

Transact Epic 950 – Trouble Shooting Guide

Printer Status LED's

The printer has been outfitted with a LED panel system that provides the condition of the printer by using solid or blinking status LEDs to communicate status information. The following table lists the different LED states for specific printer conditions.

Bezel Status Lamp



The printer's bezel also displays certain printer status information. See the table below.

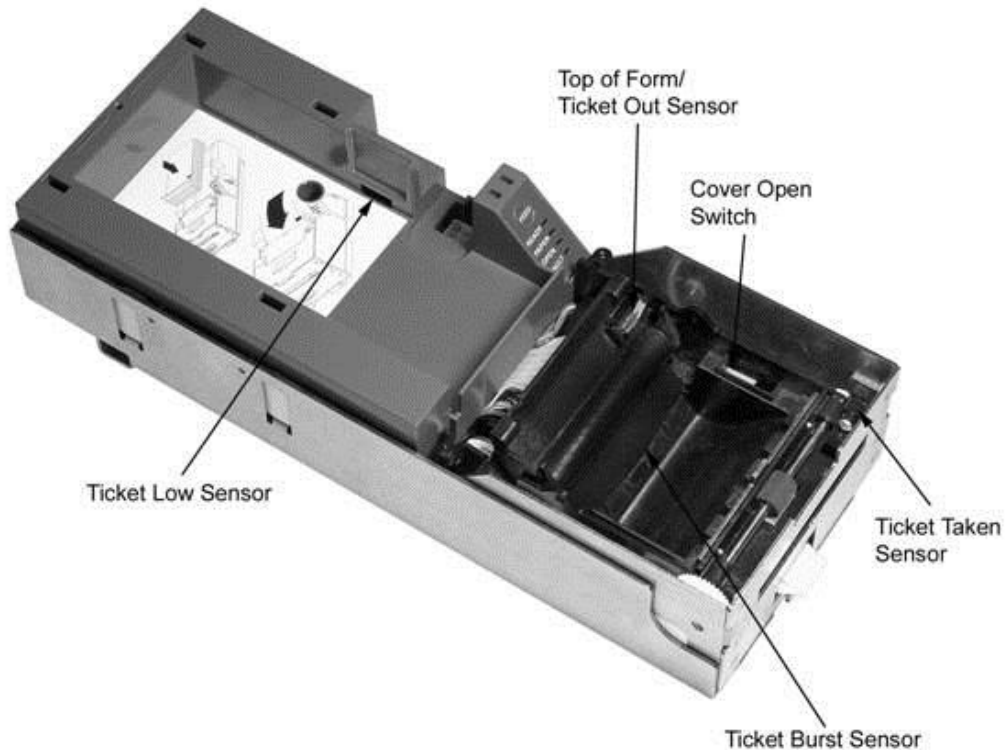
Condition	Ready LED	Paper LED	Open LED	Fault LED
Unit Ready	On	Off	Off	Off
Cover Open	On	Off	On	Off
Chassis Open	On	Off	Blink	Off
Ticket Out	On	On	Off	Off
Ticket Low	On	Blink	Off	Off
Head Temp Error	Blink	Off	Off	Blink
Paper Jam	On	Off	Off	Blink
Ram Error	2-Blink	Off	Off	On
Boot Load Mode	Blink	Off	Off	On
Config Mode	Blink	Off	Off	Off

Bezel Status Lamp

The printer's bezel also displays certain printer status information. See the table below.

