes.

> [!Note]
> *Note*
> • *A PLU not programmed for any of the tax statuses is registered depending on the tax status of the department which the PLU belongs to.*
> • *VAT/tax assignment can be printed at the fixed right position near the amount on the receipt as follows:*
>
> > *VAT1/tax1 ⟶ A*
> > *VAT2/tax2 ⟶ B*
> > *VAT3/tax3 ⟶ C*
> > *VAT4/tax4 ⟶ D*
>
> *When the multiple VAT/tax is assigned to a department or a PLU, a smaller number of the VAT/tax will be printed. For details, contact your authorized SHARP dealer.*

Example	Key operation	Print
(When the manual VAT 1- 4 system is selected)	550 [8] [ST] [VAT] [TL]	DPT.08 *5.50 SUBTOTAL *5.50 TAX1 ST *5.50 VAT 1 *0.26 NET 1 *5.24 CASH *5.50

■ VAT shift entries

This feature is intended to shift the tax status of a particular department (or PLU) programmed for taxable 1 or taxable 1 and taxable 3.

1. When the VAT shift entry is made for a particular department or PLU programmed for taxable 1, their tax status shifts to taxable 2.
2. When this entry is made for a particular department (or PLU) programmed for taxable 1 and taxable 3, the tax status "taxable 1" remains unchanged, but the other, "taxable 3" is ignored.

Procedure

Press the [VAT SHIFT] key to activate the VAT shift prior to entering department(s) or PLU(s) concerned.

Example	Key operation	Print
(When the manual VAT 1- 4 system is selected)	[VAT SHIFT] 550 [8] [ST] [VAT] [TL]	DPT.08 *5.50 SUBTOTAL *5.50 TAX2 ST *5.50 VAT 2 *0.21 NET 2 *5.29 CASH *5.50

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6 Guest check (PBLU)

PBLU system: The previous balance is automatically loaded by entering a guest check code (= a PBLU code) when additional ordering occurs.

The details of the order are not stored in the previous balance lookup file (PB lookup file).

If you want to use this function, consult your dealer.

■ PBLU system

New guest

For a new guest, open a new guest check and assign a PBLU code.
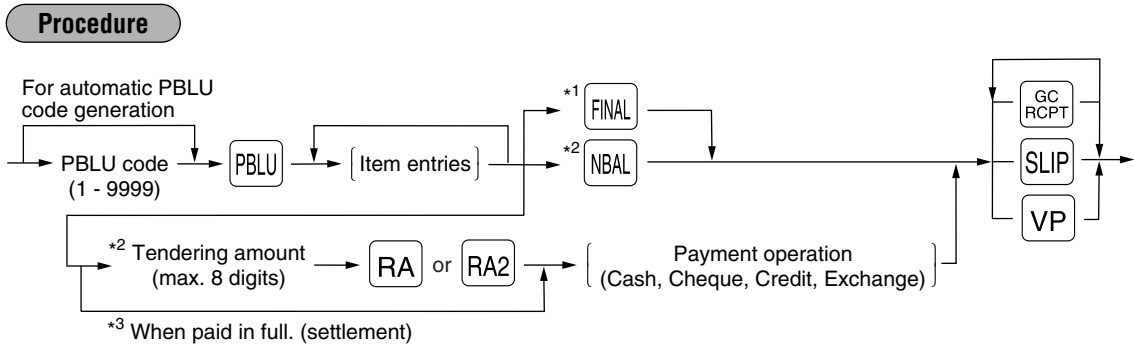
Procedure

*1 This is the optional function (Temporary finalization).

You can temporarily finalize a guest check by pressing the FINAL key. This prints out a guest check to show the current balance, including tax. The guest check, however, is still "open". This means you can still make additional orders to it. The tax is calculated but is not added to the tax totalizer.

*2 The tax is not calculated.

*3 The tax is calculated and is added to the tax totalizer.

Example

Key operation	Print
1001 PBLU	
1 PLU/SUB	
2 PLU/SUB	
NBAL	

```
PBLU#1001
***PBAL      *0.00
PL000001     *1.91
PL000002     *0.79
***NBAL      *2.70
```

Additional ordering

Use the following procedure.

PBLU code → PBLU → [Item entries] → *1 FINAL
(1 - 9999)   → *2 NBAL

*2 Tendering amount → RA or RA2 → [Payment operation
(max. 8 digits)   (Cash, Cheque, Credit, Exchange)]

*3 When paid in full. (settlement)

GC/RCPT
SLIP
VP

*1 This is the optional function (Temporary finalization).
   You can temporarily finalize a guest check by pressing the FINAL key. This prints out a guest check to show the current balance, including tax. The guest check, however, is still "open". This means you can still make additional orders to it. The tax is calculated but is not added to the tax totalizer.
*2 The tax is not calculated.
*3 The tax is calculated and is added to the tax totalizer.

Key operation	Print

Key operation

1001 PBLU
7 PLU/SUB
5 PLU/SUB
TL

Print

```
PBLU#1001
***PBAL      *2.70
PL000007     *2.50
PL000005     *3.70

CASH      *8.90
```

■ Deposit entries

Deposit refers to a prepayment on a guest check. It can be received in cash, by cheque or credit.
You can make a deposit entry only when entering a PBLU code. It cannot be done during handling of a tendered amount.
A received deposit can be refunded by pressing the $\boxed{\mathrm{DEPO} \atop (-)}$ key. You cannot attempt to refund an amount larger than the deposit balance.

Procedure

```
                                    ┌→ DEPO ┐           ┌→ CH   through  CH4
                                    │  (-)  │           │
→ Deposit amount ───────────────────┤       ├───────────┤→ TL   or  CA2
   (max. 8 digits)                  │  DEPO │           │
                                    └→ (+) ─┘           └→ CR1  through  CR4
```
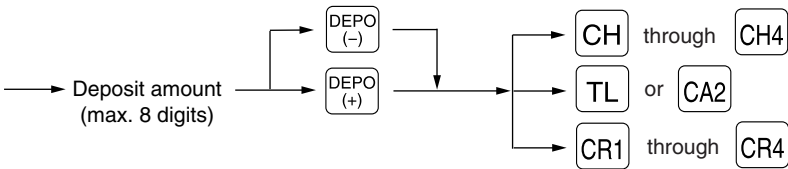
Example

Key operation	Print
1001 PBLU	PBLU#1001
5000 DEPO (+)	***PBAL *0.00
TL	CASH
NBAL	DEPOSIT *50.00
	***NBAL -50.00

Example

Key operation	Print
1001 PBLU	PBLU#1001
5000 DEPO (-)	***PBAL -50.00
TL	CASH
NBAL	DEPO. (-) -50.00
	***NBAL *0.00

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■ Bill printing

This function is used for issuing the bill to the guest. Your register can print the bill on the receipt or the slip. For selecting the slip printer, consult your dealer.

