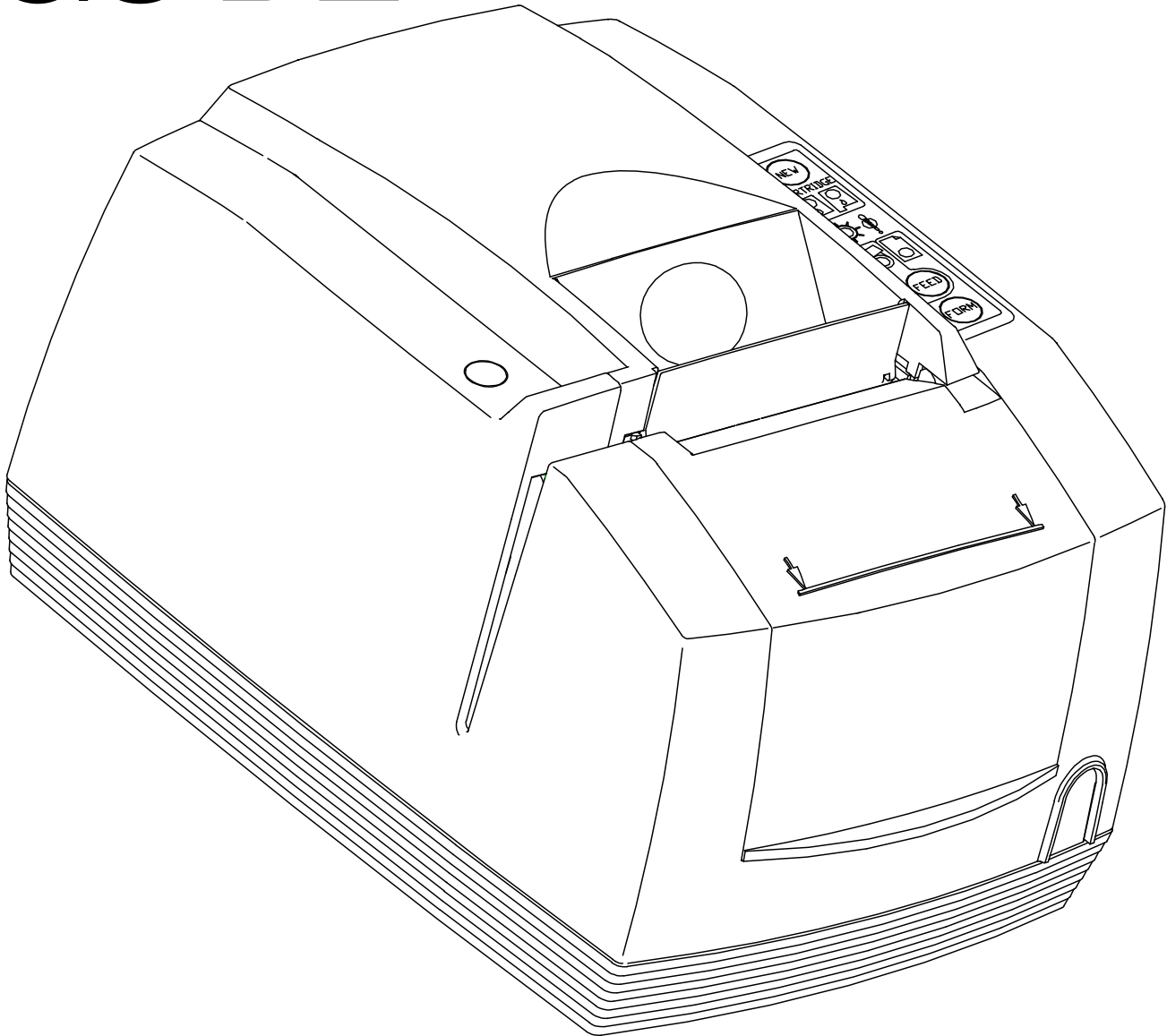


**POSjet® 1500**

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# OPERATOR'S GUIDE



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**ithaca®**  
a product of TRANSACT

20-03396  
Rev E  
Nov-07



## Change History

Rev A Initial Release.  
Rev B Update disclaimer  
Rev C updated paper case p/n's, descriptions & qtys  
Rev D Pg 36 removed "buzzer" option  
Rev E Added RoHS part numbers for the power cords in Appendix F



## Product Information

### Disclaimer

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Printed in USA.

### Federal Communications Commission Radio Frequency Interference Statement

The POSjet® 1500 Printer complies with the limits for a Class A computing device in accordance with the specifications in Part 15 of FCC rules. These regulations are designed to minimize radio frequency interference during installation; however, there is no guarantee that radio or television interference will not occur during any particular installation. Interference can be determined by turning the equipment off and on while the radio or television is on. If the printer causes interference to radio or television reception, try to correct the interference by one or more of the following measures:

- Reorient the radio or television receiving antenna
- Relocate the printer with respect to the receiver
- Plug the printer and receiver into different circuits

If necessary, the user should consult their dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: How to Identify and Resolve Radio/TV Interference Problems. This booklet is available from the US Government Printing Office, Washington, DC 20402. Ask for stock number 004-000-00345-4.

### Canadian Department of Communications Radio Interference Statement

The POSjet® 1500 Printer does not exceed Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

### Regulatory Compliance

#### North America:

**EMI:** FCC Class B

**Safety:** UL (US)  
CUL (Canada)

#### Europe:

**CE Marking:** CLASS B: EN55022, EN50081-1 (optional)

**Safety:** TUV

**Other:** CB Certificate

## TransAct Technical Support

Monday through Friday, 8 A.M. to 5 P.M. Eastern Standard Time (excluding holidays). To obtain Technical Support, call: TransAct's Ithaca Facility at (607) 257-8901, or (877) 7ITHACA (1-877-748-4222).

### Service Information

TransAct Technologies Incorporated has a full service organization to meet your printer service and repair requirements. If your printer needs service, please contact your authorized printer service center. If any problems still persist, you can directly contact the Ithaca Facility's Technical Support Department at (607) 257-8901 or (877) 7ITHACA (1-877-748-4222) for a return authorization. International customers should contact your distributor for services. TransAct offers the following service programs to meet your needs.

- Extended Warranty
- Depot Repair
- Maintenance Contract
- Internet Support

### Please have the following information at hand:

1. The Model Number and Serial Number.
2. A list of any other peripheral devices attached to the same port as the printer.
3. The application software, operating system, and network you are using.
4. A copy of your printer's Configuration Settings.
5. What happened, and what you were doing when the problem occurred.
6. How you tried to solve the problem.

### Warranty Information

TransAct's POSjet® 1500 Printers come with a standard 24-month warranty that commences upon shipment from factory, and covers parts and labor. An optional warranty, covering both parts and labor for an additional 12 months, may be purchased separately. Repairs are warranted for 90 days from the date of repair or for the balance of the original warranty period, which ever is greater.

### Return Materials Authorization and Return Policies

If the technical support person determines that the printer should be serviced at our facility, and you want to return the printer for repair, a Returned Materials Authorization (RMA) number must be issued before returning the printer. Prepare the printer being returned for repair as follows:

1. Remove and discard ink cartridges.
2. Pack the printer to be returned in the original packing material. Packing items may be purchased from TransAct's Ithaca Facility.
3. Return only the accessories that a Support Technician asks you to include.
4. Write the RMA number clearly on the outside of the box.

### Shipping Printers

**Never ship a printer by any means with any ink cartridge(s) installed.** Be sure to save the packing materials in the event that you need to send the printer in for servicing. TransAct Technologies is not responsible for damaged return items that are not packaged in original shipping material.

## ***Where Can You Find More Information?***

### **Our Internet Support and Sales Services**

**[www.transact-tech.com](http://www.transact-tech.com)**

TransAct Technologies Inc. maintains an Internet web site with content devoted to product support. Within the Technical Support section you can find the most current versions of the Operator's Guide and Programmer's Guide.

1. Upon entering our web site, you will be brought to the "Welcome to TransAct" screen. This intro page has the Ithaca Brand listed at the top right. Click on the Ithaca logo.
2. Locate and click on the technical support button in the green area of the "Welcome to Ithaca" screen.
3. Use the "Product Info" pulldown box to select the appropriate information for the printer model that you are using.

### **Programmer's Guide**

The *Programmer's Guide* is available by downloading it from our web site and is intended for system engineers or integrators. It does not contain additional information on the Microline emulation. It contains the information to integrate the POSjet® 1500 Printer with a point-of-sale terminal and to program the terminal to communicate with the printer in ITHACA, EPSON, STAR, Microline, and TM-U325 modes.

*The Programmer's Guide provides the following material:*

- Start-up Information-Diagnostics and Fault Conditions
- Command Descriptions
- Character Fonts
- Printer Features
- Parallel and RS-232 Interface Information
- Communications and Buffers
- Command Code Reference Tables

### ***Contacting TransAct's Ithaca Facility***

Contact TransAct's Ithaca facility for information about the POSjet® 1500 Printer and how it works with your system. For information on International distribution, visit our web site at [www.transact-tech.com](http://www.transact-tech.com). Contact the TransAct's Sales and Technical Support Departments at the following address and telephone or fax numbers.

#### **Technical Support**

Receive technical support, order documentation, request additional information, or send in a printer for service.

#### **Sales**

Order supplies, receive more product information, or order product brochures.

#### **TransAct Technologies Incorporated**

Ithaca Facility  
20 Bomax Drive  
Ithaca, NY 14850 USA

Telephone	(877) 7ITHACA(877 748 4222). or (607) 257-8901
Main fax	(607) 257-8922
Sales fax	(607) 257-3868
Technical Support fax	(607) 257-3911
Web site	<a href="http://www.transact-tech.com">http://www.transact-tech.com</a>



**What is covered in this Operator's Guide?**

<b>Section 1: Installation and Setup Information</b>		<b>Summary:</b>
Overview of Printer Controls	pg. 6	The "Overview of Printer Controls" sub-section provides keypad button function descriptions, and explains what the printer's indicator lights represent.
Step-by-Step Installation Instructions	pg. 10	The "Step-by-Step Installation Instructions" sub-section provides a five-step process that shows how to setup the POSjet® 1500 for the first time.
<b>Section 2: Operational Information</b>		<b>Summary:</b>
Using Validation: Form Insertion and Orientation	pg. 26	The "Using Validation: Form Insertion and Orientation" sub-section includes information on the type, orientation, and size of forms that the POSjet can accommodate. Additionally, this sub-section explains how to insert forms, and also gives instructions on how to clear validation jams.
Printer Analysis: How to Use Self-Test	pg. 29	The "Printer Analysis: How to Use Self-Test" sub-section explains how to check the operational status of a printer without it being connected to a system. It also includes a list of the self-tests that are used for testing and explains how to enter and exit the self-test mode.
Understanding Configuration Mode	pg. 31	The "Understanding Configuration Mode" sub-section gives a basic overview of configuration mode, and explains how to use it to approach troubleshooting and system compatibility setup issues. Additionally, this section will also cover how the NEW CARTRIDGE Button is used within configuration mode to change and save settings.
Printer Color Configuration	pg. 34	The "Printer Color Configuration" sub-section explains the settings of each optional printing setup. This section also explains the difference between one and two cartridge printing, and provides information on how each printing option influences the configuration settings of the printer.
<b>Section 3: POSjet® 1500 Features and Specifications</b>		<b>Summary:</b>
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<b>Section 4: Appendices</b>		<b>Summary:</b>
Appendix A: Additional Installation Procedures	pg. 46	The "Additional Installation Procedures" sub-section lists several procedures that are required to ensure that your system and printer are setup and configured to work with one another.
Appendix B: Interface Connection Specifics	pg. 49	The "Interface Connection Specifics" sub-section provides Parallel and Serial requirements, and also gives pin assignments. It also covers cash drawer driver interface specifics like the interface card and shunt positioning for the Star, Ithaca®, and Epson emulations.
Appendix C: Common Operational Tasks	pg. 52	The "Common Operational Questions" sub-section provides quick reference information covering a full range of the most common operational questions.
Appendix D: Startup Troubleshooting	pg. 53	The "Startup Troubleshooting" sub-section lists solutions to the most common printer setup problems.
Appendix E: Operational Troubleshooting	pg. 55	The "Operational Troubleshooting" sub-section explains how to read the printer's indicator lights, and also includes solutions to the most common operational problems.
Appendix F: Ordering Genuine Ithaca Supplies	pg. 59	The "Ordering Supplies" sub-section provides detailed ordering information, including part numbers for printer consumables, cables, and drivers.

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# Section 1:

## Printer Overview and Installation Information

By following the instructions in this section, the POSjet® 1500 will be ready to accept commands and successfully interface with your system in just a few minutes. Follow the steps below when setting up your printer.

Overview of Printer Controls..... pg. 6

Step-by-Step Installation Instructions

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Step 2: Connect Power and Communications ..... pg. 11

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## Overview of Printer Controls

### Leaving the 1500 Connected to a Power Source

The POSjet® 1500 Printer uses Hewlett-Packard ink jet print cartridges. Unlike consumer ink jet print cartridges, the HP print cartridge does not need to be capped when not in use. Consequently, the POSjet® 1500 is ready to print at all times. The HP cartridge does not need to be sealed. However, the ink jet cartridge must have periodic usage to maintain its functionality. The printer does this by cleaning the excess ink from the face of the cartridge (“wiping”) and firing ink into a reservoir to clean the print jets (“spitting”). The printer performs these functions as transparently to the host application as possible. However, the printer cannot perform these basic maintenance procedures if the power to the printer is removed.

**Do not unplug the printer from its power source.** Instead, turn the printer to the STANDBY/OFF mode by pressing and releasing the \* Button located on the front face of the printer. Doing this prepares the ink cartridges for periods of inactivity. Turning the printer to STANDBY/OFF maximizes the amount of time that ink cartridge(s) can be left without being used. When the printer is turned to STANDBY/OFF, it can sit unattended for an extended period of time. To bring the printer back out of STANDBY/OFF mode, simply press the \* Button. This will bring the printer into OPERATIONAL/ON mode, which should be confirmed by the POWER INDICATOR LIGHT becoming illuminated.

### Operating the Keypad Controls

The keypad contains 3 buttons and 6 indicator lights. The \* Button is used in conjunction with the keypad controls to perform operating tasks and is located on the front of the printer. The cover open button on the left side of the console opens the printer's paper cover.

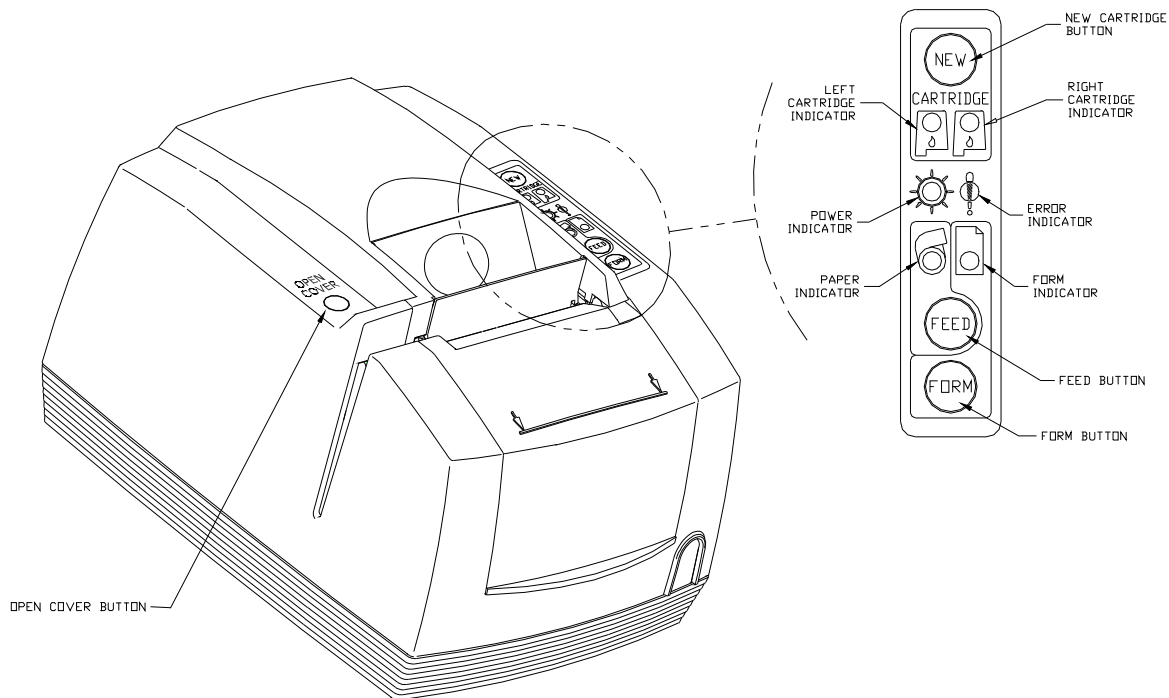


Figure 1 Keypad Buttons and Indicator Lights



## Button Function Descriptions:

The primary functions of each of the buttons are described below. These buttons may also have alternate functions when the printer is in self-test and configuration modes.

### \* Button

The \* Button is located on the front of the printer. Since the POSjet® 1500 has been designed to remain connected to a power source at all times, the \* Button does not disconnect power to the printer, but instead switches the printer between OPERATIONAL/ON and STANDBY/OFF modes. When the printer is in the OPERATIONAL/ON mode, the green POWER INDICATOR LIGHT will be illuminated. None of the keypad indicator lights are illuminated when the printer is in the STANDBY/OFF mode.

The printer will always remember the current mode that it is in when power has been disconnected and then re-connected. For example, if the printer is in STANDBY/OFF mode and the power cord is unplugged and re-connected to the printer, it will remain in STANDBY/OFF mode. If the printer is in OPERATIONAL/ON mode and the power cord is unplugged and re-connected to the printer, it will remain in OPERATIONAL/ON mode.

### NEW CARTRIDGE Button

The NEW CARTRIDGE Button works with the LEFT AND RIGHT INK CARTRIDGE INDICATOR LIGHTS to allow an operator to monitor and replace ink cartridges as ink levels become low. The primary functions of the NEW CARTRIDGE Button are:

#### *Cartridge Status Monitoring*

Ink usage is monitored by the printer. When the ink supply is low, the indicator light for the left or right cartridge will blink. After replacing the cartridge(s), press the NEW CARTRIDGE Button to inform the printer that a new cartridge has been installed.

