

# **TOSHIBA**

TOSHIBA Barcode Printer

## **B-EV4D-GS24-CUS-R**

**Owner's Manual**  
**Mode d'emploi**  
**Bedienungsanleitung**  
**Manual de instrucciones**  
**Gebruikershandleiding**  
**Manuale Utente**  
**Manual do Utilizador**  
**Instrukcja użytkownika**



## CE Compliance (for EU only)

This product is labelled with the CE mark in accordance with the provisions of the applicable European Directives, notably the Low Voltage Directive 2006/95/EC, the Electromagnetic Compatibility Directive 2004/108/EC, the RoHS Directive 2011/65/EU for this product and the electric accessories, the Radio Equipment and Telecommunications Terminal Equipment Directive 1999/5/EC for the telecommunication accessories.

### **VORSICHT:**

- *Schallemission: unter 70dB (A) nach DIN 45635 (oder ISO 7779)*
- *Die für das Gerät vorgesehene Steckdose muß in der Nähe des Gerätes und leicht zugänglich sein.*

Centronics is a registered trademark of Centronics Data Computer Corp.

Microsoft is a registered trademark of Microsoft Corporation.

Windows is a trademark of Microsoft Corporation.

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 set in accordance with the instruction manual, may cause harmful interference to radio communications. Operations 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.

(for USA only)

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

"This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations."

"Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada."

(for CANADA only)



**N258**

**IP20**

This product is designed for commercial usage and is not consumer product.

**Waste Recycling information for users:**

Following information is only for EU-member states:

The use of the crossed-out wheeled bin symbol indicates that this product may not be treated as general household waste.

By ensuring this product is disposed of correctly you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about the take-back and recycling of this product, please contact your supplier where you purchased the product.



**Following information is only for India:**

The use of the symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

For more detailed information about the take-back and recycling of this product, please contact your supplier where you purchased the product.

This product complies with the “India E-waste Rule 2011” and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1% by weight and 0.01% by weight for cadmium, except for the exemption set in Schedule II of the Rule.



## 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, and then contact your authorised TOSHIBA TEC representative for assistance.

### Meanings of Each Symbol



This symbol indicates warning items (including cautions). Specific warning contents are drawn inside the  $\Delta$  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  $\odot$  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  $\bullet$  symbol. (The symbol on the left indicates “disconnect the power cord plug from the outlet”.)



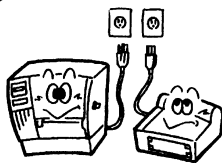
### WARNING

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



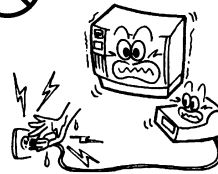
#### Use only specified AC voltage.

Do not use voltages other than the AC voltage specified on the rating plate, as this may cause **fire** or **electric shock**.



#### Prohibited

Do not plug in or unplug the power cord with wet hands as this may cause **electric shock**.



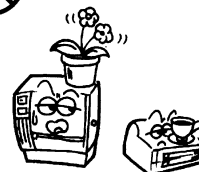
#### Prohibited

If the machine shares the same electrical outlet, with any other appliance that consumes a large amount 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**.



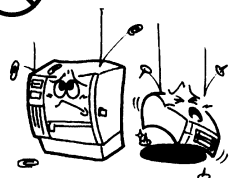
#### Prohibited

Do not place metal objects or water-filled containers (flower vases, flower pots or mugs etc) on top of the machine. If metal objects or spilled liquids enter the machine, this may cause **fire** or **electric shock**.



#### Prohibited

Do not insert or drop metal, flammable or other foreign objects into the machine through ventilation slits, as this may cause **fire** or **electric shock**.



#### Prohibited

Do not scratch, damage or modify the power cords. Do not place heavy objects on, pull on, or excessively bend the power cords, as this may cause **fire** or **electrical shock**.



#### Disconnect the plug.




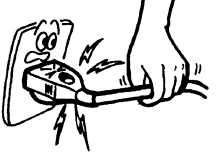



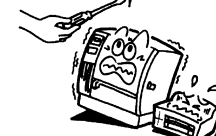




If the machine is dropped or the cabinet is damaged, turn off the power switch and disconnect the power cord plug from the outlet, and then contact your authorised TOSHIBA TEC representative for assistance. Continued use of a damaged machine may cause **fire** or **electric shock**.



#### Disconnect the plug.

Continued use of the machine in an abnormal condition (the machine is producing smoke or a strange smell) may cause **fire** or **electric shock**. In these cases, immediately turn off the power switch and disconnect the power cord plug from the outlet. Then, contact your authorised TOSHIBA TEC representative for assistance.



 <p><b>Disconnect the plug.</b></p> 	<p>If foreign objects (metal fragments, water, liquids) enter the machine, turn off the power switch and disconnect the power cord plug from the outlet, and then contact your authorised TOSHIBA TEC representative for assistance. Continued use of the machine in that condition may cause <b>fire</b> or <b>electric shock</b>.</p>	 <p><b>Disconnect the plug.</b></p> 	<p>When unplugging the power cords, be sure to hold and pull on the plug. Pulling on the cord may cut or expose the internal wires and cause <b>fire</b> or <b>electric shock</b>.</p>
 <p><b>Connect a grounding wire.</b></p> 	<p>Ensure that the equipment is properly grounded. Extension cables should also be grounded. <b>Fire</b> or <b>electric shock</b> could occur on improperly grounded equipment.</p>	 <p><b>No disassembling.</b></p> 	<p>Do not remove covers, repair or modify the machine yourself. Contact your TOSHIBA TEC representative for assistance. You may be <b>injured</b> by high voltage, very hot parts or sharp edges inside the machine.</p>
 <p><b>Prohibited</b></p> 	<p>Do not use a spray cleaner containing flammable gas for cleaning this product, as this may cause a <b>fire</b>.</p>	 <p><b>Prohibited</b></p> 	<p>Care must be taken not to injure yourself with the printer paper cutter.</p>



**CAUTION**

This indicates that there is the risk of personal **injury** or **damage** to objects if the machine is improperly handled contrary to this indication.

**Precautions**

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
  - \* Shared power source
  - \* Direct sunlight
  - \* Excessive vibration
  - \* High humidity
  - \* Dust/Gas
- The cover should be cleaned by wiping with a dry cloth or a cloth slightly dampened with a mild detergent solution. **NEVER USE THINNER OR ANY OTHER VOLATILE SOLVENT** on the plastic covers.
- **USE ONLY TOSHIBA TEC SPECIFIED** paper and ribbons.
- **DO NOT STORE** the paper or ribbons where they might be exposed to direct sunlight, high temperatures, high humidity, dust, or gas.
- Ensure the printer is operated on a level surface.
- Any data stored in the memory of the printer could be lost during a printer fault.
- Try to avoid using this equipment on the same power supply as high voltage equipment or equipment likely to cause mains interference.
- Unplug the machine whenever you are working inside it or cleaning it.
- Keep your work environment static free.
- Do not place heavy objects on top of the machine, as these items may become unbalanced and fall causing **injury**.
- Do not block the ventilation slits of the machine, as this will cause heat to build up inside the machine and may cause **fire**.
- Do not lean against the machine. It may fall on you and could cause **injury**.
- Unplug the machine when it is not used for a long period of time.
- Place the machine on a stable and level surface.
- **RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.**

**Request Regarding Maintenance**

- Utilise our maintenance services.  
After purchasing the machine, contact your authorised TOSHIBA TEC representative for assistance once a year to have the inside of the machine cleaned. Dust will build up inside the machines and may cause a **fire** or a **malfunction**. Cleaning is particularly effective before humid rainy seasons.
- Our preventive maintenance service performs periodic checks and other work required to maintain the quality and performance of the machine.  
For details, please consult your authorised TOSHIBA TEC representative.
- Do not expose the machine to insecticides or other volatile solvents. This may cause the cabinet, or other parts, to deteriorate and may cause the paint to peel.

**Notification (for Turkey)**

EEE Yönetmeliğine Uygundur

## Résumé des précautions

La sécurité personnelle lors de la manipulation ou de l'entretien du matériel est extrêmement importante. Les avertissements et précautions nécessaires à la manipulation en toute sécurité du matériel sont inclus dans ce manuel. Les avertissements et précautions contenus dans ce manuel doivent être lus et assimilés avant toute manipulation ou entretien.

Ne tentez pas d'effectuer des réparations ou des modifications sur ce matériel. Si une erreur se produit qui ne peut être résolue en suivant les instructions de ce manuel, coupez le courant, déconnectez le câble secteur et contactez votre revendeur agréé TOSHIBA TEC pour une assistance technique.

## Explication des symboles



Ce symbole signale une mise en garde (ou des précautions).  
Le dessin à l'intérieur du  $\Delta$  symbole précise quelle est l'action à exécuter. (Le symbole ci-contre indique une précaution d'ordre général.)



Ce symbole signale une action interdite (interdictions).  
Le dessin à l'intérieur ou près du  $\text{O}$  symbole précise quelle est l'action interdite. (Le symbole ci-contre indique "Ne pas démonter".)



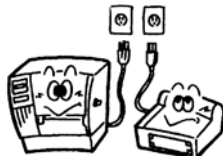
Ce symbole indique une action à effectuer.  
Le dessin à l'intérieur du  $\text{Z}$  symbole précise quelle est l'action à exécuter. (Le symbole ci-contre indique "Retirer la fiche secteur de la prise".)

## ATTENTION

Indique un danger de **mort** ou de **blessures graves** si l'équipement est utilisé en négligeant ces instructions.



**Interdiction d'utiliser une tension autre que celle spécifiée**



Ne faites pas fonctionner la machine avec une tension électrique différente de celle indiquée sur la plaquette des caractéristiques. Ceci pourrait provoquer un **incendie** ou une **électrocution**.



**Interdit**



Ne branchez pas et ne débranchez pas la fiche secteur avec les mains mouillées. Vous risqueriez une **électrocution**.



**Interdit**



Si la machine partage une même prise avec d'autres appareils consommant beaucoup d'électricité, il y aura des fluctuations de tension importantes lorsque ces appareils fonctionnent. Pour éviter tout risque d'**incendie** ou de **choc électrique**, ne branchez pas d'autres appareils à la même prise que la machine.



**Interdit**



Ne placez pas d'objets métalliques ou de récipients contenant un liquide (vases, pots de fleurs, tasses, etc.) sur la machine. Un objet métallique ou un liquide peut provoquer un **incendie** ou une **électrocution** s'il pénètre accidentellement dans la machine.



**Interdit**



N'introduisez pas et ne faites pas tomber de pièces métalliques, de matières inflammables ou d'autres objets dans les ouvertures d'aération de la machine. Ils pourraient provoquer un **incendie** ou une **électrocution**.



**Interdit**



N'essayez pas de réparer ou de modifier vous-même la machine. Ceci pourrait provoquer un **incendie** ou une **électrocution**. Pour toute question sur les réparations, adressez-vous à votre revendeur (ou au service après-vente).



**Débranchez la fiche.**








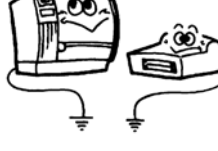

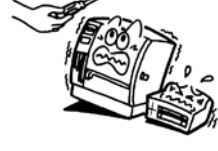




Si les machines tombent, ou que leur capot est endommagé, commencez fi par positionner le bouton marche/arrêt sur arrêt et par déconnecter le câble secteur de la prise murale. Ensuite, contactez votre revendeur agréé TOSHIBA TEC pour une assistance technique. Une utilisation prolongée de l'imprimante dans ces conditions peut être source d'**incendie** ou de **choc électrique**.



**Débranchez la fiche.**



Une utilisation prolongée de l'imprimante dans une condition anormale, comme par exemple lorsque l'imprimante produit de la fumée ou des odeurs étranges peut être source d'**incendie** ou de **choc électrique**. Dans ce cas, éteignez immédiatement l'interrupteur marche/arrêt et déconnectez le câble secteur de la prise murale. Ensuite, contactez votre revendeur agréé TOSHIBA TEC pour une assistance technique.

