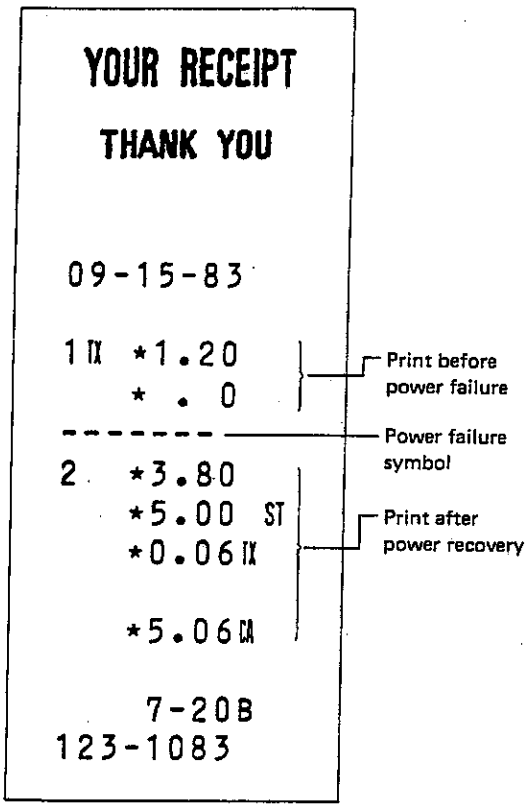
4-7. POWER FAILURE

When power is lost, the machine retains its memory contents and all information on sales transactions.

1. When a power failure is encountered in register idle state or during registration, the machine returns to the normal state of operation after power recovery.
2. When a power failure is encountered during a printing cycle the register prints "--------" and then carries out the correct printing procedure. (See the print sample.)



4-8. PAPER JAM

If a paper jam occurs, the timing signal output will exceed 300 ms.

The machine will lock and the display will indicate "PPPPPPPP".

When this situation occurs, after clearing the trouble, turn the mode switch OFF position or depress CL key.

5. OUTLINE OF FUNCTIONS

(1) ER2381 2 department
ER2391 4 department
Repeat, Taxable/Nontaxable Preset, Unit Price Preset (6 digits), Entry Limitation and +/— Preset, Single item cash sale.

(2) @/FOR: Multiplication and split princing.

(3) % :
Percentage calculation after department entry and during merchandise sub total display. The percent-calculation results of the department and merchandise sub total are stored in separate memory areas.

(4) Tax registration:
- Auto tax calculation (% tax or 49 B.P tax table).
- Manual tax entry using the tax key.
- Tax shift key. (for ER2391 Tax shift 1 and 2)

(5) AT/TTL:
- Cash payment, Amount tendered, Compound payment with charge, Non sales.

(6) CHRG: Charge (credit sales).

(7) CHK: Check.

(8) SBTL displays:
- Full sub-total (with tax) . . . . . [SBTL] key
- Taxable sub-total
  (For ER2381) . . . . . [TAX SBTL] key
  (For ER2391)
  Taxable 1 sub total . . . [TAX1 SHIFT] [SBTL] keys
  Taxable 2 sub total . . . [TAX2 SHIFT] [SBTL] keys
  Taxable 1 and Taxable 2 sub-total . . . . . [TAX1 SHIFT] [TAX2 SHIFT] [SBTL] keys
- Merchandise sub-total
  (For ER2381) . . . . . [TAX SHIFT] [TAX SBTL] keys
  (For ER2391) . . . . . [MDSE SBTL] key

(9) RA: Received on account entry.

(10) PO: Paid out entry.

(11) #: Non-add code print.

(12) PF: Refund entry.

(13) BR:
Bottle return entry, Unit price Preset (6 digits max) Entry Limitation Preset, Taxable/Nontaxable Preset.

(14) Clock Function:
Time print/display (date counts up automatically) and Hourly Total report print.

(15) PLU Function:
Price Look Up entry, 15 PLU's for ER2381 (Expandable to 88 PLU by changing the SRV program. Additional RAM is not necessary.) 88 PLU's for ER2391 are standard, Unit price preset (6 digits max), for a specific Department Preset and Taxable/Nontaxable preset.

(16) Decimal point key:
Key Entry of 2 digits below decimal point for the quantity.

(17) Last Void, Past Void and Void mode.

(18) Validation print: 1 line validation print. (ER2391 ONLY)

(19) Key catch tone, misoperation tone and lock erro tone
1 Key catch tone (high-freq sound, about 20 ms, ON/OFF setting in SRV mode (SRV. No. 2).
2 Mis operation tone (sound to announce rejection of Improper key entry, about 300 ms).
3 Lock error tone (a continuous tone cleared by [CL] key).

(20) Memory Protection: 1 month.

(21) Grand total:
For ER2381:
GT = Σ [|Dept, TTL| + |% (FOR MDSE-SBTL)| + |TAX| + |VOID| + |RFND|]

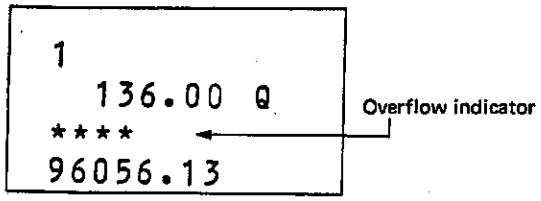
For ER2391:

GT = Σ [| Dept. TTL| + |% (FOR MDSE-SBTL)|
+ |TAX1| + |TAX2| + |M – TAX| + |VOID|
+ |RFND|]

(22) Overflow Processing

1 When the totalizer (8 digits) or the counter(6 digits) overflows, an overflow indicator is printed on the X/Z report.

2 Print format
The overflow indicator is printed in front of the totalizer as follows.



(23) CLERK KEY (only ER-2391):

These keys serve to identify the operators of the register.

Depress any one of these four keys.

The register prints the symbol that corresponds to the depressed cashier key. (The register prints the symbol "A" both on the receipt and on the journal when operated with the cashier key A.)

NOTE: The register won't operate unless a clerk key is down.

6. SERVICE (SRV) MODE

To select the SRV (1, 2) mode, use the service key (LKGIM6861RCZZ).

6-1. Program Reset

[Display : 0 0.00]

This operation resets the program to the key halt condition. If the machine does not operate normally, use this program reset operation first to clear problems.

NOTE: The time and date are cleared by this program reset.

Operation:

(1) Turn the mode switch to SRV2 position.
(2) Turn the mode switch from SRV2 position to SRV1 position.

6-2. Master Reset (All-Memories Clear)

[Display : 0 0]

This operation clears All memories (Preset memories, Totalizers, Counters) in the RAM and resets the program to the key halt condition.

NOTE: The time and date are cleared by this master reset.

Operation:

(1) Turn the mode switch to SRV2 position.
(2) Depress numeric [9] key.
(3) While holding the [9] key depressed, turn the mode switch from SRV2 position to SRV1 position.

NOTE: After performing the program reset or the master reset, the unit must be reprogrammed in the SRV, PGM and DATE modes.

