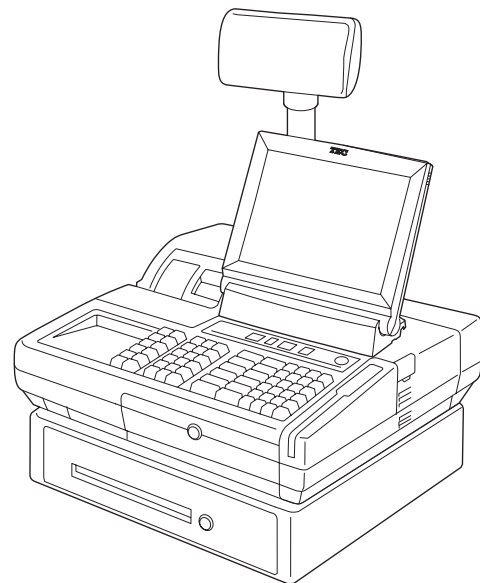**TEC**

TEC POS Terminal

ST-6400 SERIES

Owner's Manual

TOSHIBA TEC CORPORATION

CE Compliance (For EU only)

This product complies with the requirements of EMC and Low Voltage Directives including their amendments.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Warnung

Dies ist ein Klasse A Produkt. In einer örtlichen Umgebung kann dieses Gerät Funkstörungen verursachen.

ATTENTION

Ce produit est de classe A. Dans un environnement domestique, il peut causer des interférences radio. Auquel cas, l'utilisateur sera amené à prendre les mesures adéquates.

Atención

Este es un producto de la clase A. En ambientes domésticos éste producto puede causar radio interferencias en cuyo caso el usuario deberá tomar las medldas oportunas.

VERWITTIGING

Dit is een klasse A produkt. Het gebruik hiervan kan radio interferenties veroorzaken die de gebruiker ertoe kunnen dwingen sommige maatregelen te moeten treffen.

Schallemission : unter 70 dB (A) nach DIN 45635 (ISO 7779).........Thermodrucker-Type

Schallemission : 71 dB (A) nach DIN 45635 (ISO 7779)..........Matrixdrucker-Type

FCC Notice

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

Changes or modifications not expressly approved by manufacturer for compliance could void the user's authority to operate the equipment.

CAUTION

The connectors, DRW1/2, are exclusive for TOSHIBA TEC Drawer Unit.
Do not connect the equipment which is not specified by the manufacturer's instructions.

Safety Summary

Personal safety in handling or maintaining the equipment is extremely important. Warnings and Cautions necessary for safe handling are included in this manual. All warnings and cautions contained in this manual should be read and understood before handling or maintaining the equipment.

Do not attempt to effect repairs or modifications to this equipment. If a fault occurs that cannot be rectified using the procedures described in this manual, turn off the power, unplug the machine, then contact your authorized TOSHIBA TEC representative for assistance.

Meanings of Each Symbol

This symbol indicates warning items (including cautions).
Specific warning contents are drawn inside the △ symbol.
(The symbol on the left indicates a general caution.)

This symbol indicates prohibited actions (prohibited items).
Specific prohibited contents are drawn inside or near the ◯ symbol.
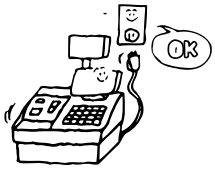(The symbol on the left indicates "no disassembling".)
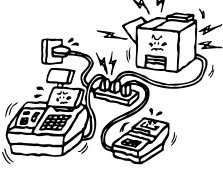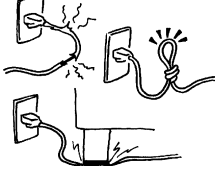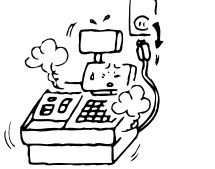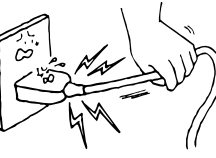
This symbol indicates actions which must be performed.
Specific instructions are drawn inside or near the ● symbol.
(The symbol on the left indicates "disconnect the power cord plug from the outlet".)

⚠ WARNING

This indicates that there is the risk of **death** or **serious injury** if the machines are improperly handled contrary to this indication.

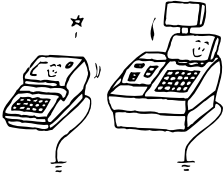|			
Prohibited	■ Do not plug in or unplug the power cord plug with wet hands as this may cause **electric shock**.	**Any other than the specified AC voltage is prohibited.**	■ Do not use voltages other than the voltage (AC) specified on the rating plate, as this may cause **fire** or **electric shock**.
Prohibited	■ If the machines share the same outlet with any other electrical appliances which consume large amounts of power, the voltage will fluctuate widely each time these appliances operate. Be sure to provide an exclusive outlet for the machine as this may cause **fire** or **electric shock**.	**Prohibited**	■ Do not place metal objects or water-filled containers such as flower vases, flower pots or mugs, etc. on top of the machines. If metal objects or spilled liquid enter the machines, this may cause **fire** or **electric shock**.
Prohibited	■ Do not insert or drop metal, flammable or other foreign objects into the machines through the ventilation slits, as this may cause **fire** or **electric shock**.	**Prohibited**	■ Do not scratch, damage or modify the power cords. Also, do not place heavy objects on, pull on, or excessively bend the cords, as this may cause **fire** or **electric shock**.
Disconnect the plug.	■ If the machines are dropped or their cabinets damaged, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause **fire** or **electric shock**.	**Disconnect the plug.**	■ Continued use of the machines in an abnormal condition such as when the machines are producing smoke or strange smells may cause **fire** or **electric shock**. In these cases, immediately turn off the power switches and disconnect the power cord plugs from the outlet. Then, contact your authorized TOSHIBA TEC representative for assistance.

Disconnect the plug.	■ If foreign objects (metal fragments, water, liquids) enter the machines, first turn off the power switches and disconnect the power cord plugs from the outlet, and then contact your authorized TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause **fire** or **electric shock.**	**Disconnect the plug.**	■ When unplugging the power cords, be sure to hold and pull on the plug portion. Pulling on the cord portion may cut or expose the internal wires and cause **fire** or **electric shock**.
Connect a grounding wire.	■ Ensure that the equipment is properly grounded. Extension cables should also be grounded. **Fire** or **electric shock** can occur on improperly grounded equipment.	**No disassembling.**	■ Do not remove covers, repair or modify the machine by yourself. You may be **injured** by high voltage, very hot parts or sharp edges inside the machine. Unauthorized modification is prohibited.

⚠ **CAUTION** This indicates that there is the risk of personal **Injury** or **damage** to objects if the machines are improperly handled contrary to this indication.

Precaution

The following precautions will help to ensure that this machine will continue to function correctly.
- Try to avoid locations that have the following adverse conditions:
  - * Temperatures out of the specification   * Direct sunlight   * High humidity
  - * Shared power socket   * Excessive vibration   * Dust/Gas
- Do not subject the machine to sudden shocks.
- Do not press the keys too hard. Keys will operate correctly if they are touched lightly.
- Clean the cover and keyboard, etc. by wiping with a dry cloth or a cloth soaked with detergent and wrung out thoroughly. Never use thinner or other volatile solvent for cleaning.
- At the end of the day, turn the power OFF, then clean and inspect the exterior of the machine.
- Try to avoid using this equipment on the same power supply as high voltage equipment or equipment likely to cause mains interference.
- USE ONLY TOSHIBA TEC SPECIFIED consumables.
- DO NOT STORE the consumables where they might be exposed to direct sunlight, high temperatures, high humidity, dust, or gas.
- When moving the machine, take hold of the drawer and lift the machine.
- Do not place heavy objects on top of the machines, as these items may become unbalanced and fall causing **injury**.
- Do not block the ventilation slits of the machines, as this will cause heat to build up inside the machines and may cause **fire**.
- Do not lean against the machine. It may fall on you and could cause **injury**.

Request Regarding Maintenance

- Utilize our maintenance services.
After purchasing the machines, contact your authorized TOSHIBA TEC representative for assistance once per year or so to have the inside of the machines cleaned. Otherwise, dust will build up inside the machines and may cause **fire** or **malfunction**. Cleaning is particularly effective before humid rainy seasons.

- Our maintenance service performs the periodic checks and other work required to maintain the quality and performance of the machines, preventing accidents beforehand.
For details, please consult your authorized TOSHIBA TEC representative for assistance.

- Using insecticides and other chemicals
Do not expose the machines to insecticides or other volatile solvents, as this will deteriorate the cabinet or other parts or cause the paint to peel.

TABLE OF CONTENTS

1. INTRODUCTION

Thank you for purchasing the TOSHIBA TEC ST-6400 Series POS Terminal.
This POS Terminal contains all the high performance register functions necessary for a specialty store POS terminal and enables the user oriented system configuration. By adopting a high-speed CPU (Celeron™ 566MHz), memory with large capacity, and magnetic device, this POS Terminal flexibly accepts the modification corresponding to the future system environment as the user expects.

This manual describes the functions and handling of this POS terminal and should be read carefully to help gain maximum performance and life from your POS terminal.
For most queries please refer to this manual and keep it safe for future reference.

1.1 Applicable Model

Model Name Description

ST-6401-☐☐☐☐☐☐☐ -QM

Destination Code (Country/Region)
QM: Standard for worldwide

Internal Construction

	Memory	HDD	FDD	SIO1,2	NVRAM	USB
1	64MB	No	No	No	No	Yes
5	64MB	No	No	Yes	No	Yes
A	64MB	No	Yes	No	128KB	Yes
B	64MB	No	Yes	No	No	Yes

Packing (Drawer)
N: None
4:   With ESP Drawer (MC-4 type)
8:   With ESP Drawer (MC-8 type)

Packing (Display)
N: None
P: With Pole
R: With Remote Indicator Unit + Pole

Keyboard Type
0:   Normal keyboard (1x1 keys only)
1:   Flat keyboard
2:   Combination keyboard
3:   Normal Keyboard (12 double keys)

Printer Type
1:   2-station dot printer (58 mm)
     Single validation/full cut
S: Single station thermal printer (80 mm)
4:   2-station dot printer (58 mm)
     Multi validation/full cut
7:   2-station dot printer (58 mm)
     Multi validation/full & stub cut
A: 2-station dot printer (45 mm)
     Multi validation/full & stub cut

CPU Frequency
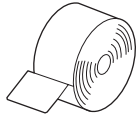5:   566 MHz

CPU Type
C: Celeron™

1.2 Accessories

Confirm that all the following Accessories are contained in the carton. If any accessories are missing or damaged, contact your nearest TOSHIBA TEC service representative.
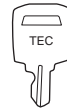
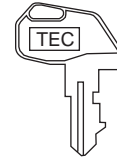• **Accessories common to the all models**

Owner's Manual (1 pc.)

Paper Roll
$\left(\begin{array}{l}\text{2 pcs. : Dot Printer} \\ \text{1 pc. : Thermal Printer}\end{array}\right)$

FDD Cover Key
(1 set: 2 keys)

Mode Selector Key Set (1 set)
REG, X, MA, S keys;
2 keys respectively
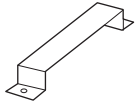
MCR Stay (1 pc.)
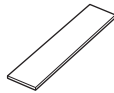
Top Dummy Cover (4 pcs.)

