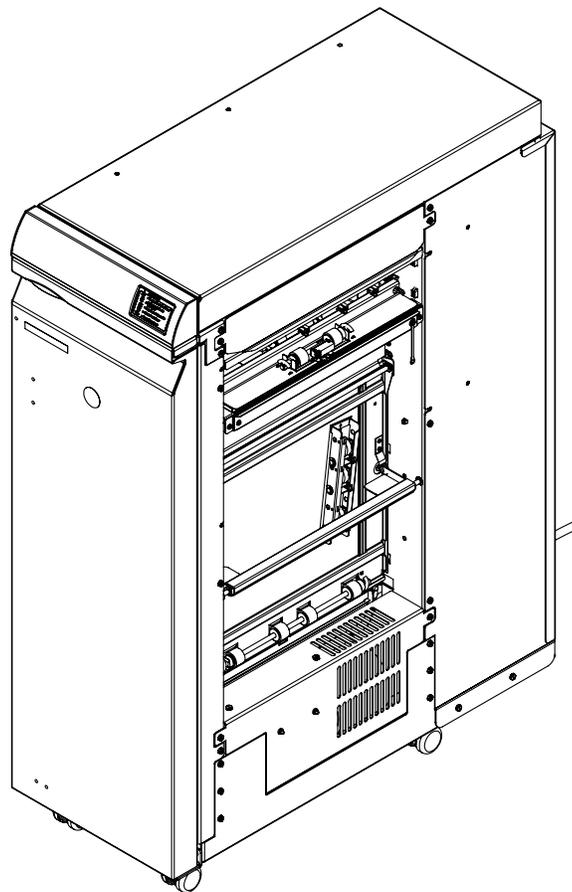




# AdvancedPunch



## Technical Service Manual

## **Copyright Notice**

**GBC**

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# Preface

## 1. Safety

These symbols are used in this documentation alert you to danger or important information.



---

**Warning:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious Injury.

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**Warning:** Risk of electrical shock. This warning statement indicates situations where there is a risk of death by electric shock.

---



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**Caution:** This notice indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

---



Certain components in this product are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

---

## 2. Introduction

This service manual is provided for use by an authorized service technician for the repair and maintenance of the Advanced Punch.

The Advanced Punch is an innovative, labor saving solution for punching paper in-line and includes the following design features:

- Maximum productivity saver with punching in-line at the speed of the printer! Does not slow up or stop the print system.
- Quick-change die sets that are self-latching without tools or levers.
- Advanced Punch die sets are available in all of the most common hole patterns and include an Identifying Label providing user with the hole pattern and name.
- Convenient storage area for three extra Die Sets located above the sheet bypass.
- Accurate hole punching with consistent alignment.

With each Advanced Punch, the customer receives a user manual. They are encouraged to keep this manual for future reference. The information contained in the user manual is also helpful to the service technician. Please refer to it for detailed information regarding dies sets, operation or specifications. You will find a copy of the User Guide at the end of section 8, Installation and Setup.

## 3. Setting the Right Expectations

The following excerpts are copied from sales and marketing literature. This customer expectation information is helpful for the service technician.

### 3.1 Product Positioning

The Advanced Punch provides a flexible, cost effective punching solution for light to medium level production oriented customers.

- Designed for customers that have the need to punch their documents at a maximum of 60-70% of their overall workflow.
- Recommended punching limit to 200K sheets per month. (600k sheets in bypass mode)
- Die Sets will decrease in performance over time based on the types of stocks and weights that are being punched.
- The expected life of a dieset is 500K punches. However, if paper stock punched is typically 20 lb. bond, then up to 2 million punches can be achieved.
- Should be regarded as a long-term supply item.

### 3.2 Long Edge Feed (LEF) Only

The Advanced Punch is designed to punch LEF only. **No exceptions.** Attempting to punch a sheet size other than LEF will cause a paper jam.

- Use a colored sheet insert (instead of the tab) in the job workflow for easier tab insertion after the job has been run.

### 3.3 Die Sets XC / Letter



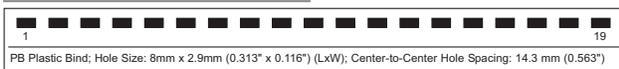
**AdvancedPunch**



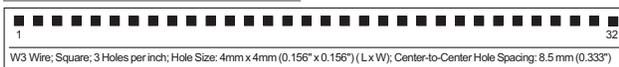
#### 4. PUNCHING PATTERNS

The AdvancedPunch uses a variety of easily interchangeable die sets that allow you to punch documents in line for several different binding styles. By selecting the appropriate die set, you can use your AdvancedPunch to punch documents in any of the binding styles indicated in Table 1.

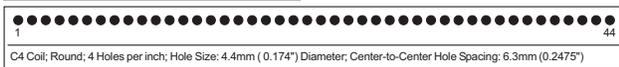
For Plastic Comb Binding choose from:



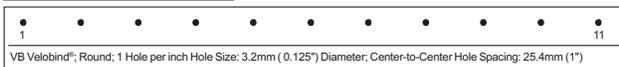
For Twin Loop™ Binding choose from:



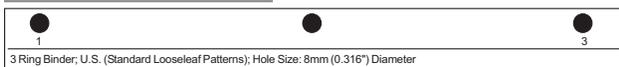
For Color Coil™ Binding choose from:



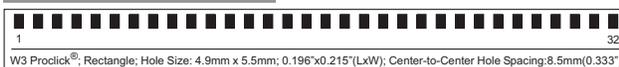
For Velo® Bind choose from:



For Looseleaf Binding choose from:



For Proclick® Binding choose from:



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Graphics do not represent actual punch pattern dimensions or spacing.

Xerox Part Number:

XEROX PB-19H	008R13066
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XEROX W3-32H-SQ	008R13069
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XEROX W2-21H-SQ	008R13068
-----------------	-----------

XEROX C4-44H	008R13067
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XEROX VB-11H	008R13070
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XEROX 3H	008R13072
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XEROX PC-32H	008R13071
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### 3.4 Die Sets XE / A4



**AdvancedPunch**



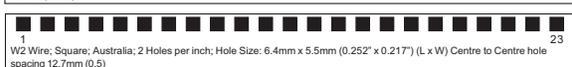
#### 4. PUNCHING PATTERNS

The AdvancedPunch uses a variety of easily interchangeable die sets that allow you to punch documents in line for several different binding styles. By selecting the appropriate die set, you can use your AdvancedPunch to punch documents in any of the binding styles indicated in Table 1.

##### For Plastic Comb Binding:



##### For Twin Loop™ Binding:



##### For Loose-leaf Binding:



##### For Velo® Binding:



##### For Colour Coil™ Binding:



##### ProClick® A4 34-Hole Binding:



Graphics do not represent actual punch pattern dimensions or spacing.

Please note that each punching style listed above requires a separate die set for the AdvancedPunch. The AdvancedPunch can hold up to four Die Sets in it's cabinet (one in the operating slot and three in the storage area).

To purchase additional or replacement Die Sets, contact your authorized sales representative.

You cannot use die sets for the AdvancedPunch..

You can confirm the attached die set in the printer/copier.

##### Xerox Part Number:

XEROX PB-21H, A4	498K19440
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XEROX PB-20H, A4	498K19340
------------------	-----------

XEROX W3-34H-RND, A4	498K19370
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XEROX W2-23H-RND, A4	498K19360
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XEROX W3-34H-SQ, A4	498K19390
---------------------	-----------

XEROX W2-23H-SQ, A4	498K19380
---------------------	-----------

XEROX 4H-8mm, A4	498K19430
------------------	-----------

XEROX 2H-8mm, A4	498K19420
------------------	-----------

XEROX VB-12H, A4	498K19400
------------------	-----------

XEROX C4-47H, A4	498K19350
------------------	-----------

XEROX PC-34H, A4	498K19410
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# **Section 1**

## **Maintenance**

This section contains service call initial action procedures, cleaning and maintenance procedures, and service call final action procedures.

### **1.1 Initial Service Action**

At the start of every service call, you should perform the following.

1. If called for a problem, determine the exact nature of the service complaint. Determine the paper type and quality, especially as it relates to curl and identify if any media changes correlate with the emergence of the customer issue.
2. Estimate the cycle life on the Die Sets. Determine if any of the Die Set life cycles have exceeded 500k sheets (cycles).
3. Determine if the customer uses only one Die Set pattern (style) or if they switch between different patterns.
4. Determine the last time the Die Set was lubricated.
5. Determine the date of the last preventative maintenance performed on the punch system.
6. Vacuum all paper path, punch, dust box area of scrap/debris.
7. Clean backgauge solenoid per instructions given in section "Back Gauge Solenoid Inspection and Cleaning" on page 1-19.

## 1.2 Paper Jam Service Action

To clear a paper jam, first press the **Stop** button on the printer and then check the printer screen to see the area of the paper jam.

If the paper jam is in the printer or finisher only, follow the information on the screen to clear the paper jam. If the screen shows a paper jam in the punch, follow this sequence.

### To clear a paper jam in the punch:

1. Open the punch cabinet door.
2. Ensure the Chip Bin is not overflowing.
3. Turn punch knob [1] anticlockwise until the punch is in its home position [2].

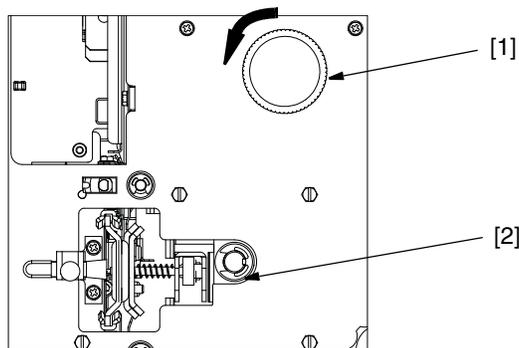


Figure 1.1 Setting the Punch to Its Home Position.

4. Open the Bypass panel cover [1] and check for obstructions in the Bypass [2].
5. Ensure the Entrance Guide is clear [3].
6. Ensure the Diverter is clear [4].

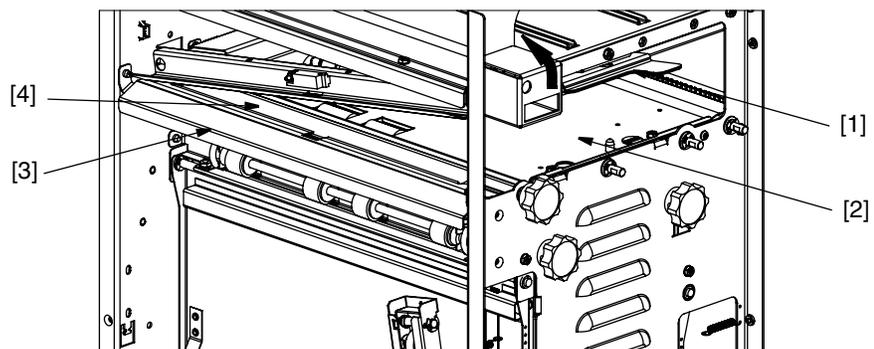


Figure 1.2 Clearing The Bypass.

7. Open the entrance paper Aligner panel latch [1] and clear obstructions in the Aligner.
8. Open the exit paper Aligner panel latch [2] and clear obstructions in each Aligner.

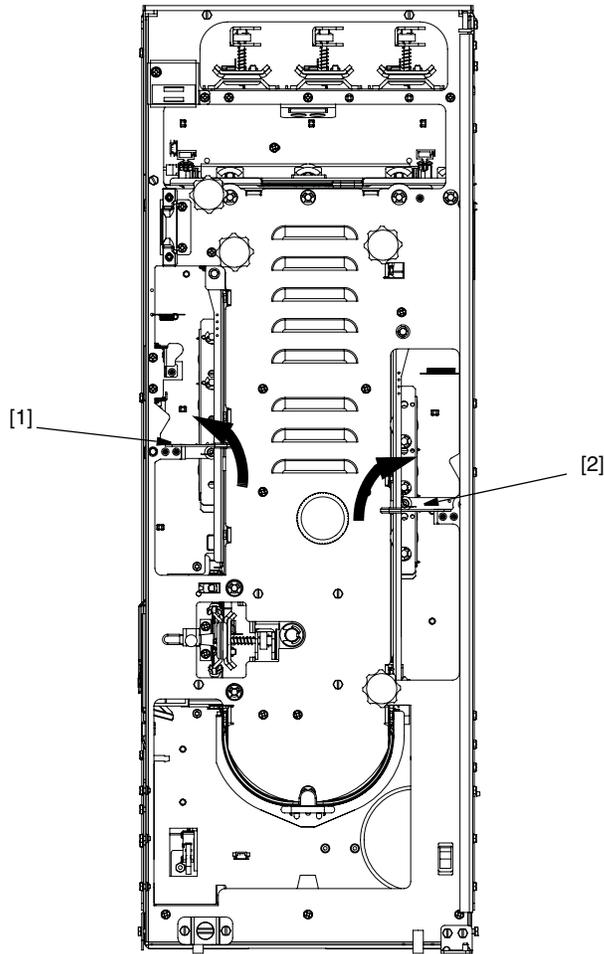


Figure 1.3 Checking Paper Path Through the Punch.

9. Open the bottom U-channel by pressing the lever in [1] and lower the U-channel [2] and clear the path.

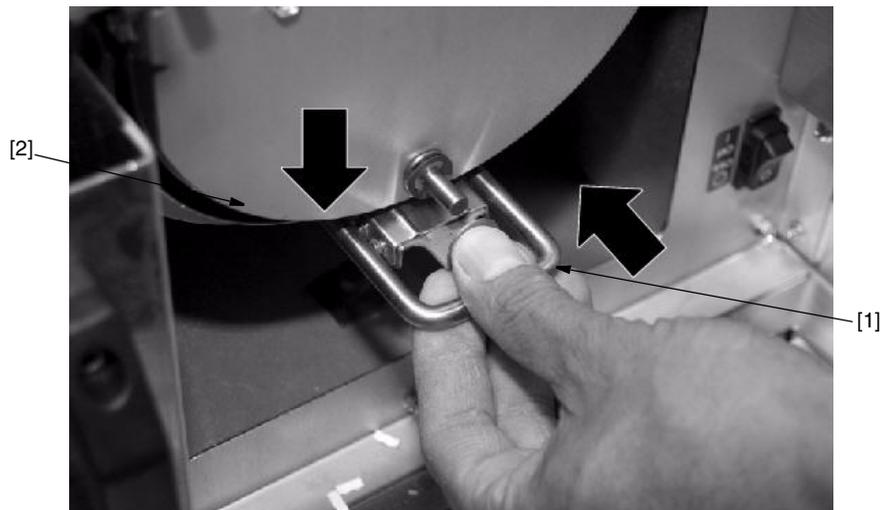


Figure 1.4 Opening the Bottom U-Channel

10. When all the paper is cleared, close the U-channel, Aligner Panels, and Bypass.
11. Shut the cabinet door.
12. Verify on the printer screen that the paper jam has been cleared. If not, repeat the above steps.
13. Press the resume button on the printer. The printing operation should resume.

## 1.3 Die Set Service

The Die Set assembly is not serviceable other than inspection and periodic lubrication.

If a Die Set is at its end of life, it will tend to cause paper jam due to hanging chips. This is a result of die plate wear, and not pin wear, which cannot be corrected. When this occurs, the Die Set should be replaced with a new one.

### 1.3.1 Die Set Life Expectancy

The Advanced Punch Die Sets have a minimum life expectancy of 500K cycles (sheets of paper punched). With periodic lubrication and optimum paper types, life can exceed this number. Access GP6 #1 to read the counter for the GBC module. Variables that affect life expectancy:

- Failure to follow the lubrication schedule or using the incorrect lubricant
- Variety and types of paper being punched
- Cover stocks being punched
- Length of the average job
- Other environmental conditions

### 1.3.2 Die Set Components

The Advanced Punch uses two types of Die Sets.

**Table 1.1 Die Set Types**

Type	Description	Bindery Style
No Felt Oiler Pad	—	3H, 4H, 5H, 7H, VB (VeloBind)
Encircled Felt Oiler Pad	Felt oiler pad surrounds the punch pins	PB 19H, 20H and 21H (Plastic Bind), PC 32H and 34H (Pro Click), C4 44H and 47H (Plastic Coil)

### 1.3.2.1 Serviceable Components

- Punch pins [1]
- Felt pad (on some Die Sets) [2]

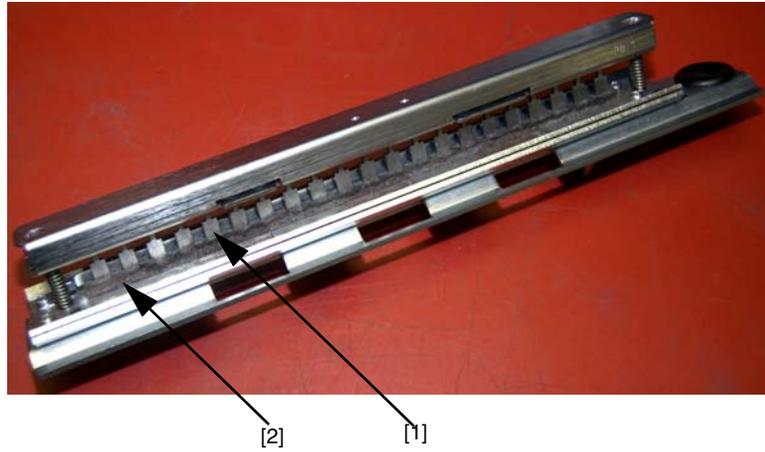


Figure 1.5 Die Set Serviceable Components.

### 1.3.3 Die Set Inspection

#### Maintenance Schedule

Inspect every 500K cycles.

Replace as needed.

#### Procedure

Set the Die Set on a table and press the top plate straight down at both ends at the same time [1] and look for a smooth operation. The top plate and pins should retract fully when you release.

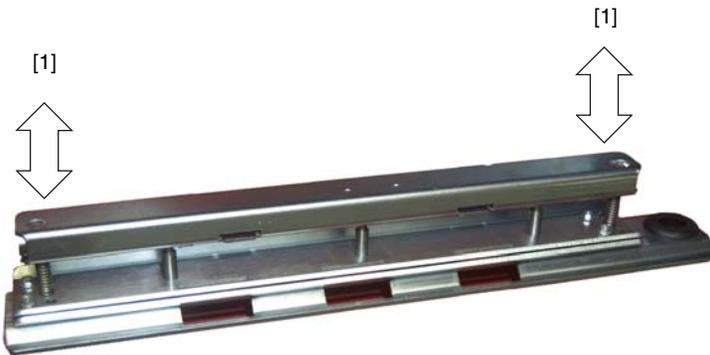


Figure 1.6 Check For Free Movement.

Reinstall the Die Set into the punch and run several sheets of the customer's paper through the punch. Inspect the holes.

- Holes should be clean and even with no tearing or frayed edges.
- Holes should be punched completely, leaving no chip attached.
- Holes should be straight (no skew) and evenly spaced from the edge of the paper and aligned. See "Idler Roller Inspection and Cleaning" on page 1-20.

### 1.3.4 Die Set Lubrication

#### Maintenance Schedule

Inspect every 500K cycles.

Lubricate Die Set pins every 50K cycles.

#### Procedure

Inspect the punch pins for signs of wear or mis-alignment. Periodic lubrication extends the life of the Die Sets.

The customer or operator can perform this maintenance between technician inspections.



Figure 1.7 Inspect Punch Pins.

#### To lubricate Die Set pins that do not have felt pads:

1. Depress the Die Set so that the pins protrude from the bottom plate.
2. Apply a drop of high quality machine oil to the end of each pin.
3. Wipe clean, leaving a light coat of oil on them.

#### To lubricate Die Set pins that have felt pads:

- Lubricate with a high quality machine oil.
- Apply oil lightly along the length of the pad [1], but do not over saturate.
- Do not use spray lubricants because they tend to dry up quickly and leave a sticky residue.

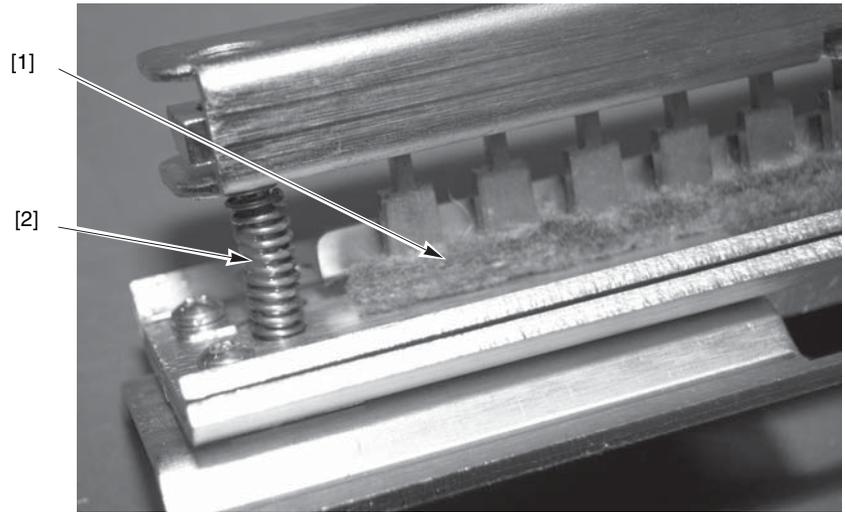


Figure 1.8 Die Set Lubrication Points.

## 1.4 Inspection, Cleaning, and Lubrication

If operating properly, the Advanced Punch will punch the same types of copy paper and cover materials handled by the printer and run at the same speed.

Hole quality will vary between different grades of paper.

The following maintenance should be performed according to the schedule.

### AdvancedPunch Maintenance Schedule

Note: cycles = sheets of paper punched, not impressions.

**Table 1.2 Customer Maintenance**

Area/Unit	Period	See:	Measures	Remarks
Punch die pins	50K cycles	Page 1-8	Lubricate	Oil the punch pins

**Table 1.3 Periodic Maintenance**

Area/Unit	Period		Measures	Remarks
Aligner belt (green belt)	750K cycles	Page 4-20	Inspect and clean	Alcohol & rag
Aligner idler rollers	750K cycles	Page 1-16	Inspect and clean	Alcohol & rag
Aligner latching mechanisms	750K cycles	Page 1-25	Inspect	
Back gauge mechanism	750K cycles	Page 1-19	Inspect and clean	Vacuum
Base	750K cycles	Page 1-12	Clean	Vacuum
Die guide	750K cycles	Page 1-13	Clean	Vacuum
Door closing latch	750K cycles	Page 1-14	Inspect	
Drive rollers	750K cycles	Page 1-24	Inspect and clean	Alcohol & rag
Hole alignment	750K cycles	Page 1-9	Inspect	
Idler rollers	750K cycles	Page 1-20	Inspect and clean	Alcohol & rag
Optical sensors	750K cycles	Page 1-26	Clean	Air
Paper path, aligner panels	750K cycles	Page 1-15	Inspect and clean	Alcohol & rag
Paper path, bypass	750K cycles	Page 1-28	Inspect and clean	Alcohol & rag
Paper path, punch	750K cycles	Page 1-29	Inspect and clean	Alcohol & rag
Roller energy drive	750K cycles	Page 4-35	Inspect	
Timing belts	750K cycles	Page 1-31	Inspect	
Brake, punch drive	3,000K cycles	Page 4-60	Inspect and clean	
Clutch, Punch Drive	3,000K cycles	Page 4-55	Inspect and clean	
Punch drive cams	3,000K cycles	Page 4-54	Lubricate	Grease

**Table 1.4 Replacement Maintenance**

Area/Unit	Period		Measures	Remarks
Die set	500K cycles	Page 1-5	Replace as needed	
Back gauge mechanism	3,000K cycles	Page 4-36	Replacement	P/N 001N00516

### 1.4.1 External Cleaning

The cover may be cleaned with a soft cloth moistened with mild detergent and warm water.

Do not use chemical cleaners or solvents as these may have a harmful effect. Use detergent sparingly to avoid contact with electrical components.



---

**Warning:** Make sure you disconnect the Advanced Punch from its power source before cleaning. Failure to observe this warning could result in death or serious injury.

---

### 1.4.2 Internal Cleaning

Occasionally remove the covers and remove paper dust and chips. Paper dust can accumulate throughout the punch including around the motor and other electrical components. Use a vacuum cleaner if possible. A small paintbrush can also be used but extreme care should be used around electrical components.

Non-electrical components may be cleaned with alcohol, an approved cleaner, or a soft cloth moistened with mild detergent and warm water. Rollers can be cleaned with alcohol.



---

**Warning:** Make sure you disconnect the Advanced Punch from its power source before cleaning. Failure to observe this warning could result in death or serious injury.

---

### 1.4.3 Operational Inspection

Make sure the punch operates smoothly and produces the desired holes in the customer's paper.

### 1.4.4 Internal Inspection

Whenever the cover has been removed for corrective maintenance, visually inspect for defects and problems such as damaged components, loose screws or nuts, abraded wire insulation, loose terminals, etc. Correct any problems before returning the machine to service.

## 1.4.5 Base Cleaning

### Maintenance Schedule

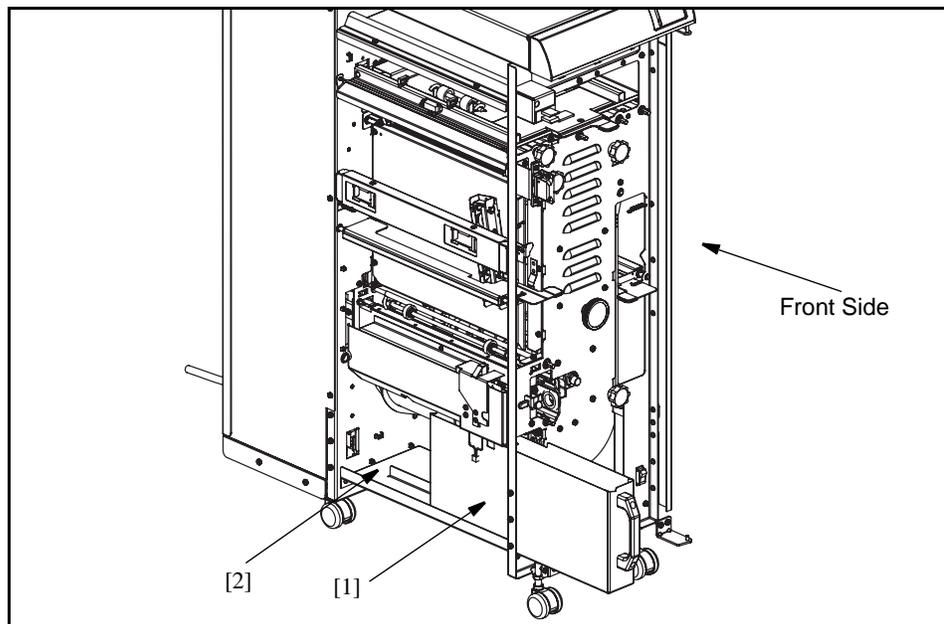
Clean every service call.

### Procedure

Chips and paper dust falls to the bottom of the punch. Clean with a vacuum cleaner each time the machine is serviced. The customer can also do this between the technician's visits.

### 1.4.5.1 Chip Bin

Remove the Chip Bin and empty. Vacuum out paper chips and dust from the Chip Bin tray [1], especially at the back around the Chip Bin micro switch [2].



## 1.4.6 Die Guide Cleaning

### Maintenance Schedule

Clean every 750K cycles.

### Procedure

Remove the Die Set and clean the guide [1] with a vacuum cleaner.

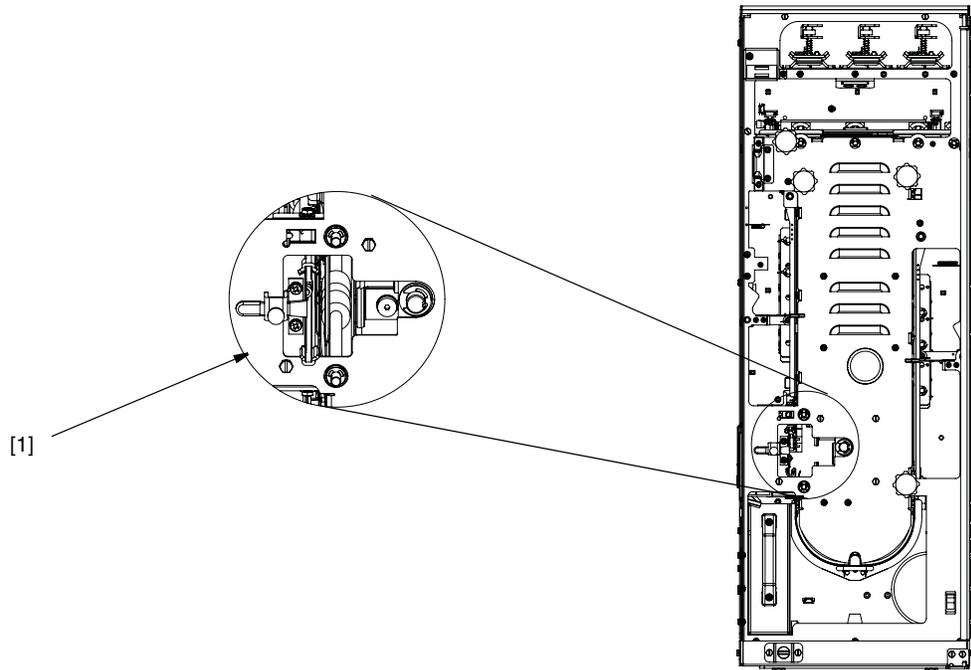


Figure 1.9 Die Guide.

## 1.4.7 Door Latch Inspection

The door latch must hold the door closed and ensure that the switch activation tab is depressing the door switch [1]. The switch tab [2] should press the switch button just so that it is close to bottoming.

### Maintenance Schedule

Inspect every 750K cycles.

### Procedure

- Ensure latch holds door closed.
- Ensure switch is activated when the door is closed.
- To adjust the door latch, see “Door Latch” on page 4-5.