6-3. Service Mode (SRV) Programming

The selection of the different machine features is accomplished in the SRV1 position via the following two methods:

6-3-1. Simple SRV programming (SRV1 mode)

(1) Key operation

(NK) ⟶ [AT TTL]

(NK) DATA	MODEL	DESTINATIONS
2	ER-2381/2391	U.S.A. CANADA

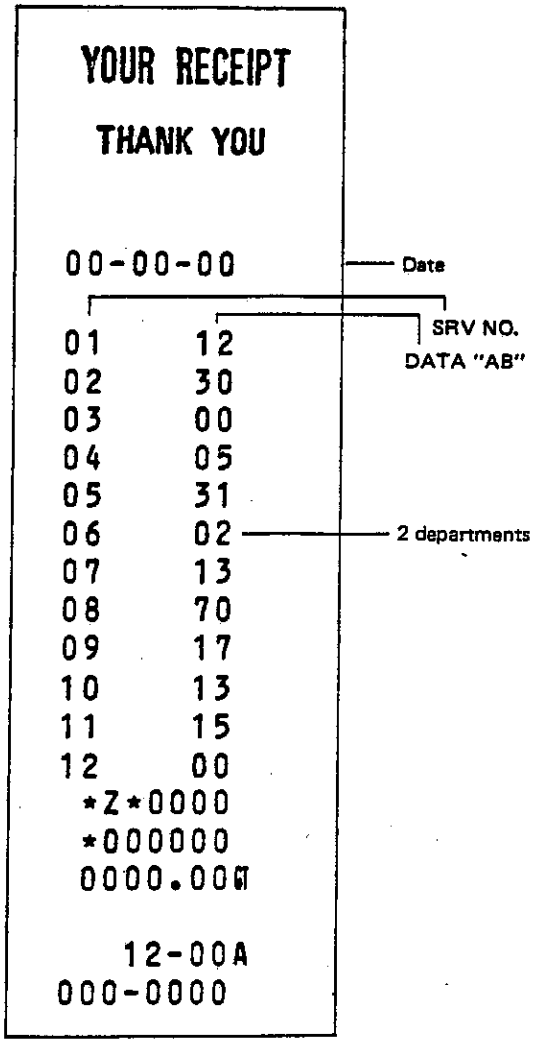
NOTE 1: Limitation of Dept 1, Dept 2, PO, and RA is preset to "7" by this operation.

NOTE 2: For other country, the following SRV programming must be performed.

Print out Sample for ER2381

SRV1 mode [AT/TTL]

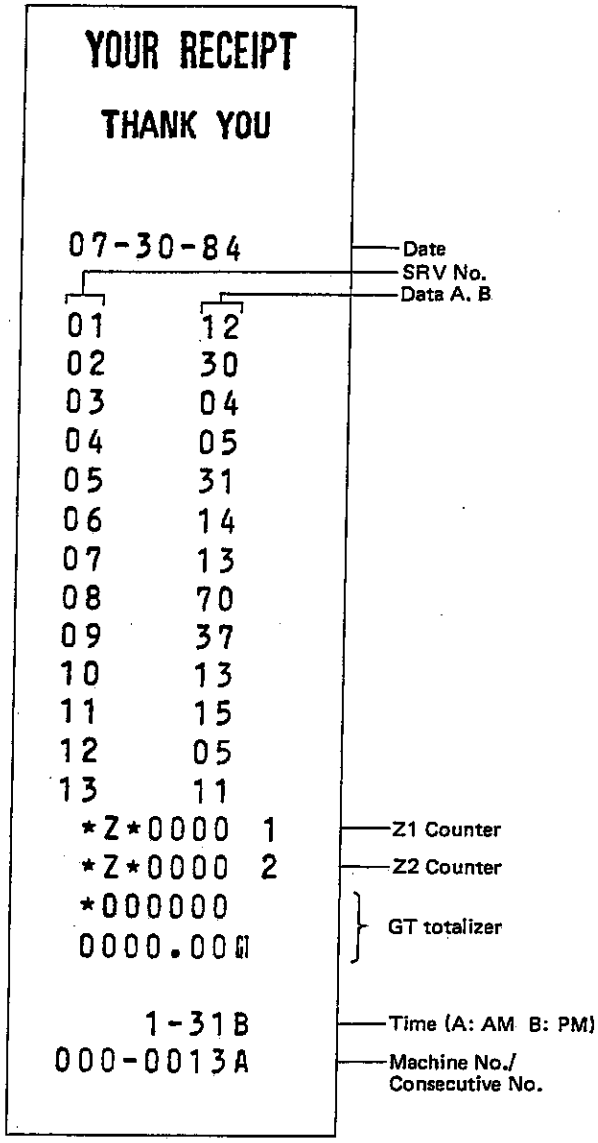
[ER2381]



Print out Sample for ER2391

SRV1 mode [AT/TTL]

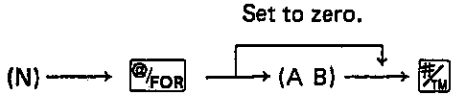
[ER2391]



6-3-2. Individual SRV programming (SRV1 mode)

Individual SRV programming is performed by the following key operation:

(1) Key operation



N : Numeric entry for SRV No. (2 digit).
A : Numeric entry for DATA (2nd digit).
B : Numeric entry for DATA (1st digit).

NOTE: Key entries other than the following designated SRV No. and DATA should not be performed, as erroneous operation may result:

(2) SRV Programming detail DATA

1. SRV No. 1

Key operation: 1 → @/FOR → AB → #/TM

[1] Selection of model name
[2] Decimal set (TAB)

A	[1] Model name
1	ER-2381/2391

B	[2] Decimal places
0	0 (0.)
1	1 (0.0)
2	2 (0.00)
3	3 (0.000)

2. SRV No. 2

Key operation: 2 → @/FOR → AB → #/TM

[1] Selection of Error codes for incorrect key entries:
LOCK ERROR:
Long error tone released by CL key.
ONE SHOT ERROR:
Short error tone.

[2] Key catch tone or no tone during key entry operation is selected.

[3] Grand Total (GT) resettable or non-resetable at Resetting (Z) is selected. G.T. resetting is performed by depressing of CHRG key in the Z mode.

[4] G.T. print or no print on Z report is selected.

A 2nd digit	[1] Error action for incorrect operation	[2] Key Catch tone
0	Together with SHORT TONE and LOCK.	DISABLE
1		ENABLE
2	ALL LOCK	DISABLE
3		ENABLE

B 1st digit	[3] G.T. RESET	[4] G.T. PRINT
0	NON-RESETTABLE	PRINT
1		NO-PRINT
2	RESETTABLE	PRINT
3		NO-PRINT

3. SRV No. 3

Key operation: 3 → @/FOR → AB → #/TM

[1] Selection of printing format of day, month and year.

[2] Selection of Time System (12 Hour/24 Hour). Selection of display or no display of AM/PM in 12 hours system.

[3] Selection of drawer compulsion.