Key Cap Set
(1x1: 66 caps/Keyboard type :0)
(1x1:42 caps,1x2:12 caps/Key-
board type :3)

Short Plug (1 pc.)
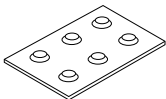
Rubber Foot (6 pcs.)

Bind Screw M3x6
(4 pcs.)
(Used to secure the FDD)

Bind Unify Screw No.6x4.5
(8 pcs.)
(Used to secure the HDDs)

Fasten Band (1 pc.)
(Used to secure the
Display Cable)

- **Only for the model including the Dot Printer**

Receipt Cover Key
(1 set: 2 keys)
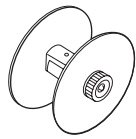
Take-up Reel (1 pc.)
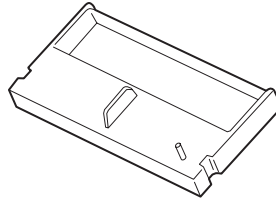
Ribbon Cassette (1 pc.)
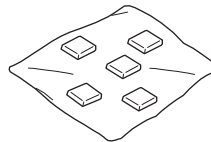
Stamp Ink (1 pc.)

- **Only for the model including the Display Unit as standard**

Display Unit (1 pc.)

Pole Unit (1 pc.)

Double Sems Screw M3x45
(2 pcs.)
(Used to secure the Pole Unit
to the Drawer)

- **Only for the model including the Drawer Unit as standard**

Drawer Release Key
(1 set: 2 keys)

Cash Drawer Cover Key
(1 set: 2 keys)

2. SPECIFICATIONS

2.1 Basic Specifications

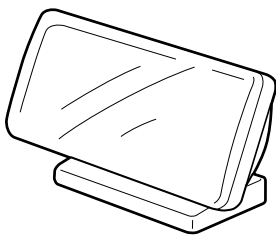|		ST-6401-C51/4/7/AXXXX-QM	ST-6401-C5SXXXX-QM
CPU		Celeron™ 566MHz	
BIOS ROM		512KB Flash ROM	
RAM	Capacity	64MB as standard, expandable up to 512MB	
	Type	SDRAM, non parity bit, without ECC, PC100 or more	
	Socket	168-pin DIMM connector x 2 slots	
Secondary Cache		128KB (CPU on die)	
PCI Bus		Up to two PCI standard boards can be installed *(NOTE 2)*	
Interface	Serial I/F *(NOTE 3)*	COM1, COM2 : D-sub 9-pin male connector COM3, COM4, SIO1, SIO2 : D-sub 9-pin female connector	
	Parallel I/F	LPT: D-sub 25-pin female connector	
	Keyboard I/F	PS-2 interface: 1 channel	
	Mouse I/F	PS-2 interface: 1 channel	
	Drawer I/F	TEC standard 24V drawer: 2 channels	
	VGA I/F (Analogue RGB)	VGA Controller: Intel® 82810E built-in (Directly AGP connection) Video Memory: The system memory used	
	LAN I/F	IEEE802.3 10BASE-T/100BASE-TX	
	USB I/F	USB1 and USB2: 2 channels	
Floppy Disk Drive		One 3.5-inch FDD (1.44MB/720KB format) *(NOTE 4)*	
Hard Disk Drive		3.5-inch, IDE I/F (Dealer option)	
Printer	Printer Model	DPR-245A or 258A series	LT-380
	Printing Method	2-station dot matrix	Line Thermal Direct
	Roll Paper Width	45mm (DPR-245A) 58mm (DPR-258A)	80mm
Input Voltage		AC: 100 - 127V +5%/-10%, 50/60 Hz 220 - 240V +10%/-10%, 50/60 Hz	
Power Consumed		180W	
Ambient Temperature		5°C to 35°C	
Relative Humidity		20% to 80% (no condensation)	
Weight		12Kg (excluding options)	
Dimension		Dot Printer Model : 493(W) x 469(D) x 199.5(H) mm without Drawer Dot Printer Model : 493(W) x 469(D) x 305 (H) mm with Drawer Thermal Printer Model : 493(W) x 469(D) x 192.5(H) mm without Drawer	

NOTES: 1) *Celeron™ is a registered trade mark of Intel Corporation.*
2) *Board size (Lower Slot): 140mm (One board)*
    Board size (Upper Slot): 185mm (One board)
3) *Some models are provided with the SIO1 and SIO2 as standard.*
4) *Some models are provided with the 3.5" FDD as standard.*

2.2 Option

Option Name	Type	Description
Drawer Unit	DRWST-64 Series	24V-drive ESP type drawer Size and Weight: 460(W) x 400(D) x 115(H) mm 8.6Kg
Remote	LIUST-51 Series	20 characters x 2 lines dot display
Display Unit	LIUST-53 Series	256 x 64 dot display
Scanner	HS-530-RS Series	Touch scanner (RS-232C Interface Type)
Unit	LS-770 Series	Vertical laser slot scanner
	LS-770-H Series	Horizontal laser slot scanner
	LS-780 Series	Vertical laser slot scanner
	LS-780-H Series	Horizontal laser slot scanner
FDD	FDDST-51	3.5-inch 1.44MB FDD Unit
NV-RAM	NVMST-50-32	32KB NV-RAM
	NVMST-50-128	128KB NV-RAM
Pole Option	POLST-51	Pole type mounting kit for the LIUST-51/53
MCR	MCRST-50	Magnetic Card Reader for Normal keyboard type
Display	TFTST-52T	10.4-inch TFT Display with touch panel (without VGA board)
	TFTST-56T	12.1-inch TFT Display with touch panel (with VGA board)
VGA Board	VGAST-52-12	VGA board for the TFTST-52T
Plate	KITST-65-1	VGA board attachment plate for the TFTST-52T
	KITST-65-2	VGA board attachment plate for the TFTST-56T

2.3 Receipt/Journal Paper Roll for the Dot Printer
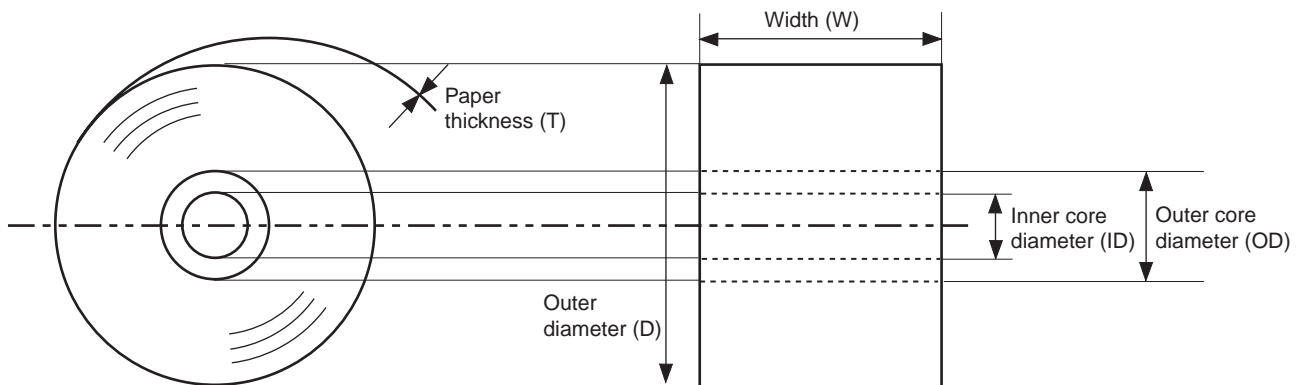
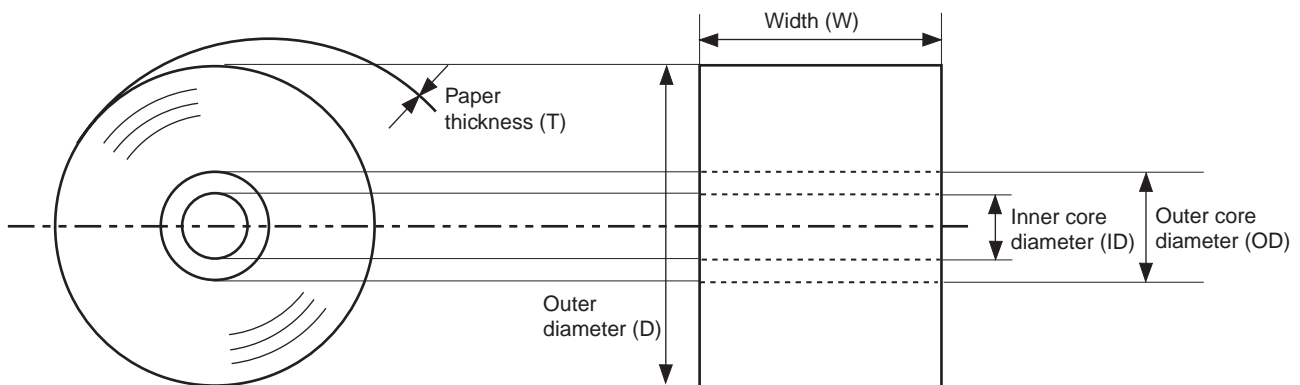| Paper Type	Paper rolled with the print side facing outside.
Width (W)	45 +0/-1 mm (DPR-245A Series) 58 +0/-1 mm (DPR-258A Series)
Outer diameter (D)	80 mm
Paper thickness (T)	0.083 ±0.005 mm
Weight	54.3±2g/m^2
Outer core diameter (OD)	25 mm
Inner core diameter (ID)	18 +0/-0.5 mm
Recommended paper	45R-80 (MHG01-00105/06) TOSHIBA TEC (DPR-245A Series) 58R-80 (MHG01-00109/10) TOSHIBA TEC (DPR-258A Series)

CAUTION!

Use only paper which meet specified requirements. Use of non-specified paper may shorten the head life of printer, result in problems with print quality, or cause a paper feed failure.

All paper should be handled with care to avoid any damage to the paper. Read the following guideline carefully.

- Do not store the paper for longer than the manufacture's recommended shelf life.
- Store the paper in a cool, dry place. Avoid areas where they would be exposed to direct sunlight, high temperature, high humidity, dust or gas.

For further information please contact your authorised TOSHIBA TEC represrntative or authorised paper manufacturer.

2.4 Thermal Paper Roll for the Thermal Printer

Paper Type	Thermal paper rolled with the print side facing outside.
Width (W)	80 +0/-1 mm
Outer diameter (D)	80 +0.5/-1 mm
Paper thickness (T)	0.075 ±0.005 mm
Weight	$69 \pm 3 g/m^2$
Outer core diameter (OD)	18 mm
Inner core diameter (ID)	12 mm
Recommended Thermal paper	Paper rolled onto a core are acceptable, however, the paper end should not be pasted to the core. Normal paper: PD150R OHJI PAPER (Japan) Highly storable paper: PD152R OHJI PAPER (Japan)

CAUTION!

Use only paper which meet specified requirements. Use of non-specified paper may shorten the head life of printer, result in problems with print quality, or cause a paper feed failure.

All paper should be handled with care to avoid any damage to the paper. Read the following guideline carefully.

