Owners Manual

TEC ELECTRONIC CASH REGISTER

MA-136-100 SERIES

TEC TOKYO ELECTRIC CO.,LTD.

WARNING

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which cause the user at his own expense will required to take whatever measures may be required to correct the interference.

TEC ELECTRONIC CASH REGISTER

MA-136-100 SERIES

OWNERS MANUAL

TABLE OF CONTENTS

TO OUR CUSTOMERS

Thank you for choosing a TEC electronic cash register MA-136-100 series. This instruction manual provides a description of the functions and handling of this register and should be read carefully to obtain maximum performance. Since every consideration has been given to safety, there is no danger of damaging the machine by incorrect operation.

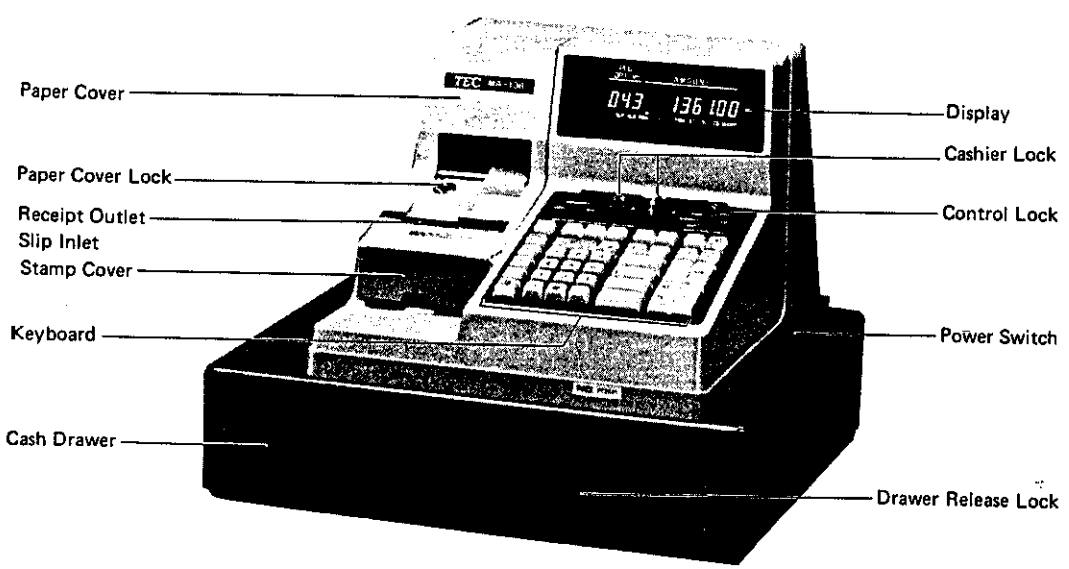
Please refer to this manual whenever you have any doubts concerning the machine. This machine has been manufactured under strict quality control and should give you full satisfaction. However, if the machine is damaged during transit, or there are any unclear points in this manual, please contact your TEC representative listed in this booklet.

- The specifications described in this manual may be modified by TEC, if necessary.
- Be sure to keep this manual for future reference.

PRECAUTIONS

1. The keys on the keyboard work with a light touch. Avoid pressing the keys too hard.
2. Avoid handling the machine with wet hands.
3. Do not apply thinner or other volatile oils to the cabinet or other plastic parts. If the dirt is very bad, wipe off with a piece of cloth soaked in neutral detergent and squeezed tightly.

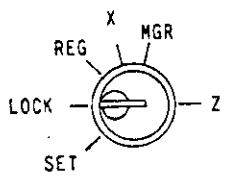
APPEARANCE AND NOMENCLATURE



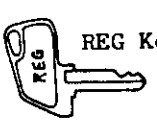
- **Power Switch** ... The power switch is provided at the righthand side of the cabinet. The AC power is turned on when the switch is pushed to ON, and turned off when the switch is pushed to OFF.

CONTROL LOCKS AND MODE SELECTOR KEYS

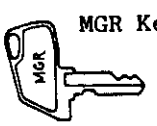
Mode Lock



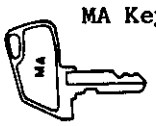
(POSITION)	(FUNCTION)
LOCK	The register operations are locked when the Mode Lock is set to this position. Displays the current time.
REG	Normal cash register operations are carried out in this mode. However, the operations using the keys that have been programmed to require the "MGR" position cannot be done in this mode.
X	The sale totals can be read and the programmed data can be verified in this position.
MGR	This position allows to register all normal cash register operations to be carried out in the REG mode and the operations using the keys that have been programmed to reguire the "MGR" position.
Z	All the resettable totals and their respective counters will be read and reset in this position.
SET	In this position, the register will allow programming operations.



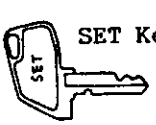
REG Key The REG Key is used by the cashier who operates the register. This key can access the positions of LOCK and REG.



MGR Key The MGR Key is used by the store manager or a person authorized by the manager. This key can access the positions of LOCK, REG, X, and MGR.

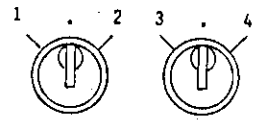


MA Key The MA Key is used by the store manager who will daily supervise the collection of money and the printout of transactions recorded by the register. This key can access the positions of LOCK, REG, X, MGR, and Z.



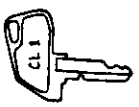
SET Key The SET Key is used by the programmer. This key can access the positions of LOCK and SET.

Clerk Locks



These locks are used to identify which clerk is operating the register.

CLERK KEYS (CL 1, CL 2, CL 3, CL 4)



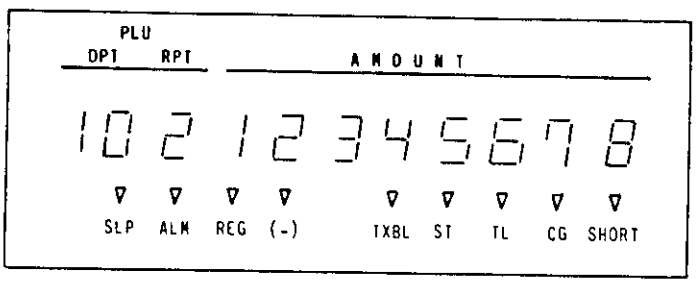
Each clerk should keep his/her clerk key. The register will not operate unless one of these keys is inserted and set to the corresponding position on the Clerk Locks. Each of the keys may be inserted and pulled out in the neutral position marked with the "." (point).

NOTES: 1. The push-style Clerk Keys may be installed in place of the Clerk Locks. In that case, four Clerk Keys will be installed

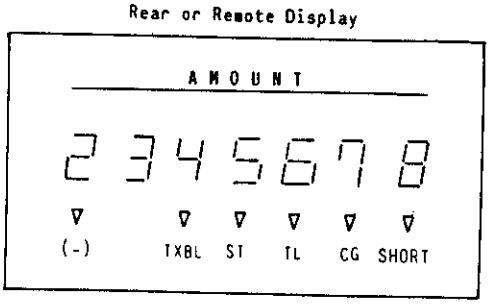
DISPLAY

The front display is located at the top of the register just above the keyboard. The display has two types of display -- numeric display and message descriptors.

Front Display



Rear or Remote Display



Numeric Display

AMOUNT (8 digits) — Displays the numeric data, such as amount, quantity, etc.

DPT (2 digits) — Dispalys the code which represents each Department Key. It stays lit when repeating the same department entry.

RPT (1 digit) — Displays the repeat department entry count.

PLU (2 digits, commonly used with the DPT) — Displays the PLU code when any PLU is entered. It goes out when repeating the same PLU entry.

Message Descriptors

SLP — Lights up when a slip has been properly inserted to allow validation.
It flashes to require a slip insertion when validation compulsion is programmed on a transaction key.

ALM — Lights up with the alarm buzzer to indicate that the last operation or numeric entry has resulted in an error. To clear the erroneous condition, depress the [C] key.

REG — Lights up when sale items have been entered into a department.

(-) — Lights up when the [RTN MDSE], [DOLL DISC], [%-], or [ITEM CORR] key has been operated.
It also lights up when the [ST] or one of the total keys has been depressed and the displayed amount is negative.

TXBL — Lights up when a taxable department or PLU is entered.
It also lights up with the 'ST' Lamp when the [TXBL TL] key is depressed.

ST — Lights up when the sub-total amount is displayed after the [ST] key has been depressed.

TL — Lights up on a finalizing operation with the total amount displayed when finalized without any amount tendered.

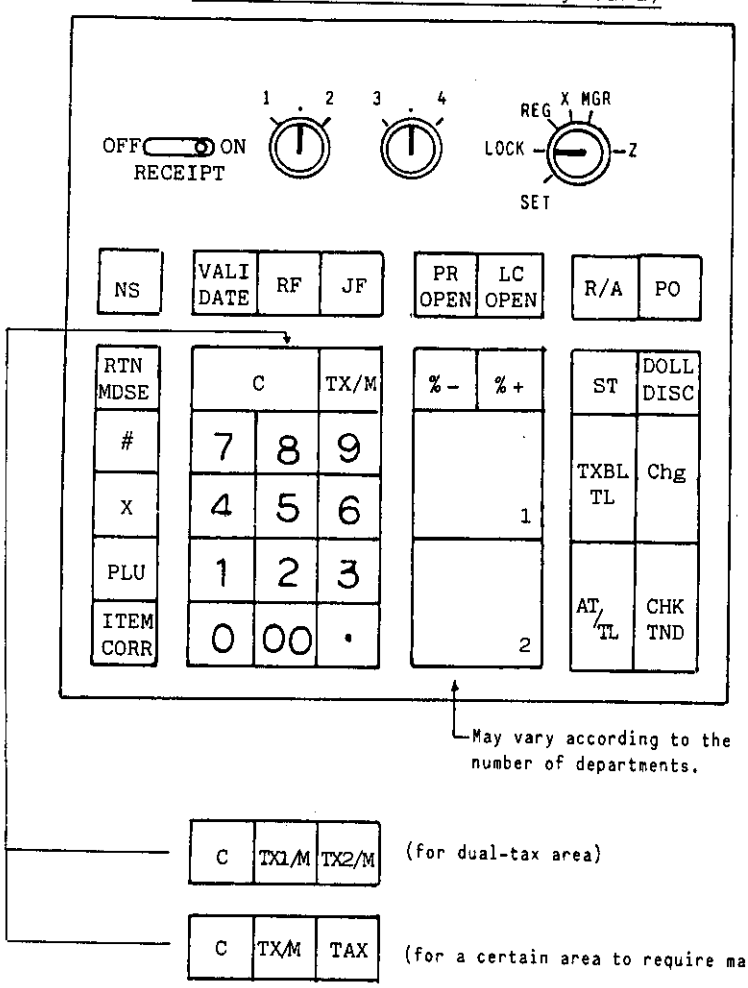
CG — When an amount tendering operation has been performed, this lamp lights up with the change due displayed.

SHORT — Lights up when the amount tendered is less than the sale total with the shortage amount displayed.

KEYBOARD LAYOUT

Below is a typical keybaord layout for the MA-136-100 series. Since this series is designed to be capable of programming most of the keys to be palced in the desired place on the keyboard, this is merely an example. Please ask your TEC representative if any other alternative or additional keys must be installed, referring to the description of the "FUNCTION OF EACH KEY" and "OTHER OPTIONAL KEYS" in this manual.

MA-136-102-US (Standard Keyboard)



FUNCTION OF EACH KEY

RECEIPT
OFF ON **Receipt ON/OFF Switch**

This switch has two positions available -- 'OFF' position and 'ON' poisition. When in the 'OFF' position, no receipt is issued from the register and sales are printed on the audit roll only. When the switch is turned to the 'ON' position, sales are printed on both the receipt roll and audit roll, then a receipt is issued which is torn off and given to the customer.

[NS] **No-sale Key**

This key is used, when the Mode Lock is in the REG position, to open the cash drawer while the machine is outside a sale. To operate, depress this key once. A non-add number may usually be entered prior to a no-sale operation. However, it can be programmed to prohibit it when a no-sale is operated.

[VALIDATE] **Validation Key**

This key is used to over print a validation slip.

To operate, after registering an item or finalizing a sale, insert a slip into the validation slot and depress the [VALIDATE] key. The item, the amount, and the date and/or consecutive number will be printed on one line on the slip.

The system option provides program selections as to the printing position, single- or multi-validation, validation compulsion on some transaction keys, etc.

If the SLIP Lamp flashes, it means that validation compulsion is programmed for the last item entered. In this case, insert a slip into the validation slot and depress the [VALIDATE] key; no other operation is allowed until the compulsory validation has been done.

[RF] **Receipt Feed Key**

This key is used to advance the receipt roll. It is operated by depressing the key and holding it in that position until the paper has advanced to the required position.

[JF] **Journal Feed Key**

This key is used to advance the audit roll in the same fashion as the RF key. These two keys are useful if the cashier, due perhaps to an interruption whilst ringing up a sale, is unsure which items have already been entered. By using the feed key the cashier can see which figures have actually been printed.

[PR OPEN] **Preset Open Key**

This key is used to modify the status of preset department keys. When the [PR OPEN] key is depressed prior to depressing a preset department key (either before or after the numeric entry), the preset

department key is reversed to non-preset and allows amount entry through the numeric keyboard.

If a preset department is entered with a price through the numeric keyboard using the [PR OPEN] key, no repeat operation is then possible for that department key.

The [PR OPEN] key cannot be used with the [PLU] key.

[LC OPEN] Listing Capacity Open Key

This key is used to release the listing capacity on each Department key. To operate, depress the [LC OPEN] key before depressing the department key (either before or after the numeric entry).

By depressing the [LC OPEN] key, the HALC (High Amount Listing Capacity) of each department will be released to allow a numeric entry with two further digits.

In order to allow a numeric entry outside the values defined above, the Mode Lock must be turned to the 'MGR' position using the MA or MGR key.

Repeat operation is possible on any department key even when the [LC OPEN] key is depressed before the department key.

[R/A] Received on Account Key

A received on account transaction is used to identify money which is in the drawer but not business. The amount entered is thus included in the "Cash-in-drawer" total but not in the sales totals.

To operate, enter an amount of payment and then depress the [R/A] key. Repeat this operation if multiple payments are entered at a time. The payments entered are usually finalized by the [AT/TL] (if paid in cash), or [CHK TND] (if paid in check). The [Chg] key may function to finalize payments received on account if so programmed in the system option. The above operation can only be done when the register is outside a sale.

The [ITEM CORR] key is effective to delete a payment just recorded with the depression of the [R/A] key, if before finalized by a media key.

[PO] Paid Out Key

A paid out transaction is used when an amount of money is removed from the cash drawer without relating to a sale. When the [PO] key is used, the amount entered is subtracted from the "Cash-in-drawer" total but does not affect the sales totals.

To operate, enter an amount taken from the cash drawer and depress the [PO] key whilst the register is in an out-of-sale condition. This operation may be repeated as many times as required if multiple paid-out items are registered at a time. The paid-out amounts recorded are finalized by the [AT/TL] key only.

[RTN MDSE] Returned Merchandise Key

This is the Returned Merchandise Key which is used for refunding money to a customer who has returned goods to the store.

To operate, depress the [RTN MDSE] key either before or after ringing up the amount to be refunded, and then depress the appropriate department key (the department key may be replaced by a PLU code and the [PLU] key combination). The amount is automatically printed and deducted from the bill.

The [RTN MDSE] key can be used outside as well as inside a sale.

[X] Quantity Extension Key

This key is used to multiply a department item entry by a quantity.

The order of multiplication is "QUANTITY x PRICE". As for the details of multiplication orders for various cases, see the "REGISTERING PROCEDURE FOR SALES".

The QUANTITY can be of maximum 3 integral digits and 3 decimal digits. (Use the [.] key if any decimal portion of the quantity is required.) The PRICE can be maximum 6 digits. The product must not exceed 7 digits.

Usually, the fraction below the least effective digit (the second digit below the decimal point) will be rounded off. However, it may be programmed to be discarded or rounded up by the system option.

[PLU] Price-Look-Up Key

This key is used to enter a PLU price that has been programmed and linked to a department.

To operate, enter the PLU code for the required item, and then depress the [PLU] key. If the [PLU] key is depressed more than once in sequence, the entry of the price looked up by the PLU code is repeated. Quantity extension is permissible on a PLU using the [X] key.

Each PLU is programmed with a 2-digit PLU code (1 throug 50), a 6-digit preset price, and a 2-digit link department code. To modify the link department, a reset of the entire PLUs sales totals is necessary. However, changing the preset prices of individual PLUs or programming new PLUs may be carried out anytime if the register is outside a sale. But please note that if a unit price of any PLU is changed between sales (but not after resetting), the accurate data of the PLU total may not be printed in the X and Z reports due to the price change.

[ITEM CORR] Item Correct Key

This key is used to remove the last line item from the bill, printing a line through that item on the receipt and journal.