Steady	Blinking Rapidly	Blinking Medium	Blinking Slowly
Online and Ready	Ticket is being printed Ticket in ticket taken sensor	Ticket low Chassis open Cover open	Ticket not loaded (TOF) Ticket jam error

Printer Sensors



Ticket Low Sensor

- Optically senses when 5-10 tickets remain in ticket supply bucket
- Reports ticket low to game in status byte
- Verify with Game Manufacturer how status byte is managed

Top of Form Sensor/Ticket Out Sensor

- Senses and aligns to black dot on right edge of ticket

Audible Alarm

- The Audible Alarm will activate upon printer reset. Other alarms are under control of the game

Chassis Open Sensor

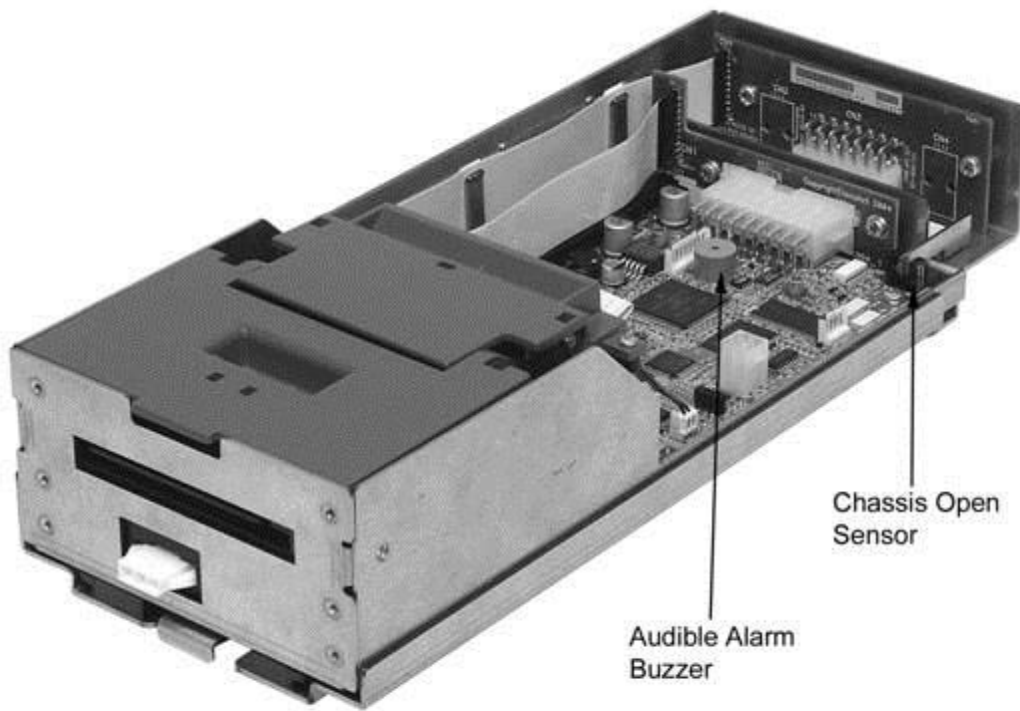
- Located on Main Controller Board
- Determines if printer Inner Chassis is racked out or "open"

Ticket Burst Sensor

- The Ticket Burst Sensor is used to verify that the ticket perforations have been separated during the burst operation

Cover Open Switch

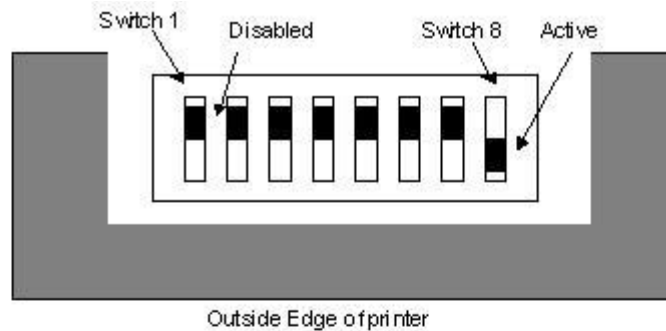
- The Cover Open Switch, when activated, returns a cover open status to the host and inhibits the ticket printing operation until the Ticket Cover is closed



(Ticket Bucket not shown for clarity)

DIP Switch Settings

Switch 1 is the furthest to the rear of the printer. The Active position is toward the outside edge of the printer.