**Note:** The printer cannot distinguish between a new, full cartridge and a used cartridge. When a cartridge is replaced, the printer will reset the ink status to full when the NEW CARTRIDGE Button is pressed. Used cartridges should be discarded to assure that they are not re-installed into the printer.

#### *Printing Cartridge Status*

Press the NEW CARTRIDGE Button to print the current status of the ink cartridges. This function is only available when the printer is in OPERATIONAL/ON mode, with paper and cartridges installed, and covers closed. It will not remove an ink low warning unless the cartridge has been replaced.

#### *Printing Ink Remaining Status*

Pressing the NEW CARTRIDGE Button once without changing the cartridge will print the ink status. It will not remove the ink low warning unless the cartridge is removed and replaced while the low indication is being displayed. If the cartridge is replaced with a used cartridge, the NEW CARTRIDGE Button should not be pressed.

### FEED Button

The FEED Button is used to advance paper. If an inserted form is present in the printer, the FEED Button will move the form in a upward direction. If no form is present, the receipt paper will be advanced.

Pressing the FEED Button momentarily, will feed one line at a time. Pressing and holding the FEED Button will feed paper continuously until it is released. The receipt paper may be fed in the reverse direction by pressing and holding the NEW CARTRIDGE Button and the FEED Button at the same time. The reverse feed function is mostly used while fixing a paper jam.

### Form Button

The FORM Button is used for inserted form operations. Pressing the FORM Button with no form inserted in the printer activates the automatic form loading function. The printer will flash the FORM INDICATOR LIGHT and wait for a form to be placed in the validation slot. If a form is already present in the printer, pressing the FORM button will move the form in a downward direction.

### Open Cover Button

The Open Cover Button is used to access the rear paper roll compartment and is located on the left side of the printer's outer console.



## Indicator Light Descriptions

POWER INDICATOR LIGHT	Indicates printer activity and non-recoverable errors.
ERROR INDICATOR LIGHT	Indicates problems and probability of recovery.
PAPER INDICATOR LIGHT	Indicates paper status (paper low and paper out).
FORM INDICATOR LIGHT	Indicates validation/inserted form status
LEFT CARTRIDGE INDICATOR LIGHT	Indicates ink levels of left cartridge.
RIGHT CARTRIDGE INDICATOR LIGHT	Indicates ink levels of right ink cartridge.

The descriptions below reflect the normal uses of the keypad indicator lights. These indicators are also used during self-test and errors modes to convey additional information.

### *Power Indicator Light (LED)*

The POWER INDICATOR LIGHT becomes active when the printer is in the OPERATIONAL/ON mode.

### *Error Indicator Light (LED)*

The ERROR INDICATOR LIGHT becomes active when a problem is detected by the printer. The ERROR INDICATOR LIGHT, along with the other indicators may be used to determine the cause of the problem.

### *Paper Indicator Light (LED)*

The PAPER INDICATOR LIGHT is used to communicate the amount of paper remaining in the printer. When the paper supply has been exhausted, the printer will stop, and the PAPER and ERROR INDICATOR LIGHTS will illuminate. When paper is reloaded, the indicator lights will be extinguished and the printer will resume operation. If the POSjet 1500 is equipped with the optional paper low feature, the PAPER INDICATOR LIGHT will flash when the paper roll diameter decreases below a preset minimum. This indication is a warning only, the printer will continue to operate normally until the paper supply is exhausted.

### *Form Indicator*

The FORM INDICATOR LIGHT is used during form validation operations. The FORM INDICATOR LIGHT blinks to alert the operator that the printer is waiting for a form to be inserted/removed in the printer. The FORM INDICATOR LIGHT will change to a steady ON condition when a form is present in the printer.

### *Left and Right Cartridge Indicator Lights (LED)*

The printer has two ink cartridge indicator lights that display the status of the ink cartridges. The indicator light will blink slowly when the ink level in the respective cartridge falls below a preset, programmable level. It is a warning only, the printer will continue to operate without intervention. When ink cartridge(s) are removed, or the ink cartridge is defective, the corresponding light will blink at a faster rate. Printer operation is inhibited until the cartridge is replaced.

## Step-by-Step Installation Instructions

### Step 1: Unpack the Printer

Be sure to save the box and packing materials in case you need to send the printer in for service. Transact Technologies is not responsible for damaged return items that are not packaged in original shipping material. Refer to "Return Materials Authorization and Return Policies", on page ii for information on what to do if you have to return your printer for repair.

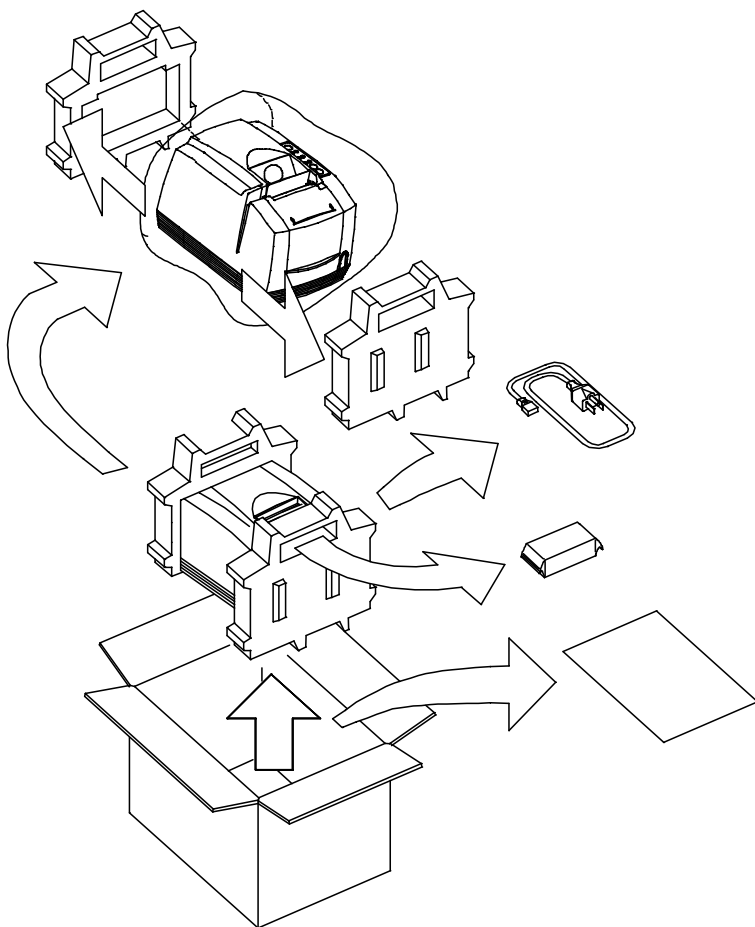


Figure 2 Unpacking Instructions

1. Open the box and remove the printer and all items. Check to make sure that all items are present.
  - **POSjet® 1500 Printer**
  - **Ink Cartridge(s)**
  - **Paper Roll (located under the paper cover)**
  - **PowerPocket® Power Supply: located in cabinetry base (optional)**
  - **AC Power Cord (optional)**
  - **Configuration Summary Receipt**
2. Separate the printer from the packing material. Reverse steps when repacking for return shipment.
3. Check the printer for any signs of damage. If the printer or any parts are damaged, report it to your supplier and shipper immediately.

## Step 2: Connect Power and Communications

### Installation Overview

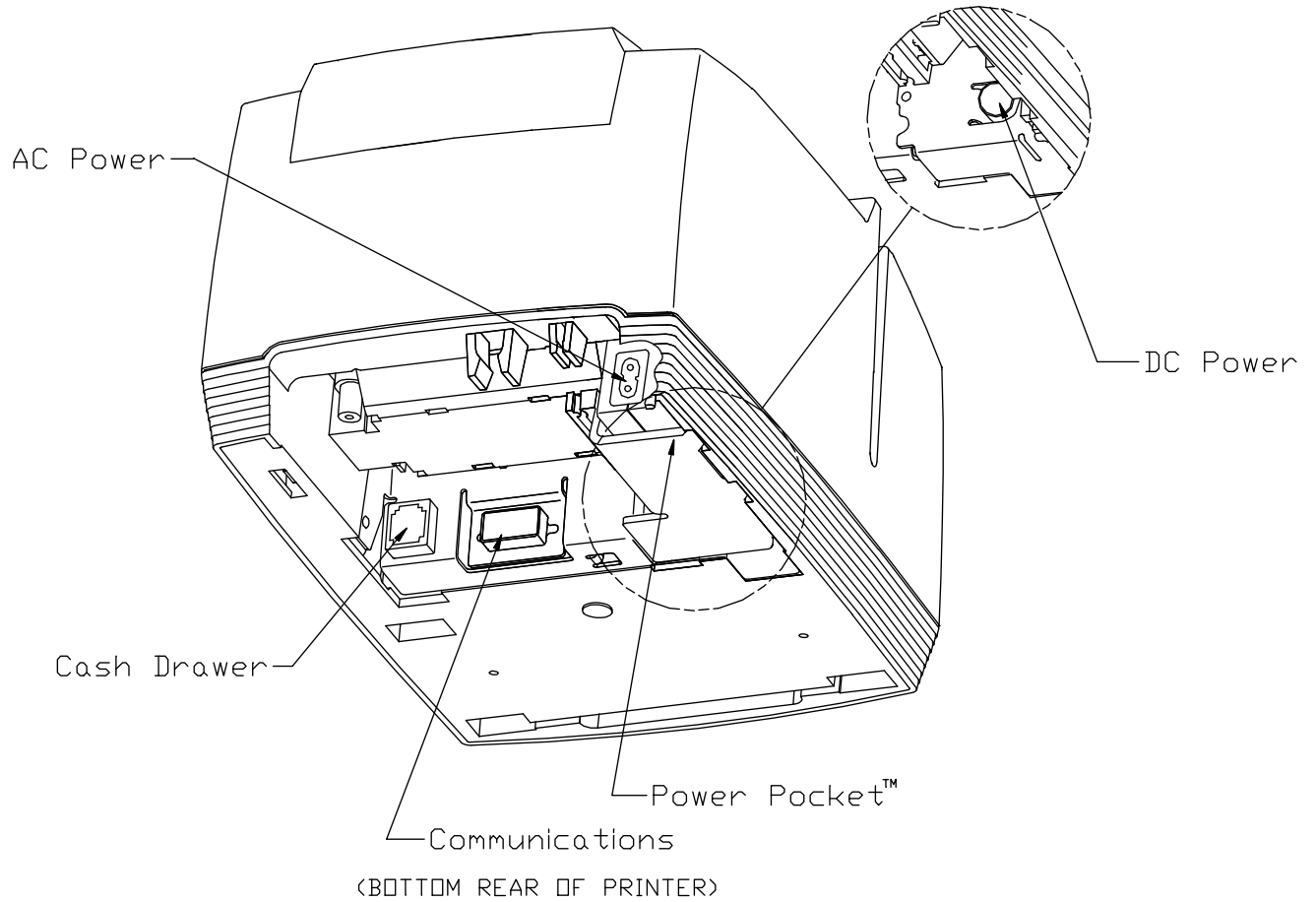


Figure 3 Power and Communications Connections

**Three cables are required to be connected to the printer**

- Power
- Communications
- Cash Drawer

### Using the Cable Restraints

Cable restraints are developed to protect against accidental unplugging of the printer while it is in use. Be sure to properly route the communications cable using the restraints provided on the back of the printer.

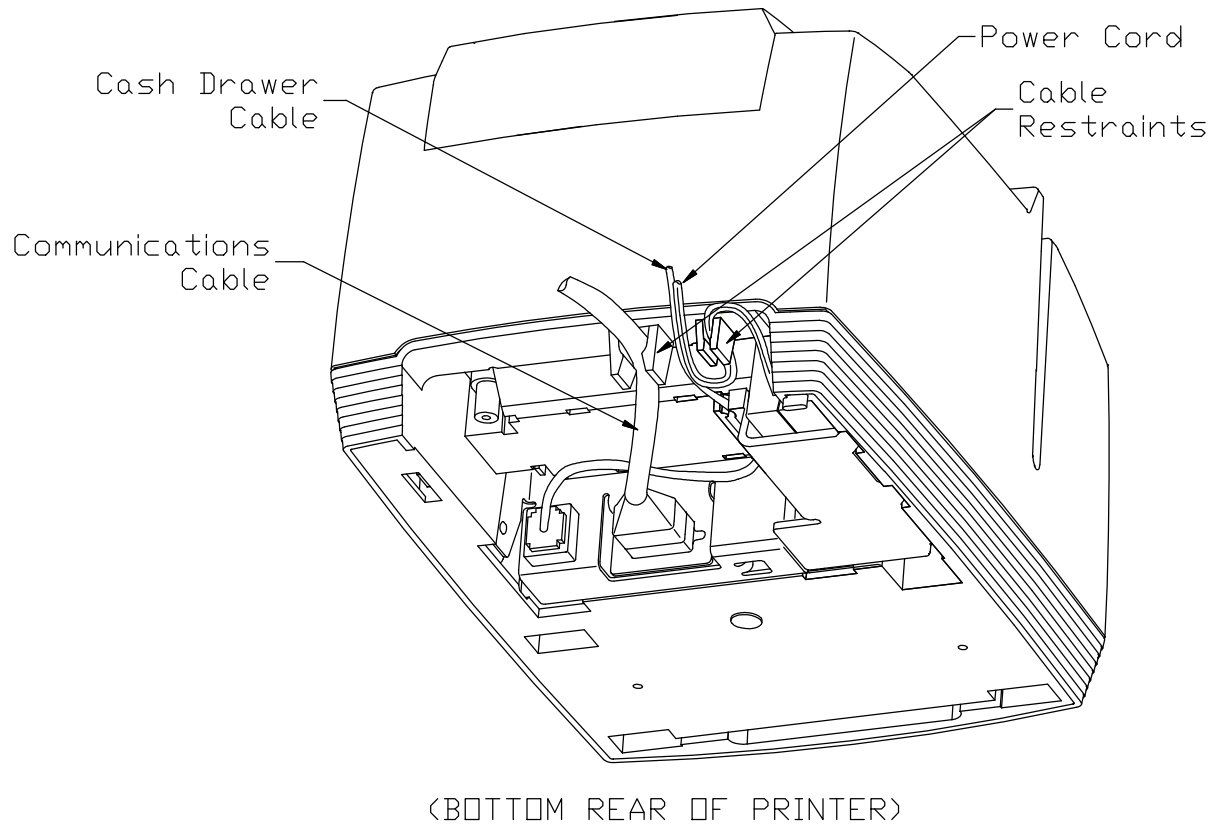


Figure 4 Using the Cable Restraints

## Connecting the Communication Cable

The POSjet® 1500 may be equipped with a number of different communications interface cards.

### These interfaces include:

RS-232 Serial with 9-pin connector

RS-232 Serial with 25-pin connector

IEEE1284 Parallel with 25-pin connector (IEEE1284-A)

IEEE1284 Parallel with 36-pin Centronics style connector (IEEE1284-B)

USB

Connect the appropriate communications cable to the printer as shown in the following figures. Cables are provided by your dealer, the system installer or are available through TransAct. If you are unsure of the interface installed in your printer, refer to "Verifying the Communications Interface Card" on page 46.

### Connecting Serial Cables

1. Disconnect all power from the printer and host system or personal computer.
2. Connect the 9/25-pin Serial Interface Cable to the connector located on the back of the printer.
3. Tighten the two mounting screws on each side of the cable connector.
4. Route the Communication Cable through the Cable Restraint and connect the cable to your host system.

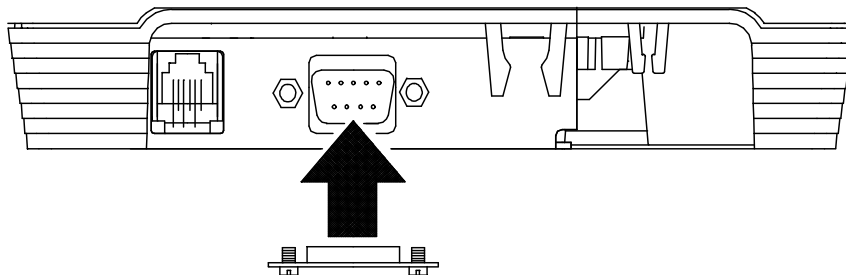


Figure 5 Connecting Serial Cables

### *Connecting Parallel Cables*

1. Disconnect all power from the printer and host system or personal computer.
2. Connect the 25/36-pin Parallel Interface Cable to the connector located on the back of the printer.
3. Tighten the two mounting screws on each side of the cable connector (25-pin only). Or, engage the locking clips (36-pin only).
4. Route the Communication Cable through the Cable Restraint and connect to your host system.

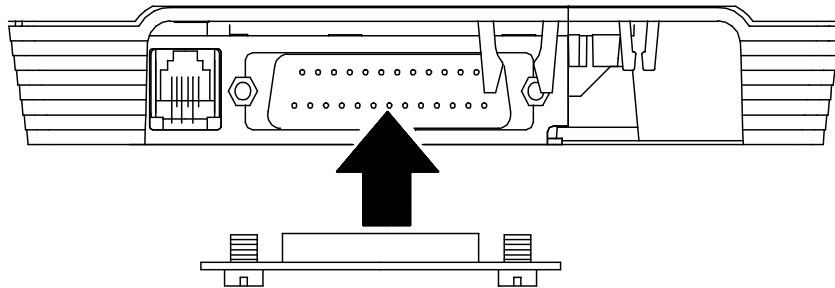
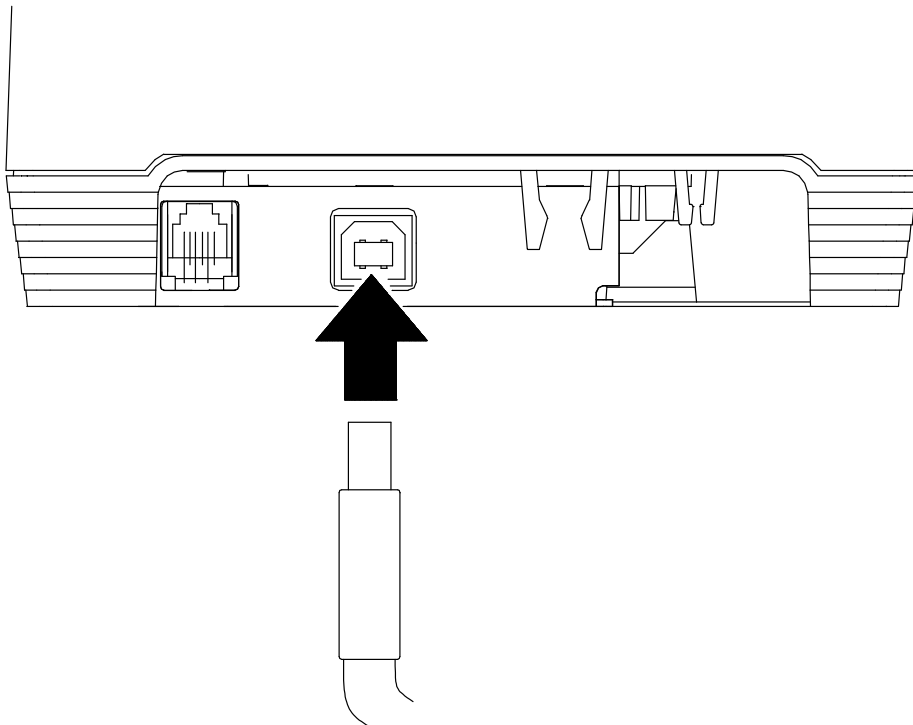


Figure 6 Connecting Parallel Cable

### *Connecting USB Cables*

**Note: the USB connector can be “hot plugged”. The power does not need to be disconnected.**

1. Connect the USB cable to the connector located on the back of the printer.
2. Route the Communication Cable through the Cable Restraint and connect to your host system.