- Do not store the paper for longer than the manufacture's recommended shelf life.
- Store the paper in a cool, dry place. Avoid areas where they would be exposed to direct sunlight, high temperature, high humidity, dust or gas.
- A contact of chemical or oil may discolor or erase the record.
- Rubbing the paper hard with nail or hard metal may discolor the paper.

For further information please contact your authorised TOSHIBA TEC represrntative or authorised paper manufacturer.

3. OVERVIEW

3.1 Front/Rear View

<Front View>
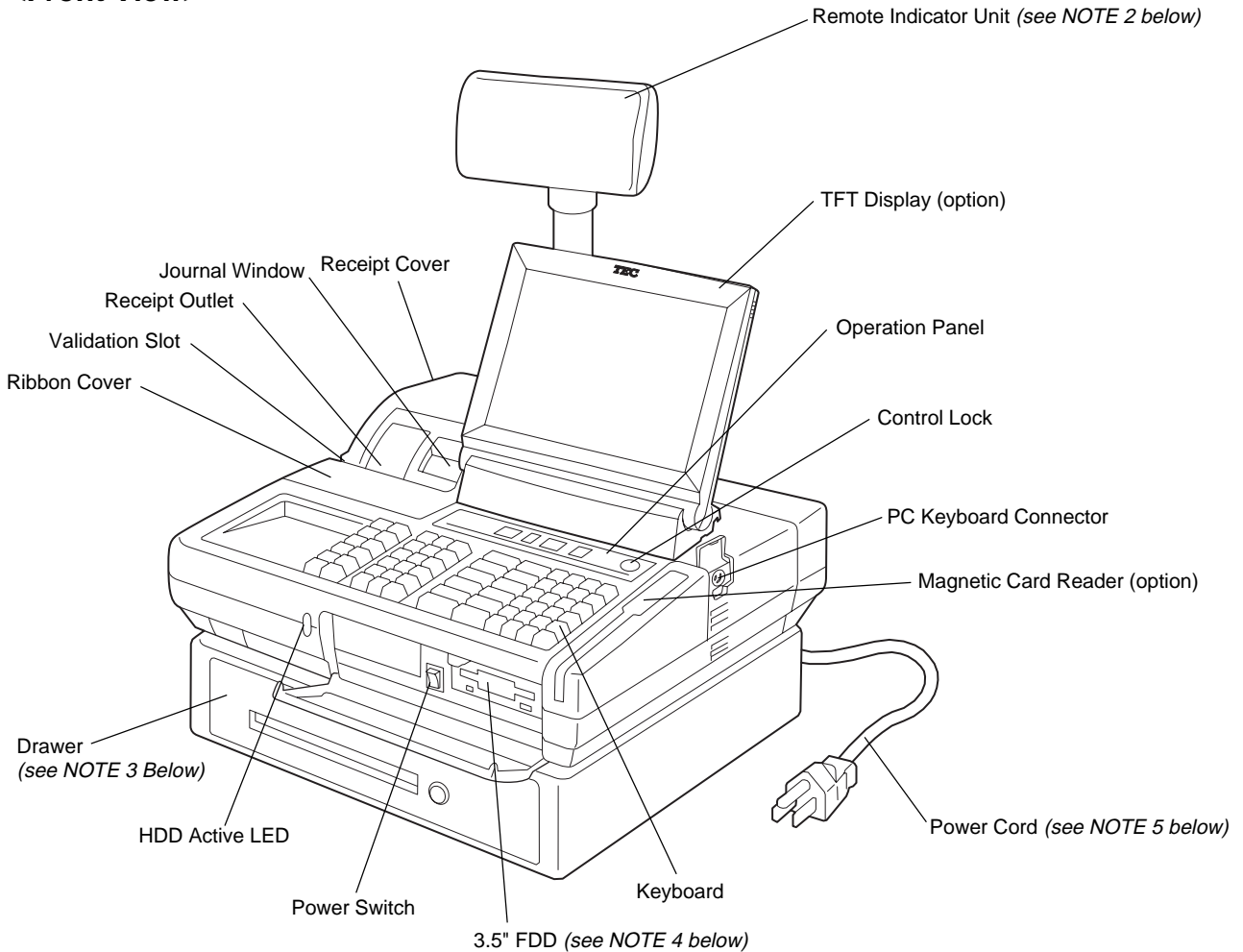
NOTES: 1) The above figure shows 2-station dot printer type.
2) Some models are provided with the Remote Indicator Unit as standard.
3) Some models are provided with the Drawer as standard.
4) Some models are provided with the 3.5" FDD as standard.
5) As the power cord is not provided for this product, please purchase it locally. For detail specifications, please contact your nearest authorised TOSHIBA TEC representative.
6) A 3.5-inch hard disk drive is optional part for the ST-6400 standard models.

<Rear View>
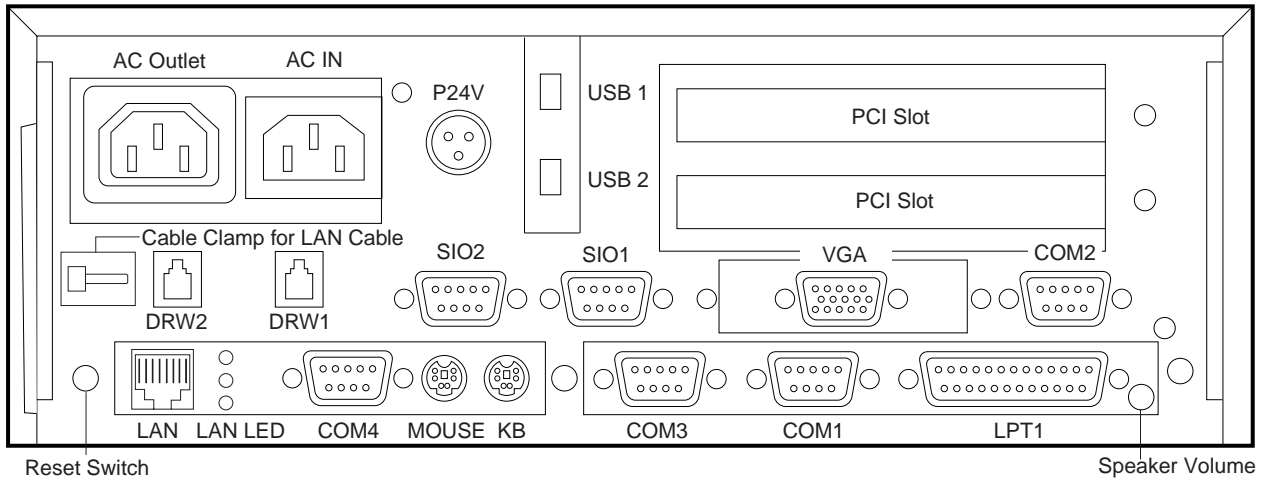
AC Outlet	Connector for the AC outlet, used for the CRT power supply.
AC Inlet	Connector for the AC inlet.
P24V	To this DC24V line connector, the power cable of the printer installed in the ST-6400 is connected.
DRW1·2	A 24V type drawer (DRWST-64, etc) is connectable. The drawer included in the ST-6400 as standard is connected to the DRW1.
MOUSE	Connector for the PS-2 type mouse.
KB	To this connector, the PS-2 type keyboard installed in the ST-6400 is connected.
COM1	D-sub 9-pin male type connector (without power supply). The LS-770/780 slot scanner, modem, serial Interface type scale, EFT, etc. are connectable.
COM2	D-sub 9-pin male type connector (without power supply). The LS-770/780 slot scanner, modem, serial Interface type scale, EFT, etc. are connectable.
COM3	D-sub 9-pin female type connector (with +5V, +12V output). The LIUST-51/53, RS-232C type hand scanner (HS-530) are connectable.
COM4	D-sub 9-pin female type connector (with +5V, +12V output). The LIUST-51/53, RS-232C type hand scanner (HS-530) are connectable.
SIO1·2	Equivalent to COM3 and COM4 (D-Sub 9-pin female).
VGA	Connector for the CRT.
LPT1	This is a Centronics interface connector, to which the printer cable of the PC standard printer installed in the ST-6400 is connected.
USB 1, 2	Connector for the USB(Universal Serial Bus) I/F. USB Mouse, USB Keyboard, etc. can be connected to these connectors.
LAN	Modular type connector for the 10BASE-T/100BASE-TX LAN interface.
Speaker Volume	Used to adjust the speaker volume. When turned to left, the sound volume decreases. When turned to right, the sound volume increases.
Reset Switch	Pressing this switch while the ST-6400 is hung-up resets the unit.

PCI Slot	Slots for installing the PCI board. Maximum of 2 boards can be installed.
	    Installable board size: Lower slot (PCI1) 140 mm 1 board
	                                              Upper slot (PCI2) 185 mm 1 board

Cable Clamp for LAN Cable	The LAN cable is fixed with this cable clamp to prevent the cable being caught in the Rear Cover.

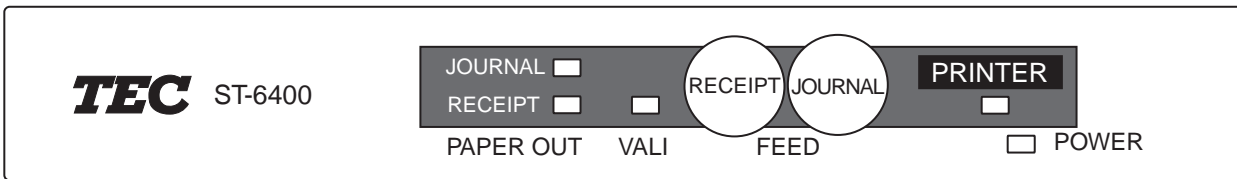## 3.2 Control Lock and Mode Selector Keys
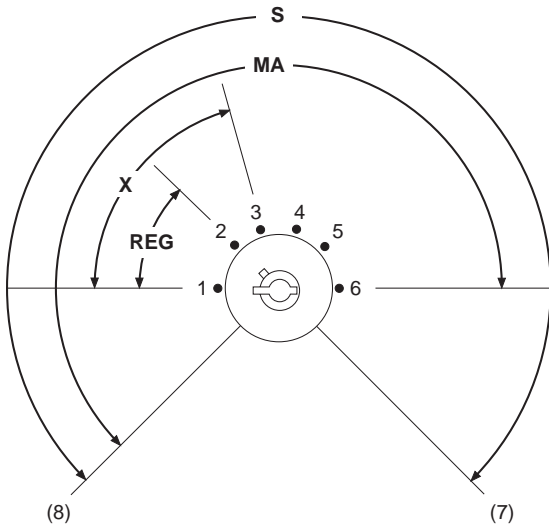
Control Lock   **Mode Selector Keys**
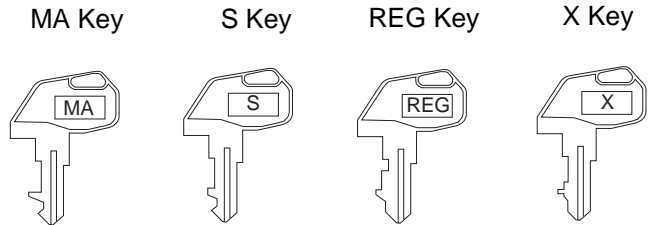
* The key can be inserted or removed at Position 1 or 2.