- SW-1 Reserved and must be in the Disabled position. If activated, the printer will be held in reset.
- SW-2 Configures Ticket Low. The Disabled position prevents ticket low from being detected.
- SW-3 Activates Demo mode. It must be in the Disabled position for normal operation.
- SW-4 Activates the Error log if enabled in <por.ini> file. This is useful for debugging but should not be on by default.
- SW-5 Activates Com Save if enabled in <por.ini> file. This is also a debugging feature and will be used with future TransAct tools to help debug printer operations.
- SW-6 Reserved
- SW-7 Activates the Smart Suite features. Must be active to use the status features of the Bench Test utility. Must be active on Bally Alpha platforms with 3.17OS or greater or if you receive constant "Printer COMM Error".
- SW-8 Activates 2-color operation (color ticket media required)

Game Interface Options

Serial (RS-232)

- Communication board #95-04998L (14-pin connector)
- Powered through the game

Netplex

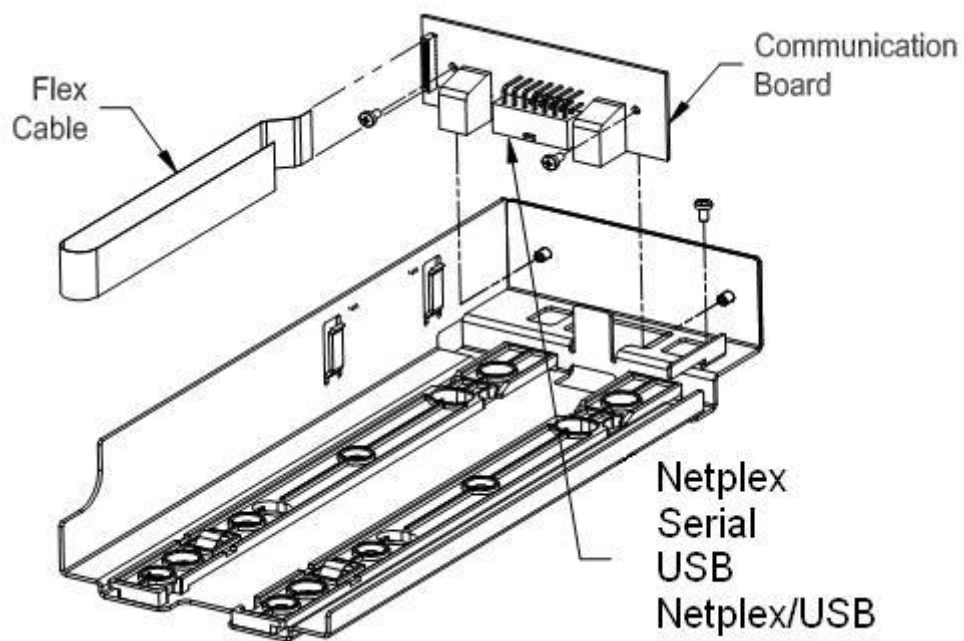
- Communication board #95-05001L (10-pin connector)
- Powered through 8-pin pigtail connector

USB

- Communication board #95-05007L (4-pin connector)
- Powered through the game

IGT USB/Netplex

- Communication board #95-05472L (4-pin USB connector and 6-pin Netplex connection)
- Powered through a 4-pin Molex connector



The Inner Chassis is compatible with all firmware versions.

Printer Firmware Versions

Firmware Naming Convention:

Each firmware file is named with a prefix and number that signify specific information about the firmware in the file. The Family Mask is indicative of backwards compatible firmware.

Firmware Prefix - Interface Type or Usage			
F	XXX	xx	Factory Test - Must be re-flashed!
D	XXX	xx	Demo - prints demo tickets w/o host PC
S	XXX	xx	Serial - TransAct Protocol (Serial PCB)
N	XXX	xx	Netplex Protocol - WMS (Serial PCB)
V	XXX	xx	Netplex Protocol - IGT (Netplex PCB)
U	XXX	xx	USB - TransAct Protocol (USB PCB)
IUN	XXX	xxxx	IGT Universal Netplex (Netplex/USB PCB)
IUU	XXX	xxxx	IGT Universal USB (Netplex/USB PCB)

Firmware Revision
Firmware Family Mask

Obtaining Printer Firmware:

Firmware files <*.cbt> are available for download from the TransAct Gaming FTP site (see page #2). After logging in, browse to the Epic 950/Firmware folder, select the interface type and firmware version to download.