### *Connecting the Cash Drawer*

The POSjet 1500 printer can be configured to operate with cash drawers designed to work with printers from different manufacturers. This configuration is preset at the factory and is identified by means of a label affixed to the bottom of the printer. The POSjet 1500 currently supports Ithaca, Epson, and Star compatible cash drawers.

**CAUTION:** The printer and cash drawer configurations must be the same to ensure proper operation. If the label is missing or does not match your cash drawer configuration, refer to “Verifying the Cash Drawer Interface” on page 46.

### *Connecting Cash Drawer Cable to the Printer*

1. Disconnect all power from the printer and host system or personal computer.
2. Orientate the printer so you are looking at the rear underside of the unit and locate the small Cash Drawer Connector to the left of the Communication Connector.
3. Connect the Cash Drawer Cable to the connector located on the back of the printer, making sure that the Cash Drawer Cable snaps into place.

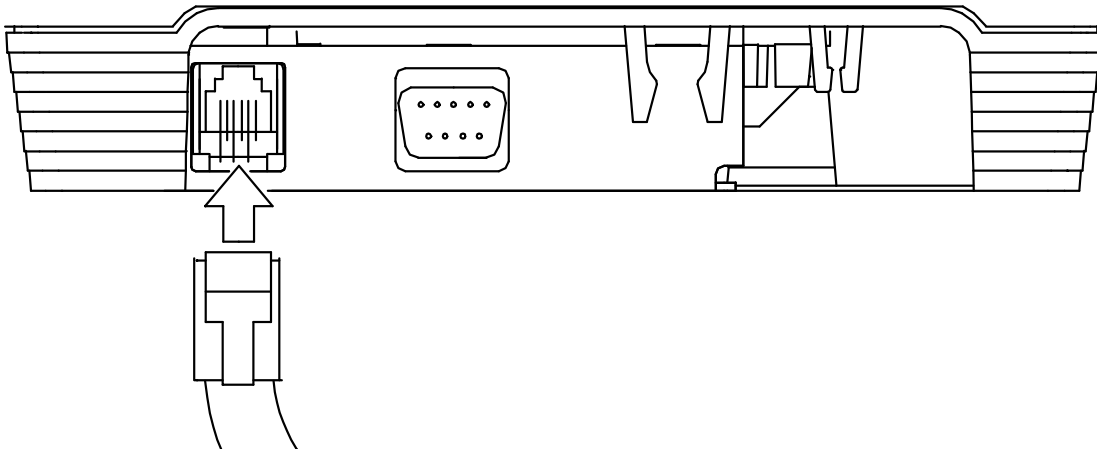
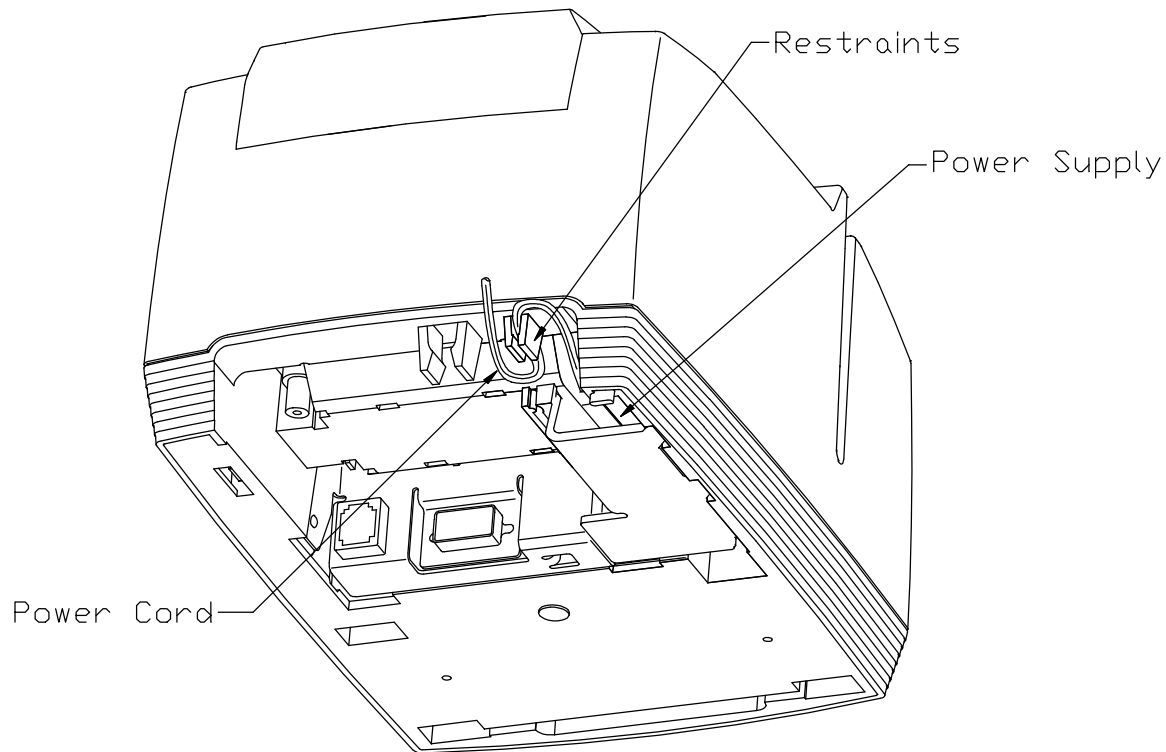


Figure 7 Connecting the Cash Drawer Cable

The POSjet® 1500 Printer may be powered from an external 24 Vdc power source, or may be equipped with a factory installed PowerPocket power supply. Refer to the specification section for DC power connector specifications.

### Connecting the Power Cord (with power supply)

1. Orientate the printer upside-down and find the POSjet's power supply's power socket.
2. Locate the power cord and connect it to the power socket (power supply) located on the back of the printer and to an external power outlet. The socket-outlet shall be installed near the equipment and shall be easily accessible.
3. Route the power cord through the cable restraints. Refer to the drawing below to see how to route the cord. Failure to use the cable restraints may result in the printer becoming accidentally unplugged during operation.
4. Set the printer into OPERATIONAL/ON mode by pressing the \* Button. The printer takes approximately 1.5 seconds to begin operation.



(BOTTOM REAR OF PRINTER)

Figure 8 Connecting the AC Power Cord (with power supply)

**Connecting the DC Power Cord (no power supply)**

1. Orientate the printer upside-down and find the DC power socket.
2. Locate the DC power cord and connect it to the Interface Card's power socket, then route the cord through the cable restraint. Failure to use the cable restraints may result in the printer becoming accidentally unplugged during operation.
3. Set the printer into OPERATIONAL/ON mode by pressing the \* Button. The printer takes 1.5 seconds to begin operation.

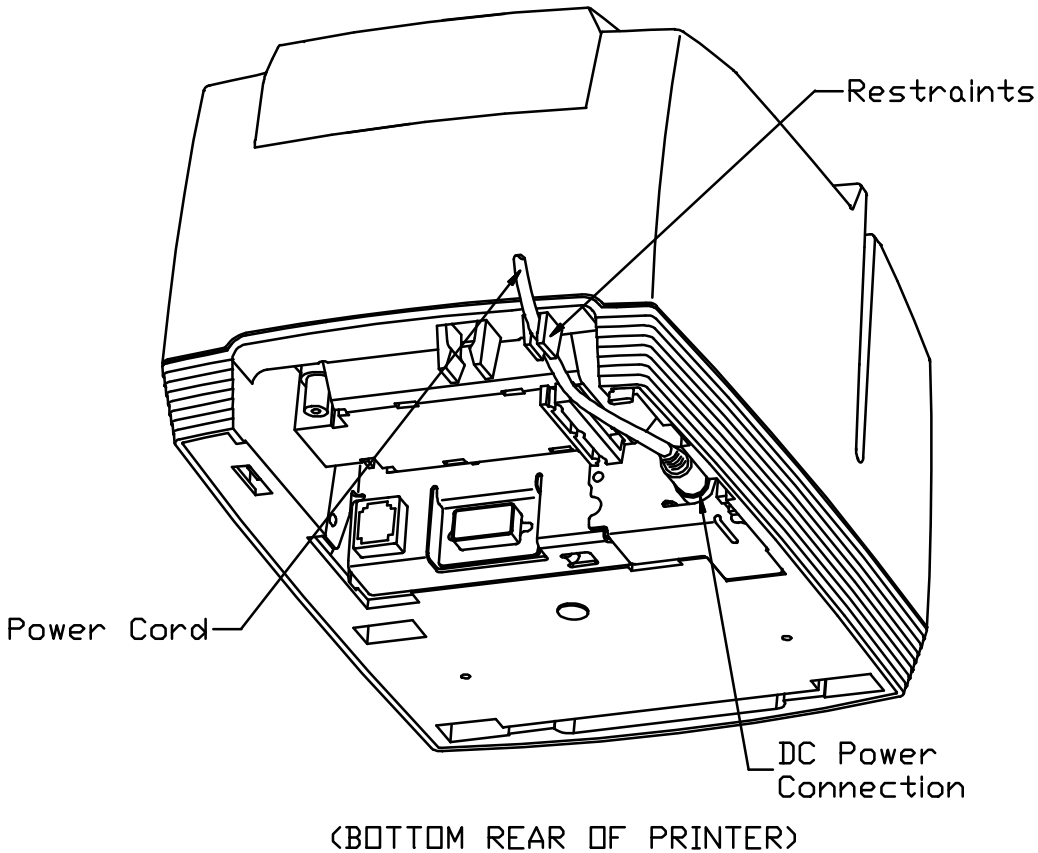


Figure 9 Connecting the DC Power Cord (no power supply)

### Step 3: Paper Low Setup

A receipt paper-low sensor is provided as an optional feature. This adjustable paper-low assembly allows the printer to detect when the paper roll is between 1.42" and 0.885" (36.1mm and 22.5mm) in diameter, and to issue a paper low status to the application. All printers are shipped with a mid-position setting that can be adjusted up or down with 1 to 3 full turns of the adjustment screw. In general, the paper low setup does not need to be changed from the factory setting.

#### Adjusting the Paper-Low Sensor

1. Use the cover open button to release the rear paper cover and locate the paper low adjustment access hole.
2. Refer to Table 2 on the following page for specific adjustment settings.
3. Turn the screw to control the amount of paper that is remaining after paper low has occurred.

**CAUTION:** When the sensor touches the plastic of the Cabinetry Base (lower limit only), the sensor should not be adjusted any further. Over adjustment will cause stress in the sensor material and will decrease its longevity.

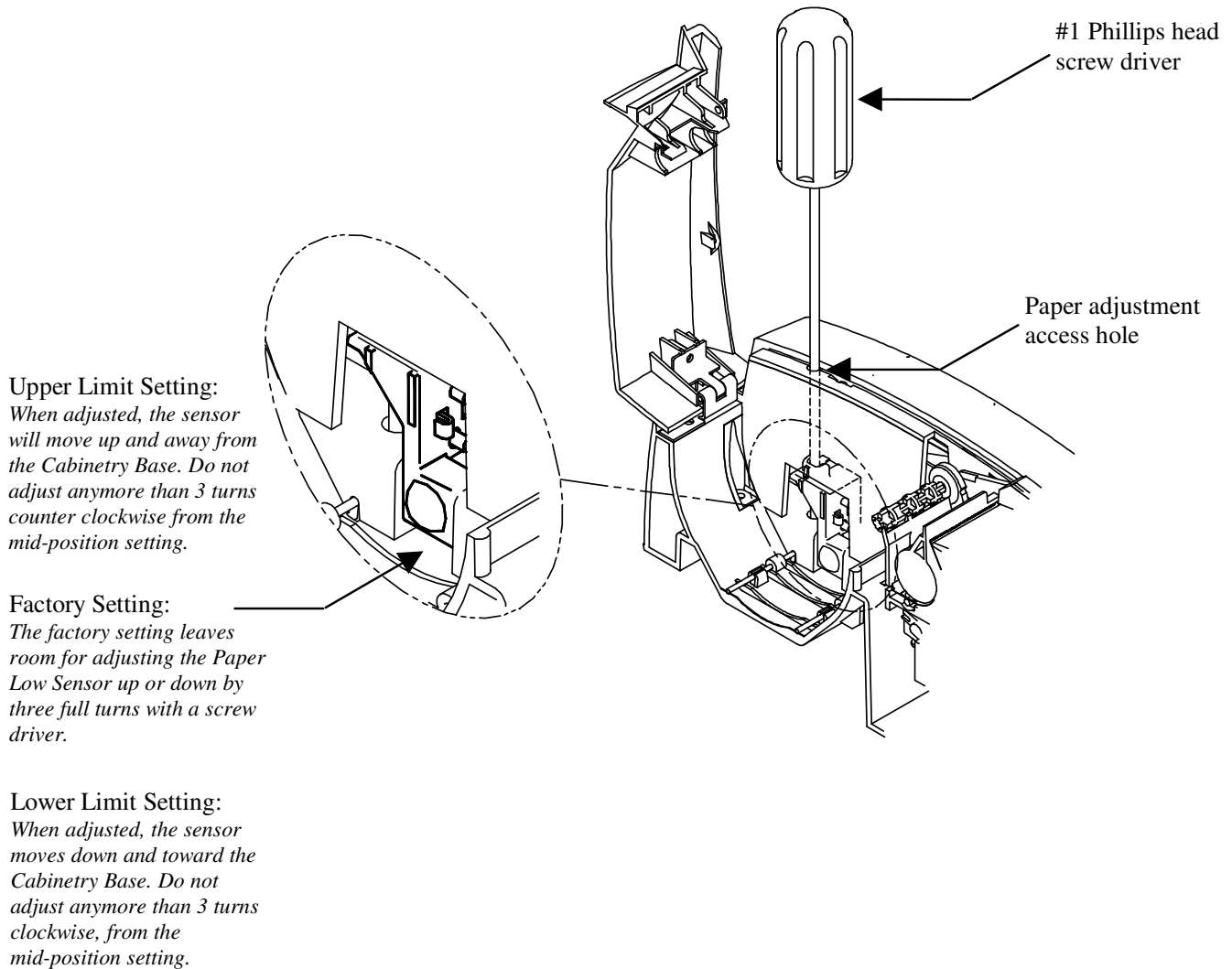


Figure 10 Paper Low Setup (adjusting the sensor)

### Paper Low Adjustment Requirements

Use the following table to decide how much paper you want to remain after paper low sensing has occurred. TransAct's expected results are based on paper and paper roll with these specifications. Refer to "Receipt Paper (one-ply receipt)" on page 42, and "Paper and Core Diameter" on page 42 for paper measurements.

Paper Low Adjustment Settings	Approximate Paper Remaining (in feet)	Paper Roll Diameter
<b>UPPER LIMIT: 3 turns (counter clockwise)</b>	<b>24'</b>	1.420" (36mm)
2 turns ( <i>counter clockwise</i> )	22'	1.375" (34.9mm)
1 turns ( <i>counter clockwise</i> )	16'	1.250" (31.7mm)
<b>FACTORY SETTING</b>	<b>12'</b>	1.175" (29.8mm)
1 turn ( <i>clockwise</i> )	7'	1.050" (26.6mm)
2 turns ( <i>clockwise</i> )	3.5'	.950" (24.1mm)
<b>LOWER LIMIT: 3 turns (clockwise)</b>	<b>1.25'</b>	.885" (22.5mm)

Table 2 Paper Low Setup

## Step 4: Loading Ink Cartridges and Paper

**Note 1:** If you are installing the printer, an ink cartridge(s) can be found in the pouch that shipped with your printer.

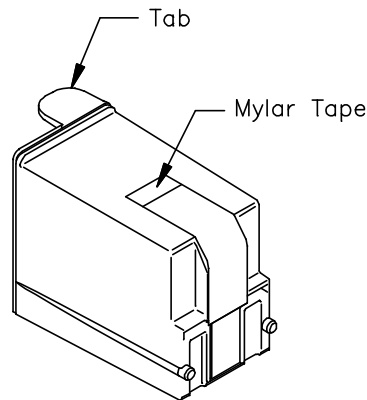
**NOTE 2:** When installing new ink cartridges and a new paper roll for the first time, you may leave the cover open until you have installed the ink cartridges, and the paper roll.

### Installing Ink Cartridges

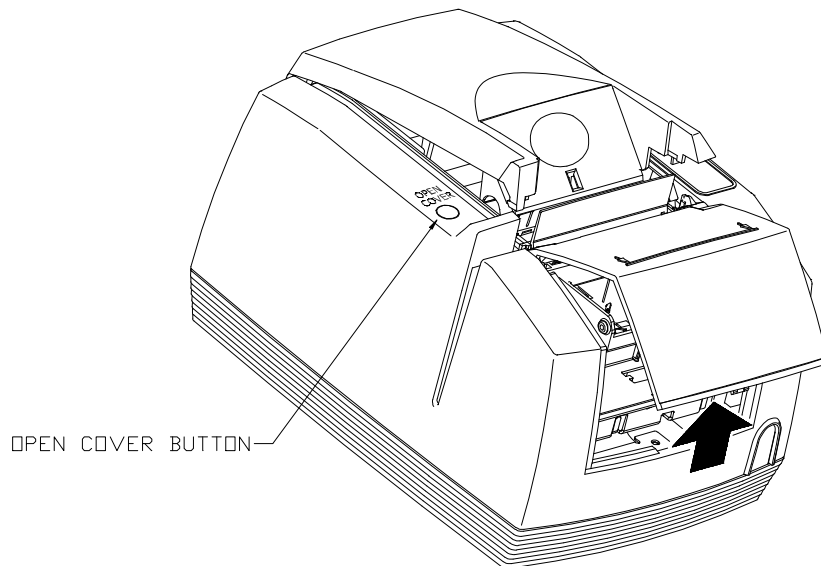
Use the \* Button to set the printer into OPERATIONAL/ON mode before you install the ink cartridges. Confirm that the printer is in this mode by checking that the POWER INDICATOR LIGHT is activated.