The item correct function is effective even when a numeric entry and a [C] key depression are done between the department entry to be corrected and the [ITEM CORR] key depression. However, if any other key-in operation, including a [C] key depression to clear an error condition, comes in between them, the item correct will not function.

The [ITEM CORR] key will function to correct any last item entered through a department, [PLU], [%+], [%-], [R/A], [PO], [DOLL DISC], or [TAX] key.

[#] Non-add Number Print Key

When the Mode Lock is in the REG position, this key is used to print a non-adding number (such as Customer No., Check No., Credit Card No., etc.) on the receipt and journal for future reference. To operate, enter a maximum 8-digit number and then depress the [#] key. The number is then printed. This operation may be done any time between items, before or after all the sale items, if the sale has not been finalized yet. Usually, non-add numbers may be entered as many times as required within a sale. However, it is programmable to prohibit more than one non-add number entry within a sale by the system option.

[0] ~ [9], [00] Numeric Keys

These keys are used to enter numeric values such as amount, quantity, date, or code number.

Depressing the [00] key once is the same as depressing the [0] key twice consecutively.

[.] Decimal Point Key

This key is used, as part of numeric keys, to designate, the position of the decimal point when entering a percent rate or a quantity. For example, to enter 0.5%, index 0 → [.] → 5, or [.] → 5.

When entering a price or amount such as $0.25, just index 2 → 5. In this case, depression of the [.] key is not necessary and will cause an error.

[1] ~ [2] (Standard Model) or maximum [1] ~ [15] Department Keys

These are department keys through which sales items are registered. These keys may be programmed as either 'PRESET' keys or 'OPEN' keys.

OPEN DEPARTMENT KEY

A key which has no preset price programmed is an 'OPEN' key and must have a price entered into it manually. The price is rung up on the numeric keyboard and appropriate department key is depressed. The price is then displayed and printed on the receipt and audit rolls.

When the same department key is depressed more than once after a price entry, the price entered is repeated as many times as the department key is depressed.

As for multiplication using a preset department key, see the "REGISTERING PROCEDURE FOR SALES".

PRESET DEPARTMENT KEY

A preset key is a key which has already a price programmed in it. It is therefore unnecessary to enter the price of an item; simply depress the key to register the sale of one item.

To repeat the same preset item, depress the same department key as many times as desired.

As for multiplication using a preset department key, see the "REGISTERING PROCEDURE FOR SALES".

If a price different from the preset price is entered on numeric keys into a preset department, depress the [PR OPEN] key either before or after the price entry on the numeric keyboard.

Each department key can be programmed with a unit price, either positive or negative use, a HALC (High Amount Listing Capacity), and taxable/non-taxable status.

When a department is programmed as a negative department, a price entry may not be repeated by depressing the department key. Neither may a price entry be repeated when the [RTN MDSE] or [PR OPEN] key has been depressed prior to a department key depression.

[C] Clear Key

This key is used to correct a numeric entry error prior to depressing any other key or to correct any error condition and cancel the alarm buzzer.

If the [C] key is depressed after a sub-total is obtained, the sub-total is displayed.

[%+] Percent Charge Key

This key is used to add a percent rate to a sale. If the pre-programmed percentage rate is to be added, depress the [%+] key without a prior numeric entry. If a rate different from the pre-programmed % rate is added, enter the desired rate on the numreic keyboard and then depress the [%+] key. (The manual rate will take priority.)

To operate, depress the [%+] key either immediately after a department entry if only that item requires the percentage addition, or after the [ST] key has been depressed if required on the total bill. The percentage rate and the amount are printed and will be added to the sales total.

The percentage rate may be within the range from 0.001 to 99.999%. The fraction resulted from the percentage calculation is usually programmed to be rounded off. However, it can be programmed to be rounded up or discarded.

Usually, if the [%+] key is depressed after a second [ST] key depression within a sale, it adds the rate to the sale total of the items entered between the first and the second [ST] key depressions. However, it can be programmed to add the rate to the entire sale by the system option.

[%-] Percent Discount Key

This key operates in the same fashion as the [%+] key except that operation will subtract from instead of adding to a sale.

[DOLL DISC] Dollar Discount Key

This key is used to subtract an amount from the sale total such as a discount during a sale. This key cannot normally be used outside a sale. An amount exceeding the sales total cannot normally be entered. However, when the "Credit Balance" option has been selected, this key can be used inside or outside the sale and over-subtraction of the sale total is allowed.

To operate, enter the discount amou on the numeric keyboar , then depress the [DOLL DISC] key.

The [DOLL DISC] key can be programmed either taxable or non-taxable status.

[ST] Sub-total Key

This key is used to obtain the sub-total amount without tax during a sale. When this key is depressed after all items have been rung up, the sub-total of the sale is printed and displayed.

If the [ST] key is depressed more than once, the first depression only will print and displayed the sub-total; further depressions will only display but not print the sub-total.

The system option provides the selection
The system option provides the selection not to print but only display the sub-total on the depression of the [ST] key.

It is also programmable to obtain the sub-total of entire sale total but not the additional items if the [ST] key is depressed for the second time (after the additional item entries after the first [ST] key depression) within a sale.

[AT/TL] Amount Tendered / Cash Total Key

This key is used to record all cash paid on transactions, and will be able to finalize a sale operation. The key may be programmed to operate with enforced tendering, as a total-only key, or may operate both ways.

AMOUNT TENDERED FUNCTION

After the [TXBL TL] key has been depressed, enter the amount tendered by the customer in payment of the sale, and then depress the [AT/TL] key. The sale total, tax, and the amount tendered are printed. The change is automatically computed, displayed, and printed.

If the amount tendered is smaller than the sale total with tax, it prints the amount tendered on the receipt with the balance still due displayed, but the drawer is not yet opened. In this case, ask the customer for additional payment in cash and repeat the same amount tendering operation, or operate another media key if the balance due is processed into that media.

TOTAL KEY FUNCTION

To obtain the total and finalize the cash sale, depress the [AT/TL] key only without a prior amount entry. The sale is finalized with the tax and the sale total with tax are printed, and the drawer opens.

NOTES: 1. If the [AT/TL] key has been programmed to function as the "AMOUNT TENDERED KEY ONLY" and the sale total is "0" or negative, no amount endering is then allowed. In this case, the [AT/TL] key will function as the "TOTAL KEY", so just depress the [AT/TL] to obtain the total and finalize the sale.

The [AT/TL] key is also used to finalize received on account payment entries or paid out amounts.

[CHK TND] Check Tendered Key

This key is used to cash a check when the register is outside a sale, or to finalize the sale as a check payment when the register is inside a sale.

CHECK CASHING

When the register is outside a sale, enter the check amount and depress the [CHK TND] key. A receipt is issued and the drawer is opened to enable the exchange.

check cashing may be prohibited if so programmed in the system option.

FINALIZING AS CHECK PAYMENT

On finalizing a sale, enter the amount of the check given by the customer and depress the [CHK TND] key. If the amount received is greater than the sale total, the receipt is issued with the change due printed and displayed. Then the change is given to the customer in cash. If the amount received is smaller than the sale total, the shortage is displayed, and the customer may pay the additional amount in cash to finalize the sale by depressing the [AT/TL] key.

The [CHK TND] key is also used to finalize received on account payment entries if paid in check.

[Chg] Charge Total Key

This key is used as an alternative method of payment for charge sales.

To operate, depress the [Chg] key instead of the [AT/TL] key, after obtaining the sub-total.

[TX/M] (or [TX1/M], [TX2/M] for Dual-tax Area) Tax Modifier Key

This key is used to reverse the taxable/non-taxable status on departments and other tax-status-programmable keys for one entry only. For dual-tax areas, two keys should be provided -- [TX1/M] and [TX2/M] -- in place of the [TX/M] key. The two tax modifier keys will function independently each with its own tax table preprogrammed for taxable items.

The tax modifier(s) will be effective to reverse the tax status programmed on Departments, PLUs, [DOLL DISC], [%+], and [%-] keys.

To operate, depress the [TX/M] key prior to depressing any of these motorized keys above listed, i.e., either before or after the amount entry.

[TXBL TL] Taxable Total Key

This key is used to display the contents of the main itemizer plus any taxes due. The amount will display only but not be printed.

In order to allow add-on operation following the use of this key, the taxes are not added into any totals until actual finalization is initiated.

Mandatory depression of this key prior to finalizing is a programmable option.

OTHER OPTIONAL KEYS

The following keys are not shown in the KEYBOARD LAYOUT already stated. However, any of these may be installed if the customer requires. But please note that some of the present keys may have to be dispensed with in order to gain additional functions. Please contact your TEC representative if any of the following keys is necessary.

Department Keys ..... Maximum 15 Department Keys are available.

[OPEN] LC/PR Open Key

This is a dual-function key, i.e., both [LC OPEN] and [PR OPEN] functions can operate using this key.

[#/NS] Non-add Number Print / No-sale Key

This is a dual-function key, i.e., both [#] and [NS] functions can operate using this key.

If this key is depressed with a prior numeric entry, it functions as the [#] key. If depressed without a numeric entry, it functions as the [NS] key.

[TAX] Manual Tax Key

This key is used to enter an irregular tax amount that cannot be calculated on the basis of programmed tax table, and to add it to the sale.

To operate, enter the desired amount of tax, and then depress the [TAX] key. The tax amount entered is then printed. This tax amount is processed into the TAX 2 memory. Therefore, the tax amount automatically calculated and printed at finalizing the sale (TAX 1) does not include a manual-entered tax, while the entire sale total printed on the receipt last line includes the manual-entered tax also.

This key is also used, if depressed without an amount entry within a sale, to display the total of only non-taxable items so far entered. Usually, this non-taxable total is only displayed but not printed. However, it may be programmed to print also in the system option.

REGISTERING PROCEDURE FOR SALES

Here are patterns for actual registering operations. In the following examples, "|___|" indicates an input through numeric keys, "[___]" indicates a depression of the transaction key, and "---" indicates other registering and/or finalizing operations.

NO-SALE (Mode Lock: REG)

[NS]

DEPARTMENT ENTRY (Mode Lock: REG)

|PRICE| → [OPEN DEPT] → ---

[PRESET DEPT] → ---

[PR OPEN] → |PRICE| → [PRESET DEPT] → ---

NOTE: To enter a price to override the listing capacity, the [LC OPEN] key may be depressed either before or after the price entry but before the department key depression. In this case, a price two-digit larger may be entered for that entry only. To allow a price even larger than this, the MA or MGR key is required and set to the MGR position of the Mode Lock.

PLU ENTRY (Mode Lock: REG)

|PLU Code| → [PLU] → ---

REPEAT ENTRY (Mode Lock: REG)

[PRESET DEPT] → [PRESET DEPT] → [PRESET DEPT] → ---

(Repeat depressing the same key as many times as the desired count.)

|PRICE| → [OPEN DEPT] → [OPEN DEPT] → [OPEN DEPT] → ---

|PRESET PLU CODE| → [PLU] → [PLU] → [PLU] → ---

NOTES: 1. Repeat entry is not possible when the [PR OPEN] or [RTN MDSE] key has been depressed prior to the [DEPT] or [PLU] key.
2. The [LC OPEN] key is effective on repeat operation.

QUANTITY EXTENSION (Mode Lock: REG)

|QUANTITY| → [X] → [PRESET DEPT] → ---

[PR OPEN] → |QUANTITY| → [X] → |PRICE| → [PRESET DEPT] → ---

|QUANTITY| → [X] → |PRICE| → [OPEN DEPT] → ---

|QUANTITY| → [X] → |PLU CODE| → [PLU] → ---

NOTE: The QUANTITY may be max. 3-digit integral and 3-digit below the decimal point. (Use the [.] key for a quantity containing the decimal point.) The PRICE may be max. 6-digit. The product must not exceeed 8 digits for a department and 7 digits for a PLU entry.

RETURNED MERCHANDISE (Mode Lock: REG; or MGR if so programmed)

[RTN MDSE] → [PRESET DEPT] → ---

[RTN MDSE] → |PRICE| → [OPEN DEPT] → ---

[RTN MDSE] → [PR OPEN] → |PRICE| → [PRESET DEPT] → ---

[RTN MDSE] → |PLU CODE| → [PLU] → ---

[RTN MDSE] → Quantity Extension Operation → ---

DOLLAR DISCOUNT (Mode Lock: REG; or MGR if so programmed)

|DISCOUNT AMOUNT| → [DOLL DISC] → ---

NOTES: 1. The [TX/M] ([TX1/M] and/or [TX2/M]) key may be operated either before or after the DISCOUNT AMOUNT entry if the tax status of the [DOLL DISC] key is reversed.
2. Unless the "Credit Balance" option has been selected, no discount amount exceeding the sale. If dollar discounting is made on a taxable item and the [DOLL DISC] key is programmed with the taxable status, no amount exceeding the taxable item amount will be allowed.
3. Unless the "Credit Balance" option has been selected, no dollar discount operation outside a sale will be allowed.

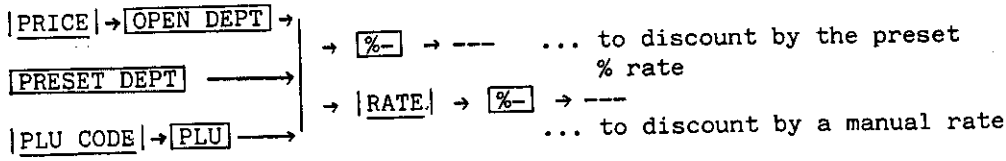
PERCENT DISCOUNT (Mode Lock: REG)

(1) To discount from the sub-total:

[ST] → [%-] → --- ... to discount by the preset % rate

[ST] → |RATE| → [%-] → --- ... to discount by a manual rate

(2) To discount from an individual department item:

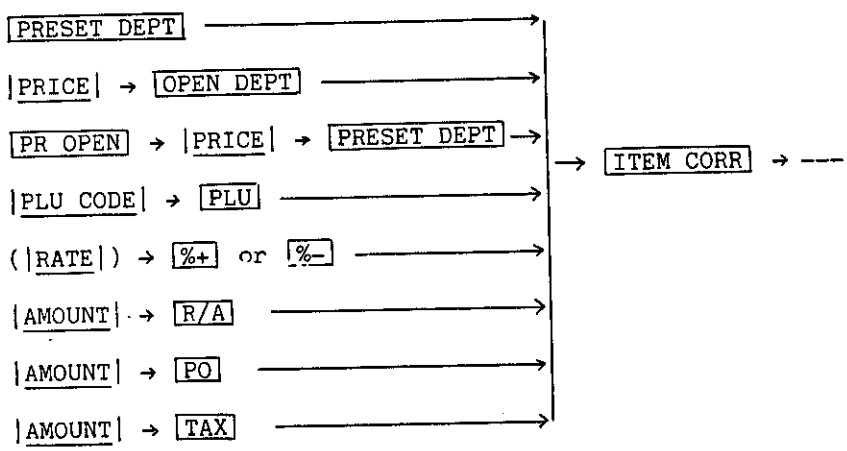


NOTES: 1. The rate may be entered within the range up to 99.999%. If the rate contains the decimal point, use the [.] key.
2. The tax modifier key(s) may be used prior to the [%-] key if necessary.

PERCENT CHARGE (SPECIAL FEE ENTRY) (Mode Lock: REG)

This operates the same as in the "PERCENT DISCOUNT" operation above, except that the [%+] is used instead of the [%-] key.

ITEM CORRECTION (LAST LINE VOIDING) (Mode Lock: REG)



NOTE: The [ITEM CORR] key depression will delete the last line item already printed within a sale.

NON-ADD NUMBER PRINT (Mode Lock: REG)

|NUMBER| → [#] → ---
└(Check No., Customer No., Credit Card No., etc.; 8 digits maximum)

NOTES: 1. If the "Non-add Number Print Allowed Only Once in a Sale" has been selected in the system option, a second non-add number entry will result in an error.
2. The [.] key cannot be used to enter a non-add number. Neither can any other key be used along with the [#] key.

SUB-TOTAL (Mode Lock: REG)

--- → [ST] → --- ... The sale total without tax so far is displayed and printed, but the sale is not finalized.

NOTES: 1. If the [C] key is depressed after once obtaining a sub-total, the sub-total amount will be displayed.
2. If the [ST] key is depressed more than once consecutively, the first depression only will print and display the sub-total; further depression will only display but not print the sub-total.

TAXABLE TOTAL (Mode Lock: REG)

--- → [TXBL TL] → --- ... The sale total with tax so far is displayed but not printed. The sale is not finalized.

NOTE: If the [C] key is depressed after the [TXBL TL] has once been depressed, the sale total with tax is then displayed.

MANUAL TAX ENTRY (Mode Lock: REG)

|TAX AMOUNT| → [TAX] → ---

NON-TAXABLE ITEM TOTAL READ (Mode Lock: REG)

--- → [TAX] → --- ... The total of the non-taxable items so far entered within the sale is displayed. It is usually not printed, but programmable to print if required.

