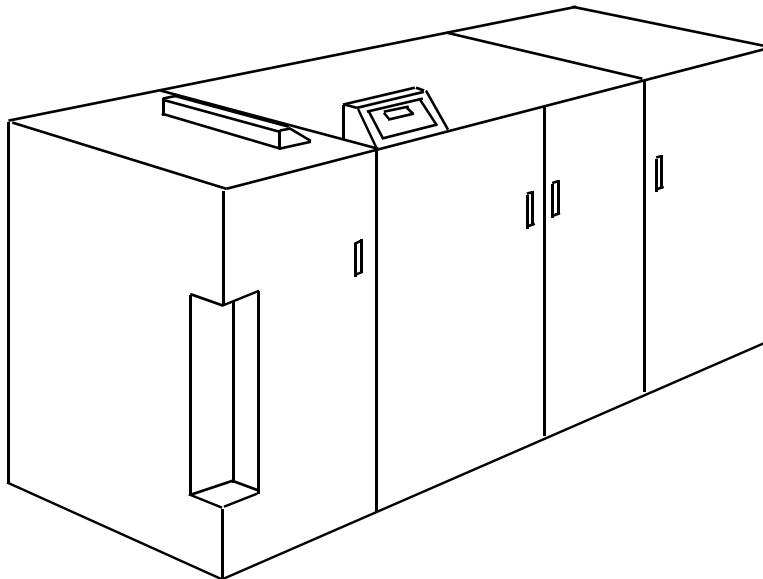

GBC
PowerPunch
User Guide



User Guide 7610848

Rev.- B1

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Preface





SAFETY MESSAGES

The safety of you and others is very important to GBC. Important safety messages and information are contained within this Operating Instructions manual as well as on the machine itself. Please be certain to carefully read and understand all of these before operating the machine.



The safety alert symbol precedes each safety message in this Operating Instructions manual. This symbol indicates a potential personal safety hazard that could result in injury to you or others as well as cause product or property damage.

The following pictorial is found on the **PowerPunch**:

 MUCHO CUIDADO Riesgo de choque eléctrico. No abra. Adentro, no hay piezas reparables para el usuario. Mantenimiento solamente para personal calificado.	 ATTENTION Risque de secousse électrique. Ne pas ouvrir. Pas de pièces réparables par l'utilisateur. Entretien par personnel qualifié.	 	 WARNING Electrical shock hazard. Do not open. No user serviceable parts inside. Refer servicing to qualified service personnel.
 WAARSCHUWING Kans op elektrische schok. Niet openen. Bevat geen door gebruik te repareren onderdelen. Door bevoegd servicepersoneel laten repareren	 ATTENZIONE Pericolo di scarica elettrica. Non aprire. Nessuna parte riparabile dall'utente. Chiamare un servizio di riparazioni qualificato.	 WARNUNG Spannungsführende Teile. Nicht öffnen. Enthält keine vom Endverbrucher zu wartende Teile. Für Service bitte an qualifiziertes Service-Personal wenden.	

This safety message indicates that you could be seriously hurt or killed if you open the product and expose yourself to hazardous voltage. NEVER

remove the machine's outer covers. ALWAYS refer service requirements to qualified GBC personnel.

The following ISO and IEC symbols appear on this product. Their meaning is:

I Means Power ON.

O Means Power OFF.



Means **START**.

"DIAGNOSTICS" Means you can select a preferred language (also used by Service Personnel).

"ONLINE/OFFLINE" Means the machine can run in conjunction with the printer or run without the printer. Also used to set up the machine in different configurations.



Means **Raise or Lower Stacker**.



Means **INTERRUPT** the job that you are running.



Means **STOP**.



Means **RESET**.

IMPORTANT SAFEGUARDS

- Use the **PowerPunch** only for its intended purpose of punching paper and covers according to the indicated product specifications.
- Retain this Operating Instructions manual for later use.



CAUTION: In case of emergency, use the power cord as a main disconnect device!

- The **PowerPunch** must be connected to a supply voltage corresponding to the electrical rating in the machine operating instructions (also listed on the serial number label).
- The socket-outlet shall be located near the equipment and shall be easily accessible.
- The grounding plug is a safety feature and will only fit into the proper grounding-type power outlet. If you are unable to insert the plug into an outlet, contact a qualified electrician to have a suitable outlet installed. Do not alter the plug on the end of the cordset (if provided) of the **PowerPunch**. It was provided for your safety.
- Unplug the **PowerPunch** before moving the machine or whenever the machine is not in use for an extended period of time.
- Do not operate the **PowerPunch** if the machine has a damaged power supply cord or plug. Do not operate the machine after any malfunction, if liquid has been spilled into the machine, or if the machine has been damaged in any way.
- Do not overload electrical outlets beyond their capacity. To do so can result in fire or electrical shock.

SERVICE

- Do not attempt to service your **PowerPunch** yourself. Contact an authorized Océ representative for any required repairs or major maintenance for your **PowerPunch**.



DO NOT REMOVE THE MACHINE'S COVERS

- There are **NO** user-serviceable parts inside the machine. Removal of the covers by the user could result in potential personal injury and/or property or machine damage.

CLEANING

- You may clean the exterior of the **PowerPunch** using a soft, damp cloth. Do not use detergents or solvents as damage to the machine may occur.

FCC NOTE

(THE FOLLOWING NOTE APPLIES ONLY TO THE UNITS RATED 115V 60HZ)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Operator Manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.



CAUTION: Changes or modifications not expressly approved by general binding corporation could void your authority to operate the equipment.

Canada Class A Notice - Avis Canada, Classe A.

This Class A digital apparatus complies with Canadian ICES-3.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Chapter 1

Getting Started



About the PowerPunch

The GBC PowerPunch is a new and improved online printer punch that has been redesigned to meet Océ certification. The PowerPunch features easy, automated operation.

Punch any hole pattern

The PowerPunch features multiple punching dies that can be changed in minutes without the use of tools. Die sets are available in a variety of standard configurations such as Three Hole, GBC Cerlox (CombBind), ProClick and WireBind. Custom dies can be built to order.

Online

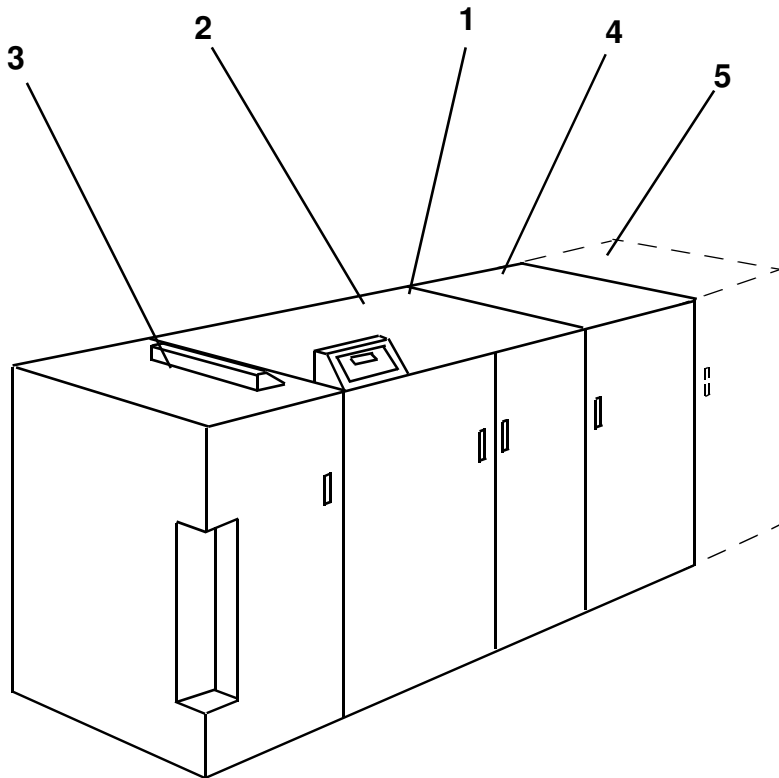
The PowerPunch attaches directly to your high-speed printer. Documents flow directly from the printer to the binding system without the bottleneck associated with traditional offline punching processes. The PowerPunch online punching system not only affords superior turnaround times, but also significantly reduces labor costs. Only one operator is required to print, punch and offset stack documents.

