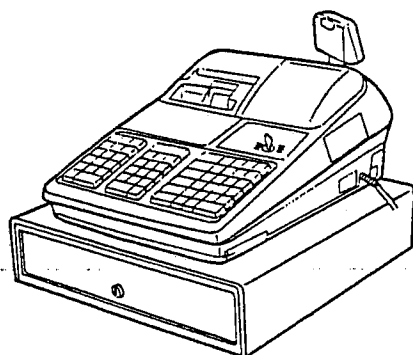
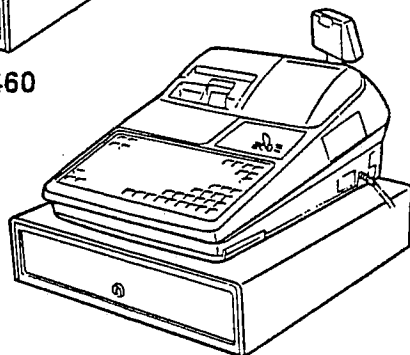




ER-A460



ER-A470

ELECTRONIC CASH REGISTER

ER-A460 MODEL ER-A470

(For "A" version)

SRV KEY : LKGIM7113RCZZ

PRINTER : DP-730

CONTENTS

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The ER-A460/A470 has the Easy Programming function which allows the user to program easily.

This function is not described in this manual.

Please refer to the ER-A460/A470 EASY PROGRAMMING INSTRUCTION MANUAL of an accessory for the product.

This manual's parts code is a "TINSE7335BHZA".

CHAPTER 1. SERVICE (SRV) MODE

The SRV key is used for operating in the SRV mode.

1. SRV. reset (Program Loop Reset)

Used to return the machine back to its operational state after a lock-up has occurred.

Procedure

• Method 1

- 1) Turn off the AC switch.
- 2) Set the mode switch to (SRV') position.
- 3) Turn on the AC switch.
- 4) Turn to (SRV) position from (SRV') position.

• Method 2

- 1) Set the mode switch to PGM2 position.
- 2) Turn off the AC switch.
- 3) While holding down JOURNAL FEED key and RECEIPT FEED key, turn on the AC switch.

Note: When disassembling and reassembling always power up using method 1 only. Method 2 will not reset the CKDC6.

Note: SRV programming job#926-B must be set to "4" to allow PGM program loop reset.

2. Master reset (All memory clear)

There are two possible methods to perform a master reset.

• MRS-1

Used to clear all memory contents and return machine back to its initial settings. return keyboard back to default. for default keyboard layout.

Procedure

- 1) Unplug the AC cord from the wall outlet.
- 2) Set the MODE switch to the (SRV') position.
- 3) Plug in the AC cord to the wall outlet.
- 4) While holding down JOURNAL FEED key, turn to (SRV) position from (SRV') position.

• MRS-2

Used to clear all memory and keyboard contents.

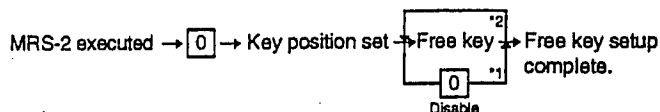
This reset returns all programming back to defaults. The keyboard must be entered by hand.

This reset is used if an application needs different keyboard layout other than that supplied by a normal MRS-1.

Procedure

- 1) Unplug the AC cord from the wall outlet.
 - 2) Set the MODE switch to the (SRV') position.
 - 3) Plug in the AC cord to the wall outlet.
 - 4) While holding down JOURNAL FEED key and RECEIPT FEED key, turn to (SRV) position from (SRV') position.
 - 5) Key position assignment:
- * After the execution of MRS-2, only the RECEIPT FEED and JOURNAL FEED keys can remain effective on key assignment. Any key can be assigned on any key position on the main keyboard.

[key setup procedure]



NOTES:

*1: When the 0 key is pressed, the key of the key number on display is disabled.

*2: Push the key on the position to be assigned. With this, the key of the key number on display is assigned to that key position.

Key number	Key name	Key number	Key name
1	Numeric key "0"	9	Numeric key "8"
2	Numeric key "1"	10	Numeric key "9"
3	Numeric key "2"	11	Numeric key "00"
4	Numeric key "3"	13	Decimal point key
5	Numeric key "4"	14	CL key
6	Numeric key "5"	15	@/FOR key
7	Numeric key "6"	16	SBTL key
8	Numeric key "7"	17	CA/AT key

3. Reading of the SRV mode program

List of program reports

JOB#	Report name
900	SRV-mode program full item report (not incl. keyboard layout)
950	Keyboard layout report (on keys other than dept. keys and direct PLU keys)
951	Keyboard layout report (on dept. keys and direct PLU keys)
970	SRV file programming report

[JOB# 900]

All parameters contained for the SRV mode as listed

Key operation.

900 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A460

Logo

01/01/00 12:00AM
000000 #0001Date/Time
Machine No./Consecutive No.

#900

Job code

901#	0002
902#	0000
903#	4000
904#	0000
905#	0005
906#	0021
907#	0010
908#	0740
909#	2000
910#	0004
911#	0100
912#	0060
913#	0104
914#	1100
915#	0000
916#	1400
917#	0000
918#	2000
919#	0000
920#	0000
921#	0000
922#	0000
923#	0000
924#	0000
925#	0000
926#	0400
927#	0000
928#	0000
929#	0000
980#	0000
930#	Z1 0000
933#	Z1 0000
934#	Z 0000
935#	Z 0000
937#	Z2 0000
939#	Z2 0000

Contents of the SRV-mode
programming

The contents of the programming
are printed only on the journal
individual formats shown at left.
(No header is printed.)

942#	
GT2	\$000000000000.00
943#	
GT3	\$000000000000.00
969#	
TR	\$000000000000.00
944#	0000
945#	0000
946#	0000

Z1 reset counter
Hourly Z1 reset counter
PLU Z1/Z2 reset counter
Cashier Z1/Z2 reset counter
Z2 reset counter
Daily net Z2 reset counter
GT2
GT3
Training GT
PGM2 mode secret code
Assignment Of RS232 channel
Assignment Of RS232 channel

[JOB# 950]

The Key layout report is printed in SRV mode

Key operation

950 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A460

Logo

01/01/00 12:43AM
000000 #0001Date/Time
Machine No./Consecutive No.

#950

Job code

001	0	KEY	029
002	1	KEY	024
003	2	KEY	030
004	3	KEY	036
005	4	KEY	025
006	5	KEY	031
007	6	KEY	037
008	7	KEY	026
009	8	KEY	032
010	9	KEY	038
011	00	KEY	035
012	000	KEY	---

Key No./Key label/Location No.

Not used

Key operation

951 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A460

Logo

01/01/00 12:00AM
000000 #0003Date/Time
Machine No./Consecutive No.

#951

Job code

001	001	047
002	002	048
003	003	049
004	004	050
005	005	051
006	006	052
007	007	053
008	008	054
009	009	055
010	010	056
011	011	057
012	012	058
013	013	059
014	014	060
015	015	061
016	016	062
017	017	063
018	018	064

Key No./key label/Location No.

⑤ [JOB#970]

Files on the memory are listed.

Key operation

970 → [@/FOR] → [CA/AT]

SHARP
PRESENTS THE
ER-A460

01/01/00 12:00AM
000000 #0001

#970

%001%	00015	/00015
%002%	00015	/00015
%003%	00015	/00015
%005%	00015	/00015
%006%	00015	/00015
%007%	00200	/00020
%008%	00200	/00020
%009%	00200	/00020
%012%	00200	/00020
%014%	00005	/00000
%015%	00005	/00000
%016%	00087	/00087
%017%	00087	/00087
%018%	00087	/00087
%019%	00004	/00004
%020%	00004	/00004
%021%	00004	/00004
%022%	00042	004/00042
%023%	00042	004/00042
%024%	00042	004/00042
%025%	00042	/00042
%026%	00042	/00042
%027%	00049	/00049
%028%	00049	/00049
%029%	00036	/00000
%030%	00036	/00000
%031%	00080	/00080

1DBF8D
1DFE7E
1FFFFF

Logo

Date/Time

Machine No./Consecutive No.

Job code

File table No./No. of records

/No. of used records

File table No./No. of records/No. of blocks/No. of used records

File memory start address

Empty memory start address

Memory end address

[JOB#990]

Reading the Contents of the SRV-Mode Programming for SSP

Key operation

990 → [@/FOR] → [CA/AT]

SHARP
PRESENTS THE
ER-A460

01/01/00 12:03AM
000000 #0006

#990

SSP ERA460U - 001

001	001
002	001
003	001
004	001
005	001
006	001
007	001

CHECK SUM ERROR

Logo

Date/Time

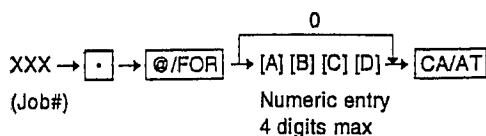
Machine No./Consecutive No.

Job code

SSP No.

4. Service mode programming

The following are the key operation required for programming.



Details of [A][B][C][D] will be discussed at each item description.
★ mark is MRS setting.

[JOB #901]:MRS=0002

#901-A: Not used (Fixed at "0")

#901-B: 1. Tax system

1. Tax system	901-B
Auto tax 1-4 & manual tax	0
CANADIAN TAX	6

★

#901-C: 1. Rounding system

1. Rounding system	901-C
Normal	0
SINGAPORE	8

★

#901-D: 1. TAB setting

1. TAB setting	901-D
0	0
0.0	1
0.00	2
0.000	3

★

[JOB#902] NOT USED MRS=0000

[JOB#903] MRS=4000

#903-A: 1. SIO loader dumper baud rate

1. Baud rate (bps)	903-A
2400	2
4800	3
9600	4
19200	5
38400	6
57600	7
115200	8

★

* The communication speed with the ER-02FD is 19200 bps.

#903-B: 1. Symbol of scale

1. Symbol of scale	903-B
"LB"	0
"KG"	2

★

#903-C: 1. Scale entry system
2. Entry of tare
3. Unit of weight for the scale

1. Scale entry system	2. Entry of tare	3. Unit of weight for the scale	903-C
Manual	Disallowed	2ld (3ld) + 2dd	0
		1ld (2ld) + 3dd	1
	Allowed	2ld (3ld) + 2dd	2
		1ld (2ld) + 3dd	3
Automatic	Disallowed	2ld (3ld) + 2dd	4
		1ld (2ld) + 3dd	5
	Allowed	2ld (3ld) + 2dd	6
		1ld (2ld) + 3dd	7

★

#903-D: 1. Type of food stamp

1. Type of food stamp	903-D
No food stamp	0
Tax not payable in food stamps	1
Tax payable in food stamps	2
Food stamp tax forgiveness	3

★

[JOB#904] MRS=0000

#904-A: 1. Printing of date

1. Printing of date	904-A
Yes	0
No	4

★

#904-B: Not used (Fixed at "0")

#904-C: 1. Printing of consecutive No.

1. Printing of consecutive No.	904-C
Yes	0
No	4

★

#904-D: Not used (Fixed at "0")

[JOB#905] MRS=0005

#905-A: 1. Taxable 4 subtotal print on X/Z report.
2. Gross Tax 4 and refund Tax 4 total print on X/Z report.
3. Net Tax 4 total print on X/Z report.

1. Taxable 4 SBTL	2. Gross Tax 4 and refund Tax 4	3. Nex Tax 4	905-A
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

★

- #905-B: 1. Tax printing when taxable subtotal is zero.
2. Tax printing when GST is VAT.
3. Tax printing when tax is zero.

1. Taxable subtotal is zero	2. GST is VAT	2. Tax is zero	905-B
Skip	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Print	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

- #905-C: 1. GST EXPT print on X/Z report

1. GST EXPT	905-C
Print	0
Skip	4

- #905-D: 1. TAX METHOD

	Tax4 method (GST)	Tax3 method		Tax2, 1 method (PST)	905-D
		GST	PST		
Type ①	VAT	VAT		Tax on Tax	0
Type ②				Tax on Base	1
Type ③	VAT			Tax on Tax	2
Type ④				Tax on Base	3
Type ⑤	Add on Tax			Tax on Tax	4
Type ⑥				Tax on Base	5
Type ⑦	Add on Tax	VAT		Tax on Tax	6
Type ⑧				Tax on Base	7
Type ⑨	Add on Tax	Add on Tax		Tax on Tax	8
Type ⑩				Tax on Base	9

[JOB#906] MRS=0021

- #906-A: 1. Print Dept. and PLU number on receipt.
2. Entry which makes the PLU stock counter negative

1. Print Dept. and PLU number on receipt.	2. Entry which makes the PLU stock counter negative	906-A
No	Allowed unconditionally	0
	Operation allowed despite ERROR message	1
	Inhibited	2
Yes	Allowed unconditionally	4
	Operation allowed despite ERROR message	5
	Inhibited	6

- #906-B: 1. Bottle return function
2. Hash department setting

1. Bottle return function	2. Hash department setting	906-B
Disable	Disable	0
	Enable	2
Enable	Disable	4
	Enable	6

- #906-C: 1. Split pricing counting
2. Multiplication entry

1. Split pricing counting	2. Multiplication entry	906-C
Quantity	Multiplication	0
	Successive multiplication	1
	Split pricing	2
Package	Multiplication	4
	Successive multiplication	5
	Split pricing	6

- #906-D: 1. Presetting consecutive No.
2. Fractional quantity

1. Presetting consecutive No.	2. Fractional quantity	906-D
Yes	No	0
	Yes (3 digit decimal place)	1
No	No	2
	Yes (3 digit decimal place)	3

[JOB#907] MRS=0010

- #907-A, B: Not used (Fixed at "00")

- #907-C: 1. Minus Dept./PLU

1. Minus Dept./PLU	907-C
Disable	0
Enable	1

- #907-D: Not used (Fixed at "0")

[JOB#908] MRS=0740

- #908-A: GT print on Z report

GT1 (NET)	GT2 (+)	GT3 (-)	908-A
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

- #908-B: GT print on X report

GT1 (NET)	GT2 (+)	GT3 (-)	908-B
Skip	Skip	Skip	0
		Print	1
	Print	Skip	2
		Print	3
Print	Skip	Skip	4
		Print	5
	Print	Skip	6
		Print	7