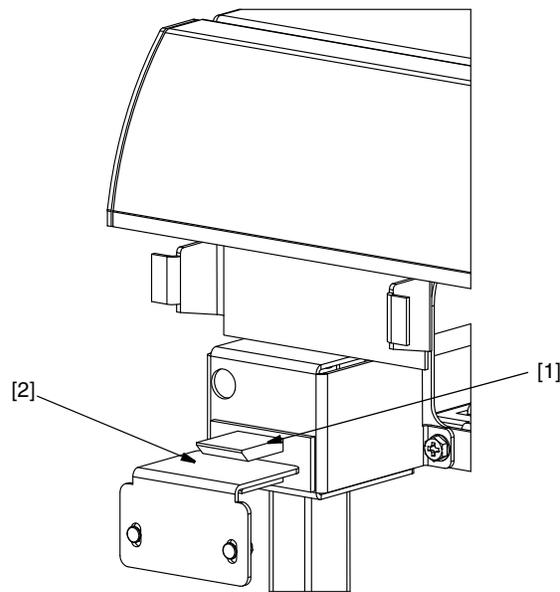


Figure 1.10 Door Switch Tab and Switch.

## 1.4.8 Separating Punch From Printer

Some procedures require separating the Advanced Punch from the printer and finisher. Refer to “Separating the Punch From the Printer” on page 4-1.

## 1.4.9 Rear Cover Removal

Some procedures require the removal of the rear cover. Refer to “Removing the Rear Cover” on page 4-2.

## 1.4.10 Aligner Panel Inspection and Cleaning

### Maintenance Schedule

Clean every 750K cycles.

### Procedure

Inspect for worn or damaged parts. Clean with alcohol, an approved cleaner, or a soft cloth moistened with mild detergent and warm water as needed.

### To clean the Aligner Panels:

1. Lift the Aligner latches to open panels.
2. Clean surfaces [1].
3. Clean paper alignment channels [2].

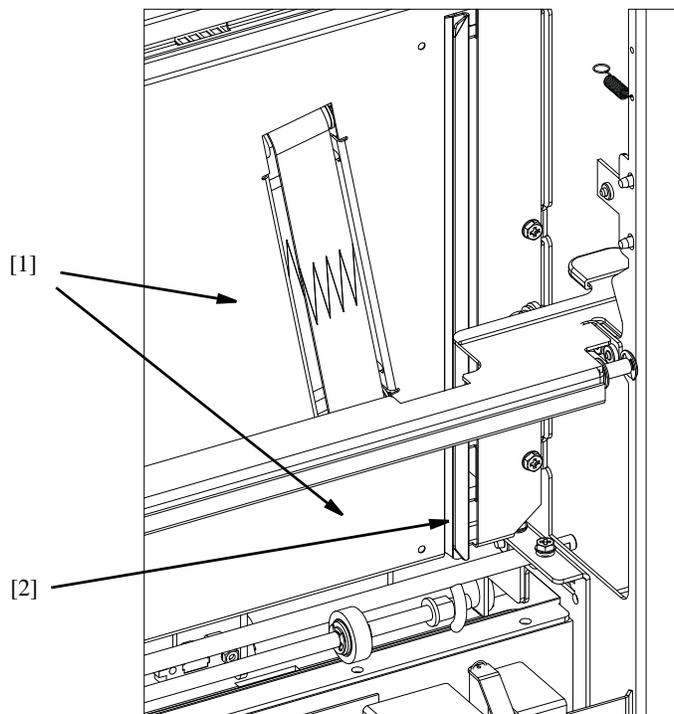


Figure 1.11 Aligner Panel Components.

### 1.4.10.1 Aligner Idler Roller Maintenance

Aligner idler rollers press the paper against the green drive belts and align the paper for punching and exiting. To replace the idler rollers, see “Aligner Idler Roller Replacement” on page 4-17.

#### Maintenance Schedule

Inspect and clean every 750K cycles.

Replace every 2000K cycles.

#### Procedure

- Make sure the aligner rollers are clean.
- Ensure that the idler rollers maintain pressure against the green drive belt.
- Inspect for bent or damaged parts.



---

**Warning:** Disconnect the Advanced Punch from power and retain the power cord in your possession for your safety. Failure to observe this warning could result in death or serious injury.

---

#### To inspect the aligner idler rollers:

1. Press the top of each roller's bracket [1]. The roller should move away from the green belt drive and then when released, they spring back into place.

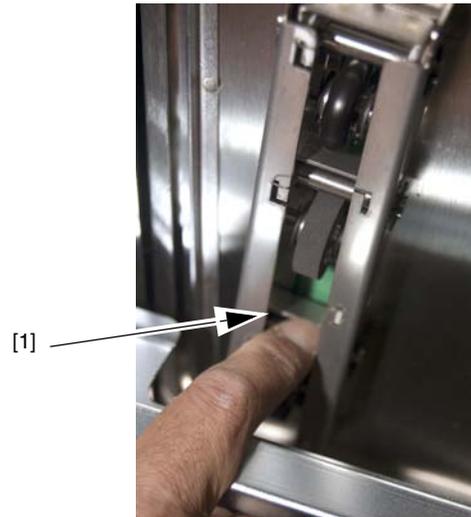


Figure 1.12 Alignment Roller Inspection.

2. Ensure the torsion springs [1] are hooked over the bracket [2].

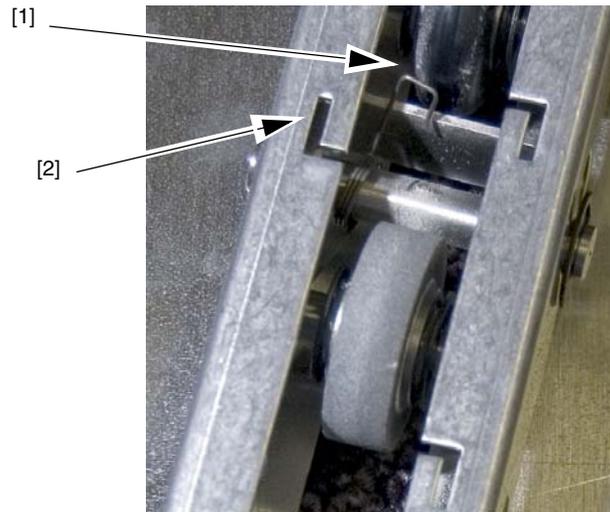


Figure 1.13 Aligner Roller Torsion Spring Hooked on Bracket.

**To clean idler rollers:**

1. Clean the idler rollers with a soft cloth and alcohol.
2. Inspect the idler rollers for wear patterns or groves. Surface should be evenly textured and clean.

### 1.4.10.2 Aligner Green Drive Belt Maintenance

#### Maintenance Schedule

Inspect and clean every 750K cycles.

Replace every 4000K cycles.

#### Procedure

- Ensure the Green Drive Belts are clean.
- Inspect for frayed edges and wear.

#### To clean the Green Drive Belts:

1. Clean Green Drive Belt [1] with a plastic scouring pad or 3M Scotchbrite Pad.
2. Use the drive knob [2] to turn the belt.

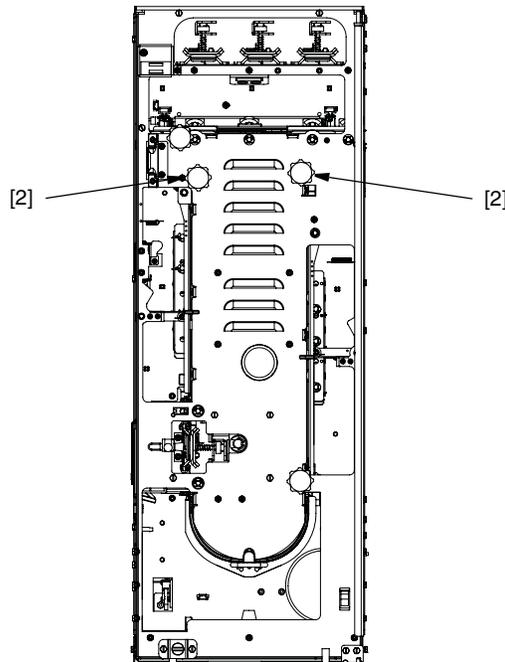
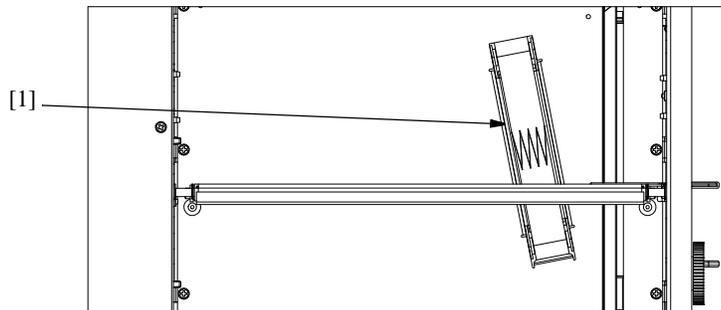


Figure 1.14 Cleaning Green Drive Belt.

To adjust or replace the Green Drive Belt, see “Aligner Drive Belt (Green Belt) Replacement” on page 4-20.

## 1.4.11 Back Gauge Solenoid Inspection and Cleaning

### Maintenance Schedule

Clean every 750K cycles.

### Procedure

- Inspect and ensure the Back Gauge solenoid linkage moves freely. Press linkage down and release [1]. Linkage should return.
- Clean out the solenoid and surrounding area with a vacuum cleaner and canned air [2]. Make sure the solenoid is clean and dry.

---

**Note:** Do not apply lubricants to the solenoid or linkage.

---

To remove and inspect the back gauge, see “Back Gauge Assembly” on page 4-36 and “Back Gauge Removal” on page 4-37.



Figure 1.15 Inspect and Clean Back Gauge Solenoid.

## 1.4.12 Idler Roller Inspection and Cleaning

Idler rollers press against the drive rollers and move the paper through the bypass [1] or the punch [2].

### Maintenance Schedule

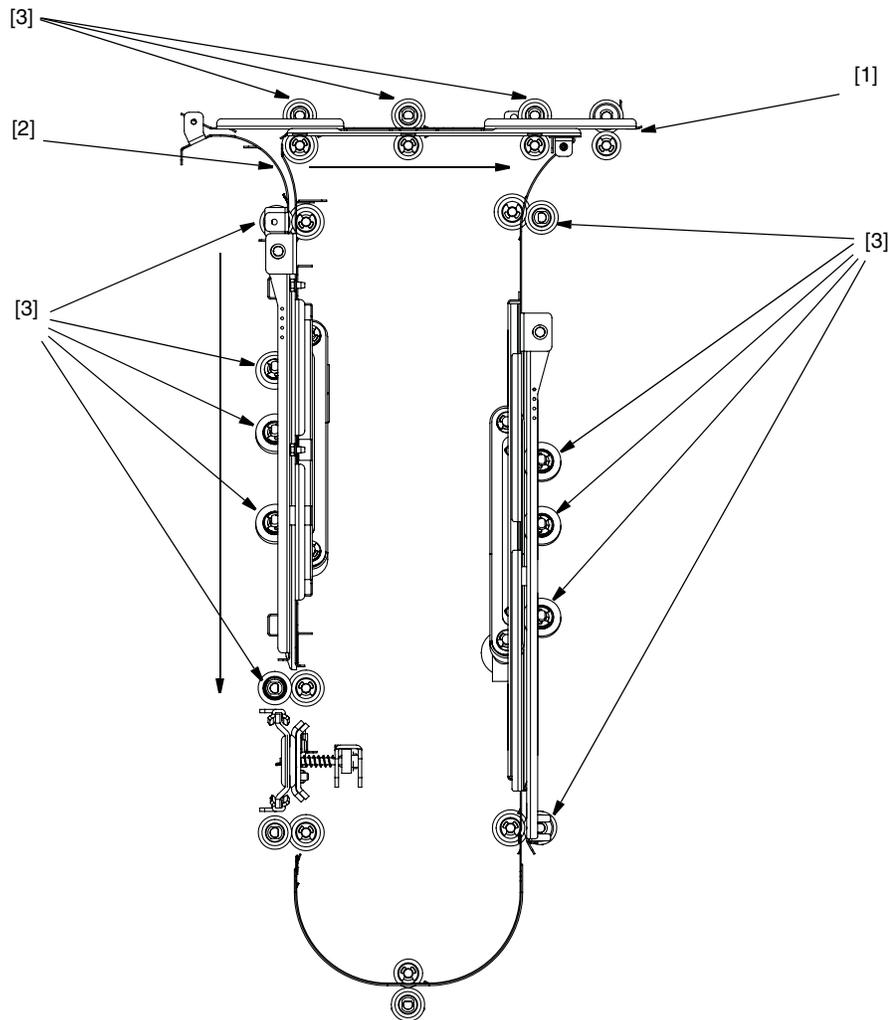
Inspect and clean every 750K cycles.

Replace idler rollers every 2000K cycles. See Page 4-13.

### Procedure

Inspect rollers for wear patterns or groves. The roller surface should be even and have a textured surface. Where practical, remove the roller assembly to clean [3].

See "Idler Roller Removal and Cleaning" on page 1-21.

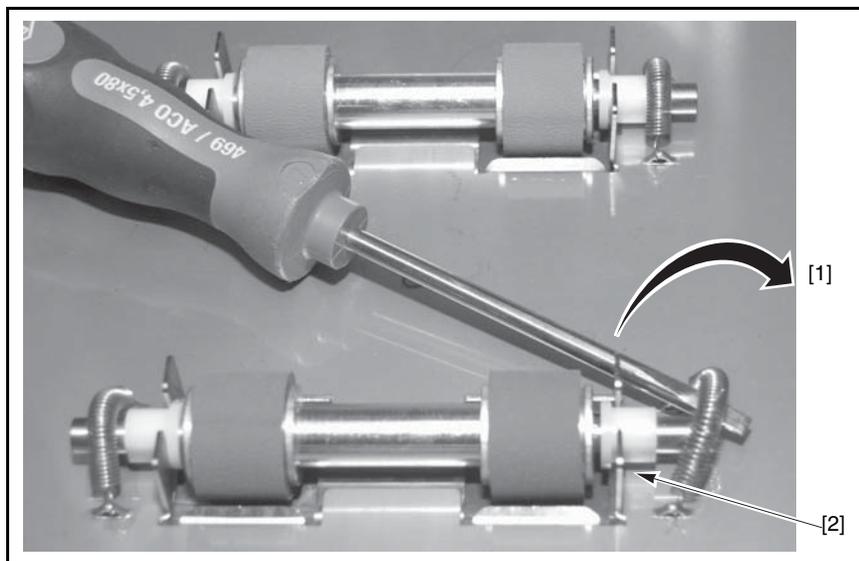


### 1.4.12.1 Idler Roller Removal and Cleaning

This procedure refers to the idler rollers [3] shown in the previous Illustration that are easily removed as assemblies. The idler rollers that are not easily removed should be cleaned while in the punch. See “Non-Removable Idler Roller Cleaning” on page 1-22.

**Note:** This procedure does not apply to the Aligner panel idler rollers. See “Aligner Panel Inspection and Cleaning” on page 1-15.

1. Separate the punch from the printer.
2. Disconnect the power.
3. Lift the retaining spring over the end of the idler roller shaft. The illustration shows moving the spring [1] on the bypass plate, which has been removed from the machine for clarity.



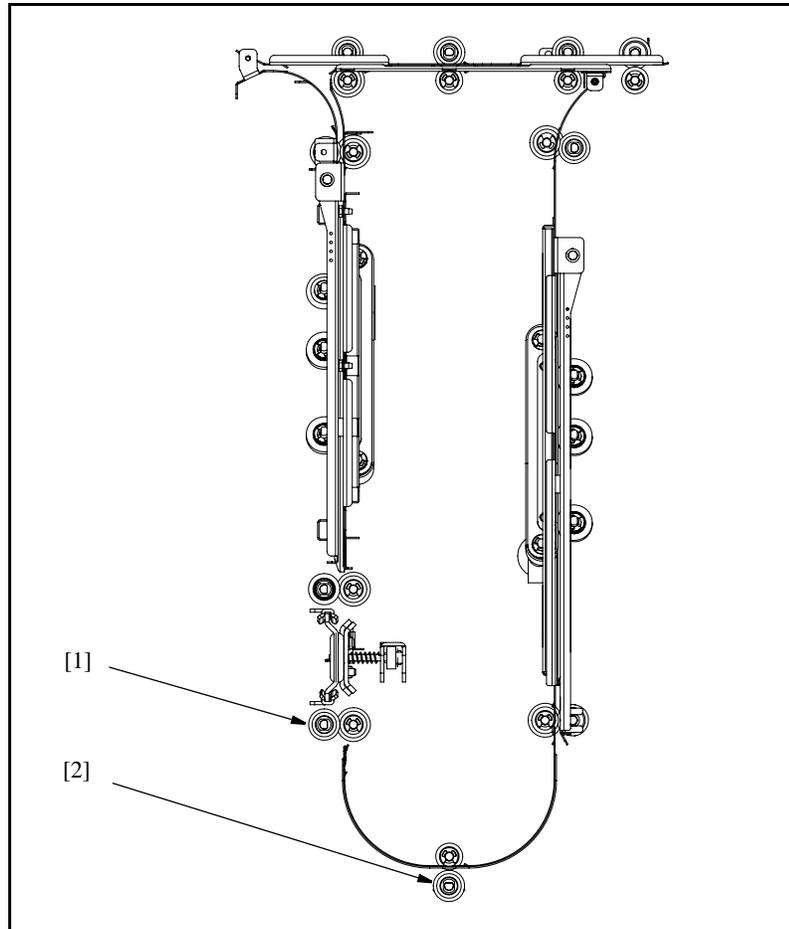
4. Pull the released shaft end out of the bushing fork [2], releasing the opposite end of the shaft from the other retaining spring.
5. Clean the idler rollers with a soft cloth and alcohol.
6. Ensure the rollers turn freely on the shaft & the idler roller shaft "floats" freely in the bushing forks.
7. To install idler roller assemblies reverse the steps.

**Installation Note:**

- Make sure the flat surface of the bushing aligns in the fork.
- Rollers are non-directional so it does not matter which end goes in each fork.
- After the assembly is in place, gently pull the assembly outward and release to ensure it moves freely in the fork.

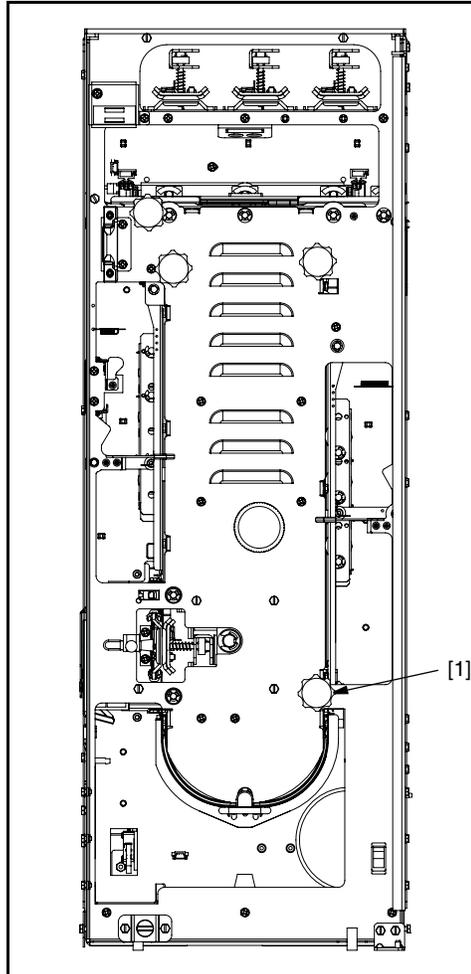
### 1.4.12.2 Non-Removable Idler Roller Cleaning

Some idler rollers, [1], [2] are not easily removed but can be cleaned while in the punch.



**To clean non-removable idler rollers:**

1. Separate the punch from the printer.
2. Disconnect the power.
3. Pull out the chip bin to access idler roller [1].
4. Inspect and clean idler rollers [1], [2] with a soft cloth and alcohol.



5. Use the drive [1] knob to turn the rollers to continue inspection and cleaning.

### 1.4.13 Drive Roller Inspection and Cleaning

Drive rollers are located opposite the idler rollers.

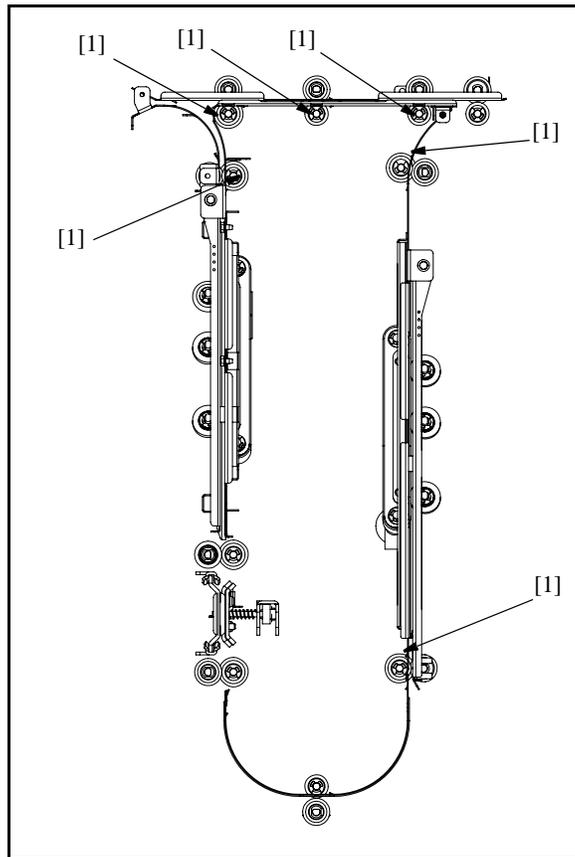
#### Maintenance Schedule

Inspect and clean every 750K cycles.

#### Procedure

Inspect for wear patterns or groves. The roller surface should be even and not glazed.

Some drive rollers are not easily accessible. Those that are [1], should be inspected and cleaned when the idler rollers are removed. Where practical, make sure the rollers are clean. Clean with a soft cloth and alcohol. See also "Idler Roller Inspection and Cleaning" on page 1-20.



## 1.4.14 Aligner Latch Inspection

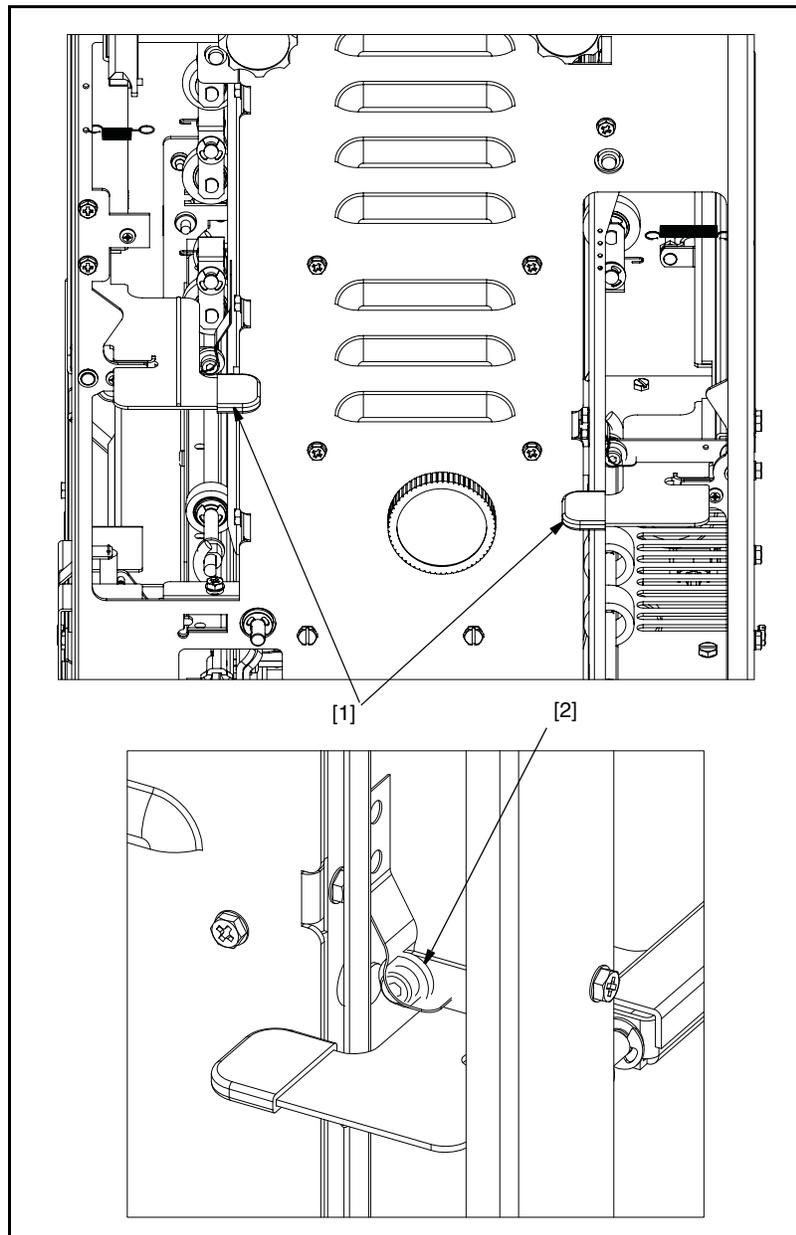
Latches [1] on both sides of the punch hold the Aligner Panels in place, which in turn keeps even pressure on the idler rollers.

### Maintenance Schedule

Inspect every 750K cycles.

### Procedure

- Inspect the latches for worn or damaged parts.
- Open and close the latches and ensure they lock into place when closed.
- Ensure the nylon wheel [2] turns freely on its bearing and that it aligns with its locking



### 1.4.15 Optical Sensor Cleaning

**Maintenance Schedule**

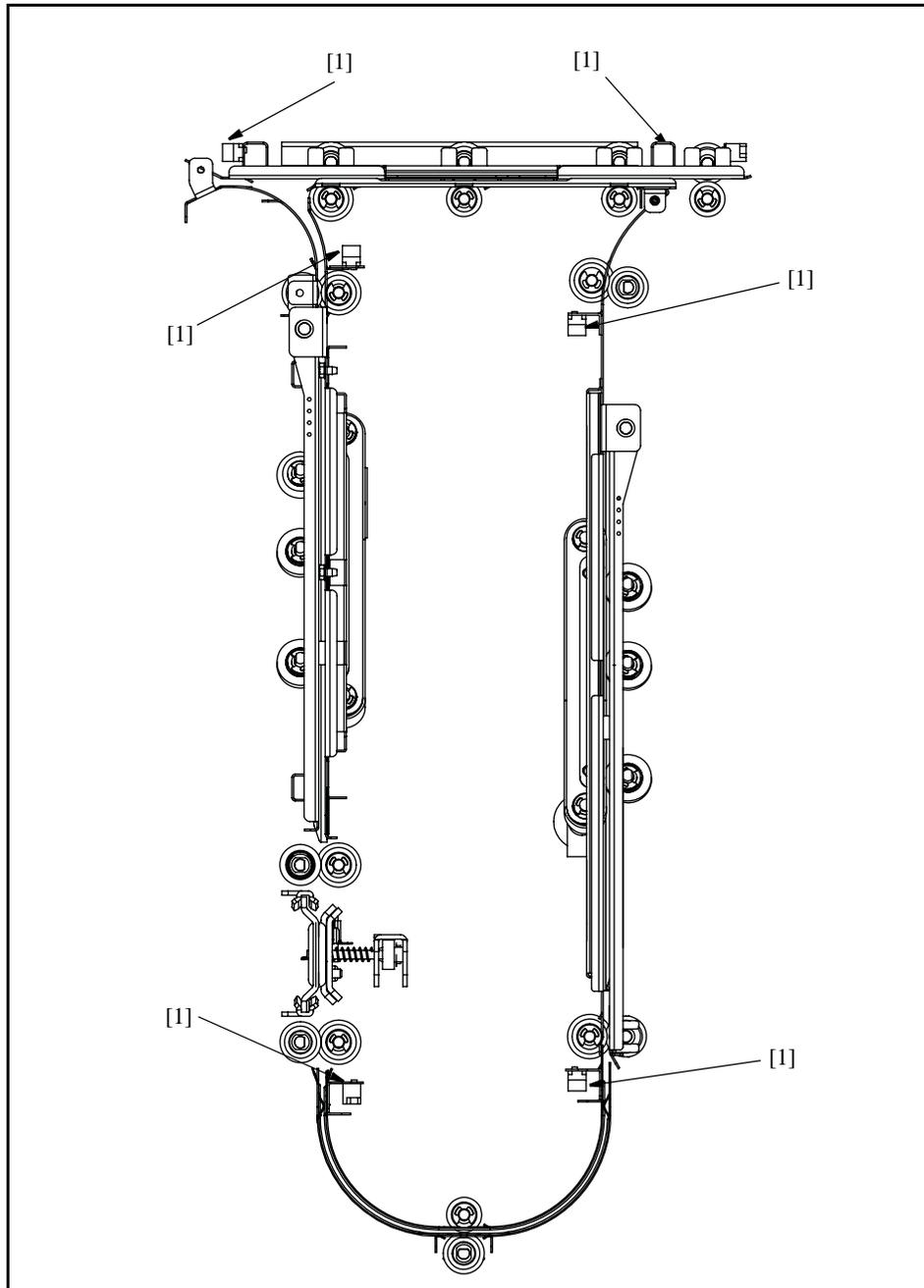
Clean every 750K cycles.