 <p><b>Débranchez la fiche.</b></p> 	<p>Si des corps étrangers (fragments de métal, eau, liquides) pénètrent commencez par positionner le bouton marche/arrêt sur arrêt et par déconnecter le câble secteur de la prise murale. Ensuite, contactez votre revendeur agréé TOSHIBA TEC pour une assistance technique. Une utilisation prolongée de l'imprimante dans ces conditions peut être source d'incendie ou de choc électrique.</p>	 <p><b>Débranchez la fiche.</b></p> 	<p>Pour débrancher le câble d'alimentation, tirez-le par la prise. Ne tirez pas directement sur le câble. Ceci pourrait sectionner et exposer les fils internes du câble et causer un <b>incendie</b> ou une <b>électrocution</b>.</p>
 <p><b>Connectez un fil de terre.</b></p> 	<p>Assurez-vous que votre installation est correctement reliée à la terre. Une mauvaise installation peut provoquer un début d'incendie ou un choc électrique.</p>	 <p><b>Démontage interdit</b></p> 	<p>Ne pas retirer les capots, réparer ou modifier l'imprimante par vous-même. Vous pouvez recevoir un choc électrique ou vous blessé par des bords tranchants dans l'imprimante.</p>
 <p><b>Interdit</b></p> 	<p>Ne pas utiliser de spray nettoyant contenant du gaz inflammable pour nettoyer ce produit, ceci pourrait provoquer un feu.</p>	 <p><b>Interdit</b></p> 	<p>Faire attention au couteau de l'imprimante.</p>

**PRECAUTION** Indique un risque de **blessures** ou de **dommages** si l'équipement est utilisé en négligeant ces instructions.

**Précautions**

Les précautions suivantes vous permettront d'avoir un fonctionnement correct de l'imprimante.

- Evitez les endroits qui présentent les conditions défavorables suivantes:
  - \* Température hors des spécifications
  - \* Exposition directe au soleil
  - \* Humidité élevée
  - \* Alimentation secteur partagée avec d'autres dispositifs.
  - \* Vibrations excessives
  - \* Poussière/Gaz
- Nettoyez le couvercle en l'essuyant au moyen d'un chiffon sec ou d'un chiffon imbibé de détergent. **NE JAMAIS UTILISER DE DILUANT NI D'AUTRES SOLVANTS VOLATILES** sur les capots en plastique.
- Utilisez des étiquettes et des rubans recommandés par TOSHIBA TEC.
- N'entrez pas les films et media à un endroit où ils seraient exposés à la lumière directe du soleil, à des températures élevées, à une humidité importante, à de la poussière ou à des gaz.
- Assurez-vous d'utiliser l'imprimante sur une surface plane.
- Toute information mémorisée dans la mémoire de l'imprimante peut être perdue lors d'une erreur d'impression.
- Evitez d'utiliser cet équipement sur la même ligne secteur que des appareils de forte puissance ou susceptibles d'émettre des interférences.
- Eteindre l'imprimante lors des interventions à l'intérieur ou lors des nettoyages.
- s'assurer de garder l'environnement de travail à l'abri de l'électricité statique.
- Ne placez pas d'objets lourds sur la machine. Ils pourraient tomber et blesser quelqu'un.
- Ne bouchez pas les ouvertures d'aération de la machine. La chaleur s'accumulerait à l'intérieur et pourrait provoquer un **incendie**.
- Ne pas s'appuyer contre l'imprimante Celle-ci peut tomber et vous pouvez être blessé.
- Débranchez l'imprimante lorsqu'elle n'est pas utilisée pendant une longue période.
- Placer la machine sur une surface stable.
- **RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UN TYPE INCORRECT.** Mettez au rebut les batteries usagées conformément aux instructions du fabricant.

**Au sujet de la maintenance**

- Faites appel à nos services de maintenance. Après avoir reçu le matériel, prenez contact avec votre revendeur agréé TOSHIBA TEC pour une visite de maintenance annuelle, de manière à effectuer un nettoyage complet de l'intérieur de la machine. Autrement, la poussière qui s'accumule à l'intérieur de la machine peut être source d'incendie ou de mauvais fonctionnement. Le nettoyage est particulièrement nécessaire avant les saisons humides ou pluvieuses.
- Nos services de maintenance effectuent les vérifications périodiques et les autres opérations nécessaires à maintenir la qualité et la performance des imprimantes. Prévenant de ce fait les problèmes. Pour tous détails, consultez votre revendeur agréé TOSHIBA TEC.
- Utilisations d'insecticides et d'autres produits. N'exposez pas les machines aux insecticides ou à d'autres solvants volatiles, dans la mesure où cela peut endommager les capots ou entraîner un écaillage de la peinture.

## TABLE OF CONTENTS

	Page
<b>1. PRODUCT OVERVIEW</b> .....	<b>E1-1</b>
1.1 Introduction.....	E1-1
1.2 Features.....	E1-1
1.3 Unpacking.....	E1-1
1.4 Accessories.....	E1-1
1.5 Appearance.....	E1-3
1.5.1 Dimensions.....	E1-3
1.5.2 Front View.....	E1-3
1.5.3 Rear View.....	E1-3
1.5.4 Interior.....	E1-4
1.5.5 Button and Indicator Lamp.....	E1-5
<b>2. PRINTER SETUP</b> .....	<b>E2-1</b>
2.1 Precautions.....	E2-1
2.2 Procedure before Operation.....	E2-2
2.3 Turning the Printer ON/OFF.....	E2-2
2.3.1 Turning ON the Printer.....	E2-2
2.3.2 Turning OFF the Printer.....	E2-3
2.4 Connecting the Cables to the Printer.....	E2-4
2.5 Connecting the Power Adapter and the Power Cord.....	E2-5
2.6 Opening/Closing the Top Cover.....	E2-6
2.7 Loading the Media.....	E2-7
2.8 Media Sensor Calibration, Self Print Test, and Dump Mode Utilities.....	E2-11
2.8.1 Media Sensor Calibration.....	E2-11
2.8.2 Self Print Test and Dump Mode.....	E2-12
2.9 How to Use an SD Card.....	E2-1
<b>3. MAINTENANCE</b> .....	<b>E3-1</b>
3.1 Cleaning.....	E3-1
3.1.1 Print Head.....	E3-1
3.1.2 Platen / Paper path / Sensors.....	E3-2
3.1.3 Cover.....	E3-2
3.1.4 Media Housing.....	E3-3
3.1.5 Linerless Cutter (Option).....	E3-3
3.2 Care/Handling of the Media.....	E3-5
<b>4. TROUBLESHOOTING</b> .....	<b>E4-1</b>
4.1 Troubleshooting Guide.....	E4-1
4.2 Status Lamp.....	E4-2
4.2 Removing Jammed Media.....	E4-3
<b>APPENDIX 1 SPECIFICATIONS</b> .....	<b>EA1-1</b>
A1.1 Printer.....	EA1-1
A1.2 Options.....	EA1-2
A1.3 Media.....	EA1-2
A1.3.1 Media Type.....	EA1-2
A1.3.2 Effective Print Area.....	EA1-3

**APPENDIX 2 INTERFACE .....EA2-1****GLOSSARIES****WARNING!****For EU only**

*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.*

**CAUTION!**

- 1. This manual may not be copied in whole or in part without prior written permission of TOSHIBA TEC.*
- 2. The contents of this manual may be changed without notification.*
- 3. Please refer to your local Authorized Service representative with regard to any queries you may have in this manual.*

**AVERTISSEMENT!**

*Ceci est un produit de Classe A. Dans un environnement domestique, ce produit peut causer des interférences radio, et dans ce cas l'utilisateur pourrait être amené à prendre les mesures nécessaires.*

**ATTENTION!**

- 1. Ce manuel ne peut être copié, en entier ni en partie, sans l'autorisation écrite préalable de TOSHIBA TEC.*
- 2. Le contenu de ce manuel est susceptible d'être modifié sans préavis.*
- 3. Veuillez contacter votre représentant local pour toutes questions relatives à ce manuel.*

# 1. PRODUCT OVERVIEW

## 1.1 Introduction

Thank you for choosing the TOSHIBA B-EV4D series barcode printer. This Owner's Manual contains valuable information from general set-up to confirming the printer's operation using test prints. You should read it carefully to help you gain maximum performance and life from your printer. This manual should be kept close at hand for everyday reference. Please contact your TOSHIBA TEC representative for further information concerning this manual.

## 1.2 Features

This printer has the following features:

### Various kinds of interface

Various kinds of interface are provided as standard:

- Parallel
- Serial
- USB
- Ethernet

### Simple mechanism

The simple printer mechanism allows easy operation and maintenance.

### Superior hardware

Clear print is realized by 8 dots/mm (203 dpi) (for the B-EV4D-GS24) print head at maximum printing speed of 127 mm/sec. (5 inches/sec.).

### Safety consciousness

The damper mechanism prevents the top cover from slamming shut.

### Options

Linerless Cutter module is available.

1. Unpack the printer.
2. Check for damage or scratches on the printer. However, please note that TOSHIBA TEC shall have no liability for any damage of any kind sustained during transportation of the product.
3. Keep the cartons and pads for future transportation of the printer.

## 1.3 Unpacking

When unpacking the printer, please check that the following accessories are supplied with the printer.


















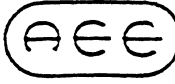

## 1.4 Accessories

- |  |   |
|--|---|
| <input type="checkbox"/> Owner's Manual (1 copy) | <input type="checkbox"/> Power Adapter (1 pc.)  |
| <input type="checkbox"/> US power cord (1 pc.)   | <input type="checkbox"/> 3.5m USB cable (1 pc.) |
| <input type="checkbox"/> Cleaner pen (1 pc.)     | <input type="checkbox"/> Glue remover (1 pc.)   |

■ When purchasing the power cord

Since only US power cord set is enclosed in this unit, please purchase an approved one that meets the following standard from your authorized TOSHIBA TEC representative.

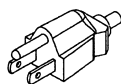
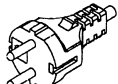
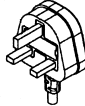


(As of August 2008)

Country	Agency	Certification mark	Country	Agency	Certification mark	Country	Agency	Certification mark
Australia	SAA		Germany	VDE		Sweden	SEMKKO	
Austria	OVE		Ireland	NSAI		Switzerland	SEV	
Belgium	CEBEC		Italy	IMQ		UK	ASTA	
Canada	CSA		Japan	METI		UK	BSI	
Denmark	DEMKO		Netherlands	KEMA		U.S.A.	UL	
Finland	FEI		Norway	NEMKO		Europe	HAR	
France	UTE		Spain	AEE		China	CCC	

Power Cord Instruction

1. For use with 100 – 125 Vac mains power supply, please select a power cord rated Min. 125V, 10A.
2. For use with 200 – 240 Vac mains power supply, please select a power cord rated Min. 250V.
3. Please select a power cord with the length of 2m or less.
4. The power cord plug connected to the AC adapter must be able to be inserted into an ICE-320-C6 inlet. Refer to the following figure for the shape.



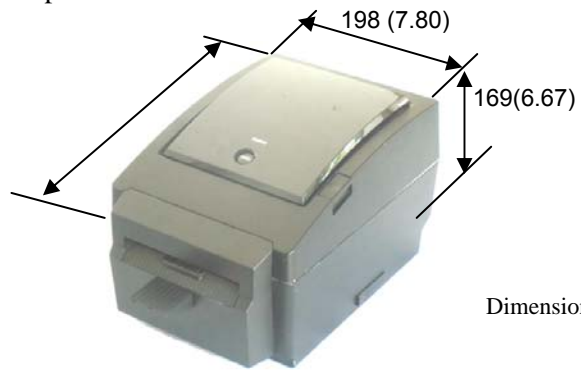
Country/Region	North America	Europe	United Kingdom	Australia	China
Power Cord Rated (Min.)	125V, 10A	250V	250V	250V	250V
Type	SVT	H05VV-F	H05VV-F	AS3191 approved, Light or Ordinary Duty type	GB5023
Conductor size (Min.)	No. 3/18AWG	3 x 0.75 mm <sup>2</sup>	3 x 0.75 mm <sup>2</sup>	3 x 0.75 mm <sup>2</sup>	3 x 0.75 mm <sup>2</sup>
Plug Configuration (locally approved type)					
Rated (Min.)	125V, 10A	250V, 10A	250V, *1	250V, *1	250V, *1

\*1: At least, 125% of the rated current of the product.