Caution: Do not touch the ink cartridge's metallic connector surface with your fingers. Doing so will contaminate the connector and produce sub-standard print quality.

1. Remove the new ink cartridge(s) from their sealed pouch and remove the Mylar tape from the face of the new ink cartridge. (Holding the cartridge by the tab will ensure a clean installation.)

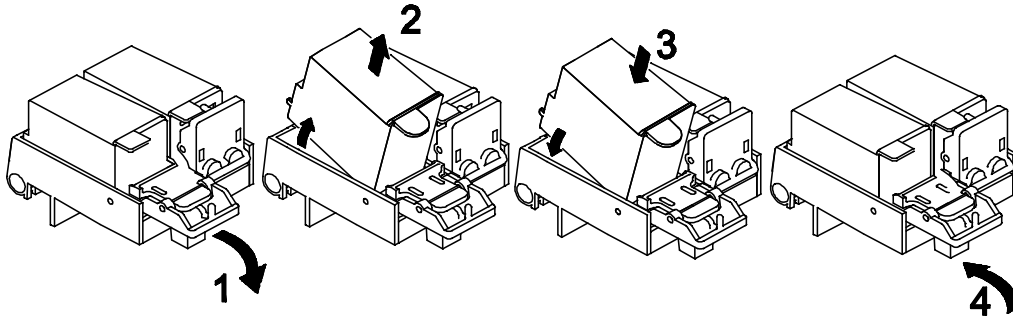


2. Press the OPEN COVER Button to release the rear paper cover from the console, then swing the rear paper cover towards the back of the printer. (Opening the printer's front cover will also open the rear paper cover.)



**NOTE:** If paper is present, ensure that the receipt is torn off prior to opening the front cover.

3. Pull down the blue cartridge latch/latches (1) and remove the old ink cartridges (2).
4. Place the new ink cartridge(s) into the carriage (3). Hold the cartridges by their tab to ensure a clean installation. (Install the cartridge so that the tab is facing the front of the printer.) Close blue latch/latches (4).



5. Close all of the printer's covers and press the NEW CARTRIDGE Button. Doing this initializes the ink status on the newly inserted ink cartridges.

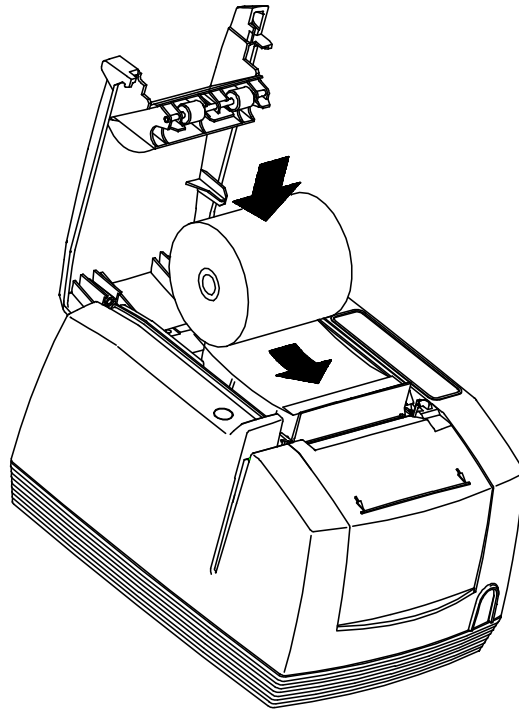
NOTE: If you experience any problems, refer to "Printer Color Configuration" on page 34 to confirm that your printer has the proper configuration settings.

### Installing a New Paper Roll Using Insta-Load™

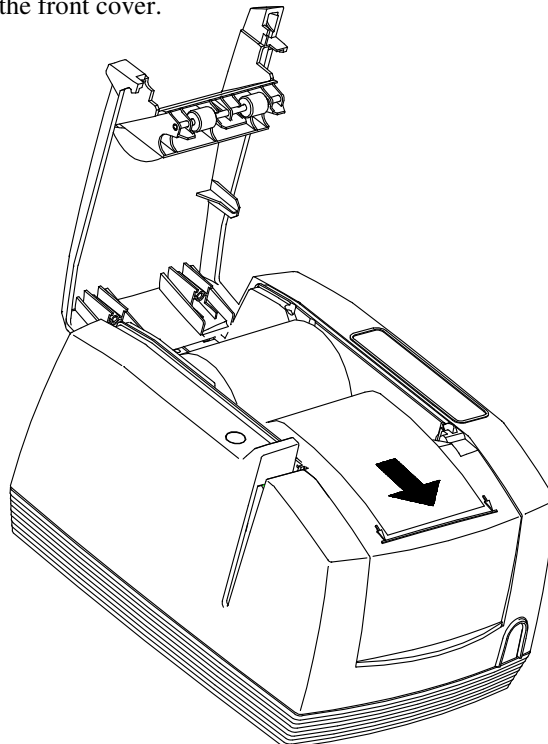
Before you attempt to load the paper roll, make sure that the printer is plugged in and that the printer is set to the OPERATIONAL/ON mode. **!IMPORTANT!:** Paper cannot be loaded for the first time without first installing the ink cartridge(s). A small receipt roll is supplied with the printer.

**ALWAYS check that the paper core is aligned with the right edge of the paper roll as installed.**

1. Use the cover open button to release the rear paper cover from the console; then swing it towards the back of the printer to reveal the paper compartment. (First time installers will already have the cover open from installing ink cartridges.)



2. **IMPORTANT!** Insert the new paper roll so that the paper unwinds from the bottom of the roll, and that the leading edge of the paper rests on top of the front cover. Make sure the paper does not extend beyond the molded paper stop mark on the front cover.





3. Close the rear paper cover; making sure that it snaps into place. The printer will automatically load the paper through the feeding mechanism. If the paper does not feed, repeat the steps.

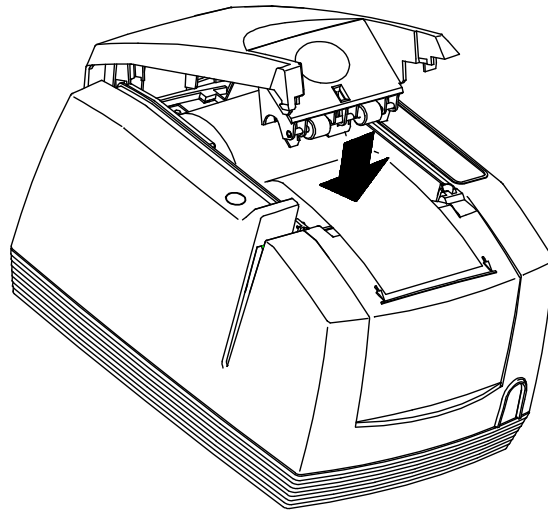


Figure 11 Installing New Paper Roll

**1      2      3**

## ***STEP 5: Printing the Configuration Summary Receipt***

This printer has been shipped with a pre-printed, Configuration Summary Receipt that shows how the printer has been configured at our factory. This Configuration Summary Receipt can be found in the paper compartment of your printer. Save this receipt for future reference. In the event that you need to view your printer's configuration settings, but do not have your Configuration Summary Receipt, you can print a new one using the printer's self-test mode. Use the configuration summary receipt to compare printer configuration settings to your system requirements. Specific attention should be given to ensure that the emulation and the communications link are properly configured. If they do not match the settings of your system, the printer may appear inoperative.

**Follow the steps below to print a new Configuration Summary Receipt:**

### **Placing the Printer In Self-Test Mode (printing the Configuration Summary Receipt)**

The NEW CARTRIDGE Button is used to enter the POSjet's self-test mode. To place the POSjet® in self-test mode, first be sure that a paper roll is loaded and that the POWER INDICATOR LIGHT is off.

1. If the POWER INDICATOR LIGHT is illuminated, press and release the \* Button to turn the printer into STANDBY/OFF mode.
2. Press and hold the NEW CARTRIDGE Button.
3. While holding the NEW CARTRIDGE Button, press and release the \* Button.
4. When the red, ERROR INDICATOR LIGHT blinks, release the NEW CARTRIDGE Button.
5. You are now in self-test mode. Read the directions on top of the printed receipt to cycle through the menu options.
6. Select the "TEST-PRINT CONFIGURATION" menu option.

### **Exiting Self-Test Mode**

Exit Self-Test mode at anytime by pressing the \* Button to place the printer back into OPERATIONAL/ON mode.

**At this point, your printer should be completely installed and ready to accept commands. Refer to our on-line Operator's Guide for additional information about setup troubleshooting, printer specifications, and operational information.**

### **Matching Printer Configuration Settings to your System**

If you are experiencing inconsistent printing operation, or if the printer appears to be nonresponsive, several of the printer configuration settings need to be set to match the requirements of your system.

#### **Parallel Printer**

Emulation

Carriage Return Options

#### **Serial Printer**

Emulation

RS-232 Serial Interface (baud rate)

Carriage Return Options

**TransAct recommends that ONLY THE ABOVE SETTINGS BE ALTERED and does not recommend that these re-configurations be made by anybody but a trained service technician who has successfully completed training on the POSjet® 1500. Please remember that these settings are only a few of the possible configurable options. If you continue to experience incompatibility issues after changing these settings to match your system, contact TransAct's Technical Support Department for assistance.**

## Section 2: Operational Information

Using Validation: Form Insertion and Orientation .....	pg. 26
Printer Analysis: How to Use Self-Test .....	pg. 29
Understanding Configuration Mode .....	pg. 31
Printer Color Configuration .....	pg. 34

## Using Validation: Form Insertion and Orientation

### Validation Orientation

The POSjet® 1500 accepts validation forms in both horizontal and vertical orientations. Each of the two different orientations have specific print zones, and print character spacing requirements. Regardless of the insertion orientation, the minimum and maximum media size that can be accepted by the printer are as follows:

### Form Requirements

#### Horizontal Mode

**Form size (Min.):** 2.75" width x 2.75" height (69.8 mm x 69.8 mm).  
**Form Size (Max):** 8.5" width x 11" height (215.9 mm x 279.4 mm).  
**Maximum Print Area:** 2.5" width x 1.5" height

#### Vertical Mode

**Form size (Min.):** 2.75" width x 2.75" height (69.8 mm x 69.8 mm).  
**Form Size (Max):** 2.75" width x 8.75" height (69.8 mm x 222.3 mm).  
**Maximum Print Area:** 2.5" width x 7.8" height

In addition to the Min/Max size requirements, it is very important to use paper having a thickness between .003" to .0047" (.076 mm. to .119 mm.). Using paper that is thicker than this may cause printing inconsistencies, and /or paper jams. Refer to "Validation Form" on page 43 for a complete listing of specifications regarding the use of validation forms.

### Printer Settings

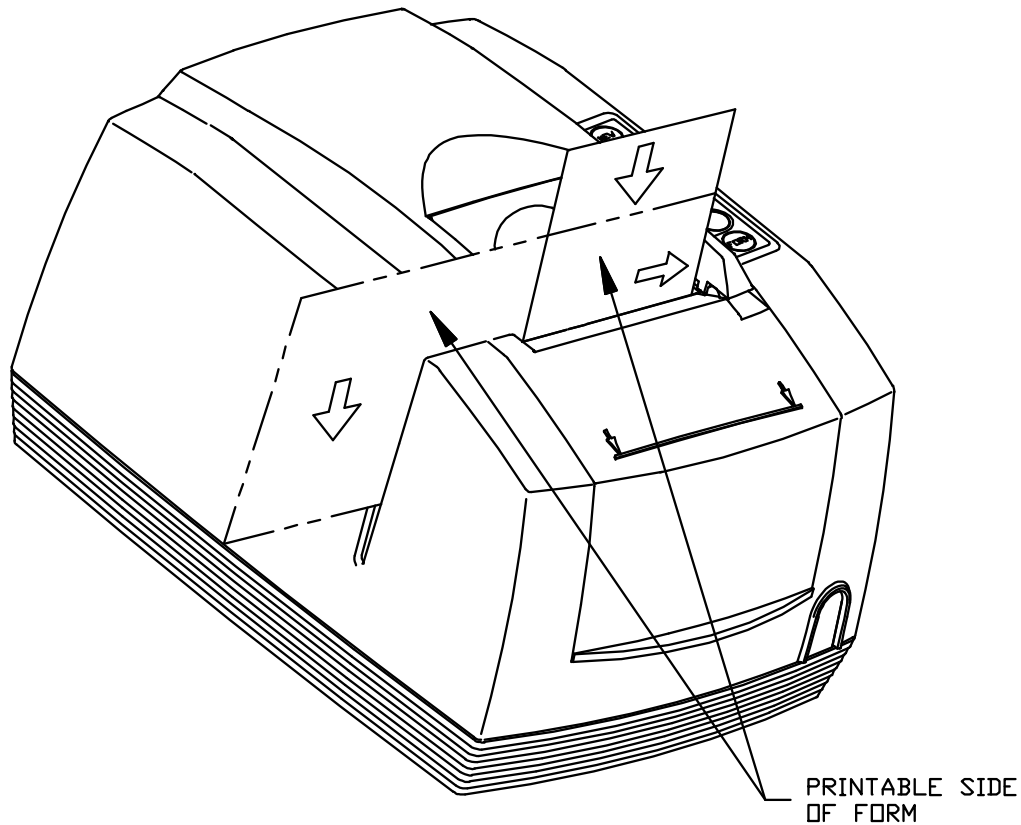
Form Orientation	Character Line Spacing	Number of printed character lines
Portrait (vertical)	10 character lines per inch	51 ( on 6 inch form)
Portrait (vertical)	10 character lines per inch	78 (on 8.75 inch form)
Landscape (horizontal)	6 character lines per inch	9
Landscape (horizontal)	8 character lines per inch	12

Table 3 Validation: Printer Settings and Requirements

### Inserting Validation Forms

The POSjet® 1500 is designed to run validation either by using application software, or manually. Forms can be inserted in either horizontal or vertical orientation. Regardless of the orientation, the insertion process is the same. The POSjet® 1500 can accept forms with measurements between 2.75" x 2.75" (69.8mm x 69.8mm) and 8.5" x 11" (215.9mm x 279.4mm).

1. Send appropriate control commands from your system to initiate the validation process or press the **FORM** button to enter validation mode.
2. When the FORM INDICATOR LIGHT starts blinking, insert the validation paper into the validation paper inlet using the right edge of the validation paper inlet as a guide.
3. When the validation sheet is detected by the sensors, the FORM INDICATOR LIGHT changes from blinking to steady ON. The paper is automatically drawn into the printer, and printing begins.
4. When the FORM INDICATOR LIGHT begins to blink again after printing, remove the validation paper.



#### Printable Side of Form

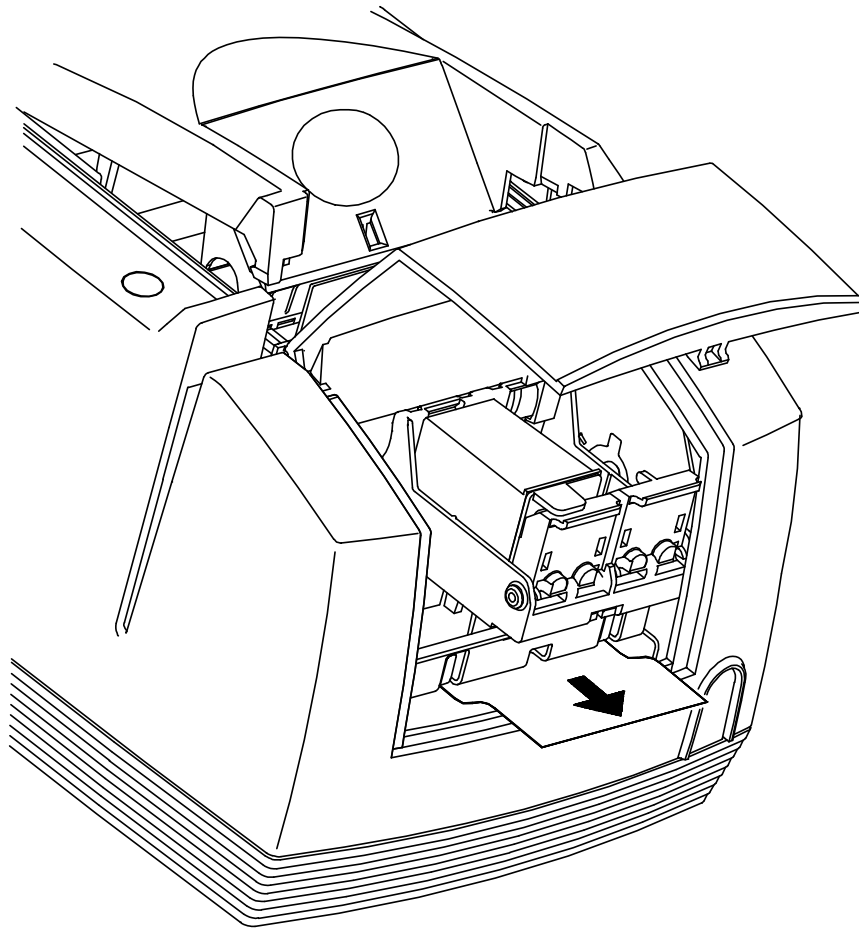
The side of the inserted form that is facing the front end of the printer is where the printing will always occur. Always insert forms so that the side of the form that you want the printing to occur on is facing the front of the printer.

### Preventing and Clearing Validation Jams

Inserted forms should not be touched during the printing, or ejection process. Pressing or pulling the paper during ejection may cause the validation process to jam. If a jam condition occurs clear it as described below:

#### *Removing a Validation Jam*

If a validation jam occurs, and the top of the form is still visible in the form insertion area, remove the form by simply pressing and holding the FEED Button. If the top of the form is not visible in the form insertion area, it can be removed manually.