- #908-C: 1. Add void-mode transaction data to hourly total report
2. X1/Z1 report in X2/Z2 mode
3. Resetting of consecutive number in Z1 resetting

1. Add void-mode transaction to hourly total report	2. X1/Z1 report in X2/Z2 mode	3. Resetting of consecutive No.in Z1 resetting	908-C
No	Enable	No	0
		Yes	1
	Disable	No	2
		Yes	3
Yes	Enable	No	4
		Yes	5
	Disable	No	6
		Yes	7

#908-D:

1. Printing X/Z report Journal only/Receipt & Journal (Except the individual cashier report)
2. Z1 resetting, resets GT Enable/Disable

1. Printing X/Z report	2. GT resetting at Z1	908-D
Receipt & Journal	Disable	0
	Enable	1
Journal	Disable	4
	Enable	5

[JOB#909] MRS=2000

- #909-A: 1. Printing of training GT on the X report
2. Printing of training GT on the Z report

1. Printing of training GT on the X report	2. Printing of training GT on the Z report	909-A
Skip	Print	0
	Skip	1
Print	Print	2
	Skip	3

- #909-B: 1. Printing of data on PLU resetting report

1. Printing of data on PLU resetting report	909-B
Print	0
Skip	4

- #909-C: 1. Printing of data in void-mode totalizer and manager void totalizer on Z2 report
2. Printing of data in void-mode totalizer and manager void totalizer on Z1 report

1. Void-mode totalizer on Z2 printing	2. Void-mode totalizer on Z1 printing	909-C
Print	Print	0
	Skip	2
Skip	Print	4
	Skip	6

#909-D: Not used (Fixed at "0")

[JOB#910] MRS=0004

#910-A: Not used (Fixed at "0")

- #910-B: 1. Auto cashier sign off at the end of each transaction

1. Auto cashier sign off at the end of each transaction	910-B
No (After cashier Z1 only)	0
Yes (Everytime)	1

#910-C, D: Not used (Fixed at "04")

[JOB#911] MRS=0100

- #911-A: 1. Fraction treatment

1. Fraction treatment	911-A
Round off	0
Round up	1
Round down	2

- #911-B: 1. Check digit checking when a manual PB/CB entry is made.

1. Check digit checking when a manual PB/CB entry is made.	911-B
No	0
Yes	1

#911-C, D: Not used (Fixed at "00")

[JOB#912] MRS=0060

- #912-A: 1. Date print format

Date format	912-A
Month/Day/Year	0
Day/Month/Year	1
Year/Month/Day	2

- #912-B: 1. Time system

1. Time system	912-B
12H	0
24H	1

- #912-C: 1. After transaction receipt format
2. Copy receipt
3. Footer print control

1. After transaction receipt	2. Copy receipt	3. Footer print control	912-C
Total only	No	All receipt	0
		On selected function keys at the time of finalization	1
	Yes	All receipt	2
		On selected function keys at the time of finalization	3
Detail	No	All receipt	4
		On selected function keys at the time of finalization	5
	Yes	All receipt	6
		On selected function keys at the time of finalization	7

- #912-D: 1. Logo message control

1. Logo/stamp message control	912-D
3-line header	0
3-line footer	2
6-line header	3

(Logo/stamp message format)

Type :	0	2	3
Header {			
Footer {			

[JOB#913] MRS = 0104

- #913-A: 1. VP format on Receipt/Journal
2. Content of TOTAL VP amount

1. VP format	2. VP amount	913-A	
Date & amount	Total amount	0	★
	Tendered amount	1	
Machine# & amount	Total amount	2	
	Tendered amount	3	
Date & consecutive no. & amount	Total amount	4	
	Tendered amount	5	

- #913-B: 1. Printing of SBTL
2. Printing of MDSE SBTL upon key depression
3. Escape the compulsion of VP

NOTE: Must turn to MGR mode and depress

- ☐ , **PRINT** keys to escape validation

1. SBTL Print	2. MDSE SBTL print	3. Escape the compulsory of VP	913-B	
No	No	Disable	0	★
		Enable	1	
	Yes	Disable	2	
		Enable	3	
Yes	No	Disable	4	
		Enable	5	
	Yes	Disable	6	
		Enable	7	

- #913-C: 1. Buzzer off 2sec. after lock error.
2. Buffered keyboard

1. Error beep	2. Buffered keyboard	913-C	
2-sec. off	Yes	0	★
	No	1	
Constant	Yes	2	
	No	3	

- #913-D: 1. Drawer closing operation
2. Error mode
3. Key catch sound

1. Drawer closed compulsory	2. Error mode	3. Key catch sound	913-D	
Non-compulsory	All lock error	Enable	0	★
		Disable	1	
	Miss operation (One shot error)	Enable	2	
		Disable	3	
Compulsory	All lock error	Enable	4	
		Disable	5	
	Miss operation (One shot error)	Enable	6	
		Disable	7	

[JOB#914] MRS = 1100

- #914-A: 1. Receipt issuing at no-sale
2. [NS] key separation from [CA/AT] key for no sale function
3. Tax delete operation

1. Receipt issuing at no-sale	2. [NS] key separation	3. Tax delete	914-A	
Enable	Yes	Inhibit	0	★
		Enable	1	
	No	Inhibit	2	
		Enable	3	
Disable	Yes	Inhibit	4	
		Enable	5	
	No	Inhibit	6	
		Enable	7	

- #914-B: 1. No-sale after NON ADD code entry

1. No-sale after # entry	914-B	
Disable	0	★
Enable	1	

- #914-C 1. Void mode

1. Void mode	914-C	
Enable	0	★
Disable	2	

- #914-D: 1. Manual tax Disable/Enable
2. CHECK CASHING Enable/Disable
3. Non-add code entry Disable/Enable

1. Manual tax	2. CHECK CASHING	3. Non-add code entry	914-D	
Enable	Disable	Enable	0	★
		Disable	1	
	Enable	Enable	2	
		Disable	3	
Disable	Disable	Enable	4	
		Disable	5	
	Enable	Enable	6	
		Disable	7	

[JOB#915] MRS = 0000

- #915-A: 1. Amount symbol

1. Amount symbol	915-A	
* \$ *	0	★
* * *	1	
* *	2	

- #915-B: Not used (Fixed at "0")

- #915-C: 1. ST%, ST(-) as many times needed/operation only once

1. ST%, ST(-) as many times needed/operation only once	915-C	
Unlimited	0	★
Once only	2	

- #915-D: Not used (Fixed at "0")

[JOB#916] MRS = 1400

- #916-A: 1. Print format when text and amount overlaps each other
REG mode

1. Print format when text and amount overlaps each other REG mode	916-A
Truncate text	0
2 line print	1

★

- #916-B: 1. Finalization by charge when $SBTL \leq 0$
2. Food stamp subtotal entry before food stamp tender

1. Finalization by charge when $SBTL \leq 0$	2. Food stamp subtotal entry before food stamp tender	916-B
RF type of sale only	Non-compulsory	0
	Compulsory	1
Always	Non-compulsory	4
	Compulsory	5

★

- #916-C: 1. Negative merchandise subtotal
2. Subtotal entry compulsory before tendering
3. Subtotal entry before direct non-tendering finalization

1. Negative merchandise subtotal	2. Subtotal entry compulsory before tendering	3. Subtotal entry before direct non-tendering finalization	916-C
Allow	Non-compulsory	Non-compulsory	0
		Compulsory	1
	Compulsory	Non-compulsory	2
		Compulsory	3
Disallow	Non-compulsory	Non-compulsory	4
		Compulsory	5
	Compulsory	Non-compulsory	6
		Compulsory	7

★

- #916-D: 1. Coupon PLU printing on X/Z report
2. Net sales subtotal (NET1) printing on X/Z report
3. CHECK change total printing on X/Z report

1. Print coupon PLU's on general report	2. Print net sales SBTL (NET1) on general report	3. Print CHK CHANGE on general report	916-D
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

★

[JOB#917] MRS = 0000

- #917-A: 1. Printing of Taxable 1 subtotal on X/Z report
2. Printing of Gross Tax 1 and refund Tax 1 total on X/Z report
3. Printing of Net Tax 1 total on X/Z report

1. Taxable 1 subtotal on X/Z report	2. Gross Tax 1 and refund Tax 1 total on X/Z report	3. Net Tax 1 total on X/Z report	917-A
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

★

- #917-B: 1. Printing of Taxable 2 subtotal on X/Z report
2. Printing of Gross Tax 2 and refund Tax 2 total on X/Z report
3. Printing of Net Tax 2 total on X/Z report

1. Taxable 2 subtotal on X/Z report	2. Gross Tax 2 and refund Tax 2 total on X/Z report	3. Net Tax 2 total on X/Z report	917-B
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

★

- #917-C: 1. Printing of Taxable 3 subtotal on X/Z report
2. Printing of Gross Tax 3 and refund Tax 3 total on X/Z report
3. Printing of Net Tax 3 total on X/Z report

1. Taxable 3 subtotal on X/Z report	2. Gross Tax 3 and refund Tax 3 total on X/Z report	3. Net Tax 3 total on X/Z report	917-C
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

★

- #917-D: 1. Printing of Total Tax amount on X/Z report
 2. Printing of Gross manual Tax and refund manual Tax on X/Z
 3. Printing of Net manual Tax total on X/Z report

1. Total Tax Amount	2. Gross manual Tax and Refund manual Tax on X/Z report	3. Net manual Tax total on X/Z report	917-D
Print	Print	Print	0
		Skip	1
	Skip	Print	2
		Skip	3
Skip	Print	Print	4
		Skip	5
	Skip	Print	6
		Skip	7

[JOB#918] MRS = 2000

- #918-A: 1. Printing of text of a tied PLU in set PLU
 2. Direct non-tendering finalization after previous tender entry

1. Printing of text of a tied PLU in promo PLU	2. Direct non-tendering finalization after previous tender entry	918-A
Yes	Disable	0
	Enable	2
No	Disable	4
	Enable	6

- #918-B: 1. Fractional entries for non-scalable PLU/Dept.

1. Fractional entries for non-scalable PLU/Dept.	918-B
Enable	0
Disable	1

- #918-C, D: Not used (Fixed at "00")

[JOB#919] MRS = 0000

- #919-A, B: Not used (Fixed at "00")

- #919-C: 1. PB entry
 2. Amount printing when PLU unit price is 0

1. PB entry	2. Amount printing when PLU unit price is 0	919-C
Non-compulsory	No	0
	Yes	1
Compulsory	No	2
	Yes	3

- 919-D: 1. Conversion SBTl printing of native SBTl
 2. Foreign currency format

1. Conversion SBTl print of native SBTl	2. Foreign currency	919-D
Yes	Not	0
	Omit digits lower than TAB position	1
No	Not	4
	Omit digits lower than TAB position	5

[JOB#920] NOT USED MSR = 0000

[JOB#921] NOT USED MRS = 0000

[JOB#922] NOT USED MRS = 0000

[JOB#923] NOT USED MRS = 0000

[JOB#924] NOT USED MRS = 0000

[JOB#925] NOT USED MRS = 0000

[JOB#926] MRS = 0400

#926-A: Not used (Fixed at "0")

- #926-B: 1. Program reset at PGM 2 mode

1. Program reset at PGM2 mode	926-B
Disable	0
Enable	4

#926-C, D: Not used (Fixed at "00")

[JOB#927] NOT USED: MRS = 0000

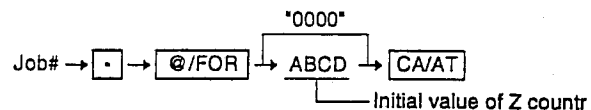
[JOB#928] NOT USED: MRS = 0000

[JOB#929] NOT USED: MRS = 0000

[JOB#980] NOT USED: MRS = 0000

[JOB#930-941] MRS = 0000

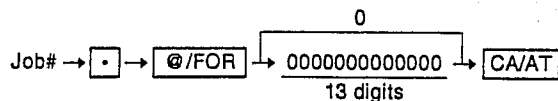
RESET REPORT COUNTER



JOB #	Function
930	Z1 report counter
933	Hourly Z1 report counter
934	PLU Z1/Z2 report counter
935	Cashier Z1/Z2 report counter
937	Z2 report counter
939	31 day daily net Z2 report counter

[JOB#942, 943, 969] MRS = 0000000000000

GT COUNTER PRESETTING

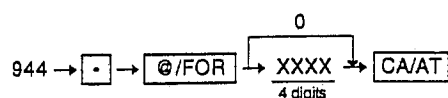


JOB #	Function
942	GT2 (Positive GT)
943	GT3 (Negative GT)
969	TRAINING GT

Note: GT1 is obtained by calculation
 Equation: GT1=GT2-GT3

[JOB#944] MRS = 0000

PGM1/2 secret code presetting

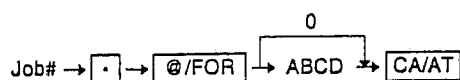


NOTE: When the secret code "0" is programmed, the secret code entry is inhibited.

[JOB#945] MRS = 0000

The assignment of RS232 channel by each devices

* For use, the option control ROM (ER-A46R1) and the RS232 I/F (ER-A5RS) are required.



#945-A: 1. Channel No. for online

1. Channel No. for online	945-A
Channel No.	0 to 7

#945-B: 1. Channel No. for Print data send

1. Channel No. for Print data send	945-B
Channel No.	0 to 7

#945-C: 1. Channel No. for scale

1. Channel No. for scale	945-C
Channel No.	0 to 7

#945-D: 1. Channel No. for Coin Dispenser

1. Channel No. for Coin Dispenser	945-D
Channel No.	0 to 7

* 0 = No connect
1 to 7 = Channel number

[JOB#946] MRS = 0000

The assignment of RS232 channel by each devices

#946-A, B: Not used (Fixed at "00")

#946-C: 1. Channel No. for CAT1

1. Channel No. for CAT1	946-C
Channel No.	0 to 7

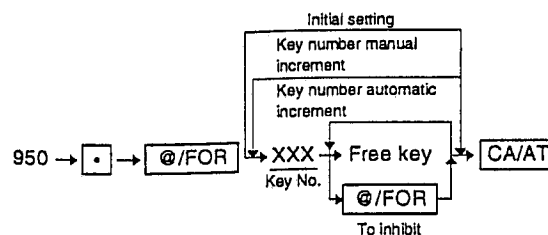
#946-D: 1. Channel No. for CAT2

1. Channel No. for CAT2	946-D
Channel No.	0 to 7

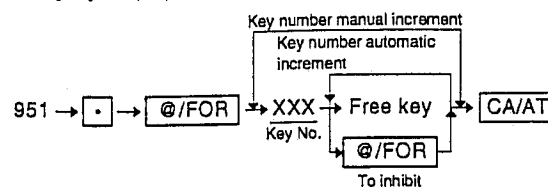
* 0 = No connect
1 to 7 = Channel number

[JOB#950] MRS = STANDARD KEY LAYOUT

Free key layout (Except for department keys and direct PLU keys.)