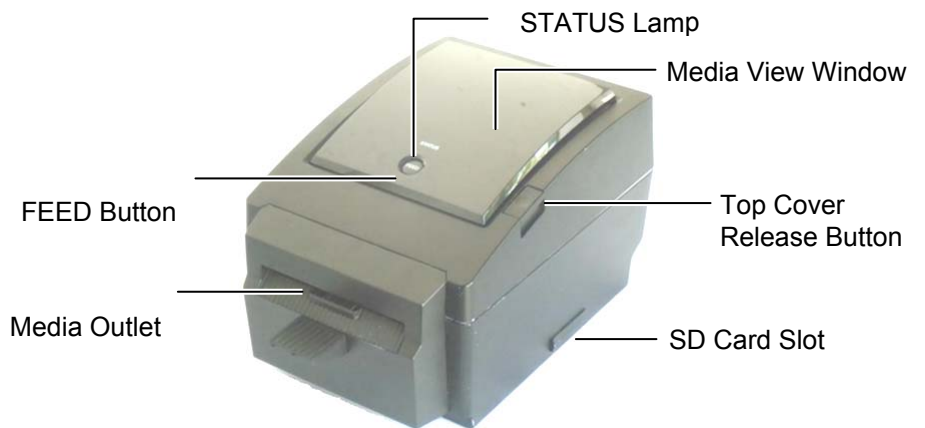
## 1.5 Appearance

### 1.5.1 Dimensions

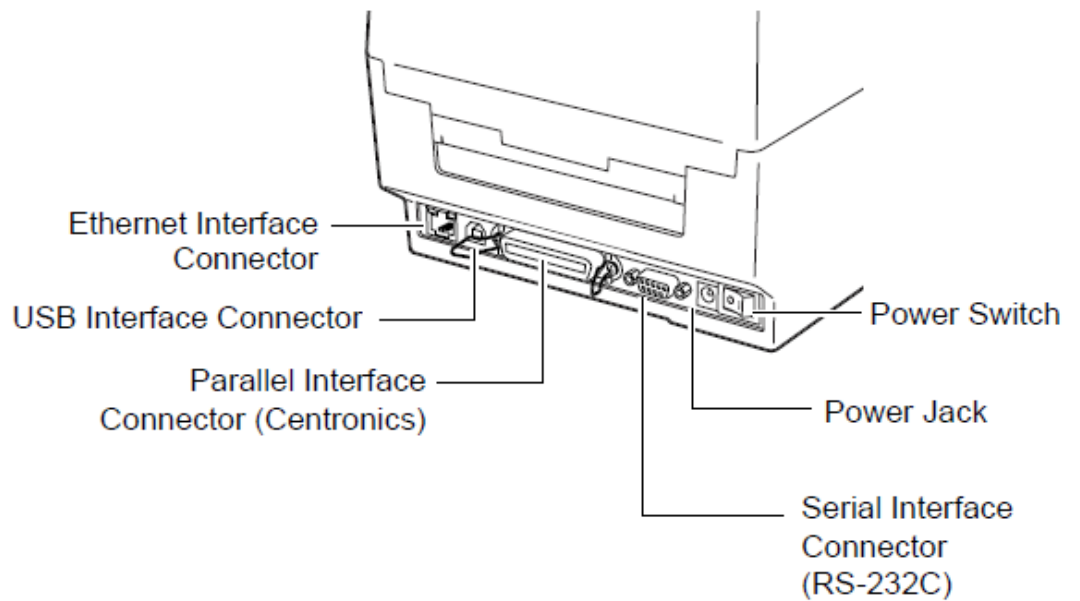
The names of the parts or units introduced in this section are used in the following chapters.



### 1.5.2 Front View



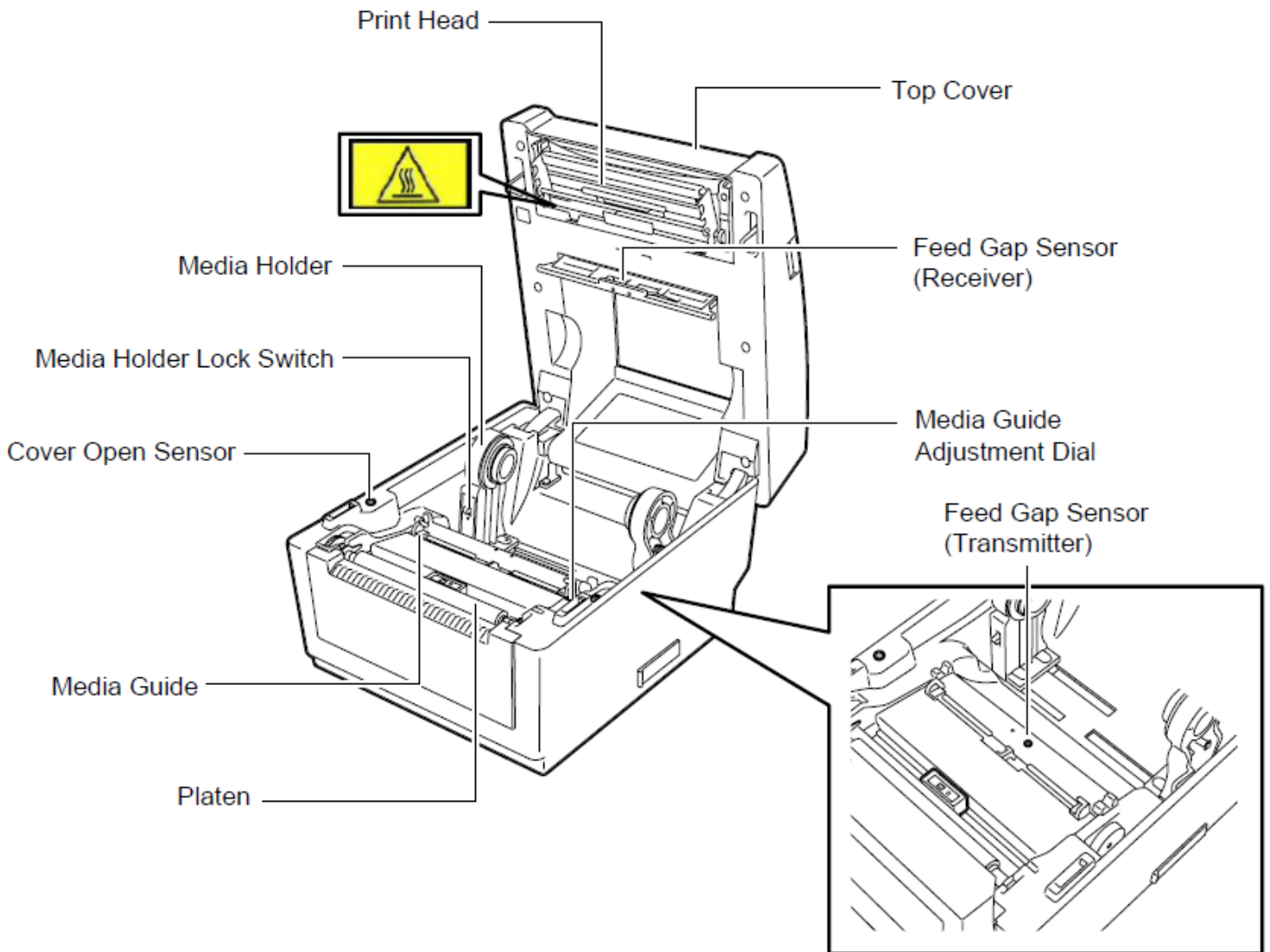
### 1.5.3 Rear View



1.5.4 Interior

**WARNING!**  
 Do not touch the print head or around it just after printing. You may get burned as the print head becomes very hot during printing.

**AVERTISSEMENT!**  
 Ne touchez pas la tête ou autour de celle-ci juste après l'impression. Vous pourriez vous brûler car la tête chauffe beaucoup lors de l'impression.



### 1.5.5 Button and Indicator Lamp

The [FEED] button operates as FEED button or PAUSE button depending on the printer statuses.

As the FEED button	<ul style="list-style-type: none"> <li>Pressing this button when the printer is in online state causes a media feed.</li> <li>Pressing this button after removing a cause of an error returns the printer to online state.</li> </ul>
As the PAUSE button	<ul style="list-style-type: none"> <li>Pressing this button during printing stops printing after completing the current label. The printer resumes printing when this button is pressed again.</li> </ul>

The indicator lamp lights up or flashes in different colors depending on the printer statuses. The main indicator lamp statuses and the corresponding printer statuses are shown inside the top cover.

Color	Status	Printer status
Green	Lights up	Stand-by
Green	Flashes fast	Communicating with a host.
Green	Flashes slowly	Printing is temporarily stopped (paused).
Green/Red	Flashes slowly	The print head temperature exceeded the upper limit.
Red	Lights up	A communication error occurred. (Only when the RS-232C is used.)
Red	Flashes fast	A paper jam occurred.
Red	Flashes at medium speed	The media is ended.
Red	Flashes slowly	An issue or feed was attempted with the top cover opened.
Orange	Flashes fast	A paper jam occurred in the cutter unit. (Only when the cutter unit is fitted.)
None	Unlit	The top cover is open.

## 2. PRINTER SETUP

This section outlines the steps necessary to setup your printer prior to its operation. The section includes precautions, connecting cables, assembling accessories, loading media, and performing a test print.

### 2.1 Precautions

**CAUTION!**

*Avoid using the printer in the locations where it is subjected to intense light (e.g. direct sunlight, desk light). Such light may affect the sensors of the printer, causing malfunctions.*

**PRECAUTION!**

*Evitez d'utiliser l'imprimante à des endroits exposés à une forte luminosité (lumière solaire directe, lampe de bureau) car les capteurs de l'imprimante peuvent en être affectés et entraîner un mauvais fonctionnement.*

To insure the best operating environment, and to assure the safety of the operator and the equipment, please observe the following precautions.

- Operate the printer on a stable, level, operating surface in a location free from excessive humidity, high temperature, dust, vibration or direct sunlight.
- Keep your work environment static free. Static discharges can cause damage to delicate internal components.
- Make sure that the printer is connected to a clean source of AC Power and that no other high voltage devices that may cause line noise interference are connected to the same mains.
- Ensure that the printer is connected only to AC mains that has a proper ground (earth) connection.
- Do not operate the printer with the cover open. Be careful not to allow fingers or articles of clothing to get caught into any of the moving parts of the printer.
- Make sure to turn off the printer power and to remove the power adapter connector from the printer whenever working on the inside of the printer or when cleaning the printer.
- For best results, and longer printer life, use only TOSHIBA TEC recommended media. (Refer to the Supply Manual.)
- Store the media in accordance with the specifications.
- This printer mechanism contains high voltage components; therefore you should never remove any of the covers of the machine as you may receive an electrical shock. Additionally, the printer contains many delicate components that may be damaged if accessed by unauthorized personnel.
- Clean the outside of the printer with a clean dry cloth or a clean cloth slightly dampened with a mild detergent solution.
- Use caution when cleaning the thermal print head as it may become very hot while printing. Wait until it has had time to cool before cleaning. Use only the accessory Cleaner Pen to clean the print head.
- Do not turn off the printer power or remove the power plug while the printer is printing or while the Indicator Lamp is flashing.

## 2.2 Procedure before Operation

**NOTE:**

1. To communicate directly with a host computer, an RS-232C, Centronics, Ethernet, or USB cable is required.
  - (1) RS-232C cable: 9 pins  
(do not use a null modem cable)
  - (2) Centronics cable: 36 pins
  - (3) Ethernet cable: 10/100 Base
  - (4) USB cable: V2.0 (Full Speed)
2. Use of a Windows Driver will allow issuing media on the printer from a Windows application.  
The printer can also be controlled with its own programming commands. For details, please contact your TOSHIBA TEC representative.

This section describes the outline of the printer setup.

1. Unpack the accessories and printer from the box.
2. Refer to Safety Precautions in this manual and set up the printer at a proper location.
3. Make sure that the Power Switch is off. (Refer to **Section 2.3**.)
4. Connect the printer to a host computer with an RS-232C, Centronics interface, Ethernet cable or USB cable. (Refer to **Section 2.4**.)
5. Connect the Power Adapter to the printer, and then plug the Power Cord into a properly grounded power outlet. (Refer to **Section 2.5**.)
6. Load the media. (Refer to **Section 2.7**.)
7. Adjust the position of the Feed Gap Sensor to match the media being used when the media has Gap. (Refer to **Section 2.7**.)
8. Turn the Power ON. (Refer to **Section 2.3**.)
9. Install the Printer Drivers in the host computer. (Refer to the Printer Driver Manual.)

## 2.3 Turning the Printer ON/OFF

When the printer is connected to a host computer it is good practice to turn the printer ON before turning on the host computer and to turn OFF the host computer before turning off the printer.

### 2.3.1 Turning ON the Printer

**CAUTION!**

Use the power switch to turn the printer on/off. Plugging or unplugging the power cord to turn the printer on/off may cause fire, an electric shock, or damage to the printer.

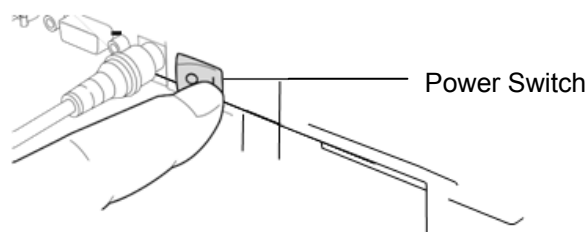
**ATTENTION!**

Utilisez le bouton Marche/Arrêt pour allumer et éteindre l'imprimante. Brancher et débrancher le câble peut entraîner un incendie, un choc électrique ou peut endommager l'imprimante.