#### *Removing a Validation Jam Manually*

1. Open the printer's front cover.
2. Insert your index finger underneath the ink carriage and evenly pull the form out toward you until it is completely removed from the printer.
3. Close the printer's covers and resume operation.

## ***Printer Analysis: How to Use Self-Test***

### **Printer Self-Testing and Diagnostics**

The POSjet® 1500 has been designed to perform several self-tests and will also allow a technician to access the printer's configuration settings. It is important to insure that the printer will perform a self-test. This isolates printing problems to something other than the operation of the printer itself. The POSjet has a total of ten self-test options with four designed to be useful when performing on-site evaluations. These four tests are the only options that should be used to test your printer. The other six testing options are used for printer demonstrations and factory setup by TransAct. Use the following four test options when trying to correct a printing problem.

**Use the following testing options when beginning to troubleshoot and repair the POSjet® 1500.**

#### ***TEST-Receipt***

The receipt test is the primary test option to use when determining if the printer is functioning correctly. The receipt test is mostly used during the early stages of troubleshooting to eliminate the possibility that the problem is occurring with the printer. If the printer experiences a failure, and the ERROR INDICATOR LIGHT is activated, call TransAct's Ithaca Facility's Technical Support Department.

#### ***TEST-Print Configuration***

The print configuration test is a quick and easy way for you to see how your printer has been configured at the factory without actually having to enter into configuration mode. A large percentage of initial installation and setup problems can be attributed to the printer's configuration not matching the user's system settings. Using this test will show you the current configuration settings of the printer.

#### ***TEST-Validation***

Validation test will validate the back of a check or inserted form. Nine lines of validation information will be printed.

#### ***TEST-Check Test***

Check test will perform the check insertion process and print a sample check.

#### **Disregard the following options when cycling through the menu:**

The following six self-test options are only extended functionality tests and do not need to be run in order to determine if the printer is running properly. These test options are only used for printer demonstrations and factory setup.

**TEST-Graphics**

**TEST-Print Specs**

**TEST-Pyramid**

**TEST-Burn in**

**TEST-Bar Codes**

**TEST-Rolling ASCII**

### Placing the Printer In Self-Test Mode

The NEW CARTRIDGE Button may be used to enter the POSjet's self-test mode. To place the POSjet® in self-test mode, be sure that a paper roll is loaded. The POWER INDICATOR LIGHT should not be illuminated when trying to place the printer in self-test mode.

1. Press and release the \* Button to switch the printer into STANDBY/OFF mode. (The POWER INDICATOR LIGHT will be not be illuminated.)
2. Press and hold the NEW CARTRIDGE Button.
3. While holding the NEW CARTRIDGE Button, press and release the \* Button.
4. When the red, ERROR INDICATOR LIGHT blinks, release the NEW CARTRIDGE Button.
5. Follow the directions printed on the receipt to cycle through and select the desired TEST option.

### Exiting Self-Test Mode

Exit Self-Test mode at any time by pressing the \* Button to place the printer back into OPERATIONAL/ON mode.

### Self-Test Hints and Suggestions

- If the printer fails to complete or enter into self-test mode, disconnect it from the application system.
- Contact TransAct's Ithaca Facility's Technical Support Department if self-test mode fails in any way.



## ***Understanding Configuration Mode***

There are two ways to configure the POSjet® 1500 printer. The first is to use the manual configuration sequence by using the keypad controls, and the second is to use TransAct's remote configuration software. The remote configuration program is available and typically used by system integrators. To obtain more information, or the latest version of the configuration program, call our Sales Department or Tech Support.

**!TransAct highly recommends that any attempt at configuring the POSjet® 1500 be made by a certified service technician who has successfully completed training on the printer. TransAct is not responsible for printer's that are configured by anyone other than a trained technician!**

### **Remote Configuration Software**

The remote configuration program provides a means of configuring printers by using the printer's remote configuration mode. The configuration program is setup to provide initial (factory) printer configuration as well as allow the printer to be reconfigured at any time. During factory configuration, the printer is configured as required by the customer, and a serial number is embedded in the EEPROM. During the reconfiguration process, features and communication configurations can be altered; however, the serial number cannot be changed. In remote configuration mode, the serial or parallel port on the printer is temporarily reconfigured to a predefined standard. The port is then used for the configuration or reconfiguration operation. The Ithaca Configuration program can configure all configurable features. The remote configuration program runs on most standard PC computers in Windows 95/98 and NT 4.0.

### **Manual Configuration**

**In many cases, manual configuration is locked by the remote configuration. If this is the case, the only way to alter the configuration is by remote configuration.**

Manual Configuration is a function of the printer that allows technicians to gain access to the printer's configuration mode. It is accessed by performing a series of steps. The POSjet® 1500 printer has many configurable features. Most all of the configurable features can be configured by a certified technician using the keypad buttons while in configuration mode. For example, if a dual color printer is to be operated with only one print cartridge, turning off the dual color option will send all data to the single cartridge.

### ***Manual Emulation Set***

To allow easy predefined configurations to be loaded, the printer contains an internal default configuration for each of the printer emulation's. The internal default configuration allows a starting point when changing the emulation. To activate the manual emulation set, press and hold the NEW CARTRIDGE and FEED Buttons during power up. Manual emulation set has more options than regular configuration mode. (Note that the additional options are only offered once.)

It is important to note that each emulation can have different configurable features. If you are changing the emulation, the printout that was printed at the beginning of the configuration process will document the initial emulation settings. When you change the emulation, the configurable features may be different. If you are using this printout as a configuration guide, and you are changing the emulation, you may wish to save the new emulation, and then re-enter configuration mode to change other options. This will print all the available features for the new emulation.

### Using Self-Test to View Configuration Settings

From configuration mode, a configuration summary receipt will be printed and will show the printer's current features and settings. This receipt is the same as the configuration summary receipt that can be printed through the self-test Mode. It is possible to print the configuration summary receipt using both the self-test, and configuration mode. Therefore, TransAct recommends that self-test be used to print the printer's current configuration receipt. Printing the self-test configuration summary receipt is also recommended before ANY changes to the settings of your printer are made by ANYONE. TransAct recommends that you print this configuration summary receipt as a reference in case you wish to return the printer to its previous configuration state.

### Entering Configuration Mode

Manually entering the printer's configuration mode can be accomplished one of two ways. Both ways have been designed to make it difficult to enter configuration mode. This has been done to prevent unintended entry into the mode and unintentional configuration changes. The mode that is used depends on how the printer is setup. If you do not have access to the power connection use the second procedure.

#### Access Option 1:

1. Unplug the power cord from the printer.
2. Press and hold the FEED Button and plug the power cord back into the printer.
3. Continue to hold the FEED Button until the ERROR INDICATOR LIGHT begins to blink.
4. Release the FEED Button. A receipt will print. This configuration summary receipt shows how your printer is configured. Follow the directions at the bottom of the receipt to change and save configuration settings.

#### Access Option 2:

- 1) Use the \* Button to place the printer into STANDBY/OFF mode. (The POWER INDICATOR LIGHT should not be illuminated.)
- 2) Press and hold the NEW CARTRIDGE Button while pressing and releasing the \* Button.
- 3) When the ERROR INDICATOR LIGHT blinks, repress the \* Button and release the NEW CARTRIDGE Button. Then release the \* Button.
- 4) You are now in configuration mode.

After you enter configuration mode, the printer will print the current configuration, the printer's current usage totals, and an internal error log if any errors have been recorded. Save this printout as a guide to changing the configuration. This printout is also helpful in case you wish to return the printer to the previous configuration settings.

### Making Changes in Configuration Mode

Press the NEW CARTRIDGE Button quickly to scroll through the list of configurable features. Press and hold the NEW CARTRIDGE Button to change the optional settings for each configurable feature. Press the \* Button to exit the printer's configuration mode. The printer gives a configuration summary and prompts you to confirm that the changes that you just made are what you want. Press the NEW CARTRIDGE Button to confirm your changes, or, press the \* Button if you do not want to save changes.

#### Using the NEW CARTRIDGE Button in Configuration Mode

The NEW CARTRIDGE Button may be used to select configuration settings, change those settings, navigate through the configuration menu, and save your specific configuration changes. Repeatedly pressing the NEW CARTRIDGE Button will allow you to select the desired configuration category. The categories will appear in sequence as shown on the configuration summary receipt. When you arrive at the desired configuration category, press and hold the NEW CARTRIDGE Button to select the specific setting of that category.

- 1) Enter configuration mode.
- 2) Press and release the NEW CARTRIDGE Button. This will display the current **"Baud Rate"**
- 3) Press and hold the NEW CARTRIDGE Button. When the printer prints, release the NEW CARTRIDGE Button. This will display the next available setting.
- 4) Repeat step 3 until the proper setting is shown.
- 5) Press and release the NEW CARTRIDGE Button. This will display the **"Mode"**
- 6) Repeat step 3 until the proper setting is shown.
- 7) Press and release the NEW CARTRIDGE Button. Until **"Carriage Return"** is shown.
- 8) Repeat step 3 until the proper setting is shown.
- 9) Press and release the NEW CARTRIDGE Button. Until **"Ink Low when at"** is shown.
- 10) Repeat step 3 until the proper setting is shown.
- 11) Press the \* Button. This will print the current configuration.
- 12) Review the print out.

If the configuration is not correct press the \* Button again and the new configuration will be discarded. You will have to re-enter configuration mode and start over. If the Configuration is correct, press the NEW CARTRIDGE Button and the configuration will be saved.

What do you want to do?	Do this...
Enter into configuration mode	First, disconnect the power cord from the back of the printer. Next, press and hold the FEED Button while plugging the cord back into the printer.
Scroll through the configuration menu	<b>Press</b> and quickly <b>release</b> the NEW CARTRIDGE Button.
Change specific configuration settings	<b>Press</b> and <b>hold</b> the NEW CARTRIDGE Button
Exit configuration mode	<b>Press</b> and <b>release</b> the * Button

Table 4 How to Change Configuration Settings

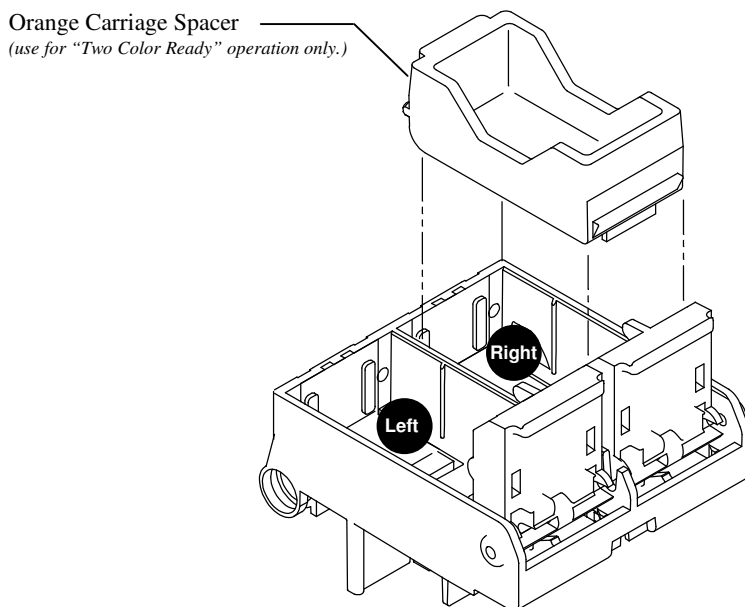
## Printer Color Configuration

### Using Ink Cartridges

- It is not possible to configure the printer to operate with two black cartridges.
- Do not store a spare cartridge in the second carriage socket position.
- Always store extra ink cartridges in the unopened original HP packaging until needed.
- Do not replace an empty ink cartridge with anything but a new ink cartridge that is approved and compatible with the printer.

### Ink Cartridge Setup

The POSjet® 1500 is available with three different printing options and can be reconfigured to accept different ink cartridge colors. See “Understanding Configuration Mode” on page 31 for information on how to change configuration settings. The standard printer setup is called Single Color. In addition to this, the printer can be operated with a Two Color Ready, or a Two Color setup. All three of these printing setup options require different printer configuration settings. The following information highlights the different functionality of each printing option and includes the corresponding configuration settings that are needed to make each printing option perform correctly.



### Single Color Setup

The Single Color printer setup is a factory built option. It is configured to handle a single ink cartridge and cannot be field upgraded for two-color operation.

When using the POSjet with a single cartridge setup the left ink carriage should contain a single BLACK cartridge, or a single color ink cartridge.

Printing Setup	Left Cart.	Right Cart.	Wiper	Selecting the configuration menu settings:
Single Cartridge Operation	Black or any color	None	Dual	Factory built option. Not field upgradable. <b>No configuration required for operation.</b>

Table 5 Single Color Printer-Color Configuration Details

*Two-Color Ready Setup (single cartridge setup)*

The two-color ready setup allows the POSjet to operate as a Single Color printer with the option of reconfiguring the printer for two-color printing. This reconfiguration can be done at anytime by TransAct or any one of our certified service technicians.

A printer that is setup with the two-color ready option but has no second cartridge in the right carriage always needs to have the orange colored, plastic spacer in the right carriage. There is an auto-sense feature that attempts to auto sense the presence of a second cartridge. This auto-sense will momentarily re-configure the printer for two cartridge operation. The auto-sense is performed when power is applied to the printer (not with the \* Button). If the printer is power cycled without the second cartridge, the printer will revert back to single cartridge operation. When the printer has the second cartridge installed, it should be reconfigured through software, or with manual configuration to be a two cartridge (color) printer. In addition to this, the printer needs the following configuration settings:

Printing Setup	Left Cart.	Right Cart.	Wiper	<b>Selecting the configuration menu settings:</b> See "Understanding Configuration Mode" on page 31 for information on how to change configuration settings.	
Two Color Ready Operation	Black or any color	Orange spacer required	Dual	<b>Config. Menu Option:</b> Left Cartridge Color <b>Black</b>	<b>Config. Menu Option:</b> Right Cartridge Color <b>Color Ready</b>

Table 6 Two Color Ready Operation-Color Configuration Details

*Two Color Setup (two cartridge setup)*

Two-color operation setup allows the POSjet to operate as a two-color printer. Unlike the two-color ready setup, the two-color setup does not use the orange colored spacer in the right carriage. Instead, the right carriage holds a color ink cartridge, and is used along with the desired ink cartridge in the left carriage to produce two-color printing. The color of the second cartridge should be configured into the POSjet® 1500 printer. The printer should be set to Red, Green, or Blue. If the desired color is not one of these primary colors, the nearest primary color should be selected. For example if the desired color is orange, the nearest primary color in the printer configuration is red. A printer that is setup to print multiple colors needs to have the following configuration settings:

Printing Setup	Left Cart.	Right Cart.	Wiper	<b>Selecting the configuration menu settings:</b> See "Understanding Configuration Mode" on page 31 for information on how to change configuration settings.	
Two Cartridge Operation	Black or any color	Red Green Blue	Dual	<b>Left Cartridge Menu</b> Black Red Green Blue	<b>Right Cartridge Menu</b> Red Green Blue

Table 7 Two Color Operation-Color Configuration Details

*Deactivating the Two-Color Setup (back to Single Color setup)*

A printer that is setup for two-color printing can be reconfigured to print using only a single cartridge. This can be achieved by resetting the left cartridge color to "BLACK" and the right cartridge color to "COLOR READY" using the configuration menu. When "COLOR READY" is activated, all printing data will be sent to the left cartridge and the printer will be able to print using a single cartridge in the left carriage only. When "COLOR READY" is activated, the orange spacer needs to be re-inserted into the right carriage.

## Section 3: POSjet® 1500 Features and Specifications

### Standard Features

- Print Speed: 12 lps. at 10 char. per line
- Print Resolution: Max. 208 dpi. Horizontal, 96 dpi. Vertical
- Simple Snap-In, No-Mess Cartridges with Fast-Drying Ink
- Standard Warranty: Two Years (Extended Maintenance Plan Available)
- Patented Insta-Load® Automatic Paper Loading
- Cash Drawer Drivers: Dual with Status (Single RJ12)
- Font Selections: Draft, Large Draft and Near Letter Quality
- Selectable Printing Features of Bold, Italics, Size Scaling and Rotated
- Emulations: Ithaca/IBM, Epson ESC/POS, TM-U325, and Star
- APA and Epson Bit Map Graphics
- Data Buffer: 8K (Adjustable)
- 208K Non-Volatile Flash for Multiple Character Sets, Bit Images and EJ
- Bar Codes: Code 39, Code 93, Interleaved 2 of 5, UPC-A and UPC-E, EAM8 and EAN13, Code 128
- 65 Language Character Sets Supported (EURO Character Included)
- Self Diagnostics
- Remote Statistics
- Paper Out and Ink Low Detection and Indicators
- Software Developer's Toolkit Available
- Top Drop-in Forms Insertion with Programmable Top of Form
- Independent Validation

### Optional Features

- Auto-cutter (partial cut)
- Adjustable paper low
- Two-Color Printing
- Universal Power Supply and PowerPocket®

## Additional Supported devices and tools

### *Printer Test and Configuration Programs*

The POSjet® 1500 will be supported by various PC based tools. These tools include but are not limited to the following:

#### **PJColor**

PJColor is a program that will allow images and picture to be processed so they can work with the printer.

#### **PJTerminal**

PJTerminal is a test application that is used to verify communications to the printer.

#### **PJBootload**

PJBootload is a program that is used to replace or update the printer's firmware.

#### **Ithaca Config**

Ithaca Config is a program that is used to replace or update the printer's configuration settings.

## Drivers and Utilities Available

POSjet® 1500 Drivers and Utilities can be downloaded from our web site, or call our Technical Support Department to request a Software Developer's Toolkit (CD-ROM).

#### **POSjet Image Converter Utility**

POSjet Image Converter (PJColor) is a tool to help develop graphic images to use as logos and coupons on the printer. It will read and convert images to a format suitable for printing on the POSjet® 1500 printer. It will allow you to preview the image and adjust the colors prior to printing. It will also allow the images to be stored in the printer's User Store.

#### **PJTerminal Utility**

PJTerminal is a tool that has been developed to allow you to interactively send commands to and get responses from the printer.

## Optional Printer Configurations

### *Color Configuration*

All POSjet® 1500 ink cartridge configurations are factory installed options.

#### **Single Color**

The single color configuration is provided with a single ink cartridge. It cannot be upgraded for two-color operation.

#### **Two-Color Ready**

The two color ready configuration is equipped with a single ink cartridge but can be easily upgraded to two-color operation simply by installing a second ink cartridge.