Procedure

on the receipt

[Finalization of payment] ────────────────────► [GC RCPT] ──────────────►

No. of lines of slip feed ────► [SLIP] ──────►

on the slip
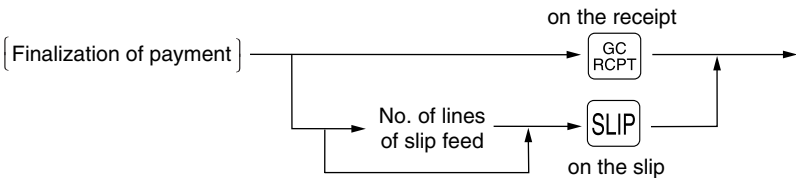
Note | *This function is available immediately after the finalization of transaction (including after pressing the [NBAL] or [FINAL] key).*

Example

Key operation	Print
1001 [PBLU] 1000 [CR1] 700 [TL] [GC RCPT]	

```
26/08/2003  1:40     1111
123456#0146 MAYER
2111 NILS

PBLU#1001

      *BILL   *
***PBAL        *17.00

***TOTAL  *17. OO
CREDIT1        *10.00
CASH           *7.00
CHANGE         *0.00
```

7 Auxiliary entries

■ Percent calculations (premium or discount)

• Your register provides the percent calculation for the subtotal or each item entry depending on the programming.
• Percentage: 0.01 to 99.99%

Percent calculation for the subtotal

Example	Key operation	Print
(When a discount of 10% is programmed for the % key)	4 ⊗ 140 5 225 7 7 ST % TL	4x 1.40 DPT.05 *5.60 DPT.07 *2.25 DPT.07 *2.25 SUBTOTAL *10.10 -10.00% %1 -1.01 CASH *9.09

Percent calculation for item entries

Example	Key operation	Print

(When a premium of 15% is programmed for the %2 key)	800 6
	%2
	90 PLU/SUB
	7 • 5 %2
	TL
		DPT.06 *8.00
		    15.00%
		%2 *1.20
		PL000090 *5.00
		    7.5%
		%2 *0.38
		
		CASH *14.58

■ Deduction entries

Your register allows you to deduct a certain amount less than a programmed upper limit after the entry of an item or the computation of subtotal depending on the programming.

Deduction for the subtotal

Example	Key operation	Print
	575 6 80 PLU/SUB ST 100 ⊝2 TL	DPT.06 *5.75 PL000080 *7.50 (−)2 -1.00 CASH *12.25

Deduction for item entries

Example	Key operation	Print
	675 [7]	
	75 [⊖]	
	[TL]	

```
DPT.07        *6.75
 (−) 1        -0.75

CASH       *6. 00
```

■ Refund entries

For a refund entry, press the [RF] key just before you press a department key, [DEPT#] key, direct PLU key or [PLU/SUB] key. The operation before pressing the [RF] key is the same as the one of normal operation. For example, if a refund item is the one entered into a department, enter the amount of the refund, then press the [RF] key and the corresponding department key in this order; if an item entered into a PLU is returned, enter the corresponding PLU code, then press the [RF] and [PLU/SUB] keys.

Example	Key operation	Print
	250 [RF] [6]	
	300 [AMT] 5 [RF] [DEPT#]	
	7 [⊗] 13 [RF] [PLU/SUB]	
	[TL]	

```
DPT.06        R-2.50
DPT.05        R-3.00
-7x 2.10
PL000013      R-14.70

CHANGE    *20. 20
```

■ Printing of non-add code numbers

Enter a non-add code number such as a customer's code number and credit card number within a maximum of 16 digits and press the [#] key at any point during the entry of a sale. Your register will print it at once, together with an 8-digit function text when so programmed.

Example	Key operation	Print
	1230 [#]	
	1500 [6]	
	[CR1]	

```
         #0000000000001230
DPT.06          *15.00

CREDIT1   *15. 00
```

8 Payment treatment

■ Currency exchange

Your register allows payment entries of foreign currency. Pressing one of the [EX1] through [EX4] keys creates a subtotal in foreign currency.

Procedure

For an additional payment in foreign currency

For direct finalization

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

Preset exchange rate → [EX1] / [EX2] / [EX3]

*Exchange rate → [EX4]

→ Amount tendered (max. 8 digits) → [TL] / [CA2] / [CH] to [CH4] / [CR1] to [CR4]

→ [CL] → Next registration or payment in domestic currency

Reentry
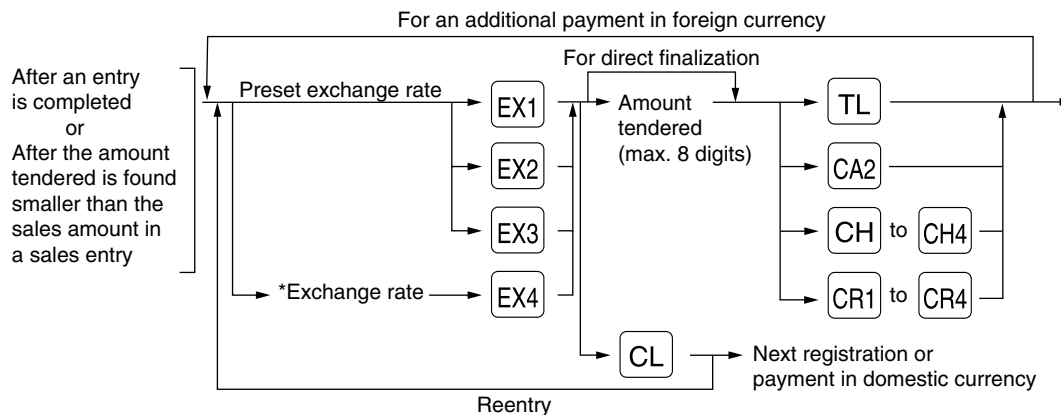
*Exchange rate: 0.000000 to 999.999999

Note
- *When the amount tendered is short, the deficit is shown in domestic currency.*
- *Availability of credit and cheque tendering depends on the programming (#2616) (only for exchange 1).*

Example

Preset exchange rate (1.550220) - EX2

Key operation	Print

Key operation:

2300 [6]
Currency exchange → 4650 [7]
[EX2]
Amount tendered in foreign currency → 15000 [TL]

Print:

```
DPT.06        *23.00
DPT.07        *46.50

***TOTAL    *69.50      ← Domestic currency
EXCH2         1.550220  ← Exchange rate
            US $107.74   ← Foreign currency
CASH        US $150.00
CHANGE        *27.26     ← Domestic currency
```

Currency description text

Case opening foreign currency drawer:

- At the timing of issuing receipt after tendering exchange amount

  [If you want to exchange displayed change amount in EURO/local currency, press the [EX1] key. However, "Printing of the exchange 1 total amount and change amount" must be programmed "Yes" by job #2616.]