**NOTE:**

If the Status Lamp is illuminated in red, go to **Section 4.1, Troubleshooting Guide**.

1. To turn ON the printer power, press the power switch as shown in the picture below. Note that ( | ) is the power ON side of the switch.



2. Check that the Indicator Lamp flashes slowly in orange for 5 seconds, and then stays illuminated in green.

### 2.3.2 Turning OFF the Printer

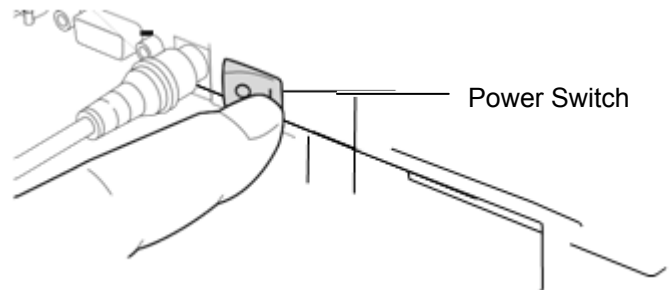
**CAUTION!**

1. Do not turn off the printer power while the media is being printed as this may cause a paper jam or damage to the printer.
2. Do not turn off the printer power while the Green Indicator Lamp is flashing as this may cause damage to the data being downloaded.

**ATTENTION!**

1. N'éteignez pas l'imprimante pendant l'impression, car cela peut entraîner un bouchage papier ou endommager l'imprimante.
2. N'éteignez pas l'imprimante pendant que voyant vert clignote, car cela peut endommager les données en cours de chargement.

1. Before turning off the printer power switch verify that the Indicator Lamp is illuminated in green, not flashing.
2. To turn OFF the printer power, press the power switch as shown in the diagram below. Note that ( O ) is the power OFF side of the switch.



## 2.4 Connecting the Cables to the Printer

### CAUTION!

Be sure to connect the serial or parallel cable while the printer and the host computer are power-off states. Failure to do this may cause electric shock, short-circuit, or breakdown of the printer.

### PRECAUTION!

Assurez-vous que l'imprimante et l'ordinateur hôte soient bien éteints avant de connecter le câble série ou parallèle, faute de quoi cela pourrait causer un choc électrique, un court-circuit ou mettre l'imprimante en panne.

### NOTE:

For the specifications of the serial interface cable, refer to **APPENDIX 2, INTERFACE**.

The following paragraphs outline how to connect the cables from the printer to your host computer, and will also show how to make cable connections to other devices. Depending on the application software you use to print labels, there are four possibilities for connecting the printer to your host computer. These are:

- A serial cable connection between the printer's RS-232C serial connector and one of your host computer's COM ports.
- A parallel cable connection between the printer's standard parallel connector and your host computer's parallel port (LPT).
- An Ethernet cable connection between the printer's Ethernet interface connector and one of your host computer's Ethernet ports.

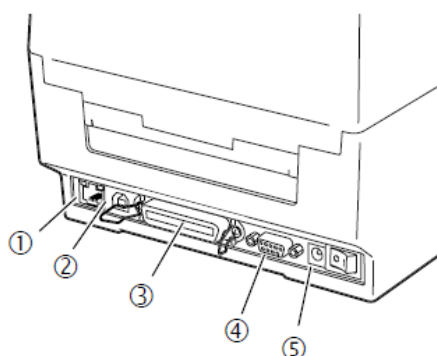
### NOTE:

- Use an Ethernet cable conforming to the standard.  
10BASE-T: Category 3 or greater  
100BASE-TX: Category 5 or greater  
Cable length: Up to 100 m segment length
- Depending on the operating environment, a communication error may occur. In that case, you may need to use a shielded cable (STP) or device matching.
- A USB cable connection between the printer's USB interface connector and one of your host computer's USB ports.

### NOTE:

- When disconnecting the USB cable from the host computer, follow the "Safely remove hardware" message shown on the host.
- Use a USB cable confirming to V1.1 or greater and with a Type B connector provided on either end.

The diagram below shows all the possible cable connections to the current version of the printer.



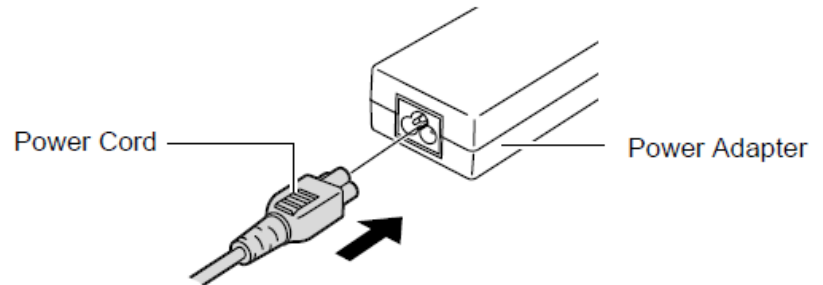
- ① Ethernet Interface
- ② USB Interface
- ③ Parallel Interface (Centronics)
- ④ Serial Interface (RS-232C)
- ⑤ Power Jack

## 2.5 Connecting the Power Adapter and the Power Cord

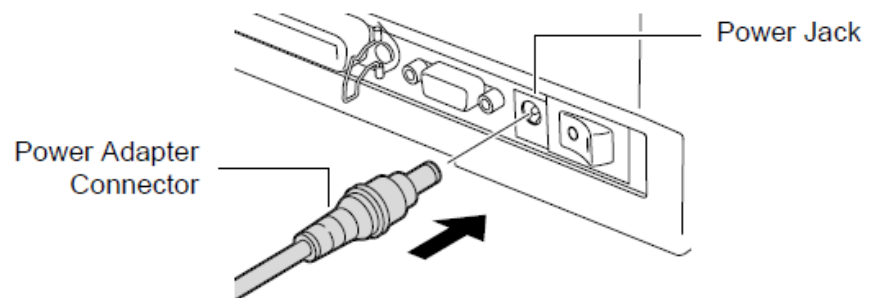
### NOTES:

1. Since the power cord is not enclosed in this printer, please purchase a proper one after referring to page 1-2.
2. The EA10953 AC adapter should be exclusively used for the B-EV4D Series printer. The B-EV4D Series printer must be powered by the EA10953 AC adapter.

1. Make sure that the printer power switch is in the OFF (O) position.
2. Insert the Power Cord into the inlet of the Power Adapter.



3. Insert the Power Adapter connector into the Power Jack on the rear of the printer.

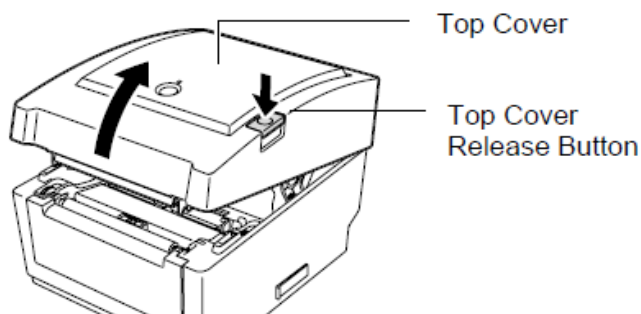


## 2.6 Opening/Closing the Top Cover

When opening or closing the Top Cover, please be sure to follow the instructions below.

### To open the Top Cover:

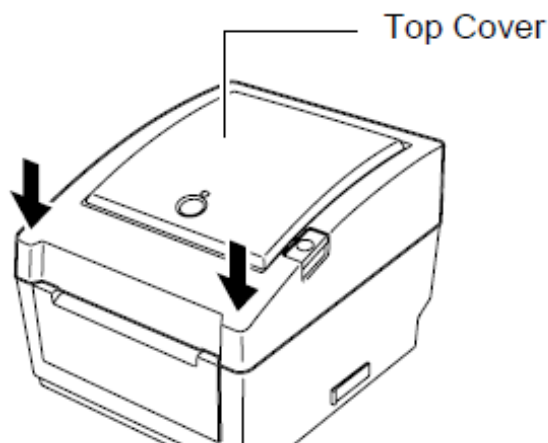
1. Press down the Top Cover Release Button to unlock the Top Cover, and then fully open the Top Cover.



As the Top Cover is held by the damper, it does not close under its own weight.

### To close the Top Cover:

1. Press down the portions of the Top Cover indicated by the arrows until they click into position.



#### **WARNING!**

To avoid injury, be careful not to trap your fingers while opening or closing the cover.

#### **AVERTISSEMENT!**

Pour prévenir tout dommage, évitez d'accrocher ou de coincer tous objets dans le mécanisme.

#### **CAUTION!**

1. Be careful not to touch the Print Head Element when opening the Top Cover. Failure to do this may cause missing dots by static electricity or other print quality problems.
2. Do not cover the Cover Open Sensor with your finger, hand, etc. Doing so may cause the sensor to wrongly detect a cover close state.

#### **ATTENTION!**

1. Prenez garde à ne pas toucher les éléments actifs de la tête en levant le bloc de tête. L'électricité statique peut engendrer des problèmes de qualité d'impression ou endommager des points de tête.
2. N'obtenez pas le détecteur de capot ouvert avec votre main ou votre doigt, car cela pourrait entraîner une détection erronée de la fermeture du capot.

#### **NOTE:**

Be sure to close the Top Cover completely. Failure to do this may affect the print quality.

## 2.7 Loading the Media

This section describes how to load a media in the printer. This printer accepts Linerless label rolls. Please use TOSHIBA TEC approved media.

### WARNING!

1. Do not touch any moving parts. To reduce the risk of fingers, jewellery, clothing, etc. being drawn into the moving parts, be sure to load the media once the printer has stopped moving completely.
2. To avoid injury, be careful not to trap your fingers while opening or closing the Top Cover.

### AVERTISSEMENT!

1. Ne touchez pas aux parties mobiles. Pour réduire le risque de prendre vos doigts, bijoux ou vêtements dans les parties mobiles, mettez l'interrupteur en position arrêt pour stopper le mécanisme.
2. Pour prévenir tout dommage, évitez d'accrocher ou de coincer tous objets dans le mécanisme.

### CAUTION!

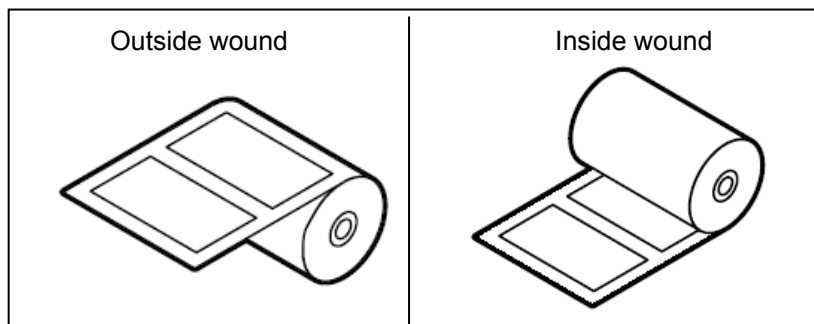
Be careful not to touch the Print Head Element when opening the Top Cover. Failure to do this may cause missing dots by static electricity or other print quality problems.

### ATTENTION!

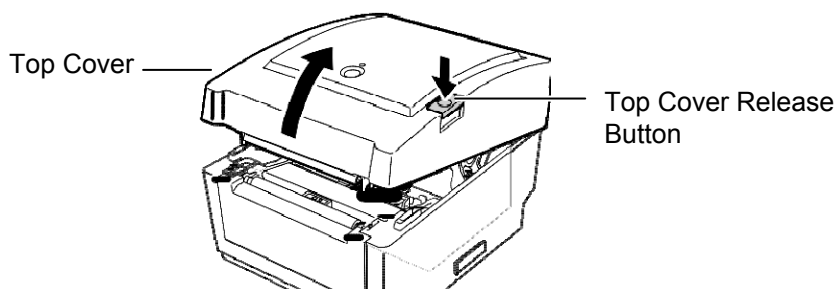
Prenez garde à ne pas toucher les éléments actifs de la tête en levant le bloc de tête. L'électricité statique peut engendrer des problèmes de qualité d'impression ou endommager des points de tête.

### NOTES:

1. Please perform a media sensor calibration when you use a label which has gaps.
2. The size of the media which can be loaded inside the printer is as follows:
  - Outer roll diameter: Max. 127mm (5")
  - Inner core diameter: 25.4 (1") mm or 38.1 mm (1.5")
  - \* 1.5" is recommended.
3. Some media rolls are wound inside and the others are wound outside. (See the diagram below.) Outside wound type of media roll should be loaded so that the print side faces up.