**[JOB#951] MRS = STANDARD KEY LAYOUT**

Free key layout (department keys and direct PLU keys)



- Programming of the keys to be dept keys or direct PLU keys on the keyboard.
- Key No. is assigned to each key which is supposed to be dept. Key or direct PLU key by depressing the key after entering the key No.
- Those keys programmed by this job No. will be dept. keys if dept. code is assigned, and will be direct PLU keys if PLU code is assigned in the PGM2 mode.

FUNCTION KEY LIST

Key No.	KEY	KEY TEXT
1	0 KEY	0 KEY
2	1 KEY	1 KEY
3	2 KEY	2 KEY
4	3 KEY	3 KEY
5	4 KEY	4 KEY
6	5 KEY	5 KEY
7	6 KEY	6 KEY
8	7 KEY	7 KEY
9	8 KEY	8 KEY
10	9 KEY	9 KEY
11	00 KEY	00 KEY
12	000 KEY	000KEY
13	DECIMAL POINT	. KEY
14	CLEAR	CLEAR
15	@/FOR	@/FOR
16	SUB TOTAL	SBTL
17	CA/AT	CA/AT
18	MDSE SBTL	MDS ST
19	TRAY SBTL	TRY ST
20	#	#
21	NO SALE	NS
22	SCALE	SCALE
23	PLU/SUB	PLU/SB
24	REFUND SALES	RF SAL
25	Level1	L1
26	Level2	L2
27	Level3	L3
28	TAX1 SHIFT	TAX1SF

Key No.	KEY	KEY TEXT
29	TAX2 SHIFT	TAX2SF
30	TAX3 SHIFT	TAX3SF
31	TAX4 SHIFT	TAX4SF
32	FS SHIFT	FS SHT
33	PRINT	PRINT
34	RCPT	RCPT
35	VOID	VOID
36	NDIRECT VOID	I. VOID
37	ST VOID	ST VD
38	REFUND	RFND
39	%1	%1
40	%2	%2
41	%3	%3
42	%4	%4
43	(-)1	(-)1
44	(-)2	(-)2
45	(-)3	(-)3
46	(-)4	(-)4
47	TAX	TAX
48	AUTO	AUTO
49	AUTO2	AUTO2
50	AUTO3	AUTO3
51	AUTO4	AUTO4
52	AUTO5	AUTO5
53	CASH2	CA2
54	CHECK	CHK
55	CH1	CH1
56	CH2	CH2
57	CH3	CH3
58	CH4	CH4
59	CH5	CH5
60	CONV1	CONV1
61	CONV2	CONV2
62	CONV3	CONV3
63	CONV4	CONV4
64	PB	PB
65	CB	CB
66	SERVICE	SRVC
67	FS TEND	FSTEND
68	RA	RA
69	RA2	RA2
70	PO	PO
71	PO2	PO2
72	OPEN TARE	OPN TR
73	CASHIER NO.	CASH#

ER-A460 KEY POSITION

R	J	16	22	28	34	40	46	52	58	64	70	76	82
5	10	15	21	27	33	39	45	51	57	63	69	75	81
4	9	14	20	26	32	38	44	50	56	62	68	74	80
3	8	13	19	25	31	37	43	49	55	61	67	73	79
2	7	12	18	24	30	36	42	48	54	60	66	72	78
1	6	11	17	23	29	35	41	47	53	59	65	71	77

ER-A470 KEY POSITION

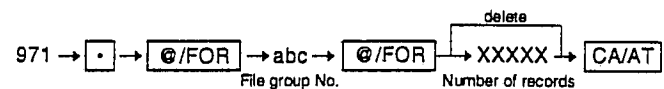
R	J	22	30	38	46	54	62	70	78	86	94	102	110	118
7	14	21	29	37	45	53	61	69	77	85	93	101	109	117
6	13	20	28	36	44	52	60	68	76	84	92	100	108	116
5	12	19	27	35	43	51	59	67	75	83	91	99	107	115
4	11	18	26	34	42	50	58	66	74	82	90	98	106	114
3	10	17	25	33	41	49	57	65	73	81	89	97	105	113
2	9	16	24	32	40	48	56	64	72	80	88	96	104	112
1	8	15	23	31	39	47	55	63	71	79	87	95	103	111

[JOB#971]

SRV FILE PROGRAMMING. (File creation deletion and change of record count or block count)

Key operation

- Normal file



Group No.	File name	Type	* File table No. (Create/Erase)
1	Dept.	1	01, 02, 03, 05
2	Dept Text (8chra.)	0	03
3	Dept Text (12chra.)	0	04
4	PLU	1	07, 08, 09, 12
5	PLU Text (8chra.)	0	09
6	PLU Text (12chra.)	0	10
7	PLU stock	0	11
8	Link PLU	1	14
9	Set PLU	1	15
10	Cashier	1	19, 20, 21, 22, 23, 24
11	Hourly	1	27, 28
12	Daily net	1	29, 30
13	Reg. buffer	1	31
14	Message Text	0	32
15	Guidance Text	0	33
16	Term Dept.	0	06
17	Term PLU	0	13
18	Term Transaction	0	18
19	Term Cashier	0	24
20	All of term file	0	06, 13, 18, 24

Type = 0 ; Create/Erase only

Type = 1 ; Create/Erase and Increase/decrease the number of Records or blocks.

* : The files which are created or erased by the entry of group No.

File table

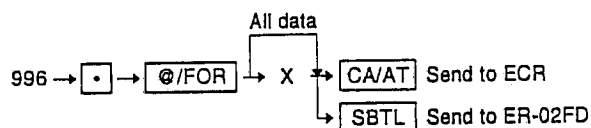
Table No.	File name		RECORD			BLOCK			Label size	Data size
			MRS	Max.	#1	MRS	Max.	#2		
1	Dept.	Preset	15	50		1	1		1	6
2		Price	15	50	(1)	1	1		0	3
3		Text (8chra.)	15	50	(1)	1	1		0	8
4		Text (12chra.)	0	50	(1)	0	1		0	12
5		Daily	15	50	(1)	1	1		0	9
6		Term	15	50	(1)	1	1		0	9
7	PLU	Preset	200	***		1	1		5	6
8		Price	200	***	(7)	1	1		0	3
9		Text (8chra.)	200	***	(7)	1	1		0	8
10		Text (12chra.)	0	***	(7)	0	1		0	12
11		Stock	0	***	(7)	0	1		0	4
12		Daily	200	***	(7)	1	1		0	9
13		Term	0	***	(7)	0	1		0	9
14	Link PLU		5	***		1	1		3	15
15	Set PLU		5	***		1	1		3	30
16	Transaction	Label	87	87		1	1		2	0
17		Daily	87	87	(16)	1	1		0	8
18		Term	87	87	(16)	1	1		0	8
19	Cashier	Preset	4	15		1	1		1	3
20		Flag	4	15	(19)	1	1		0	2
21		Text	4	15	(19)	1	1		0	8
22	Cashier transaction	Label	42	42		4	15	(19)	2	0
23		Daily	42	42	(22)	4	15	(19)	0	8
24		Term	42	42	(22)	4	15	(19)	0	8
25	Total cashier (Buffer)	Label	42	42		1	1		2	0
26		Total	42	42	(25)	1	1		0	8
27	Hourly	Label	49	49		1	1		1	0
28		Daily	49	49	(27)	1	1		0	8
29	Daily net	Label	36	36		1	1		3	0
30		Total	36	36	(29)	1	1		0	8
31	Reg. buffer		80	255		1	1		0	36
32	Message Text		89	89		1	1		2	12
33	Guidance Text		157	157		1	1		2	12

(#1) : Same as the number of record of table no. N

(#2) : Same as the number of block of table no. N

[JOB#996, 998] IR data send/receive (ECR↔ECR, ECR↔ER-02FD)

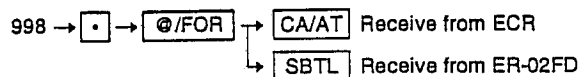
[JOB#996] IR data send



X : SSP = 0

- Send to ECR : IrDA
(Enable baud-rate : 11500bps, 57600bps, 38400bps, 19200bps, 9600bps, 4800bps, 2400bps)
- Send to ER-02FD + CE-IR2 (CE-IR4) : ASK
(Enable baud-rate : 19200bps, 9600bps, 4800bps, 2400bps)

[JOB#998] IR data receive



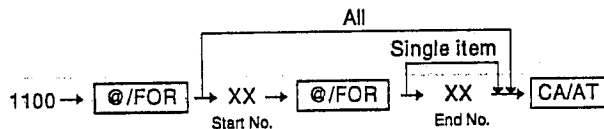
- Receive from ECR : IrDA
(Enable baud-rate : 11500bps, 57600bps, 38400bps, 19200bps, 9600bps, 4800bps, 2400bps)
- Receive from ER-02FD + CE-IR2 (CE-IR4) : ASK
(Enable baud-rate : 19200bps, 9600bps, 4800bps, 2400bps)

CHAPTER 2. PROGRAM (PGM2/PGM1) MODE

1. Reading of the PGM mode program

[JOB#1100]; DEPT reading

Key operation



SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0005

#1100 *PGM2*

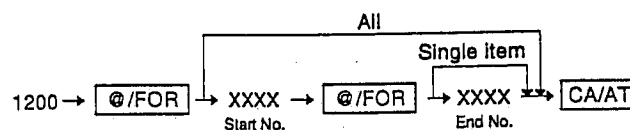
Job Code/Mode title

D01	01-15	0.00
DPT.01		G00
0000001		L17
D02		0.00
DPT.02		G00
0000001		L17
D03		0.00
DPT.03		G00
0000001		L17
D04		0.00
DPT.04		G00
0000001		L17
D05		0.00
DPT.05		G00
0000001		L17
D06		0.00
DPT.06		G00
0000001		L17
D07		0.00
DPT.07		G00
0000001		L17
D08		0.00
DPT.08		G00
0000001		L17
D09		0.00
DPT.09		G00

Start No. - End No.
Dept. code/FS. taxable/Sign, Price
Text/Group No.
Program (*1)/HALO

[JOB#1200]: PLU reading

Key operation



SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0006

#1200 *PGM2*

Job Code/Mode title

000001-999999

Start No. - End No.

F000001(01) /00
0.00

PLU code (Dept code)/(*1)/Base q'ty

PL000001
000

FS., taxable/Sign, Price

Text

Program (*2)/Stock

F000002(01) /00
0.00

PL000002
000

F000003(01) /00
0.00

PL000003
000

F000004(01) /00
0.00

PL000004
000

(*1) NORMAL. LINK PLU. SET MENU

: NORMAL
: L LINK PLU
: S SET MENU

(*2) PROGRAM: ABC

A: Tare table No.	9 to 1/0
B: Scale Compulsory/Enable/Inhibit	2/1/0
C: Amount entry type	
Open and preset/preset/open	/inhibited = 3/2/1/0
(PLU) (Sub-dept)	

(*1) PROGRAM: ABCDEFGHIJKL

A: (Not used)	0
B: Item vp compulsory/noncompulsory	1/0
C: Tare table No.	9 to 1/0
D: Scale Compulsory/Enable/Inhibit	2/1/0
E: SIF/SICS/Normal	2/1/0
F: BR/HASH/Normal	2/1/0
G: Amount entry type	3/2/1/0
Open and preset/preset/open/inhibited	

[JOB#1220]: STOCK ADD PRESET

SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0005

#1220 *PGM2*

F 000001 1000.000
 10.000
S 1010.000

Job Code/Mode title

Old stock
(Input stock)
New stock

[JOB#1221]: STOCK SUB PRESET

SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0005

#1221 *PGM1*

F 000001 1000.000
 -10.000
S 990.000

Job code/Mode title

Old stock
(Input stock)
New stock

[JOB#1222]: STOCK IN VENTRY PRESET

SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0005

#1222 *PGM1*

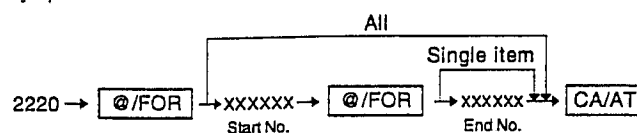
F 000001 1000.000
 500.000
S 1500.000

Job code/Mode title

Old stock
(New stock) - (Old stock)
New stock (Input stock)

[JOB#2220]: LINK PLU PRESET OR READING

Key operation



SHARP
PRESENTS THE
ER-A460

01/01/00 12:53AM
000000 #0010

#2220 *PGM2*

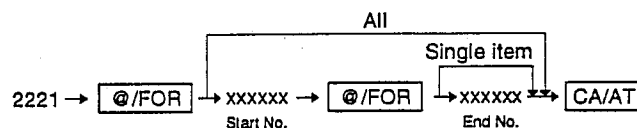
F 000002 000001-999999
 L P000011
 P000012

Job code/Mode title

Start No. - End No.
PLU code/Link PLU code (Max 5)
/Link PLU code

[JOB#2221]: SET MENU PRESET OR READING

Key operation



SHARP
PRESENTS THE
ER-A460

01/01/00 12:53AM
000000 #0011

#2221 *PGM2*

F 000001 000001-999999
 S P000002
 P000003

Job code/Mode title

Start No. - End No.
PLU code/Set PLU code (Max. 10)
/Set PLU code

[JOB#1300]: FUNCTION PRESET READING

Key operation

1300 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A46001/01/00 12:54AM
000000 #0012