TransAct Firmware Disclaimer:

The firmware within all gaming ticket printers are subject to regulatory approval. It is the casino's responsibility to ensure that only approved firmware for the specific game platform is installed to avoid potential fines imposed by the regulatory body. Please contact the game manufacture and/or regulatory agency to confirm the approval status prior to using any new printer firmware version/s in your games.

Download and Test Hardware

Required download hardware:

To download printer firmware into an Epic 950 printer requires some additional hardware available for purchase from TransAct or our distributors. 100-06693L "Single-download Kit" includes the items below whereas 100-06935L includes an Outer Chassis with a Serial interface needed to dock and power the printer.



imPort™:

The Epic 950 printer features an imPort™ firmware and graphics download port. This port uses a 4-pin Molex connector with an RS-232 interface for connecting with a PC at a fixed Baud Rate of 115,200 bps.



Warning: Do not plug power into imPort™

Making the connections:

Attach the hardware included in the Single Download Kit as shown above. Note: Power can be supplied to the printer from; a slot machine, from the 4-pin power connector into a USB I/F PCB, or via the Communication/Power Adaptor when attached to an Outer Chassis with a 14-pin Serial Interface connector.

Making the connections:

Attach the hardware included in the Single Download Kit as shown above. Note: Power can be supplied to the printer from; a slot machine, from the 4-pin power connector into a USB I/F PCB, or via the Communication/Power Adaptor when attached to an Outer Chassis with a 14-pin Serial interface connector.

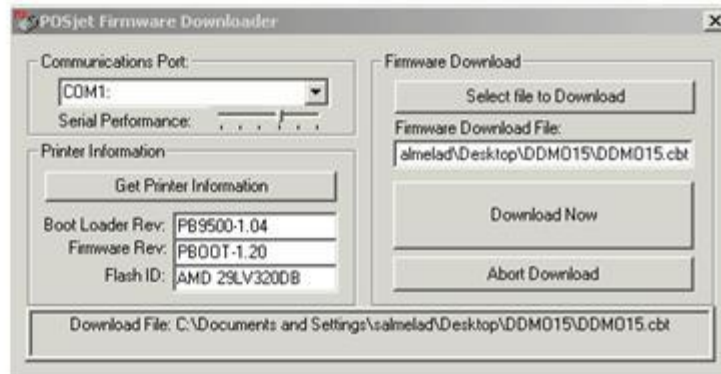
Flashing Printer Firmware

Enter printer Boot Load mode:

1. Un-rack and open the printer's top cover as shown above
2. Hold the FEED button while applying power to the printer
3. Verify status LED panel - READY > Flashing & FAULT > ON

Note: The printer will reset and print a test ticket when download completes if you rack-in, close top cover with tickets loaded.

The Single Download utility Download.exe is available on the CD included with the Download Kit or from the FTP site (see page #2 for details)



Utility one-time setup:

1. Select the assigned COMM Port number from the pull down
2. Right click on the utility's title bar and checkmark XON/XOFF
3. Slide the "Serial Performance" slider to 115,200 bps

Flashing printer firmware:

1. Click "Get Printer Info" button. The boxes below the button should populate. Also verifies bidirectional communications
2. Click "Select file to Download" button and choose a firmware
3. Click "Download Now" button to begin downloading
4. Wait until 100% Flash Update DONE is displayed Caution: watch the LEDS on the printer ... when the firmware download operation is completed only the READY LED will be flashing a short blink once every second.
5. Close the cover and chassis and power cycle the printer