**Procedure**

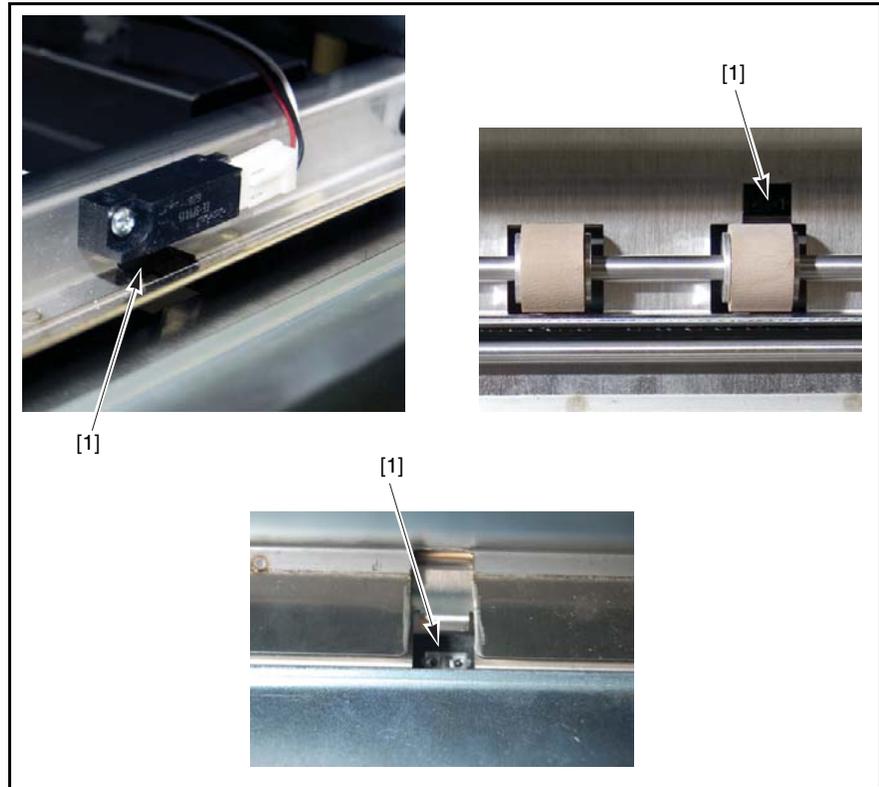
Inspect and clean per the maintenance schedule or as needed.

**Supplies Needed**

Canned air or vacuum cleaner



Use canned air to blow the debris off each sensor. The illustration shows examples of three sensors [1].



## 1.4.16 Bypass Paper Path Inspection and Cleaning

### Maintenance Schedule

Clean every 750K cycles.

Replace every 4000K cycles. See Page 4-8.

### Procedure

- Inspect the Bypass panel [1], rollers [2], and entrance guide [3] for wear, damage, and obstructions.
- Inspect the rollers for wear patterns or groves. The surface should be rough and even. Make sure the rollers are clean. Clean rollers with a soft cloth and alcohol. See also “Idler Roller Inspection and Cleaning” on page 1-20 and “Drive Roller Inspection and Cleaning” on page 1-24.
- Raise the panel and ensure the magnet holds it in open [4]. Inspect the path for obstructions. Clean as needed.
- Close the panel and check that it is flat and that paper will pass under it.
- Ensure the bypass diverter moves freely and returns to the bypass position.

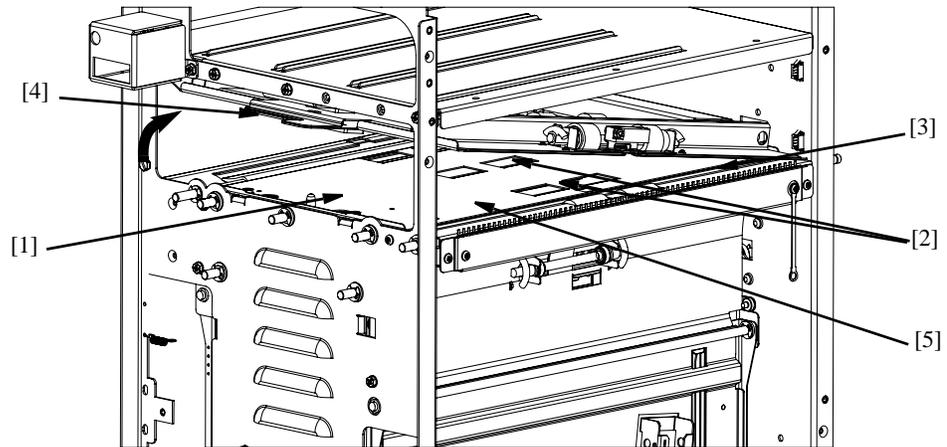


Figure 1.16 Bypass Path Inspection. Shown With Bypass Panel Raised.

## 1.4.17 Punch Paper Path Inspection and Cleaning

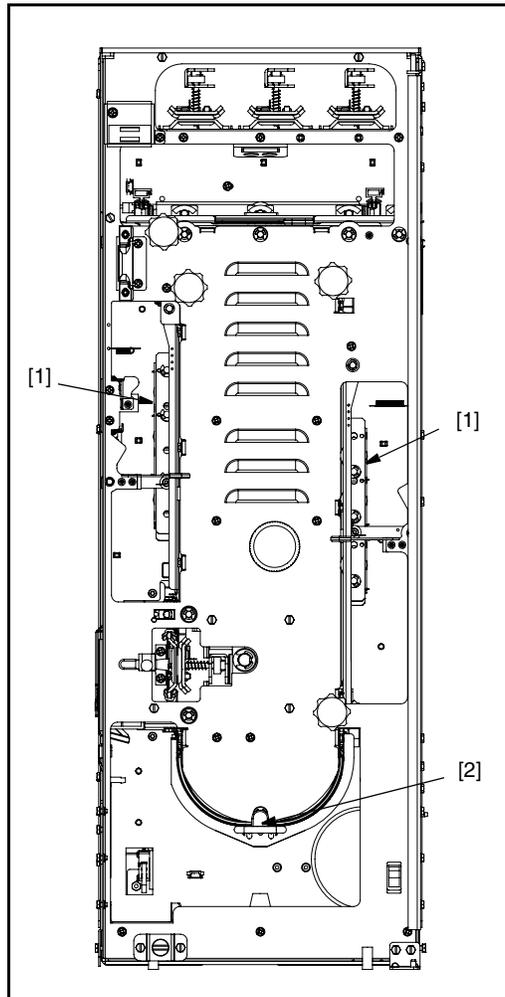
### Maintenance Schedule

Inspect and clean every 750K cycles.

Replace idler rollers every 2000K cycles.

### Procedure

- Inspect the entire paper path through the punch. Look for wear, damage, and obstructions.
- Inspect the rollers for wear patterns or groves.
- Open the Aligner Panels [1] and U-channel [2] and make sure there are no obstructions.
- Confirm that the latch holds the U-channel (Loop Pivot, Paper Guide Assembly) tightly in place [2]. If the latch is bent or damaged, replace the U-channel (See PL 5.3, item 28)
- Clean as needed.



## 1.4.18 Punch Drive Cam Lubrication

### **Maintenance Schedule**

Lubricate, with a PTFE based grease, per schedule (see Table 1.2, "Customer Maintenance," on page 10).

### **Procedure**

The Back Gauge assembly must be removed in order to lubricate the punch cams. To remove the punch, see "Punch Module Removal" on page 4-49. To lubricate the cams, see "Punch Drive Cam Lubrication" on page 4-54.

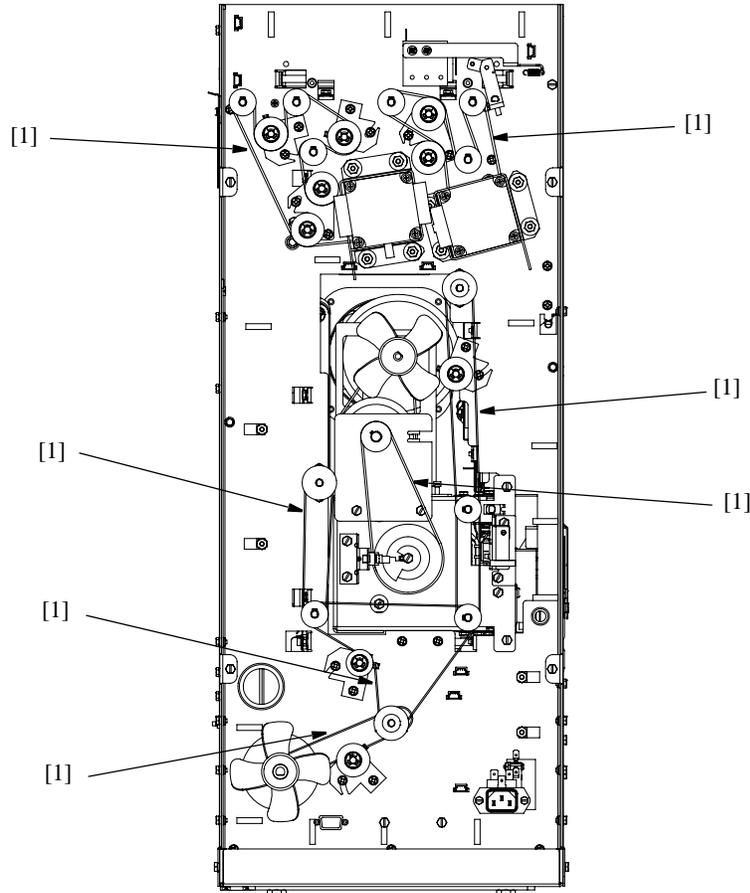
## 1.4.19 Timing Belt Inspection

### Maintenance Schedule

Inspect every 750K cycles.

### Procedure

Inspect all timing belts for wear, missing teeth, frayed edges, and cracks. For replacement, see [Belt Replacement](#) on page 4-69.



Check for proper deflection of belts. The belts should be slightly loose with approximately 1/4" deflection [1]. Belts that are too loose will not drive properly and belts that are too tight can wear out prematurely or damage their driven components. Five belts have tensioners, it is these five belts that should be checked.

## 1.5 Final Service Action

This section explains the actions a technician should take at the end of every service call. With each step, verify that the system runs smoothly and paper jam free.

1. Inspect each Die Set visually and lubrication as needed. See [Die Set Service](#) on page 1-8.
2. Using the customer's primary Die Set pattern, run 200 *simplex* printed test sheets through the punch mode and examine the output for clean hole quality and even hole alignment.
3. Using the customer's primary Die Set pattern, run 200 *duplex* printed test sheets through the punch mode and examine the output for clean hole quality and even hole alignment.
4. Using any of the customer's secondary Die Set pattern, run 100 simplex printed test sheets through the punch mode and examine the output for clean hole quality and even hole alignment.
5. Run 100 sheets simplex and 100 sheets duplex through the punch bypass mode.
6. Clean out all paper chips (chad) and paper dust from the chip tray, the bottom of the machine and from the floor around the bottom of the machine. See [Base Cleaning](#) on page 1-12.
7. Explain to the customer the service work that was performed and ensure they are satisfied before you close the call.



## ***Section 2***

# ***Fault Analysis Procedures***

Also called Repair Analysis Procedures, this section contains the basic troubleshooting information that a technician needs to isolate the root cause of a specific symptom.

## 2.1 040-101 Fault Diagnosis:

### 2.1.1 Description

This repair procedure explains the additional symptoms accompanying the 040-101 fault codes so that the specific causes can be addressed.

### 2.1.2 Initial Actions

Ensure the machine is operable and that the operator has explained how to reproduce the problem. Match symptoms to the causes and corrective actions.

### 2.1.3 Procedure

Symptom	Cause	Corrective
Reproducible shutdowns when running dark highly saturated images, no shutdowns when running light colored or low toner images.	S2 Sensor is unable to differentiate between highly saturated images and "no paper"	<ul style="list-style-type: none"> <li>•Perform Tag #1 upgrade</li> <li>•Replace S2 Sensor</li> </ul>
Shutdowns in Entrance Aligner and punch area. First jammed sheet is in punch area; next sheet overlaps first.	<p>Slippage at E-roller</p> <p>Dieset is worn</p>	<ul style="list-style-type: none"> <li>•Check aligner idler springs for correct position</li> <li>•Check for freedom of motion of E-roller idler shaft roller in the retainers</li> <li>•Clean contamination from Aligner belts and E-rollers</li> <li>•Use another dieset to determine if die is at fault</li> <li>•Replace dieset</li> </ul>
Sheets stop in Bypass Transport but should be in Punch Path	Diverter Gate malfunction	<ul style="list-style-type: none"> <li>•Perform REP 4.14 Diverter Gate Solenoid Adjustment</li> </ul>
Shutdowns in Exit Aligner.	Slippage at Exit Aligner and Punch Path Exit	<ul style="list-style-type: none"> <li>•Check aligner idler springs for correct position</li> <li>•Check for freedom of motion of all idler roller assemblies in their retainers.</li> <li>•Clean contamination from Aligner belts and drive rollers</li> </ul>

## 2.2 RAP AC Power - No Indication of Power

### 2.2.1 Description

This repair procedure explains the steps to follow when troubleshooting an AC problem.

### 2.2.2 Initial Actions

Make sure the Main Power Switch located at the front of the machine (lower right hand side, inside the door) is switched on.

Ensure you have line voltage going into the system, by checking for proper line voltage at the power cord. Pull the cord out of the machine receptacle and using a volt meter, check that line voltage is present

### 2.2.3 Procedure

1. Disconnect the machine from main power and disconnect the communication cable, then remove the rear covers to gain access to the electrical components at the rear of the machine.



---

**Warning:** AC Voltage are dangerous. Use extreme care when checking.

---

2. Connect the power cord and switch ON the main power.
3. Measure for line voltage at the Receptacle / Filter. You have line voltage.

Yes : Go to the next step

No : Replace the Receptacle / Filter

4. Measure for line voltage at the connection J1 of the main Control Board (connection for the Main Power Switch).

Measure for line voltage at the switch end of the J1 cable. You have line voltage

Yes : Go to the next step

No: Replace the cable from the filter to the switch

5. Measure for line voltage at the **top** of the Main Power Switch (ensure the switch is in the "on" position. Toggle it back and forth. You have line voltage.

Yes : Change the cable from J1 to Switch.

No : Replace the Switch.

## 2.3 RAP DC Power - No Indication of 24V DC

### 2.3.1 Description

This repair procedure explains the steps to follow when troubleshooting an DC problem.

### 2.3.2 Initial Actions

Ensure the Communication Cable is securely connected.

Ensure the AC Power at the J1 AC Power Connection. If no AC Power, go to the AC RAP.

### 2.3.3 Procedure

1. Check for line voltage at the J2 connection at the main control board. There is AC Power.

Yes : Go to the next step

No : Replace the Main Control Board

2. Check for line voltage at the Power Supply

Yes : Go to the next step

No: Replace the Cable to the Power Supply Board

3. Measure for 5V DC at pin 3 of the Communication Cable. There is 5V DC at the connection.

Yes : Go to the next step

No : Replace the Communication Cable

4. Measure for 5V DC at J13 of the Main Control Board. There is 5V DC at the connection.

Yes : Go to the next step

No : Replace the Main Control Board

5. Measure for 5V DC at the other end of J13. There is 5V DC at the connection.

Yes : Go to the next step

No : Replace the J13 Cable

6. Inspect for the LED of the Power Supply Unit The LED is illuminated.

Yes: Go to the next step

No : Replace the Power Supply Unit

7. Inspect for 24V DC at the Power Supply Unit There is 24V DC at the PS.

Yes: Go to the next step

No : Replace the Power Supply Unit

8. Inspect for 24V DC at J3 of the Main Control Board. There is 24V DC at J3.

Yes : Replace the Main Control Board

No: Replace the J3 Cable

## **2.4 RAP Paper Jams at Punch, Chad is Present in the Paper Path**

### **2.4.1 RAP Description**

The system is frequently exhibiting paper jams in the Punch Die or just after the sheets are punched.

### **2.4.2 RAP Initial Actions**

Run several sheets to confirm the symptom.

Locate a different Die Set (any pattern).

Run several more sheets to confirm the symptom.

### **2.4.3 RAP References**

Die set maintenance section [1.3](#)

### **2.4.4 RAP Procedure**

1. Inspect the die set that results in frequent paper jams. The oil pad, pins or shoulder bolt lubrication appears to be dried away.

Y- Perform the lubrication procedures explained in section [1.3](#)

N- Go to the next step.

2. Inspect the die set shoulder bolts for straightness. One or both of the bolts are bent.

Y-Replace the die set.

N- Go to the next step.

3. Inspect the die set pressure bar springs as shown in section 1.3.2.2 One of the springs is missing.

Y-Replace the missing spring.

N-Replace the die set.

## 2.5 RAP Paper Jams at Punch, Chad is Not Present in the Paper Path

### 2.5.1 RAP Description

The system is frequently exhibiting paper jams in the Punch Die or just after the sheets are punched. This may be associated with an extra deep punch or an extra shallow punch or holes punched at all.

### 2.5.2 RAP Initial Actions

Run several sheets to confirm the symptom.

Locate a different Die Set (any pattern).

Run several more sheets to confirm the symptom.

Take note of the punch cycle counts since the last Back Gauge replacement.

### 2.5.3 RAP References

Back gauge solenoid inspection and cleaning section [1.4.11](#)

Back gauge Assembly section [4.8](#)

### 2.5.4 RAP Procedure

1. Disconnect the system from the printer train to access the input side of the punch. Inspect the back gauge solenoid area. Excessive chad build-up is apparent.

Y- Perform the cleaning procedure explained in section [1.4.11](#).

N- Go to the next step.

2. Inspect the back gauge solenoid area. One or more of the three springs is broken or missing.

Y-Replace the missing spring as explained in section [4.8](#).

N- Go to the next step.

3. Inspect the back gauge paddles, welds and over all mechanical action. The Back Gauge has exceeded three (3) million punch cycles or the mechanisms appear to be in poor working order when you depress the Solenoid plunger by hand.

Y-Replace the Back gauge Assembly following section [4.8](#).

## **2.6 RAP Paper is Skewed Before It Gets to the Punch.**

### **2.6.1 RAP Description**

The system is frequently exhibiting paper jams near the entrance to the Punch Die and/or the sheets are punched on a angle (skewed holes).

### **2.6.2 RAP Initial Actions**

Run several sheets to confirm the symptom.

Disconnect the machine from power.

Unlock the AdvancedPunch module from the rest of the system.

### **2.6.3 RAP References**

Repair and Adjustment Procedure [4.7](#)

### **2.6.4 RAP Procedure**

1. Inspect the Energy Drive Roller. One or both of the retaining springs are loose or missing or the Energy Drive Idler Roller is not freely moving in the retainers.

Y- Reconnect or replace the retaining spring and ensure the idler roller is making good contact with the drive rollers or reform the retainers to reduce interference with the roller assembly.

N- Go to the next step.

2. Inspect the surface of the rollers. The rollers are slick and do not make good contact with the drive rollers when you manually turn the front knob.

Y-Perform the cleaning procedure explained in section 4.7. If the roller surface does not clean up properly, replace the Energy Roller Assembly.

N-Go to the Back Gage RAP.

## **2.7 Troubleshooting**

The tables that follow are arranged in order of the normal operational sequence.

## 2.7.1 General

One of the first rules of troubleshooting is to first understand the normal operating sequence of the machine (see Principle of Operation). Then carefully listen to the key operator's description of the problem or complaint. Follow this by your own visual observation. The cause of the problem can be determined by noting at which point in the operating cycle the problem occurred. To pinpoint the problem to a defective electrical component or mechanical part, use the Troubleshooting Guide and the Electrical Schematic Diagram.

During any service call, it is a good practice to check the cable connections for fit and alignment.

**Table 2.1 General Troubleshooting**

Symptom	Probable Cause	Corrective Action
No indication of power (None of the three green LED's on Advanced Punch main control or illuminated)	Not plugged in  Power from outlet not correct	Ensure that power cord is properly connected to the machine as well as the supply voltage.  Check the power supplied from the outlet. Check that the power switch is in the 'ON' position, located at the lower right front of the machine
No indication of power, unit is plugged in.	Main control board, a minimum of 2 of the 3 LEDs on this board should be lit, if not, board is bad. Display panel or cable. Door not making interlocks. Die Set not making switch. Communication cables between Advanced Punch and Printer	Replace main control board.  Inspect or replace. Inspect or replace. Inspect or replace. Check communication cables between printer and Advanced Punch
Indication of power, yet Advanced Punch does not function (One or two LED's on the main control board are illuminated, yet all three not illuminated).	5V from printer is not received at Advanced Punch  Door is not closed  24V power supply is not functioning or not connected  AC is not connected correctly	Connect all required communication cables from Advanced Punch to upstream device. The check to see if all LED's are illuminated.  Close door, then check to see if all LED's are illuminated. If door is closed, make sure door switch is being actuated.  Check to make certain AC is applied to power supply. Also check to make sure 24V is outputted from power supply.  See above.
Machine will not start, Advanced Punch is shown on printer interface screen	Check power supply board LED, if not lit, board is bad. Check main control board LEDs, if a minimum of two of the three are not lit, board is bad. Door is not closed or properly making the interlock.	Inspect cable connections, replace board as needed. Inspect cable connections, replace board as needed. Inspect and correct.

**Table 2.1 General Troubleshooting**

Symptom	Probable Cause	Corrective Action
Advanced Punch does not appear on printer interface screen	LED's not illuminated on Advanced Punch main control board. Communication cables between printer and upstream device not connected or faulty Firmware version not correct	See above. Connect all required communication cables from Advanced Punch to upstream device. Replace the PWB
Paper jam is shown on printer interface screen, customer or operator has been unable to locate the jam.	Small piece of paper has become torn and is blocking sensor in paper path.	Check each sensor to make certain that they are not blocked.
Paper jam, not able to find any large sheets, removed sheets are torn.	Suspect a small piece of paper is hidden somewhere in the paper path.	Run a heavy cover stock through the system by hand. This process may drive any small torn pieces out of the paper path.
Punch does not cycle.	Punch clutch out of adjustment or defective. Main control board. AC punch motor.	Adjust or replace. Adjust or replace. Adjust or replace.
Paper jam and/or punch shaft does not return to the home position.	Punch brake is not performing properly.	Adjust or replace.
Paper jam and/or punch continues to cycle.	Flag sensor is broken or misaligned.	Adjust or replace.
Paper will not enter the punch area, runs through bypass only.	Divert solenoid malfunction.	Adjust or replace.
Paper is punched in the middle of the sheet.	Back Gauge (back stop) solenoid is malfunctioning.	Adjust or replace.
Punch paper path is not operable, system will only bypass.	Transport motor not functioning. Main control board not functioning properly. Stepper motor #1 or #2 is not functioning correctly. Stepper Motor #1 or #2 driver boards are not functioning correctly.	Adjust or replace. Check connections, replace. Adjust or replace. Check connections, replace.
Punched holes are not centered.	Die Set positioning bracket is out of adjustment.	Inspect and adjust as required, see adjustment procedure.
Punched holes are not parallel to the edge of the paper.	Back Gauge (back stop) is not functioning properly.	Inspect and adjust as required, see adjustment procedure.

## 2.7.2 Back Gauge

**Table 2.2 Back Gauge Troubleshooting**

Symptom	Probable Cause	Corrective Action
Deep punch or angled deep punch from leading edge of the paper.	Broken weld on paper stop, Back Gauge paddle. Broken or missing Back Gauge linkage springs.	Replace the unit. Refer to section 4.8.3  Replace the Back Gauge assembly as explained in section 4.8
Cannot remove the Die Set.	Back Gauge paddle is not in the fully opened position and is contacting the Die Set. Broken weld on paper stop, Back Gauge paddle. Broken or missing linkage spring or springs.  Solenoid plunger stuck.  Solenoid plunger worn.	Turn the Punch Cycle Knob to ensure the punch drive indicator is lined up with the position indicator. Replace the unit. Refer to section 4.8.3  Replace the spring. See <a href="#">“Solenoid Spring Replacement”</a> on page 4-46.  Clean the solenoid. See <a href="#">“Back Gauge Solenoid Inspection and Cleaning”</a> in Section 1.4.11.  Replace Back Gauge. See <a href="#">“Back Gauge Assembly”</a> in Section 4.8.
Punches occur 2 to 4” into the sheet.	One or more broken or missing linkage springs. Back Gauge paddle is not fully closing, leaving a gap that the paper can slip through especially when using paper with heavy curl.	Replace the Back Gauge assembly as explained in section 4.8  Adjust Back Gauge adjustment. See <a href="#">“Back Gauge Assembly Adjustment”</a> on page 4-48.

## 2.7.3 Die Set

Under normal conditions, the Advanced Punch may experience one paper jam in 5000. Excessive paper jams, such as one in every 1000, requires servicing. The cause may be the Die Set.

**Table 2.3 Die Set Troubleshooting**

Symptom	Probable Cause	Corrective Action
Excessive paper jams.. Paper does not exit after being punched.	Worn Die Set.  Defective Die Set. Excessive oil on punch pins. Chad and paper dust sticks to the punch pin tip.  Floating pressure bar not retracting.	Replace Die Set if it is worn out, greater than 500K cycles.  Replace.  Clean pins to remove excess oil. Lubricate with approved lubricants only. Refer to Section 1.3.4.  Replace pressure bar springs when applicable. See <a href="#">“Floating Pressure Bar Spring Replacement”</a> on page 1-7.



Y. Go to next step.

3. Check the service records of this machine. The Energy Roller is within the normal maintenance interval.

N. Clean the Energy Roller as explained in procedure 4.7

Y. Go to next step.

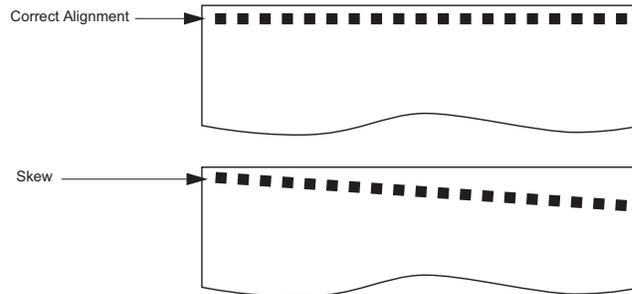


Figure 3.2 Skew Holes

4. Inspect the Back Gauge Assembly. All three Solenoid Springs are attached as shown in Figure 4.49

N. Replace the Back Gauge assembly as explained in section 4.8.

### 3.3 RAP Hole Quality

Inspect the hole quality of the punched paper output. Under a general inspection, the holes are cleanly cut and free of hanging chad.

No: Go to Section 1.3 Die Set Service and perform the maintenance checks and lubrication.

### 3.4 RAP Oil On Paper

Inspect the paper around the punched holes.. Under a general inspection, there is not an oil residue around the holes.

No: Reference section 1.3 Die Set Service and perform the maintenance checks and lubrication. Be sure the customer / operator has not used an excessive amount of oil. Using a clean cloth, with the die set plate and pin area free of excess oil. Run 20 to 50 scrap sheets of paper through the system to purge excessive oil from the pin and plate area.

### 3.5 RAP Skuff Marks On Paper

Perform the Inspection and Cleaning Procedures detailed for the following belts and rollers.

Aligner Panel procedure [1.4.10](#)

Idler Rollers procedure [1.4.12](#)

Drive Rollers procedure [1.4.13](#)

Bypass Paper Path procedure [1.4.16](#)

Aligner Drive Belt (Green belts) procedure [4.6.3](#)

### 3.6 RAP Lead Edge Damage

Some areas of the lead edge may be damaged either by the Backgate Gates or the Exit Roller Pinch Rollers. This procedure will assist you to identify the source of the damage and to perform corrective actions.

#### Procedure

1. Review problem with the customer; request that the customer reproduce the problem to fully understand the materials, workflow and run modes involved.
2. Run 50-100 sheets into a single stack and compare the defect with the photos below.

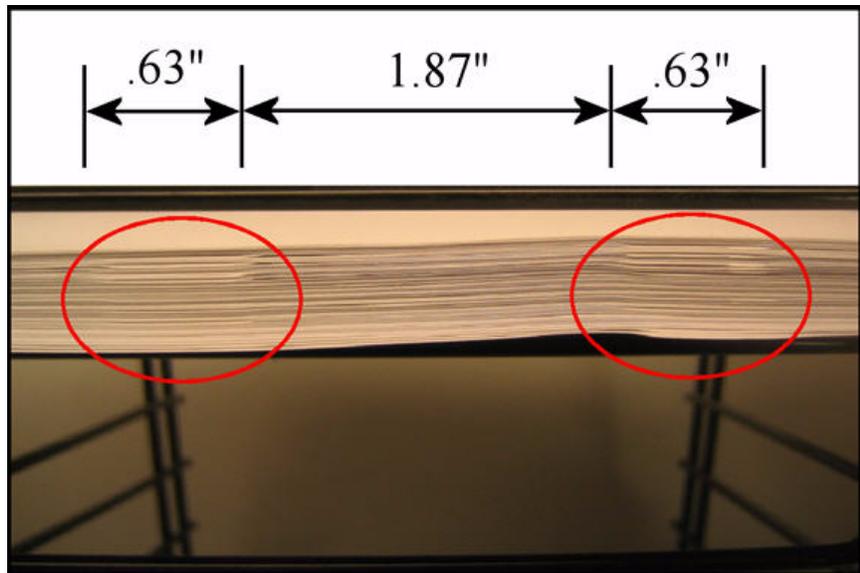


Figure 3.3 Damage from Exit Pinch Rollers

**Root cause:** The lead edge damage displayed in [Figure 3.3](#) occurs when sheets exiting the punch path strike the upper Exit Pinch Rollers with upwards curl. The lead edge will be damaged in two areas.

**Corrective actions:** Check the curl of the sheets entering the GBC Module. Adjust the curl to decrease upwards curl.





## *Section 4*

# ***Repair and Adjustment Procedures***

### **4.1 Preparing the Advanced Punch for Service**

Most service requires that the Advanced Punch be separated from the printer and finisher and the rear cover be removed.



---

**Warning:** Disconnect the unit from power and maintain the cord in your possession. Failure to observe this warning can result in injury or electrical shock.

---

#### **Procedure**

- Unplug the unit from power.
- Disconnect the communication cable
- Empty Chip Bin

#### **4.1.1 Separating the Punch From the Printer**

Follow the instructions as described in the printer's service manual.