#1300 *PGM2%

F001(-)1

S

-0.00

L17

F002(-)2

S

-0.00

L17

F005 %1

S

-0.00%

Rate

L100.00%

F006 %2

S

-0.00%

Rate

L100.00%

F032 M-TAX

L17

HALO

F060 CASH

L18

0000000000

(*1) PGM

F063 XXXRA

L18

F065 XXXPD

L18

F068 CHK/CG

999999.99

F075 CHARGE1

L18

0000000000

F076 CHARGE1-

F077 CHARGE2

L18

0000000000

F078 CHARGE2-

F079 CHARGE3

L18

0000000000

F080 CHARGE3-

F085 CHECK

L18

0000000000

F086 CA+CK ID

F087 XXXXCID

999999.99

F088 GROUP01

F089 GROUP02

:

Job code/Mode title

Function No./Text

Sign, Rate

FS, Tax/HALO

[JOB#2600]: READING OF OTHER

Key operation

2600 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A46001/01/00 12:54AM
000000 #0013

#2600 *PGM2%

#2614

SHARP
PRESENTS THE
ER-A460

#2615

10

(*1) SLIP/VP

#2616

(*2) Optional feature

01

00000000

02

00000000

03

00000000

04

00000000

05

00000000

06

00000000

07

00000000

08

00000000

09

00000000

10

00000000

11

00000000

12

00000000

13

00000000

#2617

000

Till timer

#2618 1

0.00

Scale table No./Weight

2

0.00

3

0.00

4

0.00

5

0.00

6

0.00

7

0.00

8

0.00

9

0.00

#2619

0 00

(*3) Hourly report

#2620

Stack report 1

#2630

0000

Secret code PGM1

#2631

0000

X1/Z1

#2632

0000

X2/Z2

(*1) PGM: ABCDEFGHIJ

A: Footer print on Receipt

Yes/No 1/0

B: Non-add code entry

compulsory/noncompulsory

1/0

C: Change due

Disable/Enable

1/0

D: VP

compulsory/noncompulsory

1/0

E: Taxable 4 delete

Yes/No 1/0

F: Taxable 3 delete

Yes/No 1/0

G: Taxable 2 delete

Yes/No 1/0

H: Taxable 1 delete

Yes/No 1/0

I: Drawer opening

No/Yes 1/0

J: Entry of amount tendered

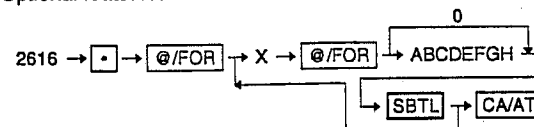
compulsory/noncompulsory (Cash, check)

1/0

compulsory/inhibit (CH1 to 8)

1/0

(*1) Optional feature: ABCDEFGH



MRS = 00000000

x: 1 MRS = 00000000
 A: OP X/Z report Disable/Enable 1/0
 B: PO operation in REG mode Disable/Enable 1/0
 C: Refund type of sale function in REG mode Disable/Enable 0
 D: "RFND" key entry in REG mode Disable/Enable 1/0
 E: Direct void function in REG mode Disable/Enable 1/0
 F: Indirect void in REG mode Disable/Enable 1/0
 G: Subtotal void in REG mode Disable/Enable 1/0
 H: Refund VP Compulsory/Non compulsory 1/0

x: 2 MRS = 00000000
 A: The first last item void Disable/Enable 1/0
 B: PLU level shift system Manual/Auto 1/0
 C: PLU level shift system MGR/MGR & REG 1/0
 D: Printing of the number of purchases Yes/No 1/0
 E: Time print No/Yes 1/0
 F: Journal select/Full print 1/0
 G: Item VP Disable/Enable 1/0
 H: (-) VP Compulsory/Non compulsory 1/0

x: 3 MRS = 00000000
 A: (Not used) 0
 B: (Not used) 0
 C: Zero skip in Cashier report No/Yes 1/0
 D: Zero skip in Transaction report No/Yes 1/0
 E: Zero skip in DEPT. report No/Yes 1/0
 F: Zero skip in PLU report No/Yes 1/0
 G: Zero skip in hourly report No/Yes 1/0
 H: Zero skip in Daily net report No/Yes 1/0

x: 4 MRS = 00000000
 A: (Not used) 0
 B: (Not used) 0
 C: (Not used) 0
 D: (Not used) 0
 E: (Not used) 0
 F: (Not used) 0
 G: (Not used) 0
 H: When PLU level system is "auto" (x: 2 B = 0),
 PLU level returns to level 1 by one receipt/by one item. 1/0

x: 5 (Not used) MRS = 00000000

x: 6 (Not used) MRS = 00000000

x: 7 MRS = 00000000

A: (Not used) 0
 B: (Not used) 0
 C: No sale in REG mode Disable/Enable 1/0
 D: Finalization in REG mode when SBTL is zero.
 Disable/Enable 1/0
 E: (Not used) 0
 F: (Not used) 0
 G: (Not used) 0
 H: (Not used) 0

x: 8 MRS = 00000000

A: (Not used) 0
 B: (Not used) 0
 C: (Not used) 0
 D: (Not used) 0
 E: Check cashing VP Compulsory/Noncompulsory 1/0
 F: RA VP Compulsory/Noncompulsory 1/0
 G: PO VP Compulsory/Noncompulsory 1/0
 H: (Not used) 0

(*2) Hourly report : a bc

a: Hourly report format by 15 minutes/by 30 minutes 1/0
 bc: start hour 00 to 23

[JOB#2640]: READING OF TEXT PROGRAMMING

Key operation.

2640 → @/FOR → CA/AT

SHARP PRESENTS THE ER-A460

01/01/00 12:56AM
 000000 #0014

#2640 *PGM2*

Job code/Mode title

#2641

01 ENTRY ERROR
 02 MISOPERATION
 03 NO RECORD
 04 PAPER EMPTY
 05 SECRET CODE
 06
 07 MEMORY FULL
 08
 09
 10

Message text

#2644

001 DEPT PRICE
 002 DEPT FUNC.
 003 DEPT TAXABLE
 004 DEPT HALD
 005 DEPT TEXT
 006 DEPT GROUP
 007 DEPT DRCTKEY
 008 PLU ASG.DEPT
 009 PLU PRICE
 010 PLU BASE QTY

Guidance

[JOB#2900]: AUTO KEY READING

Key operation

2900 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0005

#2900 *PGM2*

#01

1 KEY
0 KEY
0 KEY
CA/AT

#02

D01
D02
P000001

Job code/Mode title

(DEPT01)

(PLU000001)

#05

1 KEY
0 KEY
0 KEY
CA/AT
CHK

[JOB#1500]: CASHIER READING REP.

Key operation

1500 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A460

01/01/00 12:58AM
000000 #0016

#1500 *PGM2*

01CSR#

01

Cashier code/Name

01

Drawer No.

02CSR#

02

01

03CSR#

03

01

04CSR#

04

01

[JOB#2700]: TAX TABLE READING REP.

Key operation

2700 → @/FOR → CA/AT

SHARP
PRESENTS THE
ER-A460

01/01/00 12:51AM
000000 #0005

#2700 *PGM2*

Job code/Mode title

TAX1

10.0000%

Table No./Rate

/ 1.00

Cycle

1 0.11

Tax./Break point amount

2 0.23

3 0.57

4 0.78

5 1.11

TAX2

4.0000%

Table No./Rate

0.10

Lower tax limit

TAX3

5.0000%

0.20

TAX4

6.0000%

0.30

[JOB#2119]: DIRECT KEY READING REP.

Key operation

2119 → @/FOR → CA/AT

SHARP PRESENTS THE ER-A460		
01/01/00 12:51AM		
000000 #0005		
#2119 *FGM2*		
001	L1	001
002	L1	002
003	L1	003
004	L1	004
051	L1	P000001
	L1	P001001
052	L1	P000002
	L1	P001001
	:	
151	L1	----
	:	

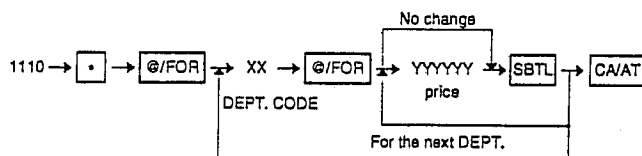
Job code/Mode title

Key no./Dept code or PLU code

***When Dept code is assigned to
the direct key, the same Dept
code is assigned to each level.

2. Programming**[JOB#1110]**

PROGRAMMING OF DEPT. PRICE



XX: DEPT-CODE = 01 ~ 50

YYYYYY: PRICE = 0 ~ 999999

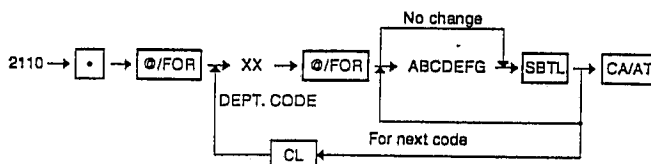
Preset price is max. 6 digits.

Price can be programmed for each dept. If this programming is performed, the ECR is automatically programmed to allow preset price entry even when it has been programmed not to allow preset price entry in dept. function programming (JOB#2110).

MRS = 000000

[JOB#2110]

PROGRAMMING OF DEPT. FUNCTION



XX: DEPT. code = 01 ~ 50

A: Not used (Fixed at "0")

B: Item validation printing	B
Non compulsory	0
Compulsory	1

C: Tare table No.	C
No	0
Table No. 1~9	1~9

D: Scale entry	D
Inhibit	0
Enable	1
Compulsory	2

E: SICS Function	E
Normal	0
Single item cash sale	1
Single item finalize	2

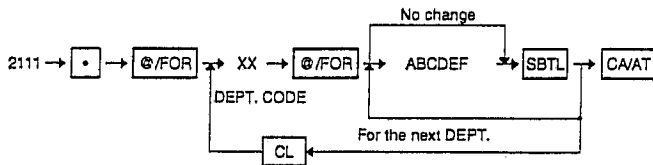
F: Dept. type	F
Normal	0
HASH	1
Bottle Return	2

G: Amount entry type	G
Inhibited	0
Open	1
Preset	2
Open and preset	3

MRS = 0000001

[JOB#2111]

DEPT. TAX STATUS AND SIGN PROGRAMMING



XX: DEPT. CODE = 01 ~ 50

A: Sign	A
+	0
-	1

B: Food stamp	B
Non-food stampable	0
Food stampable	1

C: Taxable 4	C
Non taxable	0
Taxable	1

D: Taxable 3	D
Non taxable	0
Taxable	1

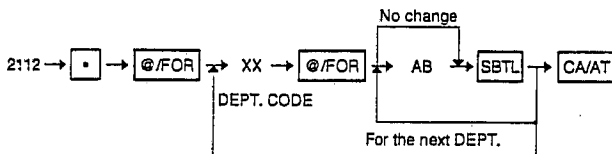
E: Taxable 2	E
Non taxable	0
Taxable	1

F: Taxable 1	F
Non taxable	0
Taxable	1

MRS = 000000

[JOB#2112]

DEPT. HALO (limit) preset



XX: DEPT. CODE = 01 ~ 50

A: Mantissa (HALO) = 1 ~ 9

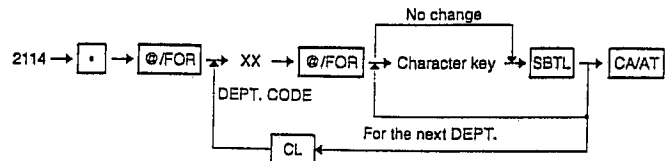
B: Exponent (HALO) = 0 ~ 7

* Items A and B indicate $A \times 10^B$. Any amount below that value is enable within 9999999.

MRS = 17

[JOB#2114]

DEPT. TEXT PROGRAMMING



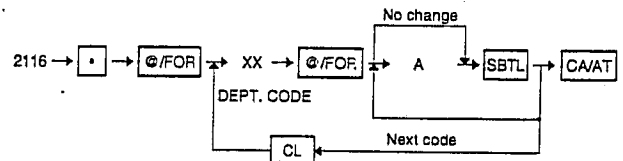
XX: DEPT. CODE = 01 ~ 50

Characters can be entered by using alphabetic keys or numeric keys. Please refer to section 3.

MRS = DPT. XX

[JOB#2116]

PROGRAMMING OF DEPT. GROUP



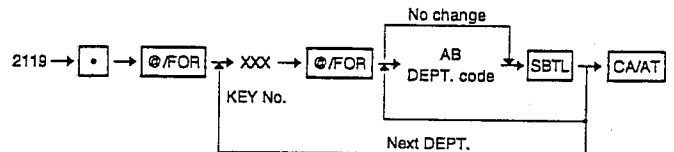
XX: DEPT. code = 01 ~ 50

AA: Group No. = 0 ~ 9

MRS = 0

[JOB#2119]

LINK NUMBER PROGRAMMING FOR DIRECT DEPT. KEYS

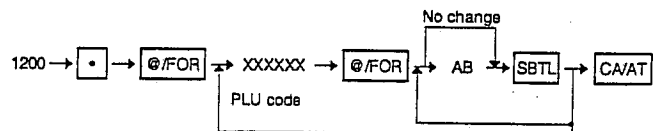


DEPT. code is assigned to the key no. Which has been programmed in JOB#951 programming.

AB: DEPT. CODE = 01 ~ 50

[JOB#1200]

Creating/assigning PLUs and the associated departments.



XXXXXX: PLU code = 01 ~ 999999

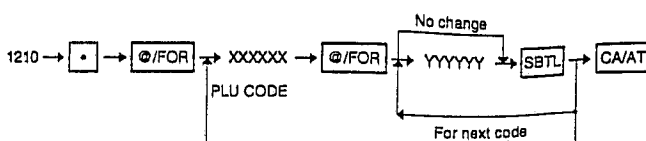
AB: DEPT. code = 01 ~ 50

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 01

[JOB#1210]

PRICE PROGRAMMING FOR PLUS



XXXXXX: PLU CODE = 1 ~ 999999

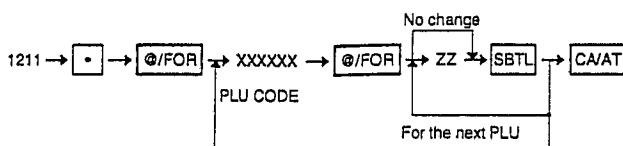
YYYYYY: Amount = 0 ~ 999999

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 000000

[JOB#1211]

PLU BASE Q'TY PROGRAMMING



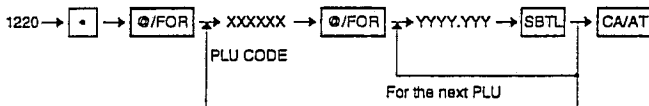
XXXXXX: PLU code = 1 ~ 999999

ZZ: Base quantity = 00 ~ 99

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

[JOB#1220]

PROGRAMMING OF PLUS STOCK (ADD)



XXXXXX: PLU code = 1 ~ 999999

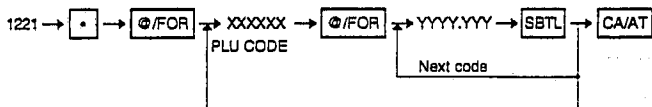
YYYY.YYY: Stock value = 0.001 ~ 9999.999

The stock value is max. 7 digits. (4 integers + 3 decimals) The stock value entered is added to the PLU stock counter.