3.3 Operation Panel

3.3.1 2-station Dot Printer Type

POWER LED: Green
    Lights: The power is supplied.
    Extinguished: The power is not supplied.

PRINTER LED: Green
    Lights: The printer is ready to print. (on-line mode)
    Extinguished: The printer is not ready to print. (off-line mode)

VALI LED: Green
    Lights: Validation mode
    Extinguished: Receipt/journal mode
    Blinks: Waiting for validation paper.

RECEIPT/JOURNAL PAPER OUT LED: Red
    Lights: Detects that receipt/journal paper has almost run out.
    Extinguished: Not detect that receipt/journal paper has almost run out. (Usual status)

PRINTER Switch
    This switch is used to select on-line or off-line. In on-line mode, printing is performed in usual mode.
    When off-line mode is selected, the printer stops printing after printing the line being printed.

RECEIPT/JOURNAL FEED Switch
    This switch is used to feed receipt/journal paper. This switch is effective only when the PRINTER LED is turned
    off (off-line mode).

3.3.2 Single Station Thermal Printer Type
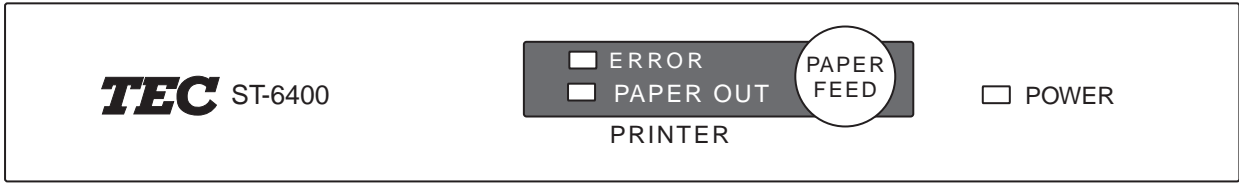
POWER LED: Green
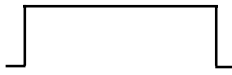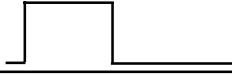
Lights: The power is supplied.

Extinguished: The power is not supplied.

PAPER FEED Switch

Pressing this switch for a short time feeds the paper by one line. Holding it down feeds the paper continuously.

ERROR LED: Red

Indicates different errors by lighting or blinking.

Error Display	Pattern	Resetting Method
Printer cover open	Illuminated	Close the cover.
Head up	Illuminated	CLose the printing head.
Memory check		Disabled
Head overheat		Automatically reset by temperature drop.
Macro execution wait		Press the PAPER FEED switch.
Cutter motorlock		Remove jammed paper.

PAPER OUT LED: Red

Illuminated when the paper nearly runs out. (Stops after printing the set length)

4. FLOPPY DISK AND FLOPPY DISK DRIVE (with FDD Model)

CAUTION!

When handling a floppy disk, care should be taken as follows:
* *Do not place the floppy disk close to any magnetic product.*
* *Do not use a damaged floppy disk.*
* *Do not bend the floppy disk.*
* *Keep the floppy disk away from water.*
* *Do not expose the floppy disk to direct sunlight.*

4.1 Floppy Disk Write Protection

The Floppy Disk contains the program to run the ST-6400. Before using this disk, make absolutely sure to write protect the disk to prevent accidental overwrite.

* **How to Write Protect the Floppy Disk**

  Slide the Write Protect Tab on the reverse side of the Floppy Disk downward to open the Write Protection Hole.

Write Protection Hole

Write Enable

Wite Protect
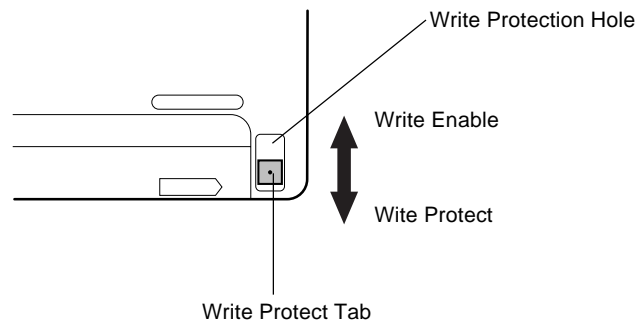
Write Protect Tab

* **How to cancel the Write Protect**

  Slide the Write Protect Tab upward to close the Write Protection Hole.

4.2 Handling the Floppy Disk Drive

The Floppy Disk drive reads and writes data via the Floppy Disk by rotating the disk at a high speed.
There are two read/write heads (multiple) in the drive. The heads touch both sides of the disk to perform read or write function.

3.5-inch Floppy Disk Drive

FDD Active LED

Eject Button
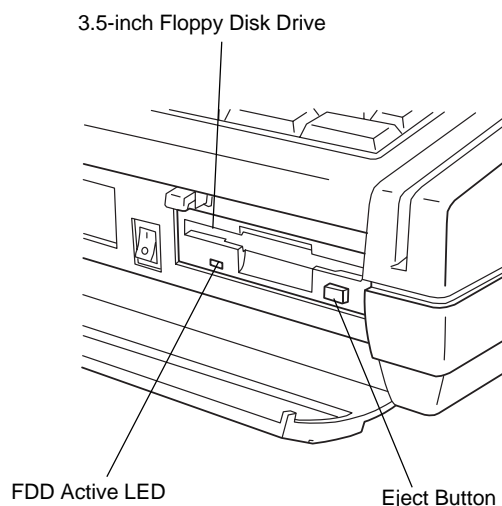
FDD Active LED: Lit when the Floppy Disk drive reads or writes data in the Floppy Disk.

4.2.1. Loading the Floppy Disk

1) Unlock the FDD Cover to open by pressing the left side of the FDD Lock.

FDD Cover Key

FDD Cover
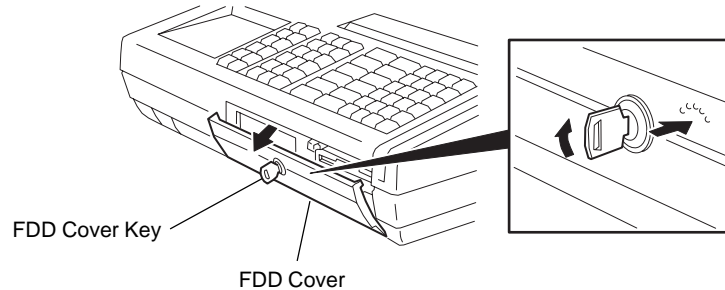
2) Insert the Floppy Disk gently with the label side up until it clicks.
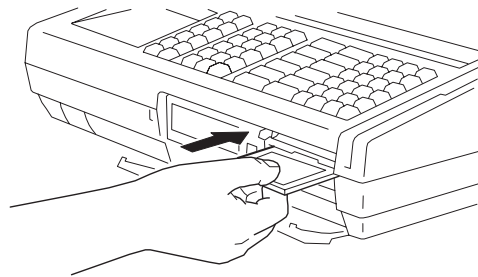
4.2.2. Ejecting the Floppy Disk

CAUTION!
Do not press the eject button while the active LED is lit. Doing so may destroy the data in the floppy disk.

Press the Eject Button on the Floppy Disk Drive. The Floppy Disk pops out to the position where it can be removed by hand.

Eject Button
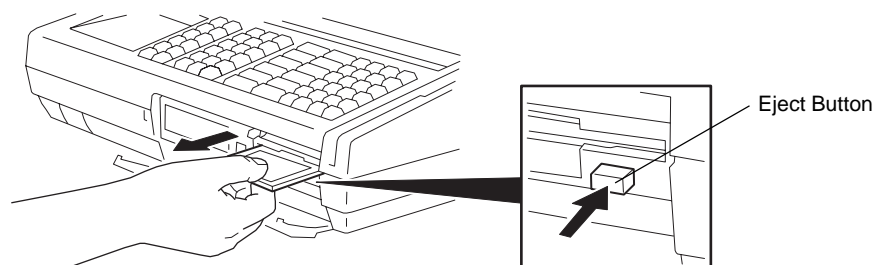
5. HANDLING OF THE PRINTER (2-station Dot Printer Type)

5.1 Removing the Reciept Cover

Remove the Receipt Cover when the Receipt or Journal Paper Roll is replaced with a new one or when the Store Name/Message Stamp must be replenished with the Ink.

5.1.1 Removing the Receipt Cover

1) Insert the Cover Lock Key into the Cover Lock and turn it 90 degrees clockwise to unlock.
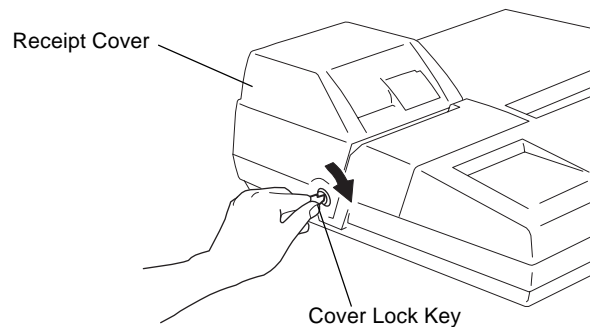
2) Remove the Receipt Cover by lifting both edges of the Receipt Cover.
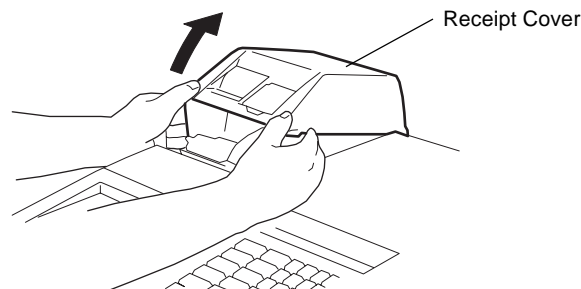
5.1.2 Attaching the Receipt Cover

1) Align the hooks on the rear of the Receipt Cover with the notches in the lower cover. Then, push down the front side of the Receipt Cover until it clicks, and lock the receipt cover with the key.
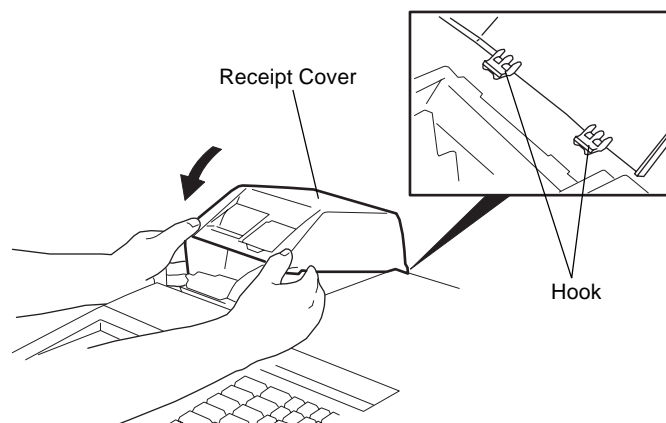
5.2   Removing the Ribbon Cover
Remove the Ribbon Cover when the Ribbon Cassette must be replaced.

5.2.1 Removing the Ribbon Cover

1) Remove the Receipt Cover. (Refer to "Removing the Receipt Cover.")