CASH TOTAL (Mode Lock: REG)

--- → ([TXBL TL]) → [AT/TL] ... The drawer opens, the sale total is displayed and printed, and a receipt is issued.

CASH TENDERING (Mode Lock: REG)

--- → ([TXBL TL]) → |CASH AMOUNT TENDERED| → [AT/TL]

CHECK TENDERING (Mode Lock: REG)

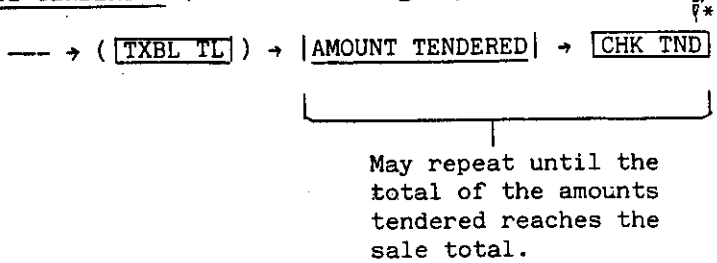
--- → ([TXBL TL]) → |CHECK AMOUNT TENDERED| → [CHK TND]

CHARGE TOTAL (Mode Lock: REG)

--- → ([TXBL TL]) → [Chg]

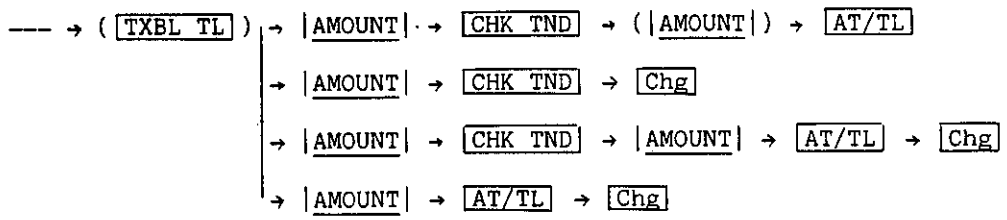
MULTI-TENDERING, SPLIT-TENDERING (Mode Lock: REG)

MULTI-TENDERING (Short tendering repeated multiple times by the same media)



* The CHK TND key may be replaced by AT/TL key if it is programmed to alllow tendering.

SPLIT-TENDERING (Short tendering repeated by different media keys)



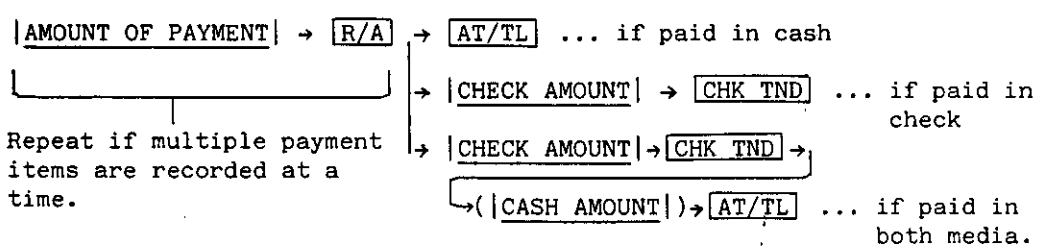
NOTES: 1. In both MULTI-TENDERING and SPLIT-TENDERING operations, the sale is finalized, a receipt is issued, and the drawer opens on reaching the sale total amount.
2. If a media key is depressed without an amount tender entry (if that key can function as a "TOTAL" Key), the sale is then finalized on that stage, processing all the balance due into that media.

CHECK CASHING (Mode Lock: REG)

| AMOUNT OF CHECK TO BE CASHED | → CHK TND ... The drawer opens and a receipt is issued. Receive the check and pay the amount in cash to the customer.

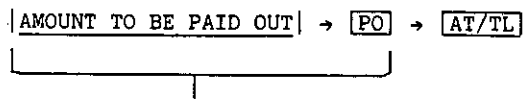
NOTES: 1. Check cashing is allowed only outside a sale.
2. The system option provides a selection to prohibit check cashing operations, if necessary.

RECEIVED ON ACCOUNT (Mode Lock: REG)



NOTE: The [Chg] key may finalize payments received on account if so programmed in the system option.

PAID OUT (Mode Lock: REG; or MGR if so programmed)

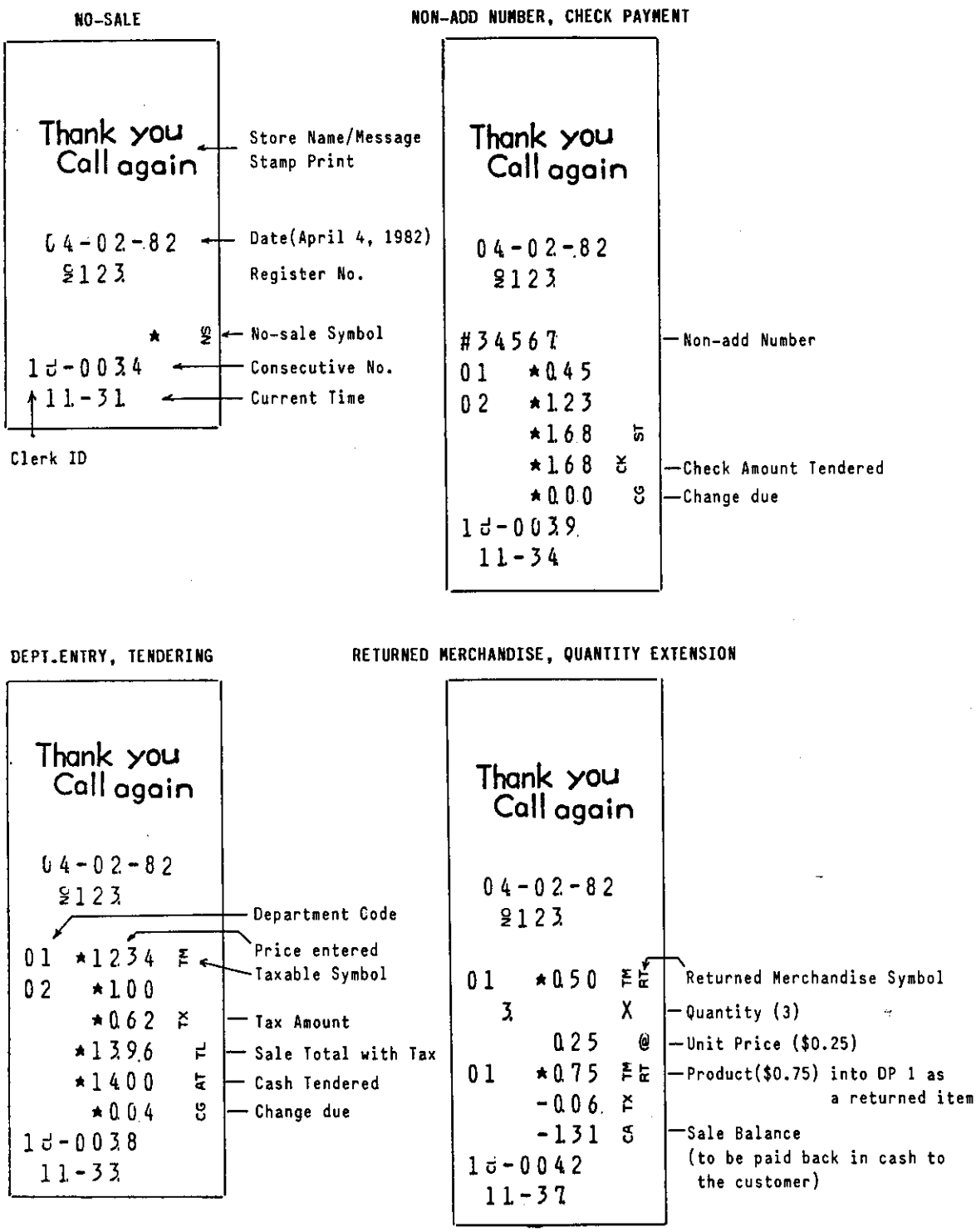


VALIDATION PRINT (Mode Lock: REG)

After entering an item through a transaction key or a media key → Insert a validation slip into the validation slot. Make sure that the "SLP" Lamp is lit. → Depress [VALI DATE]

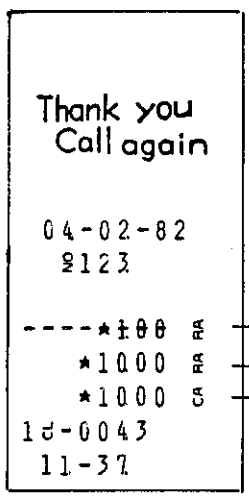
NOTES: 1. No other operations can follow until the validation slip once printed is withdrawn.
2. If the "SLP" Lamp flashes, it means that the last item entered requires a validation print.
3. The following are the selections that can be programmed in the system option related to validation:
   (1) PRINT FORMAT:
      a) AMOUNT only
      b) DATE (MONTH, DAY, YEAR) and AMOUNT
      c) MONTH, DAY, AMOUNT, and CONSECUTIVE NUMBER
   (2) MULTI-VALIDATION or SINGLE-VALIDATION
   (3) VALIDATION COMPULSORY on [RTN MDSE], [PO], [R/A], [CHK RND], [ITEM CORR], [DOLL DISC], [%-], and/or Negative Department keys.

REGISTERING RECEIPT SAMPLES



REGISTERING RECEIPT SAMPLES

RECEIVED ON ACCOUNT

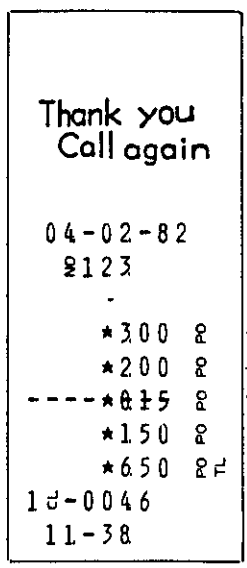


Payment of $1.00, but item-corrected

Payment of $10.00

Finalized in cash (AT/TL)

PAID OUT



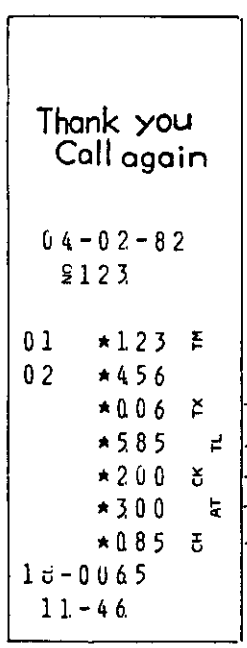
$3.00 Paid Out

$2.00 Paid Out

$0.15 Paid Out, but item-corrected

Paid Out Total

SPLIT-TENDERING



Tax Amount

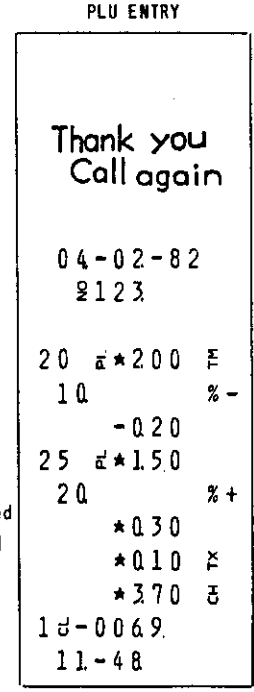
Sale Total with Tax

Check Amount Tendered

Cash Amount Tendered

Charge Total

PLU ENTRY



PLU No.20 Price $2.00

10% discount from the above PLU

PLU NO.25 $1.50

20% Charge to the above PLU

READ(X) AND RESET(Z) REPORTS

The following table shows the key operation to take each report and its content. The "X" and "Z" reports have the exactly the same content printed, except that:

1. The "X" reports allow to read the totals but not clear memories, while "Z" reports allow to read the totals and at the same time all the resettable memories will be cleared when the reports have been issued.

2. The symbol "X" is printed on the top line of a "X" report, while "Z" is printed on a "Z" report, to indicate the type of report.

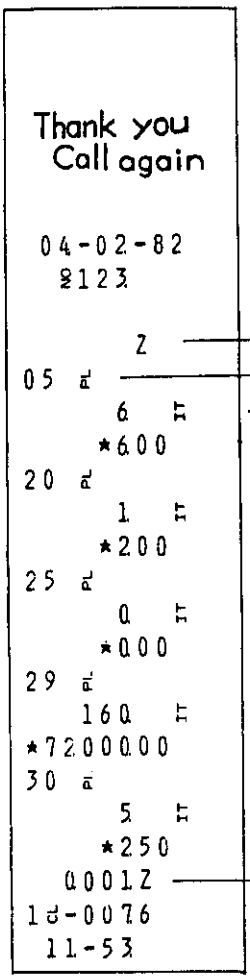
3. A reset count is printed on the bottom of a "Z" report.

TABLE OF X AND Z REPORTS

(REPORT NAME)	(KEY OPERATION)	(CONTENT & REMARKS)
AUTO SCAN READ	Mode Lock: X → → [AT/TL]	All DEPT and Transaction Totals and Counters that have memories opened.
AUTO SCAN RESET	Mode Lock: Z → → [AT/TL]	
PLU READ	Mode Lock: X → → [PLU]	All the totals of PLUs that have been set. The Z report will clear only the sales quantity but not the preset prices. In the X report, PLUs with no sales data recorded will not be printed.
PLU RESET	Mode Lock: Z → → [PLU]	
PRESET DATA VERIFICATION	Mode Lock: X	
	1 [ST]	DEPT Preset Prices
	2 [ST]	DEPT L.C., Tax Status, Pos./Neg. Status
	3 [ST]	PLU Codes, Preset Prices, Link Depts
	4 [ST]	% Preset Rates, Common LC

NOTES: 1. The cash drawer will open when final key to start each report printing is depressed except on the PRESET DATA VERIFICATION.
2. The display stays to indicate "0" throughout any report issuing operation.
3. No Clerk Key is necessary to issue any of the reports.
4. Refer to the report samples on the following pages. As for the PRESET VERIFICATION print samples, see the "VERIFICATION OF PROGRAMMED DATA" near the end of this manual.

REPORT SAMPLES

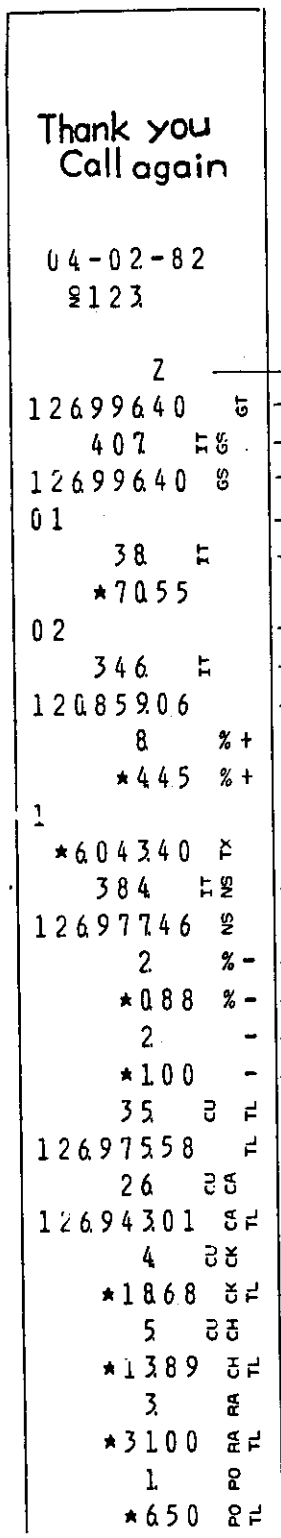


PLU RESET REPORT

Mode Lock: (X for READ) / Z for RESET Depress [PLU].