MRS = 0.000

[JOB#1221]

PROGRAMMING OF PLU STOCK (SUB)



XXXXXX: PLU code = 1 ~ 999999

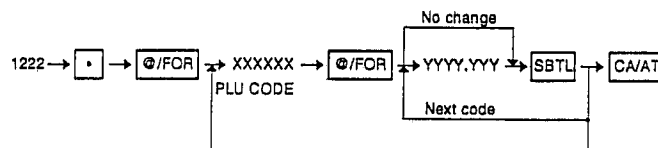
YYYY.YYY: Stock value = 0.001 ~ 9999.999

The stock value is max. 7 digits. (4 integers + 3 decimals) The stock value entered is subtracted from the PLU stock counter.

MRS = 0.000

[JOB#1222]

PROGRAMMING OF PLU STOCK (OVERWRITE)



XXXXXX: PLU code = 1 ~ 999999

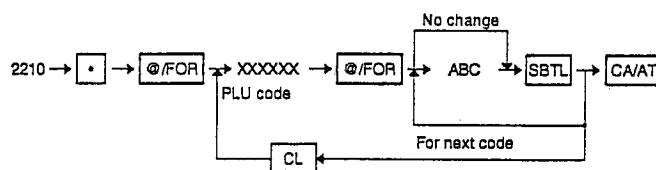
YYYYYY: Stock value = 0.001 ~ 9999.999

The stock value is max. 7 digits. (4 integers + 3 decimals) The stock value entered is overrited to the PLU stock counter.

MRS = 0.000

[JOB#2210]

PLU function programming



XXXXXX: PLU code = 1~999999

A:	Tare table No.	A
	No	0
	Table No. 1~9	1~9

B:	Scale entry	B
	Inhibit	0
	Enable	1
	Compulsory	2

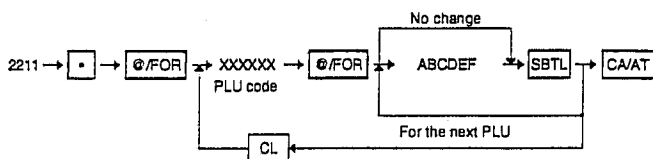
C:	Amount entry type	C
	Inhibited	0
	Open	1
	Preset	2
	Open and preset	3
	Delete	4

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 000

[JOB#2211]

PLU TAX STATUS PROGRAMMING



XXXXXX: PLU code = 1 - 999999

A: Sign	A
+	0
-	1

B: Food stamp	B
Non stampable	0
Stampable	1

C: Taxable 4	C
Non taxable	0
Taxable	1

D: Taxable 3	D
Non taxable	0
Taxable	1

E: Taxable 2	E
Non taxable	0
Taxable	1

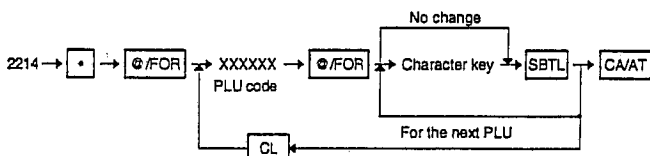
F: Taxable 1	F
Non taxable	0
Taxable	1

If the record of entered PLU code is not in PLU file at this programming, it will be created in PLU file.

MRS = 000000

[JOB#2214]

PLU TEXT PROGRAMMING



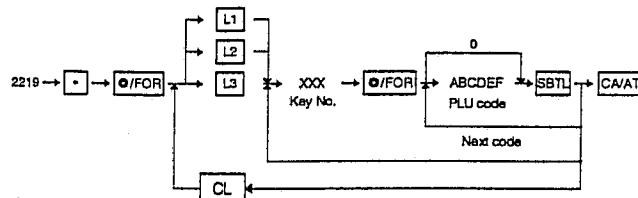
XXXXXX: PLU CODE = 1 - 999999

Characters can be entered by using alphabetic keys or numeric keys. Please refer to section 3.

MRS = PLXXXXXX

[JOB#2219]

PLU CODE DEFINITION FOR DIRECT PLU KEYS

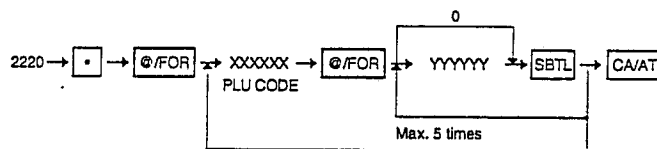


ABCDEF: PLU code = 1-999999

PLU code is assigned to the key No. which has been programmed in JOB#951 programming.

[JOB#2220]

LINKED PLU PROGRAMMING



XXXXXX: PLU code = 1 - 999999

YYYYYY: PLU code = 1 - 999999

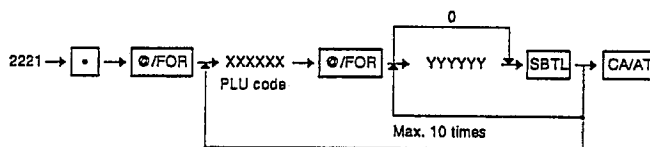
When the "SBTL" key is depressed without entering any number in (YYYYYY), there is no link.

PLU code should already be defined when they are used in programming here.

MRS = 0

[JOB#2221]

SET PLU PROGRAMMING



XXXXXX: PLU code = 1 - 999999

YYYYYY: PLU code = 1 - 999999

When the "SBTL" key is depressed without entering any number in (YYYYYY), no set is assigned.

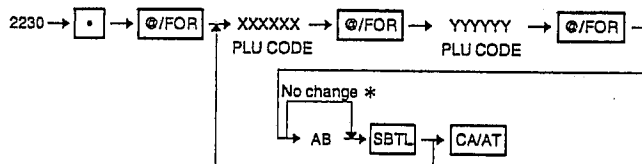
The set PLU code (XXXXXX) can not contain the same PLU code in (YYYYYY).

PLU code must already be defined when it is used in programming here.

MRS = 0

[JOB#2230]

PLU CODE PROGRAMMING (range)



XXXXXX: Start PLU code = 1 - 999999

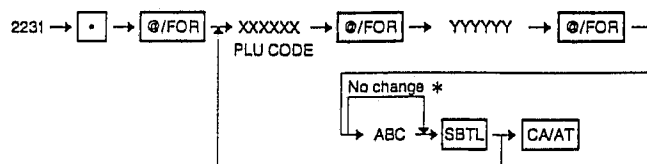
YYYYYY: End PLU code = 1 - 999999

AB: Dept. code = 1-50

* All are set with the contents of Start PLU setting.

[JOB#2231]

PLU function programming (RANGE)



* All are set with the contents of Start PLU setting.

XXXXXX: Start PLU code = 1-999999

YYYYYY: End PLU code = 1-999999

A:	Tare table No.	A
	No	0
	Table No. 1-9	1-9

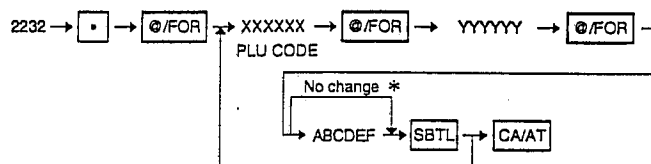
B:	Scale entry	B
	Inhibit	0
	Enable	1
	Compulsory	2

C:	Amount entry type	C
	Inhibited	0
	Open	1
	Preset	2
	Open and preset	3
	Delete	4

MRS = 000

[JOB#2232]

PLU TAX STATUS PROGRAMMING (RANGE)



* All are set with the contents of Start PLU setting.

XXXXXX: Start PLU code = 1 - 999999

YYYYYY: End PLU code = 1 - 999999

A:	Sign	A
	+	0
	-	1

B:	Food stampable	B
	Non-food stampable	0
	Food stampable	1

C:	Taxable 4	C
	Non taxable	0
	Taxable	1

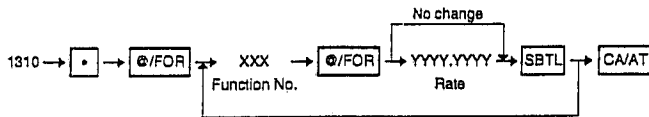
D:	Taxable 3	D
	Non taxable	0
	Taxable	1

E:	Taxable 2	E
	Non taxable	0
	Taxable	1

F:	Taxable 1	F
	Non taxable	0
	Taxable	1

[JOB#1310]

RATE PROGRAMMING



XXX: Function No.

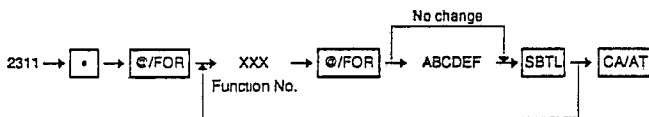
YYY.YYYY: Rate

Function No.	Function	Entry range	Remarks
1	(-)1	0 to 9999.99	(-) unit price
2	(-)2		
3	(-)3		
4	(-)4		
5	%1	0 to 100.00	% rate
6	%2		
7	%3		
8	%4		
70	Conversion 1	0 to 9999.9999	Rate
71	Conversion 2		
72	Conversion 3		

MRS = 0

[JOB#2311]

MISC KEY PROGRAMMING 1



XXX: Function No.

Function No.	Function
1	(-)1
2	(-)2
3	(-)3
4	(-)4
5	%1
6	%2
7	%3
8	%4

A:

Sign	A
+	0
-	1

B:

Food stamp	B
Non food stampable	0
Food stampable	1

C:

Taxable 4	C
Non taxable	0
Taxable	1

D:

Taxable 3	D
Non taxable	0
Taxable	1

E:

Taxable 2	E
Non taxable	0
Taxable	1

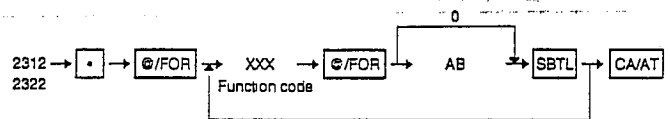
F:

Taxable 1	F
Non taxable	0
Taxable	1

MRS = 100000

[JOB#2312, 2322]

HALO PROGRAMMING



XXX: Function No.

A: Mantissa (0 to 9)

B: Exponent (0 to 8)

JOB#	Function No.	Function	Remarks
2312	1	(-)1	Item B is specifiable within the range from 0 to 7.
	2	(-)2	
	3	(-)3	
	4	(-)4	
	32	TAX	Item B is specifiable within the range from 0 to 8.
	63	RA	
	64	RA2	
	65	PO	
2322	66	PO2	Item B is specifiable within the range from 0 to 8.
	60	CA1	
	61	CA2	
	85	CHK	
	75	CH1	
	77	CH2	
	79	CH3	
	81	CH4	
	83	CH5	

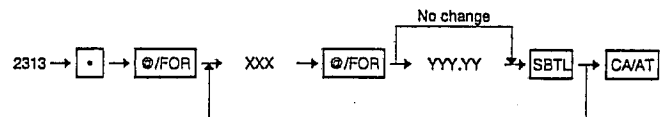
Entry range, system: $A \times 10^B$

MRS = 17 ((-)1-(-)4, TAX)

18 (RA, RA2, PO, PO2, CA1, CA2, CHK, CH1-CH8)

[JOB#2313]

MISCELLANEOUS KEY PROGRAMMING (% HALO)



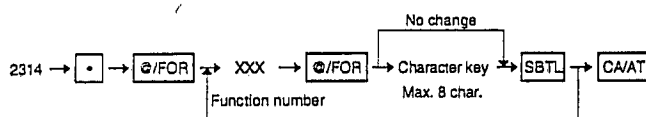
XXX: Function No.