## 4.1.2 Removing the Rear Cover

Separate the punch from the printer and finisher first. Refer to "Separating the Punch From the Printer" in Section 4.1.

**Note:** It is not necessary nor recommended that you remove the top cover.

### Procedure

#### Tool Required

- Phillips screwdriver or 1/4" hex head nut driver

#### To remove the rear cover:

1. Remove the 5 screws on the entrance side [1] & remove the 4 rear cover screws [2]
2. Slide the cover out from under the top cover. Do not remove the top cover.

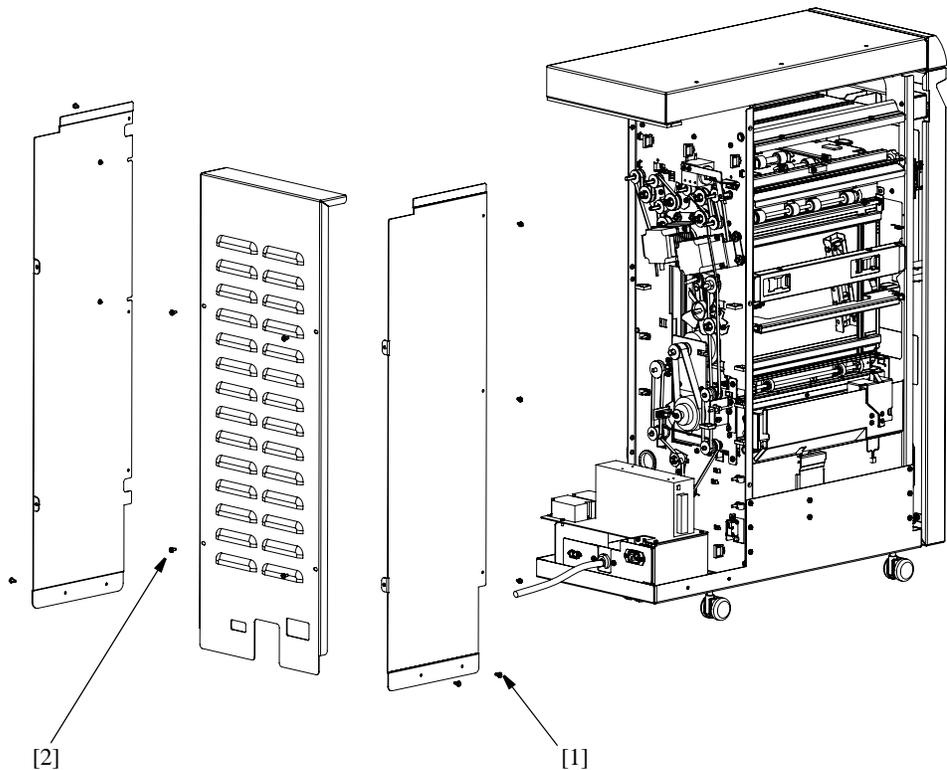


Figure 4.1 Removing Rear Cover.

## 4.2 Leveling And Aligning to the Printer

The punch must be level and in line with the printer and finisher. If the printer and Advanced Punch are moved or relocated, the system must be re-leveled.

**Note:** It is important that the punch is not twisted or skewed. It must be level front to back and side to side.

### Procedure

Raise or lower the Advanced Punch's castors to level it.

### Tool Required

- Tool located on front door
- 2 3/8" open ended wrenches
- Level

### To level the punch:

1. Remove the rear cover and put the punch back in line with the printer and finisher.
2. Place the level on a flat surface of the top [1] and determine which castor needs adjustment.



Figure 4.2 Leveling the Punch to the Printer and Finisher.

3. Loosen the locking nut [1] of the castor.

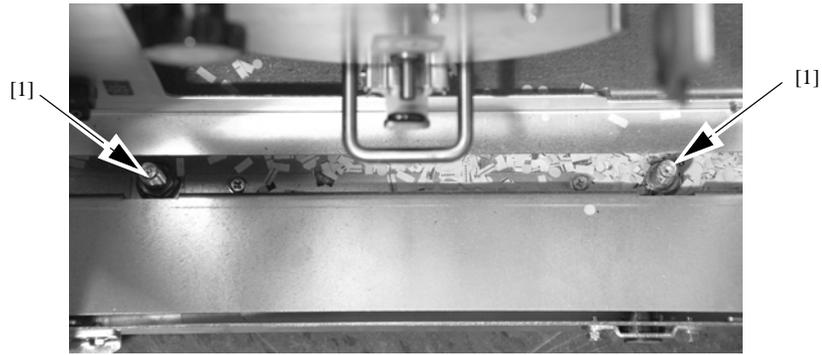


Figure 4.3 Castors Locking Nuts.

4. From below the frame and at the top of the castor [2], adjust the height of the castor as needed.
5. Check the level and adjust as necessary.
6. Tighten the locking nut [1].
7. Ensure punch is level and in line with printer and finisher.
8. Replace rear cover.

## 4.3 Door Latch

### Procedure

Ensure the door latch holds the door closed and that the activating bracket tab [1] depresses the door switch [2]. The tab should press the switch button just so that it is close to bottoming out.

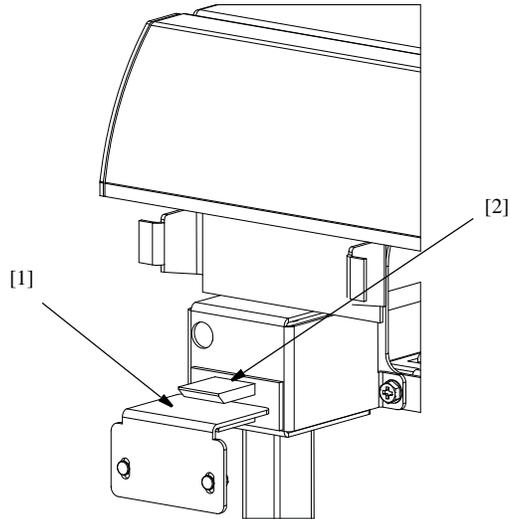


Figure 4.4 Door Latch and Switch.

### 4.3.1 Door Latch Adjustment

#### To adjust the door latch:

1. Open the front door.
2. Loosen the two adjustment screws [1] on the door latch.

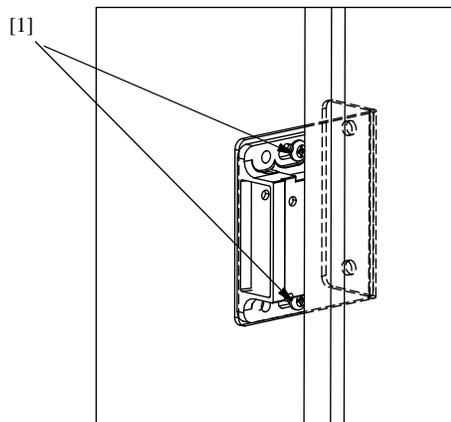


Figure 4.5 Door Latch Adjustment Screws.

3. Do one of the following.
  - To move the door in, move the latch towards the front of the door.
  - To move the door out, move the latch away from the front of the door.
4. Tighten the 2 screws [1] and close the door.
5. Test its operation.

### 4.3.2 Door Latch and Switch Replacement

To replace the door latch:

1. Open the front door.
2. Remove the 2 screws [1].

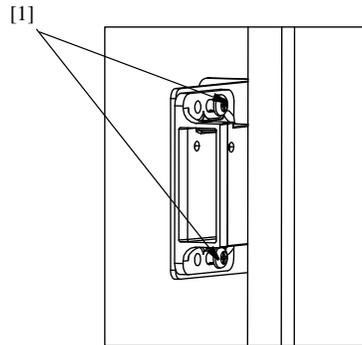


Figure 4.6 Door Latch and Screws.

**To replace the door switch:**

1. Open the front door.
2. Remove the 2 screws [1].
3. Unplug connectors from switch [2].

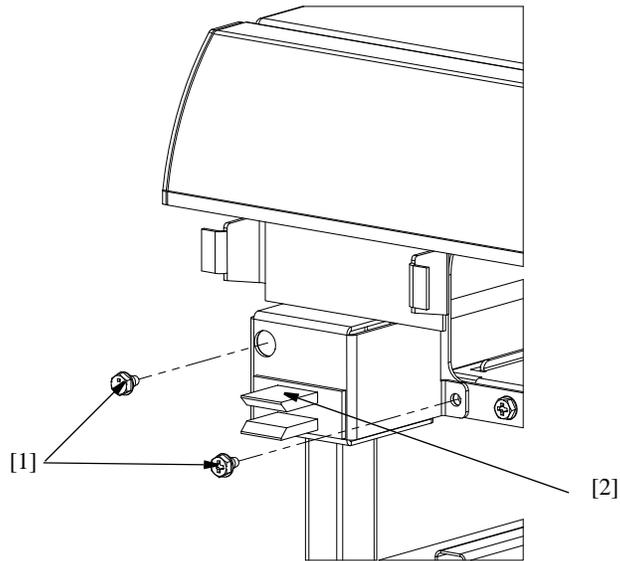


Figure 4.7 Door Switch.

## 4.4 Bypass Panel

### Maintenance Schedule

Clean every 750K cycles. Refer to Section 1.4.16.

### Tools Needed

- Phillips screwdriver or 1/4" nut driver
- Flat bladed screwdriver
- Needle nose pliers

### Procedure

Separate the punch from the printer and remove the rear cover. See Section 4.1 and Section 4.1.2.

### 4.4.1 Bypass Panel Removal

#### To remove the Bypass panel:

1. Disconnect the grounding strap by removing the screw on the exit side of the bypass [1].
2. Unplug the exit side sensor at the rear frame [2].

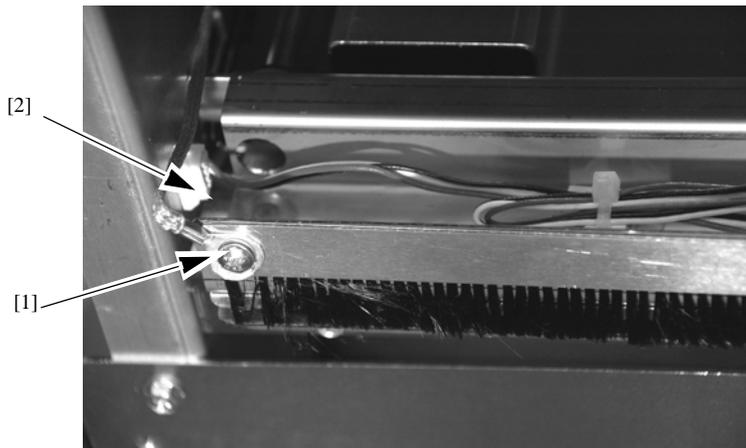


Figure 4.8 Disconnect the Grounding Strap and Unplug the Sensor.

3. Unplug the entrance side sensor at the rear frame [1].

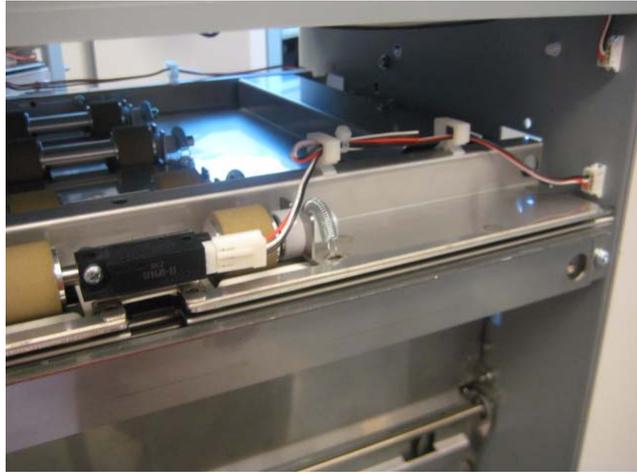


Figure 4.9 Sensor Connector on Entrance Side.

4. From the rear of the punch, remove one of the E-rings from the Bypass shaft [1].

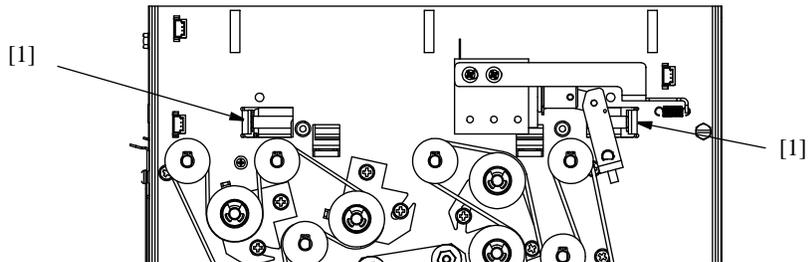


Figure 4.10 Remove E-Ring.

5. From the side of the punch, slide the shaft [1] towards the end of the shaft [1] without the E-Ring [2] until the other end of the shaft clears the nylon bushing and bracket.
6. Lift the opposite end of the shaft [3] and slide it out of the Bypass panel in the opposite direction of the removed E-Ring [4].

**Installation Note:** Make sure the nylon bushing is installed so that it protrudes through the mounting bracket of the rear frame into the Bypass panel [5].

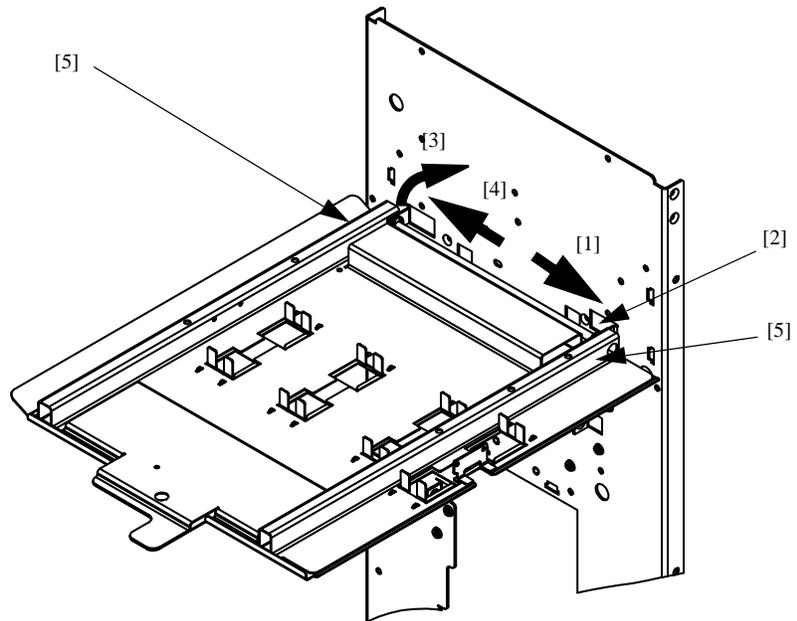


Figure 4.11 Bypass Panel, Shaft, and Rear Frame.

7. Rotate the rear of Bypass panel [1] so that it extends past the entrance side of the punch [2].

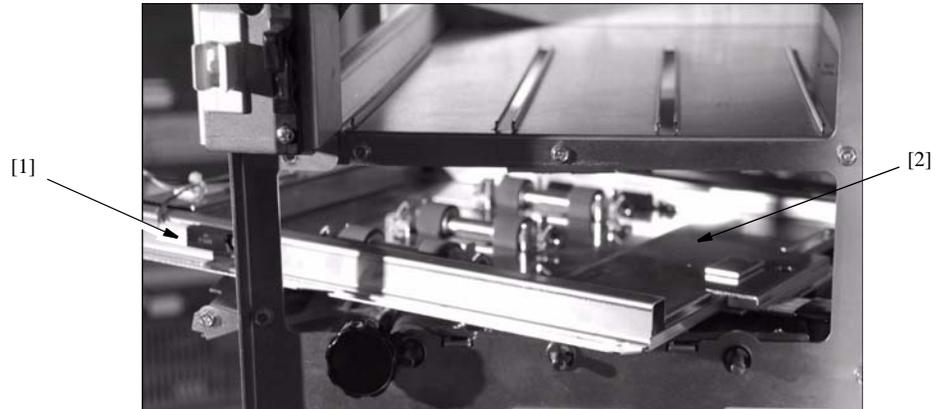


Figure 4.12 Rotate the Bypass Panel Out the Entrance Side of the Punch.

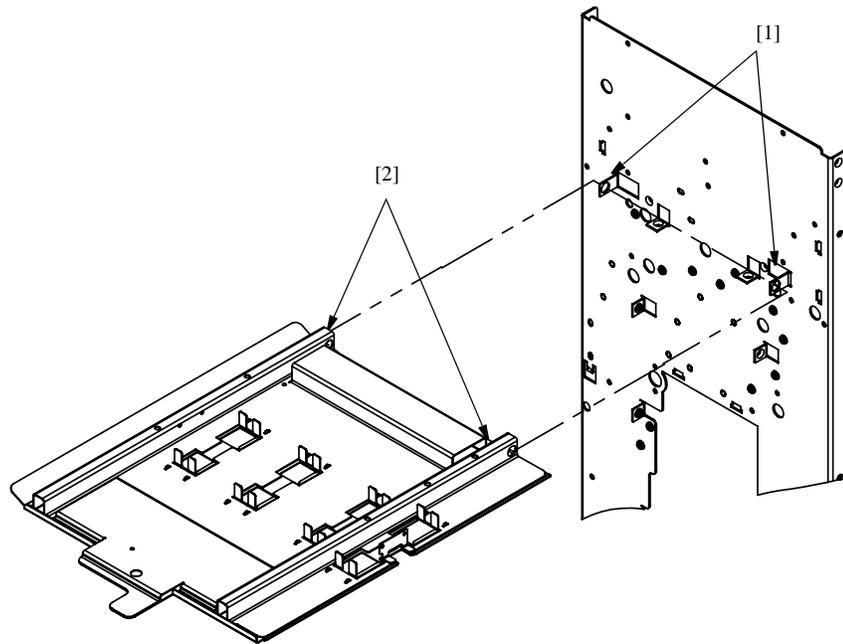


Figure 4.13 Exploded View of Bypass Panel and Mounting Brackets On the Rear Frame.

8. Remove the Bypass panel and remove all components from the old panel and then install them on the new panel, this includes: sensors, springs, cables and rollers.
9. To install the Bypass panel, reverse the steps.

**Installation Note:** Before installing the new bypass panel into the machine, ensure that all rollers move freely within the guides in the panel. Adjust the guide fingers as necessary to obtain free travel. Position the Bypass panel so that it is outside the shaft mounting brackets. The nylon bushings go through the mounting brackets [1], into the Bypass panel [2].

## 4.4.2 Bypass Idler Roller Replacement

Idler rollers press against the drive rollers and move the paper through the bypass [1]. Rollers can be serviced without removing the Bypass panel.

### **Maintenance Schedule**

Inspect and clean every 750K cycles. Refer to Refer to Section 1.4.12.1.

Replace idler rollers every 2000K cycles.

### **Procedure**

Inspect rollers for wear patterns or groves. The roller surface should be even and have a textured surface. Replace when needed or per the maintenance schedule. Rollers, bushings, and shaft are replaced as one assembly.

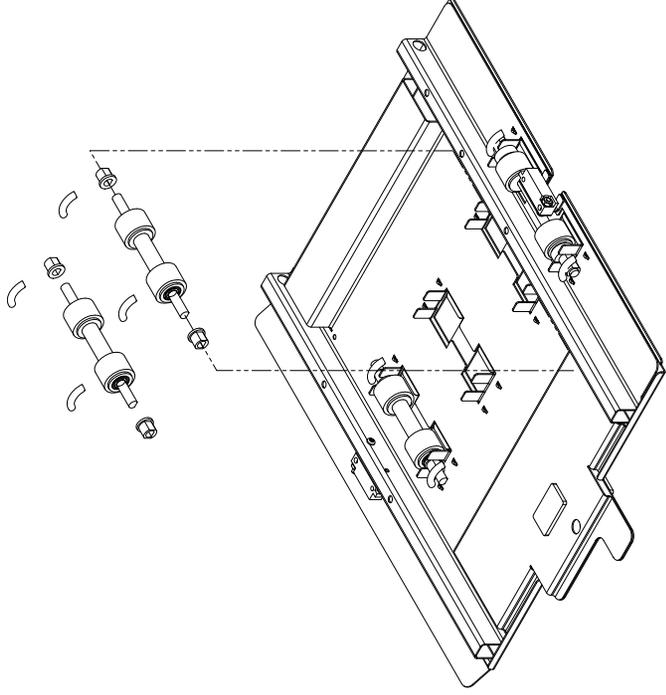


Figure 4.14 Bypass Idler Rollers.

**To remove the Bypass idler rollers:**

1. Lift the retaining spring [1] over the end of the idler roller shaft.

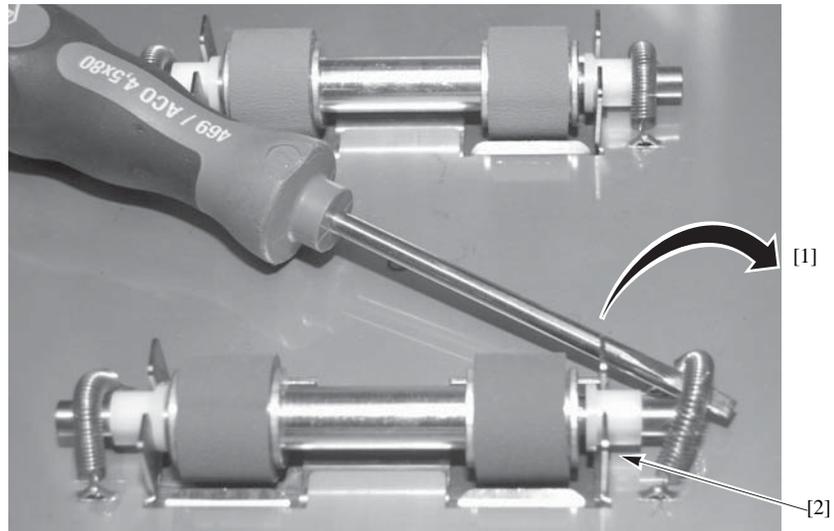


Figure 4.15 Releasing Idler Roller Retaining Spring.

2. Pull the released shaft end out of the bushing fork [2], releasing the opposite end of the shaft from the other retaining spring.
3. To install idler roller assemblies reverse the steps.

**Installation Note:**

- Make sure the flat surface of the bushing aligns in the fork.
- Rollers are non-directional so it does not matter which end goes in each fork.
- After the assembly is in place, gently pull the assembly outward and release to ensure it moves freely in the fork.

## 4.5 Punch Idler Rollers

Idler rollers press against the drive rollers and move the paper through the Advanced Punch. Most can be serviced without disassembling punch components. Unplug unit and separate from the printer. Refer to “[Separating the Punch From the Printer](#)” on page 4-1.

### Maintenance Schedule

Inspect and clean every 750K cycles. Refer to “[Idler Roller Inspection and Cleaning](#)” on page 1-21.

Replace idler rollers every 2000K cycles.

### Procedure

Inspect rollers for wear patterns or groves [1]. The roller surface should be even and have a textured surface. Replace per the maintenance schedule. Idler Rollers other than the Aligner panel idler rollers are shown in [Figure 4.16](#).

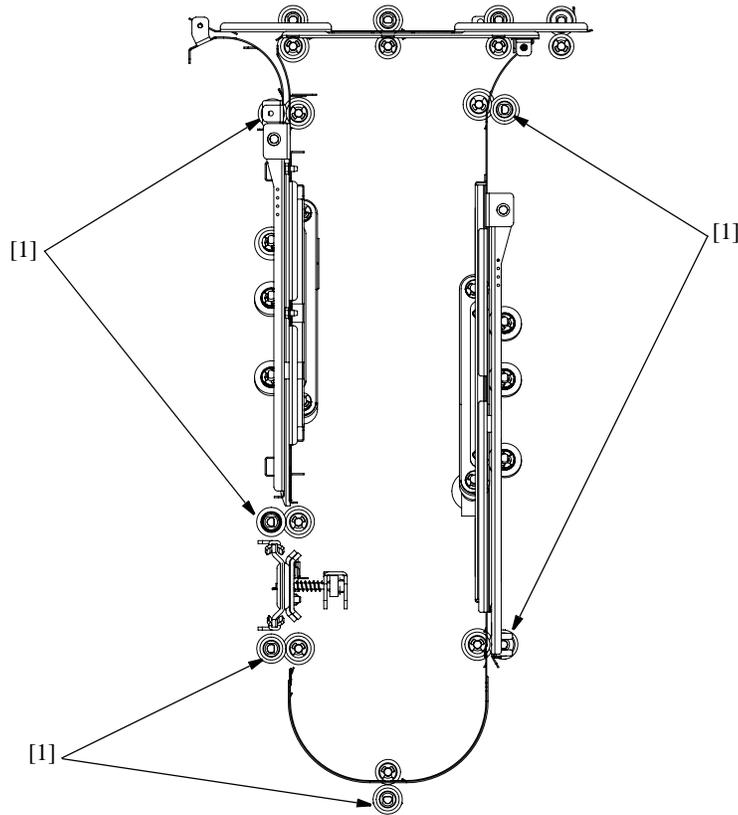


Figure 4.16 Punch Idler Roller Locations.

## 4.5.1 Idler Roller Removal

This procedure refers to the idler rollers [3] shown in [Figure 4.16](#) that are easily removed as assemblies.

**Note:** This procedure does not apply to the Aligner panel idler rollers. See [“Aligner Panels”](#) on page 4-17.

1. Lift the retaining spring [1] over the end of the idler roller shaft.

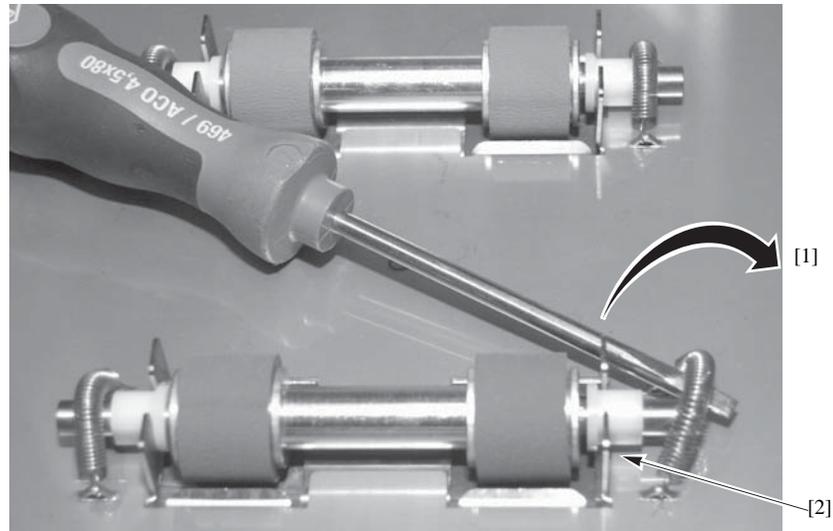


Figure 4.17 Releasing Idler Roller Retaining Spring.

2. Pull the released shaft end out of the bushing fork [2], releasing the opposite end of the shaft from the other retaining spring.
3. To install idler roller assemblies reverse the steps.

**Installation Note:**

- Make sure the flat surface of the bushing aligns in the fork.
- Rollers are non-directional so it does not matter which end goes in each fork.
- After the assembly is in place, gently pull the assembly outward and release to ensure it moves freely in the fork.

## 4.6 Aligner Panels

The entrance side Aligner panel positions the paper in the Back Gauge for punching. The exit side Aligner panel positions the paper for the finisher. Prior to servicing the Aligner Panels, separate the Advanced Punch from the printer. Refer to [“Separating the Punch From the Printer”](#) on page 4-1.

### 4.6.1 Aligner Idler Roller Replacement

#### Maintenance Schedule

Clean every 750K cycles. Refer to [“Idler Roller Inspection and Cleaning”](#) on page 1-21.

#### Tools Required

- Flat head screw driver
- Needle nose pliers

#### Procedure

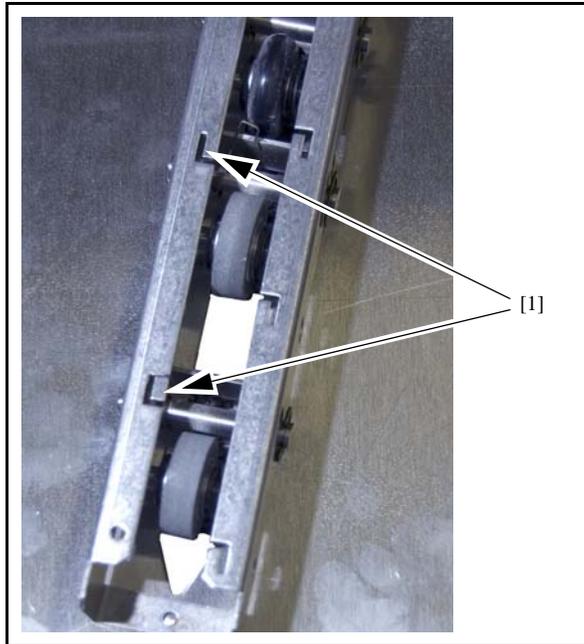


Figure 4.18

## 4.6.2 Aligner Panel Removal

Removing the Aligner panels provides access to the paper path and the Aligner Green Drive Belt. The procedure is the same for the entrance and exit Aligner panels except that the exit side has a docking plate which must be removed first.

### To remove the Aligner panel:

1. Release the Aligner latch [1].
2. Remove the E-clips from both ends of the Aligner shaft [2].
3. Slide the shaft out the front of the punch.