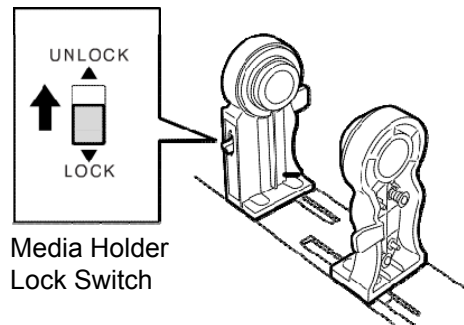


1. Press down the Top Cover Release Button to unlock the Top Cover, and then fully open the Top Cover.

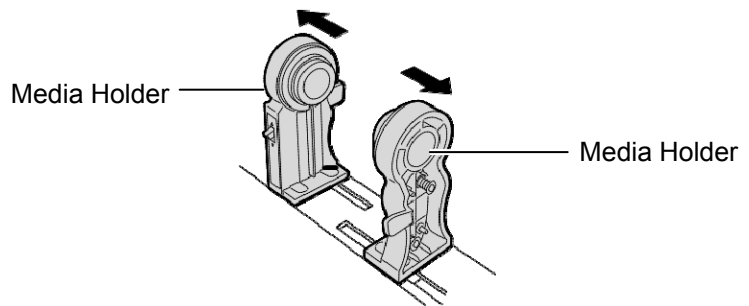


## 2.7 Loading the Media (Cont.)

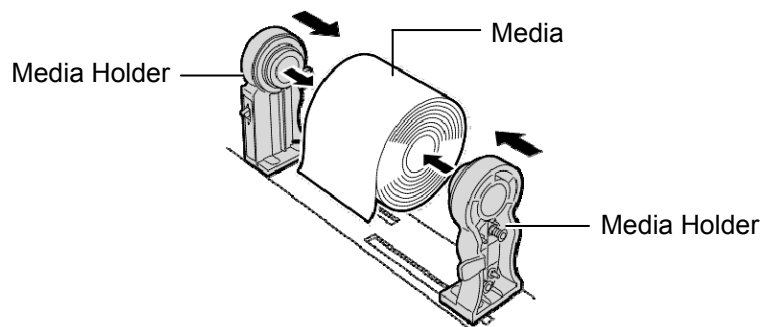
- Slide the Media Holder Lock Switch to the Unlock (▲) side to release the Media Holders.



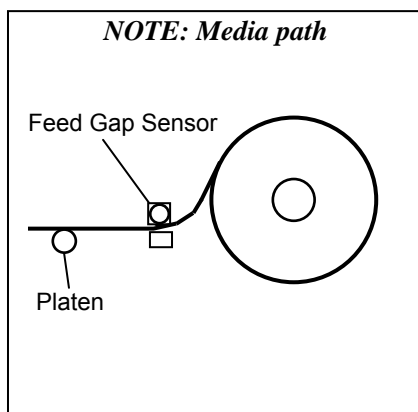
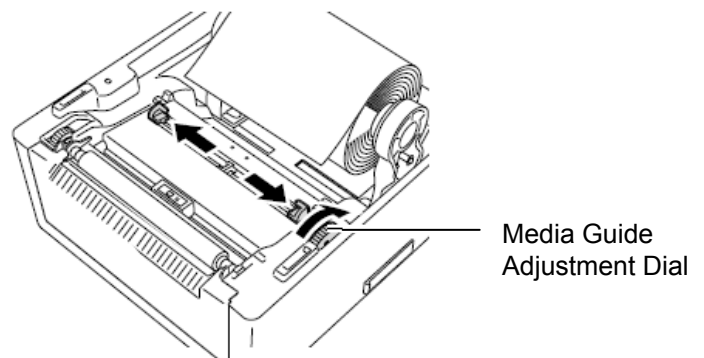
- Open the Media Holders.



- Place a media roll between the Media Holders so that the media is fed with the print side facing up. Fit the projection of the Media Holders into the core. Make sure that the projection of the both Media Holders is engaged with the core firmly.



- Turn the Media Guide Adjustment Dial in the arrow indicating direction to move the Media Guides outward.



**NOTES:**

- Refer to the Supply Path Label attached inside of the Top Cover.
- Make sure that the print side faces up.
- Cut the leading edge of the media straight with scissors.

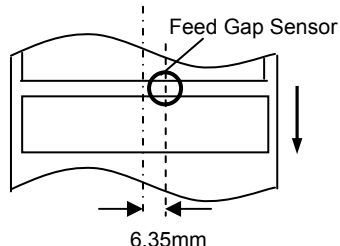
**NOTE:**

Do not forcibly move the Media Guides by hand, as doing so may break the Media Guides.

## 2.7 Loading the Media (Cont.)

**NOTES:**

1. The sensor type used in the last print job has been selected. To change the sensor type, refer to **Section 2.8.1 Media Sensor Calibration.**
2. The Feed Gap Sensor is positioned 6.35 mm right from the media centre.

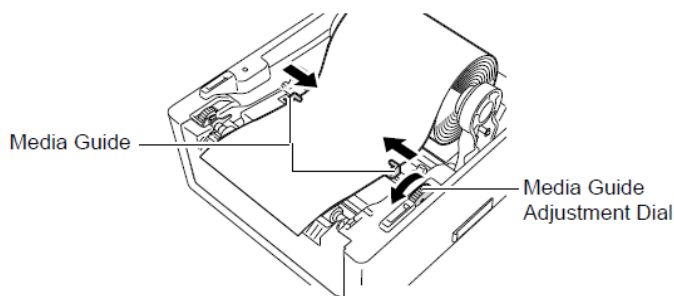


6. Adjust the media sensor position and select a sensor type to be used. (Refer to Section 2.8.1)

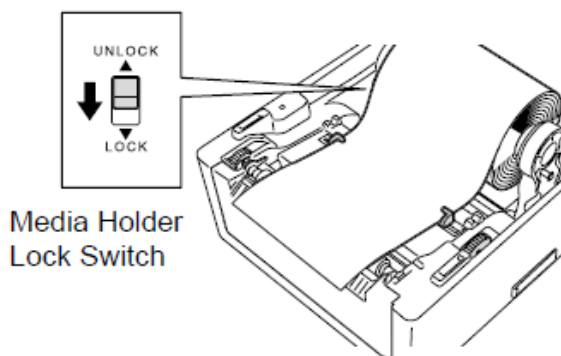
This printer is provided with a Feed Gap Sensor which detects inter-label gaps.

As the Feed Gap Sensor position is fixed, it is not necessary to move it.

7. Pass the media between the Media Guides, and turn the Media Guide Adjustment Dial in the arrow indicating direction to adjust the Media Guides to the media width.



8. Push the Media Holders against the media roll to firmly hold it, and then slide the Media Holder Lock Switch to the Lock (▼) side.

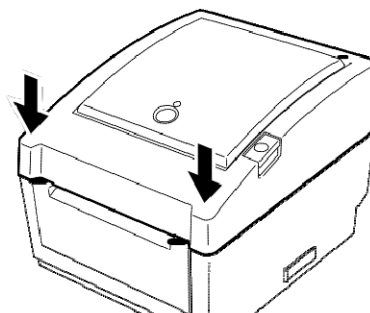


**NOTE:**

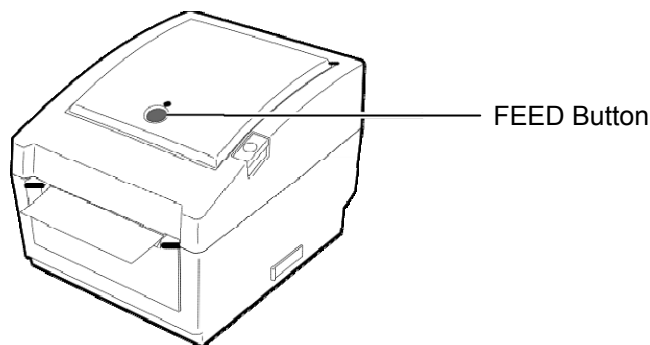
Be careful the Media Guides do not squeeze the media. Doing so bends the media, causing a paper jam or feed failure.

## 2.7 Loading the Media (Cont.)

9. Close the Top Cover gently and push down the arrow-indicating portions until they click.



10. Press the [FEED] button to check for a proper media feed.



### CAUTION!

To separate the printed media from the media roll in batch mode, be sure to tear off the media at the Media Outlet or cut the media past the Strip Plate. If you tear off the media at the Print Head by mistake, be sure to feed one label (10 mm or more) with the FEED Button prior to a next issue. Failure to do this may cause a paper jam

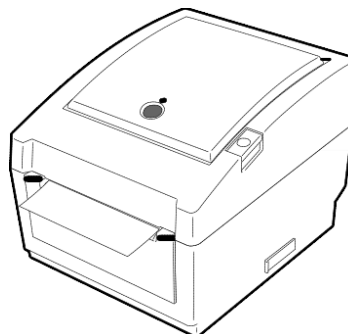
### ATTENTION!

Lorsque vous déchirez la bande de papier imprimé, assurez-vous de la déchirer contre le bord plastique de la sortie papier, ou bien au delà de la barre de pré décollage. Si par erreur vous déchirez le papier sur l'arête de la tête d'impression, il faut avancer le media d'une étiquette (10 mm ou davantage) à l'aide de la touche FEED/PAUSE avant d'effectuer l'impression suivante, faute de quoi vous pourriez avoir un brouillage papier..

There are two issue modes available for this printer.

### Batch mode:

In the batch mode, the media is continuously printed and fed until the number of media specified in the issue command has been printed.



### Linerless Cut mode (Option):

- **How to install the Linerless Cutter**

Please refer to the Installation Manual of the Linerless cutter.

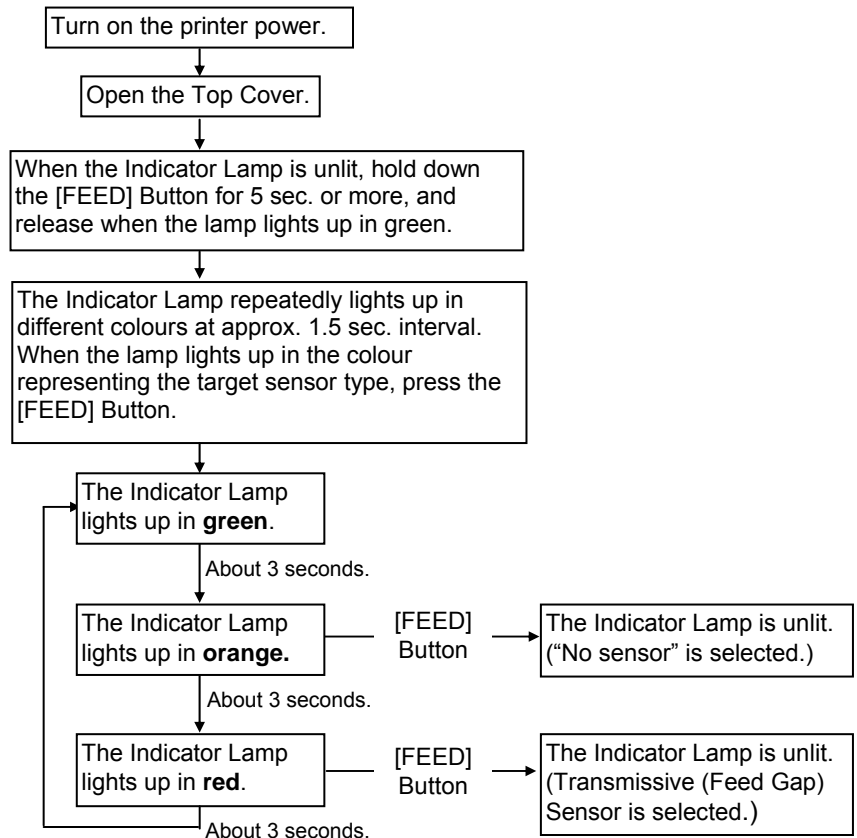
## 2.8 Media Sensor Calibration, Self Print Test, and Dump Mode Utilities

This utility is used to calibrate the sensitivity of the Feed Gap Sensor. It is necessary to set the media sensors after the media is changed to different type **when use media which have gaps.**

### 2.8.1 Media Sensor Calibration

**NOTE:**  
 The sensor type used in the last print job has been selected.  
 The factory default is the Feed Gap Sensor.

1. First, select the sensor to calibrate in the following procedure.



2. Turn off the printer, load the media properly, and close the Top Cover.  
**Note:** Do not place pre-printed area above the media sensor, as doing so disables a correct sensor calibration.
3. Press the [FEED] Button while turning on the printer.  
 The Indicator Lamp will light up in the following order:  
 Green (Flashing) → Red (Flashing) → Orange (Flashing) → Orange → RED → Green
4. Release the [FEED] button when the indicator lamp lights up in red.  
 The printer automatically feeds the media to perform a sensor calibration.  
**Note:** If you failed to release the [FEED] button at the right timing, retry from Step 3.
5. To start the Online operation, turn the printer off, then on again.

