



Zebra[®] TTP 7030[™]
Kiosk Receipt Printer

Operator Guide



© 2012 ZIH Corp. The copyrights in this manual and the software and/or firmware in the TTP 7030 described therein are owned by ZIH Corp. and Zebra's licensors. Unauthorized reproduction of this manual or the software and/or firmware in the TTP 7030 may result in imprisonment of up to one year and fines of up to \$10,000 (17 U.S.C.506). Copyright violators may be subject to civil liability.

This product may contain ZPL[®], ZPL II[®], and ZebraLink[™] programs; Element Energy Equalizer[™] Circuit; E^{3™}; and Monotype Imaging fonts. Software © ZIH Corp. All rights reserved worldwide.

ZebraLink, Element Energy Equalizer, E³ and all product names and numbers are trademarks, and Zebra, the Zebra head graphic, ZPL and ZPL II are registered trademarks of ZIH Corp. All rights reserved worldwide.

All other brand names, product names, or trademarks belong to their respective holders. For additional trademark information, please see "Trademarks" on the product CD.

Proprietary Statement This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

Product Improvements Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

Liability Disclaimer Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

Limitation of Liability In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

FCC Radiation Exposure Statement (for printers with radios or RFID encoders) This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Contents



1 • Introduction	5
About This Manual	5
Contacts	6
2 • Product Presentation	7
Indicators	9
Status Indicator	9
Control Board Indicators	9
Feed Button	10
3 • Installation	11
Installation Considerations	12
Electrostatic Discharges, and Earth Currents	13
Ambient Light	13
Connecting To The Computer	14
Connect the TTP 7030	14
Using a Serial Adapter	14
Connecting the Power	16
Making A Test Printout	17
Installing A Printer Driver	18
Paper Level Sensors	19
4 • Operation	21
Installing a Paper Roll	22
Clearing Paper Jams	24



Introduction

About This Manual

This manual contains the information required to install and operate the TTP7030 printer and to run it from a host computer such as a PC.

Updating

This manual will be updated as, from time to time, printer functions and features may be added or amended. You will always find the latest edition on our web site (<http://www.zebra.com>).

If you require functions not found in this manual edition, please contact Technical Support for your region or the Zebra partner the printer was purchased from.

Contacts

Technical Support via the Internet is available 24 hours per day, 365 days per year.

Web Site: www.zebra.com

E-mail Back Technical Library:

E-mail address: emb@zebra.com

Subject line: Emailist

Self Service Knowledge Base: www.zebra.com/knowledgebase

Online Case Registration: www.zebra.com/techrequest

Which Department Do You Need?	The Americas	Europe, Middle East, and Africa	Asia Pacific and India
Regional Headquarters	Zebra Technologies Corporation 475 Half Day Road, Suite 500 Lincolnshire, IL 60069 USA T: +1 847 634 6700 Toll-free +1 866 230 9494 F: +1 847 913 8766	Zebra Technologies Europe Limited Dukes Meadow Millboard Road Bourne End Buckinghamshire, SL8 5XF United Kingdom T: +44 (0) 1628 556000 F: +44 (0) 1628 556001	Zebra Technologies Asia Pacific Pte. Ltd. 120 Robinson Road #06-01 Parakou Building Singapore 068913 T: + 65 6858 0722 F: +65 6885 0838
Technical Support For questions on the operation of Zebra equipment and software, please call your distributor. For additional assistance, contact us. <i>Please have your model and serial numbers available.</i>	T: +1 877 ASK ZEBRA (275 9327) F: +1 847 913 2578 Hardware: ts1@zebra.com Software: ts3@zebra.com <i>Kiosk printers:</i> T: +1 866 322 5202 E: kiosksupport@zebra.com	T: +44 (0) 1628 556039 F: +44 (0) 1628 556003 E: Tseurope@zebra.com	T: +65 6858 0722 F: +65 6885 0838 E: China: tschina@zebra.com <i>All other areas:</i> tsasiapacific@zebra.com
Repair Service Department For back-to-base service and repair.	T: +1 877 ASK ZEBRA (275 9327) F: +1 847 821 1797 E: repair@zebra.com To request a repair in the U.S., go to www.zebra.com/repair .	T: +44 (0) 1772 693069 F: +44 (0) 1772 693046 New requests: ukrma@zebra.com Status updates: repairupdate@zebra.com	T: +65 6858 0722 F: +65 6885 0838 E: China: tschina@zebra.com <i>All other areas:</i> tsasiapacific@zebra.com
Technical Training Department For Zebra product training courses.	T: +1 847 793 6868 T: +1 847 793 6864 F: +1 847 913 2578 E: ttamerica@zebra.com	T: +44 (0) 1628 556000 F: +44 (0) 1628 556001 E: Eurtraining@zebra.com	T: + 65 6858 0722 F: +65 6885 0838 E: China: tschina@zebra.com <i>All other areas:</i> tsasiapacific@zebra.com
Inquiry Department For product literature and distributor and dealer information.	T: +1 877 ASK ZEBRA (275 9327) E: inquiry4@zebra.com	T: +44 (0) 1628 556037 F: +44 (0) 1628 556005 E: mseurope@zebra.com	E: China: GCmarketing@zebra.com <i>All other areas:</i> APACChannelmarketing@zebra.com
Customer Service Department (US) Internal Sales Department (UK) For printers, parts, media, and ribbon, please call your distributor or contact us.	T: +1 877 ASK ZEBRA (275 9327) E: clientcare@zebra.com	T: +44 (0) 1628 556032 F: +44 (0) 1628 556001 E: cseurope@zebra.com	T: +65 6858 0722 F: +65 6885 0836 E: China: order-csr@zebra.com <i>All other areas:</i> csasiapacific@zebra.com
Key:	T: Telephone F: Facsimile E: E-mail		

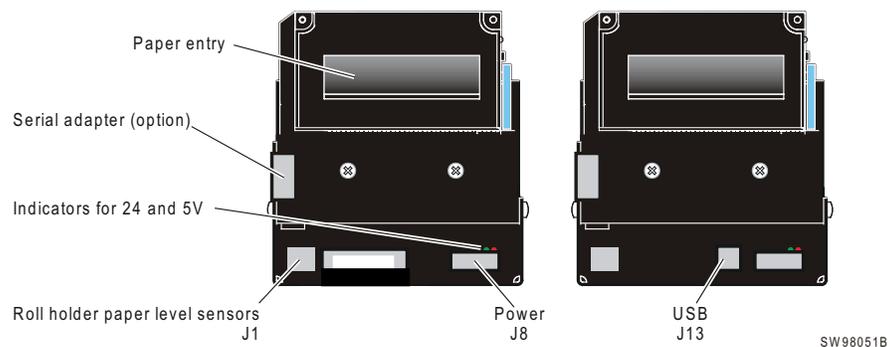


Product Presentation

The TTP 7030 kiosk printer uses direct thermal printing. The print speed is up to 75 mm per second.

The printer has an integrated control board. The TTP 7030 communicates with the host computer through the USB interface and can be equipped with an optional serial port.

Figure 1 • Printer Exterior, Rear View

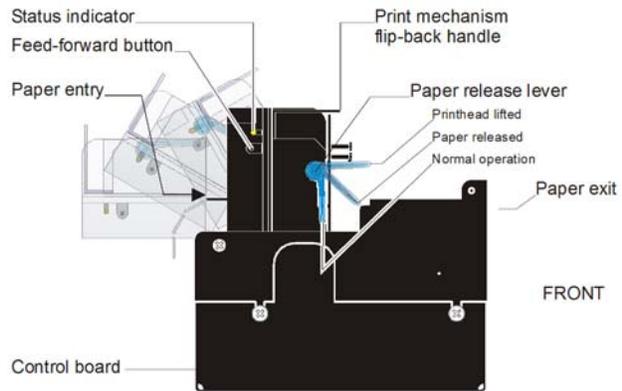


Printer drivers for Microsoft Windows™ are available, and the printer is compatible with the Plug and Play standard. It is also possible to address the printer directly from the kiosk software without using drivers.