Racking/Unracking the Inner Chassis

To remove the Inner Chassis

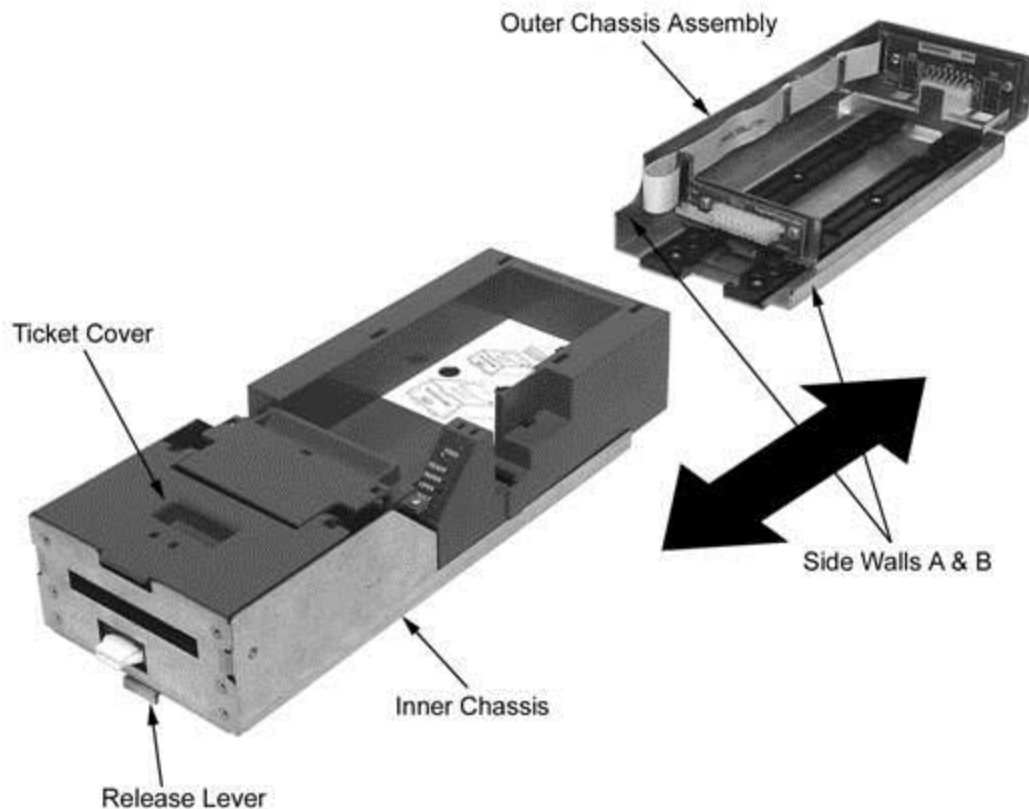
- Pull on the Ticket Cover to release the rear detents, pulling the Inner Chassis towards you until its latches catch the forward detent slots.
- Push the Inner Chassis back in slightly, pull on the Release Lever and pull forward on the Inner Chassis to undock it from the Outer Chassis.

To return the Inner Chassis: (see warning before racking)

- Align the base of the Inner Chassis with the outer walls of the Outer Chassis, seating it within side walls A and B as shown. Make certain it's straight so the inner chassis doesn't damage the flex cable.
- While pulling outwards on the Release Lever, slide the Inner Chassis towards the rear of the Outer Chassis. Push the Inner Chassis all the way to the back until it stops. When fully seated, the front metal plate of the inner chassis and the front left edge of the outer chassis are flush.
- **WARNING: Interconnect PC Board Assembly must be latched in position shown.**
- Push the Inner Chassis back in slightly, pull on the Release Lever and pull forward on the Inner Chassis to undock it from the Outer Chassis.