- Reset Report Symbol
- PLU Code (PLU No.5)
- Sales Item Count
- Sales Total
- No sales were made on this PLU. (The PLUs with no sales recorded will be skipped in a PLU READ(X) REPORT.)
- Reset Count

REPORT SAMPLES



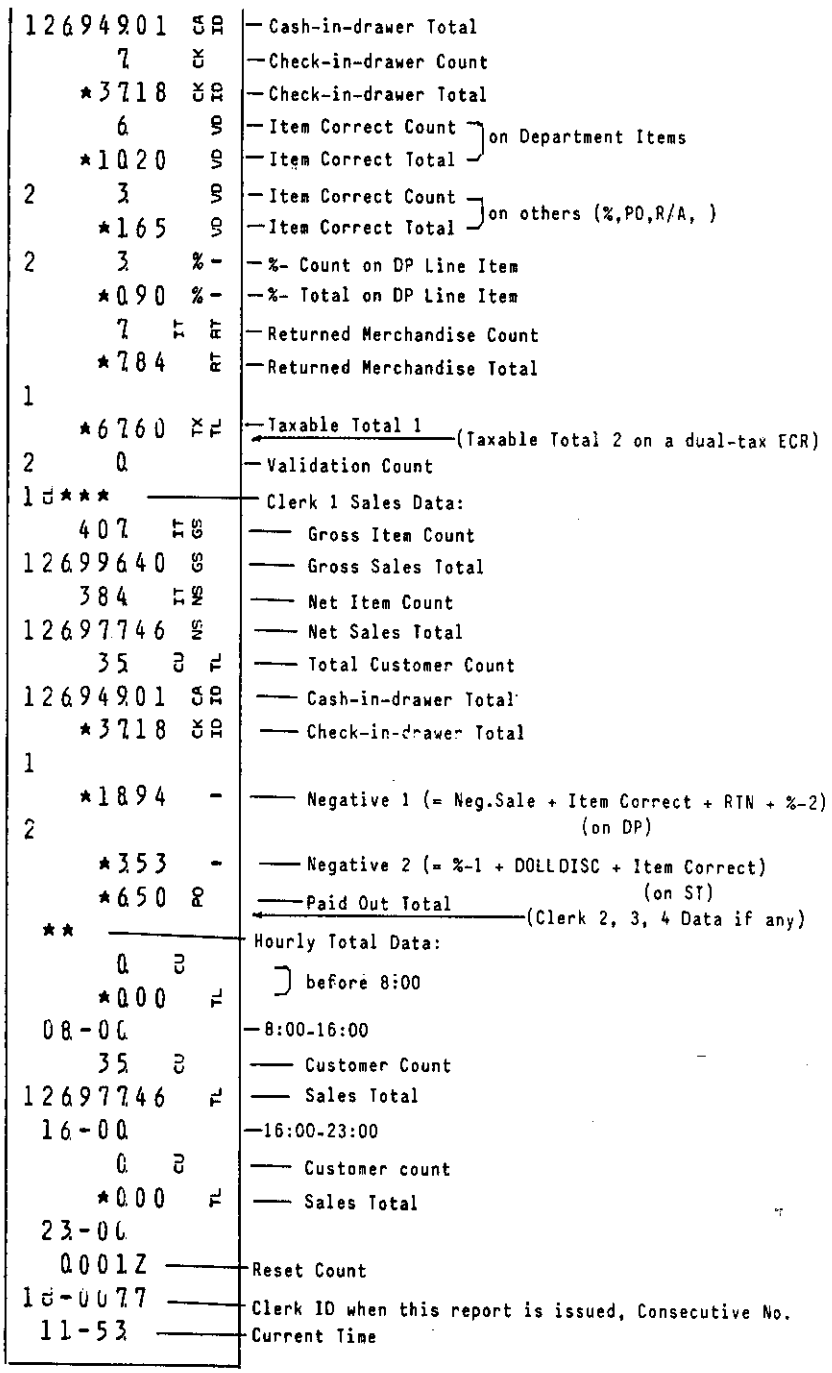
AUTO SCAN RESET REPORT

Mode Lock: (X for READ REPORT) / Z for RESET REPORT Depress [AT/TL].

- Reset Report Symbol
- Non-resettable Grand Total
- Gross Sales Item Count
- Gross Sales Total
- Department 1
- Item Count
- Sales Total
- Department 2
- Item Count
- Sale Total
- %+ Count
- %+ Total
- Tax 1 Total (Tax 2 Total if dual-tax)
- Net Sales Item Count
- Net Sales With Tax (Net Sales Without Tax -- optional)
- %- Count (on sub-total)
- %- Total (on ST)
- Dollar Discount Count
- Dollar Discount Total
- Total Customer Total
- Total = CATL + CKTL + CHTL
- Cash Customer Count
- Cash Sales Total
- Check Customer Count
- Check Customer Count
- Charge Customer Count
- Charge Sales Total
- Received on Account Count
- Received on Account Total
- Paid Out Count
- Paid Out Total

REPORT SAMPLES

(AUTO SCAN RESET REPORT --Continued--)



PROGRAMMING OF THE REGISTER

SETTING OR CHANGING THE STORE/REGISTER NUMBER (Condition: after an AUTO SCAN Z report)

Mode Lock: SET Key Operation

|NUMBER| → [#]
└ (0 ~ 999999 max.6 digits)

NOTE: The [.] key is not allowed in the number entry.

SETTING THE DATE (Condition: anytime outside a sale)

Mode Lock: SET Key Operation

|6| - [X] → |MONTH| DAY |YEAR| → [AT/TL]

1 or 2 digits (1 ~ 12)
2 digits (01 ~ 31)
2 digits (82, 83, etc.)

SETTING THE TIME (Condition: aytime outside a sale)

Mode Lock: SET Key Operation

|5| → [X] → | HOUR |MINUTE| → [AT/TL]

1 or 2 dig. (0~23)
2 digits (00~59)

SETTING INDIVIDUAL DEPARTMENT STATUS (Condition: after an AUTO SCAN Z report; also requires a PLU Z report if the positive/negative status is to be changed also)

Mode Lock: SET Key Operation:

|1| → [X] → → ([TX/M]) for single-tax status change → ([RTN MDSE]) → [DEPT] → [AT/TL]

→ ([TX1/M]) for TAX1 status change → ([TX2/M]) for TAX2 status change →

(Repeat until all the required DEPTs are set or changed with the status.)

NOTES: 1. Among [TX1/M] ([TX/M]), and [TX2/M] keys, depress the key(s) for the required status change(s) for each department. The [RTN MDSE] is depressed to set or reset the negative DEPT status.

2. Depressing any of the three keys above, the related status reverses. For example, depressing the [TX/M] reverses a non-taxable DEPT to a taxable, or taxable to non-taxable. Each department status is read by the number indicated on the display when each department key is depressed in the above operation. The numbers and their respective statuses are:

   0: Non-taxable
   1: Tax 1 only
   2: Tax 2 only
   3: Tax 1 and Tax 2

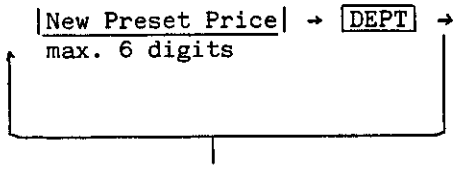
   Watching the number, adjust the status by depressing those keys. See the examples below:

STATUS NUMBER BEFORE CHANGE	→	KEY-IN FOR CHANGE PRIOR TO [DEPT] KEY	→	NEW NUMBER AND STATUS OBTAINED
0	→	[TX1/M]	→	1(Tax1 only)
0	→	[TX1/M] [TX2/M]	→	3(Tax1 and Tax2)
0	→	[TX2/M]	→	2(Tax2 only)
		⋮ etc.		
1	→	[TX1/M]	→	0(Non-taxable)
1	→	[TX2/M]	→	3(Tax1 and Tax2)
1	→	[TX1/M] [TX2/M]	→	2(Tax2 only)
		⋮ etc.		
2	→	[TX2/M]	→	0(Non-taxable)
2	→	[TX1/M]	→	3(Tax1 and Tax2)
3	→	[TX1/M]	→	2(Tax2 only)
		⋮ etc.		

3. In order to simplify the status setting operation, each department status may be reset to "0" by entering "0" and depressing the department key in the above operation. (This can only be done after a PLU reset as well as an AUTO SCAN reset.) Then the required status is set simply by depressing the keys [TX1/M] ([TX/M]) and/or [TX2/M], each only once.

SETTING OR CHANGING DEPARTMENT PRESET PRICE (Condition: anytime outside a sale)

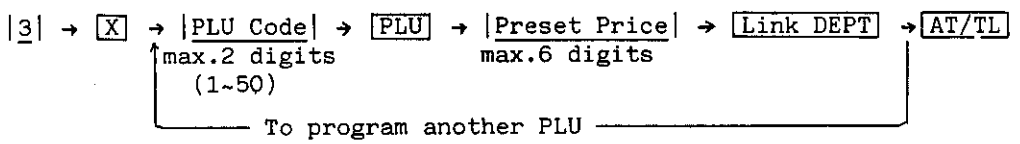
Mode Lock: SET Key Operation



NOTES:
1. To preset the price of "0", enter "0" in place of the price entry in the above operation.
2. If no price is entered in the above operation, the department is set as an open department.

PROGRAMMING PLU TABLE (Condition: after a PLU RESET to renew the PLU table, or anytime outside a sale to program additional PLUs)

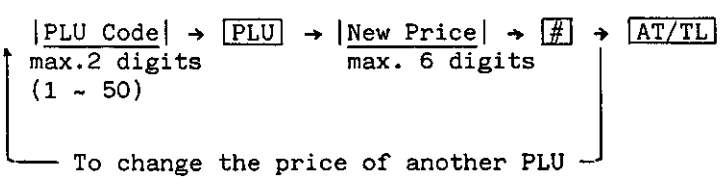
Mode Lock: SET Key Operation



NOTES: 1. No PLUs can be programmed to link a negative department.
2. A maximum of 50 PLUs may be programmed.
3. The PLUs that have not been programmed with a preset price in the above operation are automatically set as PLUs with the preset price of "0".
4. The tax status of each PLU is automatically determined by the status of the linked Department.

CHANGING PLU PRESET PRICE (Condition: anytime outside a sale)

Mode Lock: SET Key Operation



NOTE: In this operation, changes of link departments, programming additional PLUs, etc. are not possible.

PROGRAMMING TAX TABLE (Condition: after an AUTO SCAN RESET)

Mode Lock: SET

1) TAX 1 FULL BREAKS

Key Operation: |max. amount non-taxable| → [TX1/M]
|max. amount for 1¢ tax levied| → [TX1/M]
|max. amount for 2¢ tax levied| → [TX1/M]
⋮ ⋮
Repeat until the "A" Break is entered.
⋮ ⋮
|max. amount for N¢ tax levied| → [TX1/M] ..."A" Break
[ST] (to indicate the "A" Break entry)
|max. amount for N+1¢ tax levied| → [TX1/M]
|max. amount for N+2¢ tax levied| → [TX1/M]
⋮ ⋮
Repeat until the "B" Break is entered.
[AT/TL] (to end)

NOTE: The amount entry may be maximum 4-digit value (up to 9999¢).

2) TAX 1 "A" BREAK AND % RATE COMBINATION

Key Operation: First set the "A" Break following the same operation up to the "A" Break entry and the [ST] key depression in "1) TAX 1 FULL BREAKS" above.

↓

|TAX RATE applied when exceeding the "A" Break amount|

(max. 4 digits, up to 99.99%. Do not use the [.] key. The fraction of the amount resulted from this % rate calculation will be rounded off.)

↓

[AT/TL] (to end)

3) TAX 1 % RATE ONLY

Key Operation: |0| → [TX1/M] → [ST] → |TAX RATE| → [AT/TL]
(The conditions of the rate are the same as the above TAX RATE.)

NOTES: 1. If only one tax modifier key ([TX/M]) is installed on the keyboard, use the [TX/M] in place of the [TX1/M] in the description 1), 2), or 3) above.

2. For TAX 2 Table programming, follow the same procedure in the a sale) 1), 2), or 3) above, using the [TX2/M] instead of the [TX1/M].
3. If both TAX 1 and TAX 2 tables are programmed, the TAX 1 must be set first. The TAX 1 table entry will automatically reset both the TAX 1 and TAX 2 tables that have been programmed.
4. No second depression of the [ST] key is allowed within one tax table programming.

SETTING NON-TAXABLE LIMIT AMOUNT (for a certain area only)
(Condition: after an AUTO SCAN RESET)

This may be programmed only when one tax modifier key ([TX/M]) is installed. The tax levied when exceeding this limit amount will be calculated by the TAX 1 table.

Mode Lock: SET Key Operation:

|9| → [X] → |Non-taxable Limit Amount| → [AT/TL]

NOTES: 1. If this program has been set, the tax is calculated and added to the sale total which exceeds the limit amount even when the sale is entirely composed of non-taxable items.
2. To reset the limt amount once set, enter "0" in place of the |Non-taxable Limit Amount| in the above operation.
3. This tax calculation program will be disregarded when the sale total turns out to be negative.

ex.) In case the limit amount "$3.25" is set:

Case 1: Normal Department Entry: (Mode Lock: REG)

|326| → [non-taxable DEPT] → [AT/TL]

..... The entered amount $3.26 is greater than the limit amount $3.25. It will therefore be taxed.

Case 2: Returned Merchandise Entry: (Mode Lock: REG)

[RTN MDSE] → |326| → [non-taxable DEPT] → [AT/TL]

..... The non-taxable total is negative. The tax already levied will therefore not be returned.

SETTING THE LISTING CAPACITY OF DEPARTMENT (Condition: after an AUTO SCAN RESET)

Mode Lock: SET   Key Operation

```
              *(Note 1)
|2| → [X] → |HALC| → [AT/TL]  ... for the common listing capacity
                                  for all the departments
              *(Note 1)
|2| → [X] → |HALC| → [DEPT] → [AT/TL] ... for individual departments'
            ↑                    |            listing capacities
            └─Repeat until all───┘
              the required indiv.
              dept. Listing Capacities
              are set.
```

*Note 1: HALC ..... Hight Amount Listing Capacity

```
|_|_|
 │ └─Number of maximum digits allowed
 └───Maximum value of the top digit allowed
```

```
ex.) |3|4| ... indicates 3999
      │ └─4 digits ──────┘     The amount range allowed
      └─Value of the ──────┘   to enter will be:
        top digit
                                Equal to or smaller than
                                the HALC (3999 in this case).
```

NOTES: 1. If the individual listing capacity of a department has been set, it prevails over the common listing capacity of all the departments.

2. To reset an individual listing capacity, enter "0" before the [DEPT] key in the above operation. Then the common listing capacity of all the departments, if pre-programmed, will prevail.

SETTING THE PRESET RATES OF [%+] AND [%-] KEYS (Condition: anytime outside a sale)

Mode Lock SET   Key Operation

1) To set a rate of integral value:

|RATE| → [%+]

|RATE| → [%-]

2) To set a rate containing the decimal point:

```
|Integral Portion| [.] |Decimal Portion| ┌→ [%+]
 max. 2 digits          max. 3 digits    └→ [%-]
            (up to 99.999%)
```

3) To reset the rate once set:

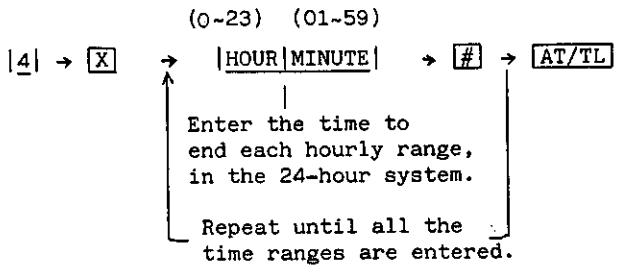
|0| → [%+]

|0| → [%-]

SETTING HOURLY RANGES (Condition: after an AUTO SCAN RESET)

Mode Lock: SET

Key Operation

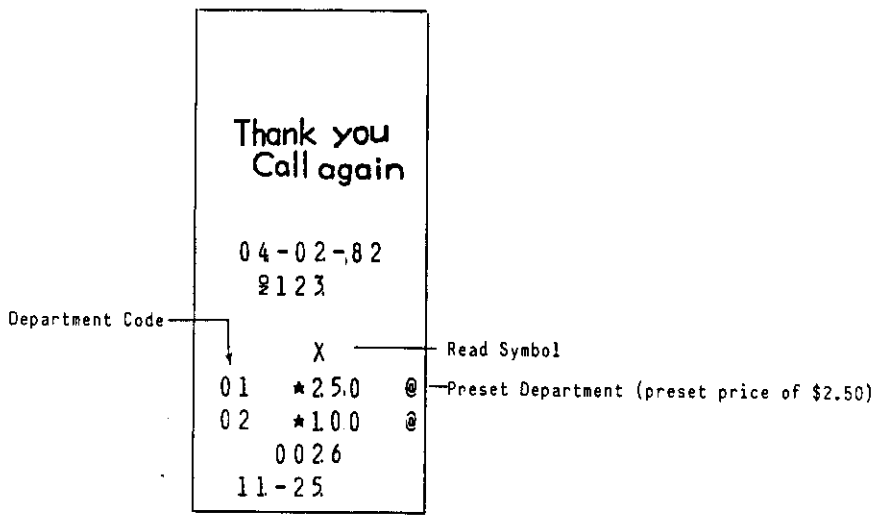


NOTES: 1. A maximum of 16 hourly ranges may be set.
2. To change the table of hourly ranges once set, partially or entirely, do the entire setting operation over again.
3. To reset the hourly range table once set:
   Mode Lock: SET, |4| → [X] → |0| → [#] → [AT/TL]
4. Do not set an hourly range accross 24:00, such as "from 23:00 to 1:00".