The loop generating presenter mechanism handles documents of various lengths. It holds the printout until printed, then cuts and presents the complete printout to the customer. The retract-and-retain version of the printer can retract uncollected printouts into a wastebasket inside the kiosk.

A flip-up print module gives the operator access to the paper path, and print head, for maintenance purposes.

Figure 2 • Printer Exterior, Side View



SW98049

Indicators

Status Indicator

The status indicator (see [Figure 1, Printer Exterior, Rear View, on page 7](#)) has several functions:

ON constantly	Indicates that the printer is operational.
Flashes, pauses, flashes	<p>Indicates warnings of non-severe error. The number of flashes reflects the <i>warning-code</i>:</p> <ul style="list-style-type: none"> 2 flashes: Paper low <p> Note • This signaling is disabled by default. It can be disabled/enabled by setting parameter P52.</p> <ul style="list-style-type: none"> 3 flashes: Weekend low <p>Warning-codes are reset automatically when the condition causing them are removed.</p>
Flashes rapidly	<p>Indicates severe error. Hold down the Feed button and the number of flashes will reflect the <i>error-code</i>.</p> <ul style="list-style-type: none"> 1 — Presenter jam, paper cannot be ejected / retracted 2 — Cutter cannot return to home position 3 — Out of paper 4 — Printhead lifted 5 — Paper wrapped around platen (under head) 6 — Temp error >60°C 7 — Presenter jam, motor cannot rotate Fast flashes — Checksum error, firmware Steady light — Wrong firmware type

Error-codes are reset:

- When the conditions causing them are removed.
- When the printer is turned off/on.
- When the **blue** printhead release arm is lifted and then lowered.

Control Board Indicators

The control board has two power indicators behind the power connector:

- Green indicator constantly ON: 24 V present
- Red indicator constantly ON: 5 V OK (generated on control board)

Feed Button

The Feed button will feed, cut, and present a complete page.

Any data in the print buffer will be printed. If the buffer is empty the page will be blank.

In black mark mode, the page will be synchronized with the black mark.

Press and hold the Feed button while turning on the power, or while opening and closing the printhead to print a self-test printout. See *Making a test printout* on page 14.