A	[1] Printing Format
0	Month/Day/Year
1	Day/Month/Year
2	Year/Month/Day

B	[2] Time system AM/PM/ Display	[3] Operation with Drawer Opened.
0	12 Hours	ENABLE
1	AM/PM NO DISPLAY	DISABLE
2	24 Hours	ENABLE
3		DISABLE
4	12 Hours	ENABLE
5	AM/PM DISPLAY	DISABLE

NOTE: The micro switch to allow the unit to sense drawer open/close status, must be installed to enable drawer open detection to be effective.

4. SRV No. 4

Key operation: 4 → @/FOR → AB → #/TM

[1] Selection of 2 or 4 digits for percentage.
2 digits: 1 % ~ 99 %
4 digits: 0.01 % ~ 99.99 %

NOTE: Including % TAX.

NOTE: When the decimal point key (•) is enable by programming SRV No. 9, the percentage is fixed at 4 digits.

[2] Fraction treatment during percentage calculation.

NOTE: Including % TAX.

EXAMPLE

Example of regist / Result	★ 0.03 @ 30 % = ★ 0.00 ⑨	★ 0.03 @ 10 % = ★ 0.00 ③
Round down	★ 0.00	★ 0.00
Round off	★ 0.01	★ 0.00
Round up	★ 0.01	★ 0.01

A	[1] % Digit Number
0	4 DIGITS
1	2 DIGITS

B	[2] Fraction Treatment
0	ROUND DOWN
5	ROUND OFF
9	ROUND UP

5. SRV No. 5

Key operation: 5 → @/FOR → AB → #/TM

[1] Enable or disable past item void function.

[2] Enable or disable void mode function.

[3] Compulsory or non-compulsory tender.

[4] Enable or disable NS (No sale) after # (no add) code printing.

[5] Enable or disable # (no add) code printing.

A	[1] Past item void	[2] Void mode
0	DISABLE	DISABLE
1		ENABLE
2	ENABLE	DISABLE
3		ENABLE

B	[3] Tender	[4] NS after # code print	[5] # code print
0	NON-COMPULSORY	DISABLE	DISABLE
1			ENABLE
2		ENABLE	DISABLE
3			ENABLE
4	COMPULSORY	DISABLE	DISABLE
5			ENABLE
6		ENABLE	DISABLE
7			ENABLE

6. SRV No. 6

Key operation: 6 → [@/FOR] → B → [TM]

[1] The number of department can be expanded by the department expansion kit (ER-18DT) from 4 departments to 8 departments.
Number of the departments may be selected according to the following list:

B	Number of departments
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

NOTE:
In regard to the ER2391, the SRV6 N0.6 data will be automatically set to "14" after the execution of MASTER RESET. This has to be changed to "04" in the following manner.

Key operation: 6 → [@/FOR] → *4 → [#/TM]

* If departments is 1 ~ 8 enter " 1 ~ 8"

7. SRV No. 7

Key operation: 7 → [@/FOR] → AB → [TM]

[1] Enable or disable function key for ER2381 (CHRG2)

[2] Enable or disable function key (CHRG)

A	ER2381		ER2391
	CHRG2	CHRG1	CHRG
0	DISABLE	DISABLE	DISABLE
1		ENABLE	ENABLE
3	ENABLE		

Key change with ER-18DT

CHK	CHRG
SBTL	

→

CHK	CHRG2
SBTL	CHRG1

[3] Enable or disable function key (RA, PO)

B	[3] RA	[3] PO
0	DISABLE	DISABLE
1		ENABLE
2	ENABLE	DISABLE
3		ENABLE

8. SRV No. 8

Key operation: 8 → [@/FOR] → AB → [TM]

[1] Enable or disable tax delete function which is performed by the key operation ([TAX/SBTL] → [TAX]).
[2] Enable or disable manual tax function.
[3] Enable or disable function (BR).
[4] Zero key function.
[5] Negative subtotal protection or no-protection.

A	[1] Tax Delete	[2] Manual Tax	[3] BR
0	DISABLE	DISABLE	DISABLE
1			ENABLE
2		ENABLE	DISABLE
3			ENABLE
4	ENABLE	DISABLE	DISABLE
5			ENABLE
6		ENABLE	DISABLE
7			ENABLE

B	[4] Zero key	[5] Negative subtotal
0	[00] key	ENABLE
1		DISABLE
2	[000] key	ENABLE
3		DISABLE

9. SRV No. 9

Key operation: 9 → [@/FOR] → AB → [=/TM]

[1] PLU can be upgraded by the SRV programming from 15 PLU to 88 PLU. (ER2381)
[2] Enable or disable PLU function.
[3] Enable or disable function (Decimal point, RF and CHK).

A	ER2381		ER2391
	[1] Number of PLU	[2] PLU	PLU
0		DISABLE	DISABLE
1	15 PLU	ENABLE	
3	88 PLU	ENABLE	ENABLE

B	[3] Decimal point	[3] RF	[3] CHK
0	DISABLE	DISABLE	DISABLE
1			ENABLE
2		ENABLE	DISABLE
3			ENABLE
4	ENABLE	DISABLE	DISABLE
5			ENABLE
6		ENABLE	DISABLE
7			ENABLE

10. SRV No. 10

Key operation: 10 → [@/FOR] → AB → [=/TM]

[1] Enable or disable of hourly total which is printed out as the sales amount divided by the hourly amount on the X report.
[2] Selecting of the partial quantity (N) or the split quantity (N/M), when the split princing is printed on the X/Z report.

NOTE: M is the base quantity.

NOTE: Sprit princing key operation.

N → [@/FOR] → M → [@/FOR] → Unit price → [Dept.]

NOTE: Muti key operation.

N → [@/FOR] → Unit price → [Dept.]

[3] Selecting of the Muti key operation only can be performed or both the Muti and the split princing can be performed.

A 2nd digit	Hourly Total
0	DISABLE
1	ENABLE

B 1st digit	Total N or N/M at split pricing	Multi only or split pricing and Multi
0		MUTI ONLY
1	TOTAL N	SPLIT PRICING AND MULTI
2		MUTI ONLY
3	TOTAL N/M	SPLIT PRICING AND MULTI

11. SRV No. 11 (ER2391 only)

Key operation: 11 → [@/FOR] → AB → [#/TM]

[1] Selection of Total Validation Type or Tendering Validation Type.

Total Validation Type:
Validation printing is enabled after finishing the transaction.

Tendering Validation Type:
Validation printing is enabled on the first compound tender, and also is enabled after finishing the transaction.

[2] Validation count can be programed as limited or unlimited. When the limitation is programed, it is possible to preset the count number for validation 1 to 9 in PGM mode.
[3] Selection of the validation format.
[4] Enable or disable validation printing.

A 2nd digit	[1] Validation Type
0	TOTAL VALIDATION
1	TENDERING VALIDATION

B 1st digit	[2] Validation count	[3] Validation Format	[4] Validation
0			DISABLE
1	UNLIMITED	M-No., C-No.	ENABLE
2			DISABLE
3	UNLIMITED	DATE	ENABLE
4			DISABLE
5	LIMITED	M-No., C-No.	ENABLE
6			DISABLE
7	LIMITED	DATE	ENABLE

NOTE: M-No. = Machine number.
C-No. = Consecutive number.