- At the timing of issuing X/Z report (including CCD report)
- The **_Exchange drawer open function_** is executed.

  When the EXCHANGE(n) key is pressed simply out of transaction, the foreign currency drawer will open and the "No sale" counter will count by one.

  → [EX1] through [EX4] →

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■ Received on account entries

Procedure

Amount
(max. 8 digits) → RA or RA2 → TL or CA2
CH through CH4
CR1 through CR4
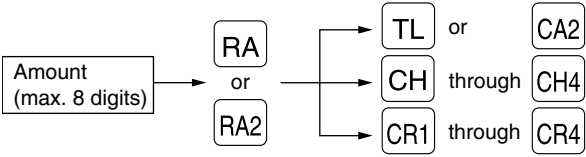
Example

Key operation

12345 #
4800 RA
CH

Print

```
            #0000000000012345
CHECK1
***RA           *48.00
```

■ Paid out entries

Procedure

Amount
(max. 8 digits) → PO or PO2 → TL or CA2
CH through CH4
CR1 through CR4
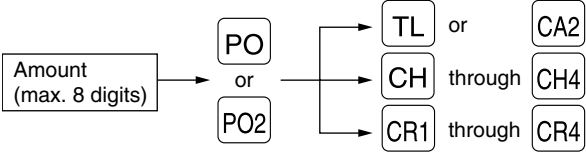
Example

Key operation

6789 #
3000 PO
CH

Print

```
            #0000000000006789
CHECK1
***PO           *30.00
```

■ No sale (exchange)

Simply press the NS key without any entry. The drawer will open and the printer will print "NO SALE" on both the journal and the receipt. If you let your machine print a non-add code number before pressing the NS key, a no sale entry is achieved with a non-add code number printed.

```
NO SALE
```

■ Cashing a cheque

Enter the cheque amount, then press one of the CH through CH4 keys.

Procedure

Non-add code number → # → Cheque amount → CH through CH4
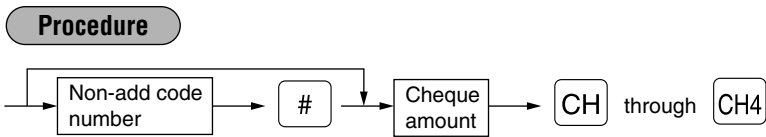
Example

Key operation	Print
6789 # 3000 CH	#0000000000006789 CA/CHK *30.00

9 Automatic sequencing key (AUTO key) entries

You can achieve a programmed transaction simply by pressing a corresponding automatic sequencing key.

Example ($\begin{smallmatrix}AUTO\\2\end{smallmatrix}$ = 500 7 TL)

Key operation	Print
$\begin{smallmatrix}AUTO\\2\end{smallmatrix}$	DPT.07 *5.00 CASH *5. 00

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CORRECTION

1 Correction of the last entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, percentage ($\boxed{\%}$ through $\boxed{\%4}$), deduction ($\boxed{\ominus}$ through $\boxed{\ominus4}$) or refund, you can void this entry by pressing the $\boxed{\infty}$ key immediately after the incorrect entry.

Example	Key operation	Print

Key operation

1250 $\boxed{6}$
$\boxed{\infty}$
2 $\boxed{\text{PLU/SUB}}$
$\boxed{\infty}$
600 $\boxed{8}$
$\boxed{\%2}$
$\boxed{\infty}$
328 $\boxed{9}$
28 $\boxed{\ominus}$
$\boxed{\infty}$
250 $\boxed{RF}$ $\boxed{6}$
$\boxed{\infty}$
$\boxed{TL}$

Print

```
DPT.06        *12.50
DPT.06        ɯ-12.50
PL000002       *1.50
PL000002      ɯ-1.50
DPT.08         *6.00
              15.00%
%2             *0.90
%2            ɯ-0.90
DPT.09         *3.28
(−)1           -0.28
(−)1          ɯ*0.28
DPT.06         R-2.50
DPT.06        Rɯ*2.50

CASH          *9.28
```

2 Correction of the next-to-last or earlier entries (indirect void)

With the $\boxed{\infty}$ key, you can void any incorrect department, PLU/subdepartment or item refund entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the $\boxed{TL}$ key). This function is applicable to department, PLU/subdepartment and item refund entries only.

For the operation, press the $\boxed{\infty}$ key just before you press a department key, $\boxed{\text{DEPT}\#}$ key, direct PLU key or $\boxed{\text{PLU/SUB}}$ key.

For the refund indirect void, press the $\boxed{\infty}$ key after you press the $\boxed{RF}$ key.

Example	Key operation	Print

Key operation

1310 $\boxed{6}$
1755 $\boxed{7}$
10 $\boxed{\text{PLU/SUB}}$
$\boxed{8}$
58 $\boxed{\text{PLU/SUB}}$
825 $\boxed{7}$
1310 $\boxed{\infty}$ $\boxed{6}$
$\boxed{\infty}$ $\boxed{8}$
58 $\boxed{\infty}$ $\boxed{\text{PLU/SUB}}$
$\boxed{TL}$

Print

```
DPT.06        *13.10
DPT.07        *17.55
PL000010       *7.15
PL000008       *3.00
PL000058       *3.00
DPT.07         *8.25
DPT.06        ɯ-13.10
PL000008      ɯ-3.00
PL000058      ɯ-3.00

CASH         *32.95
```

3 Subtotal void

You can void an entire transaction. Once subtotal void is executed, the transaction is aborted and the register issues a receipt.

Example	Key operation	Print

Key operation:

1310 [2]
1755 [6]
10 [PLU/SUB]
35 [PLU/SUB]

Subtotal void {
[ST]
[∞]
[ST]
}

Print:

```
DPT.02        *13.10
DPT.06        *17.55
PL000010       *7.15
PL000035       *3.00
SUBTOTAL      *40.80
SBTL ∽        -40.80
***TOTAL      *0.00
```

4 Correction of incorrect entries not handled by the direct or indirect void function

Any errors found after the entry of a transaction has been completed or during an amount tendered entry cannot be voided. These errors must be corrected by the manager.
The following steps should be taken:

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

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SPECIAL PRINTING FUNCTIONS

1 Copy receipt printing

If your customer wants a receipt after you have finalized a transaction with the receipt function being in the "OFF" status (no receipting), press the [RCPT] key. This will produce a receipt. Your register can also print a copy receipt when the receipt function is in the "ON" status. If you want to make a copy, please consult your dealer.