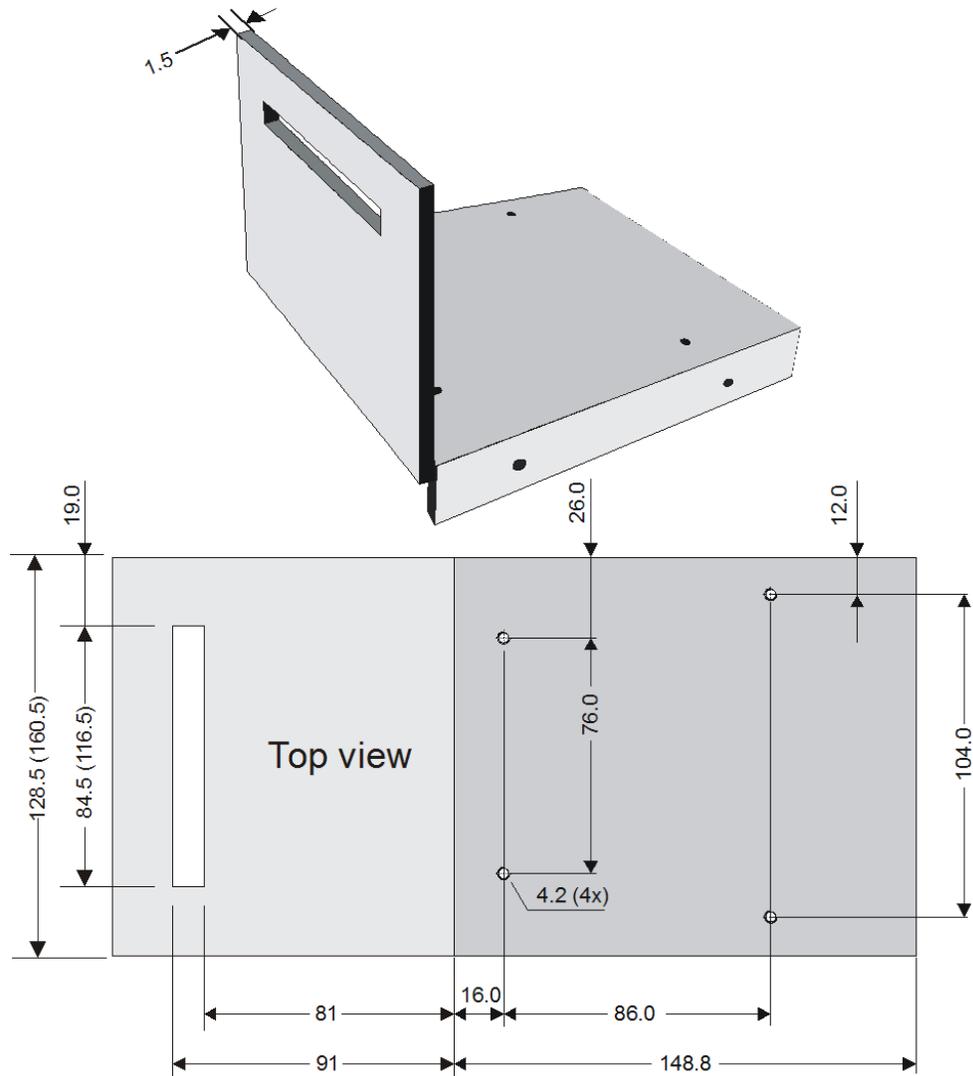


Installation

Installation Considerations

The TTP 7030 printer is designed to be installed in an enclosure such as a self-service kiosk. The illustration below gives an example of a printer-mounting shelf.

Figure 3 • Example of a Simple Shelf for Fastening a Standard Printer



All measurements are in mm. Measurements in parentheses are for TTP 70x0/112. SW98056

Additional space is required for paper loading and paper jam removal. Consider mounting the printer on a movable platform so that the printer can be maintained outside the kiosk enclosure.

Electrostatic Discharges, and Earth Currents

Preventing ESD and earth currents from affecting the printer operation requires proper connection of the printer chassis to protective earth through a mounting platform or through a separate earth conductor.

Ambient Light

There is an optical sensor just inside the paper exit at the front of the printer.

To ensure proper printer operation, design the printer enclosure so that it prevents direct sunlight or light from indoor lamps from reaching the sensor through the paper exit.

Connecting To The Computer



Caution • Using a non-Zebra power supply may cause excessive EMC interferences and void the EMC certifications of the printer.

Connect the TTP 7030

1. Connect J13 of the printer to the USB port of the computer or the USB hub to be used. USB connectors can be recognized by the following symbol:

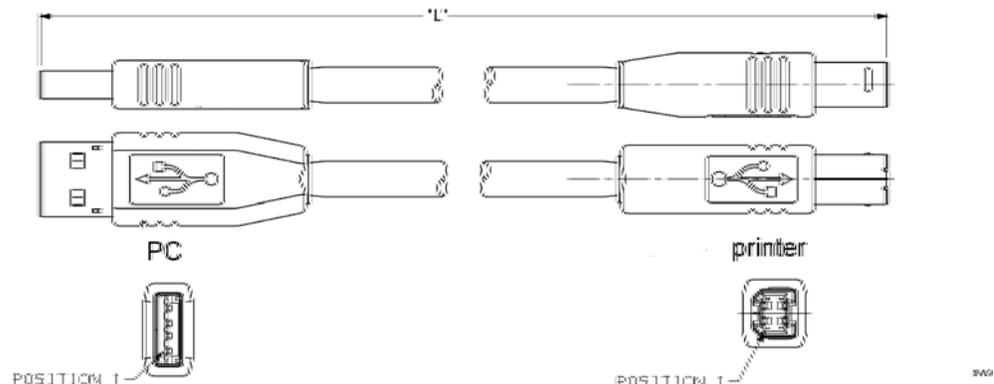


Note • Connector J13 is a 4-pin USB type B connector.



Note • A suitable cable is available from Zebra.

Figure 4 • USB Cable with Type A and Type B Connectors



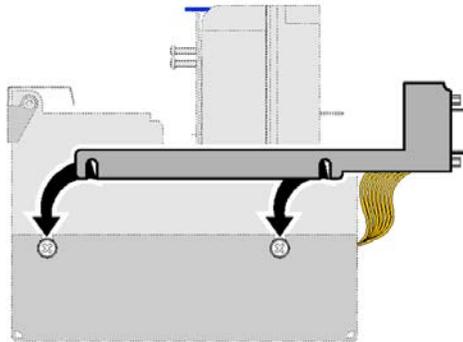
Using a Serial Adapter

1. Loosen the control board module.
2. Connect the serial adapter to J4 on the control board.
3. Fasten the control board module.
4. Fasten the serial adapter with the two screws on the right hand side of the printer.
5. Connect a serial cable between the printer and the computer to be used.



Important • We strongly recommend using the Zebra cable because many incompatible cables are available.

Figure 5 • Fitting a serial adapter to the printer.



Connecting the Power

Using the Zebra power supply.

1. Make sure the line voltage selector on the power supply is set to your local line voltage (only PSU 01035-014).
2. Connect the cable from the power supply to J8.
3. Connect the power cable to the line outlet.
4. Apply power to the printer.

If you use another type of power supply unit, connect the voltages as shown in [Figure 6](#).



Important • The protective ground and the 24V ground must be separated in the power supply to avoid ground loops!

At the printer end of the cable, use an Tyco Mate-N-Lok connector housing and two contact-sockets:

Figure 6 • Power Connection

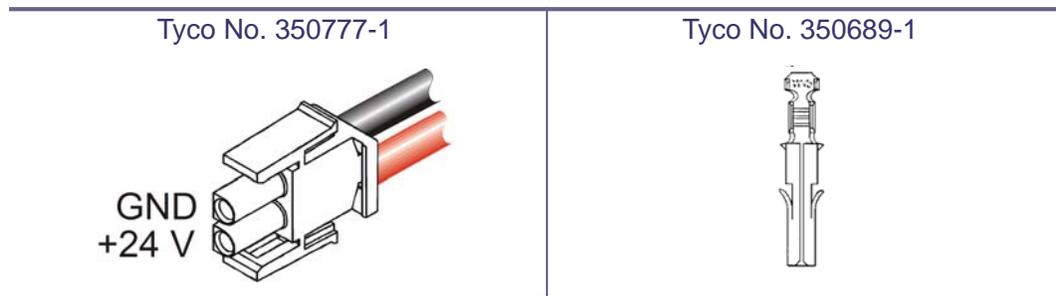


Table 1 • Current Consumption

Idle	150 mA	150 mA
Standard text printing	2.5 A average	3.5 A average
All black printing	8.5 A	11 A