VERIFICATION OF PROGRAMMED DATA

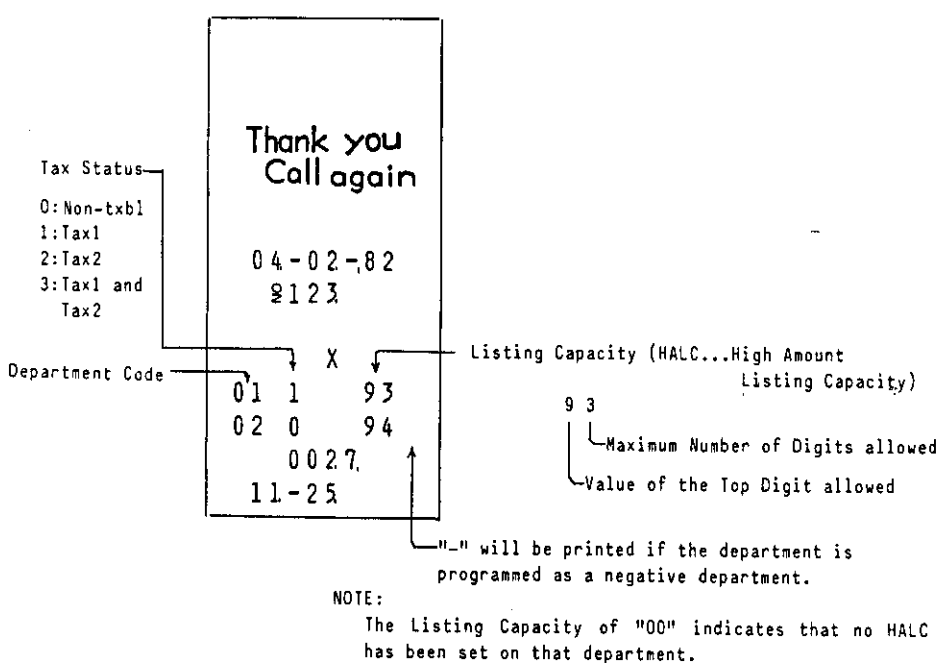
1. DEPARTMENT PRESET PRICE READ

Mode Lock: X Key Operation: |1| → [ST]



2. DEPARTMENT LISTING CAPACITY AND STATUS READ

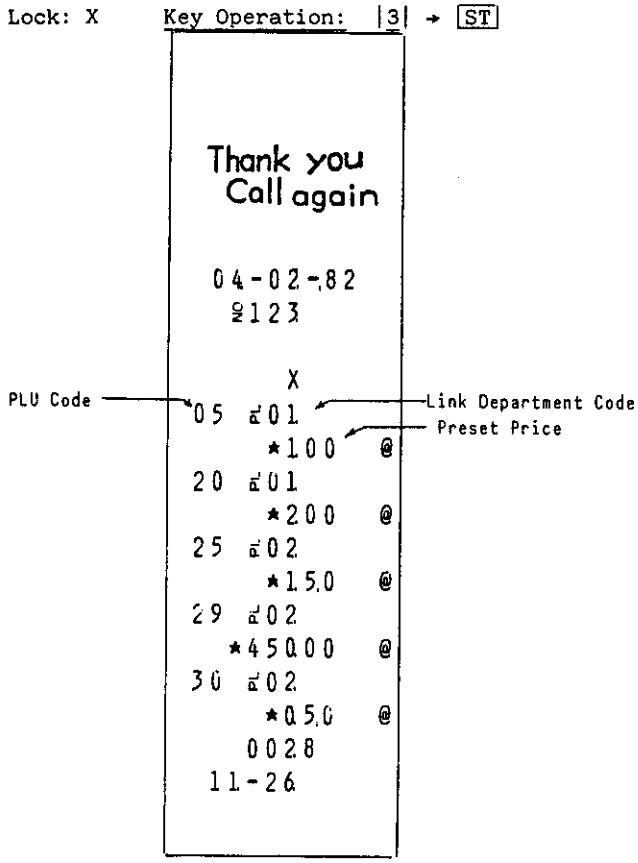
Mode Lock: X Key Operation: |2| → [ST]



NOTE:
The Listing Capacity of "00" indicates that no HALC has been set on that department.

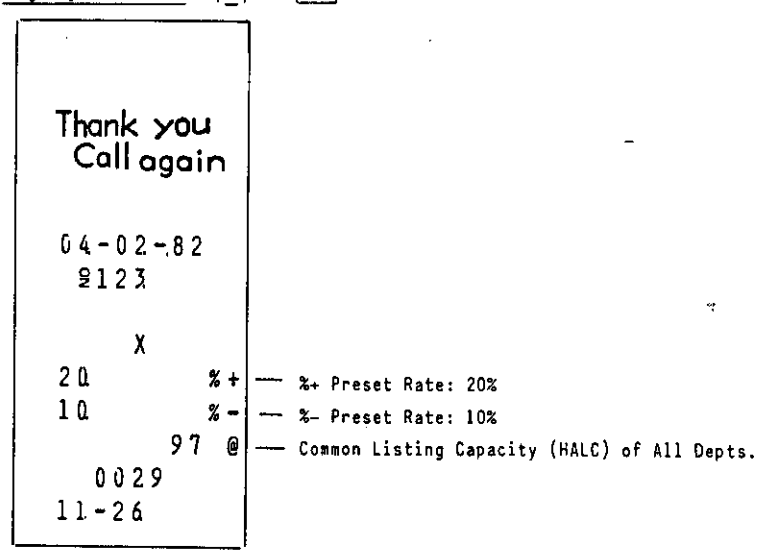
3. PLU TABLE READ

Mode Lock: X Key Operation: |3| → [ST]



4. OTHER PRESET DATA READ

Mode Lock: X Key Operation: |4| → [ST]



MANUAL CASH DRAWER RELEASING

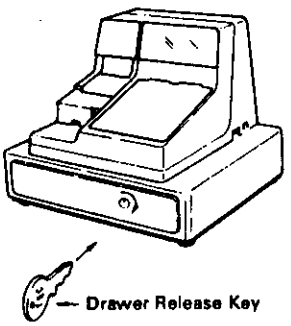


Fig. 5

Usually the drawer is released automatically. However, in an emergency, the drawer can be released manually.
Insert the Drawer Release Key into the Drawer Lock, turn the key by 45 degrees in the arrow direction. The drawer is then opened. The drawer Release Key can be taken out by returning it to the original position.

REMOVING THE DRAWER

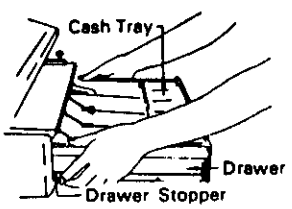
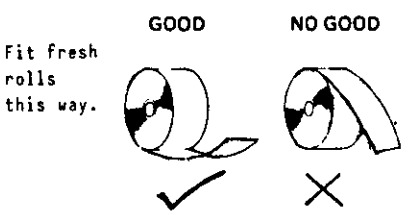


Fig. 6

The drawer can be removed by pulling it while lifting the Drawer Stopper section at both sides of drawer.
The cash tray can be removed by simply lifting it up.



REPLACING THE RECEIPT PAPER ROLL

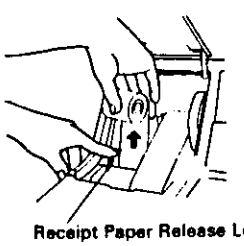


Fig. 7

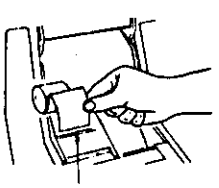


Fig. 8

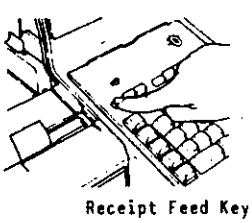


Fig. 9

1. Open the Paper Cover.
2. Pull the existing paper core backwards while pulling the Paper Release Lever toward you and remove the paper out of the printer. (Fig. 7)
3. Place the new receipt roll into the paper roll compartment so that the paper feeds from the bottom of the roll.
4. Insert the paper end by pushing it into the paper inlet. (Fig. 8)
5. Depress the [RF] key to advance the receipt paper until the paper end comes out of the receipt outlet. (Fig. 9)
   (If the receipt paper does not advance evenly though the [RF] key is depressed, re-insert the end of the paper into the paper inlet with the [RF] key depressed.)

REPLACING THE JOURNAL PAPER ROLL

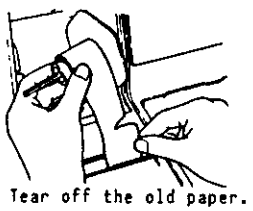


Fig. 10

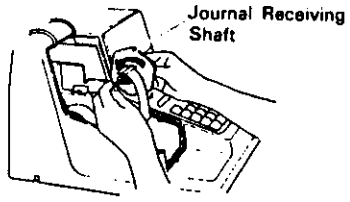


Fig. 11

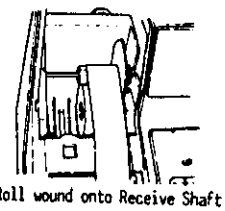


Fig. 12

1. Open the Paper Cover.
2. Depress the [JF] key to advance the journal tape until unprinted part of the paper comes out of the Journal Paper Guide.
3. Lift the printed journal together with the Journal Receiving Shaft and cut the journal paper at the edge of the Journal Paper Guide. (Fig. 10)
4. Remove the printed journal off the Journal Receiving Shaft.
5. Replace the existing journal paper roll with a new roll following the same procedure as for the receipt roll.
6. Depress the [JF] key to advance the journal paper about 20 cm (8").
7. Insert the end of the journal paper into the slot on the Journal Receiving Shaft and wrap it around the shaft twice to secure the paper. (Fig. 11)
8. Place the Journal Receiving Shaft into the guide slots so that the shaft gear engages with the journal take-up motor gear.

REPLACING THE INK ROLLER

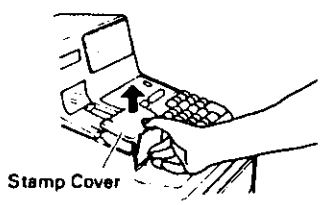


Fig. 13

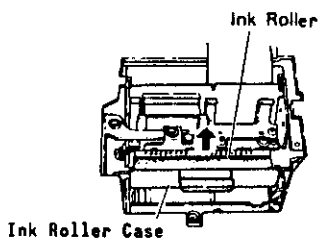


Fig. 14

1. Set the Power Switch to OFF.
2. Remove the stamp cover to gain access to the Ink Roller and Stamp Assembly. (Fig. 13)
3. Pull the Ink Roller Case upwards with your right fingertips. (Fig. 14)
4. When replacing the Ink Roller, use a vinyl glove or cover the Ink Roller using the vinyl strip to prevent inking the hands.

REPLENISHING INK TO THE STORE MESSAGE STAMP

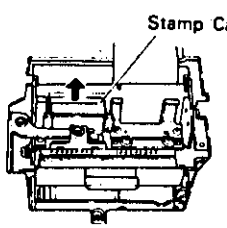


Fig. 15

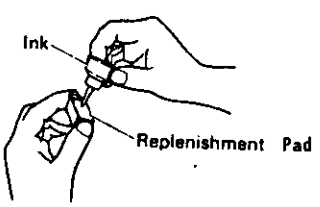


Fig. 16

1. Set the Power Switch to OFF.
2. Pull out the Store Message Stamp upwards. (Fig. 15)
3. Replenish ink to the bottom of the Stamp. (Fig. 16)
   The amount of ink to be replenished should be 2 c.c. or less depending on the intensity of print. (The supplied ink bottle contains 5 c.c. ink.)

WHEN A POWER FAILURE OCCURS

When power is restored, the register will display the last item entered before the power failure if the item was entered through a motorized key (such as [DEPT], media keys, etc.). In this case, contiue the registering operation. However, if the register displays "FAIL" when the power is restored, it indicates that the last item entry was not completed (i.e., only numeric keys or a declaration key such as [RTN MDSE] were operated but not any motorized key). In this case, first depress the [C] key to clear the "FAIL" condition, and then do the registering operation again from the numeric or declaration key entry. In the event of a power failure, be sure to check the receipt before it is handed to the customer.

SPECIFICATIONS

Size	460mm(width) x 400mm(depth) x 364mm(height) (SP MODELS)
Weight	Approx. 18.5 kg (SP MODELS)
Power Required	AC 117V 50/60 Hz (Varies depending on each area.)
Power Consumed	25 W
Size of Receipt and Journal Tape	38mm(width) X 70mm(diameter)
Ambient Temperature	0°C ~ 40°C 10-90% RH

BEFORE CALLING FOR SERVICE

It is your dealer's primary concern to give full satisfaction and better service to our customers. So if any problem arises in connection with the operation of this register, contact your TEC representative listed on the page. However, before calling for service, please check the following points once again.

■ In case the register is inoperative with a blank display and the printer will not turn.

- Is the register power switch turned on?
- Is the power cord of the register connected with the wall socket properly?
- Is AC power applied to the outlet? (Plug in a lamp or light fixture to check.)
- Has the fuse blown, or is the circuit breaker turned off?

■ In case the receipt or journal is not feeding or the receipt is not coming out of the receipt outlet.

- Can the coloured lines on the receipt or journal paper be seen?
  In this case, replace the receipt or journal paper with a new roll immediately.
- The receipt paper is jammed at the receipt cutter. In this case, remove the printer cover and check the installation of the receipt paper.

YOUR TEC REPRESENTATIVE: _____

ADDRESS: _____

PHONE: _____

PROGRAMMING MANUAL

MODEL MA-136-100 SERIES
ORIGINAL APRIL, 1982
(REVISED APRIL, 1983 **)**

DOCUMENT NO. E12-01107-A

TEC TOKYO ELECTRIC CO.,LTD.

PRINTED IN JAPAN
8304500 ©-Ⓓ

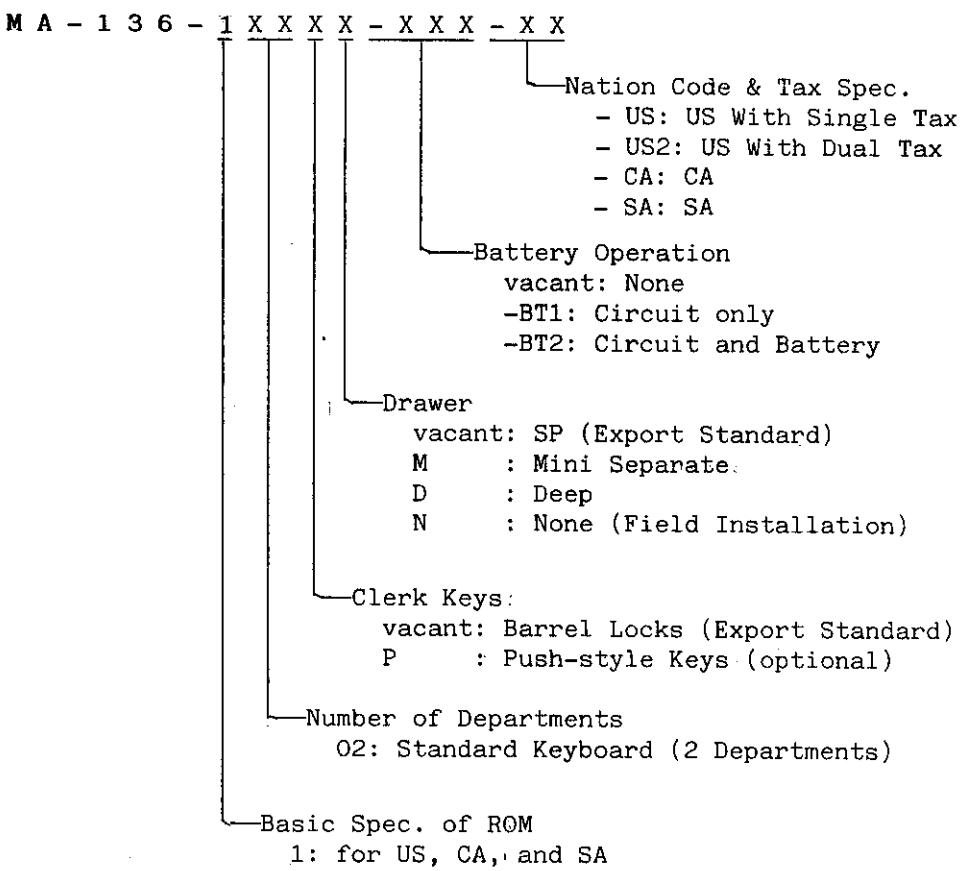
INTRODUCTION

This programming manual is provided for salesmen, field engineers, and other support personnel as a supplemenatary manual for the TEC electronic cash register Series MA-136-100. Reading through the Owners Manual for the series is recommended in order to thorougly understand the descriptions in this manual.

SPECIFICATIONS

MODELS: MA-136-100 Series

Way to assign the several versions of models MA-136-100 Series:



Standard Model: MA-136-102-US (The standard SFKC's are automatically set on this model after a RAM Clear operation.)

SIZE: 460mm(width) x 400mm(depth) x 364mm(height) (SP Size)

WEIGHT: Approx. 18.5kg (SP)

POWER REQUIRED: AC117V 50/60Hz (may vary depending on the area)

POWER CONSUMED: 25W

AMBIENT TEMPERATURE: $0^{\circ}C$ ~ $40^{\circ}C$, 10~90% (RH)

COMPOSING ELEMENTS: MOS-LSI, C-MOS IC, etc.