2) Remove the Ribbon Cover by lifting the left edge of the Ribbon Cover.
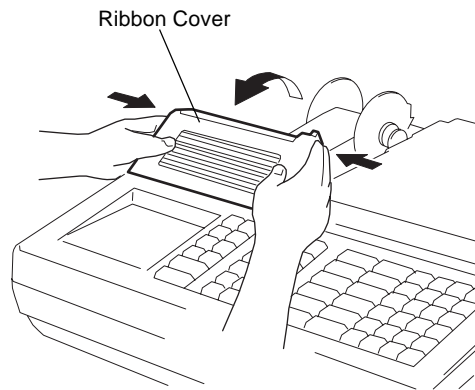
5.2.2 Attaching the Ribbon Cover

1) Align the tabs on the front of the Ribbon Cover with the holes in the Top Cover. Then, push down the rear side of the Ribbon Cover until it clicks.
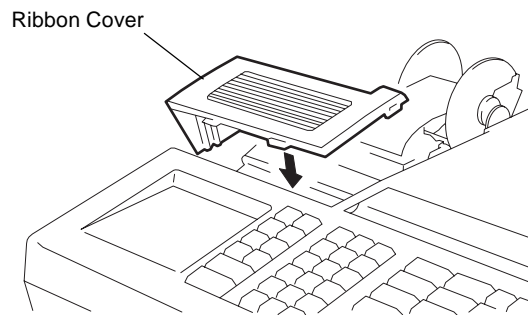
5.3 Installing/Replacing the Reciept Roll
5.3.1 Installing the Receipt Roll

1) Remove the Receipt Cover. (Refer to "Removing the Receipt Cover.")

2) Cut the paper end to make it straight.
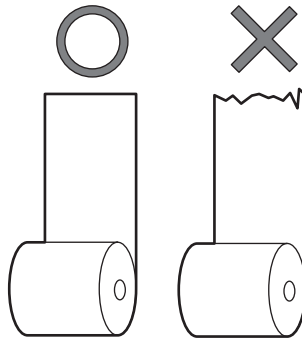
3) Put the Receipt Roll in the left holder so that the paper will be fed from the bottom of the Paper Roll.
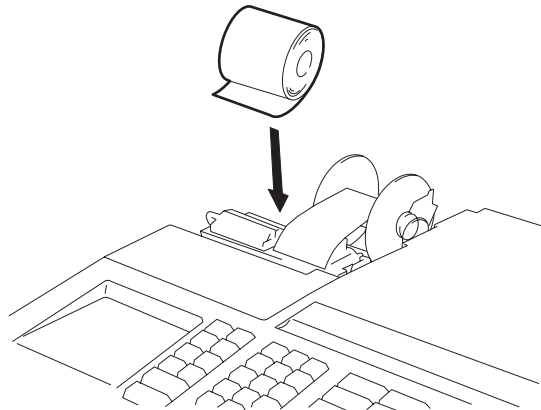
4) Insert the paper end into the paper slot until it stops, then feed the paper by pressing the **[RECEIPT FEED]** Switch.
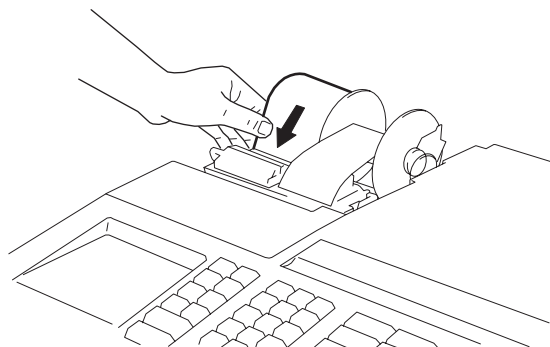
5) Attach the Receipt Cover with the paper end coming out of the receipt outlet. (Refer to "Attaching the Receipt Cover.")

5.3.2 Replacing the Receipt Roll

1) Remove the Receipt Cover. (Refer to "Removing the Receipt Cover.")

2) Pull up the Green Lever on the receipt side.
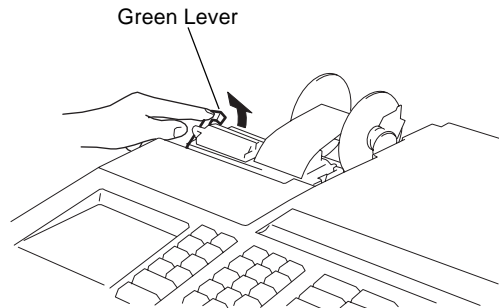
Green Lever

3) Remove the remaining paper roll from the rear of the printer.
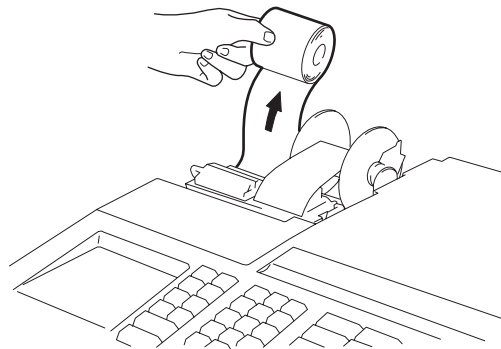
4) Press down the green lever on receipt side.

Green Lever
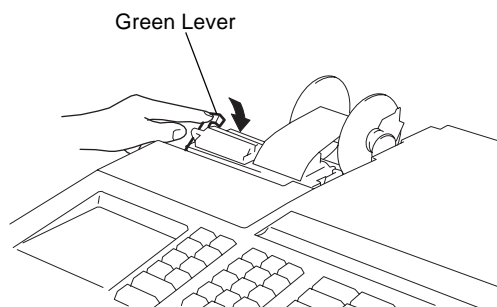
5) Install a new paper roll according to steps 2) to 5) of the procedure "Installing the Receipt Roll."

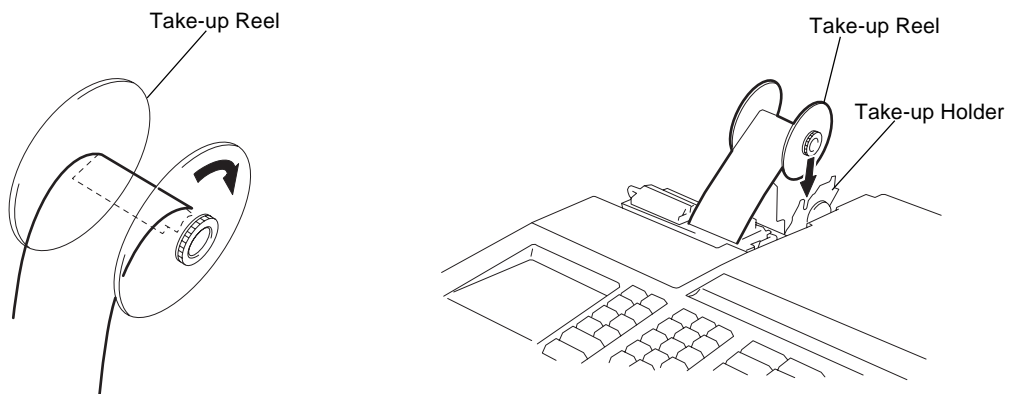# 5.4 Installing/Replacing the Journal Roll
5.4.1 Installing the Journal Roll

1) Follow Steps 1) and 2) for "Installing the Receipt Roll" in the preceding section.

2) Put the Journal Roll in the right holder so that the paper will be fed from the bottom of the Paper Roll.
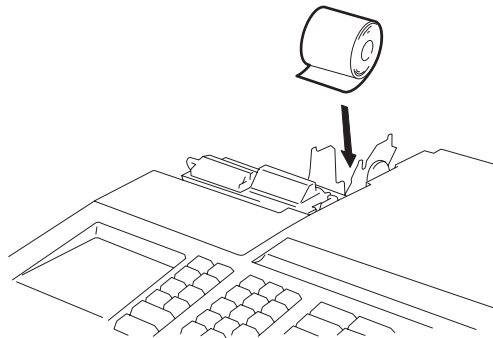
3) Insert the paper end into the paper slot until it stops, then feed the paper by pressing the **[JOURNAL FEED]** Switch until the leading edge of the journal comes out about 25 cm.
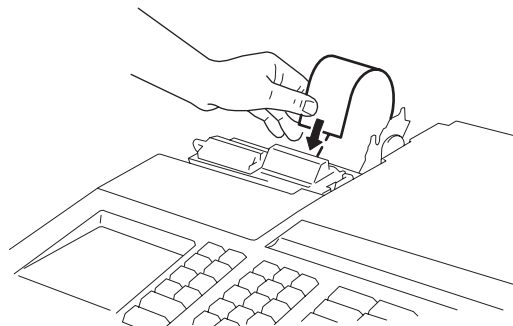

4) Insert the paper end into the slit in the Take-up Reel and wind it around the reel two or three times. Then, place the Take-up Reel on the Take-up Holder.

Take-up Reel

Take-up Reel

Take-up Holder

5) Turn the Take-up Reel rearward until slack in paper is taken out.

6) Attach the Receipt Cover. (Refer to "Attaching the Receipt Cover.")
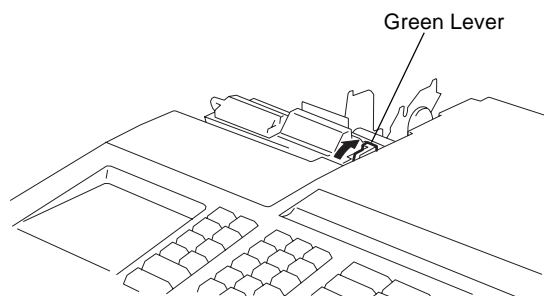
5.4.2 Replacing the Journal Roll

1) Remove the Receipt Cover. (Refer to "Removing the Receipt Cover.")

2) Cut the Journal Paper as shown in the figure.
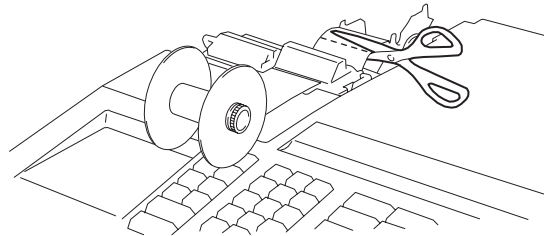
3) Pull up the Green Lever on the journal side (①). Lift the Take-up Reel to remove paper (②).
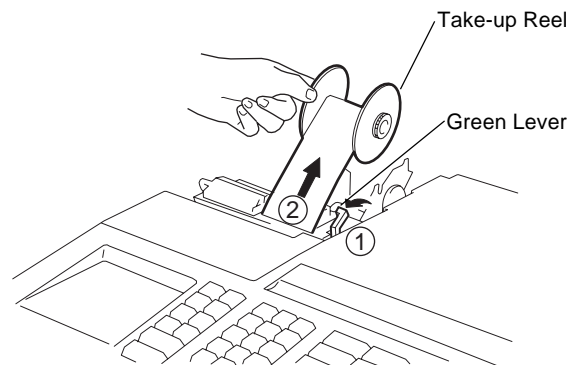

4) Press down the Green Lever on journal side.

5) Install a new paper roll according to steps 1) to 6) of the procedure "Installing the Journal Roll."