At the speed of your printer

The PowerPunch matches the speed of your printer, punching over 200 sheets per minute.

Key Features

- 1 Die sets can be easily changed without tools.
- 2 Paper size adjustments can be made quickly and easily.
- 3 The Single Sheet Feeder design of the PowerPunch maintains document integrity and allows the operator to set up the machine in offline mode.
- 4 The Output Stacker allows documents to emerge punched and offset stacked for more efficient offline binding operations. One or more stackers can be connected for continuous operation.
- 5 An optional Bypass Stacker can be used inline to allow the use of other downline finishers and ensure continual production is maintained.

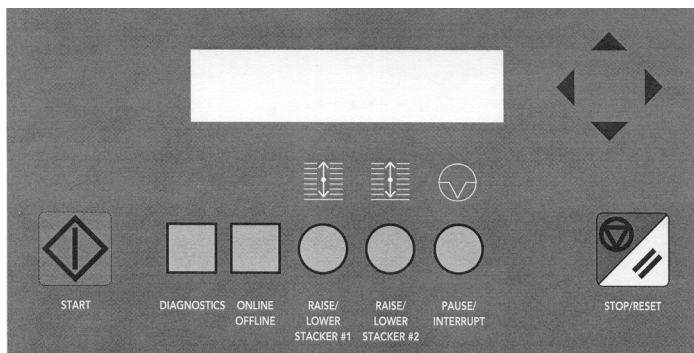


Specifications

Output Stacker	Each stacker holds 2500 sheets.
Dimensions	81 inches (2058 mm) L x 32 inches (813 mm) W x 46 inches (1140 mm) H.
Weight	Punch: 620 lbs. (281 kg.) Stacker: 270 lbs. (123 kg.) Bypass Stacker: 320 lbs. (145 kg.)
Power Supply	USA/Canada - Punch: 115 VAC, 60 Hz, 4.7 amps. Stacker: 115 VAC, 60 Hz, 1.0 amps. International - Punch: 230 VAC, 50 Hz, 6.8 amps. Stacker: 230 VAC, 50 Hz, 1.0 amps.
Temperature Range	41 - 104 Degrees F. (5 - 40 Degrees C.)
Humidity Range	30% - 95%, non-condensing.
Altitude	3280 feet (1000 meters).

Control Functions and Locations

The Control Panel



The PowerPunch Control Panel



1 Start

The Start button is used to start a job and to begin punching in offline mode.

"DIAGNOSTICS" 2 Diagnostics

The Diagnostics button is used by service personnel to run diagnostics when the machine requires service.

The Diagnostics button also has another feature known as User Functions. To use this feature, perform the following steps:

- a. Press the **Diagnostics** button once. Version Control information displays, to include the current version level of the machine's software.
- b. Press the Diagnostics button again. The Punch Count is displayed.
- c. Press the Diagnostics button again. The current language is displayed. To change languages, do the following:

- Use the Up and Down Arrows to scroll through the listing of available languages. They are: English, Spanish, German, French, Italian and Dutch.
 - Select a language and then press the **Stop/Reset** button.
- d. Press the Diagnostics button again and the message, **For service menu enter keycode** displays. This is the Diagnostics function and is for use only by trained service personnel.



CAUTION: The Diagnostics function is for use only by trained service personnel. Attempting to use diagnostics without proper training may result in damage to the machine.

"ONLINE/OFFLINE" 3 Online/Offline

The Online/Offline button is used to change the operating mode of the PowerPunch. By pressing the Online/Offline button once, the following flashing messages will appear on the Upper row of the LCD Display Screen:

1. < **Change Run Mode**
2. ^ **Change Punch Mode**
3. > **Change Destination**

The LCD Display Screen will also display the current configuration set up previously, or the default machine setup in the Lower row as follows:

" Online / Punch / Stack 1"

The different modes and the destination can be changed by pressing the designated Arrow key. As you press each arrow, the following options will appear on the LCD Display Screen:

1. < Change Run Mode

Online - used when sending a job from the host printer. In this mode, the PowerPunch must be started manually in order to receive paper from the host printer.

Cycle Up - used when sending a job from the host printer. In this mode, the PowerPunch will start and stop automatically when the host printer starts and stops.

Offline - used to start the PowerPunch without the host printer. In this mode, the PowerPunch must be started manually before the operator inserts pages in the Single Sheet Feeder.

Online50 - used to deliver offsets in stacks of 50 sets (Complete Books), to the Stackers. In this mode, the operator must start and stop the PowerPunch manually.

Cycle50 - In this mode, the PowerPunch will start and stop automatically when the host printer starts and stops, as well as deliver offsets in stacks of 50 sets (Complete Books).

2. ^ Change Punch Mode

Punch - the PowerPunch will punch the long edge of 8.5 x 11 and A4 sized paper.

NoPunch - the PowerPunch will not punch.

PunchSE - the PowerPunch will punch the short edge of 8.5 x 11 and A4 sized paper.

Punch17 - the PowerPunch will punch the short edge of 11 x 17 and A3 sized paper.

Punch14 - the PowerPunch will punch the short edge of 8.5 x 14 and 11 x 14 sized paper.

3. > Change Destination

Stack 1 - the PowerPunch will start stacking in Stacker #1 and then go over to Stacker #2 when Stacker #1 is full. (The paper tray in Stacker #2 must be in the up position for this to work.)

Stack 2 - the PowerPunch will start stacking in Stacker #2 and then go over to Stacker #1 when Stacker #2 is full. (The paper tray in Stacker #1 must be in the up position for this to work.)

S1 Only - the PowerPunch will only stack in Stacker #1, and will stop when it is full.

S2 Only - the PowerPunch will only stack in Stacker #2, and will stop when it is full.

Bypass - the PowerPunch will Bypass all sheets to a downstream device.

To exit this menu, press the Stop/Reset button. The PowerPunch will be ready for operation when the Upper row of the LCD Display Screen displays the message:

"GBC Punch Full Stop"



4 Raise/Lower Stacker #1 and #2

These buttons are used to raise and lower the paper trays in the first (#1) and second (#2) stacker, if a second stacker is present.



5 Pause/Interrupt

The Pause button is used to stop, or interrupt, a job that is currently running. This may become necessary if a problem occurs or if an adjustment is required.



Note: If running in **Cycle Up** mode, when you press the Pause/Interrupt button, the LCD will display: "**Delayed Stop.**" Press the Start or the Stop/Reset buttons to resume the printer and PowerPunch.



6 Stop/Reset

The Stop/Reset button is used to halt all operation of the PowerPunch, if it should become necessary. It is also used to reset the machine after an error has been corrected.



7 Arrows

The arrow controls at the upper right-hand corner of the Control panel are used to scroll the information on the LCD display screen up or down, or, left or right. They are also used to change the different run modes and destinations.

"LCD DISPLAY
SCREEN"

8 LCD Display Screen

The LCD Display Screen displays the current status of the PowerPunch, to include operating mode and any error messages that may occur. Also, service personnel use the display to run and interpret diagnostic codes.

Chapter 2

General Procedures



Changing Die Sets



WARNING: Switch OFF (O) the main power switch before beginning this procedure.

- 1 Open the Right Punch Door, as shown in Figure 2-1.
- 2 Open the Punch Cover, as shown in Figure 2-1.