12. SRV No. 12 (ER2391 ONLY)

Key operation: 12 → [@/FOR] → B → [#/TM]

[1] Clerk CID total selection
[2] Enable or disable clerk funcion

B	[1] Clerk CID	[2] Clerk function
0	INCLUDE CHECK	DISABLE
1		
5	CASH ONLY	ENABLE

13. SRV No. 13 (ER2391 ONLY)

Key operation: 13 → [@/FOR] → AB → [#/TM]

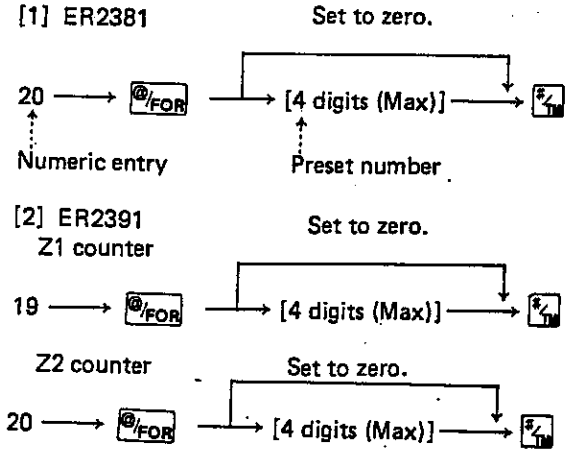
[1] Enable or disable check change total
[2] Enable or disable periodic total report

A	[1] Check change
0	DISABLE
1	ENABLE

B	[2] Periodic total
0	DISABLE
1	ENABLE

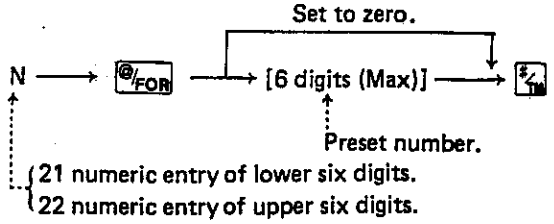
6-4. Z Counter Setting (4 digits)

The Z counter may be preset to either a predeterminated number or to zero. To preset a number, the following key operation should be performed.



6-5. Grand total (G.T.) number setting (12 digits)

The G.T. number may be preset to either a predetermined number or to zero. The presetting is accomplished in two parts:
The upper six digits and the lower six digits. To preset a number, the following key operation should be performed:



6-6. READING OF SRV MODE PROGRAMMING (SRV1 mode)

Key operation: [AT/TTL] Print sample refer page 11

7. PROGRAM (PGM) MODE

- Turn the mode switch to the "PGM" position, and

7-1. Machine-number programming (a maximum of 3 digits)

Entry of a machine number → [#/TM]
(Max. 3 digits)

123-0000

7-2. Consecutive-number programming (a maximum of 4 digits)

Entry of a consecutive number → [SBTL]
(Max. 4 digits)

123-1000

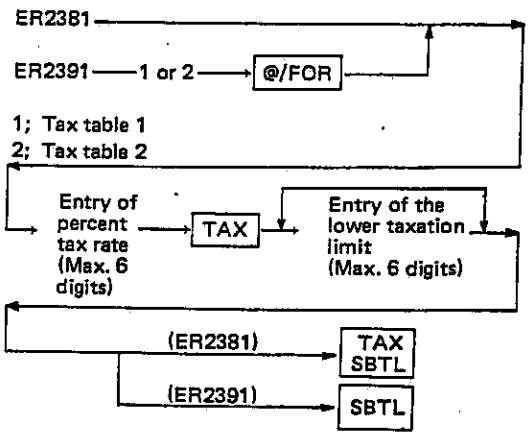
- Enter a number that is one less than the number from which you wish to start.

7-3. Designation of the automatic tax calculation function

To apply automatic tax assessment to sales transactions, it is necessary to set a percent tax rate in advance or to establish a tax table.

7-3-1. Percent tax rate programming

The percent tax rate is capable of being programmed using a maximum of six digits (two integer digits and four decimal digits).



4.0000 TX
1.00

(ER2381)

4.0000 TX 2
0.12

(ER2391)

7-3-2. Tax table programming

(1) For this example, refer to the New Jersey tax table below (column A).
New Jersey tax table: 6% rate

	A		B	C
Tax	Minimum breakpoint	Maximum breakpoint	Breakpoint difference (¢)	
.00	.01	.10	—	Non-cyclic
.01←T	.11 ← Q	.22	10	
.02	.23	.38	12	Cyclic (I)
.03	.39	.56	16	
.04	.57	.72	18	
.05	.73	.88	16	
.06	.89	1.10	16	
.07	1.11 ← "A" point	1.22	22	
.08	1.23	1.38	12	Cyclic (II)
.09	1.39	1.56	16	
.10	1.57	1.72	18	
.11	1.73	1.88	16	
.12	1.89	2.10	16	
.13	2.11	2.22	22	

The information which must be supplied to the ECR for tax table oriented calculations include the following:

R: The Rate (R) is entered as a six-digit number (2-digit integer and 4-digit decimal). Thus, a 6% rate would be entered as 60000. If the rate is fractional (e.g. 4 3/8%), then the fractional portion (3/8) would be converted to its decimal equivalent (i.e. .3750) and the resulting rate of 43750 would be entered. Note that the nominal rate (R) is generally indicated on the tax table.
The other values which must be entered for correct table-based tax calculations are as follows:

Q: The smallest amount for which tax must be collected. In some states, there are amounts which are not subject to tax (e.g. if amounts of $0.01 to $0.10 are not taxed, the value of Q — being the smallest taxable amount — would be $0.11).

T: The amount of tax which is associated with the amount Q.

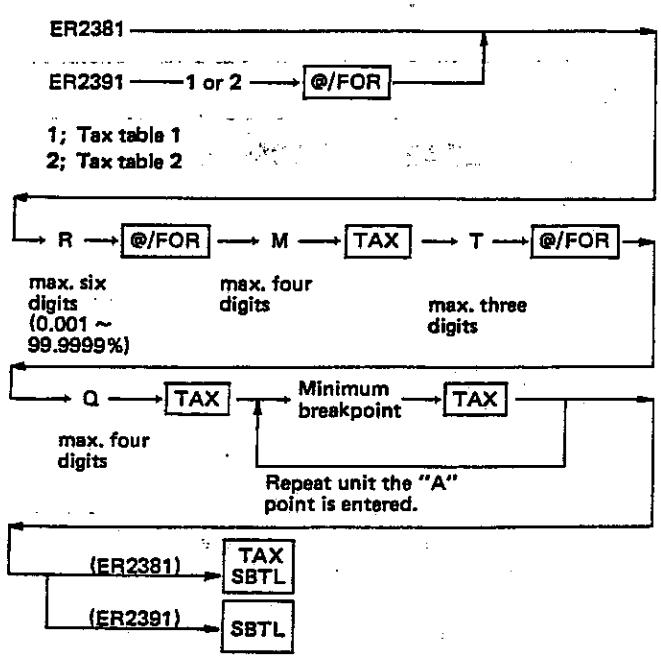
M: The value is associated with the cyclical nature of many tax tables. In fact, the need to support tax tables as opposed to the use of a straight percentage calculation is because there are amounts where the result of applying the percentage calculation does not result in a tax amount which is the same as the related table amount. The table must, therefore, be used to obtain the data (i.e. the value M) necessary for the register to obtain the correct tax amount. The procedures to obtain this value are as follows:

The tax table must be examined in order to find repeating cycles in terms of the breakpoint differences as indicated in the preceding tax table (Note that a 'breakpoint' is that amount at which a tax amount increment takes place).