#### **Two-Color**

Two-color configuration requires that two cartridges be installed in the carriage. If one of the cartridges is black, it must be installed in the left carriage position.

## Supported Emulations

#### **IPCL Codes**

#### **ESC/POS® Emulation**

#### **Ithaca® Microline Emulation**

## Printer Dimensions

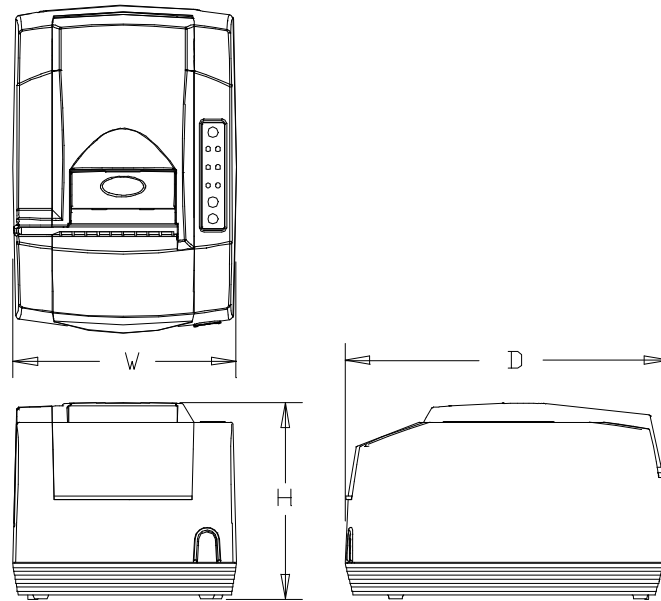


Figure 12 Printer Dimensions

	Width	Depth	Height
<b>Without Knife</b>	6.75" (172 mm)	9.75" (248 mm)	5.92" (151 mm)
<b>With Knife</b>	6.75" (172 mm)	9.75" (248 mm)	6.44" (164 mm)

**Weight:** approx. 6 lbs. (2.7 kg)  
**Shipping:** approx. 8 lbs. (3.6 kg)

### Interface

Serial RS-232C Bi-directional- Ready/Busy or XON/XOFF (9-pin D-shell or 25-pin D-shell)  
 Parallel IEEE1284 Bi-directional-transmit/receive/ground (25-pin D-shell or 36-pin Centronics)  
 USB Version 1.1



**Environmental Conditions**

The POSjet® 1500 is designed to be placed on point-of-sale terminals, counter tops, or any other flat, stable surface that can support the weight of the printer (about 6 lbs. or 2.7 kg). Be aware that the environmental conditions of the location where you place the printer will have an effect on the printer's performance and longevity. The printer will run its best when stored and operated in an environment that meets the following temperature and humidity conditions.

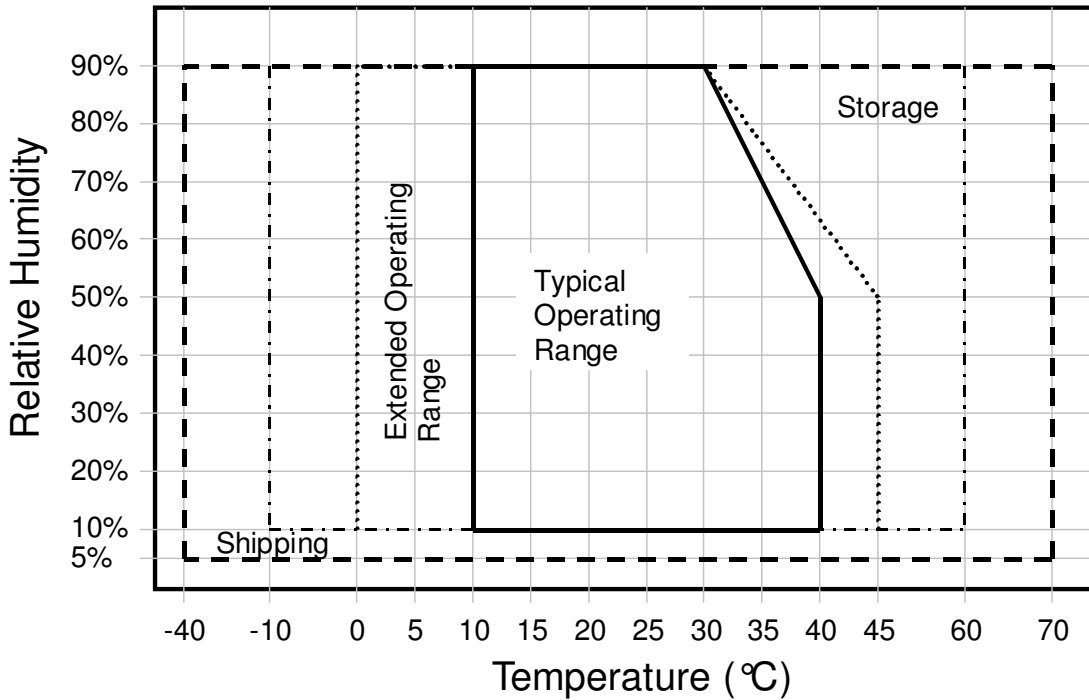


Figure 13 Environmental Conditions:Typical Operating Range

<b>Typical Operating Range:</b>	10°C to 40°C / 50°F to 104°F
<b>*Extended Operating Range:</b>	0°C to 45°C / 32°F to 113°F+
<b>Storage:</b>	-10°C to 60°C / 14°F to 140°F
<b>Shipping:</b>	-40°C to 70°C / -40°F to 158°F

\* Exposure to high or low temperatures for periods of greater than 48 hours will lead to significantly reduced cartridge life. The Typical Operating Range provides full printer reliability. The Extended Operating Range may degrade the reliability of the printer and life of the cartridge.

**Relative Humidity**

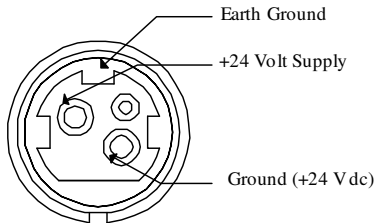
Operating:	10% to 90% RH ( <i>non-condensing</i> )
Storage:	10% to 90% RH ( <i>non-condensing</i> )
Shipping:	5% to 90% RH ( <i>non-condensing</i> )

## Reliability

Printer Life	10,000,000 print lines
Mean time between failures: (without cartridge):	28,000 hours
Average cartridge life (Average 16 dots/character):	7.0 million characters
Autocutter option (partial cut) :	1 million cuts
Mean time to repair:	15 minutes
Validation Cycles:	1 million cycles

## Power Requirements

### DC Powered Versions



Supply voltage:	24 Vdc $\pm$ 10%
Supply Current:	1.0Amps

### AC Powered Versions

Supply Voltage:	100-240 Vac
Frequency:	50/60 Hz
Supply Current:	.5 Amps maximum

## Printing Specifications

<b>Printing method:</b>	Thermal ink jet
<b>Cartridge arrangement:</b>	12 nozzle
<b>Printing directions:</b>	Bi-directional, logic seeking
<b>Paper feed pitch:</b>	Default - 0.125" (1/8" or 3.175 mm)
<b>Validation Type:</b>	Independent
<b>Receipt print zone (maximum):</b>	2.5" (63.5 mm)
<b>Validation print zone:</b>	Refer to "Validation Form Requirements" on page 43.

Characters per Line	Minimum Lines per Second <sup>1</sup>
10	12
20	10
30	8
40	6

Table 8 Print Speed Specifications

<sup>1</sup> Print speed is calculated with the 12 x 12 single wide font at 17.3 cpi and 8 lpi spacing. If head maintenance needs to be done, the print speed will be less.

**Auto-cutter (Partial Cut Option)**

A receipt auto-cutter is an optional feature with all POSjet® 1500 Printers.

<b>Cutter type</b>	Guillotine
<b>Cut to line of print</b>	1.635" (41.52 mm)
<b>Cutter life</b>	1,000,000 cuts
<b>Manual tear-off to line of print</b>	1.235 "(31.4 mm)

*Auto-cutter Position*

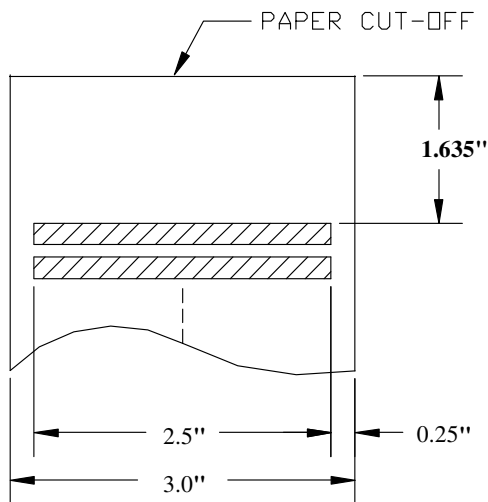


Figure 14 Receipt Printable Area

**Sensors**

<b>Paper low indicator</b>	Optional Paper Low Sensor (based on paper roll diameter).
<b>Receipt paper out</b>	About 1.0" (25 mm) of paper remaining
<b>Paper feed method</b>	Friction feed

**Paper Out**

A receipt paper out sensor is provided as a standard feature. It senses when there is approximately one inch of paper left on the paper roll.

**Paper Low**

A receipt paper-low sensor is provided as an optional feature. An operator-adjustable paper-low assembly allows the printer to sense when the paper roll is between 1.42" and 0.885" (36.1mm and 22.5mm) in diameter. It is adjustable to compensate for various paper core dimensions.

## Media Specifications

### Hewlett-Packard Inkjet Cartridges

Print Cartridge Specification	HP C6602A <sup>2</sup>
Cartridge arrangement	<b>12 vertical nozzles</b>
Vertical dot pitch	0.264 mm (0.0104") or 96dpi.
Cartridge life	~7.0 M Characters @ 16 dots per Character.
Cartridge Colors	<b>Black, Red, Blue, Green</b>

### Ink Cartridge Operating Conditions (maximum ratings)

Parameter	Minimum	Maximum	Units	Conditions
Shelf Life [1]		24	Months	At 73°F / 9°C in shipping package
Out of Package Life [1] (Installed in Printer)		6	Months	At 73°F / 9°C outside shipping package

Table 9 Ink Cartridge Maximum Operating Conditions

Note 1: Total life is Shelf Life (from date of manufacture) plus Out of Package Life.

Exposure to high and low temperatures, or long exposure times near specification limits, significantly reduce cartridge life. Higher character capacities are achieved by reducing font resolution.

### Receipt Paper (one-ply receipt)

<b>Paper width:</b>	3.0" ± .02" (76mm ± .5mm)
<b>Paper roll diameter:</b>	4.0" max (101.6mm max)
<b>Paper thickness:</b>	.003" - .004" (.07mm - .1mm)
<b>Roll paper core outside Dia.</b>	0.82" - 0.85" (20.8 – 21.6 mm) Dia.
<b>Roll paper core inside Dia.</b>	0.45" - 0.50" (11.4 – 12.7 mm) Dia.
<b>Roll footage</b>	330 feet - standard grade 300 feet - premium grade

### Paper and Core Diameter

To insure proper paper low detection, use paper rolls and paper that meet the specifications above. Adjustment and operational results may vary if other thickness and width dimensions are used.

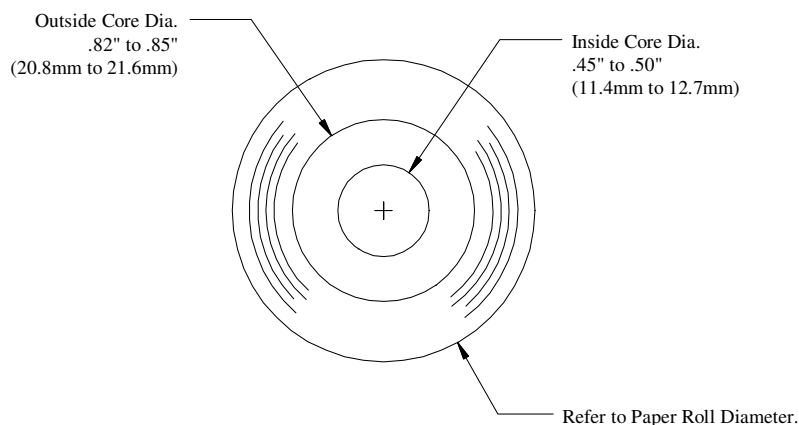
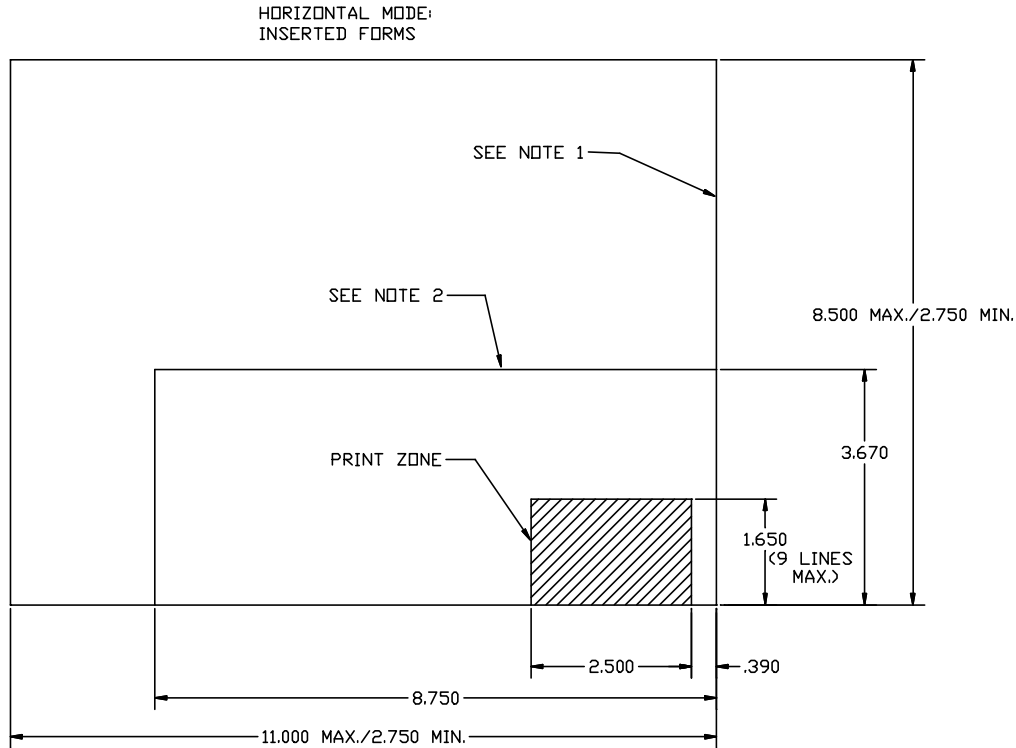


Figure 15 Paper Roll and Paper Core Diameters

<sup>2</sup> Print Cartridge Specifications are controlled by Hewlett-Packard and are proprietary. Information here is for reference only.

**Validation Form Requirements**

<b>Form thickness-single part:</b>	.003" to .0047" (.076 mm. to .119 mm.)
<b>Form Size (Min):</b>	2.75" high x 2.75" long (69.8 mm. x 69.8 mm.)
<b>Form Size (Max):</b>	8.5" high x 11" long (215.9 mm. x 279.4 mm.)
<b># Validation lines:</b>	Max. 9 lines (1.53") @ 6 lines per inch
<b>Check Basis weight:</b>	24 lbs.



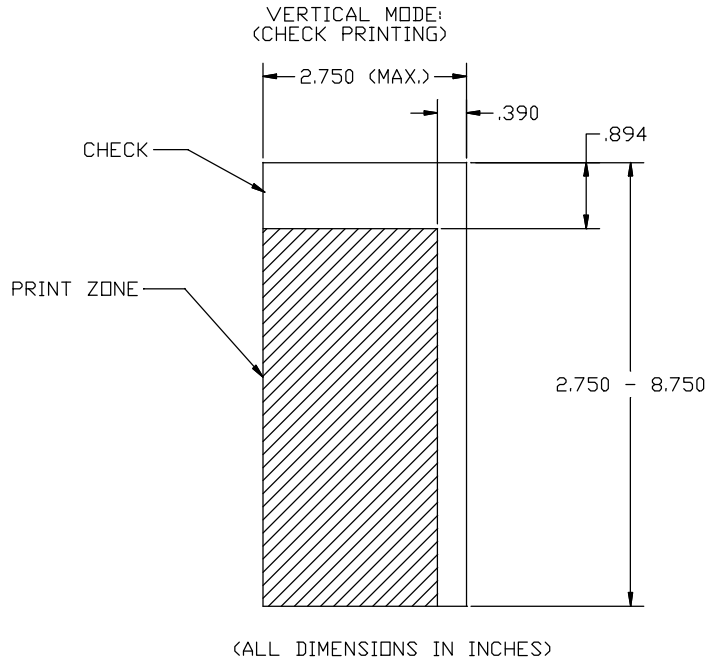


Figure 16 Form Print Zones

## Section 4: Appendices

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## Appendix A: Additional Installation Procedures

### Verifying Printer Setup and Configuration Settings

There are three parts to verifying if the printer is ready to accept commands from your system.

1. Verify the communications interface.
2. Verify the cash drawer interface.
3. Verify the printer.

### Verifying the Communications Interface Card

The POSjet® 1500 printer may be equipped with three different communication interfaces. Each type of interface may offer more than one type of connector style. The information below lists several different styles.

#### Parallel Interface

- Centronics 36-pin interface
- 25-pin D shell

#### Serial Interface

- 9-pin D shell interface
- 25-pin D shell interface

#### USB Interface

- Standard 4-pin

NOTE: Parallel and RS-232 interfaces may both be equipped with a 25-pin, D-shell connector.

To determine what interface is installed refer to the configuration summary receipt that shipped with it, or enter self-test mode and printout a new configuration summary receipt. See “Using Self-Test to View Configuration Settings” on page 32 and “Placing the Printer In Self-Test Mode” on page 30 to assist with printing the configuration summary receipt from self-test.

**If a serial interface card is installed, the print out will refer to the RS-232 Serial Interface. If the parallel interface card is installed, the print out will refer to the Parallel interface. Make sure your printer has the correct interface card.**

### Verifying the Cash Drawer Interface

The printer is shipped from the factory with a cash drawer interface label on the bottom of the printer. If there is no cash drawer label, you should have a certified technician remove the communications interface card and verify the shunt position setting. There are many vendors of cash drawers. If you are unsure what your system's cash drawer interface is, contact the cash drawer vendor for more information.