MAXIMUM NUMBER OF KEYS AVAILABLE ON KEYBOARD:

48 keys

PRINTER

Printer Model: LP-701 (TEC Line Printer)

Print Stations: Two Stations (Receipt and Journal)

Printing Speed: 2.3 lines/sec.

Printable Digits: 11 digits/line (for each of Receipt and Journal)

Character Size: 1.7mm(width) x 3.2mm(height)

Character Spacing: Digit Space -- 3.0mm
Line Space -- 5.4mm(Receipt) 4.5mm(Journal)

Print Drum Configuration:

0	0	0.	0	0	0.	0	0	0	GS	GT
1	1	1.	1	1	1.	1	1	1	CA	TL
2	2	2.	2	2	2.	2	2	2	CH	@
3	3	3.	3	3	3.	3	3	3	CK	CP
4	4	4.	4	4	4.	4	4	4	CR	VD
5	5	5.	5	5	5.	5	5	5	RA	ID
6	6	6.	6	6	6.	6	6	6	PO	RT
7	7	7.	7	7	7.	7	7	7	NS	AT
8	8	8.	8	8	8.	8	8	8	%	CG
9	9	9.	9	9	9.	9	9	9		ST
#	CL	NO	PL	NO	X	Z	kg	CU	TM	+
-	-	-	-	-	-	-	-	ITEM	LB	-
*	*	*	*	*	*	*	*		TX	NS

Receipt and Journal Roll Size:

38mm(width) x 70mm(diameter)

Paper Feed Device: Receipt and Journal have independent feeding devices from each other.

Store Name/Message Stamp Size:

26mm(width) x 11mm(height)

Receipt Cut: Manual-cut Style

Ink Feeding: Fed through a Pad Roller
Color -- violet

Detectors: Journal-near-end Detector (optional)
Validation Slip Detector
Drawer-open Detector

Validation Function: Printable Digits -- 28 digits(See the SPEC.of LP-701)

MEMORY

Totals and Counters:

NAME OF TOTAL	DIGITS(Q'TY)	TYPE OF COUNTER	DIGITS(Q'TY)	REMARKS
GT	16			
NET GT	16			optional print
GS	8	ITEM	4+2	
TAX 1	8			
TAX2	8			for Dual-tax Area only
%+	8	CTR	4	
%-	8 (x2)	CTR	4 (x2)	
DOLL DISC	8	CTR	4	
NEG SALE	8	ITEM	4+2	Sum of Negative DPs
MEDIA TL (TL)	8	CUS TL	4	
CATL	8	CUS	4	
CKTL	8	CUS	4	
CHTL	8	CUS	4	
RA	8	CTR	4	
PO	8	CTR	4	
CAID	8			
CKID	8	CTR	4	
CHID	8	CTR	4	
VD1	8	CTR	4	Item Correct on DP(+)
VD2	8	CTR	4	Item Correct on other items
RTN	8	ITEM	4+2	
TXBL TL1	8			
TXBL TL2	8			for Dual-tax Area only
DP	8 (x15)	ITEM	4+2 (x15)	
PLU		ITEM	5+2 (x50)	
HOURLY	8 (x16)	CUS	4 (x16)	
		NS CTR	4	
		VALI CTR	4	
		Z.CTR	4	
		CONS.CTR	4	
		PLU.Z.CTR	4	

--INDIVIDUAL CASHIER TOTALS--

NAME OF TOTAL	DIGITS	TYPE OF COUNTER	DIGITS	REMARKS
GS	8	ITEM	4+2	
NS	8	ITEM	4+2	
		TL CUS	4	
CAID	8			
CKID	8			
CHID	8			
NEG 1	8			
NEG 2	8			
PO	8			
TAX	8			
		Z CTR	4	

Memory Balance:

1. GT = $\sum$GS

2. NET GT = $\sum$TL

3. GS = $\sum$DP + TAX1 + TAX2 + (%+) + (%- on DP+ Items)
   + $\sum$DP(-) + VD1 + RTN

4. NS with TAX = $\sum$DP + TAX1 + TAX2 + %+
   = GS - (%- on DP+ Items) - $\sum$DP(-) - VD1 - RTN
   *NOTE 1

5. TL = CATL + CKTL + CHTL
   = NS with TAX - (%- on ST) - (DOLL DISC)
   **NOTE 2

6. $\sum$HOURLY = NS with TAX (for US Models)
   $\sum$HOURLY = NS without TAX (for CA Models)

7. $\sum$CLK NEG 1 = NEG SALE + VD1 + RTN + (%- on DP+ Items)
   *NOTE 1

8. $\sum$CLK NEG 2 = (%- on ST) + (DOLL DISC) + VD2
   **NOTE 2

*NOTE 1: "DP+ Items" describes positive department entries.
**NOTE 2: "ST" describes sub-total entries.

TABLE OF PROGRAMMING OPERATIONS

RAM CLEAR AND STATUS CLEAR OPERATION

1. Turn the Power Switch to OFF.
2. Turn the RAM Clear Switch to ON.
3. Turn all the Clerk Keys to OFF for a RAM Clear. Or turn one of the clerk keys to ON for a Status Clear.
4. Turn the Mode Lock to any one of the positions below:
   SET, LOCK, MGR, [-], Z ..... (for zero suppress of 0.00)
   (**NOTE**: If the Mode Lock is turned to other positions, the zero suppress will be as follows:
   REG ..... for zero suppress of 0 as in IT or JA version
   X ..... for zero suppress of 0.0 as in TA version)
5. Turn the Power Switch to ON.
   Now a RAM Clear operation is fininshed and the Standard S.F.K.C. have automatically been programmed. ("Standard S.F.K.C" is shown as the STANDARD KEYBOARD LAYOUT in the OWNERS MANUAL.)
6. Keep the RAM Clear Switch to ON if a SFKC programming (to change partly or entirely from the Standard S.F.K.C. feature) follows. Turn the RAM Clear Switch to OFF if not.

S.F.K.C. (Selective Function Key Code) SETTING (Condition: after a Z reset & a PLU reset)

This operation must be carried out first before any other programming operations. If a RAM Clear operation has been done prior to this operation, the S.F.K.C.'s of the Standard Keyboard should have automatically been set; therefore, this operation may not be necessary and the MEMORY OPEN operation will follow. However, in case any keys or positions are to be programmed differently from the Standard Keyboard, this S.F.K.C. operation must be done.

1. Turn the Power Switch to OFF.

2. Turn the RAM Clear Switch to ON.

3. Set the Clerk 2 Key to ON position.
   (Please note that if none of the Clerk Keys are set to ON, a RAM Clear operation will be performed.)

4. Turn the Mode Lock to SET position.

5. Turn the Power Switch to ON.

6. Enter each S.F.K.C. shown in the S.F.K.C. table and then depress the key to require the function indicated with that S.F.K.C.

   Repeat this step until all the required keys to be programmed or changed with their own S.F.K.C.'s.

   Please note:

   (1) The [C] key should be programmed first of all.

   (2) To enable other programming and registering operation rightly, the following keys must be programmed regardless of other key selections:

   [C], [X], [AT/TL], [ST], [#] or [#/NS], [TX1/M] (or [TX/M]), and Department Keys.

7. When all the necessary S.F.K.C.'s are set, turn the RAM Clear Switch to OFF.

NOTE: 1) If a wrong S.F.K.C. has been set on a key, do the operation in Step 6 again with the correct S.F.K.C. and then depress the key. The last S.F.K.C. entry into each key will be effective.

2) To cancel and close the use of a key, enter "0" instead of an S.F.K.C. before depressing the key, in Step 6. The S.F.K.C. of "0" locks the key and will not allow its use. (In this case, its memory will be closed also.)

3) To verify the S.F.K.C. already set, simply depress each of the desired key without any number entry in Step 6 condition. The S.F.K.C. is displayed but not printed.

4) The memory of each key that has been set in this S.F.K.C. SETTING operation is automatically opened. If a key's SFKC is again changed in this operation, the memory of its ild function is closed and the memory for its new function is opened.
5) If a key is closed, all the memories of the functions that have been opened for the key are closed.

S.F.K.C.	KEY SYMBOL	KEY NAME	MEMORY TO BE OPENED
0			for non-use, memory is closed
1 ~ 15	DEPT 1 ~ DEPT 15	Department Keys	Each DEPT. ITEM COUNT and TOTAL
51 ~ 53	-- vacant --		
54	DOLL DISC	Dollar Discount	DOLL DISC
55	%-		%-
56	%+		%+
57	RTN MDSE	Returned Merchandise	RTN
58	ITEM CORR	Item Correct	VD1 VD2
59 ~ 60	-- vacant --		
61	AT/TL	Amount Tendered/ Cash Total	CATL, CAID
62	CHK TND	Check Tendered	CKTL, CKID
63	Chg	Charge Total	ChgTL, ChgID(optional)
64	-- vacant --		
65	ST	Sub-total	No memory
66	R/A	Received on Account	RA
67	PO	Paid Out	PO
68	NS	No-sale	NS CTR(optional)
69	PR OPEN	Preset Open	No memory
70	LC OPEN	Listing Capacity Open	No memory
71	OPEN	Preset/Listing Capacity Open	No memory
72	VALIDATE	Validation	VALI CTR
73	# or #/CID	Non-add Number	No memory
74	#/NS	Non-add Number/ No-sale	NS CTR(optional)
75	PLU	Price-Look-Up	All 50 PLUs' memories
76	X	Quantity Extension	No memory

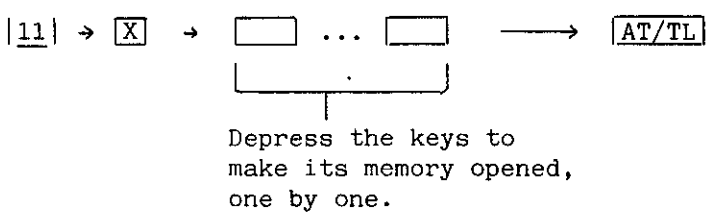
S.F.K.C. TABLE --Continued--

S.F.K.C.	KEY SYMBOL	KEY NAME	MEMORY TO BE OPENED
77	-- vacant --		
78	C	Clear	No memory
79	TX1/M (or TX/M)	Tax 1 Modifier	TAX1, TXBL TL1
80	TX2/M	Tax 2 Modifier	TAX2, TXBL TL2
81	TXBL TL	Taxable Total	No memory
82	TAX	Manual Tax	TAX2
83 ~ 95	-- vacant --		

MEMORY OPEN (Condition: after a Z reset)

Mode Lock: SET (RAM Clear Switch to OFF)

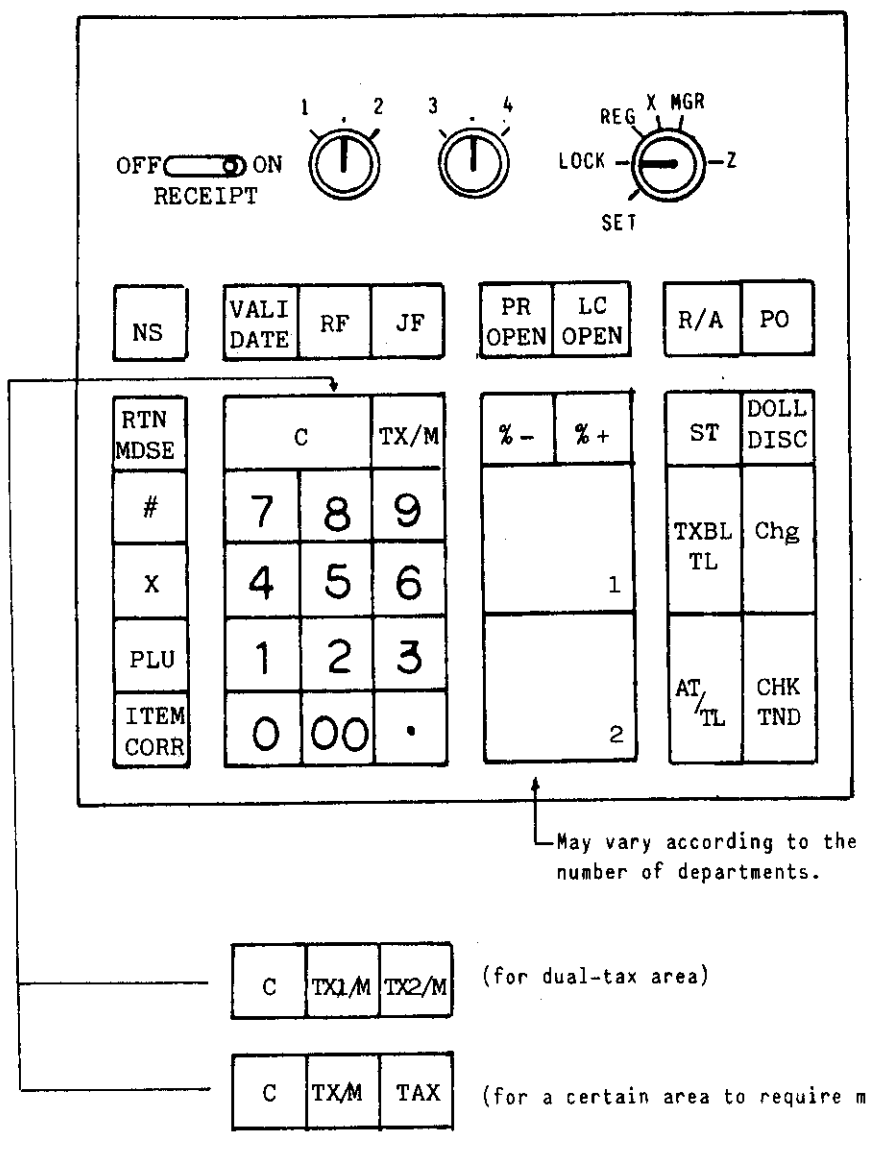
Key Operation



NOTES: 1. If a key with no memory to be opened is depressed in the above operation, it will not result in an error. However, depressing the numeric keys or the [.] key will result in an error.
2. The keys that have been operated to set their own SFKCs in the last operation have already their memories opened. Those keys, therefore, need not be depressed in the above operation.
3. Refer to the S.F.K.C. TABLE as to each key and its memory to be opened.
4. This operation is provided to open memories of the keys that have automatically been set by a RAM Clear operation. Therefore, the keys that have been programmed with the SFKC of "0" (to lock the key and close its memory) or the keys that are not programmed in the automatic SFKC by the RAM Clear will not be opened by this operation.

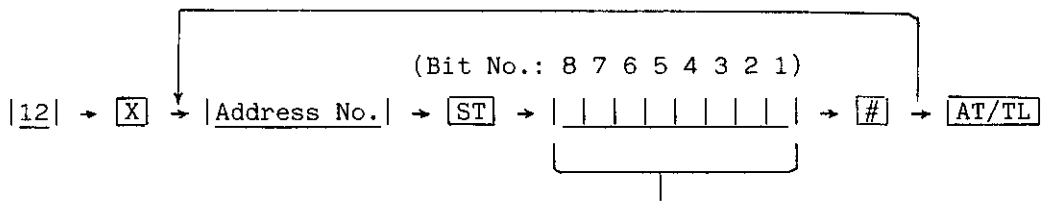
KEYBOARD LAYOUT

MA-136-102-US (Standard Keyboard)



SYSTEM OPTION PROGRAMMING (Condition: after a Z reset)

Mode Lock: SET Key Operation



Enter a 8-digit number composed of "0" or "1" on each digit as each Bit status selection. Top "0"s (on Bit No.8 and/or thereafter), if any, may be omitted when entering the 8-digit number.

NOTES: 1. Any Bit No. with the "--vacant--" item will be disregarded if entered with a "0" or "1". However, enter "0" for such a Bit in order to adjust the position of each Bit.

2. When a RAM Clear is operated, the status of each Bit No. is automatically set to the side marked with "*" in the "Standard Status" column of each table below. So, only the Bit status changes of the required Address(es) may be entered according to your customer's requirements.