As you can see from the table, the breakpoint differences indicated by Cycle I repeat in Cycle II. I indicates the tax table's cylical pattern and thus the value for M is determined by adding the breakpoint difference amounts associated with I (i.e. for purposes of the sample table, this value is 100).

The value of M may be viewed as the taxable amount which is covered by the cycle. Thus, it can be determined by adding all of the breakpoint differences in a cycle or by simply taking the difference between the first breakpoint of the cycle and the first breakpoint of the next cycle.

(Procedure)



ER2381

Programming the New Jersey Tax Table

Key operation	Display	Print
R → 6 00 00 %	P 60000	6.0000R
M → 1 00 TAX	P 0.00	1.00
T → 1 %	P 1	001 0.11
Q → 1 1 TAX	P 0.11	002 0.23
2 3 TAX	P 0.23	003 0.39
3 9 TAX	P 0.39	004 0.57
5 7 TAX	P 0.57	005 0.73
7 3 TAX	P 0.73	006 0.89
8 9 TAX	P 0.89	007 1.11
"A" point → 1 1 1 TAX	P 1.11	
Programming tax table is completed. → TAX/NTL	P 0.00	

The first cyclic portion

ER2391

Key operation	Display	Print
1 %	P 1	
R → 6 00 00 %	P 60000	6.0000R1
M → 1 00 TAX	P 0.00	1.00
T → 1 %	P 1	001 0.11
Q → 1 1 TAX	P 0.11	002 0.23
2 3 TAX	P 0.23	003 0.39
3 9 TAX	P 0.39	004 0.57
5 7 TAX	P 0.57	005 0.73
7 3 TAX	P 0.73	006 0.89
8 9 TAX	P 0.89	007 1.11
"A" point → 1 1 1 TAX	P 1.11	
Programming tax table is completed. → NTL	0.00	

The first cyclic portion

Notes: 1) The different patterns between the minimum and maximum tax breakpoints can be up to 49 entries.

2) To clear the tax table before entering a new one, simply press the VOID key immediately after the TAX key.

(2) In case the tax is not provided for every cent
Please modify the table by setting the tax for every cent in the following way.
Consider the minimum breakpoint corresponding to unprovided tax to be the same as the one corresponding to the tax provided on a larger amount and set it.

Example:

Tax	Minimum breakpoint
.00	0.01
.01	0.19
.03	0.52
.04	0.85
.05	1.19
.07	1.52
.08	1.85
.09	2.19

↓

Tax.	Minimum breakpoint	Breakpoint difference (¢)	
.00	0.01	1	Non-cyclic
.01	0.19	18	
.02	* 0.52	33	Cyclic
.03	0.52	0	
.04	0.85	33	
.05	1.19	34	←"A" point
.06	* 1.52	33	Cyclic
.07	1.52	0	
.08	1.85	33	
.09	2.19	34	

R = 4(%), M = 100, T = 1, Q = 19

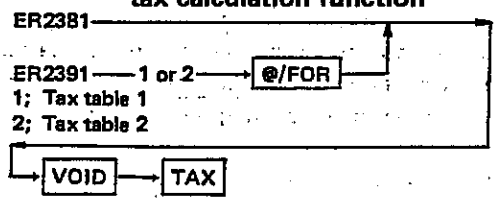
(3) In case the tax table is cyclic completely.
Program the tax table considering the first line to be non-cyclic.

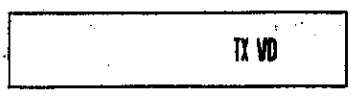
Example:

Tax	Minimum breakpoint	Breakpoint difference (¢)	
.00	0.00	–	
.01	0.11	11	Non-cyclic
.02	0.26	15	
.03	0.43	17	Cyclic
.04	0.69	26	Cyclic
.05	0.87	18	
.06	1.00	13	
.07	1.11	11	←"A" point
.08	1.26	15	
.09	1.43	17	
.10	1.69	26	Cyclic
.11	1.87	18	Cyclic
.12	2.00	13	

R = 6(%), M = 100, T = 1, Q = 11

7-3-3 Programming for cancellation of automatic tax calculation function





(ER2381)

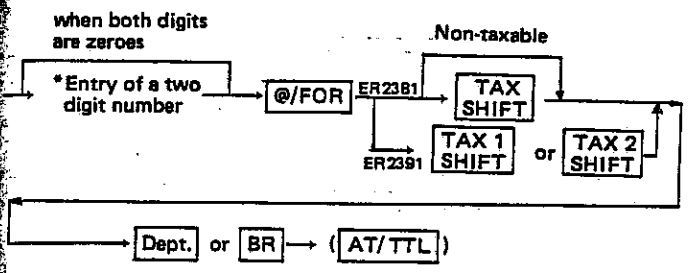
(ER2391)

7-4. Programming for department keys or the BR key

(1) Assigning single-item cash sale (department keys only)
If the single item cash is assigned to a department, a single registration into this department can be accomplished by entering a unit price and pressing the corresponding department key. If the preset unit price is desired, then only the department key need be depressed.
The sale will be finalized immediately without pressing AT/TTL. If a single item cash sale department key is depressed after a non single item cash saled department has been registered, the AT/TTL key will be required.

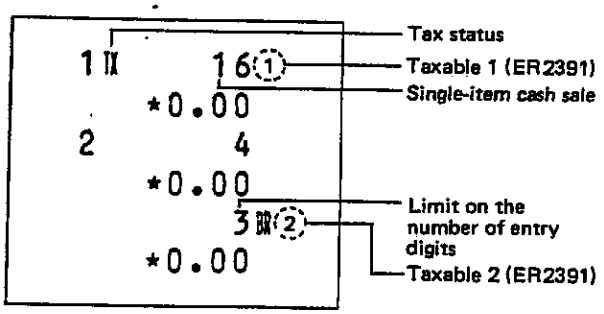
(2) Programming a limit on the number of entry digits
Any number of digits may be chosen (i.e. 0 through 7) to prevent amounts from being entered beyond limit. If "0" is chosen, registration by entering an amount is prohibited, but use of a preset unit price is permitted.

(3) Programming tax status
Either Taxable or Non-taxable status may be assigned.



	Single-item cash sale/Limit on the number of entry digits	Numeric input
1st entry	No single-item cash sale	0
	Single-item cash sale	1
2nd entry	Limit on the number of entry digits	0 ~ 7

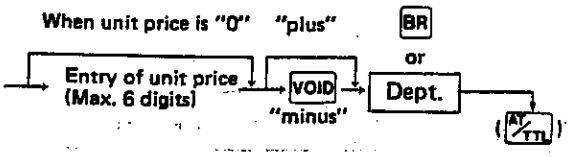
Leading zeros are not required.