In order for the cash drawer function to operate properly, the type of cash drawer, and the type of cash drawer cable that your system uses needs to match the printer's cash drawer interface shunt setting. The POSjet® 1500 uses an adjustable interface shunt. This shunt makes it possible to change the way that the printer has been setup so it will match the proper cash drawer setting of your system. By positioning the printer's shunt according to the location of pin 1 on the POSjet's communication board, it will be possible to match the system's settings.

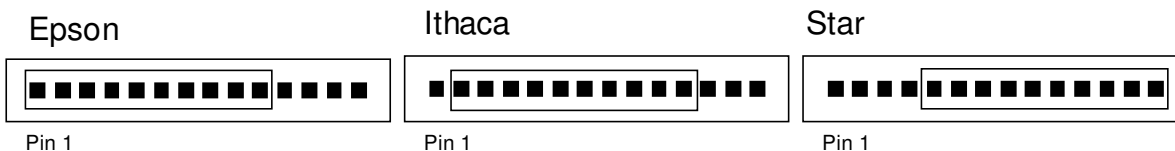


Figure 17 Cash Drawer Selection



### Changing the Cash Drawer Interface Shunt Position

The cash drawer shunt setting is printed on the communications interface card. To change the settings of your printer's communication interface card, remove the 5-position shunt and reposition it to the setting that corresponds to the cash drawer you have. If, at any time, the cash drawer interface no longer matches the label on the printer, please remove the label.

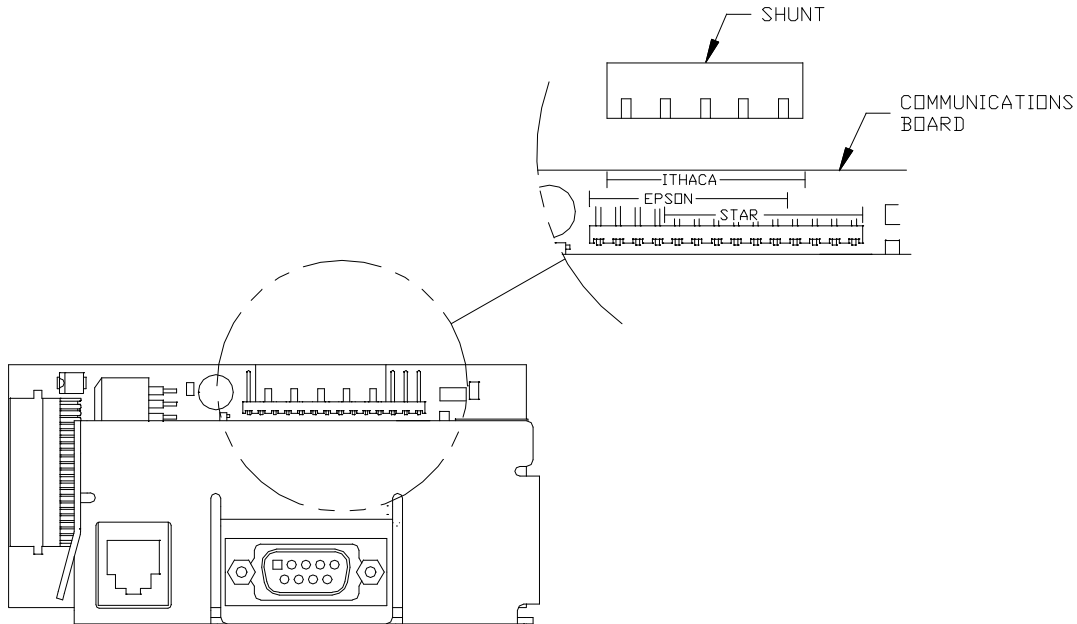


Figure 18 Cash Drawer Shunt

### Why doesn't my cash drawer open?

If the cash drawer is not opening, check the following procedures to ensure that the printer has been connected to the system properly, and that the printer's cash drawer emulation settings match the system's code structure settings.

1. Check to ensure that the cash drawer cable (RJ12) is snapped securely into the RJ12 jack.
2. Verify that the type of cash drawer listed on the "CAUTION" sticker on the bottom of the printer matches the type of cash drawer that it is trying to open. (Ithaca, Epson, Star) If they do not match, set the POSjet's cash drawer shunt to the correct position as described previously.
3. Using self-test, print the configuration summary receipt as described on page 32, "Using Self-Test to View Configuration Settings".
4. After entering self-test mode, cycle through the options until you come to the TEST-Print Configuration category. Use the New Cartridge Button to print the current printer settings from this category.
5. Compare the printer's emulation setting with the table below to verify the specific cash drawer command that the printer requires. Find the printer's emulation setting in the left column, and determine if your system is using the ASCII, HEX, or DECIMAL command structure. The command that corresponds with both of these is required by the system to properly fire the cash drawer.

EMULATION SETTING	ASCII (Cash Drawer 1)	HEX (Cash Drawer 1)	DECIMAL (Cash Drawer 1)
POSjet® 1500	[ESC]x<1>	1B 78 01	<27><120><1>
Epson	[ESC]p<0><100><100>	1B 70 00	<27><112><0><100><100>
M50 (microline)	[BELL]	07	<7>

Table 10 Cash Drawer Commands

## Verifying the Printer

**!TransAct highly recommends that any attempt at configuring the POSjet® 1500 be made by a certified service technician who has successfully completed training on the printer. TransAct is not responsible for printer's that are configured by anyone other than a trained technician!**

### *How to Compare Configuration Settings*

Included in the box your printer shipped in is a configuration summary receipt that shows how the printer was configured before it left TransAct. This configuration summary receipt can be found in the paper roll compartment of the printer.

Use the configuration summary receipt to compare printer configuration settings to your system requirements. Specific attention should be given to ensure that the emulation and the communications link are properly configured. If they are wrong, the printer may appear inoperative.

### *Matching Printer Configuration Settings to your System*

If you are experiencing inconsistent printing operation, or if the printer appears to be nonresponsive several of the system requirements need to be confirmed in how the POSjet has been configured.

### **Parallel Printer**

Emulation  
Carriage Return Options

### **Serial Printer**

Emulation  
RS-232 Serial Interface (baud rate)  
Carriage Return Options

TransAct recommends that **ONLY THE ABOVE SETTINGS BE ALTERED** and does not recommend that these re-configurations be made by anybody but a trained service technician who has successfully completed training on the POSjet® 1500. Please remember that these settings are only a few of the possible configurable options. If you continue to experience incompatibility issues after changing these settings to match your system, contact TransAct's Technical Support Department for assistance.

If the configuration is not correct, Refer to "Understanding Configuration Mode", on page 31 for information on adjusting your POSjet's settings to meet your system requirements. If there are a number of printers to be installed and you want the identical configuration in each, you can use a remote configuration program to record the configuration on one printer, and replicate it over a group. To obtain more information, or the latest version of the configuration program, call our Sales Department or visit our web site.

## Appendix B: Interface Connection Specifics

### Parallel Interface

There are two parallel interface cards available. One is a 25-pin, D-shell connector. The pin-out is such that the printer interfaces to a standard IBM PC parallel printer interface with a one-to-one cable. The second interface card provides the same interface with a standard, 36-pin Centronics type connector. Both cards provide a dual cash drawer interface. The tables below lists interface signals and pin definitions for both types of parallel interfaces.

25-pin D-Shell IEEE 1284-A

36-pin Centronics IEEE 1284-B

### Parallel Pin Assignments

25-pin Connector	36-pin Connector	Signal	Description	Direction
Pin 1	Pin 1	STROBE	Clock data to printer	Host to Printer
Pins 2-9	Pins 2-9	D0 - D7	Data	Host to Printer
Pin 10	Pin 10	ACK\	Printer accepted data	Printer to Host
Pin 11	Pin 11	BUSY	Printer busy	Printer to Host
Pin 12	Pin 12	PE	Paper Out/Status	Printer to Host
Pin 13	Pin 13	SLCT	Printer selected	Printer to Host
Pin 14	Pin 14	AUTOFD	Autofeed paper	Host to Printer
Pin 15	Pin 32	FAULT\	Printer error	Printer to Host
Pin 16	Pin 31	INIT\	Initialize printer	Host to Printer
Pin 17	Pin 36	SLIN	Select printer	Host to Printer
	Pin 17	FG	Frame ground	Printer to Host
-	Pin 18	+5V	Peripheral logic high	Printer to Host
Pins 18-25	Pins 16, 19-30	GND	Ground	

Table 11 Parallel Interface Pin-outs

### Signal Levels

Voltage levels		0 V and +5 V (nominal)
Logic levels		
Logic one	Driver	+2.4 V to +5 V
	Receiver	+2.0 V to +5 V
Logic zero	Driver	0 V to +0.4 V
	Receiver	0 V to +0.8 V

### Current requirements

Logic one	Source	0.25 ma at +2.4 V
Logic zero	Sink	16 ma

### Line termination

Data and control	3.3k ohm to +5 V
Strobe	1.2k ohm to +5 V

## RS-232 Serial Interface

There are two Serial interface cards available. One is a 9-pin, D-shell connector. The pin-out is such that the printer interfaces to a standard IBM PC Serial printer interface with a Serial Null Modem cable. The second Interface card provides the same interface with a standard 25-pin D-shell connector. Both interface cards provide a dual cash drawer interface. The tables below lists interface signals and pin definitions for both types of serial interfaces.

### Serial Port Features

The serial port features are as follows:

<b>Baud Rates</b>	300, 600, 1200, 2400, 4800, 9600, 19.2K, 38.4K, 57.6K, and 115.2K
<b>Bit Patterns</b>	8-bit no parity; 8-bit odd; 8-bit even; 7-bit no parity; 7-bit odd; 7-bit even
<b>Flow Control</b>	DTR and XON/XOFF

### Serial Pin Assignments

9-pin	25-pin	Signal	Description
Pin 1	Pin 8	N/C	No Connection
Pin 2	Pin 3	RX	Receive Data
Pin 3	Pin 2	TX	Transmit Data
Pin 4	Pin 20	DTR	Data Terminal Ready
Pin 5	Pin 7	GND	Signal Ground
Pin 6	Pin 6	DSR	Data Set Ready
Pin 7	Pin 4	RTS	Request to Send
Pin 8	Pin 5	CTS	Clear to Send
Pin 9	Pin 11	N/C	No Connection

Table 12 Serial Interface Pin Assignments

### Signal Voltage and Current levels

The Serial Interface Meets EIA RS232 Interface Specifications:

<b>Voltage Levels</b>	Max	+/-15 Volts
	Min	+/- 3 Volts

Mark = Off = -3 to -15 Volts

Space = On = +3 to +15 Volts

Because both the host and printer are DTE's (Data Terminal Equipment), they use the same serial port pin-outs. If the cable that is used to connect the host to the printer is a pin-to-pin inter-connect, it will not work. Therefore, a null modem or turn-around cable must be used to interconnect the host and the printer.

### Display Pass Through

The display pass through feature allows a pole display to be interconnected with the printer. The printer is connected to a host system with a serial cable. The host sends serial data to the printer and the printer sends serial data to the pole display. The printer does not provide power to the display. During normal printer operation, no data is passed to the display. In pass through mode, all received data is passed on to the display.

### Cash Drawer Interface Description and Specifics

The POSjet® 1500 Printer supports dual cash drawers with status. The driver in the printer is capable of supplying 24 Vdc at up to 1.5 amps for 250 milliseconds. The POSjet® 1500 Printer defines cash drawer closed as switch open. If the drawer is disconnected, the printer considers it closed. Since the printer does not act on the cash drawer status, the application can interpret cash drawer status any way it wants.

<b>Connector Type (standard)</b>	Single RJ12 connector with 24V sink drivers
<b>Voltage</b>	24 volts (Refer to power supply specification)
<b>Current</b>	1 amp maximum with current limit
<b>Pulse Duration</b>	250 msec maximum
<b>Drawer Status</b>	Open/close drawer status to printer

Pin Number	Ithaca®		Epson		Star	
	Signal Name	Direction	Signal Name	Direction	Signal Name	Direction
	pin 1 CD2- pin 2 CD1 Sense pin 3 Ground pin 4 CD Drive +(+24V) pin 5 CD1- pin 6 Not Connected		pin 1 No Connect pin 2 CD1- pin 3 CD Drive + (+24V) pin 4 CD Drive + (+24V) pin 5 CD2- pin 6 CD1 Sense		pin 1 No Connect pin 2 CD1- pin 3 CD1 Sense pin 4 CD Drive +(+24V) pin 5 CD2- pin 6 Ground	
1	Drawer kick out Drive Signal 2	Output sink Drive	Not Connected		Not Connected	
2	Drawer open/close Signal	Input	Drawer kick out Drive Signal 1	Output Sink Drive	Drawer kick out Drive Signal 1	Output Sink Drive
3	Signal Ground		Drawer open/close Signal	Input	+24V DC	
4	+24V DC		+24V DC		+24V DC	
5	Drawer kick-out Drive Signal 1	Output Sink Drive	Drawer kick out Drive Signal 2	Output Sink Drive	Drawer kick out Drive Signal 2	Output Sink Drive
6	Not Connected		Signal Ground		Drawer open/close Signal	Input

Table 13 Cash Drawer Connectors

The printer can be configured for one of three cash drawer configurations. The interface card has a 14-pin header with a 10-pin shunt installed. The shunt position defines the configuration of the cash drawer. Refer to the markings on the board when determining where the shunt should be installed to work in the three different configurations.

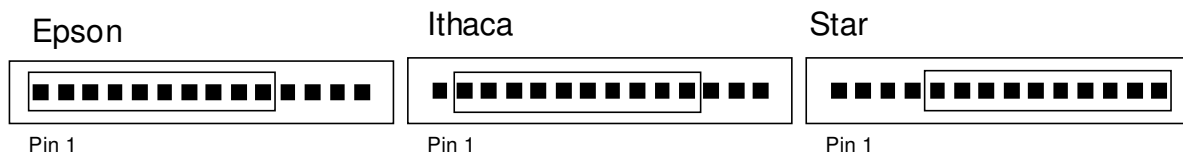


Figure 19 Cash Drawer Pin Assignments

## Appendix C: Common Operational Tasks

Task	Approach
<b>Change Paper Rolls</b>	Open the printer's front paper cover. Insert the new paper roll so that it unwinds from the bottom and rests on the top of the front cover and aligns with the paper stop on the front cover. Close the paper cover. The paper will load automatically. See "Installing a New Paper Roll Using Insta-Load™", on page 22.
<b>Feed Paper</b>	<b>Press</b> and <b>release</b> the FEED Button for a single line. <b>Press</b> and <b>hold</b> the FEED Button for continuous feed.
<b>Change Ink Cartridges</b> <i>DO NOT USE ANYTHING OTHER THAN NEW CARTRIDGES WHEN REPLACING EMPTY CARTRIDGES</i>	Open the printer's front cover. Take the ink cartridge(s) out of the carriage system and replace with new cartridge(s). Press and release the NEW CARTRIDGE Button. See "Installing Ink Cartridges", on page 20.
<b>Remove The Ink Low Warning After Installing New Ink Cartridges</b>	<b>Press</b> and <b>release</b> the NEW CARTRIDGE Button immediately after loading the new ink cartridges.
<b>Clean Ink Cartridges</b>	<b>Press</b> and <b>release</b> the NEW CARTRIDGE Button 2-3 times. If the cartridge still is not working correctly, replace the cartridge(s).
<b>Print Ink Level Status</b>	<b>Press</b> and <b>release</b> the NEW CARTRIDGE Button.
<b>Cycle Through Configuration Menu</b>	Follow the directions that print on the configuration summary receipt after entering Configuration Mode.
<b>Save Configuration Settings</b>	<b>Press</b> and <b>release</b> the * Button at any time.
<b>Exit Self-Test Mode</b>	<b>Press</b> and <b>release</b> the * Button at any time.
<b>Exit Configuration Mode</b>	<b>Press</b> and <b>release</b> the * Button at any time.
<b>Turning Printer ON</b>	<b>Press</b> and <b>release</b> the * Button.
<b>Turning Printer OFF</b>	<b>Press</b> and <b>release</b> the * Button.
<b>Placing Printer Into Self-Test Mode</b>	<ol style="list-style-type: none"> <li>1. <b>Press</b> and <b>release</b> the * Button to place the printer into STANDBY/OFF mode. (The POWER INDICATOR LIGHT will be off.)</li> <li>2. <b>Press</b> and <b>hold</b> the NEW CARTRIDGE Button.</li> <li>3. <b>While holding</b> the NEW CARTRIDGE Button, <b>press</b> and <b>release</b> the * Button.</li> <li>4. When the red, ERROR INDICATOR LIGHT blinks, <b>release</b> the NEW CARTRIDGE Button.</li> <li>5. Follow the directions printed on the receipt to select the desired TEST option.</li> </ol>
<b>Entering Configuration Mode</b>	<ol style="list-style-type: none"> <li>1. Unplug the power cord from the printer.</li> <li>2. <b>Press</b> and <b>hold</b> the FEED Button and plug the power cord back into the printer.</li> <li>3. Continue to <b>hold</b> the FEED Button until the ERROR INDICATOR LIGHT begins to blink.</li> <li>4. <b>Release</b> the FEED Button. A receipt will print. This Configuration Summary Receipt shows how your printer is configured. Follow the directions at the bottom of the receipt to change and save settings.</li> <li>5. See "Understanding Configuration Mode" on page 31.</li> </ol>

Table 14 Using Buttons Quick Reference Table

## Appendix D: Startup Troubleshooting

### Correcting Common Startup Problems

This troubleshooting section provides solutions to problems that may occur with your printer during installation. The following items are a list of possible problem areas. For more in-depth troubleshooting information, refer to our Programmer's Guide available from our web site or call our Technical Support Specialists.

Check to see if the following items have been installed and connected properly to your printer.

1. Are both covers fully closed and snapped into place?
2. Are the power cord and all communication cables plugged in correctly?
3. Are the ink cartridges installed properly?
4. Does the printer successfully complete a self-test?

Printer Does Not Turn ON	
Possible Cause	Remedy
Printer is OFF	Press and release the * Button
No Power	Confirm that power is available, and that the power cord is fully seated in the power supply's power socket.
No DC Power	Check the connection of the power supply output cable to the printer.
Defective Interface Card	Check the printer's Interface Card for damage. Replace if needed.