YYY.YY: % HALO

Function No.	Function	Remarks
5	%1	
6	%2	
7	%3	
8	%4	

[JOB#2314]

TEXT PROGRAMMING FOR MISC KEYS



XXX: FUNCTION CODE

Characters can be entered by using character keys or numeric keys. the key entry sequence for entering one character by numeric keys is as follows:

XXX → 00 key XXX: CHARACTER CODE (3DIGITS)

Please refer to section 3

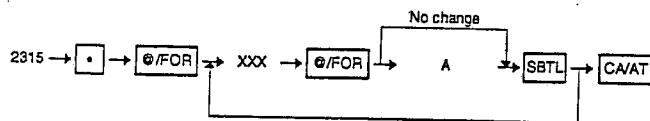
F-NO.	FUNCTION	DEFAULT TEXT
1	(-)1	(-)1
2	(-)2	(-)2
3	(-)3	(-)3
4	(-)4	(-)4
5	%1	%1
6	%2	%2
7	%3	%3
8	%4	%4
9	NET1	NET1
10	TAXABLE1 ST	TAX1 ST
11	GROSS TAX1	GRS TAX1
12	REFUND TAX1	RFD TAX1
13	NET TAX1	TAX1
14	EXEMPT TAX1	TX1 EXPT
15	TAXABLE2 ST	TAX2 ST
16	GROSS TAX2	GRS TAX2
17	REFUND TAX2	RFD TAX2
18	NET TAX2	TAX2
19	EXEMPT TAX2	TX2 EXPT
20	TAXABLE3 ST	TAX3 ST
21	GROSS TAX3	GRS TAX3
22	REFUND TAX3	RFD TAX3
23	NET TAX3	TAX3
24	EXEMPT TAX3	TX3 EXPT
25	TAXABLE4 ST	TAX4 ST
26	GROSS TAX4	GRS TAX4
27	REFUND TAX4	RFD TAX4
28	NET TAX4	TAX4
29	EXEMPT TAX4	TX4 EXPT
30	GROSS M-TAX	GRS MTAX
31	REFUND M-TAX	RFD MTAX
32	NET M-TAX	M-TAX
33	NON GST SUBTOTAL	GST EXPT
34	PST TOTAL	PST TTL
35	GST TOTAL	GST TTL
36	FS1 FORGIVE	FS TX1
37	FS2 FORGIVE	FS TX2
38	FS3 FORGIVE	FS TX3
39	TOTAL TAX	TTL TAX

F-NO.	FUNCTION	DEFAULT TEXT
40	NET	NET
41	NET2	NET2
42	COUPON PLU	CP PLU
43	DIRECT VOID	DIR UD
44	PAST VOID	PAST UD
45	SBTL VOID	SBTL UD
46	MANAGER VOID	MGR UD
47	VOID MODE	VOID
48	REFUND	REFUND
49	HASH DIRECT VOID	HASH UD
50	HASH PAST VOID	HA P. UD
51	HASH REFUND	HASH RF
52	NO SALE	NO SALE
53	VP COUNTER	UP CNT
54	TRAY COUNTER	TRAY CNT
55	DRAWER COUNTER	DRW CNT
56	PBAL	XXXPBAL
57	SERVICE	SERVICE
58	CUSTOMER	TRANS CT
59	NET3 (SALES)	NET3
60	CASH	CASH
61	CASH2	CASH2
62	FS SALE	FSSALE
63	RA	XXXRA
64	RA2	XXXRA2
65	PO	XXXPO
66	PO2	XXXPO2
67	CHECK CASHING	CA/CHK
68	CHECK CHANGE	CHK/CG
69	FS CHANGE	FS/CG
70	CONVERSION1	CONU 1
71	CONVERSION2	CONU 2
72	CONVERSION3	CONU 3
73	CONVERSION4	CONU 4
74	FS IN DRAWER	FS/ID
75	GROSS CHARGE1	CHARGE1
76	REFUND CHARGE1	CHARGE1-
77	GROSS CHARGE2	CHARGE2
78	REFUND CHARGE2	CHARGE2-
79	GROSS CHARGE3	CHARGE3
80	REFUND CHARGE3	CHARGE3-
81	GROSS CHARGE4	CHARGE4
82	REFUND CHARGE4	CHARGE4-
83	GROSS CHARGE5	CHARGE5
84	REFUND CHARGE5	CHARGE5-
85	CHECK	CHECK
86	CASH+CHECK IN DRAWER	CA+CK ID
87	CASH IN DRAWER	XXXXCID
88	GROUP1	GROUP01
89	GROUP2	GROUP02
90	GROUP3	GROUP03

F-NO.	FUNCTION	DEFAULT TEXT
91	GROUP4	GROUP04
92	GROUP5	GROUP05
93	GROUP6	GROUP06
94	GROUP7	GROUP07
95	GROUP8	GROUP08
96	GROUP9	GROUP09
97	(+)DEPT TOTAL	%DEPT TL
98	(-)DEPT TOTAL	DEPT(-)
99	HASH (+)DPT TOTAL	%HASH TL
100	HASH (-)DPT TOTAL	HASH(-)
101	BOTTLE (+)DPT TOTAL	%BTTL TL
102	BOTTLE (-)DPT TOTAL	BTTL(-)
103	SUBTOTAL	SUBTOTAL
104	MDS SBTL	MDSE ST
105	TOTAL	%%TOTAL
106	CHANGE	CHANGE
107	DUE	DUE
108	TRAY-TOTAL	TRAY TL
109	FS SBTL	FS ST
110	FS TEND	FS TEND
111	FS CHANGE	FS CG
112	ITEMS	ITEMS
113	COPY RCPT TITLE	COPY
114	CBAL	%%CBAL

[JOB#2315]

MISC KEY PROGRAMMING (%)



XXX: Function No.

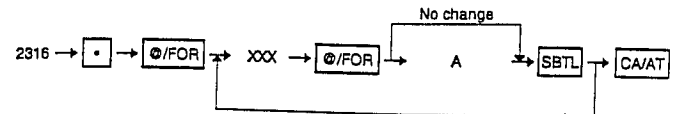
A:	% type	A
	Subtotal %	0
	Item %	1

Function No.	Function	Remarks
5	%1	
6	%2	
7	%3	
8	%4	

MRS = 0

[JOB#2316]

MISC KEY PROGRAMMING (⊖)



XXX: Function No.

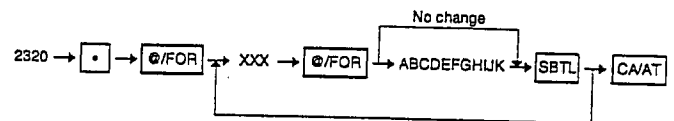
A:	⊖ type	A
	Subtotal ⊖	0
	Item ⊖	1

Function No.	Function	Remarks
1	(-) 1	
2	(-) 2	
3	(-) 3	
4	(-) 4	

MRS = 0

[JOB#2320]

MEDIA KEY PROGRAMMING



XXX: Function No.

Function No.	Function	A	B	C	D	E	F	G	H	I	J	K
60	CA 1	x	o	o	o	o	o	o	o	o	o	o
61	CA 2	x	o	o	o	o	o	o	o	o	o	o
75	CH 1	o	o	o	o	o	o	o	o	o	o	o
77	CH 2	o	o	o	o	o	o	o	o	o	o	o
79	CH 3	o	o	o	o	o	o	o	o	o	o	o
81	CH 4	o	o	o	o	o	o	o	o	o	o	o
83	CH 5	o	o	o	o	o	o	o	o	o	o	o
85	CHK	x	o	o	o	o	o	o	o	o	o	o

* Items marked with on (O) are programmable.

A:	CAT 1/CAT 2	A
	Non compulsory	0
	Compulsory	1
	CAT 1, CAT 2	2

B:	Footer print on receipt	B
	No	0
	Yes	1

C:	Non-add code entry	C
	Non compulsory	0
	Compulsory	1

D:	Change due	D
	Enable	0
	Disable	1

E:	VP	E
	Non compulsory	0
	Compulsory	1

F:	Taxable 4 delete	F
	No	0
	Yes	1

G:	Taxable 3 delete	G
	No	0
	Yes	1

H:	Taxable 2 delete	H
	No	0
	Yes	1

I:	Taxable 1 delete	I
	No	0
	Yes	1

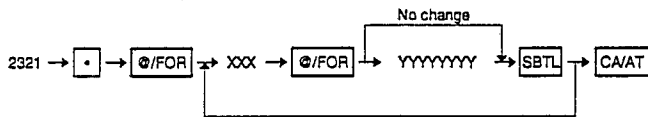
J:	Drawer opening	J
	Yes	0
	No	1

K:	Entry of amount tended	K
	Non compulsory (Cash, Check) Inhibit (CH1 to CH8)	0
	Compulsory	1

MRS=0000000000

[JOB#2321]

MEDIA KEY FUNCTION PROGRAM (AMOUNT HALO)

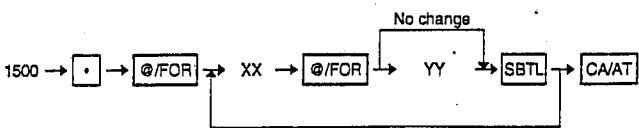


XXX: Function No.
YYYYYYY: Limitation amount

Func. No.	Function	Entry range	MRS
87	CID (Sentinel)	0 to 9999999.99	9999999.99
68	CHK CHANGE	0 to 9999999.99	9999999.99
67	CA/CHK	0 to 9999999.99	9999999.99

[JOB#1500]

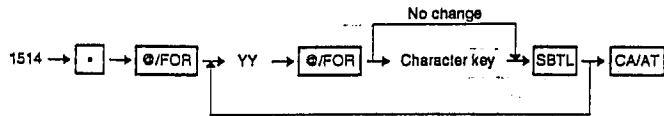
CASHIER CODE DEFINITION



XXX: Cashier No.= 1 - 15
YYY: Cashier code = 00 - 99
MRS = 01;1, 02;2, 03;3, 04;4, 05;5, 06;6 - 15;15

[JOB#1514]

CASHIER NAME PROGRAMMING

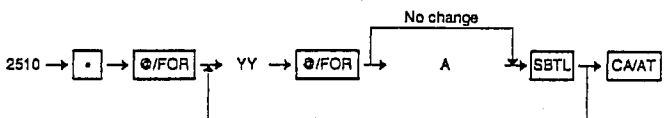


YYYY: Server code = 01 - 99
Characters can be entered by using character keys or numeric keys.
The key entry sequence for entering one character by numeric keys is as follows:

XXX -> 00 KEY
XXX: Character code (3 digits)
Please refer to section 3.
Max. 8 characters
Mrs = 'Space'

[JOB#2510]

CASHIER PROGRAMMING



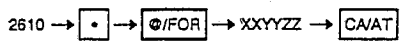
YYYY: Cashier code = 01-99

A:	Drawer No.	H
	Not open	0
	Drawer No.	1-2

MRS = 1

[JOB#2610]

DATE SETTING

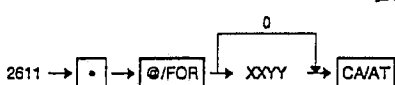


XXYYZZ: Date (Year-Month-Day/Day-Month-Year/Month-Day-Year)
* The date entry format complies with the applicable SRV-mode programming.

MRS = 010100

[JOB#2611]

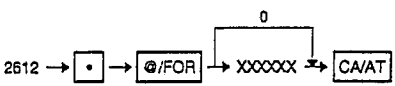
TIME SETTING



XX: Hour (00 - 23)
YY: Minute (00 - 59)
MRS = 0

[JOB#2612]

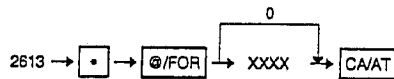
MACHINE NUMBER SETTING



XXXXXX: Machine number (0 - 999999)
MRS = 0

[JOB#2613]

CONSECUTIVE NUMBER SETTING

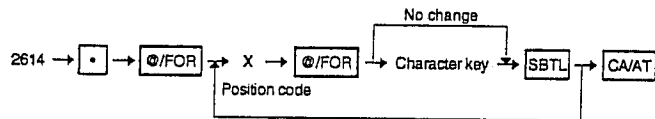


XXXX: Consecutive number (0000 - 9999)

MRS = 0000

[JOB#2614]

LOGO TEXT PROGRAMMING



X: 1 - 6

1	(24 char.)
2	(24 char.)
3	(24 char.)
4	(24 char.)
5	(24 char.)
6	(24 char.)

Character can be entered by using character keys or numeric keys.
The key entry sequence for entering one character by numeric keys is as follows:

XXX -> 00 Key

XXX: Character code (3 digits)

Please refer to section 3.

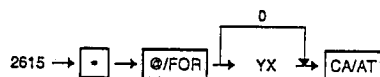
MRS =

SHARP
PRESENTS THE
ER-A460

NOTE: This programming is related to JOB# 912D programming.
Only when "6-line header instead of a stamp" is selected by JOB# 912D programming, all 6 lines are programmable.
When "3-line header" is selected, upper 3 lines (1st-3rd line) are programmable.
When "3-line footer" is selected, lower 3 lines (4th-6th line) are programmable.

[JOB#2615]

Programming of the limits to TRY ST feed line and No. of times of validation printing.



Y: No. of times of validation printing

= 0 - 9

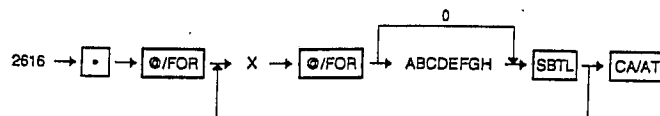
X: Feed line after depression of TRAY ST key.

= 0 - 9

MRS = 10

[JOB#2616]

OPTIONAL FEATURE



X: 1

MRS = 00000000

A: OP X/Z report	A
Enable	0
Disable	1

B: PO operation in REG mode	B
Enable	0
Disable	1

C: Refund type of sale function in REG mode	C
Enable	0
Disable	1

D: "RFND" key entry in REG mode	D
Enable	0
Disable	1

E: Direct void function in REG mode	E
Enable	0
Disable	1

F: In direct void in REG mode	F
Enable	0
Disable	1

G: Subtotal void in REG mode	G
Enable	0
Disable	1

H: Refund VP	H
Non compulsory	0
Compulsory	1

X: 2

MRS = 00000000

A: The first last item void	A
Enable	0
Disable	1

B: PLU level shift system	B
Auto	0
Manual	1

C: PLU level shift system	C
MGR & REG mode	0
MGR mode	1

D: Printing of the number of purchases	D
No	0
Yes	1

E: Time print	E
Yes	0
No	1

F:	Printing of journal	F
	Full print	0
	Journal select	1

G:	Item VP	G
	Enable	0
	Disable	1

H:	(-) VP	H
	Non compulsory	0
	Compulsory	1

X: 3 MRS = 00000000

A, B: Not used (Fixed at "00")

C:	Zero skip in Cashier report	C
	Yes	0
	No	1

D:	Zero skip in Transaction report	D
	Yes	0
	No	1

E:	Zero skip in Dept. report	E
	Yes	0
	No	1

F:	Zero skip in PLU report	F
	Yes	0
	No	1

G:	Zero skip in Hourly report	G
	Yes	0
	No	1

H:	Zero skip in Daily net report	H
	Yes	0
	No	1

X: 4 MRS = 00000000

A, B, C, D, E, F, G: Not used (Fixed at "0000000")

H:	When PLU level system is "Auto" (X:2 B = 0), PLU level returns method	H
	By one item	0
	By one receipt	1

X: 5 NOT USED MRS = 00000000

X: 6 NOT USED MRS = 00000000

X: 7 MRS = 00000000

A, B: Not used (Fixed at "00")

C:	No sale in REG mode	C
	Enable	0
	Disable	1

D:	Finalization in REG mode when SBTL is zero	D
	Enable	0
	Disable	1

E, F, G, H: Not used (Fixed at "0000")

X: 8

MRS = 00000000

A, B, C, D: Not used (Fixed at "0000")

E:	Validation printing of check cashing	E
	Non compulsory	0
	Compulsory	1

F:	Validation printing of RA	F
	Non compulsory	0
	Compulsory	1

G:	Validation printing of PO	G
	Non compulsory	0
	Compulsory	1

H: Not used (Fixed at "0")

[JOB#2617]

PROGRAMMING OF THE TIME INTERVAL FOR THE TILL TIMER

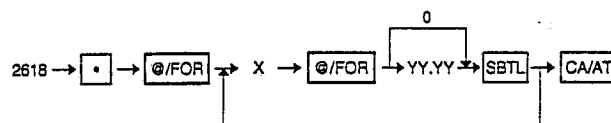


XXX: 0 ~ 255 sec

MRS = 000

[JOB#2618]

Scale table programming



X: Table No. = 1-9

YY.YY: Weight = 0-99.99

MRS = 0.00

[JOB#2619]

HOURLY REPORT (Starting time)



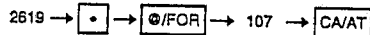
a:

Memory format	A
30 minuts (24 hour)	0
15 minuts (12 hour)	1

bb: Starting time (hour): 00 - 23

ex)

Case 1.