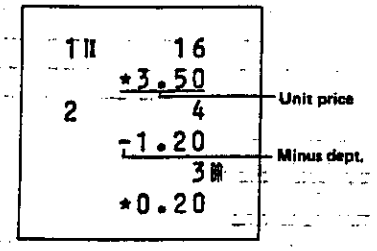


(4) Programming unit prices
This register allows programming of a unit price for each department which may be a maximum of six digits in length.

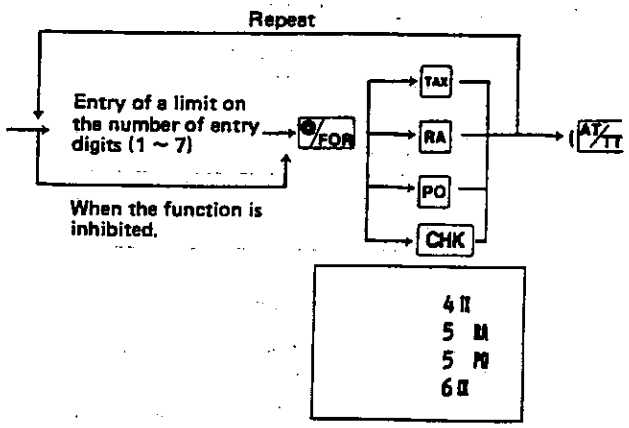
(5) Programming a plus (+) or minus (—) department (department keys only)
Departments where sales are to be registered must be individually programmed as a plus department.

The entries for departments programmed as minus wi subtract from the transaction amount.





7-5. Programming an entry digit limit for th function keys

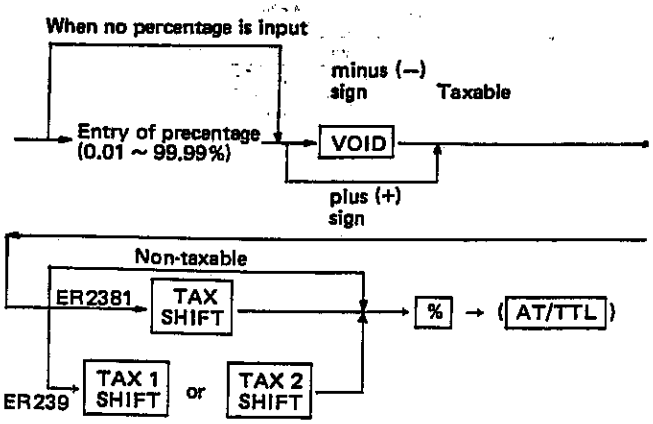


7-6. Programming for the % key

(1) Programming percentage (a maximum of 4 digits)

(2) Assigning plus sign (premium) or minus sign (discount)
The ER-2381/2391 register can assign a plus or minu sign to percent calculations. For premium registration: choose plus sign and for discount registration, choos minus sign.

(3) Programming tax status to be used for the percer calculations.



7-7. Programming to define the presence or absence of the time on the receipt/journal

——→ * Entry of a one-digit number → [AT/TTL] ——→ ([AT/TTL])

Time printing		Numeric input
Receipt	Journal	
no	yes	1
yes	no	2
no	no	3
yes	yes	4

1 : [1 #]

2 : [2 #]

3 : [3 #]

4 : [0 #]

8. Programming a limit to the number of validation print operations. (ER2391 ONLY)

To prohibit the validation printing

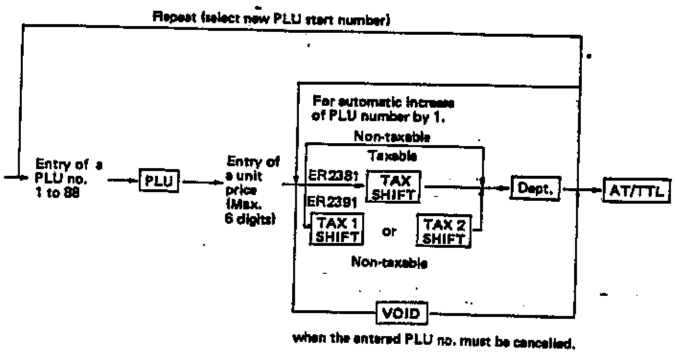
——→ Entry of the number of times of validation printing (1 to 9) ——→ [PRINT] ——→ ([AT/TTL])

[1 Q]

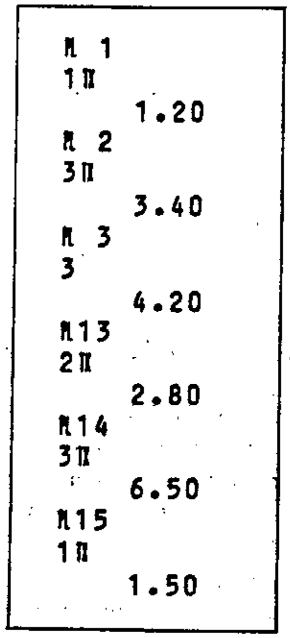
9. Price look-up (PLU) programming

Programming unit price, department, and tax status

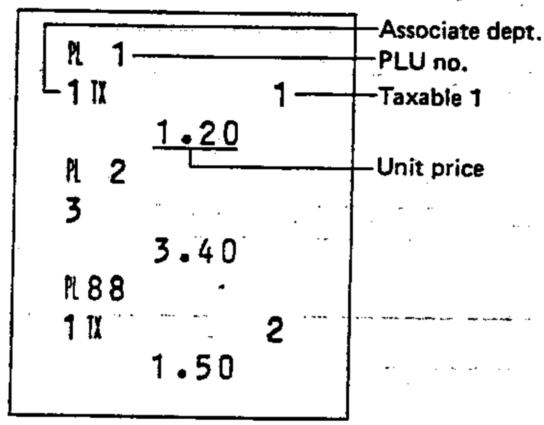
- Assign PLU numbers to individual items, and preset their unit prices, departments and tax statuses.
- A maximum of 88 PLU numbers – 1 to 88 – are standard for ER2391.
- When the ER2381 left our plant, it has been set to 15 PLUs. But, it has the memory capacity for 88 PLUs. That is, it would be possible to expand the capacity of PLUs by simply observing a change using the SRV program, without need of mounting the RAM option unit.



Note: The PLU number counter increments automatically.