| **Note** | Pressing the [RCPT] key in the OP X/Z mode before registration toggles the status "ON" and "OFF". |

Example Printing a copy receipt after making the entries shown below with the receipt function being in the "OFF" status

Key operation	**Print**
850 [2]	
3 [⊗]	26/08/2003 2:46 1111
150 [1]	123456#0155 MAYER
[TL]	2111 NILS
Print on the journal	DPT. **02** *8.50
	3x 1.50
	DPT. **01** *4.50
	CASH *13. 00

For receipting→ [RCPT]	26/08/2003 2:46 1111
	123456#0155 MAYER
	2111 NILS
Print on the receipt	DPT. **02** *8.50
	3x 1.50
	DPT. **01** *4.50
	CASH *13. 00

When the receipt function is in the "ON" status and you press the [RCPT] key to make a second copy.

```
26/08/2003  2:46      1111
123456#0155 MAYER
2111 NILS

      *COPY    *  ──── When the receipt function is in the "ON" status,
DPT. 02       *8.50       the "*COPY*" symbol will be printed on the receipt.
3x 1.50
DPT. 01       *4.50

CASH     *13. 00
```

2 Guest check copy

You can use this function when you want to take a copy of guest check.
Press the ⌈GC COPY⌋ key and make a desired entry.

Procedure

⌈GC COPY⌋ → Item entries → Finalization → ⌈RCPT⌋ ↓→

When the receipt
ON/OFF function is
in the "OFF" status
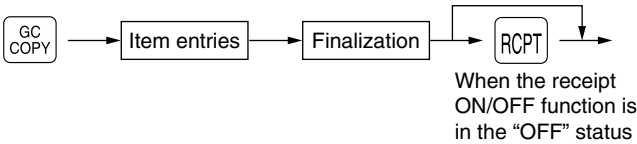
Note | *The guest check copy has nothing to do with the memory.*

Example

Key operation

⌈GC COPY⌋
1480 ⌈2⌋
⌈TL⌋

Print

```
      *G.C COPY   *
DPT.02        *14.80

CASH   *14.80
```

3 Printing of header and footer graphic logos

As a default setting, it is set to print a graphic logo on the top of each receipt (header graphic logo), and another
graphic logo can be printed on the bottom of each receipt (footer graphic logo) with the job code #2616. You can
also print the graphic logos with the combination of 3-line header logo message or 3-line footer logo message, or
can print only logo message without graphic logo. Consult your dealer when you want to change the setting.

• **Sample receipt with a header graphic logo and a footer graphic logo**

```
YOUR RECEIPT
THANK YOU           ⎫ Header graphic logo
28/08/2003 14:31    1111
123456#2995 MAYER
2111 NILS

DPT.02        *10.00

CASH   *10.00
                    ⎫ Footer graphic logo
```
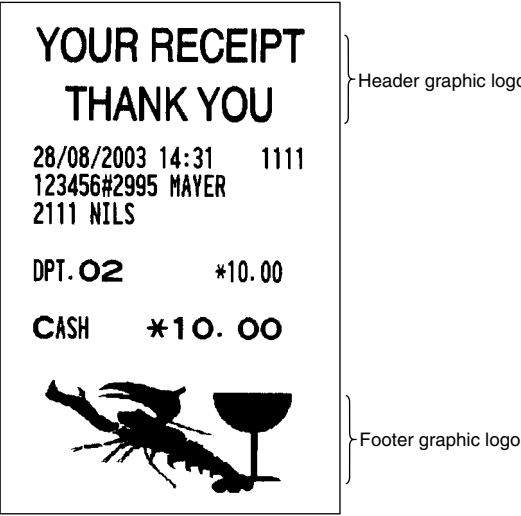
4 Validation printing function

Your register can perform validation printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.

1. Set a validation slip to the slip printer.
2. Press the [VP] key. The validation printing will start.

| Note | *Programmed compulsory validation printing can be overridden by performing the following operation. If you need this function, contact your authorized SHARP dealer.* |

   1. Move the mode key to the MGR position.
   2. ⟶ [•] ⟶ [VP]

5 Printing of the employee's arrival and departure times

Your register can perform employee's arrival and departure time printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.
For printing, you must be in the OP X/Z mode.

Printing of arrival time

   Cashier: ⟶ 1 ⟶ [VP]   Clerk: ⟶ 11 ⟶ [VP]
                                (Only in cashier + clerk system)

Printing of departure time

   Cashier: ⟶ 2 ⟶ [VP]   Clerk: ⟶ 22 ⟶ [VP]
                                (Only in cashier + clerk system)

6 French EURO cheque printing

Your register can perform the French EURO cheque printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.

⟶ Tendered amount ⟶ [CH] through [CH4] ⟶ [VP]
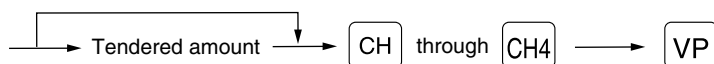
7 English cheque printing

Your register can perform the English cheque printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.

To print the full subtotal amount

⟶ [Item registration] ⟶ Cheque amount ⟶ [CHK PRINT] ⟶ [Payment operation]
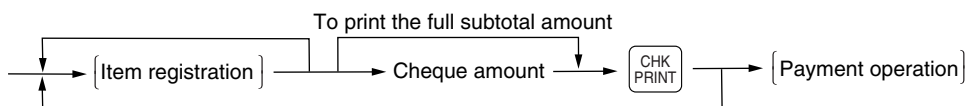
OVERLAPPED CASHIER ENTRY

This function allows you to switch from one cashier to another and to interrupt the first cashier's entry. So the second cashier can do his or her entry in this mode. For actual use of this function, consult your dealer.

Example

Cashier 1: Entry started
Cashier 2: Cashier change (1 to 2), interrupt initiated
Cashier 2: Transaction finished (2)
Cashier 1: Cashier change (2 to 1), entry restart

Note
- *When the cashier and clerk system is applied to your register, you cannot operate the overlapped cashier entry.*
- *The overlapped cashier entry is not effective while the tendering sale is going on.*
- *If any cashier is still making an entry (or has not finalized the transaction yet), the machine does not run in any mode other than REG and MGR and can print no X/Z reports. The error message "CASHIER ERR." and the corresponding cashier code(s) are displayed at this time.*

Key operation	Comments
1. Cashier 1 is assigned.	The entry by cashier 1 is started.
(1 CASH#)	
100 1	
360 3	
3	
2. Cashier 2 is assigned.	The entry by cashier 2 is started.
2 CASH#	(The entry by cashier 1 is interrupted.)
3 ⊗	
150 2	
TL	The transaction by cashier 2 is finalized.
3. Cashier 1 is assigned.	
1 CASH#	The entry by cashier 1 is restarted.
100 1	
360 3	
TL	The transaction by cashier 1 is finalized.