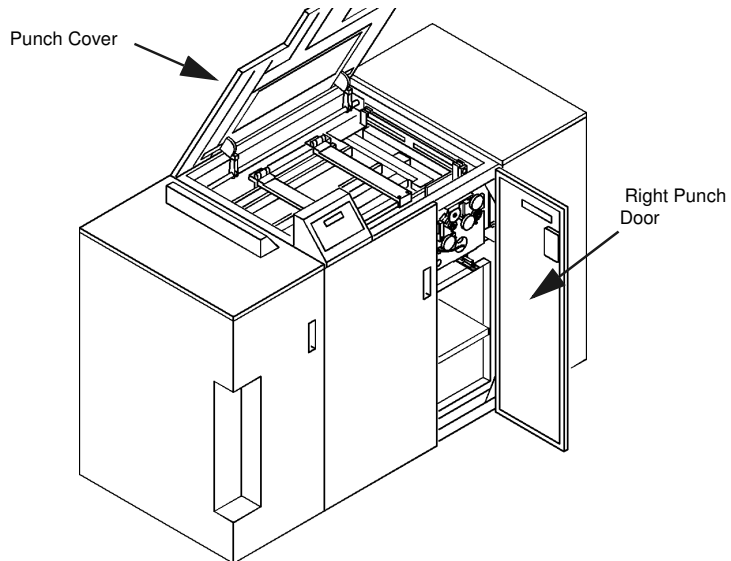


Figure 2-1: Opening the Punch Door and Cover

- 3 Open the Sheet Eject Strap assembly, as shown in Figure 2-2.
- 4 Release the Punch Arm retaining levers down and to the side, as shown in Figure 2-2.

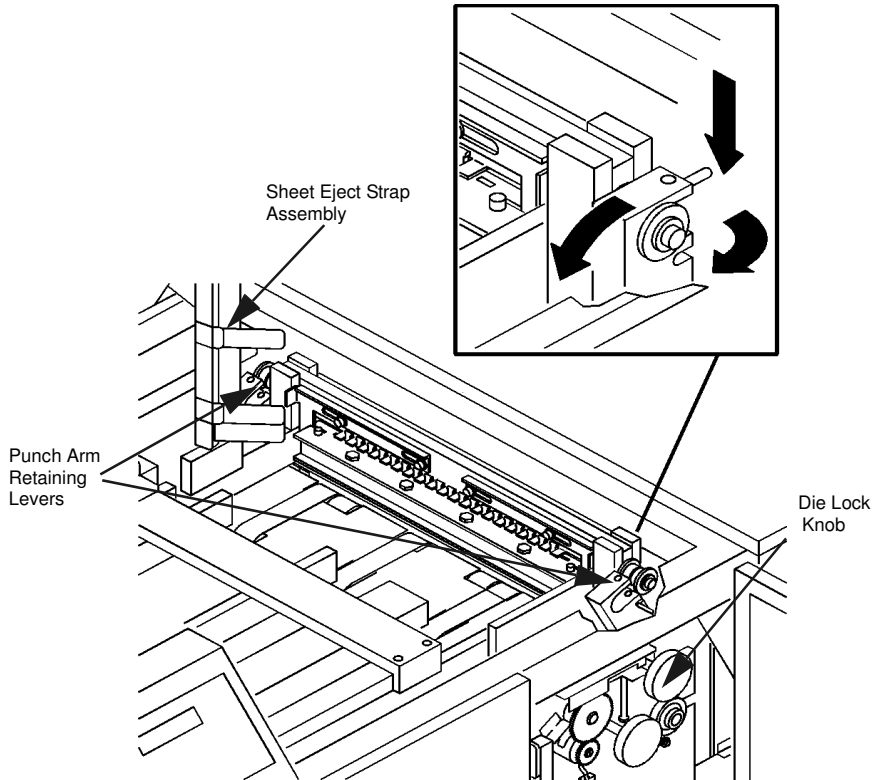


Figure 2-2: Unlocking the Die Assembly

- 5 Unlock the Die: turn the Die Lock knob clockwise until a "click" is felt, as shown in Figure 2-2. Do not turn past that point or you will lock the Die again.

- 6 Grasp the base of the Die and lift straight up, as shown in Figure 2-3.

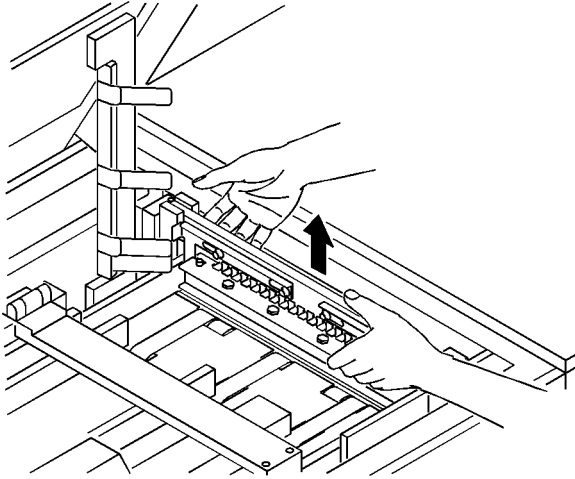


Figure 2-3: Removing and replacing the Die Assembly

- 7 To replace the Die, repeat Steps 1 through 6 in **reverse** order.



Note: The Die assembly is keyed and will reinstall only one way.

Removing and Replacing Die Pins

- 1 To remove and replace individual die pins, slide the Pressure Bar release levers to the side and lift the Pressure Bar off of the Die, as shown in Figure 2-4.

You may now remove and replace individual die pins.

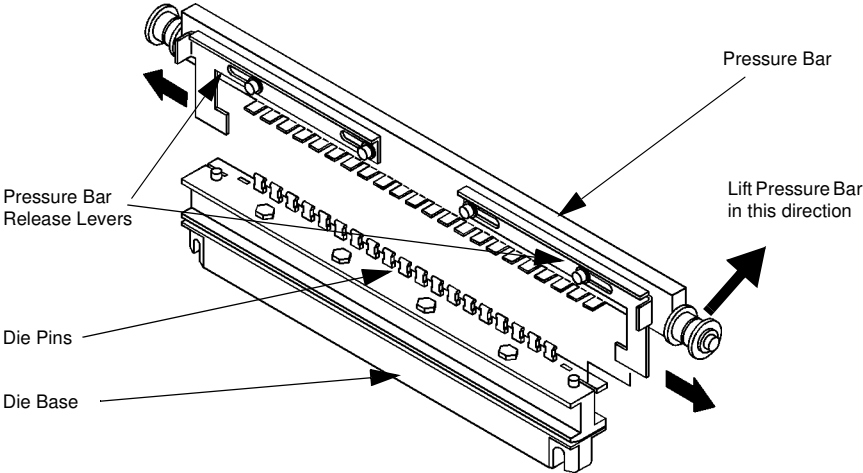






Figure 2-4: Accessing the Die Pins

- 2 Reverse this procedure to reinstall the Punch Arm.

Centering the Punch

The purpose of this procedure is to center the punched hole set on the paper.

- 1 Set up the PowerPunch in the following modes and destination;
"Offline / Punch / Stack 1" (or Stack 2).
- 2 Ensure that the Stacker Tray is in the TOP position. If it is not, press the **RAISE/LOWER STACKER**  1 or 2 button either once or twice until the Stacker moves up to its TOP position. The Punch will not start with the Stacker Tray down.
- 3 Press **START**  .
- 4 Into the Single Sheet Feeder, feed a sheet of paper of the size required for the job.
- 5 Press the **STOP/RESET**  button.
- 6 Press the **RAISE/LOWER STACKER**  1 or 2 button to lower the Stacker.
- 7 Open the Stacker Door and remove the punched sheet of paper.
- 8 Check the centering of the punched holes, as shown in Figure 2-5.

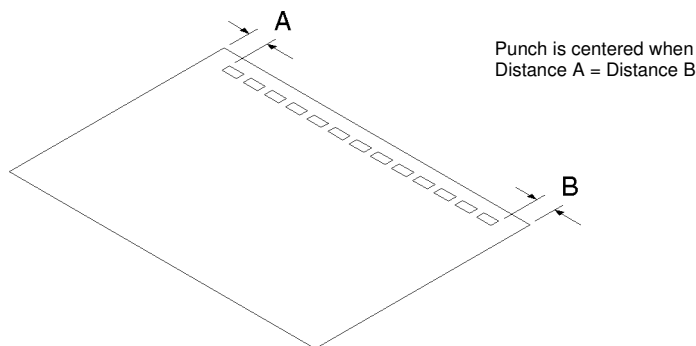


Figure 2-5: Checking the Centering of the Punched Holes

- 9 If the holes are centered, go on to **Setting the Side Guide**. If the holes are not centered, go on to **Step 10** to adjust the Punch.
- 10 Open the Right Punch Door.
- 11 Loosen the Locking Wing Nut, as shown in Figure 2-6.
- 12 Use the Edge Guide Adjustment Knob to make small ($1/8$ to $1/4$ -turn) adjustments, as shown in Figure 2-6. Test after each adjustment until the punched hole sets are centered.