X1 Hourly report (#160) (15 min, start time = 7)

#160

7:00
(DATA)

7:15
(DATA)

7:30
(DATA)

7:45
(DATA)

SUBTOTAL
(DATA)

I

I

18:45
(DATA)

SUBTOTAL
(DATA)

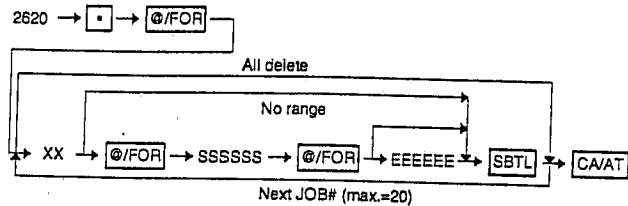
XX:XX
(DATA)

12 hour started from 7:00

Data out of range (19:00 to 6:59)

[JOB#2620]

STACK REPORT



XX: JOB#
SSSSSS: Start code
EEEEEE: End code

JOB#	REPORT NAME	TYPE
00	General	
10	DEPT.	
13	DEPT. All group	
20	PLU	RANGE
24	PLU stock	
27	PLU zero sales	RANGE
29	PLU price category	RANGE
30	Transaction	
31	CID	
50	All cashier	
60	Hourly	RANGE (only X report)
70	Daily net	

[**]

Max. 70 step are programmable. "1 step" means the memory size used for one no range type JOB#.

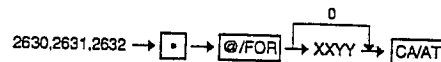
The RANGE type JOB# means "8 steps":

For example)

The memory size for programming JOB#00, 20 and 50 is 10 steps. (ie. 1 step for JOB#00, 8 step for JOB#20, and 1 step for JOB#50.)

[JOB#2630, 2631, 2632]

SECRET CODE PROGRAMMING



#2630: TEXT1 mode

#2631: X1/Z1 mode

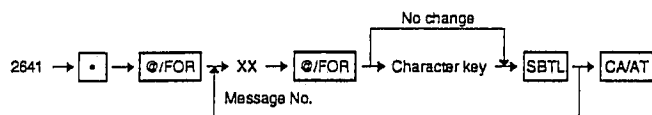
#2632: X2/Z2 mode

* If "0" is entered, "compulsory secret code entry" is canceled.

MRS = 0

[JOB#2641]

MESSAGE TEXT PROGRAMMING



X: Message No. = 1-81

Message No.	Description	MRS
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPERATION
3	Desired code is not programmed yet.	NO RECORD
4	Paper empty	PAPER EMPTY
5	Secret code error	SECRET CODE
6	(reserved)	
7	Memory is full	MEMORY FULL
8	(reserved)	
9	(reserved)	
10	Stock error	OUT OF STOCK
11	Compulsory of pushing the SBTL key	SBTL COMPUL.
12	Compulsory of tendering	TEND COMPUL.
13	Compulsory of PB entry	PB COMPUL.
14	(reserved)	
15	(reserved)	
16	Check digit error	C/D ERROR
17	(reserved)	
18	Retry for CAT	RETRY ?
19	After Z1 report	ENTRY ERR Z
20	(reserved)	
21	(reserved)	
22	(reserved)	
23	(reserved)	
24	(reserved)	
25	(reserved)	
26	File type error	TYPE ERROR
27	Power off	POWER OFF
28	(reserved)	
29	(reserved)	
30	(reserved)	
31	Compulsory of non-add code entry	# COMPULSORY
32	The cashier key is not pushed or inserted.	NOT ASSIGNED
33	The cashier key is changed in the transaction	NOT CHANGE
34	Overflow limitation	OVER LIMIT.
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	Read error of Scale	SCALE ERROR
39	(reserved)	
40	(reserved)	
41	(reserved)	
42	Open store	OPEN STORE

Message No.	Description	MRS
43	Close store	CLOSE STORE
44	(reserved)	
45	(reserved)	
46	(reserved)	
47	(reserved)	
48	(reserved)	
49	(reserved)	
50	(reserved)	
51	Weight on scale	WEIGHT
52	(reserved)	
53	(reserved)	
54	Entry tare weight	ENTR TARE WT
55	(reserved)	
56	(reserved)	
57	(reserved)	
58	(reserved)	
59	(reserved)	
60	(reserved)	
61	(reserved)	
62	(reserved)	
63	(reserved)	
64	(reserved)	
65	(reserved)	
66	(reserved)	
67	REG Buffer full	BUFFER FULL
68	(reserved)	
69	(reserved)	
70	(reserved)	
71	(reserved)	
72	(reserved)	
73	(reserved)	
74	(reserved)	
75	(reserved)	
76	Closed drawer error	CLOSE DRAWER
77	(reserved)	
78	(reserved)	
79	(reserved)	
80	Enter subdept price	ENTER PRICE
81	Enter secret code	ENTR SECRET#
82	IR sending	SEND
83	IR receiving	RECEIVE
84	IR send OK	SEND OK
85	IR receive OK	RECEIVE OK
86	IR communication error	COM. ERROR
87	IR data content error	DATA ERROR
88	IR time out error	TIME OUT
89	IR communication cancel	CANCEL

Amessage is 12 characters

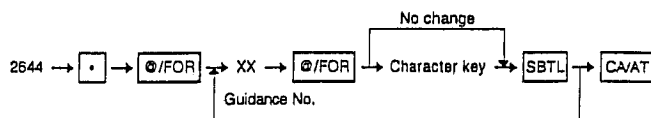
Characters can be entered by using character keys or numeric keys. the key entry sequence for entering one character by numeric keys is as follows:

XXX → 00 key XXX: Character code (3 digits)

Please refer to section 3

[JOB#2644]

GUIDANCE TEXT PROGRAMMING FOR EASY PROGRAMMING



XX: Guidance No. = 1~37

Characters can be entered by using character keys or numeric keys.
the key entry sequence for entering one character by numeric keys
is as follows:

XXX → 00 key XXX: Character code (3 digits)

Please refer to section 3

1 text max. 12 characters

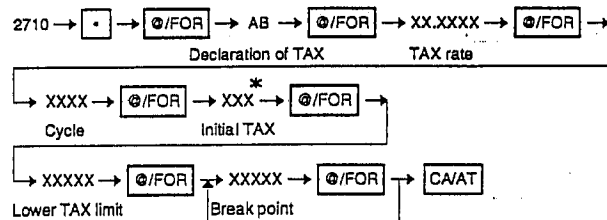
No.	MRS	JOB No.
1	DEPT PRICE	#1110
2	DEPT FUNC.	#2110
3	DEPT TAXABLE	#2111
4	DEPT HALO	#2112
5	DEPT TEXT	#2114
6	DEPT GROUP	#2116
7	DEPT DRECTKEY	#2119
8	PLU ASG.DEPT	#1200
9	PLU PRICE	#1210
10	PLU BASE QTY	#1211
11	PLU STCK ADD	#1220
12	PLU STCK SUB	#1221
13	PLU STCK OVW	#1222
14	PLU FUNCTION	#2210
15	PLU TAXABLE	#2211
16	PLU TEXT	#2214
17	PLU DRECT KEY	#2219
18	LINK PLU	#2220
19	SET PLU	#2221
20	PLU CODE RNG	#2230
21	PLU FUNC RNG	#2231
22	PLU STTS RNG	#2232
23	RATE PROGRAM	#1310
24	MISC KEY PGM	#2311
25	FNC KEY HALO	#2312
26	MDIAKEY HALO	#2322
27	% HALO	#2313
28	FUNC TEXT	#2314
29	MISC KEY PGM	#2315
30	MISC KEY PGM	#2316
31	MDIA KEY PGM	#2320
32	MDIAKEY HALO	#2321
33	CSR CODE PGM	#1500
34	CSR NAME PGM	#1514
35	CSR PGM(DRW)	#2510
36	DATE PROGRAM	#2610
37	TIME PROGRAM	#2611
38	MCHN NO. PGM	#2612
39	CC NO. PGM	#2613
40	LOGOTEXT PGM	#2614
41	VP,TRY FEED	#2615
42	OPT FEATURE	#2616
43	TILL TIMER	#2617
44	SCALE TABLE	#2618
45	HOURLYREPORT	#2619

No.	MRS	JOB No.
46	STACK REPORT	#2620
47	SECRET(TEXT)	#2630
48	SECRET(X1Z1)	#2631
49	SECRET(X2Z2)	#2632
50	MESSGE TEXT	#2641
51	GUID TEXT	#2644
52	TAX TABLE	#2710
53	TAX RATE	#2711
54	TRNING START	#2910
55	TRNING END	#2911
56	PRICE	#1110/#1210
57	ENTER DEPT#	#1200/#2230
58	SIGN (-)	#2111-A/#2211-A/#2311-A
59	SIGN (+)	#2232-A
60	FS :YES	#2111-B/#2211-B/#2311-B
61	FS :NO	#2232-B
62	TAXABLE1 :YES	#2111-F/#2211-F/#2311-F
63	TAXABLE1 :NO	#2232-F
64	TAXABLE2 :YES	#2111-E/#2211-E/#2311-E
65	TAXABLE2 :NO	#2232-E
66	TAXABLE3 :YES	#2111-D/#2211-D/ #2311-D
67	TAXABLE3 :NO	#2232-D
68	TAXABLE4 :YES	#2111-C/#2211-C/ #2311-C
69	TAXABLE4 :NO	#2232-C
70	VP COMPL :YES	#2110-B/#2320-E
71	VP COMPL :NO	
72	TARE TBL#	#2110-C/#2210-A/#2231-A
73	SCALE CMPL	#2110-D/#2210-B
74	SCALE ALLOW	#2231-B
75	SCALE INH.	
76	SIF	#2110-E
77	SICS	
78	NORMAL	
79	BR	#2110-F
80	HASH	
81	NORMAL	
82	DELETE	#2210-C
83	OPEN&PREST	#2110-G/#2231-C
84	PRESET	
85	OPEN	
86	INHIBITED	
87	HALO(EXP.)	#2112/#2312/#2322
88	HALO(AMOUNT)	#2321
89	HALO(RATE)	#2313
90	GROUP	#2116
91	BASE Q'TY	#2118
92	STOCK(ADD)	#1220
93	STOCK(SUB)	#1221
94	STOCK(OVER)	#1222
95	RATE,PRICE	#1310
96	ITEM	#2315
97	ST	#2316
98	CAT2 CMPL	#2320-A
99	CAT1 CMPL	
100	CAT NONCMPL	
101	FOOTER :YES	#2320-B
102	FOOTER :NO	

No.	MRS	JOB No.
103	# CMPL	#2320-C
104	# NONCMPL	
105	DUE DISABLE	#2320-D
106	DUE ENABLE	
107	TXBL1DEL :YES	#2310-I
108	TXBL1DEL :NO	
109	TXBL2DEL :YES	#2320-H
110	TXBL2DEL :NO	
111	TXBL3DEL :YES	#2320-G
112	TXBL3DEL :NO	
113	TXBL4DEL :YES	#2320-F
114	TXBL4DEL :NO	
115	DRW OPEN :YES	#2320-J
116	DRW OPEN :NO	
117	TND CMPL :YES	#2320-K
118	TND CMPL :NO	
119	TND INH.	
120	ENTER PLU#	#2220/#2221
121	ENT.CSR CODE	#1500
122	ENT.CSF NO	
123	ENT.DRW#	#2510
124	ENT.DEPT#	#1110/#2110/#2111/ #2112/#2114/#2116
125	ENT.KEY#	#2119/#2219
126	ENT.FUNC#	#1310/#2311/#2312/ #2322/#2313/#2314/ #2315/#2316/#2320/ #2321
127	ENT.POS.CODE	#2614
128	ENTER TAX NO	#2710/#2711
129	ENT.TAX RATE	
130	CYCLE	
131	INIT. TAX	
132	LOWER TAX	
133	BREAK POINT	
134	ENTER MSG NO	#2641
135	ENTER GID NO	#2644
136	(FIXED DATA)	The message for "Fixed" or "Not used" data
137	ENTER [00] KEY	The message to start programming the text at EASY PROGRAMMING mode.
138	PC-LINK SEND	#0996
139	PC-LINK RCV.	#0998
140	ZAURUS RCV.	#1996
141	ONL T. NO.	#6110
142	ONL MODEM	#6111
143	ONL BAUDRATE	#6112
144	ONL CODE	#6113
145	ONL TIMER	#6114
146	ONL AT CMD	#6130
147	RS PRT BAUD	#6212
148	RS PRT CODE	#6213
149	RS PRT PROG	#6220
150	CAT TIMER	#6610
151	CAT ACT CODE	#6620
152	CAT PROGRAM	#6630
153	CAT PRD. CODE	#6640
154	CAT ACT. CODE	#6650
155	CAT BAUDRATE	#6660

[Job# 2710]

TAX TABLE PROGRAMMING



72 BREAKPOINTS CAN BE PROGRAMMED FOR EACH TAX-TABLE.

(Case of interval between break point is 1 dollar or more and less than 100 dollar, 36 breakpoints is programmed for each table.)