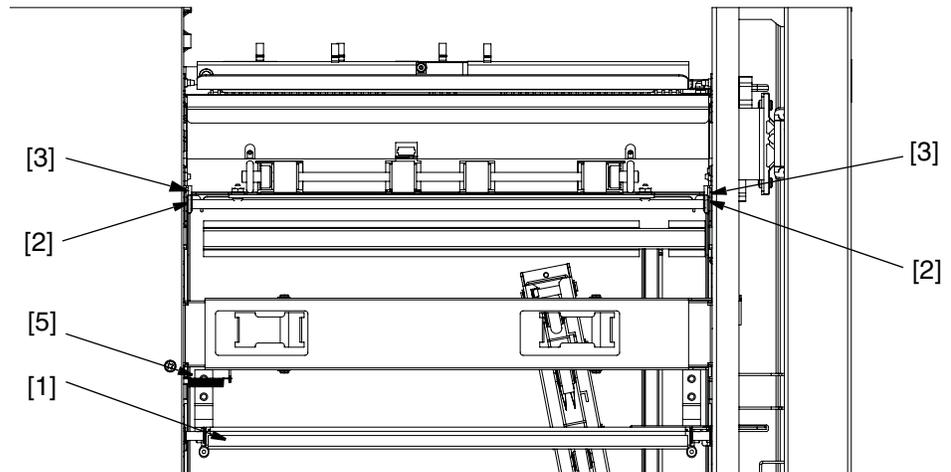
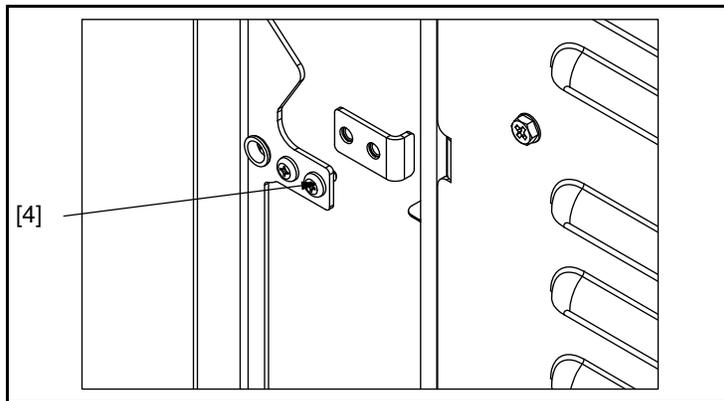
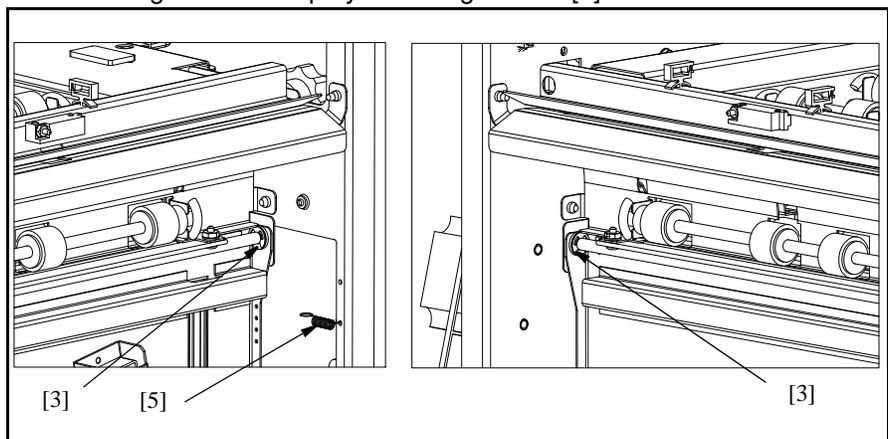


Figure 4.19 Entrance Side Aligner Panel.



4. Remove aligner latch stop by removing screws [4]



5. Remove the shaft nylon bushings [3].
6. Lift the Aligner panel up and unhook the tension spring from the panel [5].
7. Remove the Aligner panel out the front of the punch.
8. Reverse the steps to install the Aligner panel.

### 4.6.3 Aligner Drive Belt (Green Belt) Replacement

#### Maintenance Schedule

Clean every 750K cycles. Refer to [“Aligner Panel Inspection and Cleaning”](#) on page 1-15.

#### Procedure

Before replacing the green drive belts, remove the Aligner panels. See [“Aligner Panel Removal”](#) on page 4-18. Then follow the procedures below for the entrance side or exit side green drive belt service, [“Paper Entrance Side Green Drive Belt Replacement”](#) on page 4-21 or [“Paper Exit Side Green Drive Belt Replacement”](#) on page 4-27.

#### Tools Required

- Phillips screw driver
- Nut drivers, 1/4 and 5/16"
- Hex wrenches, 5/64 and 9/64"
- Snap ring pliers
- E-Ring tool
- Twelve inch metal ruler or similar straight edge



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**Caution:** Disconnect the Advanced Punch from power and retain the power cord in your possession for your safety. Failure to observe this caution can result in injury.

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**Tip:** Empty the paper chip bin and replace it. This makes it easier to find small parts that you may drop into the bin.

### 4.6.3.1 Paper Entrance Side Green Drive Belt Replacement

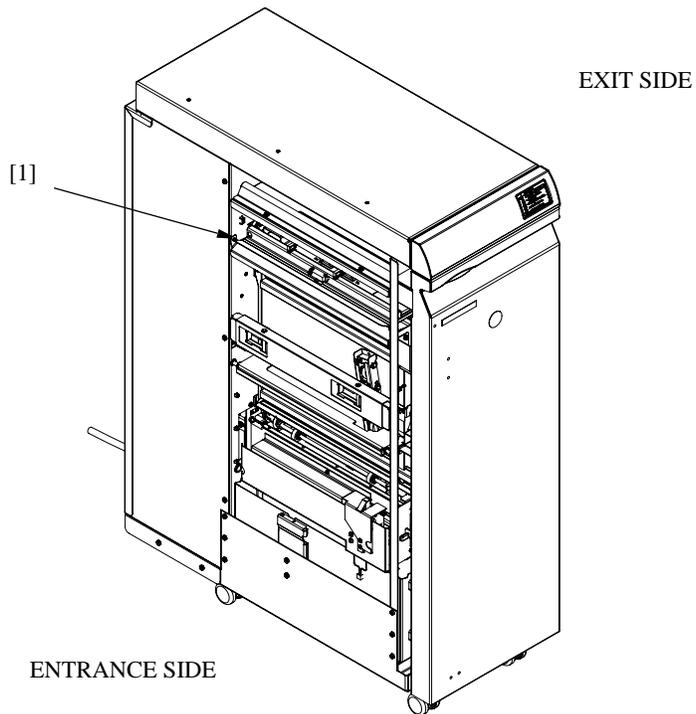


Figure 4.20 Opening Door and Removing Chip Tray.

1. Disconnect the entrance sensor wire from the side frame [1].
2. Remove the 4 screws that secure the front paper chute [2].

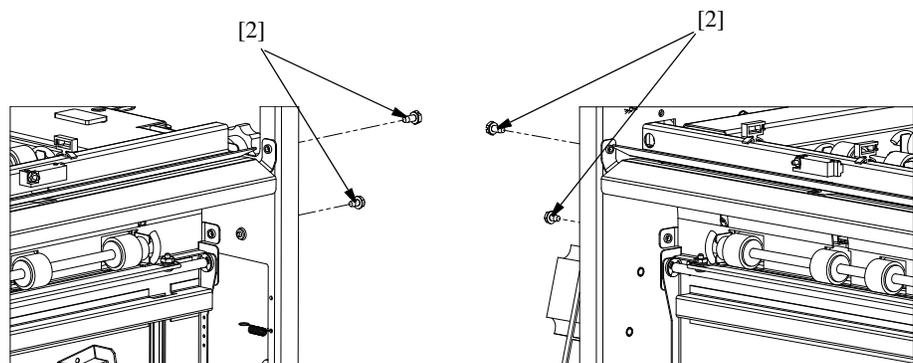


Figure 4.21 Remove 4 Paper Chute Screws.

3. To remove the GP2 aligner latch [9], do the following:

- a. Unhook the spring of the GP2 aligner latch on the right end.
  - b. Remove only one (the one closest to the frame) of the E-rings of the GP2 aligner latch on the left end (front Door side).
  - c. Push the GP2 aligner latch in toward the front door until it clears the rear frame.
  - d. Pull the entire GP2 aligner latch, door latch out and set it aside.
4. To remove Entrance Aligner panel, Idler Paper Guide assembly (refer 4-19):

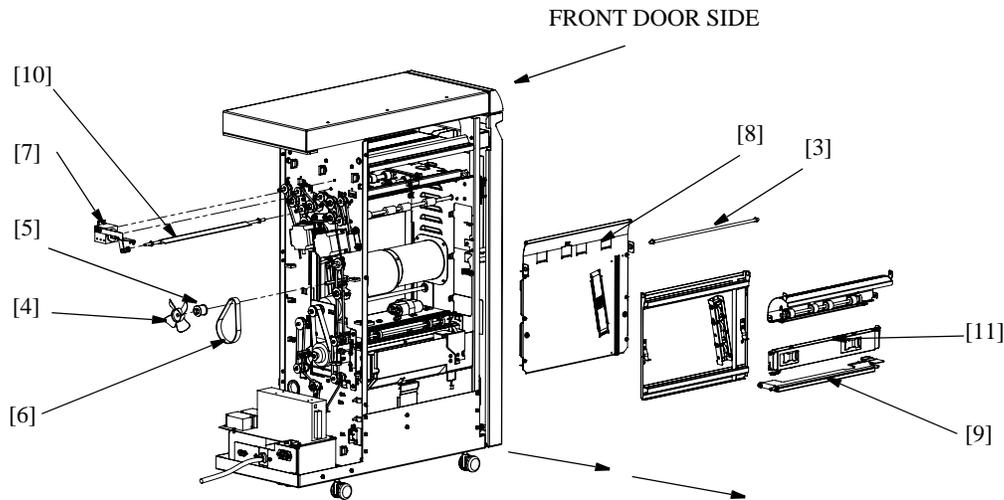


Figure 4.22 Remove Idler Paper Guide Assembly.

- a. Remove 2 E-rings from the Pivot shaft [3].
  - b. Slide the shaft [3] all the way out through the front of the Advanced Punch.
  - c. Remove the fan [4] that prevents access to the flexible cable. To remove it simply pull it off of the shaft.
  - d. Remove the flexible cable using a hex wrench.
  - e. Remove the rear top motor pulley [5].
  - f. Loosen the belt [6].
  - g. Remove the belt and pulley.
  - h. Loosen screw from the solenoid link.
  - i. Remove the solenoid assembly [7] and link from the Diverter Shaft, leave it hang.
  - j. Remove the 2 E-Rings of the Entrance Diverter assembly, slide the Diverter out and set it aside [10].
5. To remove the drive side, Paper Entrance Guide Aligner assembly [8], which is the large sheet metal assembly that actually contains the green drive belt and

Aligner.

- a. Remove the 6 Screws that secure the face of this assembly.
- b. Remove the 2 screws that secure this assembly from the side frame.
- c. Pull and walk the entire sheet metal assembly of the Paper Guide Aligner assembly up and outward. You can grab the assembly at the roller cut out with your fingers.



**Caution:** As you pull the assembly out, disconnect the sensor harness behind the assembly as soon as you are able to reach it. Failure to observe this notice may damage the wiring.

6. Remove the green drive belt Aligner Roller assembly by removing the 4 screws (S).

**Caution:** Leave the Flex Shaft (FS) attached.

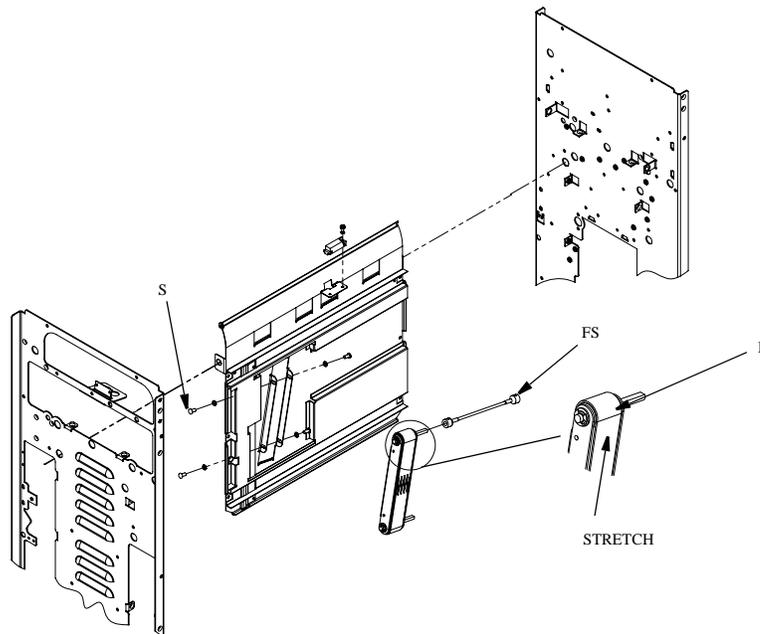


Figure 4.23 Removing the green drive belt.

#### 4.6.3.2 Green Drive Belt Assembly

1. Stretch the new Belt (B) onto the Aligner Roller assembly, green side out. Rotate the Shaft (S) to confirm that the belt tracks properly.
2. Slide the Aligner into place, loosely attach the 4 Pan Head Screws with the 4 Lock Washers.
  - a. Check that the metal surface of the Aligner Roller assembly is flush with the Sheet Metal surface of the Paper Guide. A 12" metal ruler works well to check this adjustment. Slip the ruler under the green drive belt and press it flat against the two surfaces.
  - b. Adjust the Aligner and snug the screws when perfectly flush.

**Note:** The green drive belt should look like the drawing shown in [Figure 4.23](#).

- c. As a double check, hold the entire Paper Guide assembly up so that you can visually inspect the alignment between the sheet metal surface and the metal surface of the Aligner. The green drive belt should appear to be even or parallel, and just floating above the surface of the sheet metal.
3. To install the Paper Guide assembly into the Advanced Punch:
  - a. As you slide the Paper Guide assembly into place,
    - Hook up the Sensor Harness to the Sensor on the back.
    - Lift it up slightly to clear the lower Transition Paper Guide.
    - Be sure to clear the Sensor Bracket at the top left.
    - Be sure that the Flex Coupling Shaft is sticking out of the rear of the GP-501 Punch properly.
  - b. Visually check all around the mounting area of the Paper Guide assembly and that the Sensor Harness is properly connected.
  - c. **Loosely** secure it in place with 3 screws on the left and 3 on the right.
  - d. **Loosely** install the 2 top screws.
  - e. Once all 8 mounting screws have been properly started you have good alignment. You may now go back and tighten the screws until they are snug.

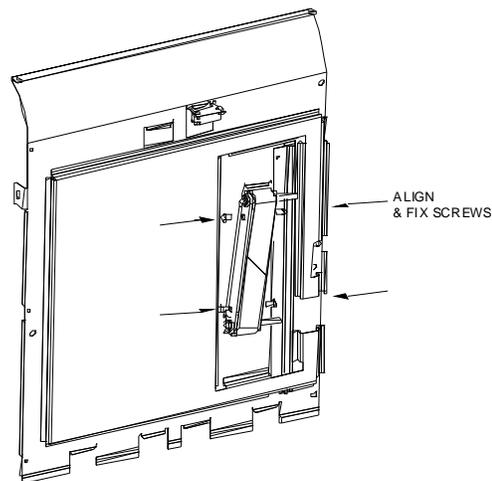


Figure 4.24 Aligning and Tightening Paper Guide Assembly Into the Machine.

4. Install the Flexible Shaft.
5. Install the curved sheet metal Exit Paper Guide (item 7) with Idler Roller 4 Screws.  
Start all 4 screws, (2 on front and 2 on back) then tighten.
6. Connect the Sensor Wire Harness at the top rear of the Exit Paper Guide.
7. Install the Shaft back into place by inserting it first into the front, then the back.

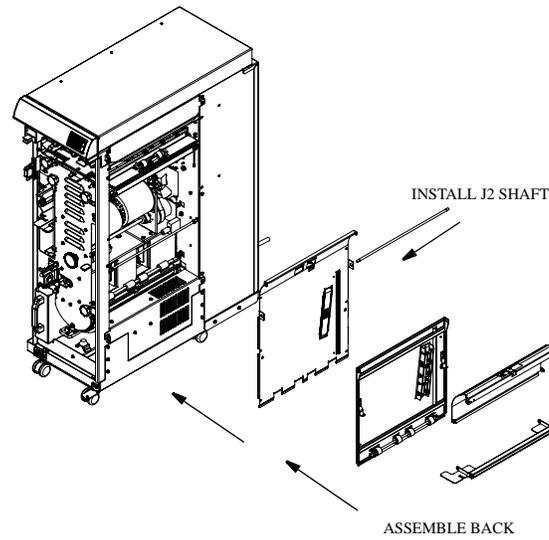


Figure 4.25 Installing J2 Shaft.

8. Close the Flipper Latch.  
Repeat the test of rotating the pulleys to ensure smooth rotation of the Idler Rollers.
9. Attach the Shaft Spring.
10. Install the front E-Ring to secure.

### 4.6.3.3 Entrance Aligner Panel Installation

To install the Idler Aligner panel, refer to “[Back Gauge Solenoid Inspection and Cleaning](#)” on page 1-20. Then insert the punch into the printer and finisher and connect the power cord.

**Test the Advanced Punch by doing the following:**

1. Run 10 copies in bypass mode.
2. Run 1 sheet in punch mode.
3. Run 10 sheets in punch mode.
4. Run 100 sheets in punch mode.

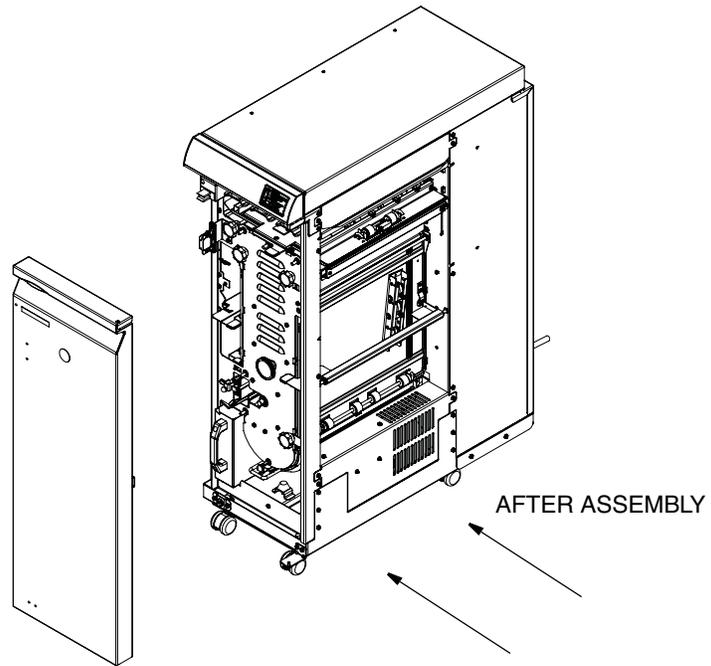


Figure 4.26 Removing Rear Aligner.

#### 4.6.3.4 Paper Exit Side Green Drive Belt Replacement

1. To remove the Flipper (C), Door Latch:
  - a. Remove only one (the one closest to the frame) of the E-Rings of the Flipper on the right end (front door side).
  - b. Push the Flipper in toward the front door until it clears the rear frame.
  - c. Pull the entire Flipper, door latch out and set it aside.

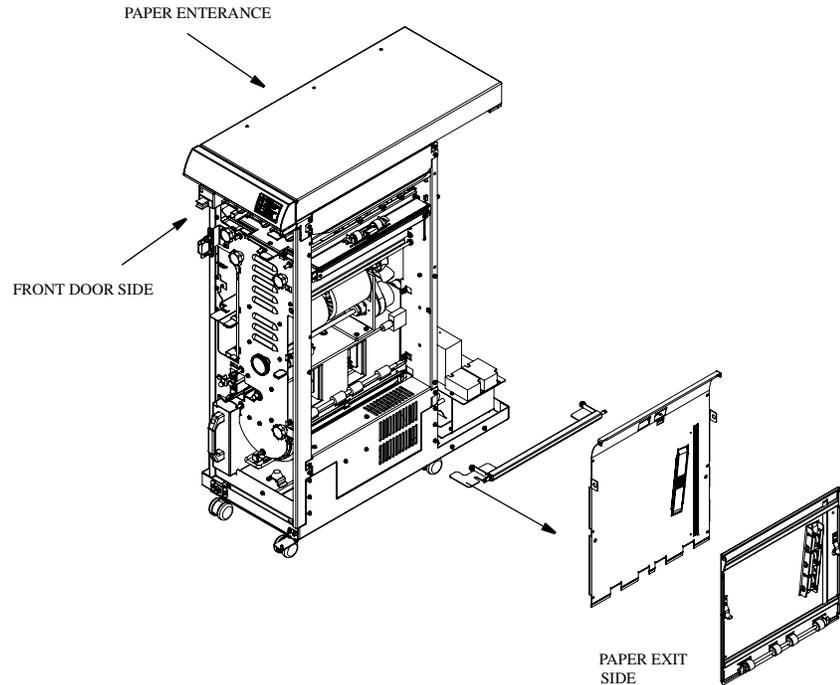


Figure 4.27 Removing Rear Aligner.

2. To remove the Rear Aligner, Idler Paper Guide assembly:
  - a. Remove 2 E-Rings from the Pivot Shaft.
  - b. Slide the Shaft all the way out through the front of the Advanced Punch.
  - c. Remove the 2 nylon bearings.
  - d. Remove and set aside the Rear Aligner, Idler Paper Guide assembly.
3. To remove the curved sheet metal Exit Paper Guide assembly:
  - a. Remove the 4 screws (2 rear and 2 front) of the curved sheet metal Exit Paper Guide assembly.
  - b. Unplug the sensor.
  - c. Pull the entire sheet metal Exit Paper Guide assembly out, set aside.
4. To remove the Rear, Drive Side, and Paper Guide Aligner assembly. This is the large sheet metal assembly within the Advanced Punch that contains the green drive belt Aligner.

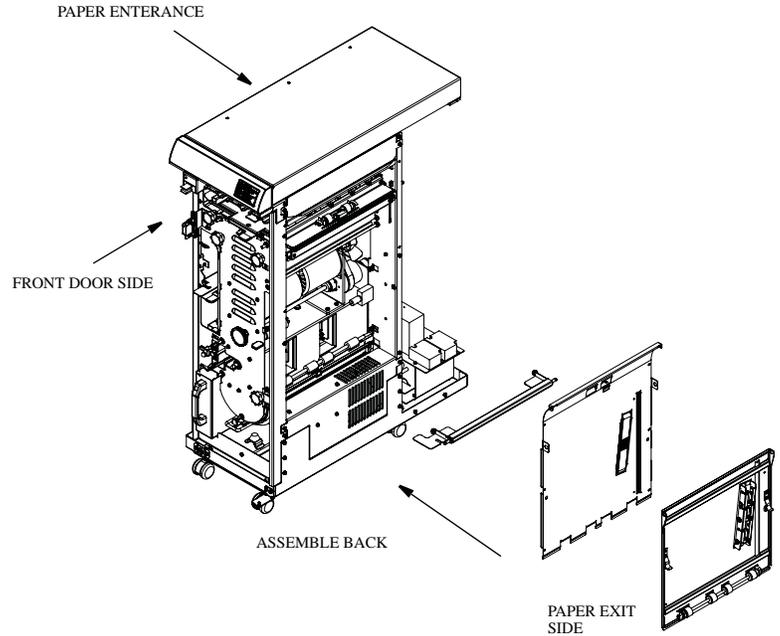


Figure 4.28 Removing the Aligner assembly.

---

**Caution:** Walk the Belt off of the Aligner Pulley at the rear.

---

- a. Remove the 2 screws that hold the block to the frame. The Coupler is loose and the rear panel will come out.
- b. Remove the 6 screws that secure the face of this assembly.
- c. Remove the 2 screws that secure this assembly from the top.
- d. Pull and walk the entire sheet metal assembly of the Paper Guide Aligner up and outward. You can grab the assembly at the roller cut out with your fingers.

---

**Caution:** Handle the helical coupling carefully. It is very delicate.

---

---

**Note:** In order to access these screws, you must first remove the Die Set storage shelf and the cable shield attached to the Die storage shelf at the paper entrance side. Moving the Die Storage shelf aside will enable better access to the 2 screws with a short Phillips screw driver.

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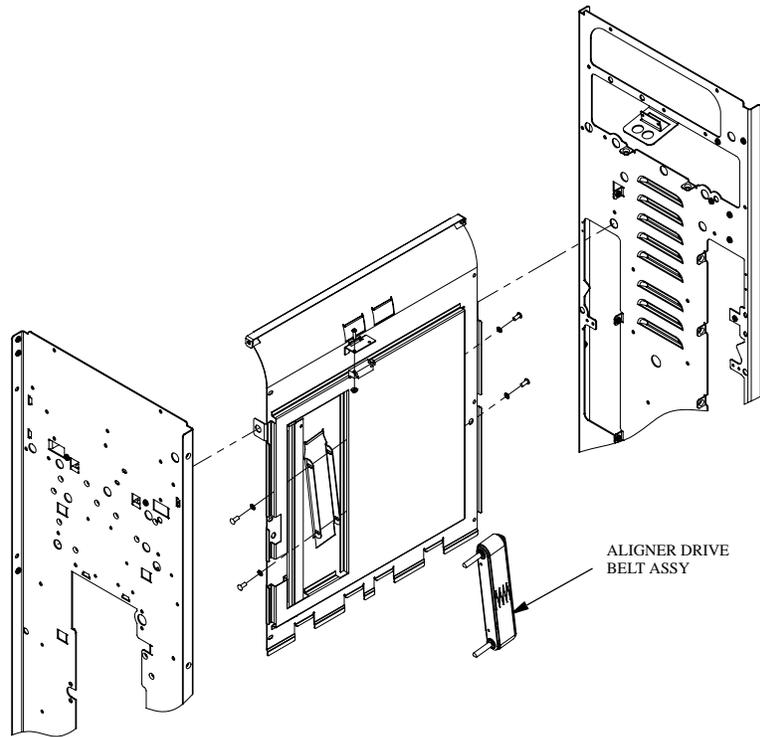


Figure 4.29 Removing the Aligner Drive Belt.



---

**Caution:** As you do this, disconnect the sensor harness behind the assembly as soon as you are able to reach it. Failure to do this can damage the unit.

---

5. Remove the green drive belt Aligner Roller assembly by removing the 4 screws (S).

---

**Caution:** Leave the Flex Shaft (FS) attached.

---

6. Remove the green drive belt Aligner Roller assembly by removing the 4 screws.

---

**Caution:** Leave the Coupler attached.

---

### 4.6.3.5 Green Drive Belt Assembly

1. Stretch the new green drive belt onto the Aligner Roller assembly, green side out.
  - Take care when handling the Aligner Roller assembly so as not to damage the Flex Coupling.
  - Rotate the shaft to confirm that the belt tracks properly.
2. Slide the Aligner into place, **loosely** attach the 4 pan head screws with the 4 lock washers.

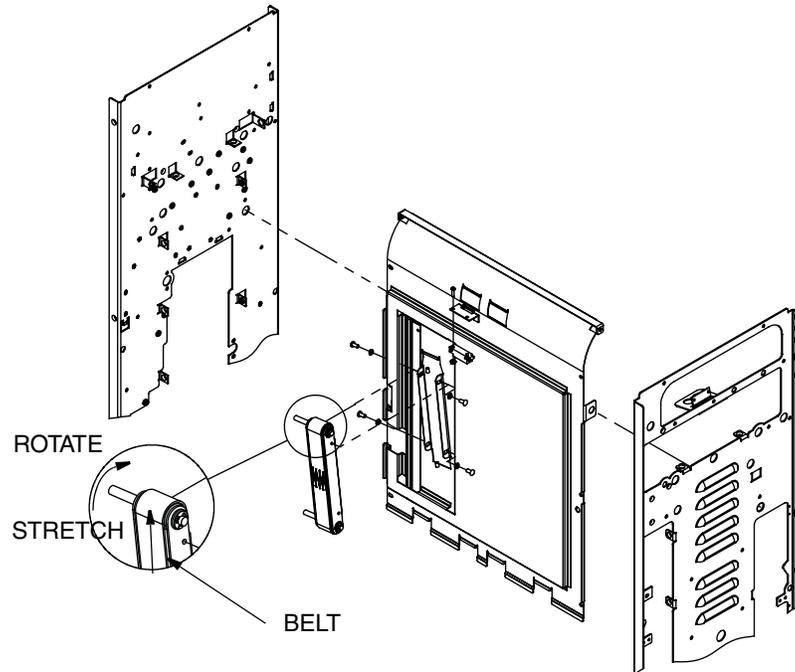


Figure 4.30 Installing Green Drive Belt.

Check that the metal surface of the Aligner Roller assembly is flush with the sheet metal surface of the Paper Guide. A 12" metal ruler works well to check this adjustment. Slip the ruler under the green drive belt and press it flat against the two surfaces. Adjust the Aligner and snug the screws when perfectly flush.

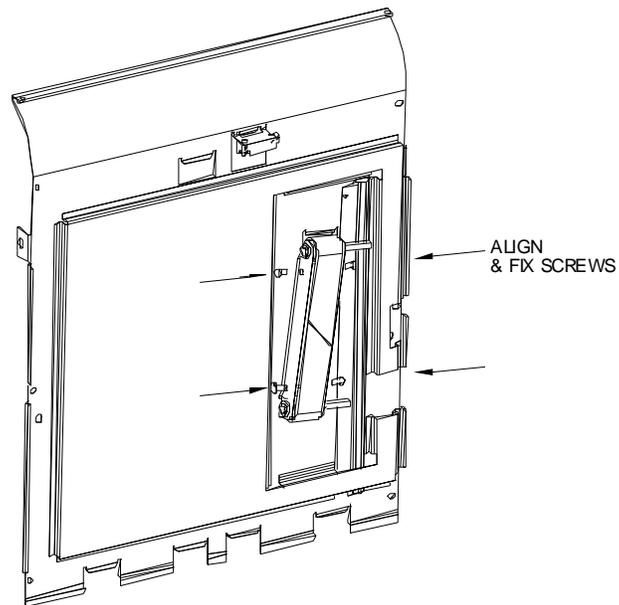


Figure 4.31 Final Assembly of the Green Drive Belt.