5.5 Setting/Replacing the Ribbon Cassette
5.5.1 Setting the Ribbon Cassette

1) Remove the Receipt Cover and the Ribbon Cover. (Refer to "Removing the Receipt Cover." and "Removing the Ribbon Cover.")

2) Push down the Ribbon Cassette until it clicks.
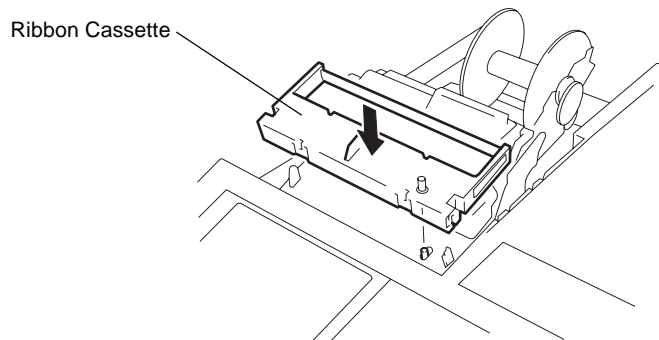
Ribbon Cassette

3) Turn the knob of the Ribbon Cassette in the direction of the arrow several times to remove any slack in the ribbon.

Ribbon Cassette

Knob
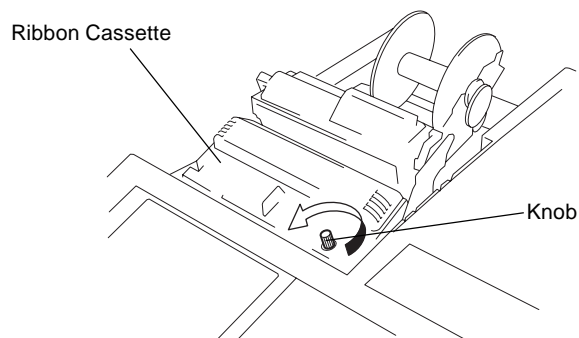
4) Attach the Ribbon Cover and the Receipt Cover. (Refer to "Attaching the Ribbon Cover." and "Attaching the Receipt Cover.")

5.5.2 Replacing the Ribbon Cassette

1) Remove the Receipt Cover and the Ribbon Cover. (Refer to "Removing the receipt cover." and "Removing the Ribbon Cover.")

2) Remove the old Ribbon Cassette by lifting if from the right front side so that it does not make contact with the Top Cover.
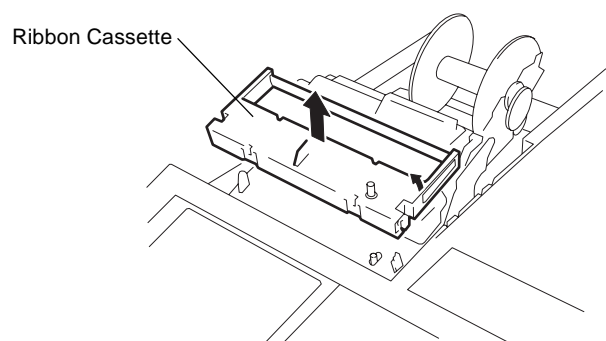

Ribbon Cassette

3) Set a new Ribbon Cassette according to steps 2) to 4) of the procedure "Setting the Ribbon Cassette."

5.6 Replenishing the Store Name/Message Stamp with Ink

When the Store Name/Message Stamp is installe and printing appears too light, replenish the ink in the following procedure.

1) Remove the Receipt Cover. (Refer to "Removing the Receipt Cover.")

2) Remove the Store Name/Message Stamp by pulling it as shown in the figure.

Store Name/Message Stamp
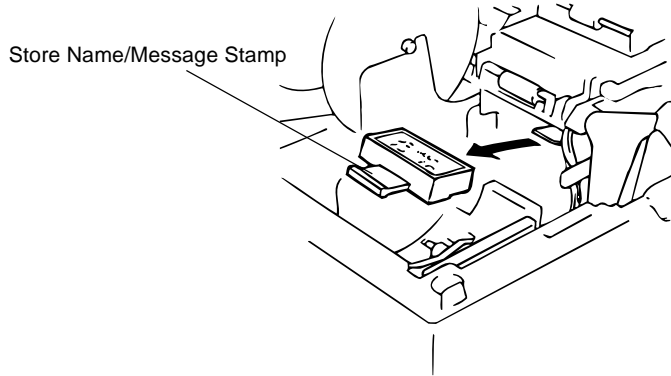
3) Apply only two or three drops of ink. The stamp may not print dark immediately. Allow time for ink to saturate the stamp.

Stamp Ink

Store Name/Message Stamp
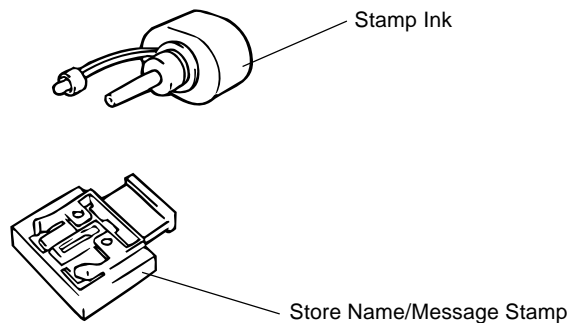
4) Install the stamp by inserting it in the direction of the arrow until it clicks.

Store Name/Message Stamp
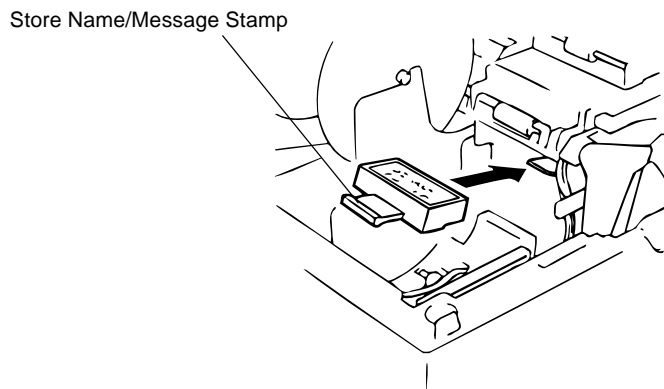
6. HANDLING OF THE PRINTER (Single Station Thermal Printer Type)

A thermal receipt printer is provided on this unit. (A thermal printer prints thermal receipt paper by applying heat to the paper to react with the chemicals on the paper surface.)


WARNING!
1. There is a Cutter Blade inside. Do not touch and disassemble this cutter block.
2. After printing, the thermal head may become very hot. Do not touch the thermal head to avoid burning your fingers.

CAUTION!
1. Do not subject the thermal receipt paper to water, oil, or heat source as this will darken the paper.
2. Do not open the printer cover during printing.

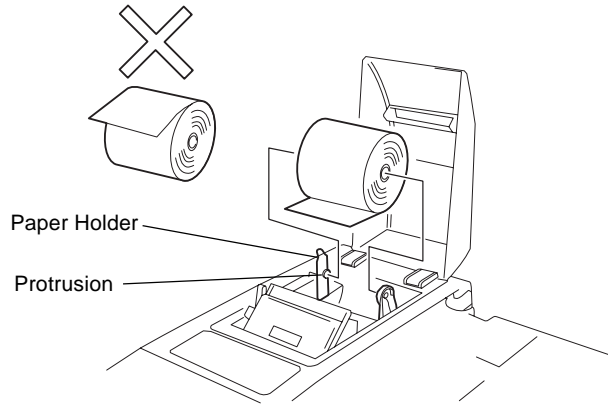## 6.1 When using the Auto Loading Function

1) Open the Printer Cover.

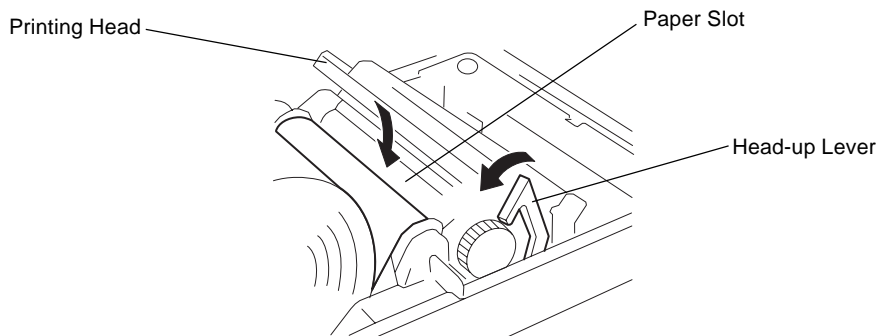2) Move the Head-up Lever in the direction of the arrow to raise the Printing Head.

Printer Cover

Head-up Lever

Auto Cutter
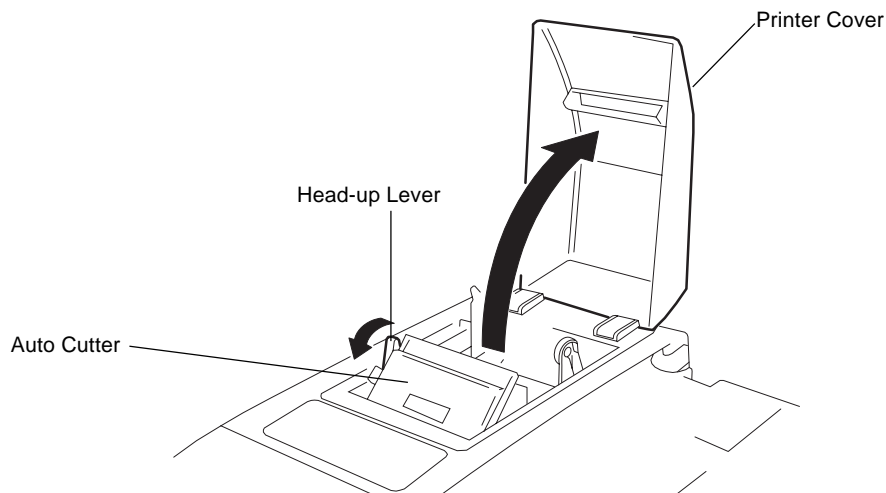
3) Cut the end of the paper straight with a pair of scissors. Do not insert the paper into the printer with its end fluffed or bent.

| Good | NG | NG | NG |
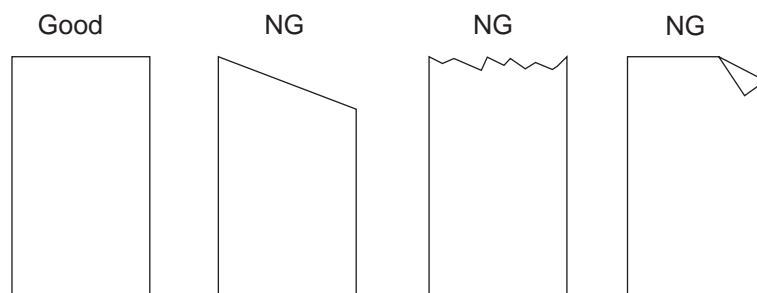
4) Confirm the winding direction of the Paper Roll. Spread the Paper Holder and fit the protrusions into the paper core properly.

5) Insert the end of the paper straight into the paper slot of the printer and close the Printing Head. The paper is automatically pulled in by a constant length.