OPERATOR MAINTENANCE

1 In case of power failure

When power is lost, the machine retains its memory contents and all information on sales entries.

- When power failure is encountered in register idle state or during an entry, the machine returns to the normal state of operation after power recovery.
- When power failure is encountered during a printing cycle, the register prints "=======" and then carries out the correct printing procedure after power recovery. (See the sample print.)

```
DPT.03        *10.00
DPT 05        *35 00
= = = = = = = = = = = =
DPT.05        *35.00

CASH      *45. 00
```

2 In case of printer error

If the printer runs out of paper, the printer will stall, "PAPER EMPTY" will appear on the display, and the register will start to continuously produce an intermittent beeping tone. Key entries will not be accepted. Referring to "4. Installing and removing the paper roll" in this chapter, install a new roll paper in the proper position, then press the [CL] key. The printer will print the power failure symbol and resume printing.

If the print head comes up, the printer stalls, "HEAD UP" will appear on the display, and the register will start to continuously produce an intermittent beeping tone. Key entries will not be accepted. Bring back the print head to the correct position, then press the [CL] key. The printer will print the power failure symbol and resume printing.

3 Thermal printing

Your register prints by means of thermal printing. The print head applies heat to thermal paper which is chemically treated to change color when heated to a certain level. This creates the printed text.

■ Cautions in handling the printer

Printing position

Head-up position
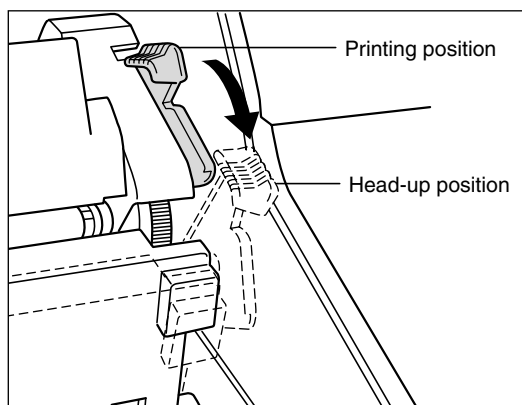
- If you are not going to use the register for an extended period of time, pull the print head release lever toward you so that the print head is set apart from the plate.

• Avoid the following environments:
  Dusty and humid places
  Direct sunlight
  Iron powder (A permanent magnet and electromagnet are used in this machine.)
• Use the print head release lever only when necessary.
• Never pull the paper when it is in contact with the print head. First release the head with the print head release lever, and then remove the paper.
• Never touch the surface of the print head.
• Never touch around the print head and the motor during printing or before they have had sufficient time to cool.

■ Cautions in handling the recording paper (thermal paper)

• Use only the paper specified by SHARP.
• Do not unpack the thermal paper until you are ready to use it.
• Avoid heat. The paper will color at around 70°C.
• Avoid dusty and humid places for storage. Avoid direct sunlight.
• The printed text on the paper can discolor under the following conditions:
  Exposure to high humidity and temperature
  Exposure to the direct sunlight
  Contact with glue, thinner or a freshly copied blueprint
  Heat caused by friction from scratching or other such means
  Contact with a rubber eraser or adhesive tape
• Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.

4 Installing and removing the paper roll

■ Recording paper specifications

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

Paper specification

Paper width:	44.5 ± 0.5 mm
Max. outside diameter:	80 mm
Quality:	Thermal paper
Paper tube:	18 mm

• **Be sure to set paper roll(s) prior to using your machine, otherwise it may cause a malfunction.**

Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

Note *If the top end of the paper roll is fixed with paste or tape, the paper may lose its color development ability in the pasted or taped area due to the deterioration of the heat-sensitive color development component of the paper surface. This may result in nothing appearing at this location when printing is performed. Therefore, when setting a new paper roll in the machine, be sure to cut off approximately one revolution (approx. 25 cm long).*

(How to set the paper roll)   **(How to cut the paper end)**

To the printer   To the printer

Incorrect   Correct   Correct   Incorrect
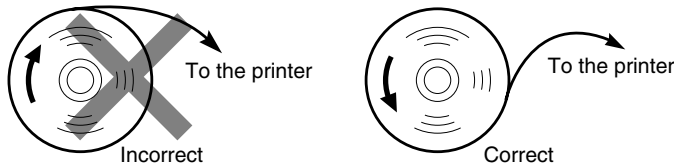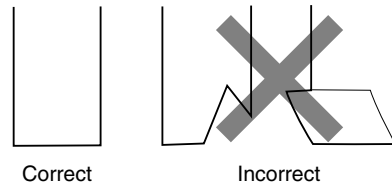
■ Installing the paper roll

Installing the receipt paper roll
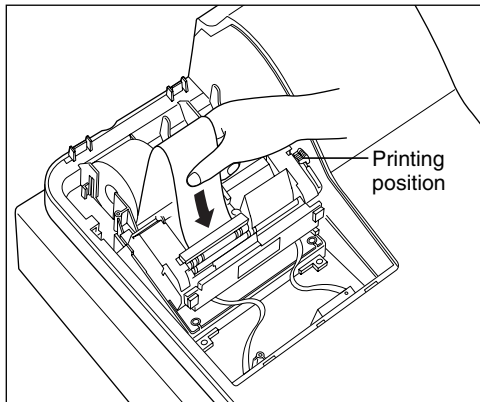
Printing position

1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in its printing position.
4. Set the paper correctly as illustrated above in the receipt side of the printer.
5. Insert the end of the paper into the paper chute as shown on the left. It will automatically be fed through the printer.
6. Cut off the excess paper that comes out of the printer with the manual cutter.
7. Replace the printer cover.

Installing the journal paper roll
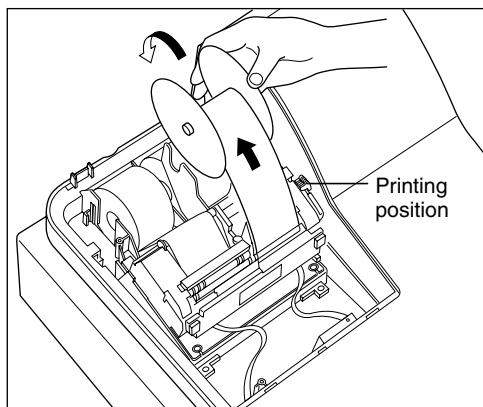
Printing position

1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in its printing position.
4. Set the paper correctly as illustrated on the previous page in the journal side of the printer.
5. Insert the end of the paper into the paper chute as shown on the left. It will automatically be fed through the printer.
6. Insert the end of the paper into the slit in the paper take-up spool. (Press the ⬆ key to feed more paper through if required.)
7. Wind the paper two or three turns around the spool shaft.
8. Set the spool on the bearing.
9. Replace the printer cover.