SYSTEM OPTION TABLES

Address No.	Contents
1	MEDIA FUNCTION 1

Bit No.	Item		Selective Status	Standard Status	Remarks
1	CASH MEDIA KEY	0		*	If both " 0 ", it functions as TENDER and TOTAL Key.
		1	TOTAL KEY only		
2	CASH MEDIA KEY	0		*	
		1	TENDER KEY only		
3	--vacant--	0			
		1			
4	--vacant--	0			
		1			
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	--vacant--	0			
		1			

Address No.	Contents
2	MGR REQUIREMENT I

Bit No.	Item	Selective Status		Standard Status	Remarks
1	RTN MDSE	0	FREE	*	
		1	COMPULSORY		
2	PO	0	FREE	*	
		1	COMPULSORY		
3	DOLL DISC	0	FREE	*	
		1	COMPULSORY		
4	Negative DEPT	0	FREE	*	—Fixed Status (No selection available.)
		1	COMPULSORY		
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	--vacant--	0			
		1			

Address No.	Contents
3	VALIDATION COMPULSORY I

Bit No.	Item	Selective Status		Standard Status	Remarks
1	RTN MDSE	0	FREE	*	
		1	COMPULSORY		
2	PO	0	FREE	*	
		1	COMPULSORY		
3	R/A	0	FREE	*	
		1	COMPULSORY		
4	CHK IND	0	FREE	*	
		1	COMPULSORY		
5	Chg	0	FREE	*	
		1	COMPULSORY		
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	--vacant--	0			
		1			

Address No.	Contents
4	VALIDATION COMPULSORY II

Bit No.	Item		Selective Status	Standard Status	Remarks
1	ITEM CORR	0	FREE	*	
		1	COMPULSORY		
2	DOLL DISC	0	FREE	*	
		1	COMPULSORY		
3	%-	0	FREE	*	
		1	COMPULSORY		
4	Negative DEPT	0	FREE	*	
		1	COMPULSORY		
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
5	FRACTION ROUNDING

Bit No.	Item		Selective Status	Standard Status	Remarks
1	QUANTITY EXTENSION PRODUCT [1]	0		*	If both " 0 ", it will be rounded off
		1	ROUND UP		
2	QUANTITY EXTENSION PRODUCT [1]	0		*	
		1	DISCARD		
3	--vacant--	0			
		1			
4	--vacant--	0			
		1			
5	-- vacant --	0			
		1			
6	--vacant--	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

NOTE [1]: The rounding rule to be designated here will also applies to the % calculations.

Address No.	Contents
6	TAX 1 STATUS

Bit No.	Item	Selective Status		Standard Status	Remarks
1	[%+]	0	NON-TAXABLE	*	
		1	TAXABLE		
2	[%-]	0	NON-TAXABLE	*	
		1	TAXABLE		
3	[DOLL DISC]	0	NON-TAXABLE	*	
		1	TAXABLE		
4	--vacant--	0			
		1			
5	--vacant--	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
7	TAX 2 STATUS

For Dual-tax Area Only

Bit No.	Item	Selective Status		Standard Status	Remarks
1	[%+]	0	NON-TAXABLE	*	
		1	TAXABLE		
2	[%-]	0	NON-TAXABLE	*	
		1	TAXABLE		
3	[DOLL DISC]	0	NON-TAXABLE	*	
		1	TAXABLE		
4	--vacant--	0			
		1			
5	--vacant--	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
8	MEDIA FUNCTION I

Bit No.	Item	Selective Status		Standard Status	Remarks
1	CREDIT BALANCE (REG MODE)	0	PROHIBIT	*	*NOTE
		1	ALLOW (in REG Mode)		
2	CREDIT BALANCE (MGR MODE)	0	PROHIBIT		Fixed Status (Always allow in MGR mode)
		1	ALLOW (in MGR Mode)	*	
3	-- vacant --	0			
		1			
4	CHECK CASHING	0	ALLOW	*	Check cashing will also increments the No-sale Counter.
		1	PROHIBIT		
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	--vacant--	0			
		1			

*NOTE: The "CREDIT BALANCE" is a balance of sale to result in a negative amount. For example, if an amount exceeding the sale total is discounted through the [DOLL DISC] key within the sale is entered, the sale balance will then go into negative.
(However, any negative balance due to the use of the [RTN MDSE] key can be finalized regardless of the "CREDIT BALANCE" option selection.)

Address No.	Contents
9	FUNCTION I

Bit No.	Item	Selective Status		Standard Status	Remarks
1	ST PRINT	0	PRINT	*	
		1	NON-PRINT		
2	Second [ST] depression after additional entries	0	Sub-total from the first item		The displayed amount will be the sub-total from the first in either status.
		1	Sub-total of additional items	*	
3	[TXBL TL] depression before finalization	0	FREE	*	
		1	COMPULSORY		
4	R/A FINALIZATION BY [Chg]	0	ALLOW		
		1	PROHIBIT	*	
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	--vacant--	0			
		1			

Address No.	Contents
10	FUNCTION II

Bit No.	Item		Selective Status	Standard Status	Remarks
1	-- vacant --	0			
		1			
2	-- vacant --	0			
		1			
3	--vacant--	0			
		1			
4	--vacant--	0			
		1			
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	DUAL-TAX PRINT	0	(TX1+TX2) TOGETHER	*	Fixed Status (Always print TOGETHER.)
		1	SEPARATE PRINT		

Address No.	Contents
11	FUNCTION III

Bit No.	Item		Selective Status	Standard Status	Remarks
1	FREQUENCY DEPARTMENT(report)	0	ITM CTR and AMOUNT	*	
		1	CUS CTR and AMOUNT		
2	ITEM COUNTER PRINT ON RECEIPT	0	NOT PROVIDED	*	
		1	PROVIDED		
3	--vacant--	0			
		1			
4	ITEM PRINT ON JOURNAL	0	IPD (Print)	*	
		1	INPD (non-print)		
5	TIME PRINT	0	PRINT	*	
		1	NON-PRINT		
6	TIME DISPLAY	0	AVAILABLE	*	Displays the time when the Mode Lock is in the "LOCK" position.
		1	NOT AVAILABLE		
7	DRAWER COMPULSORY	0	NOT PROVIDED	*	ECR with "DRAWER COMPULSORY" function can only be set with the "1" status.
		1	PROVIDED		
8	-- vacant --	0			
		1			

Address No.	Contents
12	FUNCTION IV

Bit No.	Item	Selective Status		Standard Status	Remarks
1	-- vacant --	0			
		1			
2	--vacant--	0			
		1			
3	--vacant--	0			
		1			
4	-- vacant --	0			
		1			
5	--vacant--	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
13	PRINT FORMAT I

Bit No.	Item	Selective Status		Standard Status	Remarks
1	DATE ORDER	0			┐If both " 0 ", YEAR-MONTH-DAY order.
		1	MONTH-DAY-YEAR	*	┘
2	DATE ORDER	0		*	
		1	DAY-MONTH-YEAR		
3	CONSECUTIVE No. PRINT	0	PRINT	*	—Fixed Status (Always PRINT)
		1	NON-PRINT		
4	GT PRINT	0	PRINT	*	
		1	NON-PRINT		
5	NET GT PRINT	0	PRINT		
		1	NON-PRINT	*	—Fixed Status (Always NON-PRINT)
6	NET SALE(WITH TAX) PRINT	0	PRINT	*	
		1	NON-PRINT		
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
14	PRINT FORMAT II

Bit No.	Item	Selective Status		Standard Status	Remarks
1	NET SALE(WITHOUT TAX) PRINT	0	PRINT		
		1	NON-PRINT	*	
2	SUM OF NEGATIVE DEPARTMENTS	0	PRINT		
		1	NON-PRINT	*	
3	Chg-in-drawer PRINT	0	PRINT		
		1	NON-PRINT	*	
4	-- vacant --	0			
		1			
5	--vacant--	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
15	VALIDATION

Bit No.	Item	Selective Status		Standard Status	Remarks
1	SINGLE or MULTI VALIDATION	0	SINGLE	*	
		1	MULTI		
2	DATE PRINT	0	PRINT	*	
		1	NON-PRINT		
3	CONSECUTIVE NO. PRINT	0	PRINT	*	—Will print MONTH, DAY, and the lowest 3 digits of CONSECUTIVE NO.
		1	NON-PRINT		
4	AMOUNT PRINT POSITION	0	JOURNAL SIDE	*	If this option is "1", Bits No.2 and No.3 are disregarded.
		1	RECEIPT SIDE		
5	--vacant--	0			
		1			
6	--vacant--	0			
		1			
7	--vacant--	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
16	CLERK SPEC.

Bit No.	Item	Selective Status		Standard Status	Remarks
1	CLERK 1 MEMORY OPEN	0	OPEN	*	
		1	CLOSE		
2	CLERK 2 MEMORY OPEN	0	OPEN	*	
		1	CLOSE		
3	CLERK 3 MEMORY OPEN	0	OPEN	*	
		1	CLOSE		
4	CLERK 4 MEMORY OPEN	0	OPEN	*	
		1	CLOSE		
5	-- vacant --	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
17	SECURITY OPTION I

Bit No.	Item	Selective Status		Standard Status	Remarks
1	NO-SALE COUNTER	0	NOT PRIVIDED	*	
		1	PROVIDED		
2	NO-SALE ENTRY AFTER NON-ADD #	0	FREE	*	
		1	PROHIBIT		
3	NON-ADD # ENTRIES WITHIN A SALE	0	As many times as required	*	
		1	Only once		
4	-- vacant --	0			
		1			
5	-- vacant --	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
18	SECURITY OPITON II

Bit No.	Item	Selective Status		Standard Status	Remarks
1	RECEIPT FEED DURING A SALE	0	FREE	*	
		1	PROHIBIT		
2	-- vacant --	0			
		1			
3	-- vacant --	0			
		1			
4	-- vacant --	0			
		1			
5	--vacant--	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8.	-- vacant --	0			
		1			

Address No.	Contents
19	MARKET SPECIALTY

Bit No.	Item	Selective Status		Standard Status	Remarks
1	-- vacant --	0			
		1			
2	-- vacant --	0			
		1			
3	TAX PRINT ON CLERK REPORTS	0	NON-PRINT	*	
		1	PRINT		
4	CA BALANCE	0	NOT AVAILABLE	*	
		1	AVAILABLE		—for CANADA models
5	CA TAX (Non-txbl Items TL Print)	0	NOT AVAILABLE	*	
		1	AVAILABLE		—for CANADA models
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
20	HARDWARE TYPE I

Bit No.	Item		Selective Status	Standard Status	Remarks
1	PRINT MOTOR DRIVE TIME	0		*	Maximum 75 seconds may be obtained by combining those Bits.
		1	Approx.5 seconds		
2	PRINT MOTOR DRIVE TIME	0			
		1	Approx.10 seconds	*	
3	PRINT MOTOR DRIVE TIME	0			
		1	Approx.20 seconds	*	
4	PRINT MOTOR DRIVE TIME	0		*	
		1	Approx.40 seconds		
5	CUSTOMER DISPLAY	0	NORMAL	*	Fixed Status. Always NORMAL-Type display. No PUT-AWAY type is possible.
		1	PUT-AWAY		
6	--vacant--	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

Address No.	Contents
21	HARDWARE TYPE II

Bit No.	Item		Selective Status	Standard Status	Remarks
1	MULTIPLE DRAWERS	0	SINGLE DRAWER	*	
		1	MULTIPLE DRAWERS		
2	PRINTER FEED TYPE	0	R.J. FEED	*	(LP-701 TYPE)
		1	RF, JF		(LP-601 TYPE)
3	RECEIPT FEED PULSE	0	NOT PROVIDED	*	(LP-701 TYPE)
		1	PROVIDED		(LP-601 TYPE)
4	--vacant--	0			
		1			
5	-- vacant --	0			
		1			
6	-- vacant --	0			
		1			
7	-- vacant --	0			
		1			
8	-- vacant --	0			
		1			

SETTING OR CHANGING THE STORE/REGISTER NUMBER (Condition: after an AUTO SCAN Z report)

Mode Lock: SET Key Operation

|NUMBER| → [#]
(0 ~ 999999 max.6 digits)

NOTE: The [.] key is not allowed in the number entry.

SETTING THE DATE (Condition: anytime outside a sale)

Mode Lock: SET Key Operation

|6| - [X] → |MONTH| DAY |YEAR| → [AT/TL]

1 or 2 digits (1 ~ 12)
2 digits (01 ~ 31)
2 digits (82, 83, etc.)

SETTING THE TIME (Condition: aytime outside a sale)

Mode Lock: SET Key Operation

|5| → [X] → | HOUR |MINUTE| → [AT/TL]

1 or 2 dig. (0~23)
2 digits (00~59)

SETTING INDIVIDUAL DEPARTMENT STATUS (Condition: after an AUTO SCAN Z report; also requires a PLU Z report if the positive/negative status is to be changed also)

Mode Lock: SET Key Operation:

|1| → [X] → → ([TX/M]) for single-tax status change →
→ ([TX1/M]) for TAX1 status change → ([TX2/M]) for TAX2 status change →
→ ([RTN MDSE]) for positive/negative status change → [DEPT] → [AT/TL]

(Repeat until all the required DEPTs are set or changed with the status.)

NOTES: 1. Among [TX1/M] ([TX/M]), and [TX2/M] keys, depress the key(s) for the required status change(s) for each department. The [RTN MDSE] is depressed to set or reset the negative DEPT status.

2. Depressing any of the three keys above, the related status reverses. For example, depressing the [TX/M] reverses a non-taxable DEPT to a taxable, or taxable to non-taxable. Each department status is read by the number indicated on the display when each department key is depressed in the above operation. The numbers and their respective statuses are:

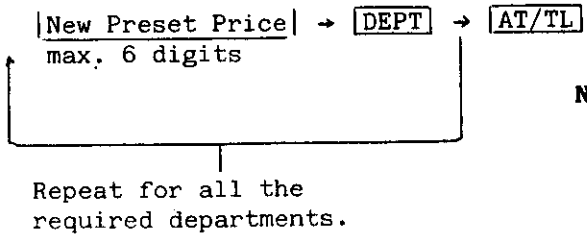
   0: Non-taxable
   1: Tax 1 only
   2: Tax 2 only
   3: Tax 1 and Tax 2

   Watching the number, adjust the status by depressing those keys. See the examples below:

STATUS NUMBER BEFORE CHANGE	→	KEY-IN FOR CHANGE PRIOR TO [DEPT] KEY	→	NEW NUMBER AND STATUS OBTAINED
0	→	[TX1/M]	→	1(Tax1 only)
0	→	[TX1/M] [TX2/M]	→	3(Tax1 and Tax2)
0	→	[TX2/M]	→	2(Tax2 only)
		⋮ etc.		
1	→	[TX1/M]	→	0(Non-taxable)
1	→	[TX2/M]	→	3(Tax1 and Tax2)
1	→	[TX1/M] [TX2/M]	→	2(Tax2 only)
		⋮ etc.		
2	→	[TX2/M]	→	0(Non-taxable)
2	→	[TX1/M]	→	3(Tax1 and Tax2)
3	→	[TX1/M]	→	2(Tax2 only)
		⋮ etc.		

SETTING OR CHANGING DEPARTMENT PRESET PRICE (Condition: anytime outside a sale)

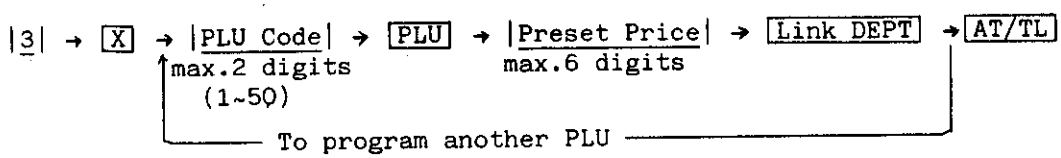
Mode Lock: SET Key Operation



NOTES:
1. To preset the price of "0", enter "0" in place of the price entry in the above operation.
2. If no price is entered in the above operation, the department is set as an open department.

PROGRAMMING PLU TABLE (Condition: after a PLU RESET to renew the PLU table, or anytime outside a sale to program additional PLUs)

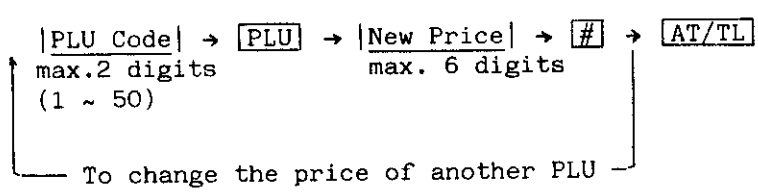
Mode Lock: SET Key Operation



NOTES:
1. No PLUs can be programmed to link a negative department.
2. A maximum of 50 PLUs may be programmed.
3. The PLUs that have not been programmed with a preset price in the above operation are automatically set as PLUs with the preset price of "0".
4. The tax status of each PLU is automatically determined by the status of the linked Department.

CHANGING PLU PRESET PRICE (Condition: anytime outside a sale)

Mode Lock: SET Key Operation



NOTE: In this operation, changes of link departments, programming additional PLUs, etc. are not possible.

NOTE: Even if a PLU has been set without its linked department, this PLU Preset Price Change operation can be done to the PLU. However, no registering into this PLU will be possible any way because no linked department has been set to this PLU.