**2.8.2 Self Print Test and Dump Mode**

1. Turn off the printer power and install a media roll on the printer.
2. Press the [FEED] Button while turning on the printer. The Indicator Lamp will light up in the following order:  
Green (Flashing) → Red (Flashing) → Orange (Flashing) → Orange → RED → Green
3. Release the [FEED] Button when the Indicator Lamp lights up in green.
4. The printer automatically performs a self print test, and then enters the Dump Mode.
5. To start the Online operation, turn the printer off, then on again.

**Print test label sample**

**NOTE:**  
The following commands should not affect the test print issue.  
D, AX, XS, Z2;1, Z2;2 (without AY)

<b>PRINTER INFO.</b>	
<b>PROGRAM VERSION</b>	VX.XX XXXX
<b>TONE ADJUST</b>	+XX
<b>FEED ADJUST</b>	+XX.Xmm
<b>CUT POSITION ADJUST</b>	+XX.Xmm
<b>BACKFEED ADJUST</b>	+XX.Xmm
<b>PARAMETER</b>	[ PC-850 ] [ 0 ] [ 9600 ] [ 8 ] [ 1 ] [ NONE ] [ 2 ] [ ON ] [ AUTO ] [ FEED ] [ B0 ]
<b>X-COORDINATE ADJUST</b>	+XX.Xmm
<b>SENSOR SELECTION</b>	TRANSMISSIVE
<b>SENSOR ADJ. VALUE</b>	TRANSMISSIVE [XX] REFLECTIVE [XX]
<b>PRINT SPEED</b>	5 IPS
<b>FLASH ROM</b>	4 MB
<b>SDRAM</b>	8 MB
<b>USER MEMORY</b>	[ X KB][ 0 KB]
<b>TTF AREA</b>	[ 0 KB][ 0 KB]
<b>EXT CHAR AREA</b>	[ 0 KB][ 0 KB]
<b>BASIC AREA</b>	[ 0 KB][ 0 KB]
<b>PC SAVE AREA</b>	[ X KB][ 0 KB]
<b>INFORMATION</b>	
<b>TOTAL FEED</b>	0.00 km
<b>TOTAL PRINT</b>	0.00 km
<b>TOTAL CUT</b>	0
<b>IP ADDRESS</b>	192.168.10.20
<b>SUBNET MASK</b>	255.255.255.0
<b>GATEWAY</b>	0.0.0.0
<b>MAC ADDRESS</b>	XX-XX-XX-XX-XX
<b>DHCP</b>	Disabled
<b>DHCP CLIENT ID</b>	FFFFFFFFFFFFFFFFFFFF FFFFFFFFFFFFFF
<b>SOCKET COMM.</b>	Enabled
<b>SOCKET COMM. PORT</b>	08000

**2.8.2 Self Print Test and Dump Mode (Cont.)**

The test print contents are following:

```

PROGRAM VERSION: VX.XX XXXX --- Firmware version and checksum
TONE ADJUST: +XX ----- Print tone fine adjustment value
FEED ADJUST: +XX.Xmm ----- Print position fine adjustment value
CUT POSITION ADJUST: +XX.Xmm ----- Cut position fine adjustment value
BACKFEED ADJUST: +XX.Xmm ----- Back feed amount fine adjustment value
PARAMETER: [PC-850][0] ----- Character code selection and Font "0"
                                         selection
                                         [9600][8][1][NONE][2] --- Baud rate, Data length, Stop bit length,
                                         Parity, and Transmission control of RS-
                                         232C
                                         [ON][AUTO][FEED][B0] ----- Forward feed wait function, Control code,
                                         Feed key function, and Euro code
X-COORDINTE ADJUST: +XX.Xmm ----- X-coordinate fine adjustment value
SENSOR SELECTION: TRANSMISSIVE- Sensor selection and sensitivity
SENSOR ADJ. VALUE:
  TRANSMISSIVE[XX] REFLECTIVE[XX] -- Sensor setting value
PRINT SPEED: 5IPS ----- Print Speed
FLASH ROM:4MB ----- Flash ROM Capacity
SDRAM: 8MB ----- SDRAM Capacity
USER MEMORY: [X KB][0 KB] ----- User Memory Capacity
TTF AREA: [XXXXKB][XXXXKB] ----- True type font storage area, Main PC board
and optional memory card
EXT CHAR AREA: [XXXXKB][XXXXKB] -- Writable character storage area, Main PC
board and optional memory card
BASIC AREA: [XXXXKB][XXXXKB] ----- BASIC file storage area, Main PC board and
optional memory card
PC SAVE AREA: [XXXXKB][XXXXKB] ----- PC save storage area, Main PC board and
optional memory card
INFORMATION: ----- Printed only when some information is
stored in the flash ROM
TOTAL FEED ----- Total feed distance
TOTAL PRINT: 0.00 km ----- Total Print distance
TOTAL CUT: 0 ----- Total Cut Count
IP ADDRESS: 192.168.10.20 -----
SUBNET MASK: 255.255.255.0 -----
GATEWAY: 0.0.0.0 -----
MAC ADDRESS: XX-XX-XX-XX-XX ---
DHCP: Disabled -----
DHCP CLIENT ID:
  FFFFFFFFFFFFFFFFFF FFFFFFFFFF ----
SOCKET COMM.: Enabled -----
SOCKET COMM. PORT: 08000 -----
    
```

} Network setting values

## 2.9 How to Use an SD Card

### CAUTION!

1. Turn off the printer before inserting or removing an SD card. Failure to do this may destroy the data in the SD card.
2. Do not turn off the printer during access to the SD card, as doing so may destroy the data in the SD card.
3. For handling of the SD card, refer to the instruction supplied with the SD card.

### ATTENTION !

1. Eteignez l'imprimante avant d'insérer ou de retirer une carte SD, faute de quoi vous risquez de perdre les données mémorisées.
2. N'éteignez pas l'imprimante alors qu'elle accède aux informations de la carte SD, faute de quoi vous risquez de perdre les données mémorisées.
3. Reportez-vous aux instructions fournies avec la carte SD pour la manipulation de cette dernière.

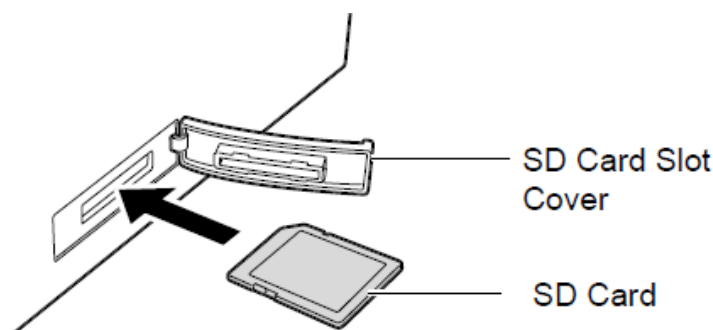
This printer enables you to save print formats, writable characters, True Type fonts, etc. in commercially available SD cards.

For available SD card types, please ask the nearest TOSHIBA TEC representative.

For how to save data in an SD card, please refer to the External Equipment Interface Specification.

### ■ Inserting an SD Card

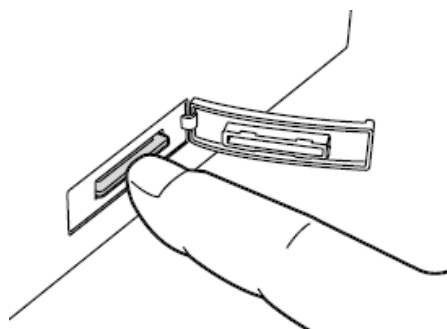
1. Turn off the printer and open the SD card slot cover.
2. Hold an SD card with the print surface facing up, and insert it into the SD card slot until it clicks.



3. Close the SD card slot cover.

### ■ Removing an SD Card

1. Confirm no access is made to the SD card, and turn off the printer.
2. Open the SD card slot cover.
3. Push the SD card. The SD card pops up.



4. Remove it from the slot, and close the SD card slot cover.

## 3. MAINTENANCE

**WARNING!**

1. *Be sure to turn OFF the power before performing maintenance. Failure to do this may cause an electric shock.*
2. *To avoid injury, be careful not to trap your fingers while opening or closing the cover.*
3. *Be careful when handling the print head as it becomes very hot immediately after printing. Allow it to cool before performing any maintenance.*
4. *Do not pour water directly onto the printer.*

**AVERTISSEMENT!**

1. *Assurez-vous d'éteindre l'imprimante (bouton marche/arrêt sur OFF) avant de réaliser toute maintenance. Autrement vous pourriez recevoir un choc électrique.*
2. *Pour éviter les blessures, prenez garde à ne pas vous pincer les doigts en ouvrant ou en fermant le capot.*
3. *Soyez prudent car la tête d'impression est très chaude immédiatement après une impression. Laissez-la refroidir avant de réaliser toute maintenance.*
4. *Ne versez pas d'eau directement sur l'imprimante.*

This chapter describes how to perform routine maintenance.

To ensure the continuous high quality operation of your printer, you should perform a regular maintenance routine. For high throughput it should be done on a daily basis. For low throughput it should be done on a weekly basis.

## 3.1 Cleaning

To maintain the printer performance and print quality, please clean the printer regularly, or whenever the media is replaced.

When use Linerless cutter module, cleaning is required to keep printer and cutter life after 1 roll is printed or the end of day.

### 3.1.1 Print Head

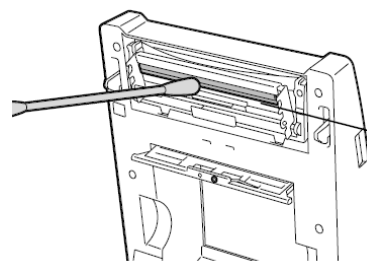
#### **CAUTION!**

1. Do not allow any hard objects to touch the print head or platen, as this may cause damage to them.
2. Do not use any volatile solvents including thinner and benzene, as this may cause discoloration of the cover, print failure, or breakdown of the printer.
3. Do not touch the print head element with bare hands, as static may damage the print head.

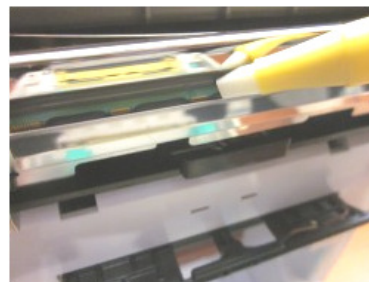
#### **ATTENTION!**

1. Ne laissez aucun objet dur entrer en contact avec la tête d'impression ou le rouleau, car cela peut les endommager.
2. N'utilisez aucun solvant volatil, diluant ou benzène, car cela peut entraîner une décoloration du capot, des problèmes d'impression, voire une panne de l'imprimante.
3. Ne touchez pas la tête à mains nues, l'électricité statique peut endommager la tête. Éléments chauffants de la tête (sur l'arête de la tête)

1. Turn the power off.
2. Open the Top Cover.
3. Clean the Print Head Element 1 time per day with a Cleaner Pen.



Print Head Element  
(Positioned at the  
print head edge)

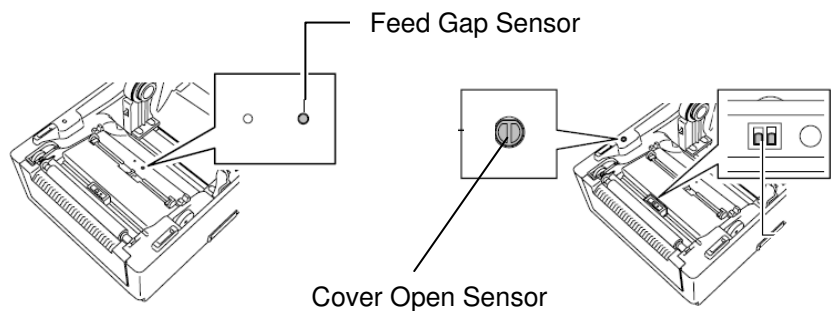
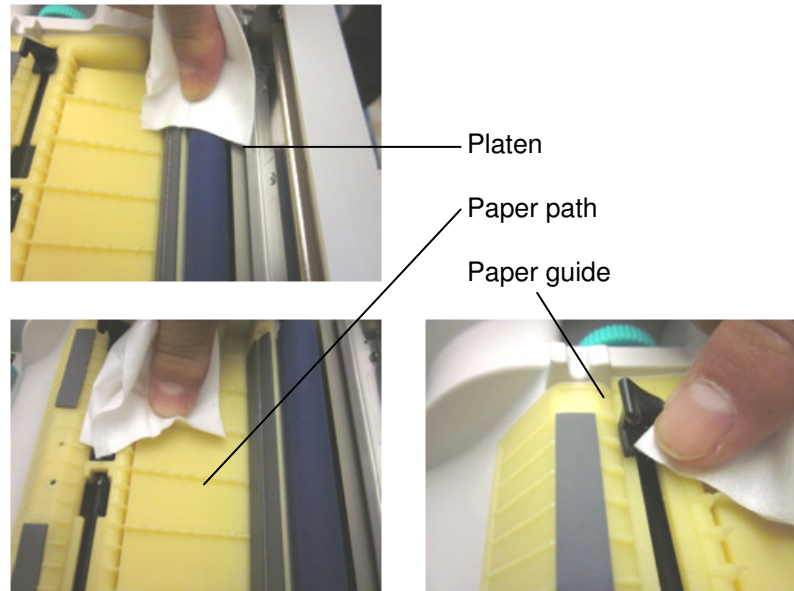


#### **NOTE:**

Please purchase the Print Head Cleaner from the authorised TOSHIBA TEC service representative.