Table 15 Troubleshooting: Printer Does Not Turn ON

Printer Will Not Communicate (prints illegible receipts)	
Possible Cause	Remedy
Incorrect Cable Configuration	Turn printer OFF and reconnect communication cables.
Incorrect Printer Configuration	<p><b>Compare configuration settings with application requirements.</b> Use Self-Test to print out the printer's configuration settings, or compare to the configuration receipt that shipped with your printer.</p> <p><b>Most Frequent Configuration Incompatibilities</b></p> <p><i>Parallel Printer</i></p> <ul style="list-style-type: none"> <li>Emulation</li> <li>Carriage Return Options</li> </ul> <p><i>Serial Printer</i></p> <ul style="list-style-type: none"> <li>Emulation</li> <li>RS-232 Serial Interface (baud rate)</li> <li>Carriage Return Options</li> </ul> <p><i>Knife Option</i></p> <p>The Knife option is not automatically detected by the printer at initial power on. It must be enabled at the factory using the printer's configuration mode. Be sure that the knife option is selected in configuration mode.</p> <p><i>Dual Color Option</i></p> <p>The Dual Color option is not automatically detected by the printer at initial power on. It must be enabled at the factory in configuration mode. If the printer is configured for dual color and operation is attempted without the second pen installed, the printer will generate an Error Fault. To avoid this Fault, the option must be disabled. A Dual cartridge printer can be operated with only the left cartridge installed if the Color configuration is set to Black Only.</p>
Incorrect Cash Drawer Settings	Confirm that the sticker on the bottom of your printer matches the application system requirements. The setting should be one of three: Ithaca, Epson, Star. See "Connecting the Cash Drawer", on page 15.
Defective Interface Card	Check the Interface Card for damage. Replace if needed.

Table 16 Troubleshooting: Printer Will Not Communicate (prints illegible receipts)

<b>Ink Cartridge Status Indicator Flashing/ Printer will not Operate</b>	
<b>Possible Cause</b>	<b>Remedy</b>
<b>Cartridges(s) Not Installed</b>	Ensure that the ink cartridge(s) are properly installed and the blue latch(es) are closed properly. If the printer is configured for two cartridges, both must be present. See "Installing Ink Cartridges", on page 20.
<b>Poor Cartridge Installation</b>	Remove ink cartridge(s) and re-install. Make sure the blue latches are closed properly. See "Installing Ink Cartridges", on page 20.

Table 17 Troubleshooting: Ink Cartridge Status Indicator Flashing/Printer will not Operate



## Appendix E: Operational Troubleshooting

### Understanding Fault Indicators

The ERROR INDICATOR LIGHT is the primary fault indicator. It is always On or Blinking if a fault has occurred.

#### Three types of faults exist

<b>Fully-recoverable faults</b>	Paper out or cover open
<b>Semi-recoverable faults</b>	Head jam
<b>Non-recoverable faults</b>	Component failure

#### *Fully-recoverable and Status*

A fully-recoverable error will restart printing exactly where it stopped when the error occurred. Printing will resume after error has been properly addressed.

#### *Semi-recoverable*


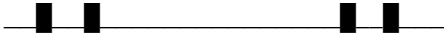
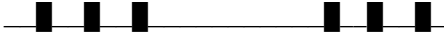
A semi-recoverable error requires that the printer be reset or power cycled after the cause of the error is corrected. The amount of information lost is dependent on the type of error and the state of the information being processed.

#### *Non-recoverable*

A non-recoverable error likely produces information loss and may require a service call.

### Indicator Light Blink Patterns

If during normal operation, the ERROR indicator is lit and the POWER indicator is blinking, a minor error occurred. The POWER indicator shows the error by blinking a pattern. Pressing the \* Button restarts the printer. Blink patterns are defined as follows.<sup>3</sup>

<b>1 Blink</b>	(1 blink, pause)	
<b>2 Blink</b>	(2 blinks, pause)	
<b>3 Blink</b>	(3 blinks pause)	

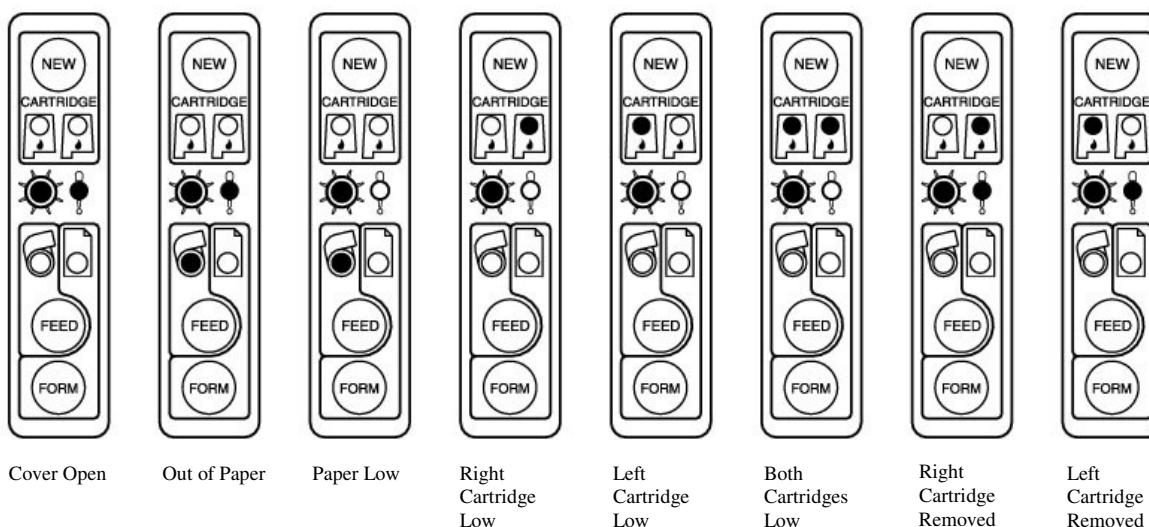
<sup>3</sup> The blink rate is effected by the data received. The faster the data, the faster the printer blinks.

## Keypad Indicator Troubleshooting Chart: General Problems

General problems: Use this table to determine problem type					
Error Type	Power LED	Error LED	Paper LED	Left Cartridge	Right Cartridge
Cover Open	ON	ON	OFF	OFF	OFF
Out of Paper	ON	ON	ON	OFF	OFF
Paper Low	ON	OFF	<b>Blink</b>	OFF	OFF
Right Cartridge Low	ON	OFF	OFF	OFF	<b>1 Blink</b>
Left Cartridge Low	ON	OFF	OFF	<b>1 Blink</b>	OFF
Both Cartridges Low	ON	OFF	OFF	<b>1 Blink</b>	<b>1 Blink</b>
Left Cartridge Removed	ON	ON	OFF	ON	OFF
Right Cartridge Removed	ON	ON	OFF	OFF	ON

Table 18 Keypad Indicators: General Problems

The black colorings for each indicator light simulate either a solid or a blinking indicator light.



## Keypad Indicator Troubleshooting Chart: Serious Problems

The POSjet® will use a combination of the POWER and ERROR INDICATOR LIGHTS to signal serious problems. In most cases, you can tell if the printer is experiencing a specific type of serious problem by counting the number of times that the POWER INDICATOR LIGHT blinks. Most serious problems should be addressed by a TransAct technical support specialist. See “Contacting TransAct’s Ithaca Facility” on page iv.

Serious problems: Contact Technical Support for assistance. (877) 7ITHACA(877 748 4222) or (607) 257-8901					
Error Type	Power LED	Error LED	Paper LED	Left Cartridge	Right Cartridge
Carriage Jam	<b>1 Blink</b>	ON	OFF	OFF	OFF
Configuration Error	<b>2 Blinks</b>	ON	OFF	OFF	OFF
Statistics Update Error	<b>3 Blinks</b>	ON	OFF	OFF	OFF
Internal Software Error	<b>4 Blinks</b>	ON	OFF	OFF	OFF
Knife Jam	<b>5 Blinks</b>	ON	OFF	OFF	OFF
User Store Defective	<b>6 Blinks</b>	ON	OFF	OFF	OFF
Flash Write Error	<b>7 Blinks</b>	ON	OFF	OFF	OFF

Table 19 Keypad Indicators: Serious Problems

### Correcting Common Operating Problems

This troubleshooting section provides solutions to problems that may occur with your printer. Use the following series of tables to determine printing problems. It is highly recommended that you maintain a history of reported problems and the actions you took to identify or resolve problems. This information can help you isolate later problems and anticipate or avoid others. In particular, you should record the problem description, including a brief explanation of the symptoms. The following is a list of possible problem areas. These categories have been established to assist you with preliminary troubleshooting information.

- Keypad Lights Are Not Working
- Printer Will Not Print (ERROR INDICATOR LIGHT ON)
- Printer Will Not Print (ERROR INDICATOR LIGHT OFF)
- Printer Prints With Missing Dots In Characters
- Printer Sounds Like It's Printing But Nothing Prints
- Printer Will Not Load Or Feed Paper

Keypad Lights Are Not Working	
Possible Cause	Remedy
Poor Connections/No Power	Check to see if the power cord is plugged into wall outlet.
	Check the power cord connection on back of the printer.
	Check to see if printer is turned in OPERATIONAL/ON mode.

Table 20 Troubleshooting: Keypad Lights Will Not Work

Printer Will Not Print (Error light ON)	
Possible Cause	Remedy
Ink Cartridge Not Installed	Install new ink cartridge(s). See "Installing Ink Cartridges on page 20.
Paper Cover Open	Close the printer's front cover, making sure that the rear paper cover is snapped into place.
	Check the paper path for debris and/or jammed paper which might cause the covers not to close fully.
Paper Not Installed	Install a new paper roll. See "Installing a New Paper Roll Using Insta-Load™", on page 22.
Carriage Jammed	Open the printer's cover and clear any paper or debris from around the carriage.

Table 21 Troubleshooting: Printer Will Not Print (Error Light ON)

Printer Will Not Print (Error Light OFF)		
Possible Cause	Remedy	
Printer Is Not Responding To Any Input	Check Printer in Self-Test. See "Printer Self-Testing and Diagnostics on page 29.	
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b><i>If Self-Test prints</i></b>                      Check communication cable connection, and verify the printer's communication configuration settings.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><b><i>If Self-Test does not print</i></b>                      Contact TransAct's Ithaca Facility. See "Contacting TransAct's Ithaca Facility", on page iv.</p> </td> </tr> </table>	<p><b><i>If Self-Test prints</i></b>                      Check communication cable connection, and verify the printer's communication configuration settings.</p>
<p><b><i>If Self-Test prints</i></b>                      Check communication cable connection, and verify the printer's communication configuration settings.</p>	<p><b><i>If Self-Test does not print</i></b>                      Contact TransAct's Ithaca Facility. See "Contacting TransAct's Ithaca Facility", on page iv.</p>	

Table 22 Troubleshooting: Printer Will Not Print (Error Light OFF)

Printer Prints With Missing Dots In Characters		
Possible Cause	Remedy	
Ink Buildup On Ink Cartridges	Press the NEW CARTRIDGE Button 2-3 times and try to print again. The NEW CARTRIDGE Button cycles the printer's ink cartridge cleaning wipers.	
	<table border="1"> <tr> <td><b>If the New Cartridge Button Works:</b> Resume printing and remember to use the * Button to place the printer into STANDBY/OFF mode while not in use.</td> <td><b>If the New Cartridge Button Does Not Work:</b> Replace with a new ink cartridge. Dispose of the used ink cartridge. Resume printing.</td> </tr> </table>	<b>If the New Cartridge Button Works:</b> Resume printing and remember to use the * Button to place the printer into STANDBY/OFF mode while not in use.
<b>If the New Cartridge Button Works:</b> Resume printing and remember to use the * Button to place the printer into STANDBY/OFF mode while not in use.	<b>If the New Cartridge Button Does Not Work:</b> Replace with a new ink cartridge. Dispose of the used ink cartridge. Resume printing.	

Table 23 Troubleshooting: Printer Prints With Missing Dots in Characters

Printer Sounds Like It's Printing But Nothing Prints			
Possible Cause	Remedy		
Paper Path Jammed	Open printer's covers and check to see if there is any debris in the paper path that may cause paper not to feed correctly.		
	<table border="1"> <tr> <td><b>If You See Debris:</b> Unplug the printer and clear any debris. Plug the printer back in. Press and hold the FEED Button to advance paper. Try printing again.</td> <td><b>If There Is No Debris:</b> Press the NEW CARTRIDGE Button 2-3 times to cycle the printer's automatic cleaning mechanism. Try printing again. If the problem still exists, contact TransAct's Ithaca Facility.</td> </tr> </table>	<b>If You See Debris:</b> Unplug the printer and clear any debris. Plug the printer back in. Press and hold the FEED Button to advance paper. Try printing again.	<b>If There Is No Debris:</b> Press the NEW CARTRIDGE Button 2-3 times to cycle the printer's automatic cleaning mechanism. Try printing again. If the problem still exists, contact TransAct's Ithaca Facility.
	<b>If You See Debris:</b> Unplug the printer and clear any debris. Plug the printer back in. Press and hold the FEED Button to advance paper. Try printing again.	<b>If There Is No Debris:</b> Press the NEW CARTRIDGE Button 2-3 times to cycle the printer's automatic cleaning mechanism. Try printing again. If the problem still exists, contact TransAct's Ithaca Facility.	
	Press the NEW CARTRIDGE Button 2-3 times and try to print again. The NEW CARTRIDGE Button cycles the printer's ink cartridge cleaning wipers.		
	<table border="1"> <tr> <td><b>If New Cartridge Button Works:</b> Resume printing and remember to use the * Button to place the printer into STANDBY/OFF mode while not in use.</td> <td><b>If New Cartridge Button Does Not Work:</b> Replace with a new ink cartridge. Dispose of the used ink cartridge.</td> </tr> </table>	<b>If New Cartridge Button Works:</b> Resume printing and remember to use the * Button to place the printer into STANDBY/OFF mode while not in use.	<b>If New Cartridge Button Does Not Work:</b> Replace with a new ink cartridge. Dispose of the used ink cartridge.
<b>If New Cartridge Button Works:</b> Resume printing and remember to use the * Button to place the printer into STANDBY/OFF mode while not in use.	<b>If New Cartridge Button Does Not Work:</b> Replace with a new ink cartridge. Dispose of the used ink cartridge.		
If the problem still exists, contact TransAct's Ithaca Facility. See Contacting TransAct's Ithaca Facility on page iv.			

Table 24 Troubleshooting: Printer Sounds Like It's Printing But Nothing Prints

Printer Will Not Load Or Feed Paper		
Possible Cause	Remedy	
Covers Open	Close the printer's covers making sure that they are fully snapped into place.	
	Check the paper path for debris and/or jammed paper which might cause the covers not to fully close.	
Paper Path Jammed	Open the printer's covers and check to see if there is any debris in the paper path that may cause paper not to feed correctly.	
	<table border="1"> <tr> <td><b>If You See Any Debris:</b> Unplug the printer and clear any debris. Plug the printer back in and <b>press and hold</b> the FEED Button to advance paper.</td> <td><b>If There Is No Debris:</b> Call TransAct's Ithaca facility. See "Contacting TransAct's Ithaca Facility", on page iv.</td> </tr> </table>	<b>If You See Any Debris:</b> Unplug the printer and clear any debris. Plug the printer back in and <b>press and hold</b> the FEED Button to advance paper.
<b>If You See Any Debris:</b> Unplug the printer and clear any debris. Plug the printer back in and <b>press and hold</b> the FEED Button to advance paper.	<b>If There Is No Debris:</b> Call TransAct's Ithaca facility. See "Contacting TransAct's Ithaca Facility", on page iv.	
Paper Not Installed Correctly	Remove all paper from the printer. Then, reload the paper roll, making sure that the leading edge of the paper does not extend past the molded paper stop mark on the front cover. Refer to "Installing a New Paper Roll Using Insta-Load™" on page 22.	

Table 25 Troubleshooting: Printer Will Not Load or Feed Paper

## Appendix F: Ordering Genuine Ithaca Supplies

Genuine Ithaca Supplies can be ordered directly from the TransAct website ([www.transact-tech.com](http://www.transact-tech.com)) or by using our toll free telephone number within the US: (877) 7ithaca(877 748 4222). (other inquires: (607) 257-8901). When calling by phone, please ask for the Sales Department. See "Contacting TransAct's Ithaca Facility" on page iv for more details.

The following items may be ordered:

Consumable Kits	Stock Number
12 rolls paper/1 Blk. Ink Cartridge (Standard Grade)	100-03429
20 rolls paper/1 Blk. Ink Cartridge (Standard Grade)	100-03430
12 rolls paper/1 Blk. Ink Cartridge (Premium Grade)	98-03508
20 rolls paper/1 Blk. Ink Cartridge (Premium Grade)	98-03509

Table 26 Paper Ordering Information

Receipt Paper	Type	Dimensions	Stock Number
24 Roll Case	(Ithaca Inkjet 295S)	See page 42.	98-02022
32 Roll Case	(Ithaca Inkjet 300P)		98-03505
24 Roll Case	(Ithaca Inkjet 300P)		98-06697

Table 27 Paper Ordering Information

### Ink Cartridges

3 Pack Cartridges	Supplier	Stock Number
3 Pack Black	Transact's Ithaca Facility	100-02347
3 Pack Red	Transact's Ithaca Facility	100-02349
6 Pack Cartridges	Supplier	
6 Pack Black	Transact's Ithaca Facility	100-02348
6 Pack Red	Transact's Ithaca Facility	100-02350

Table 28 Ink Cartridge Ordering Information

### Cables

Cables	Stock Number
110V Power Cable (USA)	98-02174L
220V Power Cable (Australia)	98-02178L
230V Power Cable (International)	98-02175L
230V Power Cable (IND/South Africa)	98-02179L
240V Power Cable (UK)	98-02176L
<b>Parallel Communication Cable</b> 25-pin male to 25-pin male 36-pin Centronics to 25-pin male	253-9800007 253-9800002
<b>Serial Communication Cable</b> 9-pin Female to 9-pin Female 9-pin Female to 25-pin Female	10-2020 10-2021

Table 29 Cables Ordering Information

Domestic and International power cables available. Call for more information

### Drivers Available

Windows® 95/98/Me Print Driver and Documentation	98-9171
Windows® 2000/NT 4.0 Print Driver and Documentation	98-9172
OPOS Print Driver Manual	100-9730
OPOS Print Driver Disk 1	100-9731
OPOS Print Driver Disk 2	100-9732

Software Developer's Toolkit (CD-ROM)

100-02440

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