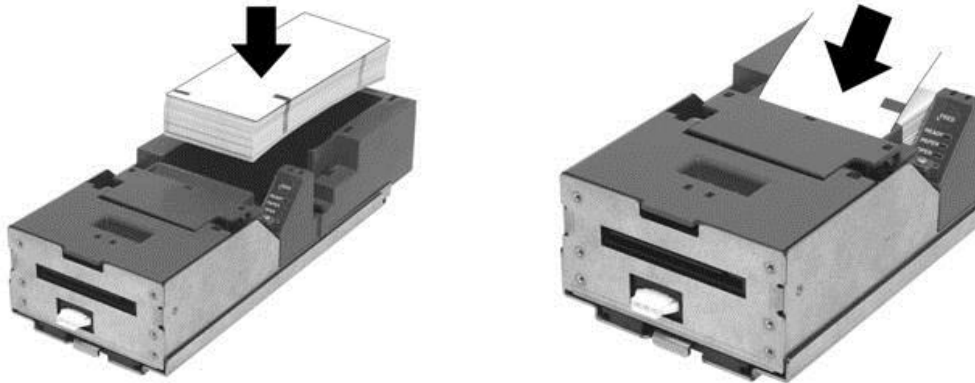
Check by trying to move the board by hand prior to racking.

MAKE SURE IT IS LATCHED



Loading Tickets into Feeding Mechanism

When loading new ticket stacks, be sure that there is power to the printer. The first ticket of the stack must be inserted into the printer by hand. The Epic 950 printers' ticket tray is integrated with a guide to direct the ticket into the printer mechanism. Once the leading ticket enters the Top of Form sensor, the ticket will be automatically fed into the Printer Mechanism.



Ticket Loading and Ticket Feed Mechanism

Loading tickets into the ticket supply box: (Refer to the label on printer)

- Load tickets into the ticket supply tray, making sure that the Black Dot is positioned as shown above.
- Orient the tickets so that the Black Dot is towards the leading edge of the ticket.

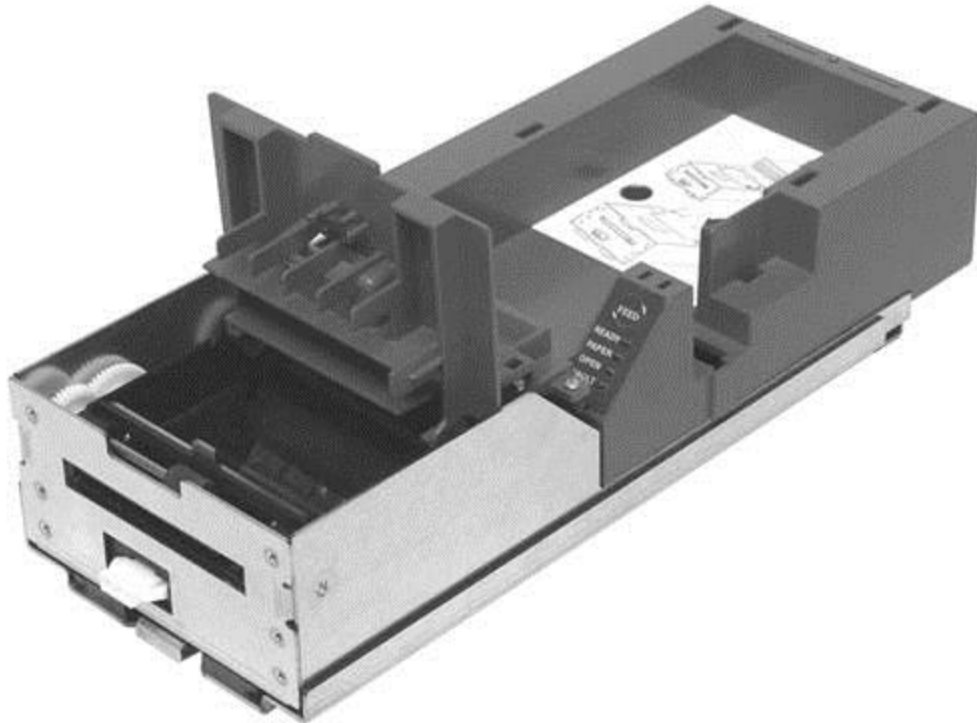
Feeding tickets into the Printer Mechanism: (Refer to the label on printer)

- Check to ensure that the tickets have been placed in the ticket tray with the proper black dot orientation.
- Insert the leading ticket into the Printer Mechanism's insertion guide area. The ticket should be fed about a ½" into the mechanism; at this time, the machine automatically completes the feeding process.
- If printer has been slid out from rack, make sure that the printer is closed.
- The printer is ready to receive information.