### 3.1.2 Platen / Paper path / Sensors

1. Wipe the Platen, Paper path and Paper guide 1 time per day with a soft cloth moistened with absolute ethyl alcohol.
2. Remove dust or paper particles 1 time per day by wiping the Feed Gap Sensor and Cover Open Sensor with a dry soft cloth.



### 3.1.3 Cover

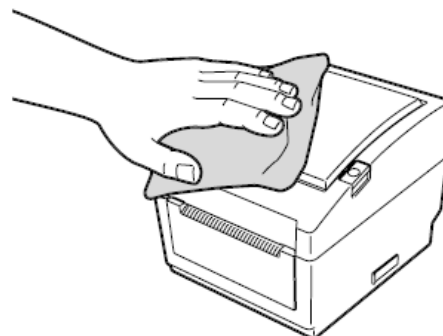
**CAUTION!**

*Do not use any volatile solvents including thinner and benzene, as this may cause discoloration or distortion of the cover.*

**ATTENTION!**

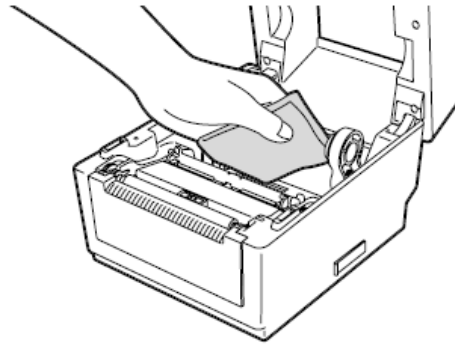
*N'utilisez aucun solvant volatil, diluant ou benzène, car cela peut entraîner une décoloration ou une déformation du capot.*

Wipe the Cover with a dry soft cloth. Wipe off dirt with a soft cloth slightly moistened with mild detergent solution.



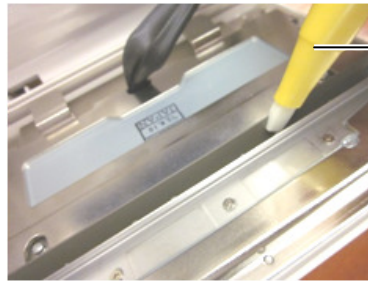
**3.1.4 Media Housing**

Wipe the media housing with a dry soft cloth. Wipe off dirt with a soft cloth slightly moistened with mild detergent solution.



**3.1.5 Linerless Cutter (Option)**

Cleanup Cutter guide by Cleaner Pen.



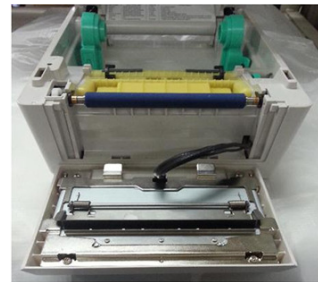
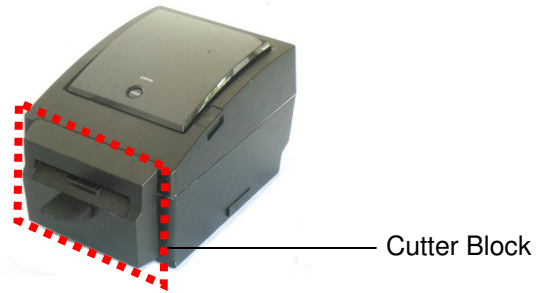
Cleaner Pen

Wipe Cutter outlet and Cutter tray with a dry soft cloth.

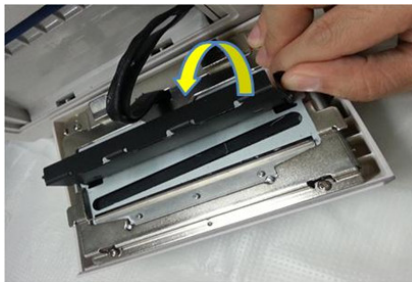


**3.1.5 Linerless Cutter  
(Cont.)**

1. Turn the power off.
2. Open the Top Cover.
3. Remove Linerless cutter from printer.



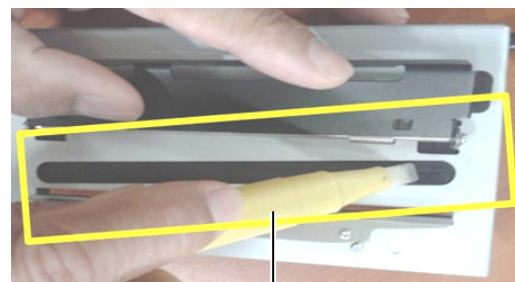
4. Pull and open bottom side paper guide for cleanup.



5. To use Glue Remover to remove adhesive residues from blade.
6. To use Cleaner Pen to cleaning on blade surface.



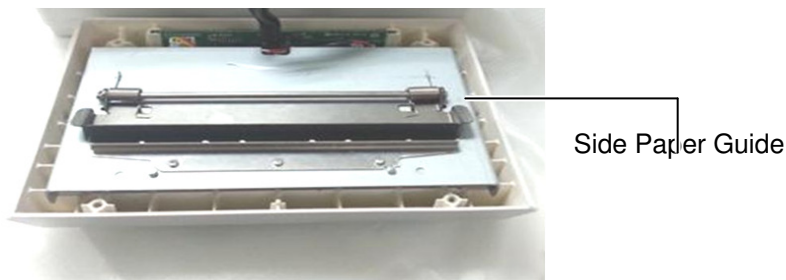
Glue Remover



Cleaner Pen

### 3.1.5 Linerless Cutter (Cont.)

7. Release bottom side paper guide gently, paper guide returns to original position by spring.



## 3.2 Care/Handling of the Media

### **CAUTION!**

*Be sure to carefully review and understand the Supply Manual. Use only media which meets specified requirements. Use of non-specified media may shorten the head life and result in problems with bar code readability or print quality. All media should be handled with care to avoid any damage to the media or printer. Read the guideline in this section carefully.*

### **ATTENTION!**

*Assurez-vous de lire et de bien comprendre le manuel des consommables. N'utilisez que des médias conformes aux spécifications. L'utilisation de médias non conformes peut écourter la durée de vie de la tête et entraîner des problèmes de qualité d'impression ou de lecture des codes à barres. Manipulez tous les médias avec précaution pour éviter tout dommage sur les médias ou l'imprimante. Lisez les directives de ce paragraphe avec attention.*

- Do not store media for longer than the manufacturer's recommended shelf life
- Store media rolls on the flat end. Do not store them on the curved sides as this might flatten that side causing erratic media advance and poor print quality.
- Store the media in plastic bags and always reseal after opening. Unprotected media can get dirty and the extra abrasion from the dust and dirt particles will shorten the print head life.
- Store the media in a cool, dry place. Avoid areas where they would be exposed to direct sunlight, high temperature, high humidity, dust or gas.
- The thermal paper used for direct thermal printing must not have specifications which exceed  $\text{Na}^+$  800 ppm,  $\text{K}^+$  250 ppm and  $\text{Cl}^-$  500 ppm.
- Some ink used on pre-printed media may contain ingredients which shorten the print head's product life. Do not use labels pre-printed with ink which contain hard substances such as carbonic calcium ( $\text{CaCO}_3$ ) and kaolin ( $\text{Al}_2\text{O}_3$ ,  $2\text{SiO}_2$ ,  $2\text{H}_2\text{O}$ ).

For further information, please contact your local distributor or your media manufacturer.

## 4. TROUBLESHOOTING

### WARNING!

If a problem cannot be solved by taking actions described in this chapter, do not attempt to repair the printer. Turn off and unplug the printer. Then contact an authorised TOSHIBA TEC service representative for assistance.

### AVERTISSEMENT!

Si un problème n'est pas résolu en suivant les recommandations indiquées dans ce chapitre, n'essayez pas de réparer par vous-même. Eteignez et débranchez l'imprimante, puis contactez un mainteneur agréé TOSHIBA TEC pour une assistance.

### 4.1 Troubleshooting Guide

Symptom	Cause	Solutions
The power lamp of the Power Adapter does not light up though the power cord is plugged in an AC outlet.	The power cord is not connected to the Power Adapter.	Disconnect the power cord from the AC outlet, connect the power cord to the Power Adapter, and then connect it to the AC outlet. (⇒ Section 2.5)
	There is a power failure or the power is not being supplied to the AC outlet.	Test the AC outlet with a power cord from another electric appliance. If power is not being supplied, consult an electrician or your Electricity supplier.
	The fuse of the building has blown or the circuit breaker has tripped.	Check the fuse or circuit breaker.
The Indicator Lamp does not light up in green when the power switch is turned on though the power lamp of the Power Adapter is lit.	The Power Adapter Connector is disconnected from the Power Jack.	Disconnect the power cord from the AC outlet, insert the Power Adapter Connector into the Power Jack, then connect the power cord to the AC outlet. (⇒ Section 2.5)
Media is not issued.	The media is not loaded properly.	Reload the media properly. (⇒ Section 2.7)
	The interface cable is not connected properly.	Connect the interface cable again. (⇒ Section 2.4)
	The media sensor is dirty.	Clean the media sensor. (⇒ Section 3.1.2)
Nothing is printed.	The media is not loaded properly.	Reload the media properly. (⇒ Section 2.7)
	Print data is not sent from the host computer.	Send print data.
Poor print	TOSHIBA TEC approved media is not used.	Replace the media with TOSHIBA TEC approved one.
	The print head is dirty.	Clean the print head. (⇒ Section 3.1.1)
Missing dots	The print head is dirty.	Clean the print head. (⇒ Section 3.1.1)
	The print head elements are partly broken.	When the missing dots affect printouts, turn off the printer and contact the nearest TOSHIBA TEC representative to ask for replacement of the print head.

Symptom	Cause	Solutions
Labels are not separated from the backing paper smoothly. (When the optional strip unit is fitted.)	TOSHIBA TEC approved media is not used.	Replace the media with TOSHIBA TEC approved one.
	Label loading method is incorrect.	Load the label properly. (⇒ Section 2.7)
Media cannot be cut cleanly. (When the optional cutter unit is fitted.)	The cutter blade has reached the end of its useful life.	Turn off the printer and contact the nearest TOSHIBA TEC representative to ask for replacement of the cutter unit.

## 4.2 Status Lamp

Color	Status	Cause	Solutions
Green	Lights up	Stand-by	Normal
Green	Flashing fast	Communicating with a host	Normal
Green	Flashing slowly	Printing is temporarily stopped (paused.)	Press the [FEED] Button. Printing is resumed.
Green/Red	Flashing slowly	The print head temperature exceeded the upper limit.	Stop printing and allow the print head to cool until the indicator lamp lights up in green. If the indicator lamp does not light up in green or this problem occurs frequently, contact the nearest TOSHIBA TEC representative.
Red	Lights up	A communication error occurred. (Only when the RS-232C is used.)	Turn off the power switch and back to on. Or press the [FEED] Button. If this problem frequently occurs, turn off the printer and contact the nearest TOSHIBA TEC representative.
Red	Flashing fast	A paper jam occurred.	Remove the jammed media, reload the media, and press the [FEED] Button. (⇒ Section 4.3)
Red	Flashing at medium speed	The media is ended.	Load a new media roll and press the [FEED] Button. (⇒ Section 2.7)
Red	Flashing slowly	An issue or feed was attempted with the top cover opened.	Close the top cover completely, and press the [FEED] button. Printing is resumed.
Orange	Flashing fast	A paper jam occurred in the cutter unit. (Only when the cutter unit is fitted.)	Remove the jammed media, reload the media, and press the [FEED] Button. (⇒ Section 4.3)
None	Unlit	The top cover is open.	Close the top cover completely

### Flashing speed of the LED

Status	Flashing interval
Flashing slowly	1 sec.
Flashing at medium speed	0.5 sec.
Flashing fast	0.2 sec.