The green drive belt should look like the drawing shown in [Figure 4.30](#).

To ensure proper assembly, hold the entire Paper Guide assembly up so that you can visually inspect the alignment between the sheet metal surface and the metal surface of the Aligner. The green drive belt should appear to be even and just floating above the surface of the sheet metal.

3. To install the Paper Guide assembly into the Advanced Punch:

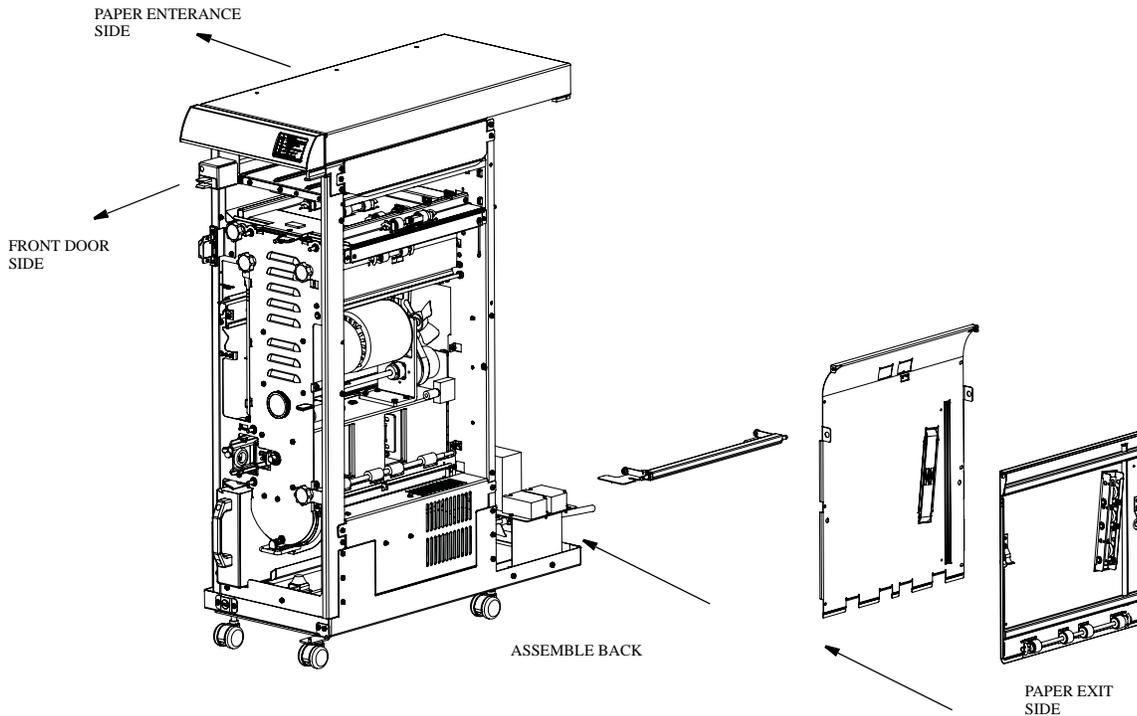


Figure 4.32 Installing the Paper Guide Assembly.

- a. As you slide the Paper Guide assembly into place:
  - Hook up the Sensor Harness to the Sensor on the back.
  - Lift it up slightly to clear the lower Transition Paper Guide.
  - Be sure to clear the sensor bracket at the top left.
  - Be sure that the Flex Coupling shaft is sticking out of the rear of the Advanced Punch properly.
- b. Visually check all around the mounting area of the Paper Guide assembly and that the sensor harness is properly connected.
- c. **Loosely** secure it in place with 3 screws on the left and 3 on the right.
- d. **Loosely** install the 2 top screws.
- e. Once all 8 mounting screws have been properly started go back and tighten the screws until they are snug.



**Caution:** Do not over tighten the 2 screws on top.

4. Install the 2 screws to secure the bearing block for the pulley arrangement at the rear of the Advanced Punch. Press the block to the top of the punch before tightening
5. Install the pulley and belt onto the pulley block. Once properly aligned, check belt and pulley movement. Tighten the set screw.
6. Install the Die Set storage rack with 3 screws front and 3 screws back. Remember to attach the ground strap at the middle screw on the rear (belt

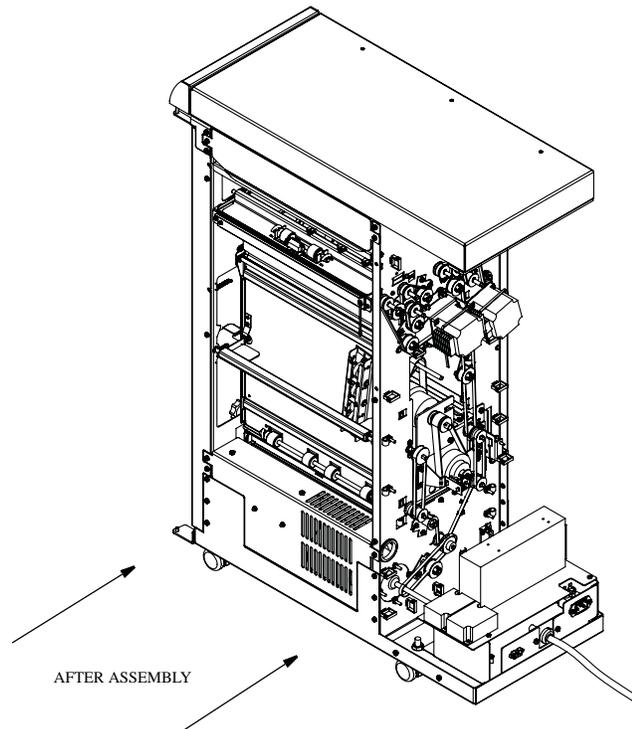
- side). Start each screw to achieve proper alignment, then go back over each screw and tighten it.
7. Install the Cable Guard on top of the Die Set storage rack (2 Screws).
  8. Install the curved sheet metal Exit Paper Guide with Idler Roller 4 screws.
  9. Start all 4 screws, (2 on front and 2 on back) then tighten.
  10. Connect the sensor wire harness at the top rear of the Exit Paper Guide.
  11. To install the Idler Aligner Paper Guide:
    - a. Hold it loosely in place.
    - b. Press the nylon flange bearings into place, through both pieces of sheet metal, with the flange to the inside
    - c. Slide the shaft through the front of the machine, while holding the nylon flange bearing in place.
    - d. Secure with 2 E-rings on the inside of the bearing.
    - e. Inspect by pressing in on the bottom area of the sheet metal for:
      - A slight deflection of each Idler Roller as you press.
      - As you press, you can turn the pulleys at the rear of the Advanced Punch and see the Idler Rollers rotate smoothly.
  12. Bend the small metal tab back into place.
  13. Install the flipper shaft back into place by inserting it first into the front, then the back.
  14. Close the Flipper Latch.  
Repeat the test of rotating the pulleys to ensure smooth rotation of the Idler Rollers.
  15. Attach the shaft spring.
  16. Install the front E-Ring to secure flipper latch.

### 4.6.3.6 Aligner Panel Installation

To install the Idler Aligner panel, refer to “[Back Gauge Solenoid Inspection and Cleaning](#)” on page 1-20. Then insert the punch into the printer and finisher and connect the power cord.

**Test the Advanced Punch by doing the following:**

1. Run 10 copies in bypass mode.
2. Run 1 sheet in punch mode.
3. Run 10 sheets in punch mode.
4. Run 100 sheets in punch mode.



## 4.7 Energy Drive Roller

### Maintenance Schedule

Clean every 750K cycles.

### Procedure

Reference Figure 4.33 Energy Roller as you perform this procedure.

1. Without disconnecting either retaining spring (1), roll one of them gently to one side to release the Energy Drive Roller shaft from its mounting bracket.
2. Lift the shaft (2) from the mounting bracket.
3. Using a clean cloth and alcohol, clean the surfaces of the rollers (3) to remove any paper dust or toner that may have accumulated over time.
4. Reverse steps 2 & 1 above to replace the shaft into the holder.
5. Ensure the flats of the bearings are seated properly in the mounting brackets.
6. Ensure the springs are straight on the bearing to apply sufficient force for the rollers to turn when you rotate the knob at the front of the machine.

See Figure 4.33a

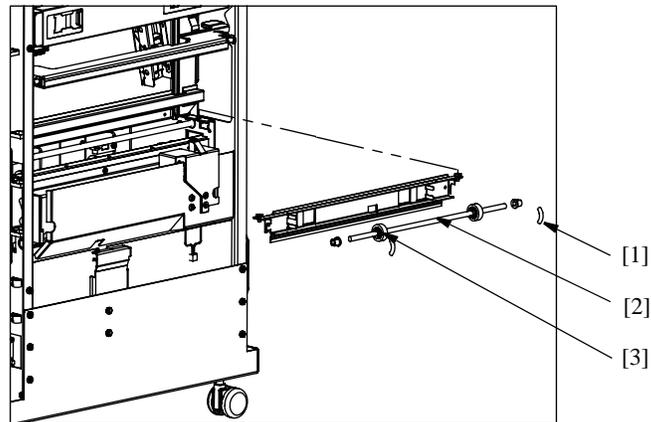


Figure 4.33 ENERGY ROLLER.

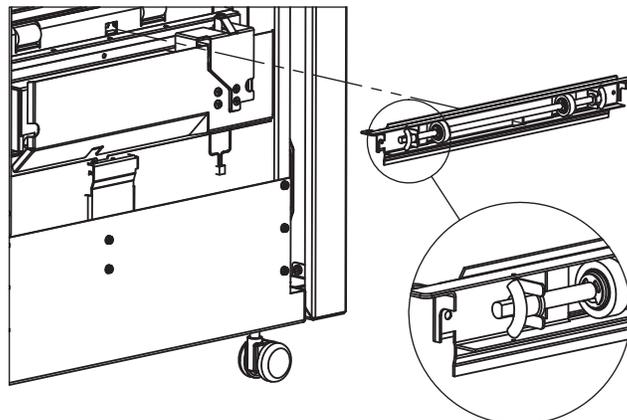


Figure 4.33a For LTR & A4

## 4.8 Back Gauge Assembly

The Back Gauge assembly pauses the paper just as the edge has entered the die set. Working properly, the sheet will pause only long enough for the holes to be punched correctly. The Back Gauge assembly also controls the paper chad falling into the chad bin, significantly reducing the amount of chad that could flow through the paper path. Some chad falls outside the chad bin and should be cleaned up with a vacuum cleaner during each servicing.

**Warning:** Disconnect the Advanced Punch from its power source before removing the Back Gauge assembly. Failure to observe this warning can result in severe injury or death and damage the punch.



### Maintenance Schedule

Clean every 750K cycles.

Replace every 3,000K cycles.

### Procedure

Remove Back Gauge assembly to clean and service the solenoid or to replace the Back Gauge. Also allows the removal of the Punch Module.

To repair or replace the Back Gauge, separate the Advanced Punch from the printer and finisher and then remove the rear cover. See [“Preparing the Advanced Punch for Service”](#) on page 4-1.

### Tools Required

- Phillips screw driver or 1/4" nut driver
- Diagonal wire cutter

**Tip:** Empty the paper chip bin and replace it. This makes it easier to find small parts that you may drop into the bin.

### 4.8.1 Back Gauge Removal

To remove the Backgauge assembly:

1. Begin by removing the punch die set and the chip bin waste container.
2. Remove rear cover as well as the rear entrance side cover.

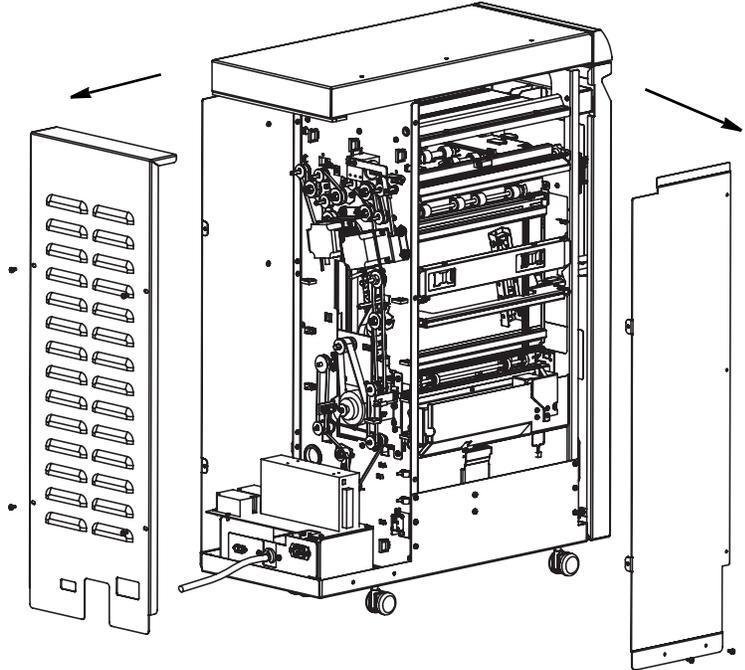


Figure 4.34 Rear Cover & Rear Entrance Side Cover Removal

3. Remove the four screws securing power supply plate.

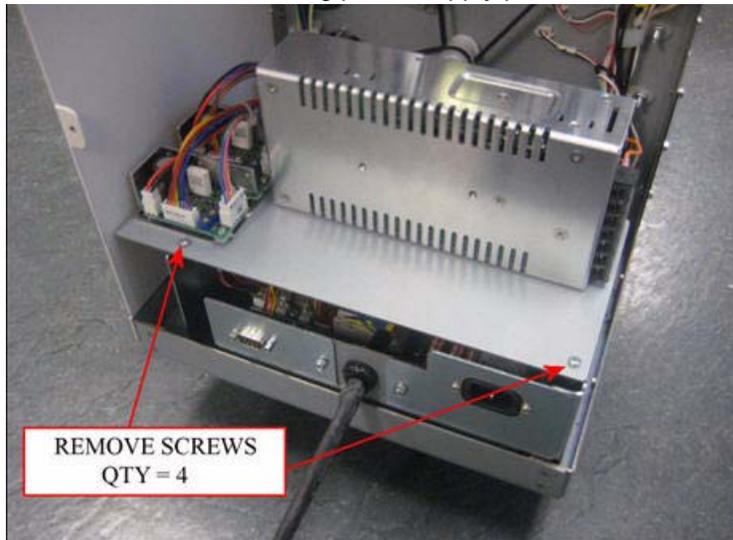


Figure 4.35 Power Supply Plate Removal

4. Tilt the power supply plate upward to expose the circuit board below.



Figure 4.36 Exposure to Circuit Board

5. Locate and then disconnect wire harness J8 from the circuit board. Wire harness J8 consists of two black wires.

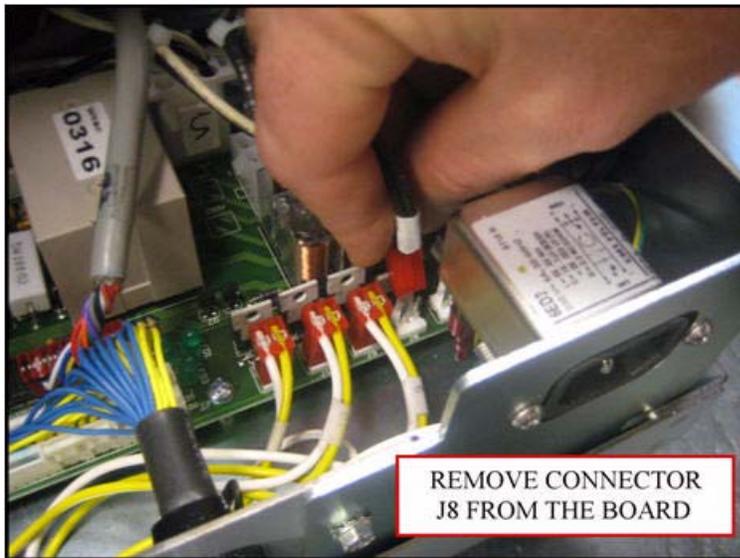


Figure 4.37 J8 Connector Removal

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**Note:** On A4 (230VAC, 50Hz) models the AC line filter is larger than on the LTR 60Hz model. Because of this the AC line filter must be removed when performing this procedure on an A4 model machine.

---



Figure 4.38 Removal of AC Line Filter

6. To remove wire harness J8 from the other cables it will be necessary to cut and discard some wire ties. Take caution not cut or damage any wires while performing this action. After the wire ties are removed, undress wire harness J8 from the other cables.

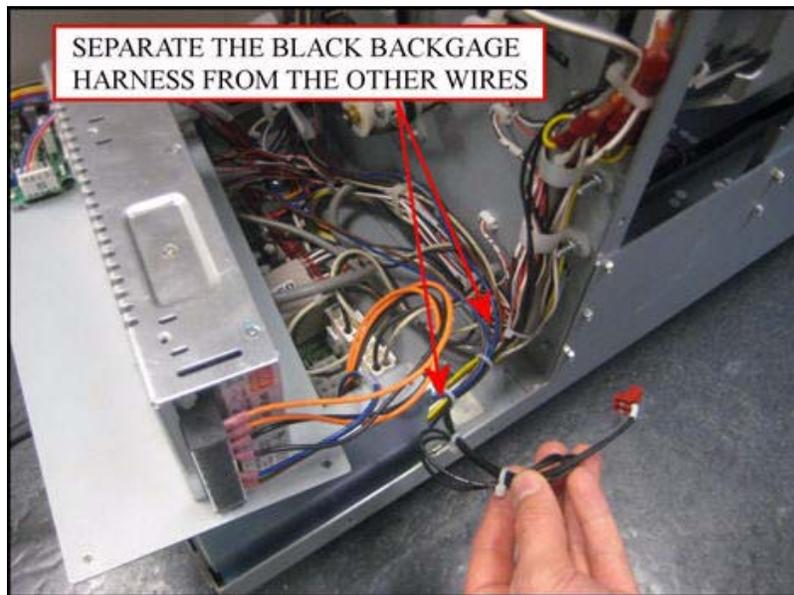


Figure 4.39 Separating Backgage harness

7. Remove the nut from both the upper and lower wire saddles in order to release harness J8.

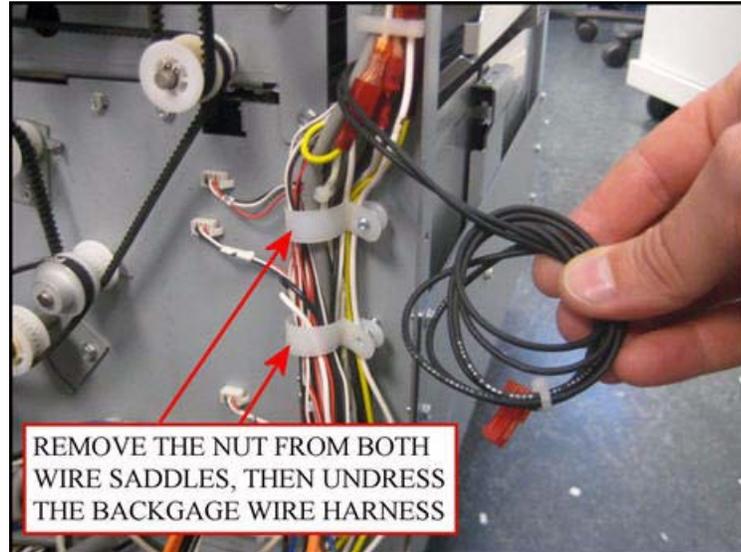


Figure 4.40 Release Harness J8

8. Locate the black rubber grommet that harness J8 passes through. Remove the grommet from its mounting hole in the frame by pushing from one side and pulling from the other. Once the grommet is removed from the frame pass wire harness J8 completely through the hole so that it is free of the frame.

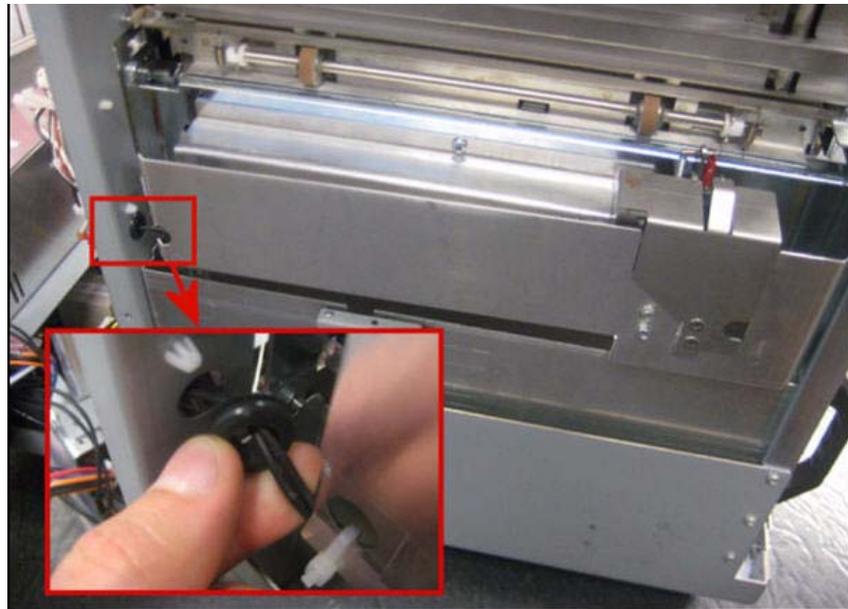


Figure 4.41 Removal of Grommet

9. Remove the two screws securing the backage chute, then remove the chute.

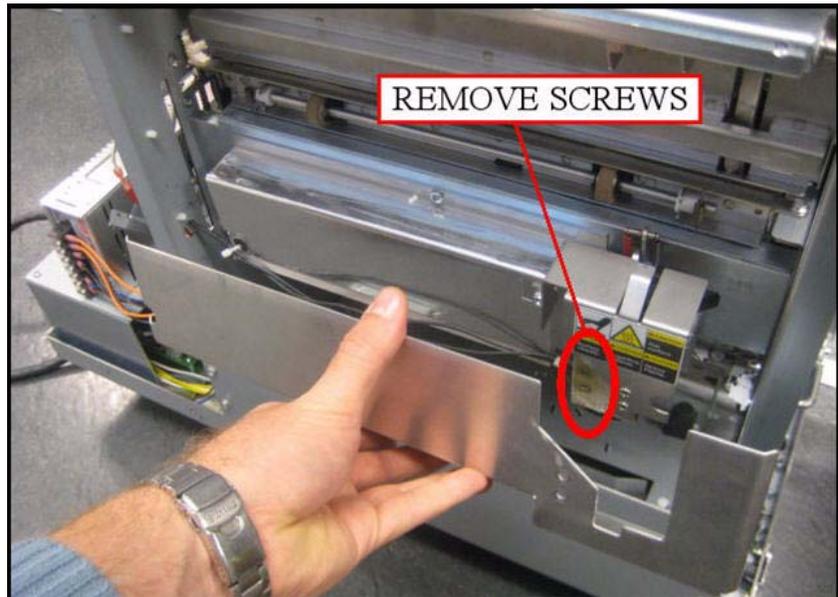


Figure 4.42 Removal of Backage Chute

10. Remove the two screws securing the dieset brush, then remove the brush and bracket.

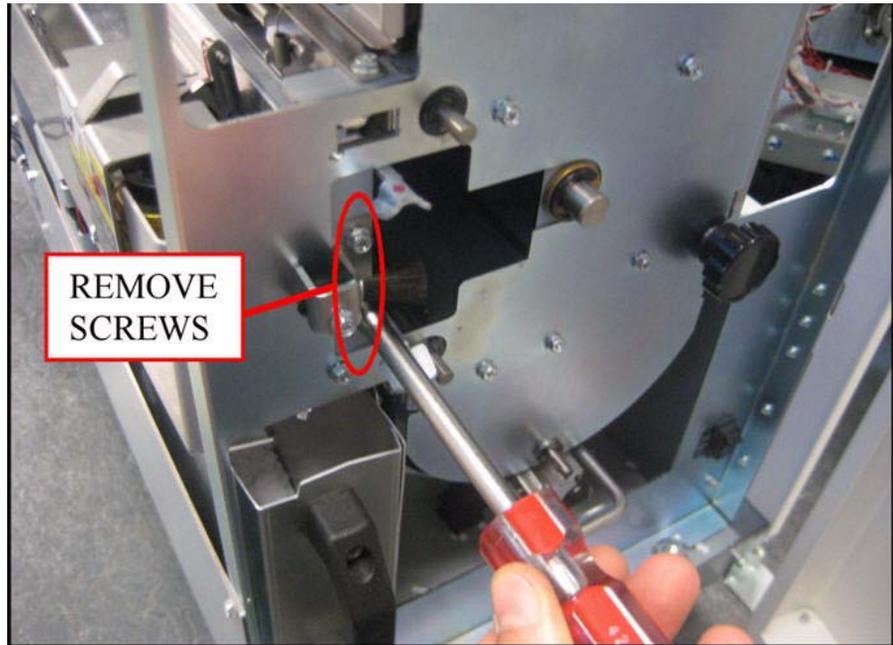


Figure 4.43 Removal of Brush Bracket

11. Remove punch module home sensor cable.

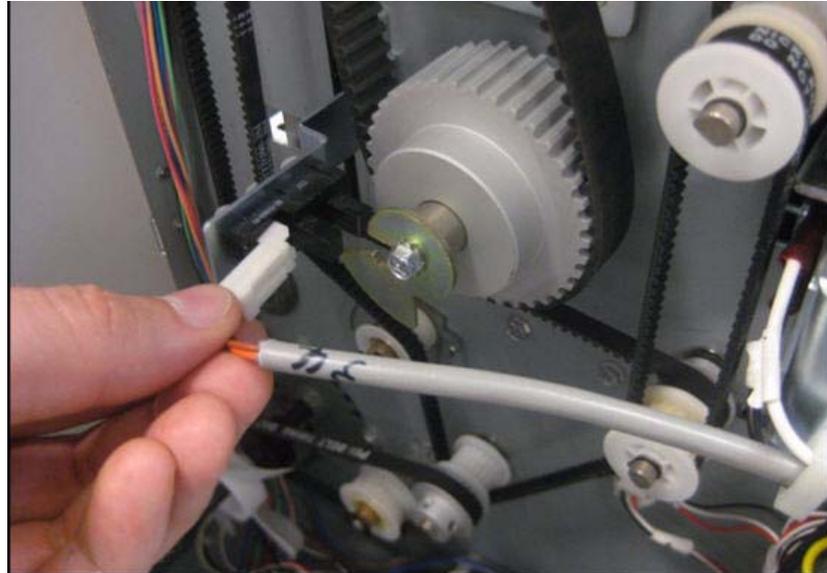


Figure 4.44 Removal of Sensor Cable

12. Remove the two screws shown below from the dieset stop bracket and then remove the bracket from the rear frame.

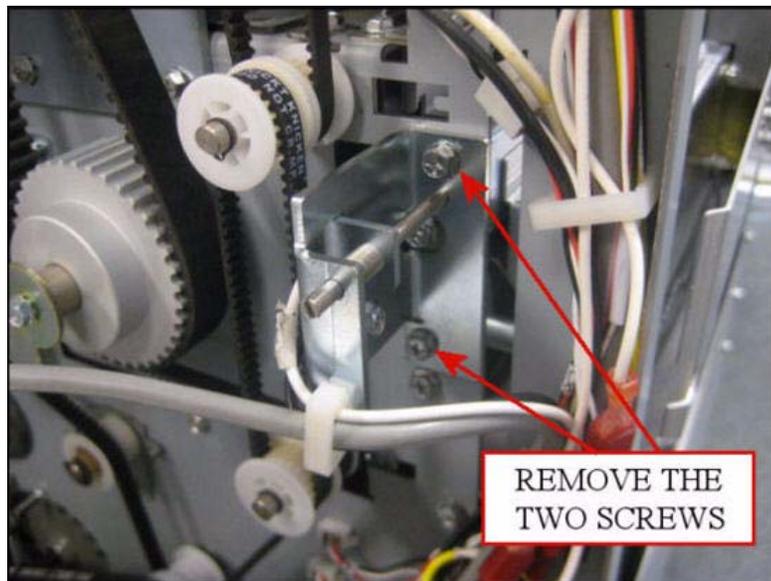


Figure 4.45 Removal of Dieset Stop Bracket

13. Remove the two screws that secure the backage to the rear frame.

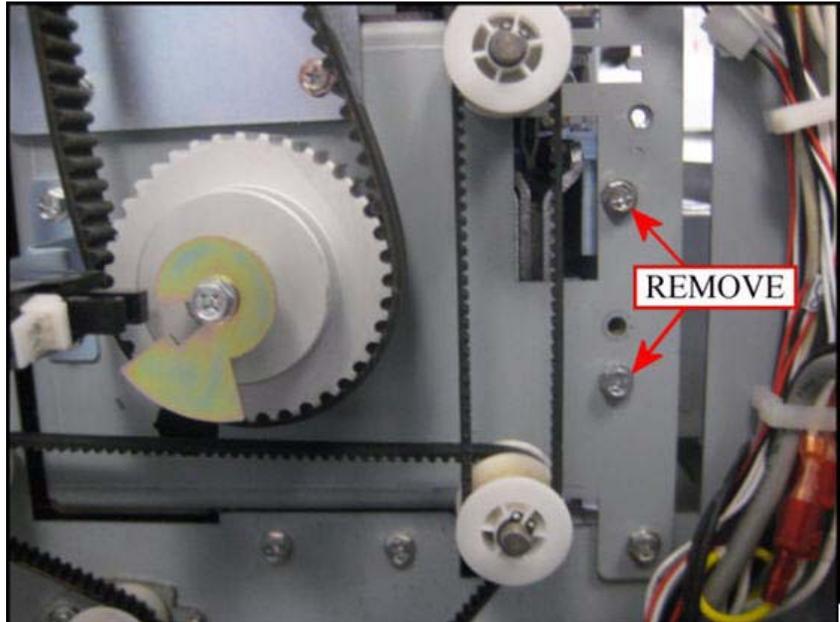


Figure 4.46 Removal of Backage Screws

14. Remove the backage assembly by swinging it out from the left side, and then finally removing the backage entirely.

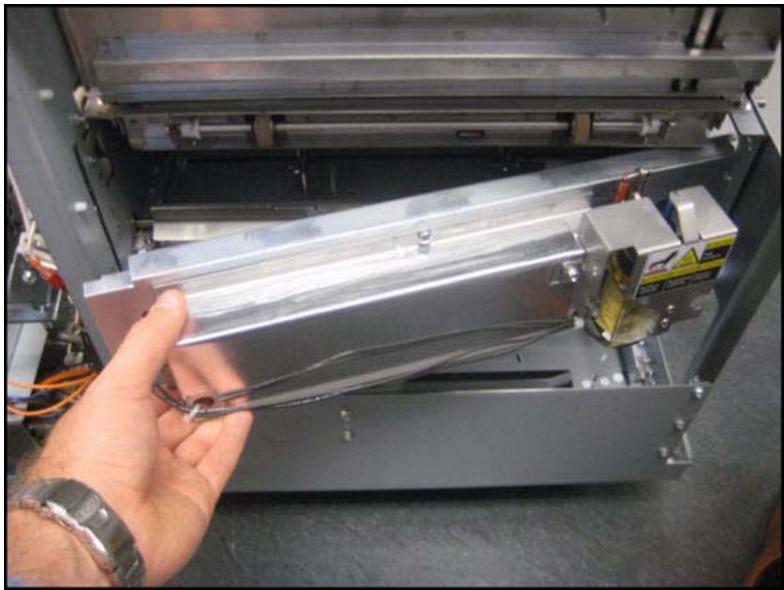


Figure 4.47 Removal of Backage

### 4.8.1.1 Back Gauge Installation

1. Install the back gauge in the reverse order of the steps given in the preceding removal back removal section.

---

**Note:** If replacing the back gauge, make certain to save the black grommet from the original back gauge that is referenced in [Figure 4.41](#). [Removal of Grommet]

---

### 4.8.1.2 Testing

**To test the Back Gauge:**

1. Install a Die Set.
2. Rotate the punch drive knob to ensure the drive and cams turn easily.
3. Test for proper hole alignment to the paper edge by doing the following.
  - a. Run 1 page at a time.
  - b. Run 2 pages at a time.
  - c. Run 5 pages at a time.
  - d. Run 10 pages at a time.
  - e. Run 50 pages at a time.