Removing Loaded Tickets

The Epic 950 printers have two ways to remove unused tickets from the printer mechanism:

- The first way is to release the Ticket Cover by lifting and rotating backward, this will relieve pressure to the platen and tickets can be removed. This also will allow an opening that provides space to check the printer for ticket jams, or prepare the paper path for ticket replenishing.
- The second way is to use the feed button, which will feed out tickets from within the printer mechanism



Ticket Cover Shown Open for Ticket Removal

Unloading Tickets from the Printer by opening the Ticket Cover

1. Pull Inner Chassis away from the Outer Chassis until it stops in the open position.
2. Lift and rotate the Ticket Cover backwards, towards the rear of the printer.
3. Remove all tickets from the ticket path and check for any debris.
4. Remove any remaining tickets from the ticket tray.
5. Rotate the Ticket Cover into its original closed and latched (Magnetic) position.
6. Proceed with ticket loading procedure.

Preventive Maintenance

Cleaning Instructions:

1. Remove Inner Chassis as shown above
2. Open top cover all the way to allow airflow between print-head and platen roller
3. Remove any loose particles using compressed air
4. Clean ticket burst area (under top cover) with a lint free cloth
5. Supply power to the printer either by reinstalling it back into a game or using the Download Kit's power supply
6. Open cleaning card pouch and remove cleaning card
7. Insert cleaning card into feed path while applying some tension thereby cleaning the entire surface of the platen roller
8. Open the top cover and remove the cleaning card
9. Repeat process if necessary
10. Properly dispose of used cleaning card

Waffletechnology cleaning cards with cutout notches:

Insert cleaning card into feed path with the notches towards the leading edge and use the FEED button to feed it through 2x.

Warnings:

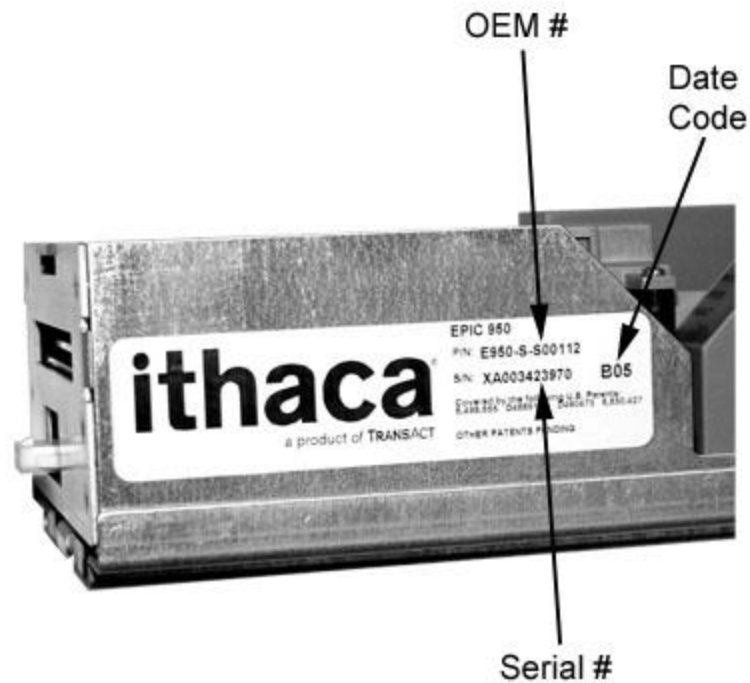
IPA solvents can damage rubber rollers with frequent use. TransAct recommends a maximum usage of 2x annually.

The thermo print-head's life can be reduced with excessive friction. When cleaning the component directly, TransAct recommends using an IPA solvent on a nonabrasive lint free cloth.

Purchasing cleaning cards:

Cleaning cards are available through SUZOHAPP.