### 4.3 Removing Jammed Media

This section describes in detail how to remove jammed media from the printer.

**CAUTION!**

*Do not use any tool that may damage the print head.*

**ATTENTION!**

*N'utilisez aucun outil qui pourrait endommager la tête.*

1. Turn the power off.
2. Open the Top Cover and remove the media roll.
3. Remove the jammed media from the printer. **DO NOT USE** any sharp implements or tools as these could damage the printer.
4. Clean the Print Head and Platen, then remove any further dust or foreign substances.
5. Load the media again, and close the Top Cover.

## APPENDIX 1 SPECIFICATIONS

Appendix 1 describes the printer specifications and supplies for use on the B-EV4D-GS24-QM-CUS-R printer.

### A1.1 Printer

The following are the printer specifications.

Item	B-EV4D-GS24-QM-CUS-R
Supply voltage	AC100 to 240V, 50/60 Hz
Power consumption	
During a print job	100 to 120V: 2.93 A, 70.3 W max., 200 to 240V: 2.91 A, 69.8 W max.
During standby	100 to 120V: 0.91 A, 2.18 W max., 200 to 240V: 0.91 A, 2.17 W max.
Power supply	100 to 240V universal switching power supply
Operating temperature range	5°C to 40°C(*1) (41°F to 104°F(*1))
Storage temperature range	-40°C to 60°C(-40°F to 140°F)
Operating humidity	25% to 85%(*1) RH (no condensation)
Humidity for storage	10% to 90% RH (no condensation)
Ventilation for storage	Free air environment
Resolution	203 dpi (8 dots/mm)
Printing method	Direct thermal
Issue mode	Batch, Cut (option)
Printing speed	50.8 mm/sec. (2"/sec.), 76.2 mm/sec. (3"/sec.),
In the batch/cut mode	101.6 mm/sec. (4"/sec.), 127 mm/sec. (5"/sec.) (*2)
Available media width	102 mm (4.0")
Effective print width (max.)	108.0 mm (4.25")
Dimension (W × D × H)	198.0 mm × 287.5 mm × 169.5 mm (7.8" × 11.32" × 6.7")
Weight	2.84 kg (6.26 lb) (Excluding media)
Available bar code types	EAN8/13, EAN8/13 add on 2&5, UPC-A, UPC-E, UPC-A add on 2&5, CODE39, CODE93, CODE128, EAN128, NW7, MSI, Industrial 2 of 5, ITF, RM4SCC, KIX-Code, POSTNET, PLESSEY, GS1 DataBar, USPS 4state intelligent barcode
Available two-dimensional code	Data matrix, PDF417, QR Code, Maxi Code, Micro PDF417, GS1 Data Matrix
Available bar code font	Times Roman (6 sizes), Helvetica (6 sizes), Presentation (1 size), Letter Gothic (1 size), Courier (2 sizes), Prestige Elite (2 sizes), OCR-A (1 type), OCR-B (1 type), Kanji (3 sizes)
Rotations	0°, 90°, 180°, 270°
Standard interface	Serial interface (RS-232C), Parallel interface (Centronics SPP), USB 2.0 (Full speed), Ethernet interface (10/100 Base), SD Card Slot

#### NOTES:

- Data Matrix™ is a trademark of International Data Matrix Inc., U.S.
- PDF417™ is a trademark of Symbol Technologies Inc., US.
- QR Code is a trademark of DENSO CORPORATION.
- Maxi Code is a trademark of United Parcel Service of America, Inc., U.S.
- Please use TOSHIBA TEC recommended SD cards. The SD Cards are available from your nearest TOSHIBA TEC representative or TOSHIBA TEC Head Quarters.

#### NOTES:

\*1 Since the adhesive strength of labels becomes higher in hot and humid conditions, the possibility of label jam increases.

\*2 When printing linerless lable, 4 ips or 5 ips are required.

## A1.2 Options

Option Name	Type	Description
Cutter module	B-EV204-LC-QM-R	Guillotine cutter for Linerless label.

**NOTE:**

- Cleaning is required to keep printer and cutter life after 1 roll is printed or the end of day.
- The above options are available from your nearest TOSHIBA TEC representative or TOSHIBA TEC Head Quarters.

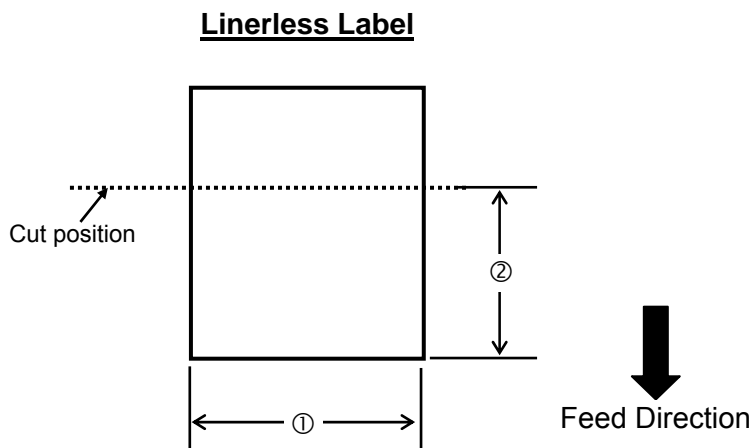
## A1.3 Media

Please make sure that the media to be used is approved by TOSHIBA TEC. The warranties do not apply to problems caused by using media that is not approved by TOSHIBA TEC.

For information regarding TOSHIBA TEC-approved media, please contact a TOSHIBA TEC authorised representative.

### A1.3.1 Media Type

The table below shows the size and shape of the media that can be used on this printer.



Unit: mm (inch)

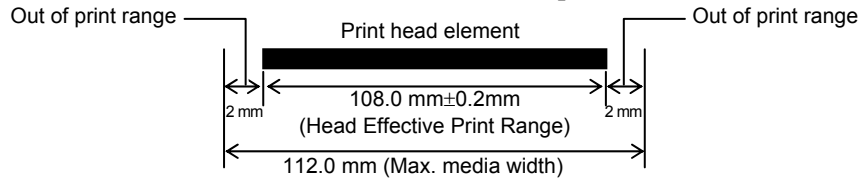
Item \ Issue mode	Linerless Cut mode
① Label width	102mm (4.0")
② Label length	25.0mm to 152.4mm (1.0" to 6" )
Thickness	0.009mm (0.0035")
Max. outer roll diameter	Ø127mm (5")
Roll direction	Outside wound
Inner core diameter	25.4mm to 38.1mm (1" to 1.5"), 1.5" is recommended <sup>(See NOTE 2.)</sup>

**NOTES:**

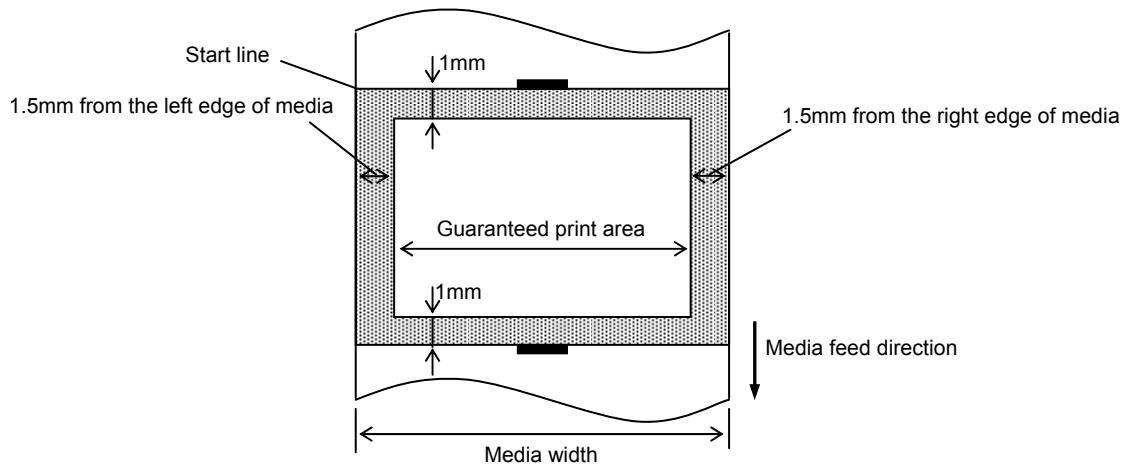
1. To ensure print quality and print head life use only TOSHIBA TEC approved media.
2. A label jam is more likely to occur with the approach of label end because labels around the paper core curl intensely..

**A1.3.2 Effective Print Area**

The figure below illustrates the relation between the head effective print width and media width.



The figure below shows the effective print area on the media.



**NOTES:**

1. Be sure not to print on the 1.5-mm wide area from the media edges (shaded area in the above figure).
2. The centre of media should be positioned at the centre of the print head.
3. Print quality is not guaranteed within 3 mm from the print head stop position (including 1-mm slow-up.)
4. Average print (black) rate should be 15% or less. For bar code print area, the print rate should be 30% or less.
5. Line weight should be 3 to 12 dots.

## APPENDIX 2 INTERFACE

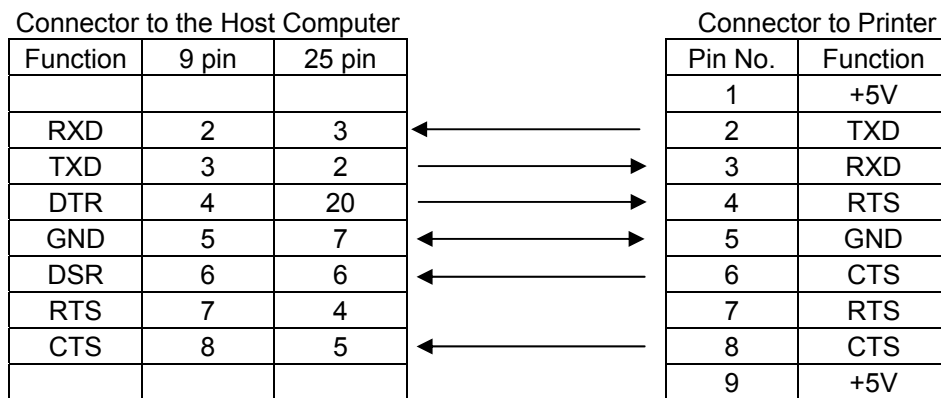
### ■ Interface Cables

To prevent radiation and reception of electrical noise, the interface cables must meet the following requirements:

- Fully shielded and fitted with metal or metallized connector housings.
- Keep as short as possible.
- Should not be bundled tightly with power cords.
- Should not be tied to power line conduits.

### ■ RS-232C Cable description

The serial data cable used to connect the printer to a host computer should be one of the following two types (9-pin or 25-pin connector):



**NOTE:**  
Use an RS-232C cable with a connector with inch type securing screws.

## GLOSSARIES

### **Bar code**

A code which represents alphanumeric characters by using a series of black and white stripes in different widths. Bar codes are used in various industrial fields: Manufacturing, Hospitals, Libraries, Retail, Transportation, Warehousing, etc. Reading bar codes is a fast and accurate means of capturing data while keyboard entry tends to be slow and inaccurate.

### **Batch mode**

Issue mode that continuously prints media until the required number has been printed.

### **Direct thermal printing**

A printing method using no ribbon, but thermal media which reacts to heat. The thermal print head heats the thermal media directly, causing print image to be printed on the media.

### **DPI**

Dots Per Inch

A unit used to express print density or resolution.

### **Feed gap sensor**

A transmissive sensor that detects the difference between the gap between labels and the label itself, to find the print start position of the label.

### **Font**

A complete set of alphanumeric characters in one style of type. E.g. Helvetica, Courier, Times

### **Gap**

Distance from the bottom of one label to the top of the next label.

### **IPS**

Inch per second

A unit used to express print speed.

### **Label**

A type of media with adhesive backing supplied on a backing paper.

### **Media**

Material on which images are printed by the printer. Label, tag paper, fanfold paper, perforated paper, etc.

### **Printer driver**

A software program that will convert the application program's printing request into the language that the printer understands.

### **Print head element**

The thermal print head consists of a single line of tiny resistive elements which when current is allowed to flow through them it heats up causing a small dot to be burned onto thermal paper or a small dot of ink to be transferred from a thermal ribbon to ordinary paper.

### **Printing speed**

The speed at which printing occurs. This speed is expressed in units of IPS (inches per second).

### **Resolution**

The degree of detail to which an image can be duplicated. The minimum unit of divided image is called a pixel. As the resolution becomes higher, the number of pixels increases, resulting in a more detailed image.

### **Supply**

Media

### **Thermal print head**

A print head using thermal transfer or thermal direct printing method.