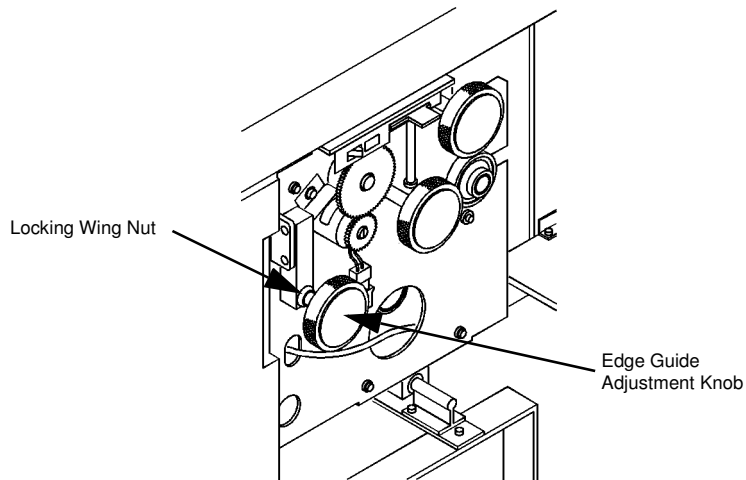



Figure 2-6: Edge Guide Adjustment

- 13 Tighten the Locking Wing Nut after you have completed the adjustments.

Setting the Side Guide

The purpose of this procedure is to ensure that each sheet of paper maintains registration as it passes through the PowerPunch.

 **Note:** Use tab stock or cover stock when performing these procedures.

- 1 Press the **STOP/RESET**  button.
- 2 Open the Punch Cover.
- 3 Open the Document Transport Ball Track assembly, as shown in Figure 2-7.
- 4 Open the Sheet Eject assembly, as shown in Figure 2-7.

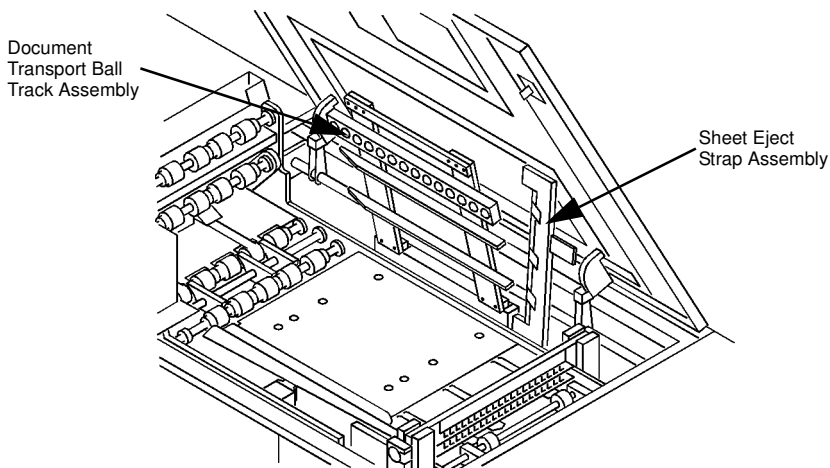


Figure 2-7: Preparing to Adjust the Side Guide

- 5 Slide a sheet of tab stock or cover stock partially through the Die.
- 6 Ensure that the stock is against the Document Transport Guide Rail, as shown in Figure 2-8. If the stock is straight against the Document Transport Guide Rail and as close as possible to the Side Guide without actually touching it, go on to **Setting the Backgauge**. If the Side Guide is not as close as possible to the stock without touching it, go on to **Step 7** to adjust the Side Guide.

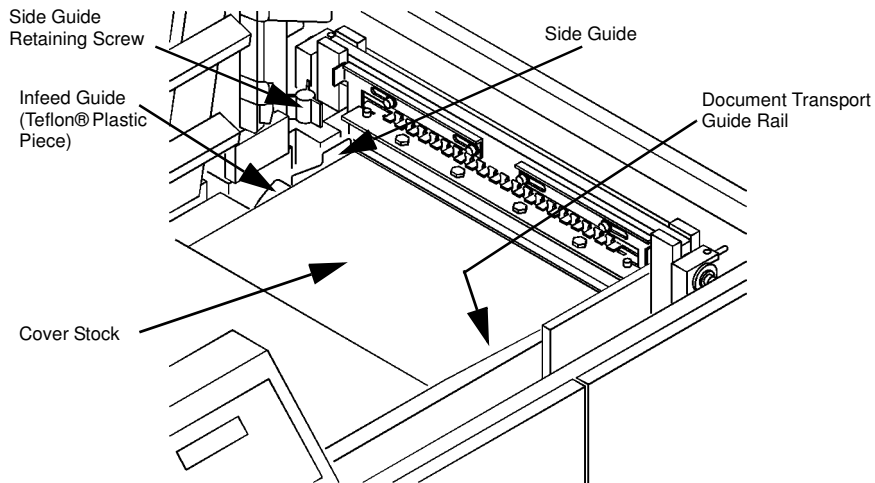


Figure 2-8: Adjusting the Side Guide

- 7 If punching the 11" edge of the sheet, loosen the Side Guide Retaining Screw. If punching the 8.5" edge of the sheet, add the additional Short Edge Side Guide to the Sheet Eject Strap assembly with the adjustment screws finger tight. Remove the stock and close the Sheet Eject Strap assembly. Now, slide the stock under the Sheet Eject Straps and partially through the Die again.



Note: When using the existing 11" Side Guide, ensure that the Side Guide is under the Infeed Guide (Figure 2-8) before continuing.

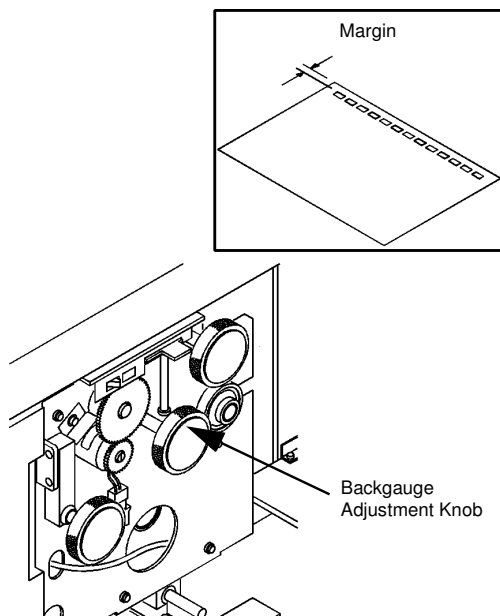
Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

- 8 Adjust the Side Guide so that it is as close to the stock as possible without actually touching the stock.
- 9 Tighten the Side Guide Retaining Screws.
- 10 When you have completed this procedure, close the Sheet Eject Strap assembly, Document Transport Ball Track assembly, and the Punch Cover if they are not already closed.

Setting the Backgauge






The purpose of this procedure is to ensure that the margin between the leading edge of the copy and the punched holes is correct.

- 1 If your die set is anything **other than a GBC Cerlox (CombBind)** die set, turn the Backgauge Adjustment Knob clockwise continuously until it stops. If your die set is a **GBC Cerlox (CombBind)** die set, go to **Step 2**.
- 2 Check the margin between the leading edge and the punched holes of copies that have been run through the Punch, or, from paper you have run through the Manual Feed Tray. If the margin is correct, go to **Starting a Job** in this chapter to familiarize yourself with the operation of the PowerPunch. If the margin is not correct, go to **Step 3** to adjust



the Backgauge.