Making A Test Printout

1. Is a power button available for the printer?

If...	Then...
Yes	<ol style="list-style-type: none"> Remove power from the printer. Hold the feed-forward button depressed while powering ON the printer. Keep the button depressed until printing starts. This produces a printout showing the firmware program version and date, control board revision number and serial number, name of loaded fonts and logotypes, and the parameter settings. Each successive press of the button will produce a test printout. Switch the printer OFF and ON again to exit self-test mode.
No	<ol style="list-style-type: none"> Lift the printhead. Press and hold the Feed button while lowering the printhead, and keep it pressed until after the auto-load is completed. Release the button. A self-test printout will be printed. <p> Note • this feature was introduced in firmware version 2.44b.</p>

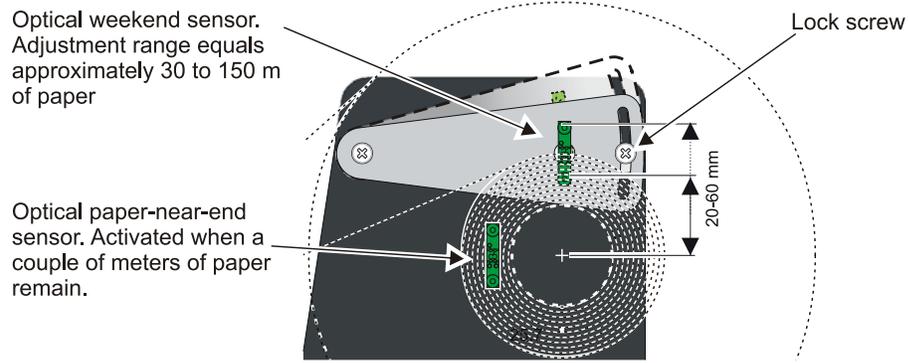
Installing A Printer Driver

Printer drivers for most versions of Microsoft Windows™, are available on the Zebra web site <http://www.zebra.com>. Please follow the installation instructions that accompany the drivers and refer to the Kiosk Driver Reference Guide, Part Number P1006873-001, available on www.zebra.com for detailed driver information.

Paper Level Sensors

The printer has inputs for one paper-near-end sensor, and one weekend sensor.

Figure 7 • Paper Level Sensor Indicators on Roll Holder



The paper-near-end sensor alerts the system when a couple of meters of paper remain on the roll. The purpose of this sensor is to get an early alert so that you can replace the paper roll in time in remotely located kiosks.

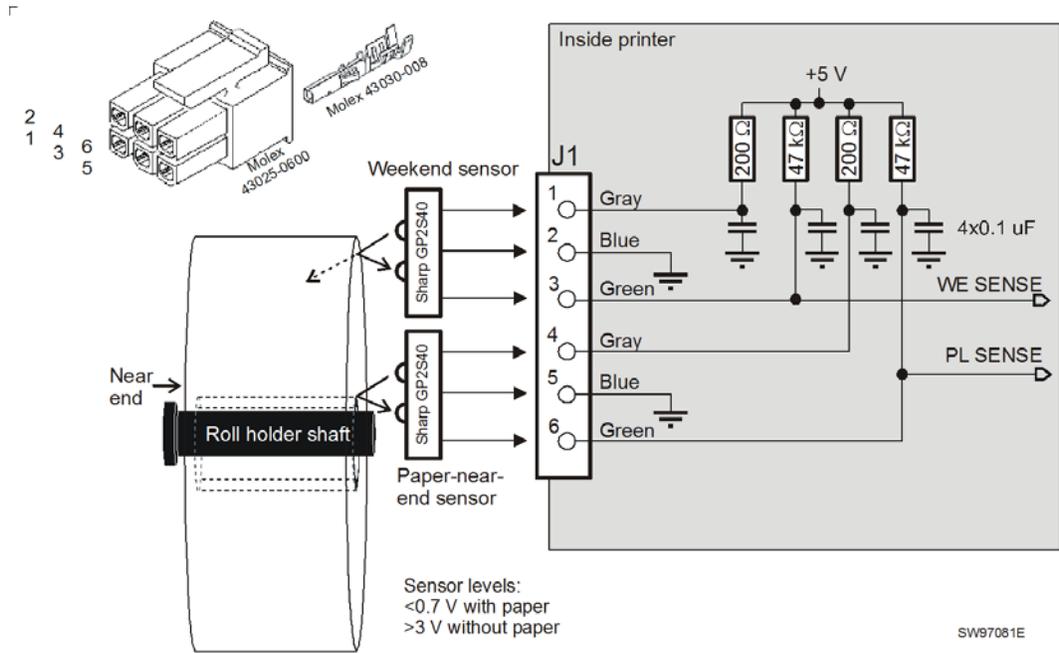
The weekend sensor should alert when the remaining paper does not last over a weekend. A reason to use this sensor is that it is more expensive to get a service technician out on a weekend or holiday than it is to replace the roll before it is totally empty.