NOTE: *When the inserted paper skews, remove the paper by pulling up the Head-up Lever, raising the Printing Head, and rotating the Paper Feed Knob. Then, reinsert the paper.*
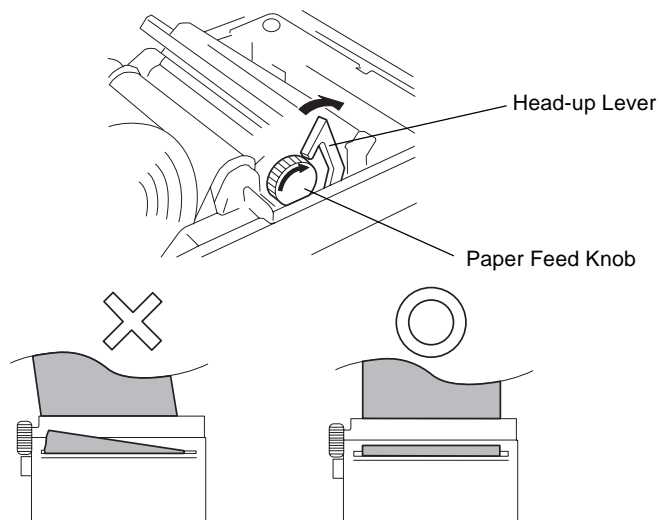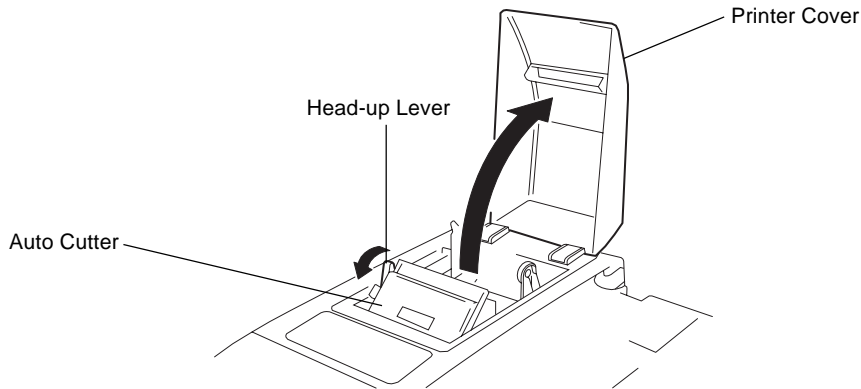

6) Close the Printer Cover to finish setting of the Paper Roll.

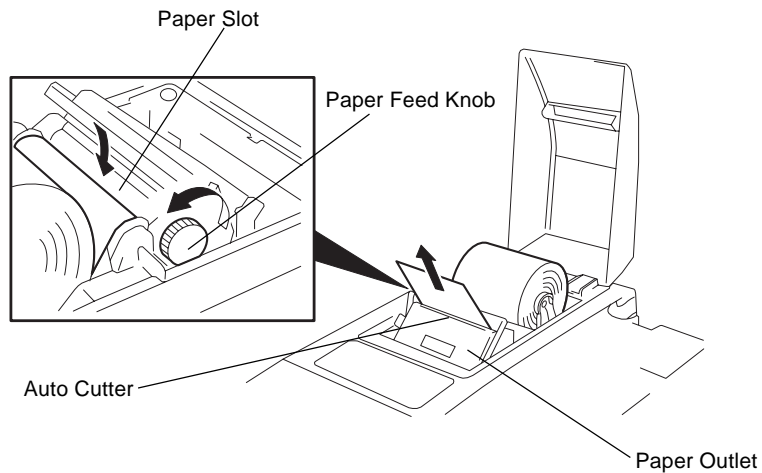## 6.2 When using the Manual Loading Function

1) Open the Printer Cover.

2) Move the Head-up Lever in the direction of the arrow to raise the Printing Head.

3) Insert the end of the paper into the Paper Slot, turn the Paper Feed Knob in the direction of the arrow until the paper end comes out of the auto cutter's paper outlet for about 5cm.

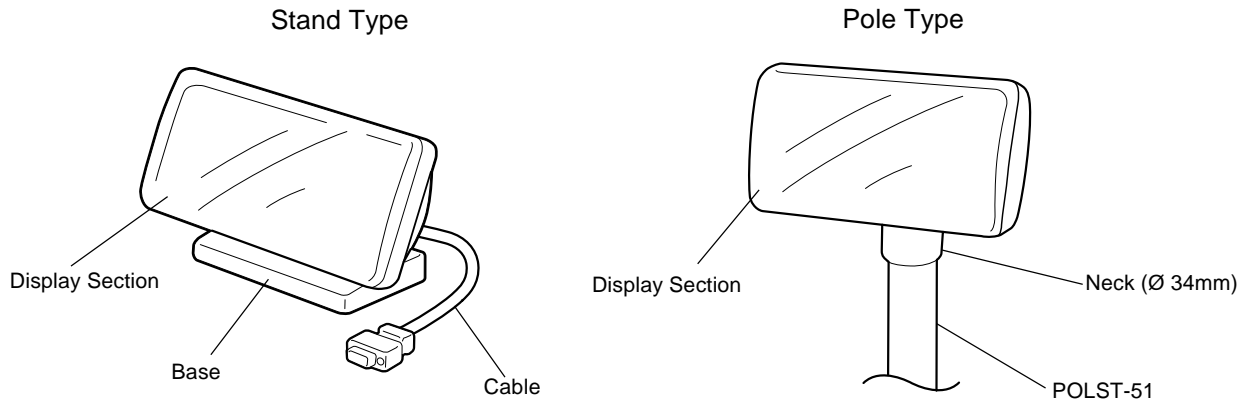4) When the paper is tilting, correct it and close the Printing Head.
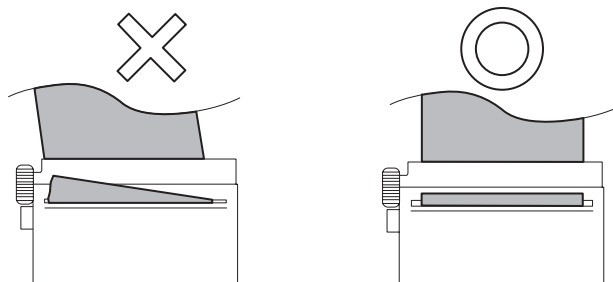
5) Move the Head-up Lever in the direction of the arrow to close the Printing Head. Cut off the surplus paper at the edge of the paper outlet of the auto cutter.
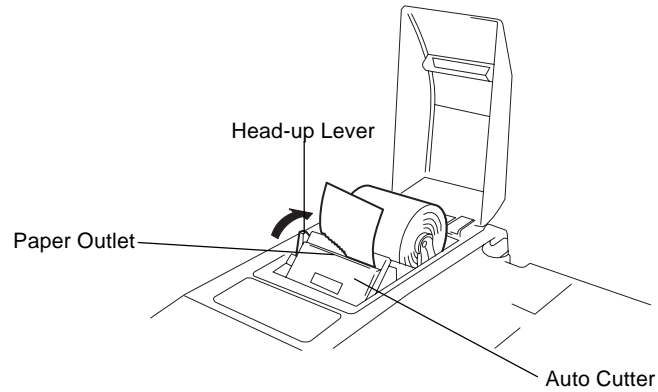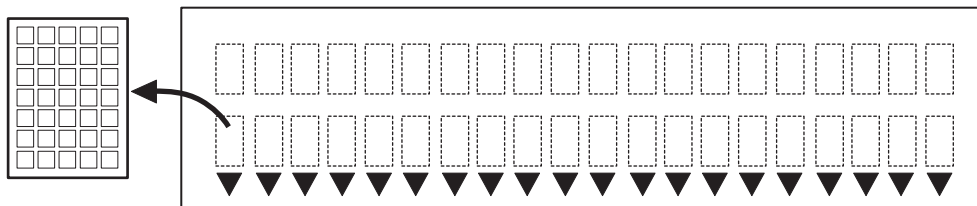

6) Close the Printer Cover. The Paper Roll loading has been completed.

7) To take out the end of the paper, pull it out straight while the Printing Head is opened.

7. DISPLAY (LIUST-51)

This LIUST-51 is a dot fliorescent display for ANK indication with 20 digits in 2 lines, connected to the ST-6400 POS Terminal. It has a built-in controller and connects to the Control Unit of the ST-6400 with the I/O serial interface (RS-232C or equivalent). It is normally supplied as a stand type, but can be modified to a pole type which are integrated into the ST-6400 terminal.

Stand Type

Pole Type

Display Section

Base

Cable

Display Section

Neck (Ø 34mm)

POLST-51

<Overview of Display Section>
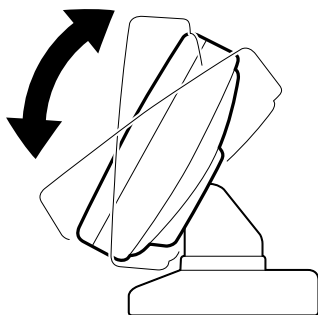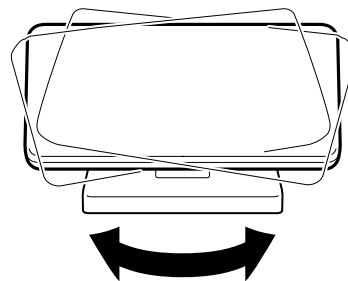
<Display Angle Adjustment>

   This line display can be adjusted in vertical (tilt) and horizontal (swivel) direction so that the operator or customer can see it easily.

Tilt direction
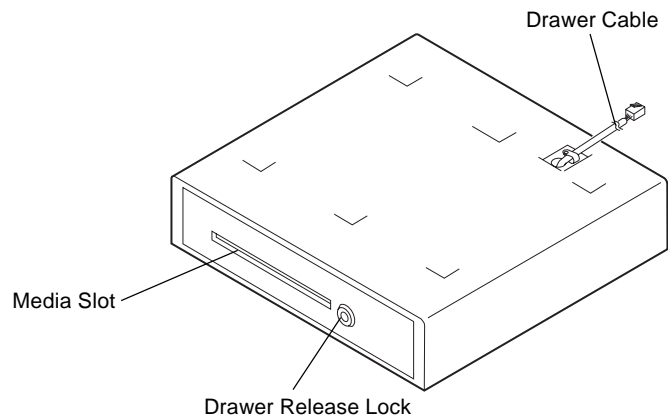10 to 42 degrees above the horizontal level (8° x 4 steps)

Swivel direction
165 degrees on either side from the center (15° x 22 steps)

8. DRAWER

WARNING!
When opening the drawer, be careful not to let the drawer hit any person.

This drawer can be used both as an integrated drawer into the ST-6400 terminal, and as a separate remote drawer.


8.1 Manual Drawer Release and Lock
The drawer opens automatically when a registration is performed. In the event of a power failure or other trouble, the drawer can be opened manually in the following manner.