Note

• When it is difficult to insert paper into the paper chute, try inserting it again by following the steps described below.

Head-up position
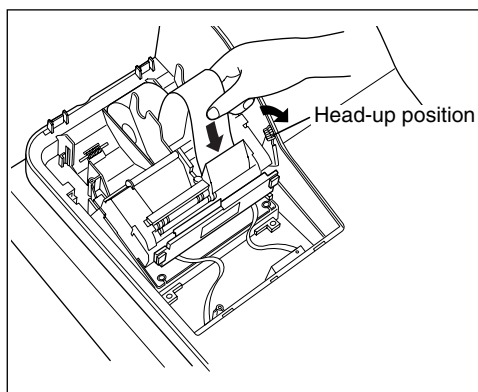
1. Cut off the end of paper in a single straight cut.
2. Pull the print head release lever toward you to lift up the print head.
3. Insert the end of paper into the paper chute, while pressing the corresponding paper feed key (⬆ key or ⬆ key).
4. When the end of paper comes out of the printer, release the feed key and return the print head release lever to its original position.
5. Press the feed key to feed more paper.

In case of inserting the journal paper roll

• When you want to manually install a new roll of paper while your machine is turned off, follow the steps shown below:
  1. Pull the print head release lever toward you to lift up the print head.
  2. Correctly place the new paper roll into the receipt/journal paper roll location.
  3. Insert the paper end into the paper chute until it comes out of the printer.
  4. Cut or roll the paper onto the take-up spool as described for automatic installation.
  5. Return the print head release lever to its original position.

■ Removing the paper roll

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

Removing the receipt paper roll
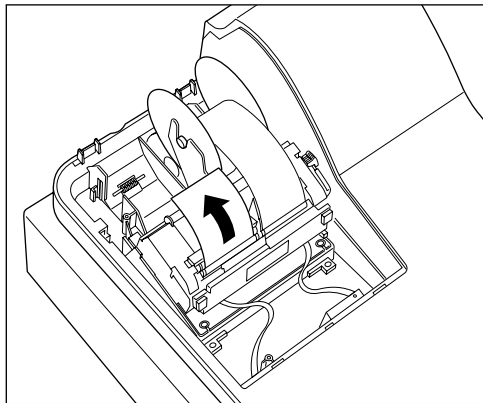
1. Remove the printer cover.

2. Cut the paper behind the printer and near the paper roll.

3. Press the [RECEIPT] key until the paper remaining in the printer comes out completely.

4. Remove the paper roll from the back of the printer.

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

Removing the journal paper roll

Area to cut
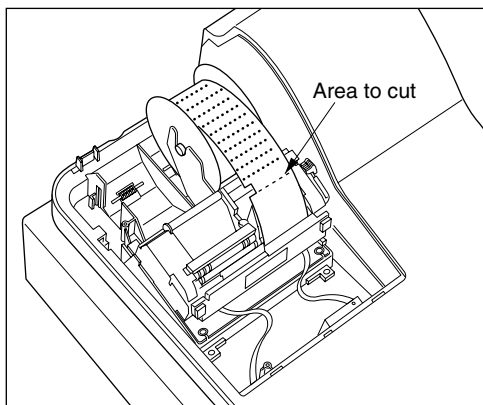
1. Remove the printer cover.

2. Press the [JOURNAL] key to advance the journal paper until its printed part is out of the way.

3. Cut the paper and remove the take-up spool.
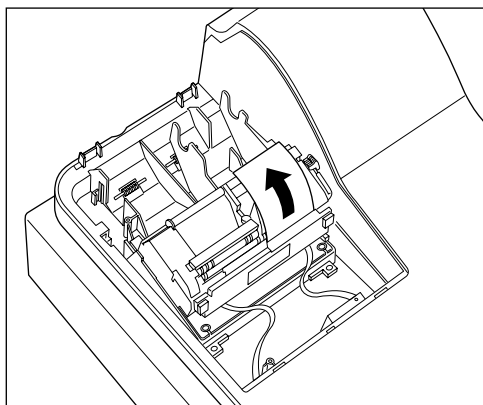
4. Cut the paper behind the printer and near the paper roll.

5. Press the [JOURNAL] key until the paper remaining in the printer comes out completely.

6. Remove the paper roll from the back of the printer.

| **Note** | *Do not pull the paper through the printer.* |
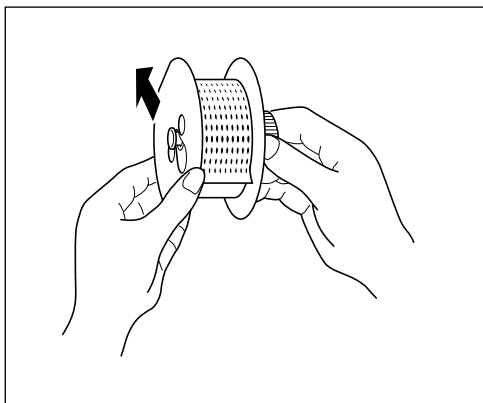
7. Remove the outer side of the take-up spool as shown on the left.
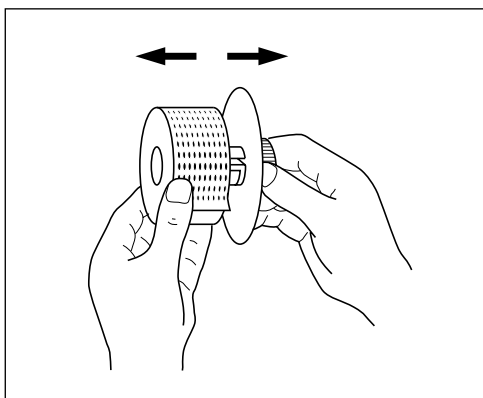
8. Remove the printed journal roll from the take-up spool.

■ Removing a paper jam

Precaution: Be very careful with the manual cutter, so as not to cut yourself. Never touch the print head immediately after printing, because the head may still be hot.

Pull all the way forward
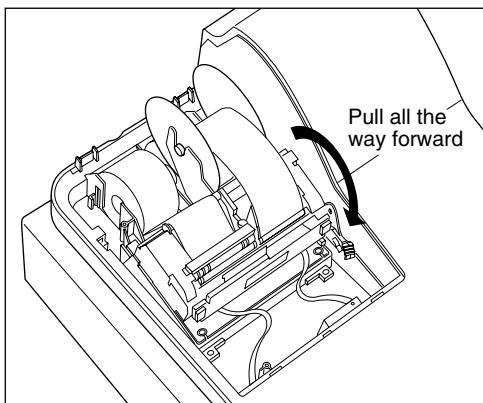
1. Remove the printer cover.
2. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Reset the paper roll correctly by following the steps in "Installing the paper roll".
5. Return the print head release lever to its original position.
6. Replace the printer cover.