The Zebra 150 mm paper roll holders are equipped with paper-near-end sensor only, while the 250 mm roll holders have both paper-near-end and weekend sensors.

When installing the Zebra roll holder just connect the cable from the roll holder to connector J1 at the back of the printer. See [Figure 1, Printer Exterior, Rear View, on page 7](#).

If you use custom designed roll holders, connect the sensors according to [Figure 8, Paper-near-end Sensor Connection, on page 20](#).

Figure 8 • Paper-near-end Sensor Connection



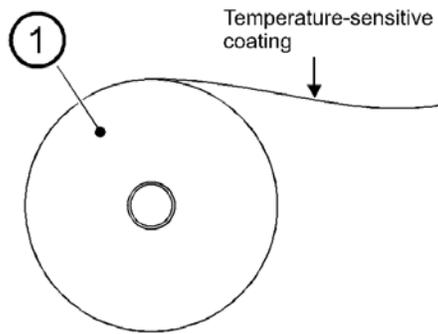
Operation



Installing a Paper Roll

1. Turn the new paper roll as shown. The paper should be inserted into the printer with the temperature-sensitive side up.

Figure 9 • Paper Roll Orientation



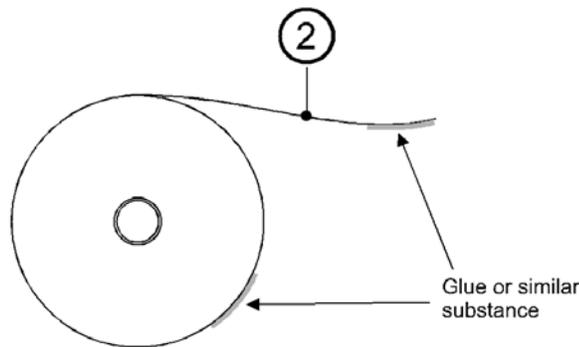
SW96074A

2. Tear off a full turn of the paper (approximately 0.5 m) from the new paper roll.



Caution • This is important since the outer end of the paper is usually fixed to the roll with some type of glue or self-adhesive substance that might otherwise cause paper jam or even print head damage.

Figure 10 • Tear off 0.5 m from the new paper roll

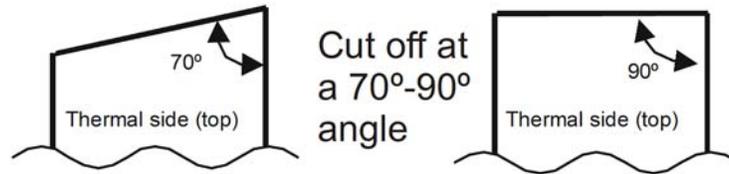


SW96075A

3. Make sure the printer is turned ON.

- Cut the paper in a suitable angle. See Figure 11.

Figure 11 • Suitable paper edge for auto load



Note • The paper sensor is on the same side as the blue paper release lever (where the arrow points in Figure 12, *Insert the New Paper*, on page 23). If the paper is cut in a direction opposite to that as shown in the figure above, the sensor will not detect the paper.