## 4.8.2 Solenoid Cleaning and Inspection

### Maintenance Schedule

Clean every 750K cycles.

### Procedure

Clean per the maintenance schedule and any time the Back Gauge is pulled out of the punch. Inspect for damaged or worn parts. The only repairable part is spring replacement. See [“Solenoid Spring Replacement”](#) on page 4-46. Replace Back Gauge if solenoid is inoperative.

### To clean the solenoid with the Back Gauge out of the punch:

1. Clean with a vacuum cleaner and canned air. See also [“Back Gauge Solenoid Inspection and Cleaning”](#) on page 1-20.
2. Inspect for dirt or obstructions, wear or damage or missing springs.

---

**Note:** Do not apply lubricants to the solenoid or linkage.

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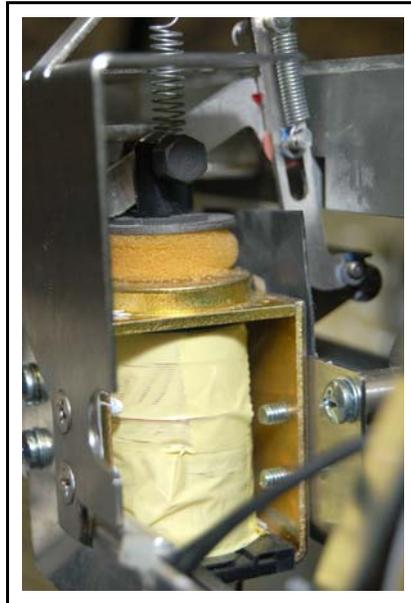


Figure 4.48 Back Gauge Solenoid.

### 4.8.2.1 Solenoid Spring Replacement

#### Procedure

Replace broken or missing springs [1].

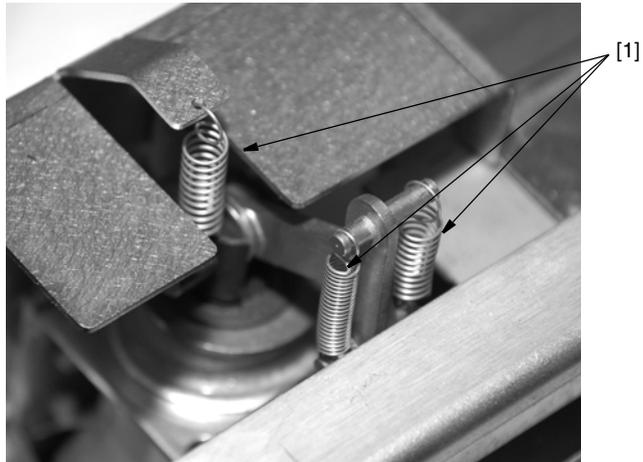


Figure 4.49 Back Gauge Solenoid Springs.

### 4.8.3 Back Gauge Paddle

#### Procedure

Deep or angled deep punches may be caused by a broken weld on the Paddle [1] shaft. Inspect the Paddle and press down on it while holding the linkage to keep the linkage from moving. If the paddle moves [2], replace the Back Gauge assembly.

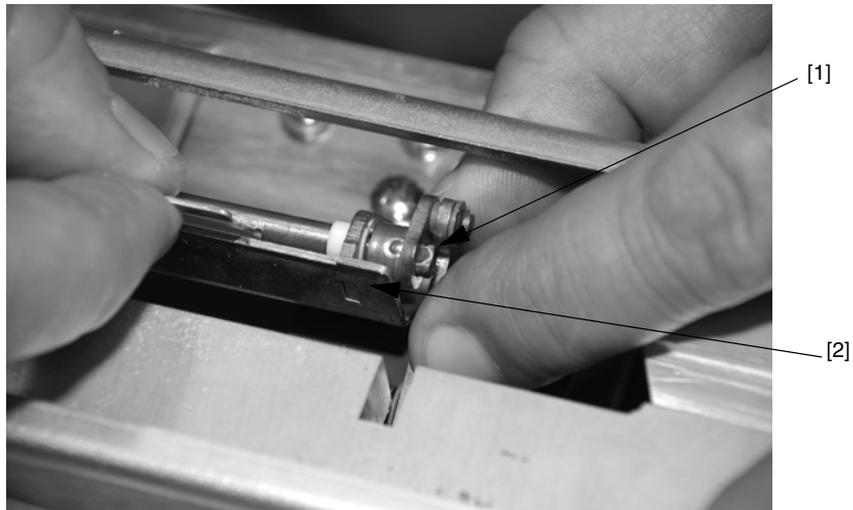


Figure 4.50 Testing for Broken Paddle Weld.

## 4.9 Punch Module

### Maintenance Schedule

Lubricate cams every 750K cycles with teflon grease.

### Tools Required

- Phillips screw driver or 1/4" nut driver
- Hex wrench, 5/64"

**Tip:** Empty the paper chip bin and replace it. This makes it easier to find small parts that you may drop into the bin.

### Procedure

Remove the module to lubricate the cams, or to service or replace the following components.

- Drive motor
- Drive motor belt
- Brake
- Cams
- Flexible drive coupling
- Punch Module drive rollers

The clutch can be replaced without removing the module. See "[Clutch Replacement](#)" on page 4-55.

---

**Warning:** Disconnect the Advanced Punch from its power source before removing the Back Gauge assembly. Failure to observe this warning can result in severe injury or death and damage the punch.

---



### 4.9.1 Punch Module Removal

The Back Gauge assembly must be removed before removing the Punch Module. See [“Back Gauge Assembly”](#) on page 4-36.

**To remove the Punch Module:**

1. Remove the Back Gauge assembly.
2. Use a 5/64” hex wrench to remove the Punch Cycle knob [1].

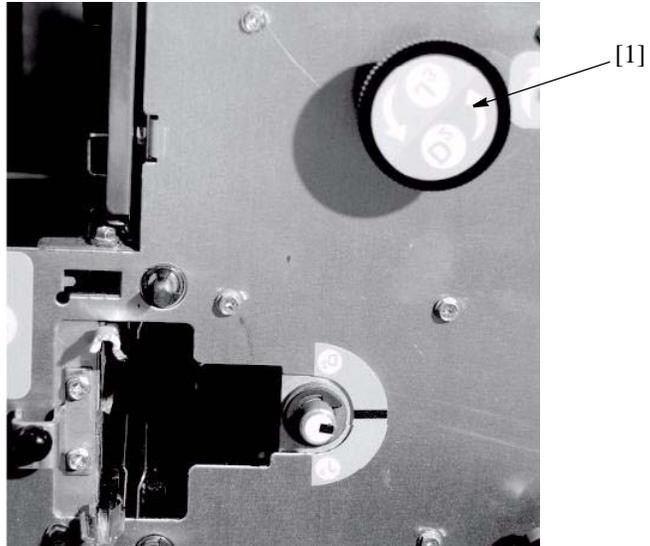


Figure 4.51 Removing the Punch Cycle Knob on the Front Panel.

3. Remove the 4 Punch Module retaining screws from the front panel [1].

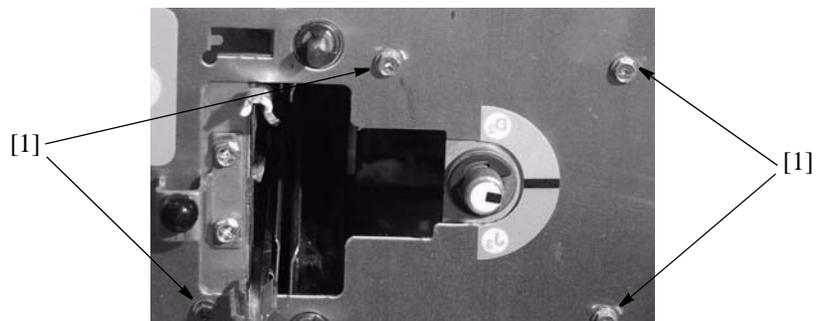


Figure 4.52 Punch Module Front Retaining Screws.

4. Cut the cable ties on the left wiring harness [1] to free the Punch Module wiring.

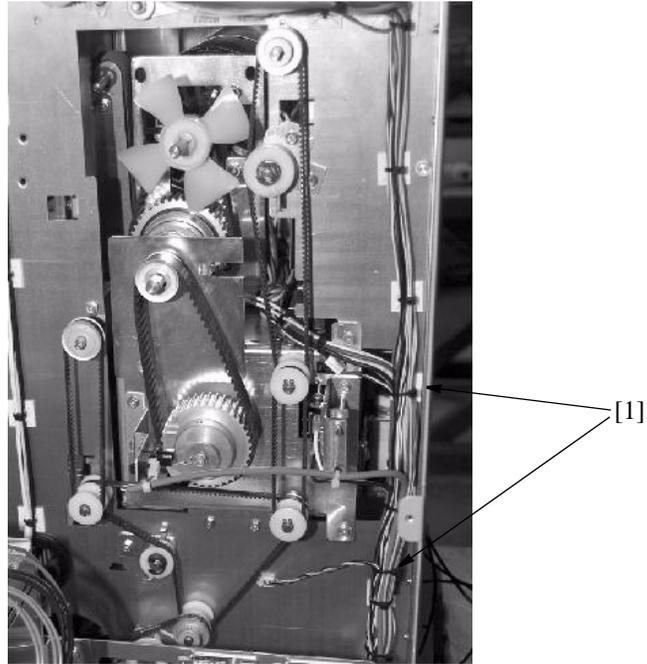


Figure 4.53 Wiring Harness at Rear of Punch.

5. Remove the belts in the following order.
  - a. Remove the bottom left and right vertical belts [1] by walking the belts over the pulleys.
  - b. Loosen the belt idler rollers [2] and remove the upper vertical belt.
  - c. Remove the bottom triangular belt [4].

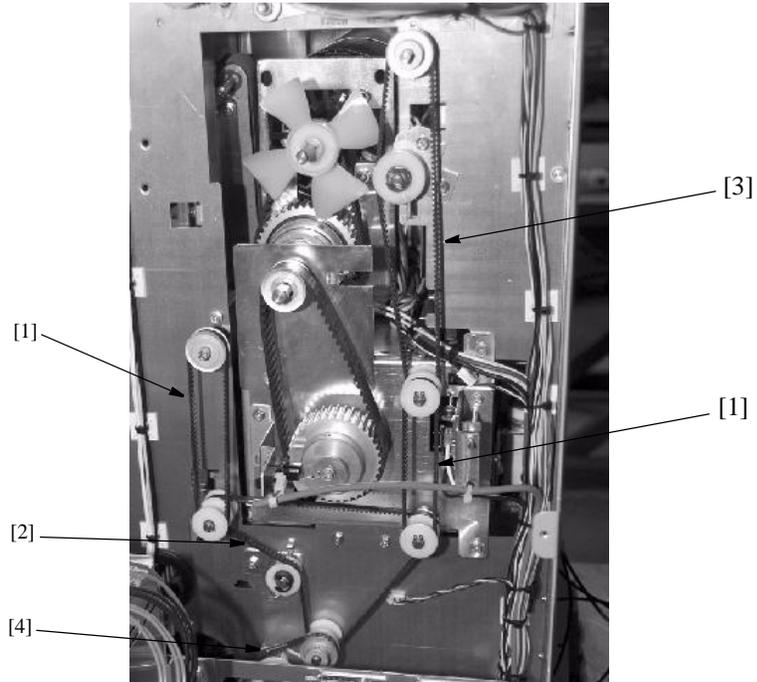


Figure 4.54 Order of Belt Removal.

6. Remove the two rear Punch Module screws [1].

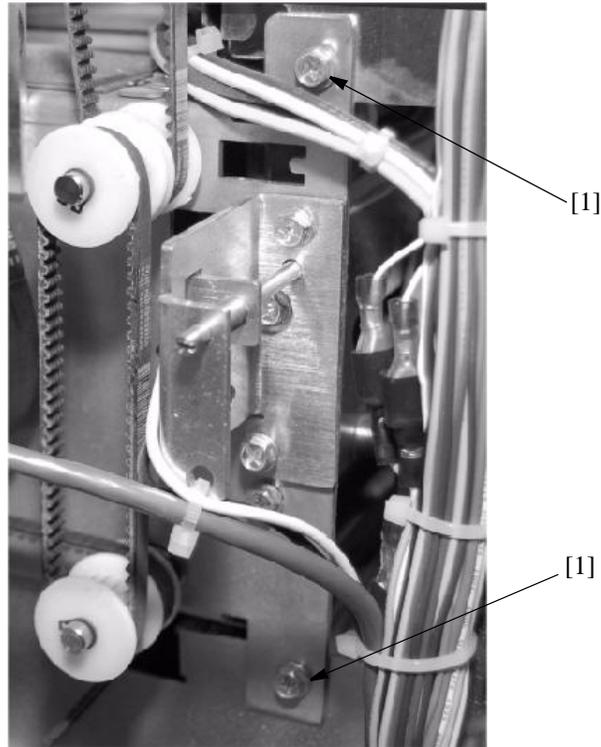


Figure 4.55 Punch Module Retaining Screws on Rear of Punch.

7. Remove the 4 power supply screws [1].

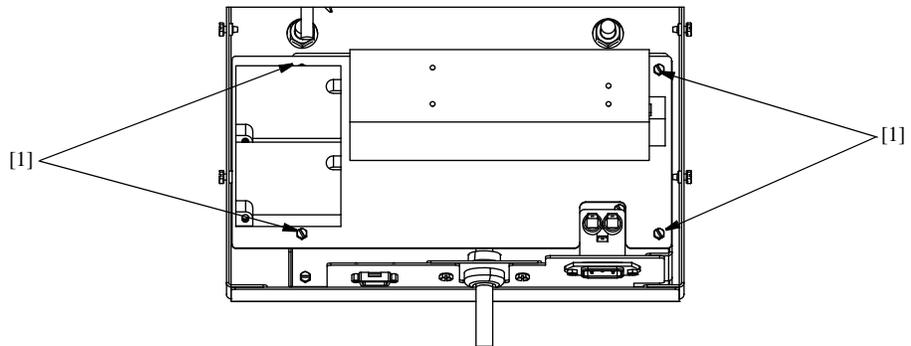


Figure 4.56 Power Supply.

8. Cut wire harness ties as needed to release the punch wiring.

9. Unplug the punch connector [1] from the control board.

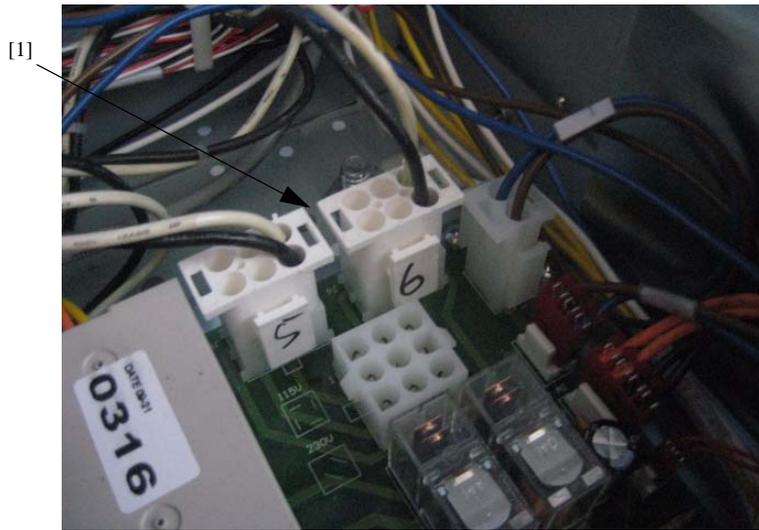


Figure 4.57 Punch Connector on Control Board.

10. Carefully slide the Punch Module out the back of the punch.  
Ensure that the wiring harness does not get caught or prevent removal of the module.

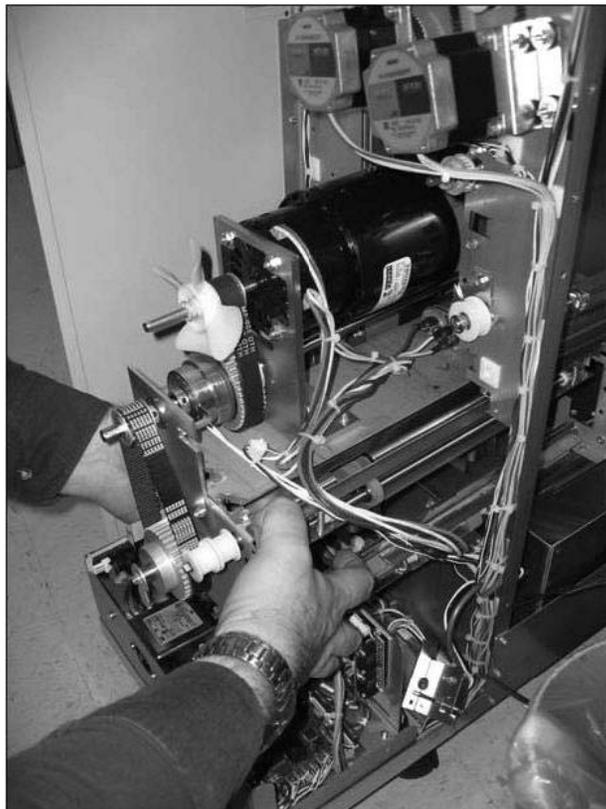


Figure 4.58 Removing the Punch Drive Module.

## 4.9.2 Punch Drive Cam Lubrication

### Maintenance Schedule

Lubricate every 750K cycles with Teflon grease.

### Procedure

The Punch Drive module must be removed for service. Clean the old grease from the cams and then apply a light coat of high quality grease (not oil). To remove the module, see [“Punch Module Removal”](#) on page 4-49.

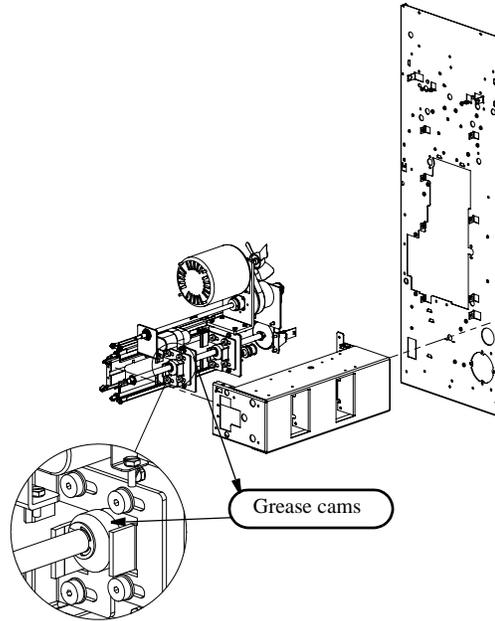


Figure 4.59

**Installation Note:** Make sure the wires on the rear of the punch are not obstructing the Die Set or Chip Bin.

### 4.9.3 Clutch Replacement

#### Procedure

Replace if clutch is malfunctioning.

---

**Note:** The clutch can be removed without removing the Punch Module.

---

#### Tools Required

- Phillips screwdriver or 1/4" nut driver
- Hex wrench, 5/64"

#### To remove the clutch:

1. Unplug the flag sensor connector [1].

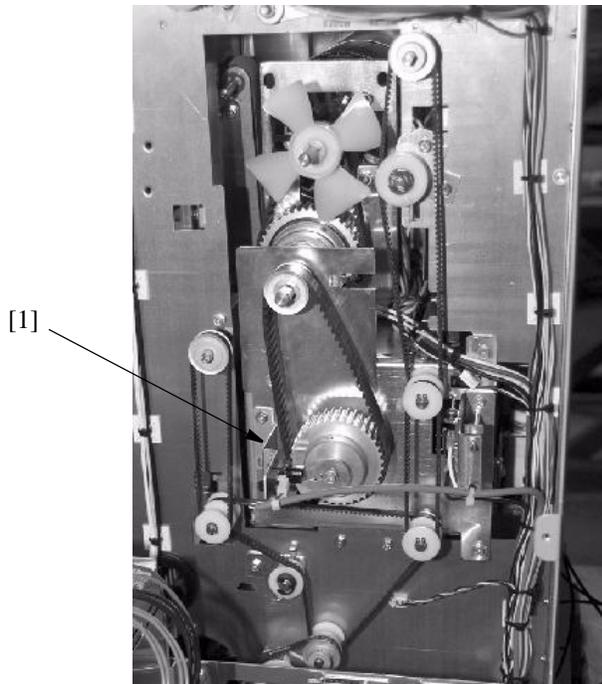


Figure 4.60 Flag Sensor Connector on Rear of the Punch.

2. Remove the metal spring clip [1] from the fan and slide the fan [2] off the shaft.

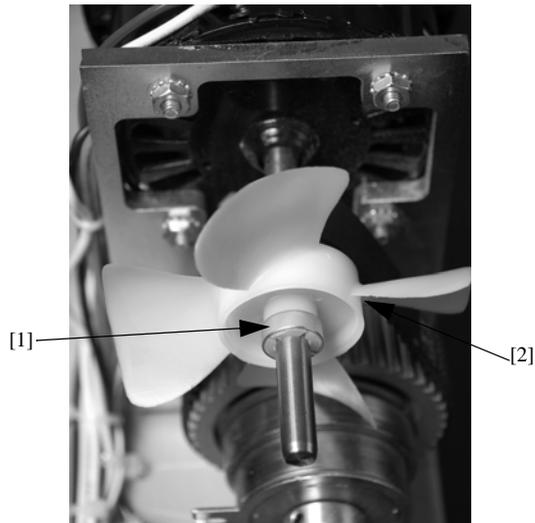


Figure 4.61 Punch Fan and Spring Clip.

3. Remove the lower drive belt [1].

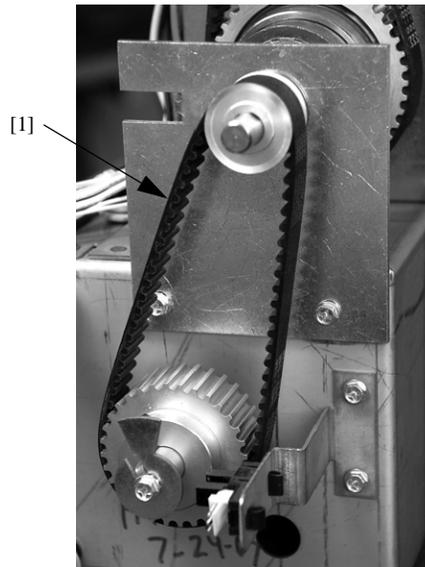


Figure 4.62 Punch Drive Belt.

4. Loosen the 2 pulley socket head set screws [1].
5. Remove the pulley and its shaft key [2].

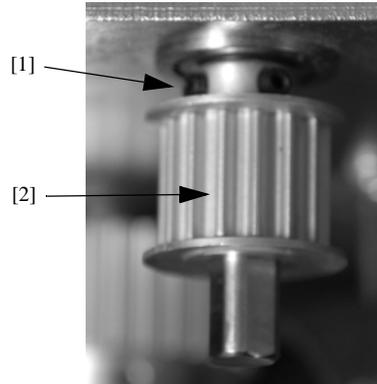


Figure 4.63 Drive Upper Pulley.

6. Remove the 2 clutch bracket screws [1].

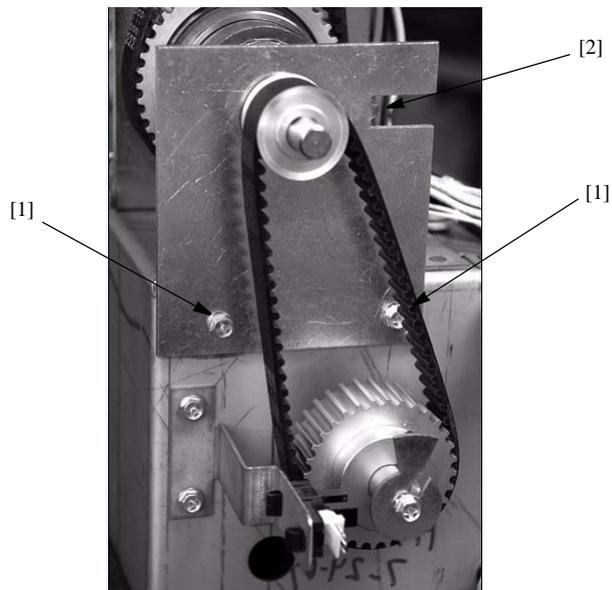


Figure 4.64 Clutch Bracket.

**Installation Note:** When installing the clutch bracket, ensure that the fork of the clutch engages the tab on the bracket [2].

7. Loosen the 2 clutch socket head set screws [1], slide the clutch [2] off the shaft, and remove the shaft key [3].

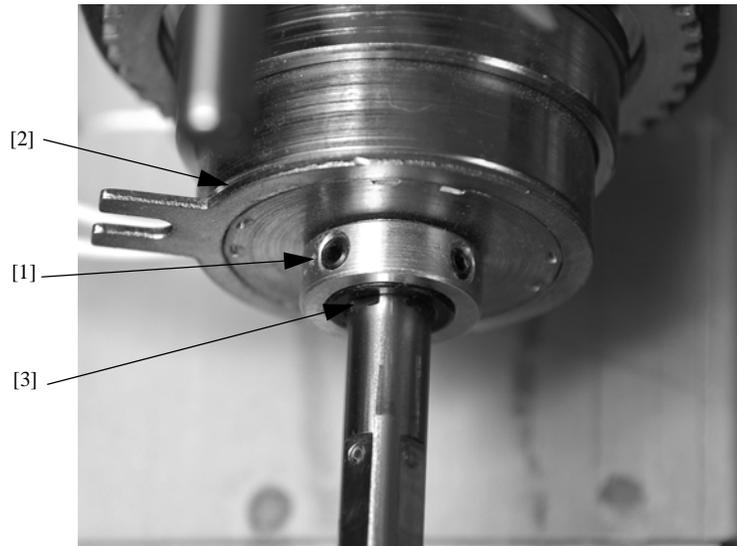


Figure 4.65 Punch Clutch.

**Installation Note:** When installing the clutch, be sure to install the shaft key. Press the clutch against the drive gear plate. While pressing the clutch against the plate, tighten the 2 set screws. The assembly does not require a gap between the clutch and clutch plate.

8. Cut wire ties as needed and unplug the clutch connector [1] from the control board.

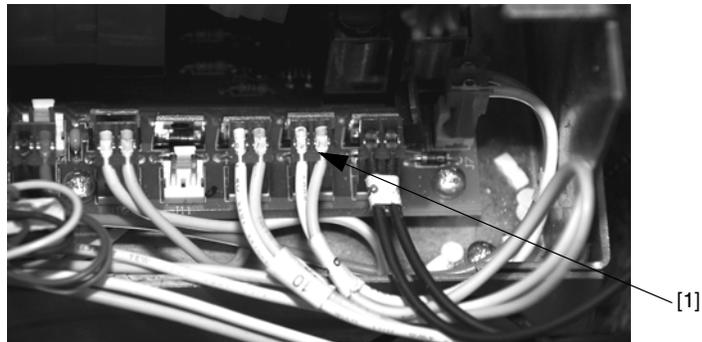


Figure 4.66 Punch Clutch Connector on the Control Board.

9. Slide the back portion of the clutch [1] off the shaft.  
The motor drive belt [2] can be removed at the same time.

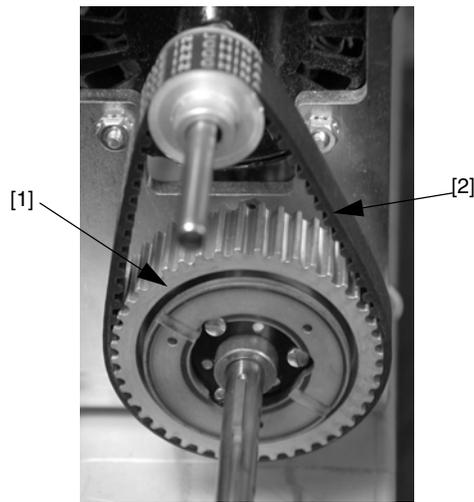


Figure 4.67 Drive Belt and Back Portion of Clutch.