5 Cleaning the print head

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

Pull all the way forward
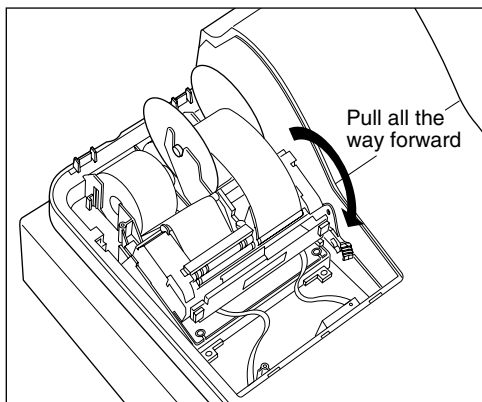
1. Turn the mode switch to the "⏻" position.
2. Remove the printer cover.
3. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).
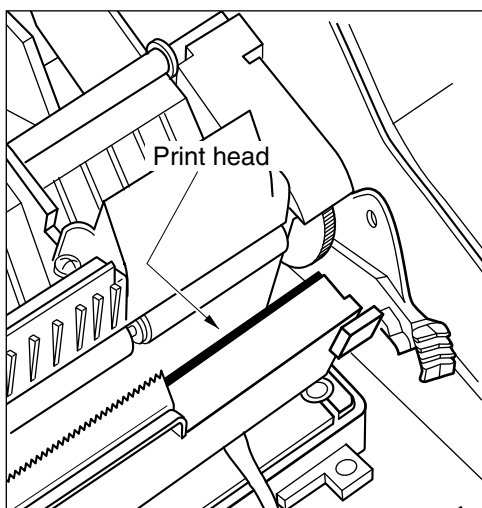
Print head

4. Clean the print head with a soft rag moist with ethyl alcohol or isopropyl alcohol.
5. Return the print head release lever to its original position immediately after cleaning.
6. Replace the printer cover.

Precautions:
Never touch the print head with a tool or anything hard as it may damage the head.

6 Removing the till and the drawer

The till in the register is detachable. After closing your business for the day, remove the till from the drawer and keep the drawer open. The coin case is also detachable from the till. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.
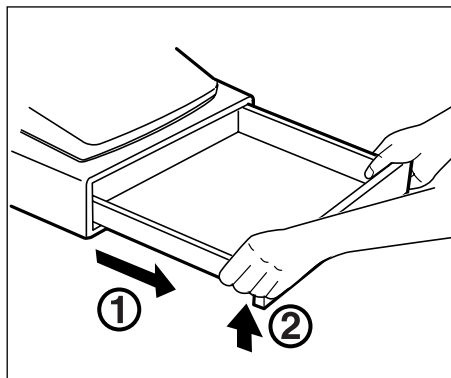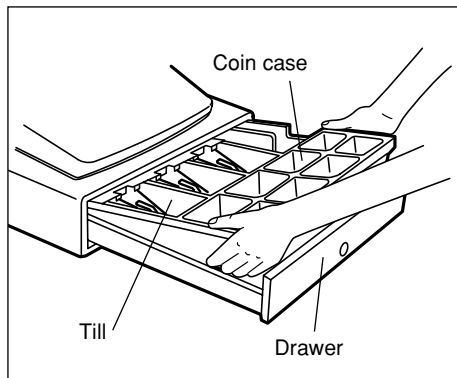
7 Opening the drawer by hand

The drawer automatically opens in the usual way. However, when power failure is encountered or the machine becomes out of order, slide the lever located on the machine bottom toward the rear. (See the figure below.) The drawer will not open, if it is locked with a drawer lock key.

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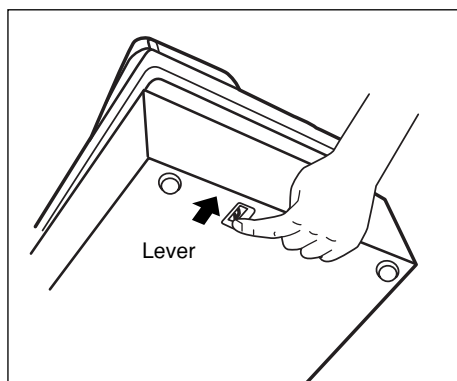
8 Installing the fixing angle bracket

To prevent the register from moving when the drawer opens, the fixing angle bracket is supplied with the register. By attaching the bracket to the table where the register is installed, you can hock the register on this bracket and secure the register to its position.

How to install the fixing angle bracket
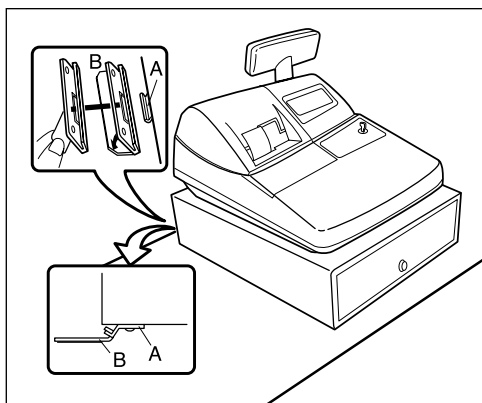
1. Thoroughly clean the location where the fixing angle bracket (B) is to be placed.
2. Peel off the adhesive tape on the fixing angle bracket.
3. Hook the angle bracket onto the hook (A) that is located at the bottom rear of the register.
4. Firmly stick the fixing angle bracket to the table surface that your cleaned above.

How to remove the register from the fixing angle bracket
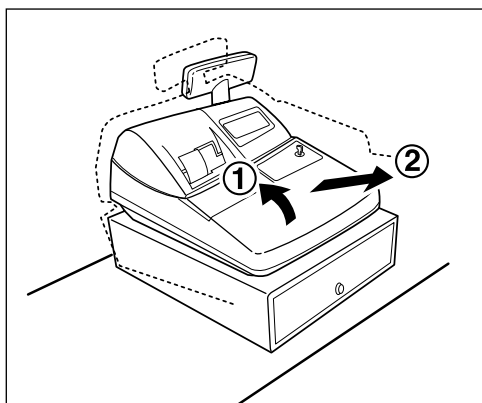
1. Lift up the front of the register and pull the register towards you.

9 Before calling for service

The malfunctions shown in the left-hand column below, labelled "Fault," do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to the "Checking" shown in the right-hand column before calling for service.