PROGRAMMING TAX TABLE (Condition: after an AUTO SCAN RESET)

Mode Lock: SET

1) TAX 1 FULL BREAKS

Key Operation: |max. amount non-taxable| → [TX1/M]
|max. amount for 1¢ tax levied| → [TX1/M]
|max. amount for 2¢ tax levied| → [TX1/M]
⋮ ⋮
Repeat until the "A" Break is entered.
⋮ ⋮
|max. amount for N¢ tax levied| → [TX1/M] ..."A" Break
[ST] (to indicate the "A" Break entry)

|max. amount for N+1¢ tax levied| → [TX1/M]
|max. amount for N+2¢ tax levied| → [TX1/M]
⋮ ⋮
Repeat until the "B" Break is entered.
[AT/TL] (to end)

NOTE: The amount entry may be maximum 4-digit value (up to 9999¢).

2) TAX 1 "A" BREAK AND % RATE COMBINATION

Key Operation: First set the "A" Break following the same operation up to the "A" Break entry and the [ST] key depression in "1) TAX 1 FULL BREAKS" above.

↓

|TAX RATE applied when exceeding the "A" Break amount|

(max. 4 digits, up to 99.99%. Do not use the [.] key. The fraction of the amount resulted from this % rate calculation will be rounded off.)

↓

[AT/TL] (to end)

3) TAX 1 % RATE ONLY

Key Operation: |0| → [TX1/M] → [ST] → |TAX RATE| → [AT/TL]
(The conditions of the rate are the same as the above TAX RATE.)

NOTES: 1. If only one tax modifier key ([TX/M]) is installed on the keyboard, use the [TX/M] in place of the [TX1/M] in the description 1), 2), or 3) above.

2. For TAX 2 Table programming, follow the same procedure in the 1), 2), or 3) above, using the [TX2/M] instead of the [TX1/M].
3. If both TAX 1 and TAX 2 tables are programmed, the TAX 1 must be set first. The TAX 1 table entry will automatically reset both the TAX 1 and TAX 2 tables that have been programmed.
4. No second depression of the [ST] key is allowed within one tax table programming.

SETTING NON-TAXABLE LIMIT AMOUNT (for a certain area only)
(Condition: after an AUTO SCAN RESET)

This may be programmed only when one tax modifier key ([TX/M]) is installed. The tax levied when exceeding this limit amount will be calculated by the TAX 1 table.

Mode Lock: SET Key Operation:

|9| → [X] → |Non-taxable Limit Amount| → [AT/TL]

NOTES: 1. If this program has been set, the tax is calculated and added to the sale total which exceeds the limit amount even when the sale is entirely composed of non-taxable items.
2. To reset the limt amount once set, enter "0" in place of the |Non-taxable Limit Amount| in the above operation.
3. This tax calculation program will be disregarded when the sale total turns out to be negative.

ex.) In case the limit amount "$3.25" is set:

Case 1: Normal Department Entry: (Mode Lock: REG)

|326| → [non-taxable DEPT] → [AT/TL]

..... The entered amount $3.26 is greater than the limit amount $3.25. It will therefore be taxed.

Case 2: Returned Merchandise Entry: (Mode Lock: REG)

[RTN MDSE] → |326| → [non-taxable DEPT] → [AT/TL]

..... The non-taxable total is negative. The tax already levied will therefore not be returned.

SETTING THE LISTING CAPACITY OF DEPARTMENT (Condition: after an AUTO SCAN RESET)

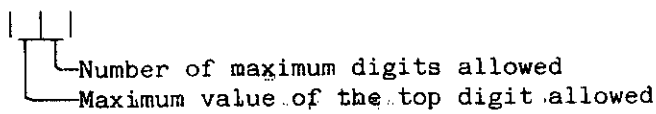
Mode Lock: SET Key Operation

|2| → [X] → |HALC| *(Note 1) → [AT/TL] ... for the common listing capacity for all the departments

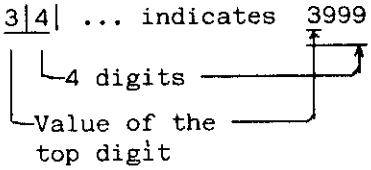
|2| → [X] → |HALC| *(Note 1) → [DEPT] → [AT/TL] ... for individual departments' listing capacities

Repeat until all the required indiv. dept. Listing Capacities are set.

***Note 1:** HALC ..... Hight Amount Listing Capacity



ex.) |3|4| ... indicates 3999



The amount range allowed to enter will be:

Equal to or smaller than the HALC (3999 in this case).

NOTES: 1. If the individual listing capacity of a department has been set, it prevails over the common listing capacity of all the departments.

2. To reset an individual listing capacity, enter "0" before the [DEPT] key in the above operation. Then the common listing capacity of all the departments, if pre-programmed, will prevail.

SETTING THE PRESET RATES OF [%+] AND [%-] KEYS (Condition: anytime outside a sale)

Mode Lock SET Key Operation

1) To set a rate of integral value:

|RATE| → [%+]

|RATE| → [%-]

2) To set a rate containing the decimal point:

|Integral Portion| [.] |Decimal Portion| → [%+] / [%-]

max. 2 digits max. 3 digits

(up to 99.999%)

3) To reset the rate once set:

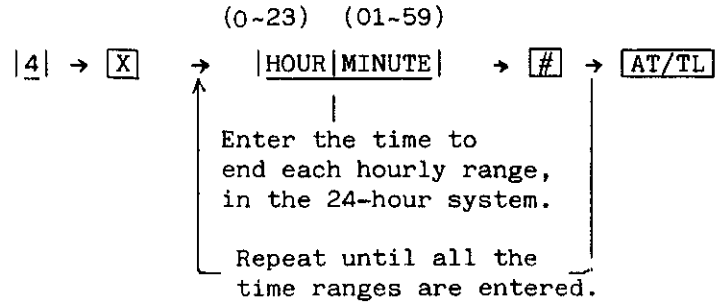
|0| → [%+]

|0| → [%-]

SETTING HOURLY RANGES (Condition: after an AUTO SCAN RESET)

Mode Lock: SET

Key Operation

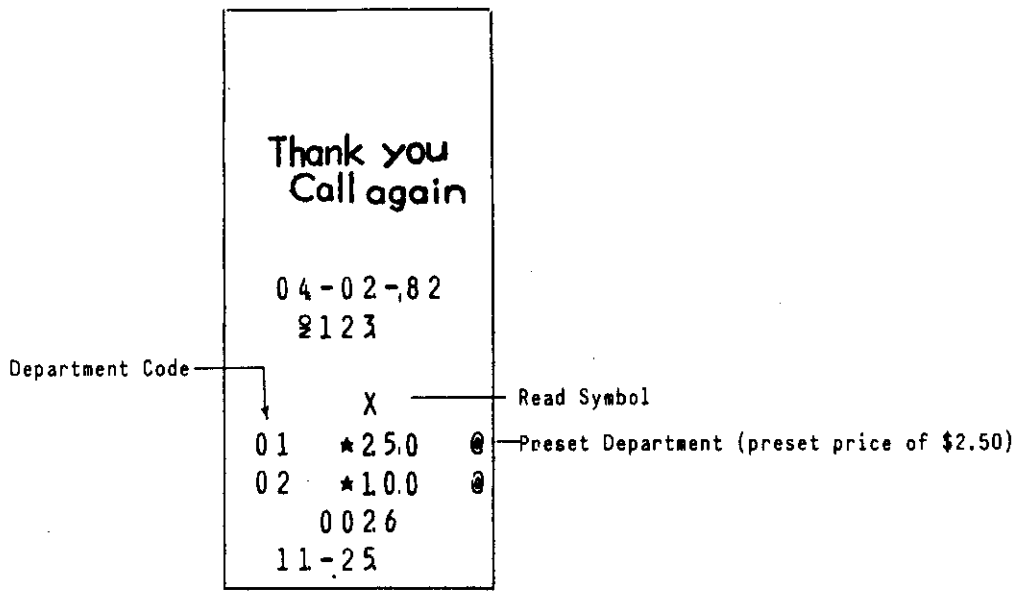


NOTES: 1. A maximum of 16 hourly ranges may be set.
2. To change the table of hourly ranges once set, partially or entirely, do the entire setting operation over again.
3. To reset the hourly range table once set:
   Mode Lock: SET, |4|→[X]→|0|→[#]→[AT/TL]
4. Do not set an hourly range accross 24:00, such as "from 23:00 to 1:00".

VERIFICATION OF PROGRAMMED DATA

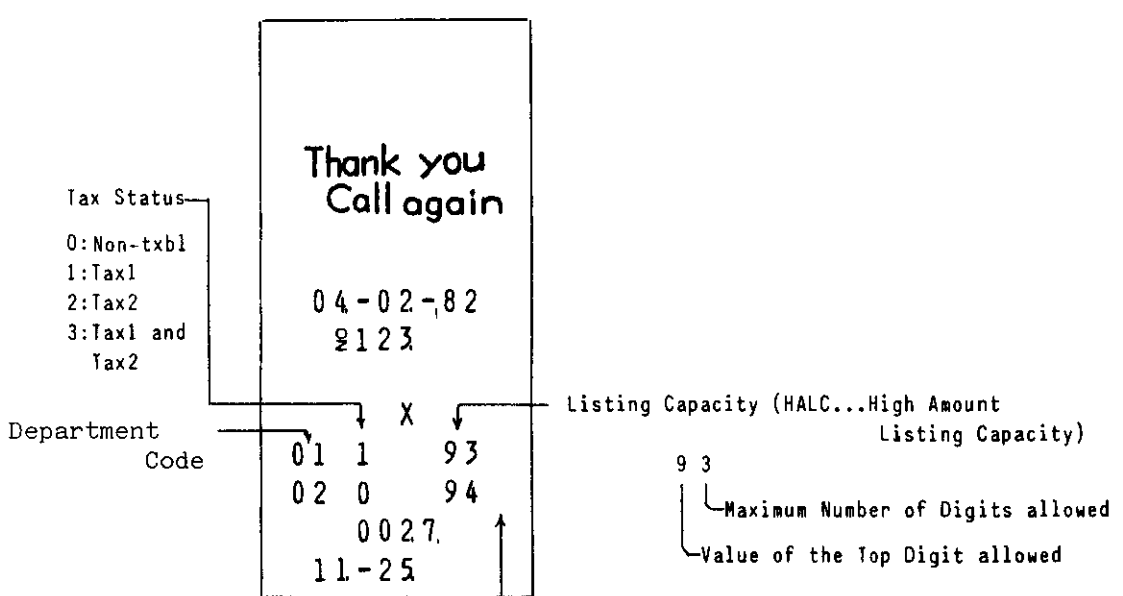
1. DEPARTMENT PRESET PRICE READ

Mode Lock: X Key Operation: |1| → [ST]



2. DEPARTMENT LISTING CAPACITY AND STATUS READ

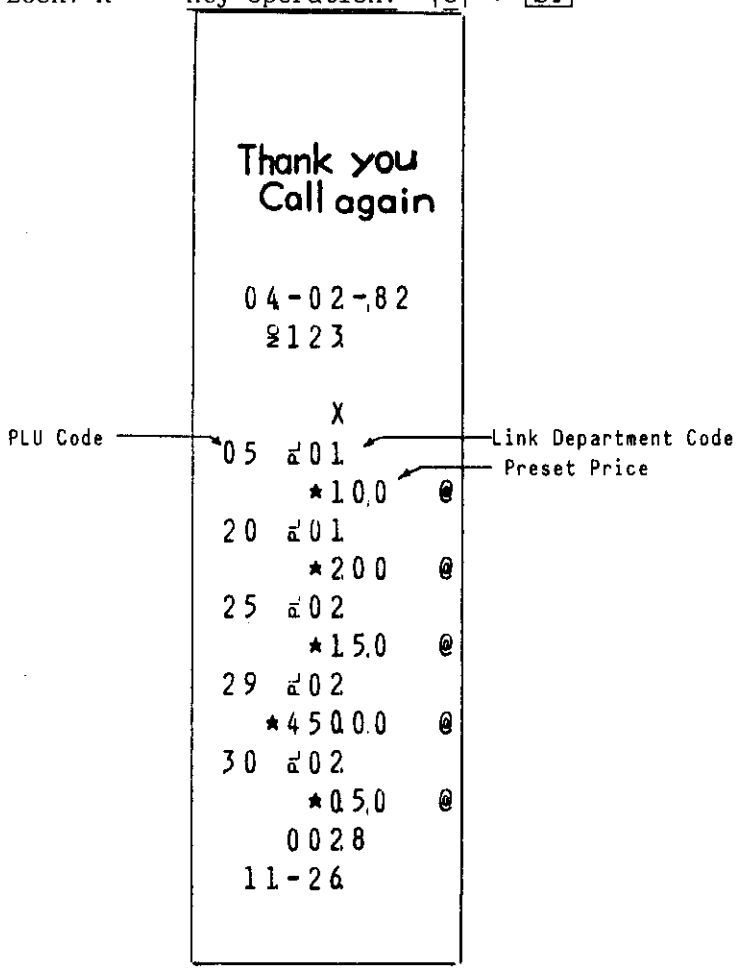
Mode Lock: X Key Operation: |2| → [ST]



NOTE:
The Listing Capacity of "00" indicates that no HALC has been set on that department.

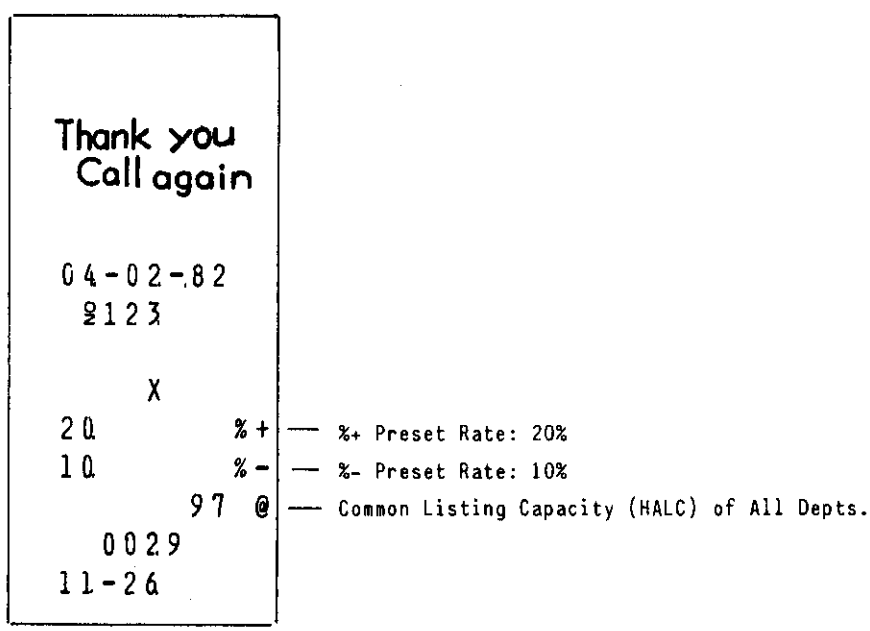
3. PLU TABLE READ

Mode Lock: X Key Operation: |3| → [ST]



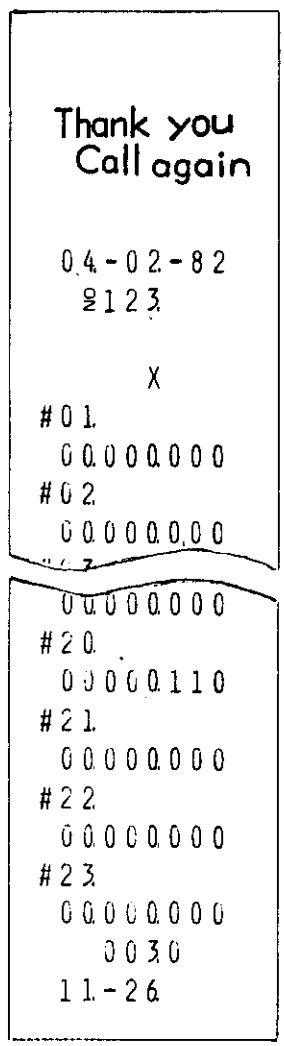
4. OTHER PRESET DATA READ

Mode Lock: X Key Operation: |4| → [ST]



5. SYSTEM OPTION READ

Mode Lock: X |9| → [ST]



6. TESTING TAX CALCULATION

Mode Lock: X Key Operation: |AMOUNT TO TEST| → [TXBL TL]

(Repeat this operation, alternating the amount entry with various amounts.)

Amount entered → Tax due (Tax1 and Tax2 together) displayed

(No receipt is issued.)

REMOTE SLIP PRINTER

The following is the table of the Remote Slip Printer DIP Switches and the respective print data when each switch is set to the 'ON' side.

DIP SW	PRINT CONTENT AND TRANSACTION
0	Read(X), Reset(Z), Programming, No-sale
1	Store/Register No.
2	Date
3	Consecutive No.
4	Time
5	ITEM CORR, DOLL DISC, %+, %-,
6	DP, PLU, RTN MDSE,
7	R/A, PO, POTL
8	#, ST
9	
A	CG
B	CA, AT
C	CHECK
D	Chg
E	
F	TAX, TL

NOTE: Validation print data will not be printed on the remote slip.