Serial Plate Information



Date Code identification

The first letter denotes the month built, as follows:

A = January, B = February, C = March, D = April, E = May, F = June, G = July, H = August, I = September, J = October, K = November & L = December

The two numbers denote the last two digits of the year built, as follows:

04 = 2004

05 = 2005

06 = 2006

etc

Note: Standard printer warranty is 2 years form the build date.

More Troubleshooting

Problem	Solution
Ticket jam	<ul style="list-style-type: none"> • Open ticket cover to clear jam in burst chamber
Bad print quality	<ul style="list-style-type: none"> • Clean print head
No LEDs	<ul style="list-style-type: none"> • Check flex cable connections • Refer to Printer Status LED section for LED status errors
Poor Color	<ul style="list-style-type: none"> • Check for two color ticket stock • Check dipswitch position 8 (color active "ON")

Main Controller Board Connections — see figure 1

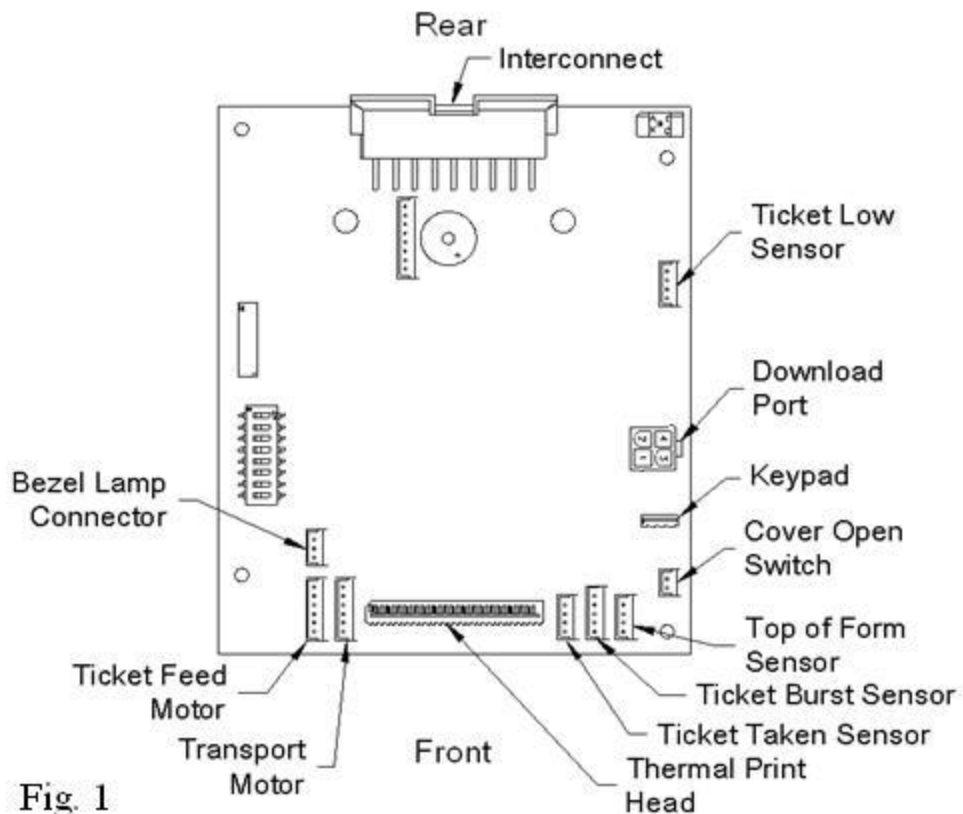


Fig. 1

Flex Cable Replacement

Installation:

When installing the cable into the Outer Chassis, make the rear connection first. Then create a loop in the cable so that it can be easily slipped over the clip (A) closest to the connector, then repeat for remaining clips. Release the sliding connector board's latches by lifting up on the two levers and push the board towards the rear to allow enough slack to mate the front connection. Now mate the front connection to the sliding board and pull the sliding board forward until it is firmly latched.

Warning: If reinstalling a used cable, care must be taken to insure that the cable's bow protrudes in the direction as shown in Figure 2 and when installed, it should look like (C).

Flex Cable Item Number: 98-06499L