Fault	Checking
(1) The display won't be illuminated even when the mode switch is turned to any other position than "⏻".	• Is power supplied to the electrical outlet? • Is the power cord plug out or loosely connected to the electrical outlet?
(2) The display is illuminated, but the whole machine refuses registrations.	• Is a cashier code assigned to the register? • Is a clerk code assigned to the register? • Is the mode switch set properly at the "REG" position?
(3) No receipt is issued.	• Is the receipt paper roll properly installed? • Is there a paper jam? • Is the receipt function in the "OFF" status? • Is the print head release lever at the printing position?
(4) No journal paper is taken up.	• Is the take-up spool installed on the bearing properly? • Is there a paper jam?
(5) Printing is unusual.	• Is the print head release lever at the printing position? • Is the paper roll properly installed?

■ Error message table

Text no.	Description	In default of programming
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPERATION
3	Desired code is not programmed yet.	NO RECORD
4	(Reserved)	
5	Secret code error	SECRET CODE
6	(Reserved)	
7	Memory is full.	MEMORY FULL
8	Insert slip paper.	INSERT SLIP
9	The entered cashier code is not authorized.	NO AUTHORITY
10	Stock is empty.	OUT OF STOCK
11	Compulsory pushing the subtotal key	SBTL COMPUL.
12	Compulsory tendering	TEND COMPUL.
13	Compulsory PBAL	PB COMPUL.
14-21	(Reserved)	
22	Overlapped cashier error	CASHIER ERR.
23	Cashier resetting over error	ENTRY ERR CA
24-26	(Reserved)	
27	Power off	POWER OFF
28-30	(Reserved)	
31	Compulsory non-add code	# COMPULSORY
32	The cashier/clerk is not assigned.	NOT ASSIGNED
33	(Reserved)	
34	Overflow limitation	OVER LIMIT.

Text no.	Description	In default of programming
35	The open price entry is inhibited.	INH. OPEN PR
36	The unit price entry is inhibited.	INH. UNIT PR
37	The direct non-tendering finalization after previous tender entry is inhibited.	NOT NON-TEND
38-66	(Reserved)	
67	REG buffer is full.	BUFFER FULL
68-71	(Reserved)	
72	EFT error	EFT ERROR
73	EFT connection is broken.	EFT BREAK
74-75	(Reserved)	
76	Closing the drawer is compulsory.	CLOSE DRAWER
77-80	(Reserved)	
81	Entry of secret code is needed.	ENTR SECRET#
82-83	(Reserved)	
84	Data backup send success	SEND OK
85	Data backup receive success	RECEIVE OK
86	Data backup communication error	COM. ERROR
87	Backup data format error	DATA ERROR
88	Data backup time out error	TIME OUT
89-94	(Reserved)	
95	EURO change compulsory	EURO CHANGE

LIST OF OPTIONS

For your register, the following options are available.
For details, contact your dealer.

•Remote drawer model ER-03/04/05/06DW
•Key kit models
    By using the following key kits, you can change the keyboard layout of your register including the
    expansion of the number of departments.
        ER-11KT7: 30 regular size key kits
        ER-12KT7: 30 1 x 2 size key kits
        ER-22KT7: 10 2 x 2 size key kits
        ER-11DK7G: 30 regular size dummy key kits
        ER-51DK7G: 10 5 x 1 size dummy key kits
•EFT interface model ER-03EF

SPECIFICATIONS

Model:	ER-A410/A420
Dimensions:	355 (W) x 424 (D) x 305 (H) mm
Weight:	ER-A410: 12.2 kg / ER-A420: 12.1 kg
Power source:	Official (nominal) voltage and frequency
Power consumption:	Stand-by 11 W
	Operating 49 W (max.)
Working temperature:	0 °C to 40 °C
Electronics:	LSI (CPU) etc.
Built-in battery:	Rechargeable battery, memory holding time about 1 month
	(with fully charged built-in battery, at room temperature)
Display:	
Operator display:	LCD dot-matrix display (16 positions x 2 lines)
Customer display:	7-segment display (7 positions)
Printer:	
Type:	2-station thermal printer
Printing speed:	Approx. 13.3 lines/second
Printing capacity:	24 digits each for receipt and journal paper
Other functions:	• Graphic logo printing function
	• Logo text printing function
	• Receipt (ON-OFF) function, journal selective function
	• Receipt and journal independent paper feed function
Paper roll:	Width: 44.5 ± 0.5 mm
	Max. diam.: 80 mm
	Quality: High quality (0.06 to 0.08 mm thickness)
Cash drawer:	5 slots for bill and 8 for coin denominations
Accessories:	Manager key 2
	Submanager key 2
	Operator key 2
	Drawer lock key 2
	Paper roll 2
	Take-up spool 1
	Standard key sheet 1 (mounted on the keyboard) ⎤
	Programming key sheet 1 (mounted on the keyboard) ⎦ for ER-A420 only
	Fixing angle bracket 1
	Instruction manual 1 copy

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

FOR CUSTOMERS IN U.K.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

BLUE:	**Neutral**
BROWN:	**Live**

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.

The wire which is coloured **BLUE** must be connected to the terminal which is marked with the letter **N** or coloured black.

The wire which is coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured red.

The apparatus must be protected by a 3A fuse in the mains plug or distribution board.

CAUTION: DO NOT CONNECT THE LIVE (BROWN) WIRE OR THE NEUTRAL (BLUE) WIRE TO THE EARTH TERMINAL OF YOUR 3-PIN MAINS PLUG.

Environment Protection

The device is supported by a battery. To dispose the battery safely to protect the environment, please note the following points:

• Take the used battery to your local waste depot, dealer or customer service centre for recycling.

• Do not throw the used battery into fire, into water or into the household waste!

Umweltschutz

Das Gerät wird durch eine Batterie gestützt. Um die Batterie sicher und umweltschonend zu entsorgen, beachten Sie bitte folgende Punkte:

• Bringen Sie die leere Batterie zu Ihrer örtlichen Mülldeponie, zum Händler oder zum Kundenservice-Zentrum zur Entsorgung.

• Werfen Sie die leere Batterie niemals ins Feuer, ins Wasser oder in den Hausmüll.

Protection de l'environnement

L'appareil est supporté sur pile. Afin de protéger l'environnement, nous vous recommendons de traiter la pile usagée la façon suivante:

• Apporter la pile usagée à votre centre de traitement des ordures ménagères le plus proche ou, à votre revendeur ou, au service après-vente, pour recyclement.

• Ne jamais jeter la pile usagée dans une source de chaleur, dans l'eau ou dans les vide-ordures.

Miijöskydd

Denna produkt nöddrivs av batteri.

Vid batteribyte skall följande iakttagas:

• Det förbrukade batteriet skall inlämnas till er lokala handlare eller till kommunal miljöstation för återinssamling.

• Kasta ej batteriet i vattnet eller i hushållssoporna. Batteriet får ej heller utsätttas för öppen eld.

SHARP®

SHARP CORPORATION