- Insert the paper through the paper entry opening at the back of the printer.
The printer will now feed, cut and eject a printout, and then automatically go on-line.



Note • In high temperature and high humidity, the paper may lose its stiffness resulting in paper jam at automatic paper loading. In such cases, load paper manually.

Figure 12 • Insert the New Paper

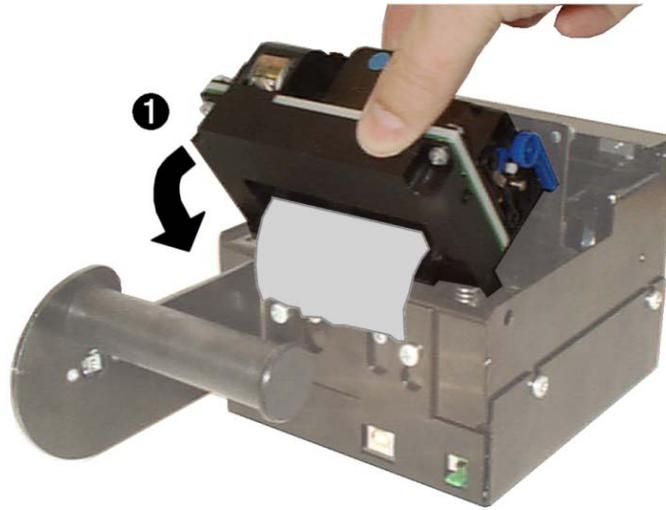


Clearing Paper Jams

Should a paper jam occur, follow the procedure below:

1. Tear off the paper close to the paper roll and open the print module.

Figure 13 • Open the Print Module



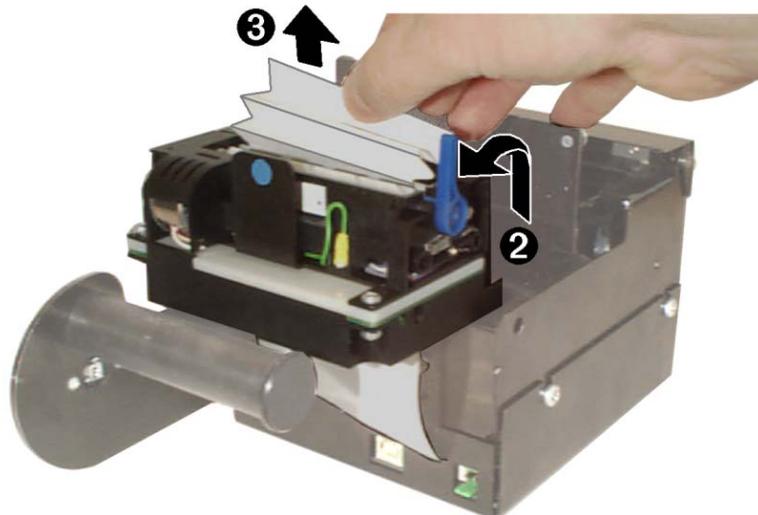
SW98064

2. Lift the print head by pushing the paper release lever upwards.
3. Remove all jammed paper by gently pulling the paper up and out of the print module. Make sure the paper path is clear and then close the printhead.



Caution • NEVER pull paper backwards through the print mechanism.

Figure 14 • Remove All Jammed Paper



SW98065



Zebra Technologies International, LLC

475 Half Day Road, Suite 500
Lincolnshire, Illinois 60069 U.S.A
T: +1 847 634 6700
Toll-free +1 866 230 9494
F: +1 847 913 8766

Zebra Technologies Europe Limited

Dules Meadow
Millboard Road
Bourne End
Buckinghamshire, SL8 5XF, UK
T: +44 (0) 1628 556000
F: +44 (0) 1628 556001

Zebra Technologies Asia Pacific, LLC

120 Robinson Road
#06-01 Parakou Building
Singapore 068913
T: +65 6858 0722
F: +65 6885 0838

<http://www.zebra.com>