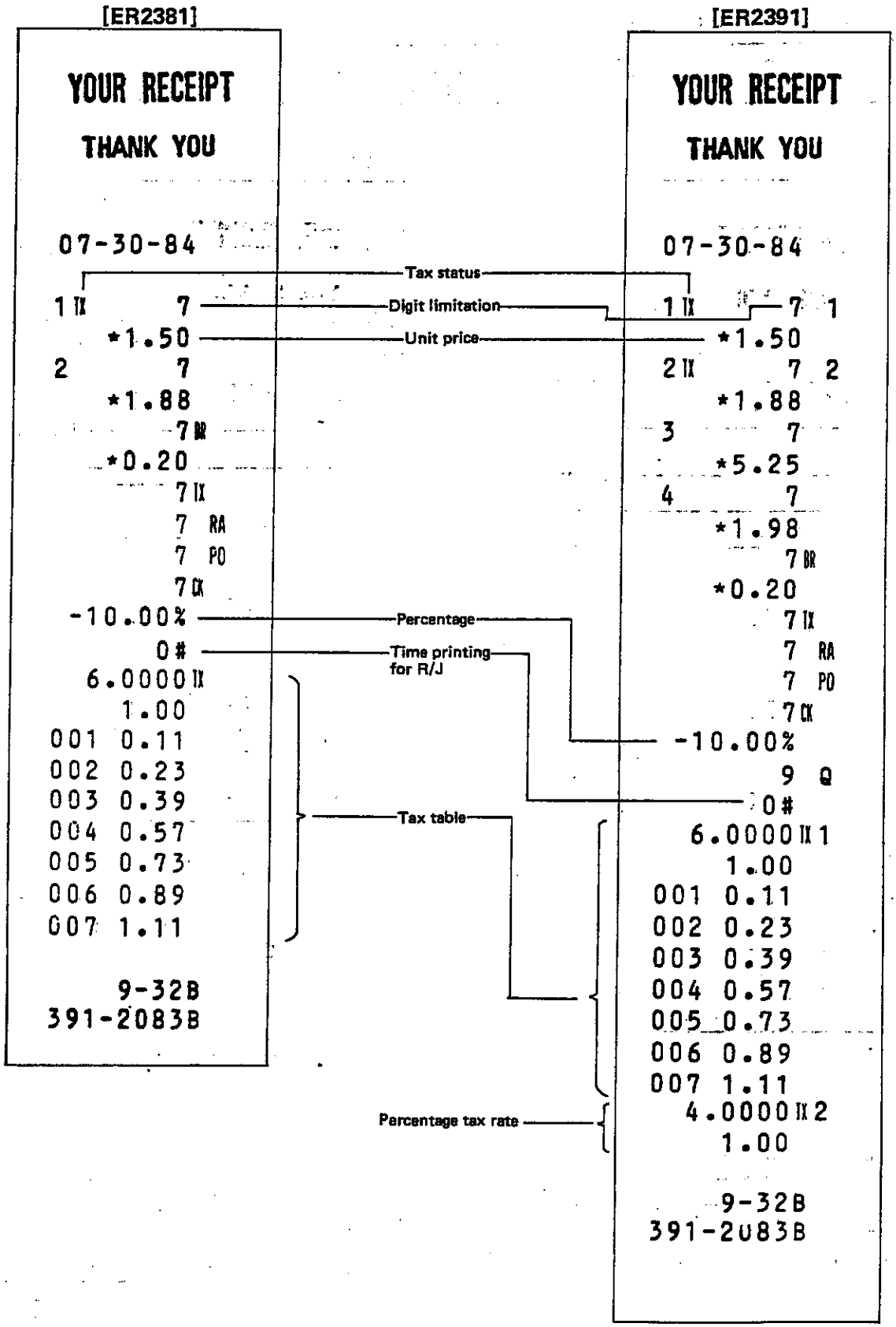
(ER2381)



(ER2391)

10. Listing the program.

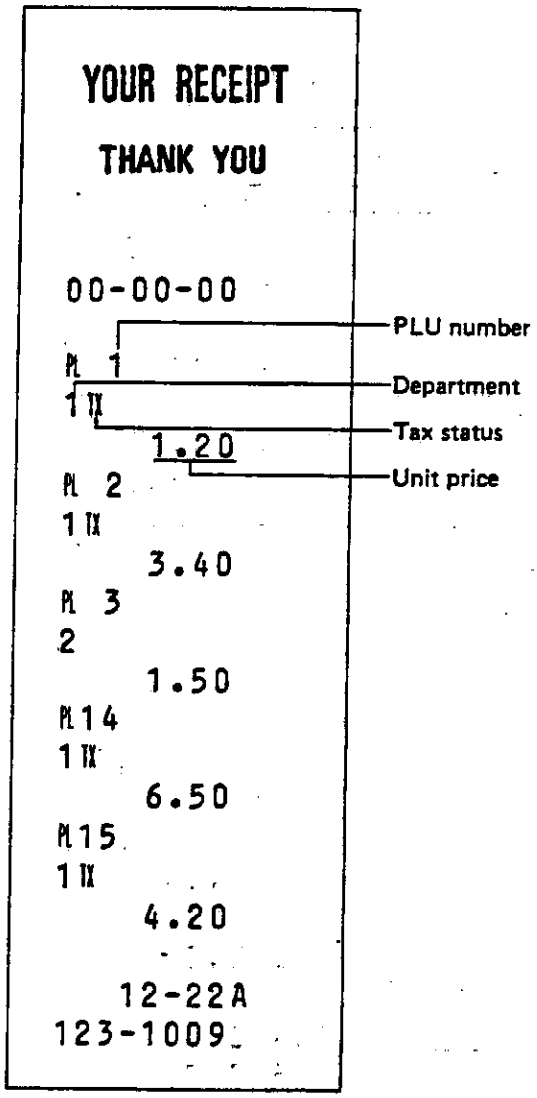
(1) The ER-2381/2391 prints out all programming except for PLU preset data with the depression of the AT/TTL key



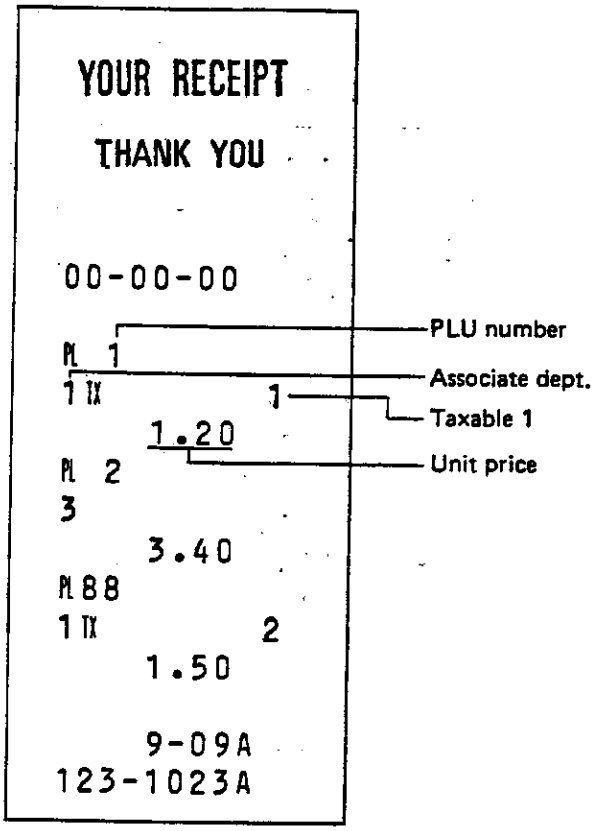
(2) • Depress the PLU key only, in the PGM mode, to Obtain all PLUs preset data.
• The ER-2381/2391 permits you to obtain the preset data for a specific range of PLU numbers.