Figure 2-9: Setting the Backgauge Adjustment

- 3 Open the Right Punch Door.
- 4 Use the Backgauge Adjustment Knob to correct the margin, as shown in Figure 2-9. Adjust as follows:
 - To **increase** the margin between the leading edge of the copy and the punched holes, turn the Backgauge Adjustment Knob **counterclockwise**.
 - To **decrease** the margin, turn the adjustment knob **clockwise**.
- 5 Turn the Backgauge Adjustment Knob one click at a time and check the margin at each position. Use the Single Sheet Feeder to run test paper through the Punch. To do this:
 - a) Set up the PowerPunch in the following modes and destination; "**Offline / Punch / Stack 1**" (or **Stack 2**).
 - b) Ensure that the Stacker Tray is in the TOP position. If it is not, press the **RAISE/LOWER STACKER**  **1** or **2** button either once or twice until the Stacker moves up to its TOP position. The Punch will not start with the Stacker Tray down.
 - c) Press **START**  .
 - d) Into the Single Sheet Feeder, feed a sheet of paper of the size required for the job.
 - e) Press the **STOP/RESET**  button.
 - f) Press the **RAISE/LOWER STACKER**  **1** or **2** button to lower the Stacker.
 - g) Open the Stacker Door and remove the punched sheet of paper.
 - h) Close the Stacker Door and press the **RAISE/LOWER STACKER**  **1** or **2** button to raise the tray.
- 6 Repeat Steps 4 and 5 until the margin is correct.

Using the GBC Stacker

The GBC Stacker is inline with the PowerPunch and interfaces electronically and mechanically with the PowerPunch. The Stacker will start up and shut down automatically with the Punch, under control of the Printer.

The Stacker requires minimal operator intervention, with the exception of unloading the Stacker Tray. Although the internal Stacker Tray has an extension that is adjustable, you will seldom have to change this adjustment, except in the case of job runs with unique paper sizes. See Figure 2-29 below for locations of Stacker components.

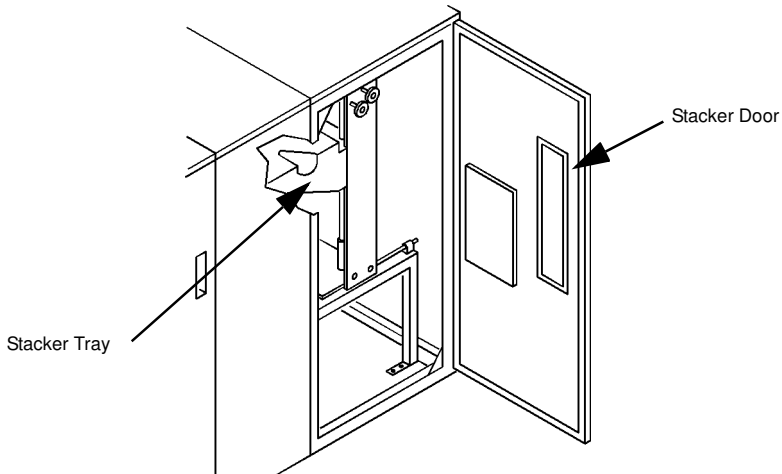





Figure 2-10: The GBC Stacker with Front Door open

To lower the Stacker Tray for unloading, go to the PowerPunch Control Panel and do the following:

- 1 If in **Cycle Up** mode:
 - and only one stacker is installed, wait for the PowerPunch and the host printer to cycle down. **GBC Punch Full Stop** will be displayed in the LCD Display Screen when the machines have cycled down.
 - and the system is equipped with a Second Offset Stacker, you will not have to wait for the the punch and the printer to cycle down. By setting the destination to **Stack 1** or **Stack 2** the PowerPunch will automatically switch between the stackers as long as the next stacker's tray is in the up position.
- 2 Press the **Raise/Lower Stacker**  #1 button to lower the tray of the first (#1) Stacker in the system.

Press the **Raise/Lower Stacker**  #2 button to lower the tray of the second stacker in the system (if a second Stacker is installed).
- 3 Open the Stacker Door and remove the punched copy.
- 4 Close the Stacker Door.
- 5 Press the **Raise/Lower Stacker**  button(s) to raise the Stacker tray (or trays) back up to the top position. The Punch will not start with the Stacker tray(s) down. The following applies to Stackers:
 - If a single Stacker is used and its tray is down, the Punch Control Panel will display a message telling you to empty the Stacker. The Punch will not start until the tray is up.
 - If more than one Stacker is employed in the system, at least one of the Stackers' trays must be up to start the Punch. However, when that Stacker fills up, the Punch will not switch to the other Stacker if its tray is down. Instead, it will stop the Printer and display a message telling you to empty the Stacker.

Troubleshooting

Clearing Jams

Error Messages


from the PowerPunch

from downstream devices



Clearing Jams

A good rule for clearing jams is to follow the paper path through the Punch and Bypass Stacker, from left to right. The jam clearing procedures are as follows:

- 1 Press the **Stop/Reset**  button on the Punch Control Panel.
- 2 Open both Top Covers on the Punch, as shown in Figure 3-1.
- 3 Open (lift) the Input Ball Tracks, as shown in Figure 3-1, and clear any paper that may be jammed in that area. Also, check the printer Finisher and output tray for any paper jams.

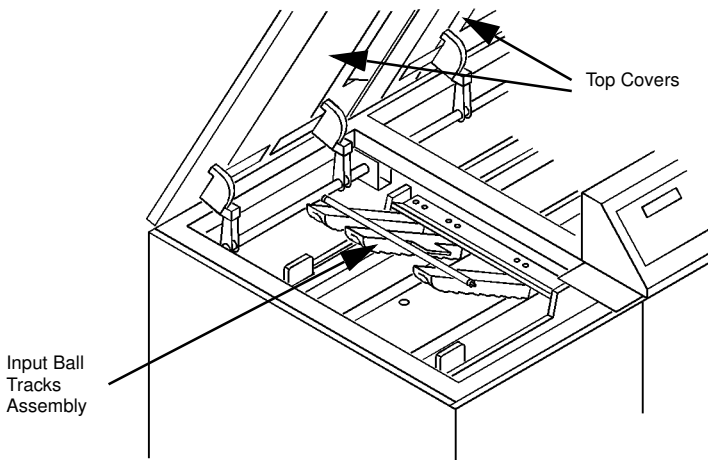


Figure 3-1: The Top Covers and Input Ball Tracks

- 4 Open (lift) the Input Guide Roller assembly, the Document Transport Ball Track assembly and the Sheet Eject Strap assembly, as shown in Figure 3-2 and clear any paper that may be jammed in that area.

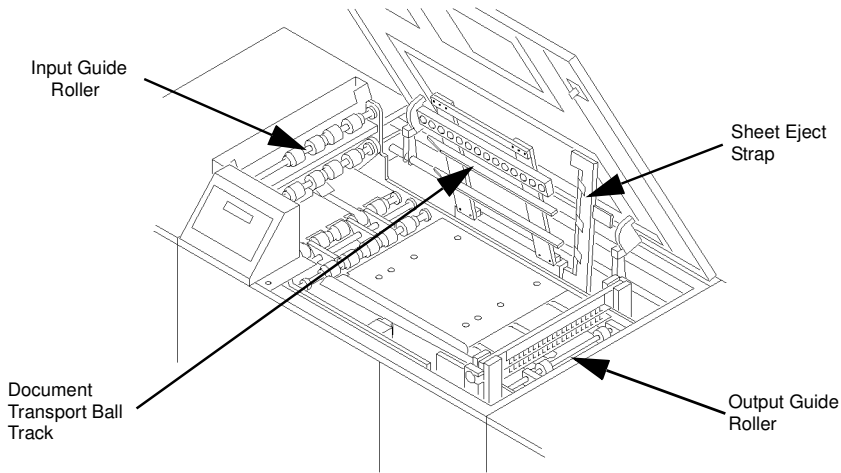


Figure 3-2: The Internal Paper Path Components

- 5 Remove the Output Guide Roller assembly, as shown in Figure 3-2 and clear any paper that may be jammed in that area.
- 6 Reinstall the Output Guide Roller assembly and ensure that all assemblies are locked down. Then, close the Top Covers.
- 7 Open the Bypass Stacker Top Cover and clear any paper that might be jammed in that area.