8.1.1 Releasing
Insert the Drawer Release Key into the Drawer Release Lock, then turn the key clockwise. The drawer will now open. The Drawer Release Key can be taken out by returning it to the original position.
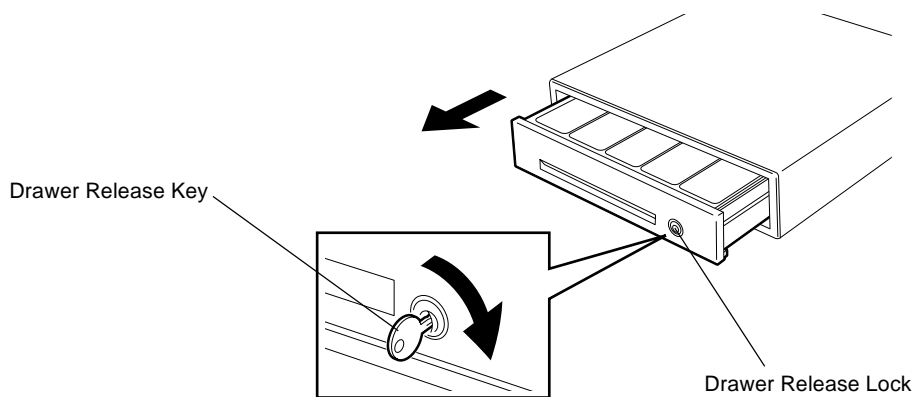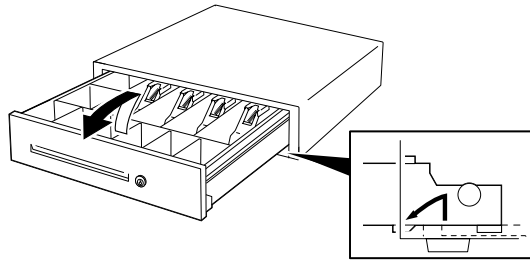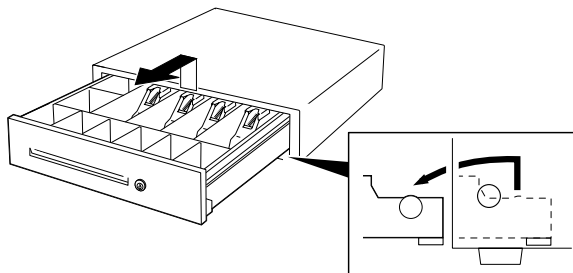

8.1.2 Locking
When the drawer is closed, it is automatically locked and will not open without the Drawer Release Key or transaction entries.

8.2 Removing the Drawer

1) Pull the drawer out, and when it stops by the stopper, lift the drawer up and pull it again.
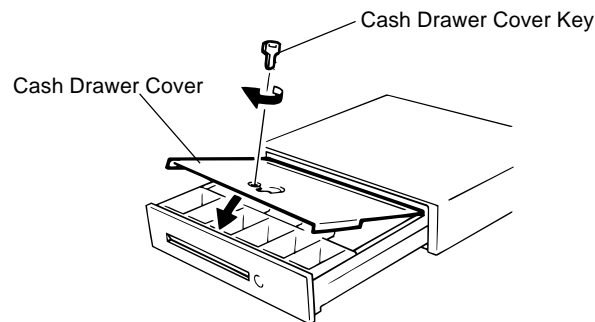

2) When it stops again by the roller fixed in the drawer case, lift it and pull it again.

8.3 Locking the Cash Drawer Cover (CDC)
8.3.1 Locking

Push the Cash Drawer Cover to the back of the drawer. Then, press the cover lightly, insert the key into the key hole in the cover, and turn it to lock.
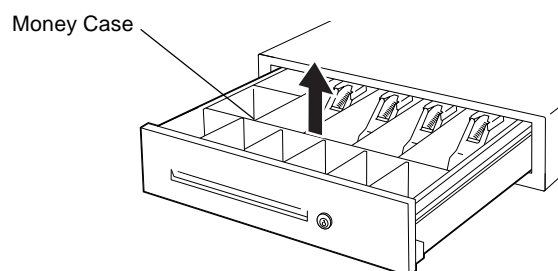

Cash Drawer Cover Key
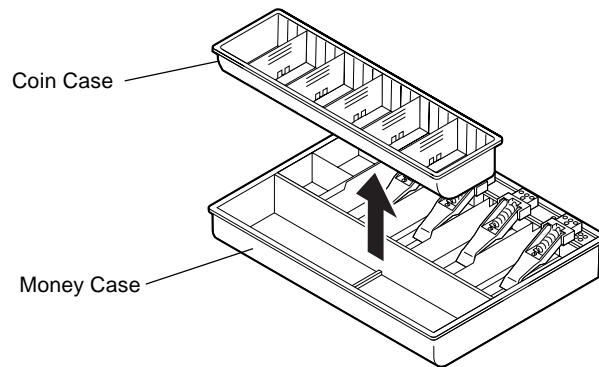
Cash Drawer Cover

8.3.2 Unlocking

Unlock the cover using the key, and lift the front end.
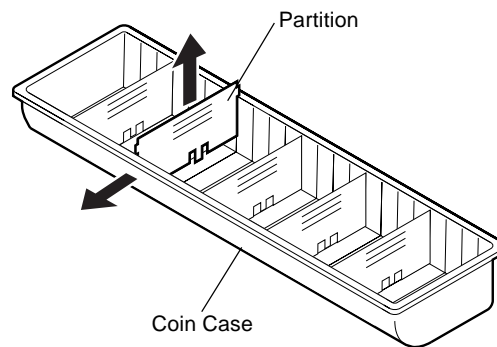
8.4 Changing the Layout of the Money Case

1) Open the drawer, then take the Money Case out.

Money Case

2) Remove the Coin Case from the Money Case.

Coin Case

Money Case

3) To remove the Partition from the Coin Case, pull the Partition upward while pushing the Coin Case outward.

Partition

Coin Case

4) Set the Partition in the groove of the place where you like to set, then push the Partition downward.

Partition

Coin Case
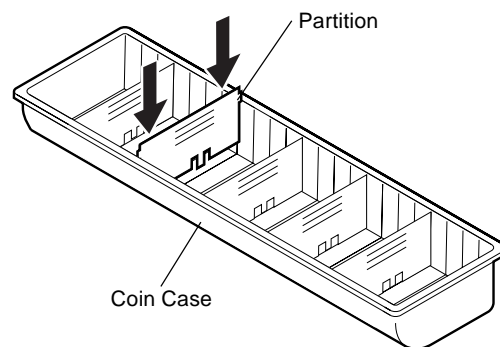
5) To change the layout of the Bill Case, it is necessary to remove the Bill Holder. To remove the Bill Holder, insert the tip of the phillips screwdriver in the back of the Bill Holder, then push the phillips screwdriver downward. To remove the Partition, pull the front of the Partition upward.

Bill Holder

Phillips Screwdriver

Bill Holder
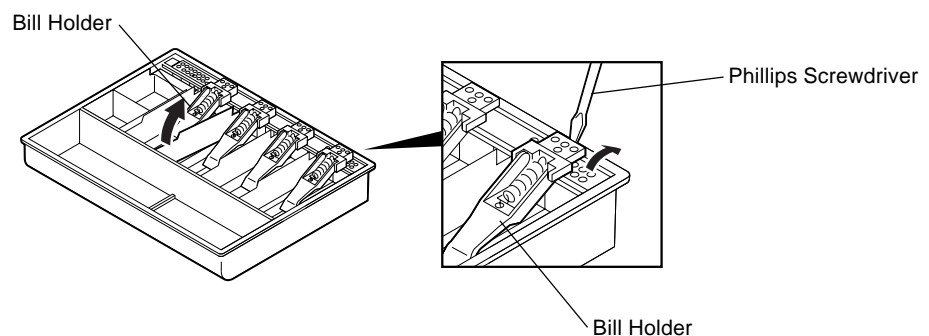
8.5 Media Slot

The Media Slot provided at the front of the drawer is used to put non-cash media such as check in the drawer without opening it. The non-cash media put from this slot are kept under the Money Case, therefore you can keep them in secret.

Media Slot

Money Case

Non-cash media are kept here.
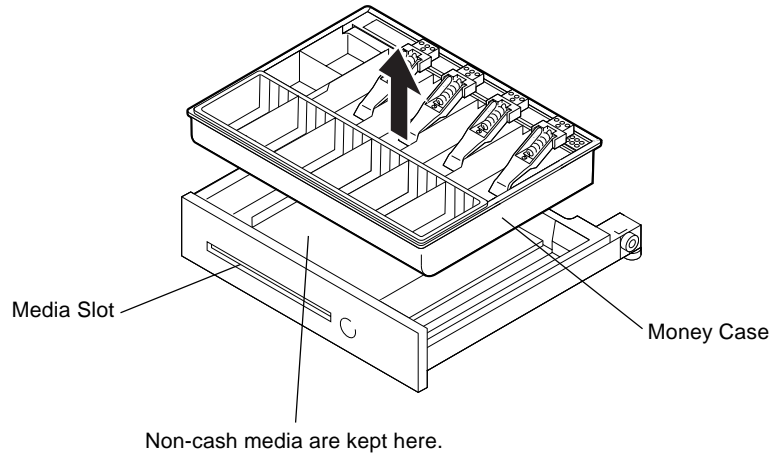
9. GENERAL MAINTENANCE

9.1 Cleaning

WARNING!
1. Be sure to disconnect the power cord prior to performing any maintenance.
2. Do not pour water directly on or wipe the operator's/Customer's display with a soaked cloth, as this may cause fire, electric shock, or machine failure.

CAUTION!
1. Never use an organic solvent like thinners or benzene for cleaning. Using such solvents may discolor the covers.
2. Do not use any sharp object to clean the operator's/Customer's display. Doing so may cause an operator's/Customer's display failure.

To help retain the high quality and performance of your POS Terminal, it should be cleaned regularly.
The greater the usage on the POS Terminal, the more frequent the cleaning. (i.e. low usage = weekly: high usage = daily)

• **Cleaning the Operator's Display**
  Clean the surface of the operator's display with a soft dry cloth or with an electrostatic free cleaner for automated office equipment.

• **Cleaning the Covers**
  Wipe the covers with a soft dry cloth or soft cloth slightly moistened with mild detergent. After using detergent for cleaning, be sure to wipe it off with a slightly moistened cloth.

10. TROUBLESHOOTING

WARNING!
If you cannot solve a problem with the following solutions, do not attempt to repair it yourself.
Turn the power off, unplug the POS Terminal, then contact your TOSHIBA TEC representative for assistance.

Symptom	Check Point	Solution
The power does not turn on.	• Is the power cord plugged in correctly? • Is the power supplied to the AC outlet? • Has the fuse or circuit breaker blown?	• Plug in correctly. • If it is not a power failure, check for the power supply to the AC outlet with another electric appliance. When the power is not supplied, contact your nearest power company. • Check the fuse or circuit breaker.
Registration cannot be performed.	• Is the key position set correctly?	• Set the key position correctly.
Receipt paper is not issued.	• Is the receipt roll loaded properly? • Is the printer jammed with the receipt?	• Refer to page 5-3 (Dot Printer Type) or 6-1 (Thermal Printer Type) and load the receipt roll properly. • Remove the jammed receipt, and reload the receipt roll.
Journal paper is not taken up.	• Is the journal roll loaded properly?	• Refer to page 5-5 and load the journal roll oroperly.

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