Entry of a PLU no. the start no. (Max. 2 digits) → FOR → Entry of a PLU no. the end no. (Max. 2 digits) → PLU

[ER2381]



[ER2391]



Note: When the starting PLU number and the ending PLU number are the same, the machine will report the preset data for that individual PLU.

8. DATE MODE

- Turn the mode switch to the "DATE" position.
- Once the clock is set at the correct time, it runs as long as the built-in battery is good and updates the date automatically.

1. Date setting

Entry of date (month, day, year) → E TM

09-15-83

2. Time setting

Entry of time (hour, minute) → FOR → AT/TTL

9-00A
123-1027

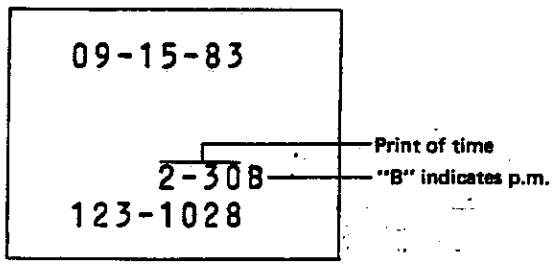
- The time can be displayed by pressing the E TM key in the "REG", "DATE", or "VOID" mode position.
- The time display can be cancelled by any key.

- Time is entered according to the 24-hour clock format:
  2:30 AM is entered as 230.
  2:30 PM is entered as 1430.
- However, time is displayed and printed according to conventional AM or PM indication;
  2:30 AM prints as 2–30A.
  2:30 PM prints as 2–30B.
- Clock ccuracy: Within ±50 seconds per month at 25°C.

3. Automatic date updating

The date is automatically updated as long as the clock unit works. However, both the receipt and journal papers will continue to show the previous date even when the date has been updated internally. It is therefore necessary to ring-up an empty receipt every day before the start of the business by pushing the [AT/TTL] key in the "DATE" mode, updating the print of date. If this operation is not done, the first transaction of the day is printed with the previous date.

4. Example of transaction-time print



9. READING (X) & RESETTING (Z) MODE

9-1. ER2381

ER2381 can issue 3 kinds of reports
1) Daily general report (note 1)
2) Hourly report (note 2)
3) PLU report (note 2)

MODE	REPORT ITEM	KEY OPERATION
X	Reading daily general report	[AT/TTL]
	Reading hourly report	[#/TM]
	Reading PLU report	[PLU] (note 3)
Z	Resetting daily general report	[AT/TTL]
	Resetting daily general report with GT	[CHRG] (note 4)
	Resetting PLU report	[PLU]

(note 1): The hourly Z report is included in the daily general Z report.
(note 2): The hourly and PLU reports are always zero skip printout.
(note 3): Reading for specific range of PLU numbers key operation is follow

→ The start no. of PLU → [@/FOR] → The end no. of PLU → [PLU]

If the starting PLU number and the ending PLU number are the same, the machine will report the sales for that individual PLU.
(note 4): SRV programing is required.

9-2. ER2391

ER2391 can issue 5 kinds of reports
1) Daily general report
2) Hourly report (note 1)
3) PLU report (note 1)
4) Periodic general report (note 2)
5) Individual clerk report

MODE	REPORT ITEM	KEY OPERATION
X1/Z1	Reading daily general report	[AT/TTL]
	Resetting daily general report	[·] → [AT/TTL]
	Resetting daily general report with GT	[·] → [CHRG] (note 3)
	Reading hourly report	[#/TM]
	Resetting hourly report	[·] → [#/TM]
	Reading PLU	[PLU] (note 4)
	Resetting PLU	[·] → [PLU]
	Reading individual clerk report	Depress each clerk → [SBTL]
X2/Z2	Reading periodic general report	[AT/TTL]
	Resetting periodic general report	[·] → [AT/TTL]

(note 1): The hourly and PLU reports are always zero skip printout
(note 2): The periodic general report is accumulated at the timing of a Z1 report printing.
(note 3): SRV programming is required.
(note 4): Reading for specific range of PLU numbers key operatin is follow

→ The start no. of PLU → [@/FOR] → The end no. of PLU → [PLU]

If the starting PLU number and the ending PLU number are the same the machine will report the sales for that individual PLU.

Print sample for ER2391

(General Report Z2)

```
YOUR RECEIPT
THANK YOU

07-30-84           —— Date

*Z*0007  1         —— Reset 1 counter
*Z*0001  2         —— Reset 2 counter
*000000            }
0961.83            }— Grand total
                   —— Department number
1
  59.00 Q          —— Q'ty
*250.58            —— Amount
2
  82.00 Q
*336.30
3
  29.00 Q
*254.20
4
  18.00 Q
 *53.66
*894.74 TL         —— Gross total

      8 Q          }
  *2.40            }— Q'ty and amount of bottle return
      % ST         }
  -8.60            }— Total of percent calculation for merchandise sub-total
*883.74 ST         —— Net total
      %            }
  *6.25            }— Total of percent calculation for department amount

 *13.52 1          —— Tax1 total
  *5.19 2          —— Tax2 total
 *12.80            —— Manual tax total
 *19.33            —— Void total
  *6.75            —— Total of amounts entered in at "VOID" mode.
  *5.25            —— Refund total
 *50.00            —— Received-on-account total
 *10.25            —— Paid-out total
*104.20            —— Check tender total
  *6.30            —— Check change total
 *76.48            —— Charge sales total
*740.87            —— Cash sales total

      5            —— No. of times of exchange.

     13 Q          —— Clerk A total Q'ty
*217.06A           —— Clerk A sales amount
*173.94A TL        —— CID or CID + CHECK IN DRAWER
     11 Q
*265.66B
*181.35B TL
     10 Q
 *20.67D
 *20.67D TL
      9 Q
*411.86E
*398.36E TL

     43 Q          —— Customer count.
*774.32 TL         —— CID

391-1994B
```

(PLU Reading X1)

```
YOUR RECEIPT
THANK YOU

07-30-84

***** X1
                   —— PLU no.
1
  8.00 Q           —— Q'ty
 *9.60 TL          —— Amount.
2
  5.00 Q
*25.00 TL

86
  2.00 Q
 *7.00 TL
87
  1.00 Q
 *4.80 TL
88
  7.00 Q
*24.50 TL

391-1997B
```

(Hourly total: X1)

```
YOUR RECEIPT
THANK YOU

07-30-84

***** X1

 9-00A             —— 9:00 AM
     6 Q           —— Q'ty of transactions
*17.99 TL          —— Total sales
10-00A
     5 Q
*12.74 TL
11-00A
     7 Q
*19.58 TL
 2-00B             —— 2:00 PM
     1 Q
 *1.96 TL
 6-00B
     4 Q
*14.05 TL
 7-00B
    18 Q
*50.29 TL
 8-00B
     3 Q
 *8.82 TL
 9-00B
     6 Q
*24.82 TL

 9-23B
391-2079B
```