- 8 If the PowerPunch is set up in **Cycle Up** mode, press the **Stop/Reset**



button and the job will restart automatically.

- 9 If the PowerPunch is set up in **Online** mode, press the **Stop/Reset**



button to clear the error message and then press **Start** .

Error Messages

From the PowerPunch

The following is a listing of Punch-related error messages that could appear on the PowerPunch Control Panel Display screen. Also included are a description of the possible causes and the resolution for each problem.

Error Message	Possible Cause	Resolution
Punch Covers Open	The Interlock Switch under one or both of the Punch covers is not actuated.	Open and close both Punch covers and ensure that they are securely closed. If the problem persists, call your GBC or Océ Service Representative.
Punch Left Door open/ Punch Mid Door open/ Punch Right Door open	The Interlock Switch behind the Punch Door that corresponds to the error message is not actuated.	Open and close the appropriate door, corresponding to the error message, and ensure that it is securely closed. If the problem persists, call your Océ Service Representative.
Stacker Cover open	The Interlock Switch under the Stacker's Top Cover is not actuated.	Open and close the Stacker's Top Cover and ensure that it is securely closed. If the problem persists, call your Océ Service Representative.
Stacker Door open	The Interlock Switch behind the Stacker Door is not actuated.	Open and close the Stacker Door and ensure that it is securely closed. If the problem persists, call your Océ Service Representative.

Figure 3-3: Punch-Generated Error Messages


Error Message	Possible Cause	Resolution
Jam Entrance Sensor	<ol style="list-style-type: none"> 1. There is a sheet of paper blocking the Entrance Sensor (first sensor from the left side of the machine). 2. The Entrance Sensor and/or its Reflector may be dirty. 3. The Side Guide may be adjusted too tight for the paper, cover stock, or tab stock. 	<ol style="list-style-type: none"> 1. Lift up the Input Track Ball assembly and remove the paper. 2. Clean the Entrance Sensor and reflector, using Isopropyl alcohol and a clean, lint-free cloth. If the problem persists, call your Océ Service Representative. 3. Ensure that the Side Guide is not too tight. Perform the adjustment in Chapter 2 (Setting the Side Guide). If the problem persists, call your Océ Service Representative. 4. Press Stop/Reset  button to clear error message. Follow printer jam clearance procedure and resume the job.

Figure 3-3: Punch-Generated Error Messages


Error Message	Possible Cause	Resolution
Jam Document Transport Sensor 1	<ol style="list-style-type: none"> 1. There is a sheet of paper blocking the first Document Transport Sensor (second sensor from the left). 2. The Document Transport Sensor 1 and/or its Reflector may be dirty. 3. The Side Guide may be adjusted too tight for the paper, cover stock, or tab stock. 	<ol style="list-style-type: none"> 1. Lift up the Document Transport Track Ball assembly and remove the paper. 2. Clean the Document Transport Sensor 1 and reflector, using Isopropyl alcohol and a clean, lint-free cloth. If the problem persists, call your Océ Service Representative. 3. Ensure that the Side Guide is not too tight. Perform the adjustment in Chapter 2 (Setting the Side Guide). If the problem persists, call your Océ Service Representative. 4. Press Stop/Reset  button to clear error message. Follow printer jam clearance procedure and resume the job.

Figure 3-3: Punch-Generated Error Messages


Error Message	Possible Cause	Resolution
Jam Document Transport Sensor 2	<ol style="list-style-type: none"> 1. There is a sheet of paper blocking the second Document Transport Sensor (third sensor from the left). 2. The Document Transport Sensor 2 and/or its Reflector may be dirty. 3. The Side Guide may be adjusted too tight for the paper, cover stock, or tab stock. 	<ol style="list-style-type: none"> 1. Lift up the Document Transport Track Ball assembly and remove the paper. 2. Clean the Document Transport Sensor 2 and reflector, using Isopropyl alcohol and a clean, lint-free cloth. If the problem persists, call your Océ Service Representative. 3. Ensure that the Side Guide is not too tight. Perform the adjustment in Chapter 2 (Setting the Side Guide). If the problem persists, call your Océ Service Representative. 4. Press Stop/Reset  button to clear error message. Follow printer jam clearance procedure and resume the job.

Figure 3-3: Punch-Generated Error Messages



Error Message	Possible Cause	Resolution
Jam Punch Sensor	<ol style="list-style-type: none"> 1. There is a sheet of paper blocking the Punch Sensor (fourth sensor from the left). 2. The Punch Sensor and/or its Reflector may be dirty. 3. The Side Guide may be adjusted too tight for the paper, cover stock, or tab stock. 	<ol style="list-style-type: none"> 1. Lift up the Sheet Eject Strap assembly and remove the paper. 2. Clean the Punch Sensor and reflector, using Isopropyl alcohol and a clean, lint-free cloth. 3. Ensure that the Side Guide is not too tight. Perform the adjustment in Chapter 2 (Setting the Side Guide). If the problem persists, call your Océ Service Representative. 4. Press Stop/Reset  button to clear error message. Follow printer jam clearance procedure and resume the job.
Jam Punch Exit Sensor	<ol style="list-style-type: none"> 1. There is a sheet of paper blocking the Punch Exit Sensor at the Stacker's input. 2. The Punch Exit Sensor and/or its Reflector may be dirty. 	<ol style="list-style-type: none"> 1. Lift up the Stacker Top Cover and remove the paper. 2. Clean the Punch Exit Sensor and reflector, using Isopropyl alcohol and a clean, lint-free cloth. If the problem persists, call your Océ Service Representative. 3. Press Stop/Reset  button to clear error message. Follow printer jam clearance procedure and resume the job.

Figure 3-3: Punch-Generated Error Messages





Error Message	Possible Cause	Resolution
Please Empty Stacker	1. The Stacker is full. 2. The Stacker Tray was left in the DOWN position.	1. Press the appropriate Raise/Lower Stacker  button (No. 1 or No. 2) to lower the Stacker Tray. Then, unload the Stacker. 2. Press the appropriate Raise/Lower Stacker  button (No. 1 or No. 2) to raise the Tray to its Home position. If the problem persists, call your Océ Service Representative.
Please Check Chip Box	Each time the PowerPunch is turned ON this message will appear. It will also appear after 100,000 completed punches.	Open the Punch Right Door, and leave it open for at least 5 seconds before closing it. The total count will not be affected by opening the Punch Right Door.
Stacker Upper Switch ??	The Stacker's Upper Switch did not release during an emptying operation.	Lower and raise the Stacker Tray several times, using the appropriate Raise/Lower Stacker  button (No. 1 or No. 2). Then, press the Stop/Reset  button. If the problem persists, call your Océ Service Representative.

Figure 3-3: Punch-Generated Error Messages

Error Messages

From downstream devices

The following is a listing of error messages that could appear on the PowerPunch Control Panel Display screen generated by a downstream device. Also included are a description of the possible causes and the resolution for each problem.



Note: These messages will only be displayed when the PowerPunch is set up in **Bypass** mode. If all messages are displayed one after the other, make sure that the downstream device is turned on and that the communications cable (DFA Cable) is properly connected.

Error Message	Possible Cause	Resolution
Next Device Not Ready	The downstream device from the PowerPunch is not ready to receive paper.	Check the downstream device for further information.
Next Device Faulted	The downstream device from the PowerPunch is in a Fault condition and is not ready to receive paper.	Check the downstream device for further information and fault-resolutions.
Next Device Full	The downstream device from the PowerPunch is in a Full condition and is not ready to receive paper.	Check the downstream device for further information.