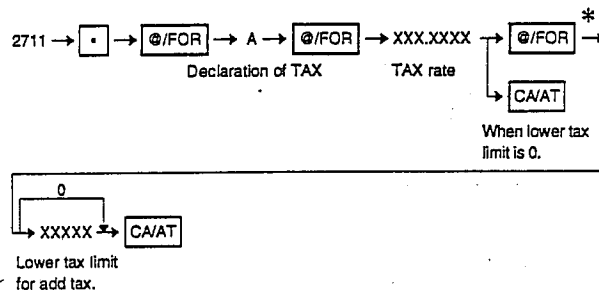
* DEPRESSION OF THE SBTL KEY AT THE FOLLOWING POINTS MEANS A TAX TABLE DELETE OPERATION.

- A: INTERVAL BETWEEN BREAKPOINTS IS = 1
1 DOLLAR OR MORE AND LESS THAN 100 DOLLAR
INTERVAL BETWEEN BREAKPOINTS IS = 0
BELOW 1 DOLLAR
- B: TABLE 1 PROGRAMMING = 1
TABLE 2 PROGRAMMING = 2
TABLE 3 PROGRAMMING = 3
TABLE 4 PROGRAMMING = 4

MRS = NO TAX

[JOB#2711]

TAX RATE PROGRAMMING



DEPRESSION OF THE ST KEY AT FOLLOWING POINTS PERFORM A TAX TABLE DELETE OPERATION.

A:	Tax programming	A
	Tax1	1
	Tax2	2
	Tax3	3
	Tax4	4

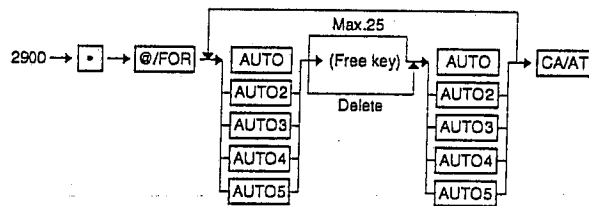
xxx.xxxx: Rate = 0.0000-999.9999%
LOWER TAX LIMITATION max. 999.99
(This is invalid in VAT system.)

MRS = 0

<CAUTION>

(This JOB must be performed at X2/Z2 mode position.)

AUTO KEY SETTING



(Auto key function)

- This machine has [AUTO] key which can be programmed by the following key-sequence.
- When [AUTO] key is depressed, the machine works the same as the programmed key-sequence programmed.

<Example>

Mode switch



(X2/Z2)

2900 → [] → []/FOR → [AUTO] → [PLU1] → 100 → [DEPT2] → [AUTO] → [CA/AT]

(REG)

Key entry	R/J	Display	Comment
[AUTO]	PL000001 \$1.10	PL000001 1.10	same as [PLU1] entry
		1	same as [1] entry
		10	same as [0] entry
		100	same as [0] entry
	PL000001 \$1.00	DEPT02 1.10	same as [DEPT2] entry

(X2/Z2)

2900 → [] → []/FOR → [AUTO2] → [PLU1] → 100 → [DEPT2] → [AUTO2] → [CA/AT]

(REG)

Key entry	R/J	Display	Comment
[DEPT 1]	DEPT01 \$1.00	DEPT01 1.10	
[AUTO 2]		1	same as [1] entry
		10	same as [0] entry
		100	same as [0] entry
	***TOTAL \$1.00	CHANGE 0.00	same as [CA/AT] entry
	CASH \$1.00		
	CHANGE \$0.00		

[JOB#2910, 2911]

Training mode start (#2910), End (#2911)

2910/2911 → [] → []/FOR → [CA/AT]

<Training mode>

All operation is same as REG-mode operation.

In the training mode, the consecutive number is printed as same number in receipt/journal printer.

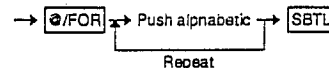
In the training mode, the consecutive number is counted up.

3. Character assignment method

- Using alphabetic assignment method -

The ER-A460/A470 has two kinds of method at character assignment.

One is to use alphabetic assigned key and other one is to use ten keys one is to use ER-01RK.



Programming key layout

① ER-A460

↑ RECEIPT	↑ JOURNAL	\$		BACK SPACE	(DC)		A *	G *	M *	S *	W *
7	8	9					B *	H *	N *	T *	X *
4	5	6					C *	I *	O *	U *	Y *
1	2	3					D *	J *	P *	V *	Z *
0							E *	K *	Q *	MDSE SBTL	SBTL
(SPACE)	(SHIFT)						F *	L *	R *	CA/AT	

② ER-A470

↑ RECEIPT	↑ JOURNAL	[	]	Ñ	_	-	+	!!	¿	{	}			
←	→	◁	▷	↑	↓	"	"	'	?	<	>	(DEL)		
!	@	#	\$	%	^	&	*	(	)	(←)	(→)	(BACK SPACE)		
1	2	3	4	5	6	7	8	9	0	@/FOR	.	CL		
Q *	W *	E *	R *	T *	Y *	U *	I *	O *	P *	7	8	9		
A *	S *	D *	F *	G *	H *	J *	K *	L *	/	4	5	ε		
	Z *	X *	C *	V *	B *	N *	M *	;	:	1	2	3		
(SHIFT)	(DC)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	=	,	.	0	00		SBTL	CA/AT

* When the 'SHIFT' key is depressed, this character can be preset with small character.

(ⓈⓈ)	(→)	(BS)	(CL)
1 !	2 @	3 #	4 \$
5 %	6 +	7 &	8 *
9 (	0)	- ?	= :
A {	B }	C [	D]
E ↑	F ↓	G ←	H →
I £	J ¢	K β	L Ç
M Pt	N l	O x	P œ
Q P	R §	S ù	T !!
U <	V >	W ◀	X ▶
Y (^)	Z (v)	Æ (~)	Ø (°)
; (..)	: (/)	• (\)	' (//)
“ ‘	” ’	(SPC) /	(00)
(SML)	(SHIFT)	(DC)	(ST)

SHARP

ER-01RK

* Ten Key/CL key input by remote control key

Ten key function is set to the remote control key for use other than text input.

Keys to be used and their corresponding keys on the ECR

Keys on the remote control	Key on the ECR
0, 1 - 9	0, 1 - 9
[00]	[00]
(←)	[X], [®/FOR]
(→)	[.]
[.]	[.]
[ST]	[SBTL]
[CL]	[CL]

If a remote control key other than the above is pressed in a case other than character input, it is invalid. (the key input is not accepted.)

[CA/AT] key is not provided on the remote control. (After completion of setting, press [CA/AT] key on the ECR.)

The remote control keys can be used only in PGM1/PGM2 modes.

For the remote control key layout, refer to the separate sheet.

* The following key marks show the following functions:

Keys	Used as:	
	Normal mode	Character entry mode
(ⓈⓈ)	®/FOR key	Left cursor key
(→)	• key	Right cursor key
(BS)	—	Back space key
(CL)	Clear key	Clear key
1 !	Numeric key	Numeric key
2 @		
3 #		
4 \$		
5 %		
6 +		
7 &		
8 *		
9 (	—	A space key or the character key(" ")
0)		
(SPC) /	—	—
(00)	00 key. It is used to go into the character entry mode.	—
(SML)	—	used for entering letters in lower case.
(SHIFT)	—	used for entering the right side letter.
(DC)	—	used for entering characters in double size.
(ST)	SBTL key	SBTL key

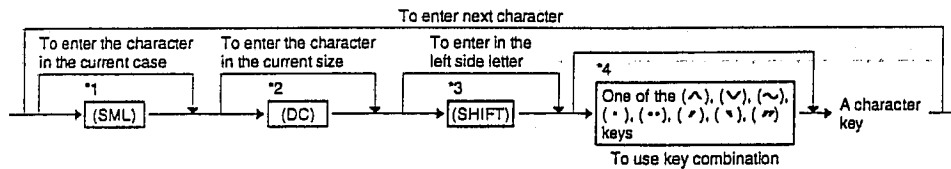
* General instructions for programming alphanumeric characters using the ER-01RK

This programming remote keyboard allows you to program various items instead of using the keyboard of the cash register.

The basic instruction for programming with the remote keyboard is the same as the one with the keyboard of the register. In this part, the method for programming alphanumeric characters is described.

Note: Both PGM1 and PGM2 modes are available for this programming.

Procedure



*1 Letters of alphabets "A" through "Z" are possible to be entered in lower case or in upper case. By default, the upper-case letter mode is selected. To enter the character in lower case, press the (SML) key before you enter the character. The SML lamp lights up. To return to the upper-case letter mode, press the (SML) key again.

Example: To enter "aA", do the following:

(SML) → A { → (SML) → A {

*2 Characters are possible to be entered in single size or in double size. By default, the single-size character mode is selected. To enter the character in double size, press the (DC) key before you enter the character. The DC lamp lights up. To return to the single-size character mode, press the (DC) key again.

Example: To enter "aA", do the following:

(SML) → (DC) → A { → (SML) → A { → (DC) → A {

*3 Each character key has two levels. For example, with the A { key, you can enter "A" or "{". Under the normal condition, the left side letter is selected. To use the right side letter, press the (SHIFT) key just before you press a key.

Example: To enter "Aa{", do the following:

A { → (SML) → A { → (SHIFT) → C {

*4 "(^)", "(v)", "(~)", "(.)", "(..)", "(.)", "(.)", and "(.)" are used only for combination with a character key. If the combination is unavailable, only a character key is entered.

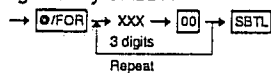
Example: To enter "Ä", do the following:

(SHIFT) → : (·) → A {

To enter "ä", do the following:

(SML) → (SHIFT) → : (·) → A {

④ Using ten key of ECR



Note: [00] key is used to enter each 3 digit alpha code.

CODE TABLE FOR ALPHA DESCRIPTOR PROGRAMMING

CODE	CHARACTER	CODE	CHARACTER	CODE	CHARACTER	CODE	CHARACTER	CODE	CHARACTER
032		055	7	078	N	101	e	124	!
033	!	056	8	079	O	102	f	125	}
034	*	057	9	080	P	103	g	126	β
035	#	058	:	081	Q	104	h	127	c
036	\$	059	;	082	R	105	i	128	!!
037	%	060	<	083	S	106	j	129	1
038	&	061	=	084	T	107	k	130	2
039	'	062	>	085	U	108	l	131	3
040	(	063	?	086	V	109	m	132	4
041	)	064	@	087	W	110	n	133	½
042	*	065	A	088	X	111	o	134	F _T
043	+	066	B	089	Y	112	p	135	←
044		067	C	090	Z	113	q	136	→
045	-	068	D	091	Ä	114	r	137	∞
046	.	069	E	092	Ö	115	s	138	∞
047	/	070	F	093	Ü	116	t	139	◀
048	0	071	G	094	^	117	u	140	▶
049	1	072	H	095	_	118	v	141	F
050	2	073	I	096	'	119	w	142	T
051	3	074	J	097	a	120	x	253	DC
052	4	075	K	098	b	121	y		
053	5	076	L	099	c	122	z		
054	6	077	M	100	d	123	{		

DC: DOUBLE CODE

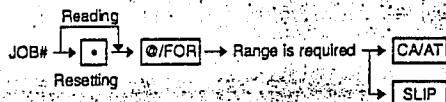
Fig. 7-2

CHAPTER 3. OP X/Z, X1/Z1, X2/Z2 MODE

The following categories of reports can be printed by the ECR.

- 1) OP X/Z reports (Individual clerk reports)
- 2) X1/Z1 reports (Daily sales total X and Z reports)
- 3) X2/Z2 reports (Periodic total X and Z reports)

To print reports, use the following key entry sequence



	MODE *1									
	OP X/Z		X1/Z1		X2/Z2		F-read	*3	DATA FOR	
REPORT NAME	X	Z	X1	Z1	X2	Z2	X1 *4	JOB#	READING	NOTE
GENERAL			O	O	O	O		00	—	
DEPT			O		O		O	10	—	
IND. GROUP			O		O			12	GROUP No.	
GROUP TOTAL			O		O			13	—	
PLU BY RANGE			O	O	O	O		20	PLU CODE	*2
PLU BY DEPT			O		O			21	DPT CODE	
PLU STOCK			O					24	PLU CODE	*2
PLU ZERO SALES			O		O			27	ALL	
PLU PRICE CATEGORY			O		O			29	PRICE	*2
TRANSACTION			O		O			30	—	
CID			O				O	31	—	ALL CASHIER
ALL CASHIER			O	O	O	O		50	—	
IND. CASHIER	O	O	O	O	O	O		51	—	
HOURLY (ALL)			O	O				60		
(RANGE)			O					60		*2
DAILY NET					O	O	O	70		
STACKED REP			O	O	O	O		90		

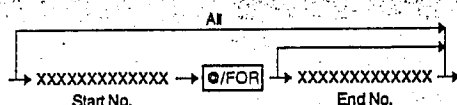
- *1 X1: Daily X report Z1: Daily Z report
X2: Periodic X report Z2: Periodic Z report

Stop of printing reports:
The printing of all reports can be stopped by the following operation.

Set the mode switch to "MRG" to cancel.

Note) When the printing is stopped, the consecutive number or Z counter don't return to the original value.
When Z reports, Memory is not reset.
In In-line system, when Master has consolidated the data from the satellite, ECR can not stop the printing.

- *1 X1: Daily X report Z1: Daily Z report
X2: Periodic X report Z2: Periodic Z report
- *2 The time interval range, PLU code range can be specified by entering the start and end numbers according to the following procedure. When specifying a single time interval, PLU code, the start number has only to be entered.



- *3 When 2 is entered in the third digit of a job code, periodic reports are printed.

Example: Daily general report; job code 460
Periodic general report; job code 200

- An individual report is printed on the receipt and journal when the CA/AT key is pressed.
- Pressing the decimal point key just after the entry of a job code clears the corresponding data in the ECR. (Z report)
(When printing those reports for which no Z reports can be taken, the decimal point key cannot be pressed after the entry of a job code.)
- When the decimal point key is not pressed after the entry of a job code, the corresponding data is held in the ECR. (X report)

- *4 Reading display only

→ KEY → CL
(Display amount) (Display initialize)

KEY DEPT = DEPTn key
CID = @/For key
Daily Net = ST key