Figure 3-4: Downstream device - Generated Error Messages

Chapter 4

Maintenance

Cleaning the PowerPunch

Cleaning the PowerPunch

Your PowerPunch is designed as a high-speed, inline production Punch that requires only a minimal amount of attention from the operator. But, because it is a production machine and because it handles and punches paper, we recommend a light cleaning of the paper path components periodically, to remove accumulations of paper dust, paper chips and toner. GBC recommends the following operator maintenance practices.

When to Clean

The following is based on a printing house that operates one to three shifts a day.

Usage	Cleaning Intervals
Heavy usage (continuous - 8 hours per shift)	after each shift
Medium Usage (intermittent - 4 hours per shift)	after every 2 shifts
Light usage (intermittent - 2 to 3 hours per shift)	after every 3 shifts

In effect, the PowerPunch should be cleaned after every 8 continuous hours of operation.



Note: In a very busy shop with significant paper dust in the air, the PowerPunch may have to be cleaned more frequently - for example, after every 6 continuous hours of operation.

What to Use

GBC recommends using only 90% Isopropyl alcohol and a clean, lint-free cloth. 90% Isopropyl alcohol is available from any local pharmacy.



CAUTION: To prevent possible damage to the machine, use only 90% Isopropyl alcohol. Do **not** use film remover or any other type of cleaning solvent.

What to Clean

A good rule for cleaning that is easy to remember is to follow the paper path through the Punch and Bypass Stacker, from left to right. The cleaning procedures are as follows:



WARNING: Switch OFF (O) the Main Power Switch before performing this procedure.

Cleaning the Punch

- 1 Open the Top Covers on the PowerPunch, as shown in Figure 4-1.
- 2 Open (lift) the Input Ball Tracks, as shown in Figure 4-1. Clean the green belt under the three ball tracks, the Sensor Reflector and the Sensor (under the hole in the base plate) with Isopropyl alcohol and a clean, lint-free cloth. Check also for accumulations of paper dust or toner under the base plate.

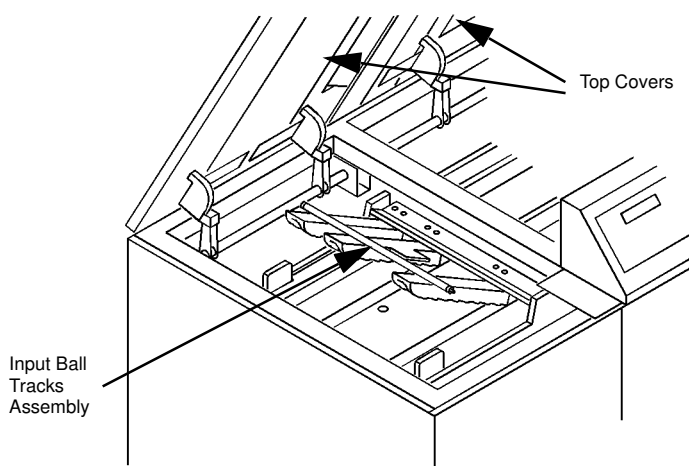


Figure 4-1: The Top Covers and Input Ball Tracks

- 3 Open (lift) the Input Guide Roller assembly, as shown in Figure 4-2. Clean the rollers with Isopropyl alcohol and a clean lint-free cloth. Check also for accumulations of paper dust or toner on the base plate.
- 4 Open (lift) the Document Transport Ball Track assembly, as shown in Figure 4-2. Clean the green belt under the ball track, both Sensor Reflectors and both Sensors (under the holes in the base plate) with Isopropyl alcohol and a clean lint-free cloth. Check also for accumulations of paper dust or toner on the base plate.

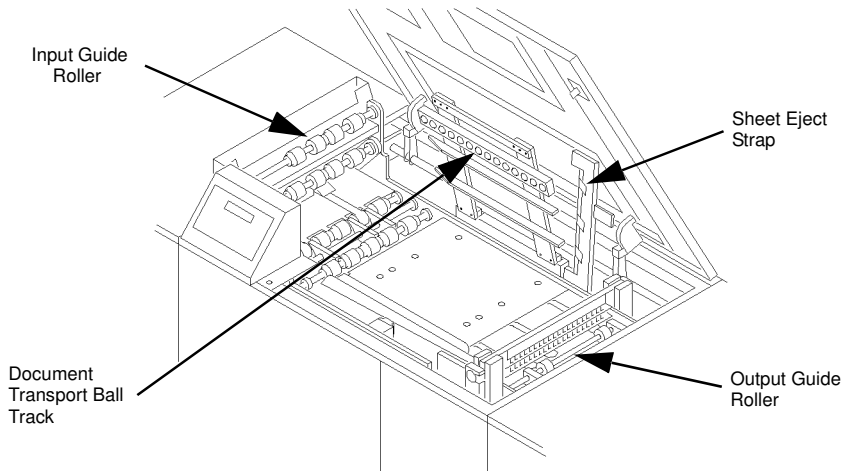


Figure 4-2: The Internal Paper Path Components

- 5 Open (lift) the Sheet Eject Strap assembly. Clean the green belts under the straps, the Sensor Reflector and the Sensor (under the hole in the base plate) with Isopropyl alcohol and a clean lint-free cloth. Clean the Side Guide and the Infeed Guide, as shown in Figure 4-3. Check also for accumulations of paper dust or toner on the base plate.

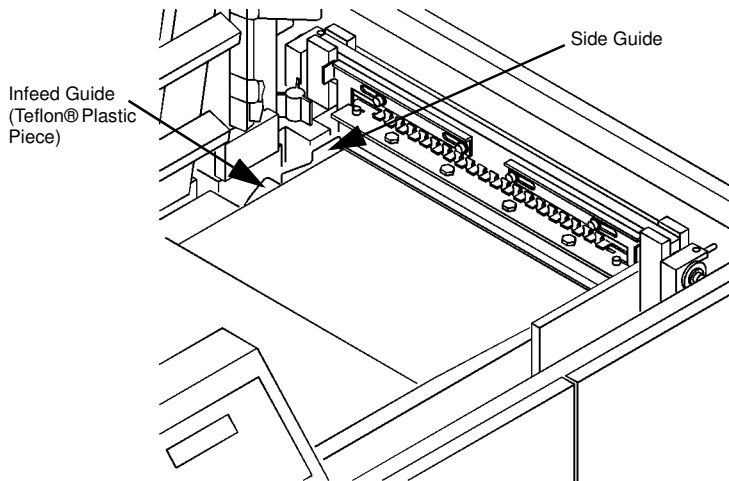


Figure 4-3: The Side Guide and Infeed Guide

- 6 Remove and clean the Output Guide Roller assembly and the red rollers under the Output Guide Roller assembly. Clean the rollers with Isopropyl alcohol and a clean lint-free cloth. Check also for accumulations of paper dust or toner on the base plate.
- 7 Close (lower) all assemblies and reinstall the Output Guide Roller assembly when finished. Close the Top Covers and resume normal operation.

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Cleaning the Stacker

- 1 Open the Stacker Top Cover, as shown in Figure 4-4.
- 2 Clean the two orange O-rings on the Roller Assembly, as shown in Figure 4-4, using only 90% Isopropyl alcohol and a clean lint-free cloth.
- 3 Clean the large O-rings that transfer the drive to the rollers, using only 90% Isopropyl alcohol and a clean, lint-free cloth.

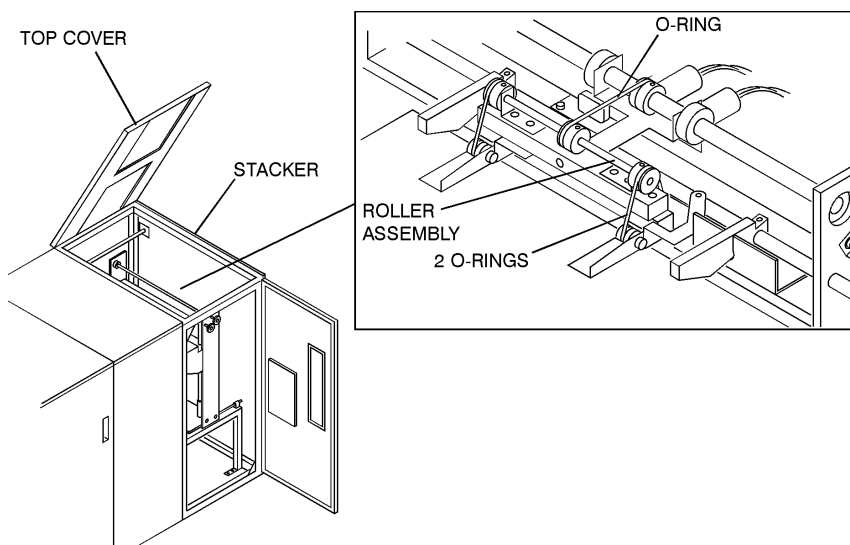


Figure 4-4: Cleaning the Stacker

Cleaning the Bypass

- 1 Open the Stacker Top Cover.
- 2 Clean the three red feed rollers and the green Flat Belt, as shown in Figure 4-5, using only 90% Isopropyl alcohol and a clean lint-free cloth.
- 3 Clean the Sensor, as shown in Figure 4-5, using only 90% Isopropyl alcohol and a clean lint-free cloth.

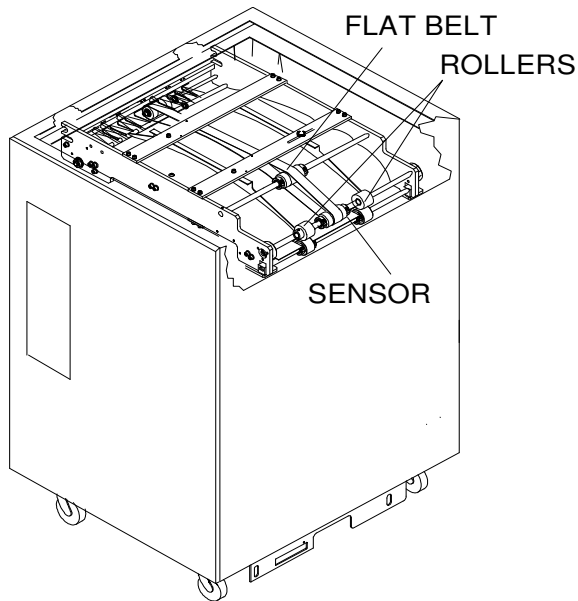


Figure 4-5: Cleaning the Bypass

Glossary

G

Glossary of Common PowerPunch Terms



Glossary of Common PowerPunch Terms

The following is a glossary/definition of terms that are common to the GBC PowerPunch and all related inline finishing devices.

Backgauge - an adjustable assembly that serves as a stop for the paper when it arrives under the Punch Die. The adjustment of the Backgauge determines the distance from the long edge of the paper to the punched holes. This adjustment applies only when a GBC Cerlox Punch Die set is in use. For all other die sets, the Backgauge is set to its extreme minimum position.

Backgauge Adjustment Knob - a knob that is used to adjust the Backgauge assembly described above.

Centering the Punch - an adjustment procedure that is used to ensure that the punched holes are centered (side to side) on the paper.

Control Panel - the central control area for the PowerPunch and any stackers that may be inline with the Punch. It consists of all control buttons and a LCD display screen.

Diagnostics - a set of test routines used by the service representative to troubleshoot the PowerPunch.

Die, or Die Set - the tool steel assembly that punches the holes in the paper.

Die Lock Knob - the knob that is used to lock down or release the Die Set. You would use this release to change die sets.

Die Pins - the actual cutting tools that are part of the Die Set. Each Die Pin cuts a hole in the paper. A die set that punches several holes has several die pins. Also, these pins are individually removable to adjust for different widths of paper, or for replacement, in case one becomes damaged.

Document Transport Ball Track Assembly - an assembly that is located in the center of the paper path through the Punch. It consists of rails with large plastic ball bearings under which the paper passes with minimal friction. The Document Transport Ball Track Assembly is hinged and can be opened (lifted) in the event of a paper jam. This assembly also contains reflectors for the two sensors installed in that area of the paper path.

Edge Guide Adjustment Knob - the knob that is used in centering the Punch to ensure that the holes are centered (side to side) on the paper.

Finishing Device - any device that is installed inline with a printer to process and finish documents. The PowerPunch is a finishing device. The Stacker is another example of a finishing device.

Infeed Guide - a small, contoured paper guide made of Mylar® or Teflon® plastic and located under the Sheet Eject Strap Assembly, next to the Side Guide.

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Inline - same as "in series with", or directly behind another device. The PowerPunch is inline with the printer and the Stacker, in turn, is inline with the PowerPunch.

Misfeed - a condition that occurs when paper becomes folded or wrinkled and becomes stuck while feeding, thereby causing a paper jam.

Offline - when finishing devices are not being fed or controlled by the printer in a live production run. When the PowerPunch and Stacker are being fed manually, they are in offline mode. Many setup and error recovery operations are done offline.

Offset Stacked - an automatic machine method of stacking documents in a staggered, side-to-side fashion so that each individual document (e.g., book or manual) is separated from the next.

One-Sided - a printing job that uses only one side of the paper, also called Single-Sided.

Online - the opposite of Offline; when the finishing devices are being fed and controlled automatically by the printer in a live production run.

Operator - the person responsible for the operation of the printer and finishing devices. The Operator starts production jobs and sees them through to completion.

Pressure Bar Release Levers - two levers that are used to lock or release the Pressure Bar, a machined steel bar located on top of the Die Set. You would remove the Die Set from the machine and release the Pressure bar to access and remove die pins, or change damaged pins.

Printer - the machine that actually produces the documentation (prints the books) and controls the finishing devices.

Print Queue - a set of values or system configuration parameters in the printer's operating system that communicates input and output information from the printer to a finishing device, such as the PowerPunch. The System Administrator can set up or change these values from the keyboard.

Profile - similar to Print Queue above; a set of values or system configuration parameters in the printer's operating system that communicates input and output information from the printer to a finishing device, such as the PowerPunch. Each model of printer has its own, unique profile.

Punch - a finishing device, such as the PowerPunch, that is used to punch binding holes in printed documents.

Punch Arm Retaining Levers - two levers that are used to lock or release the Die Set assembly from the machine. You would release these levers to change die sets.

Punch Cover - refers to the two top covers on the PowerPunch. The covers can be opened to allow access to the paper path through the Punch. The small top cover to the left, when opened, exposes the Input Ball Track assembly and the paper entryway into the machine. The large top cover next to it is opened to access the remainder of the paper path and associated components.

Right Punch Door - the narrow door in the front of the Punch cabinet that, when opened, allows access to various adjustment knobs and to the Slug (punched paper chaff) Bin, which must be emptied periodically.

Setting the Backgauge - an adjustment procedure that is done to ensure that the margin between the leading edge of the paper and the punched holes is correct.

Setting the Side Guide - an adjustment procedure that is done to ensure that each sheet of paper maintains registration as it passes through the Die Set to be punched.

Sheet Eject Strap Assembly - an assembly consisting of a steel rail and three spring steel straps, that is used to tension the paper just before it enters the Die Set. The Sheet Eject Strap assembly is hinged and can be opened to clear paper jams.

Side Guide - a small, contoured paper guide made of sheet metal and located under the Sheet Eject Strap Assembly, to the right of the Infeed Guide. The Side Guide is adjustable and is used in *Setting the Side Guide*, described above.

Stacker - the finishing device that follows the PowerPunch. The Stacker receives the punched output from the PowerPunch and stacks it on an internal tray that will hold 2500 sheets of paper. When the Stacker Tray is full, the operator removes the stacked documents and generally transfers them to a separate area for offline binding.

Stacker Tray - a tray internal to the Stacker, as described above.

System Administrator - the person who is responsible for setting up and maintaining the printer's operating system. The System Administrator also installs new software, when necessary.

Two-Sided - a printing job that uses both sides of the paper; also called Double-Sided, or Duplex.