10. To install the clutch, reverse these steps.

## 4.9.4 Punch Module Brake Replacement and Adjustment

### Procedure

Remove the Punch Module Assembly first, using procedure [“Punch Module Removal”](#) on page 4-49.

To replace the brake, first remove the clutch and related drives. See [“Clutch Replacement”](#) on page 4-55. The brake must be adjusted while on drive shaft. To adjust the brake, see [“Punch Module Brake Adjustment”](#) on page 4-62.

### Tools Needed

- Feeler gage, 0.010" (0.25 mm)
- Hex wrenches, 0.05" and 3/32"
- Flat blade screwdriver
- Pliers

### 4.9.4.1 Punch Module Brake Replacement

#### To replace the brake:

1. Remove the 4 socket head set screws [1].
2. Loosen the 2 set screws [2] until the brake pad [3] slides freely on the shaft.

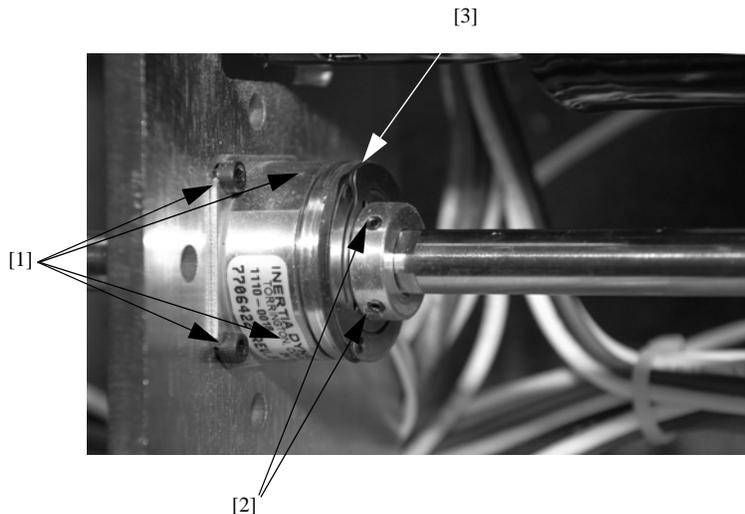


Figure 4.68 Brake Assembly and Drive Shaft.

**Installation Note:** When installing the brake, ensure that the 2 set screws engage the flats on the shaft. To adjust the brake, see [“Punch Module Brake Adjustment”](#) on page 4-62.

3. Remove the E-Ring at the opposite end of the shaft [1].
4. Slide the shaft out of the bearing bracket, away from the clutch end.
5. Slide the brake assembly off the shaft.

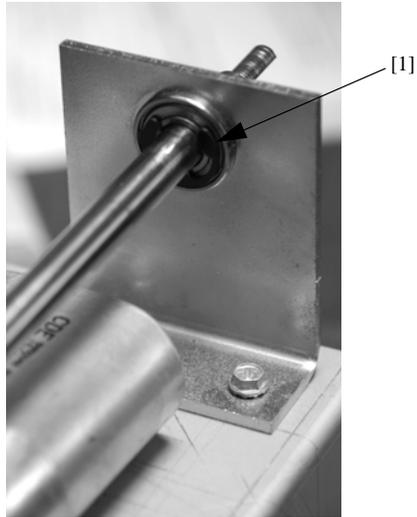


Figure 4.69 Shaft E-Ring.

6. To install the brake assembly, reverse these steps.

### 4.9.4.2 Punch Module Brake Adjustment

#### Procedure

The brake can be adjusted without removing the brake from the shaft. The gap between the brake and the pad is 0.010" (0.25 mm)

#### To adjust the brake:

1. Loosen the 2 set screws [2] until the brake pad slides freely on the shaft.

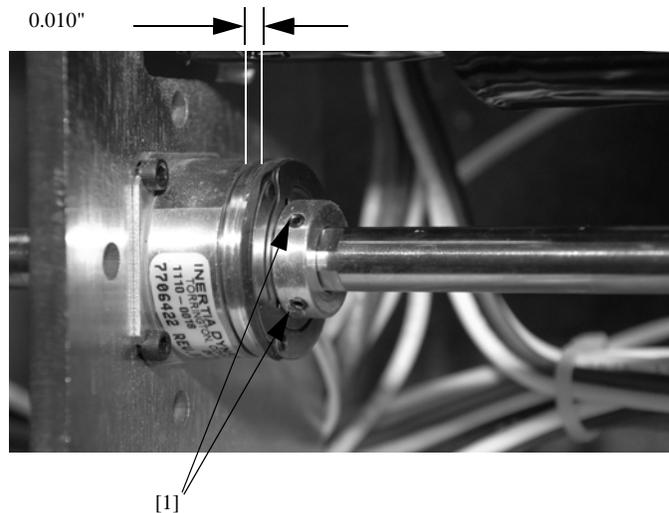


Figure 4.70 Brake Assembly Gap Adjustment.

2. Use a 0.010" feeler gage to set the gap between the brake and the brake pad.
3. Tighten the 2 set screws and check the gap.

## 4.9.5 Punch Module Motor Replacement

### Procedure

Replace motor when it malfunctions.

### To replace the Punch Module motor:

1. Cut any wire ties as necessary to release the motor wires.
2. Unplug motor wire connections from the capacitor [1].

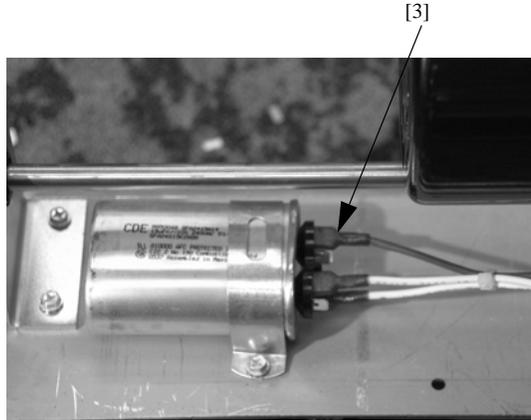


Figure 4.71 Punch Capacitor.

3. Remove the metal spring clip [1] from the fan and slide the fan [2] off the shaft.

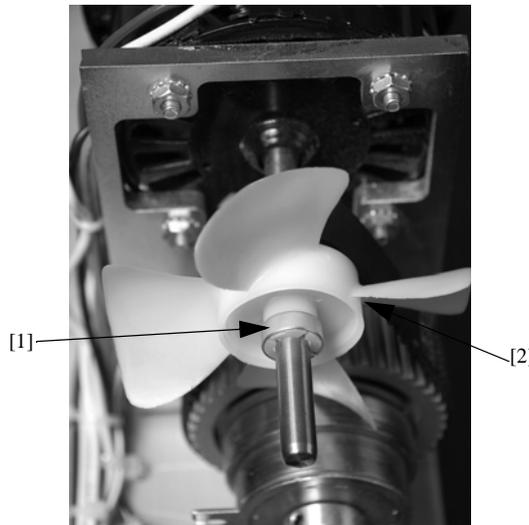


Figure 4.72 Punch Fan and Spring Clip.

**Installation Note:** When installing the fan, be sure to align the flat of the fan hub with the flat on the shaft. Also, make sure the hub and spring clip are facing away from the motor.

4. Loosen the 2 socket head set screws[1] on the pulley and slide the pulley and belt off the shaft.
5. Remove the motor mounting 4 nuts [2].

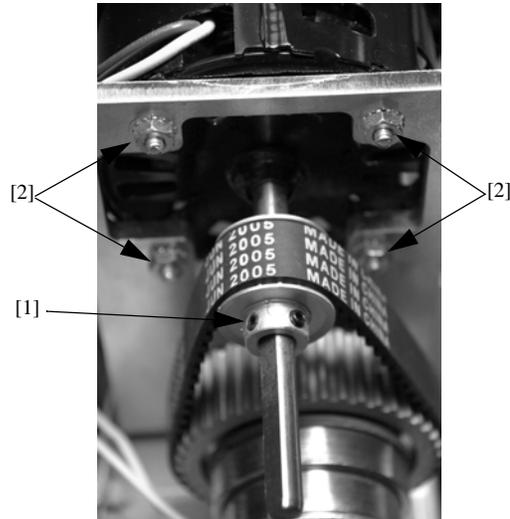


Figure 4.73 Motor Pulley and Mounting Nuts.

6. To install the motor, reverse these steps.

### 4.9.5.1 Punch Module Motor Drive Belt Replacement

#### Procedure

Replace the belt when it is frayed, missing teeth, or worn out.

#### To replace the Punch Module drive belts:

1. With the fan removed from the shaft, work the belt [1] off the clutch gear [2].

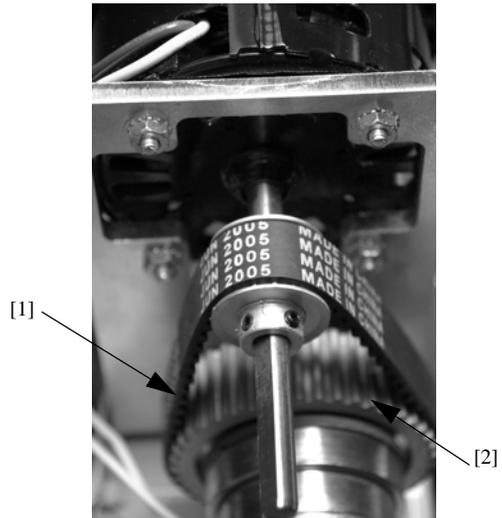


Figure 4.74 Motor Pulley and Belt.

2. Install a new belt by looping it over the motor pulley and then work it onto the clutch gear.  
The belt requires no adjustment. It should have slight deflection when pressed.

## 4.9.6 Punch Module Drive Roller Cleaning and Replacement

### Maintenance Schedule

Inspect and clean every 750K cycles.

### Procedure

Inspect for wear patterns or groves. The roller surface should be even and not glazed. Clean with a soft cloth and alcohol.

### Tools Required

- Phillips screw driver or 1/4" nut driver
- Flat bladed screwdriver
- Needle nose pliers

Remove the Punch Module Assembly first, using procedure "[Punch Module Removal](#)" on page 4-49. With the Punch Module out of the machine, the punch entrance side [1] and exit [2] drive rollers can be cleaned or replaced.

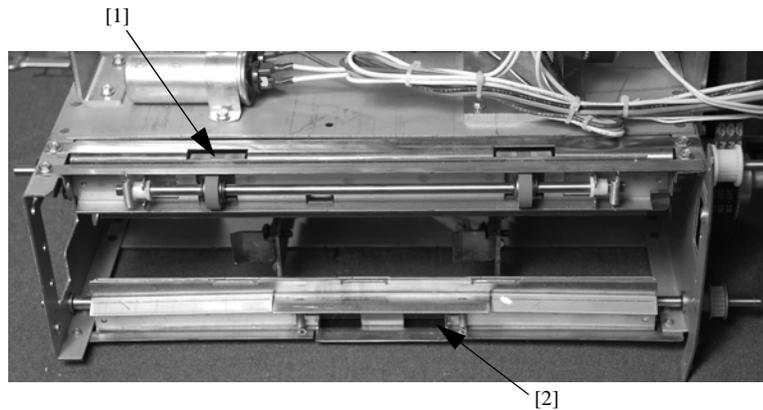


Figure 4.75

### To clean the punch entrance drive rollers:

1. Remove the idler roller assembly [1].
2. Rotate and clean the drive rollers [2].

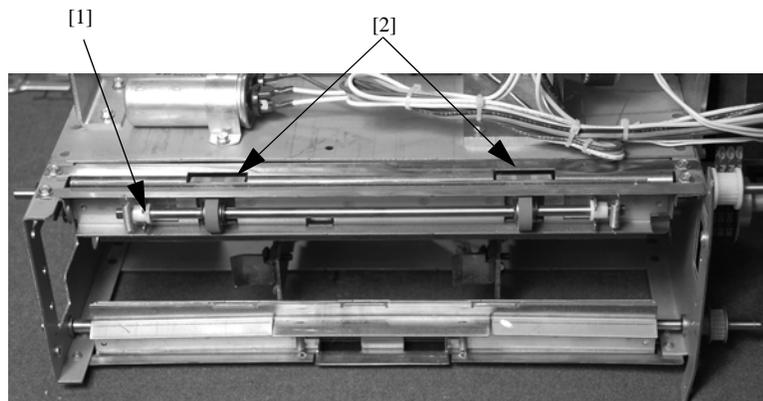


Figure 4.76 Punch Entrance Rollers.

**To replace the punch entrance drive rollers:**

1. Unplug the sensor [1].
2. Remove the 2 screws at the ends of the idler roller assembly [2].
3. Remove the 2 screws at the ends of the drive roller assembly [3].

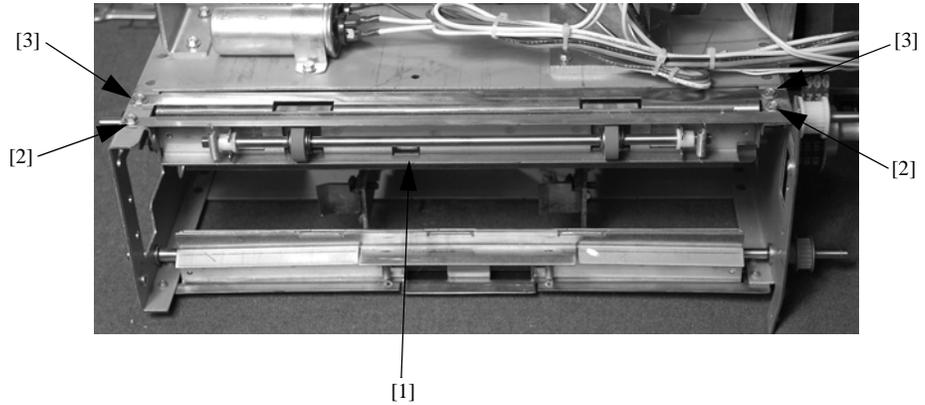


Figure 4.77 Punch Entrance Drive Roller Assemblies.

4. Remove the E-Ring at the end of the drive roller shaft [1].

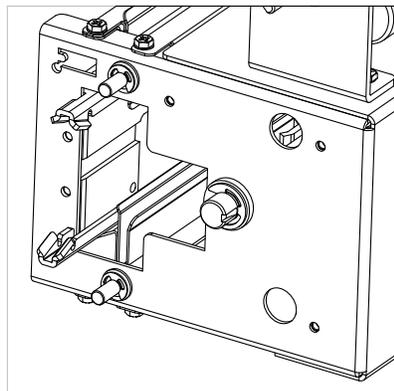
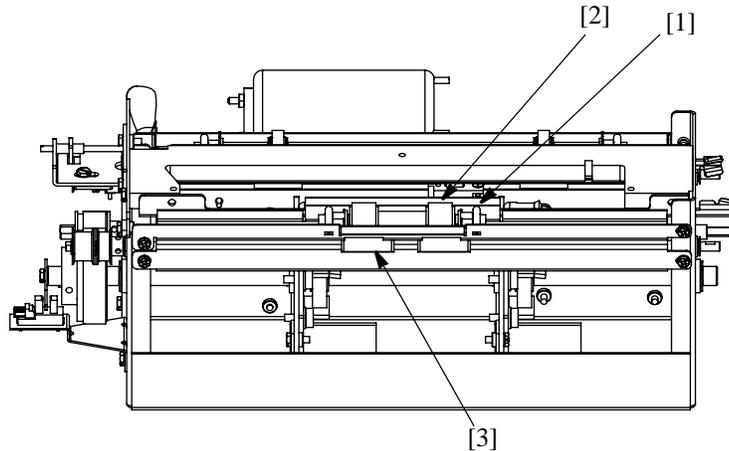


Figure 4.78 Drive Roller Shaft and E-Ring.

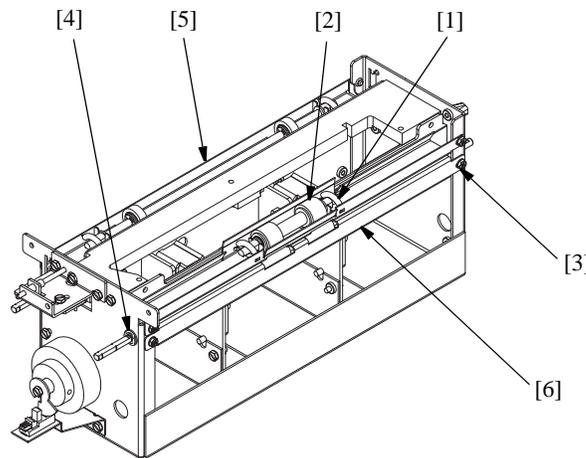
**To clean the punch exit drive rollers:**

1. Move one retaining spring [1] to the side and then remove the idler roller assembly [2].
2. Rotate and clean the drive rollers [3].



**To replace the punch exit drive rollers:**

1. Move one retaining spring [1] to the side and then remove the idler roller assembly [2].
2. Remove the 2 screws at each end of the idler roller assembly [3].



3. Remove the E-Ring at the end of the drive roller shaft [4].
4. Slide the drive roller shaft and bracket towards the opposite end of the Punch Module [5] so that the end of the shaft clears the bearing at the end where you removed the E-Ring [4].
5. Lift the drive roller and bracket out of the Punch Module [6].
6. Remove the sensor.
7. To install the drive roller, reverse these steps.

## 4.10 Belt Replacement

### Maintenance Schedule

Inspect every 750K cycles.

Replace as needed.

### Procedure

Inspect all timing belts for wear, missing teeth, frayed edges, and cracks. The belts should be slightly loose with approximately 1/4" deflection [1]. Belts that are too loose will not drive properly and belts that are too tight can wear out prematurely or damage their driven components.

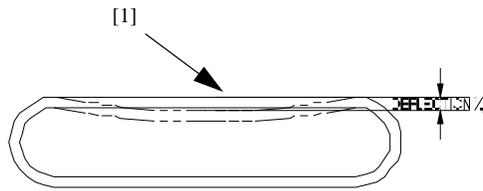


Figure 4.79 Typical Belt Deflection.

### To replace belts:

1. Loosen the screws of the 3 belt idlers [1].

**Installation Note:** When setting the belt tension, adjust the belt idlers so that the belt has approximately 1/4" of deflection.

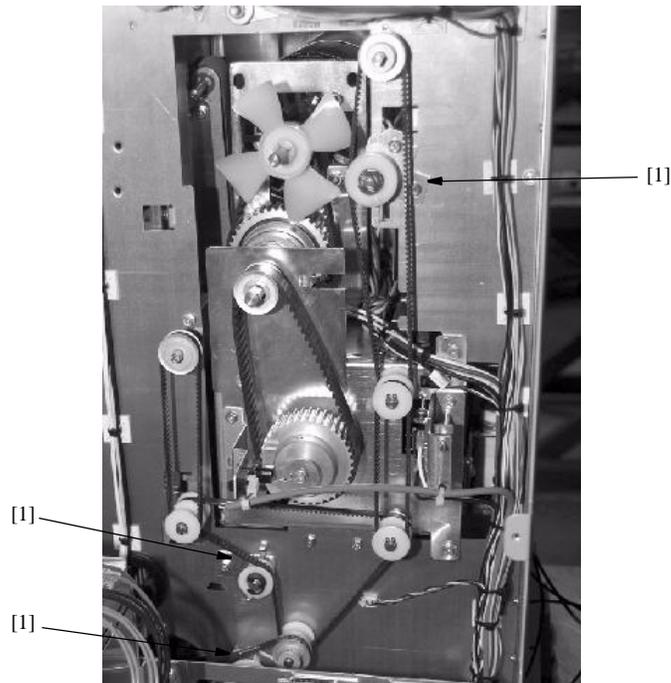


Figure 4.80 Belt Idler Locations.

2. Remove the belts in order as shown in [Figure 4.81](#).

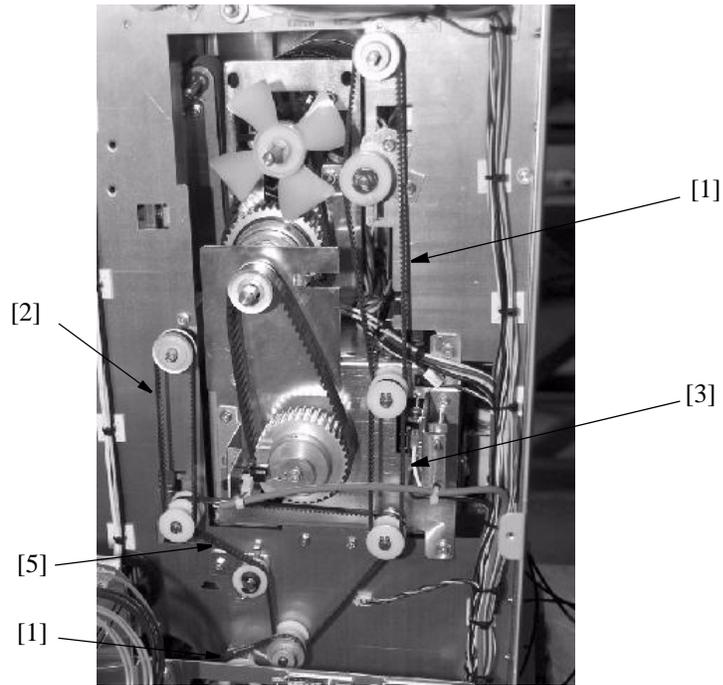


Figure 4.81 Order of Belt Removal.

3. To install and adjust the tension of the belts, reverse these steps.

## 4.11 Hole Alignment Adjustment

Die Set Position Cradle Adjustment, The die set position cradle is set in the factory; however, because of the punched-hole spacing on the PB die sets, there is a minimal amount of paper on each edge of the punched paper. The die set position cradle may have to be fine adjusted to center the punched-hole pattern in the paper.

Listed below are the step-by-step instructions to adjust the die set to the proper position.

1. The punched-hole alignment must be checked on a piece of punched paper. Fold the punched sheet of paper in half and the punched-holes should be aligned. If the punched-holes are not aligned, then the die set cradle must be adjusted to align the punched holes.

---

**Note:** The paper path is always constant, if the holes are not centered, you must adjust the die set cradle.

---

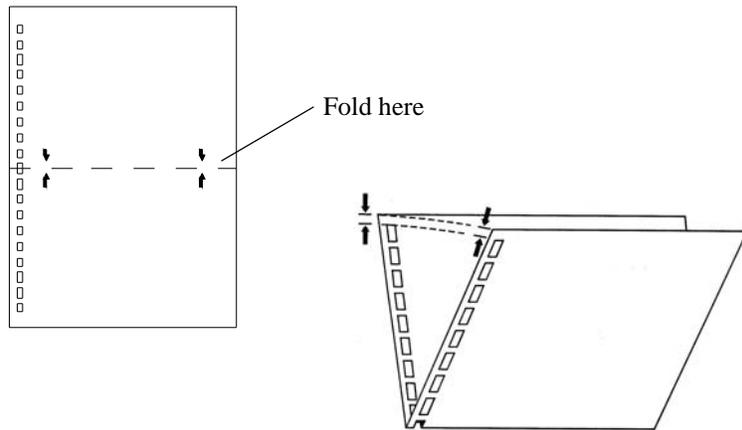


Figure 4.82 Folding Punched Paper to Check Alignment.

2. The two back covers on the Advanced Punch must be removed to access the die set position cradle. See section 4.1.2 for information on removing rear cover.

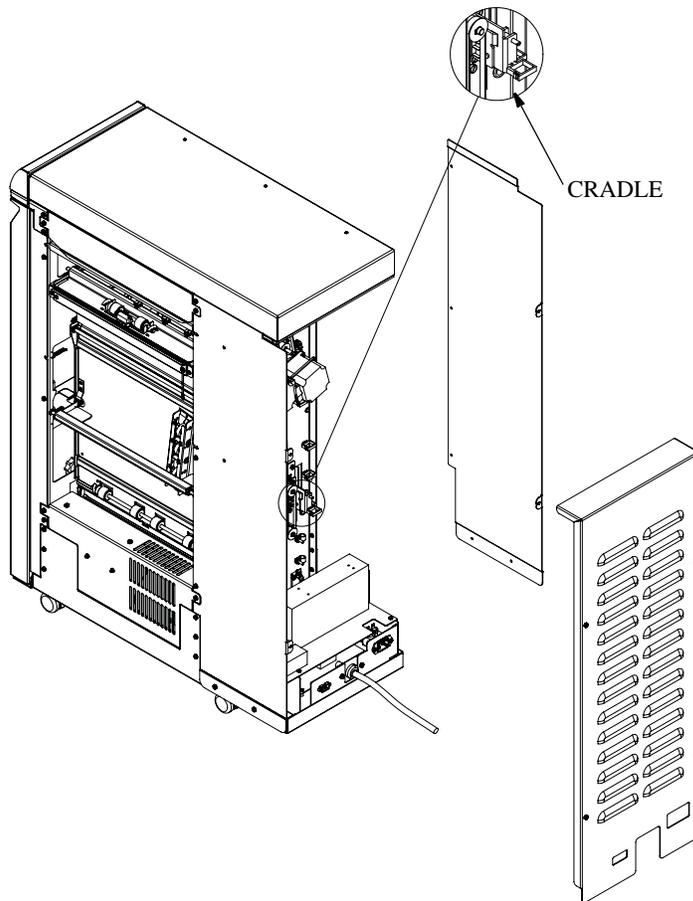


Figure 4.83 Removing Back Cover to Access the Die Set Position Cradle.

3. Before adjusting the die set position cradle, you must first note what direction the die set cradle must move.

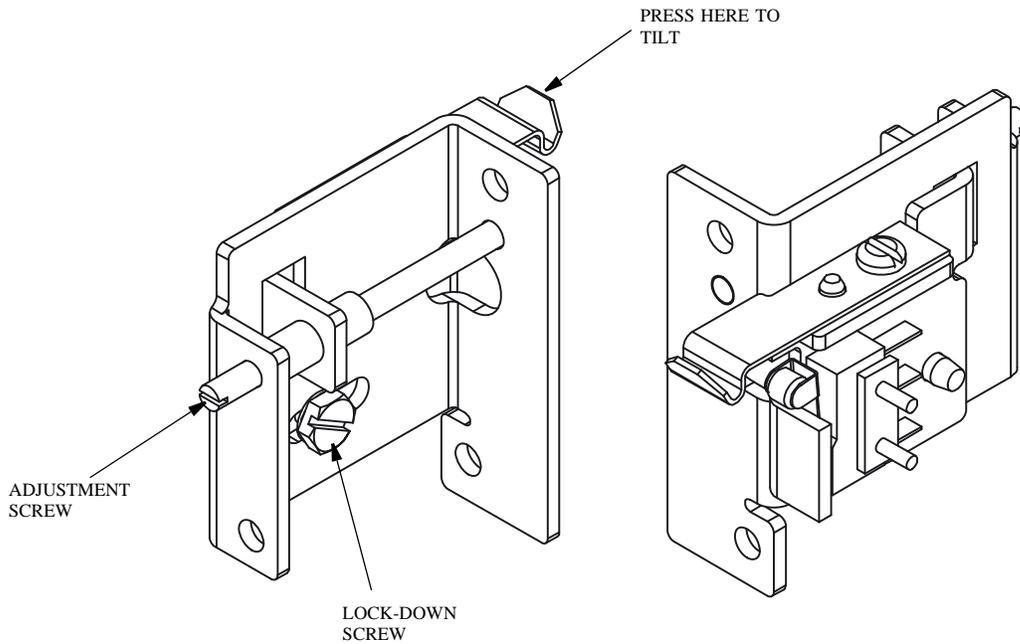


Figure 4.84 Die Set Position Cradle Adjustment

4. Before you adjust the die set position cradle, you must loosen the lock-down screw.
5. Using a flat-blade screwdriver, turn the adjustment screw clockwise or counter-clockwise to move the die set position cradle.

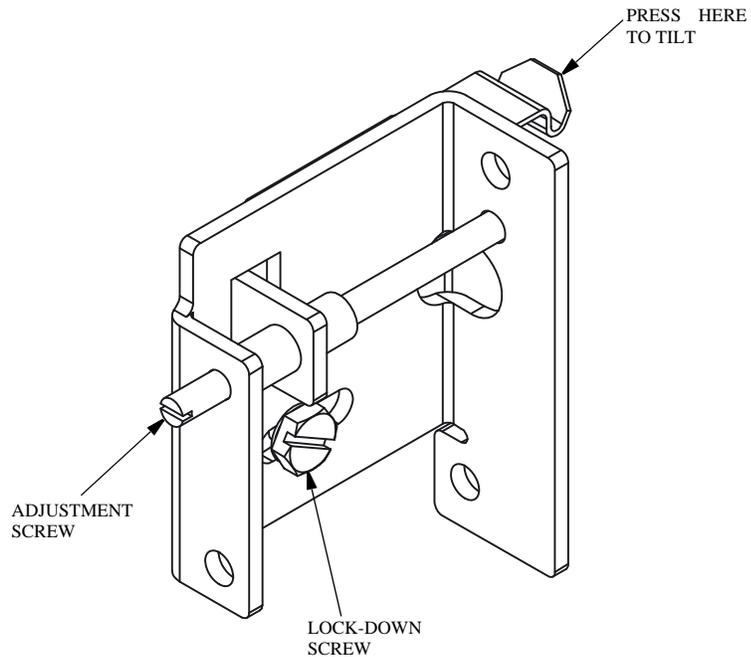


Figure 4.85 Adjusting Die Set Position.

6. Observe the punched paper. If the punched-holes are too close to the rear of the machine, then you must turn the adjustment screw counter-clockwise.

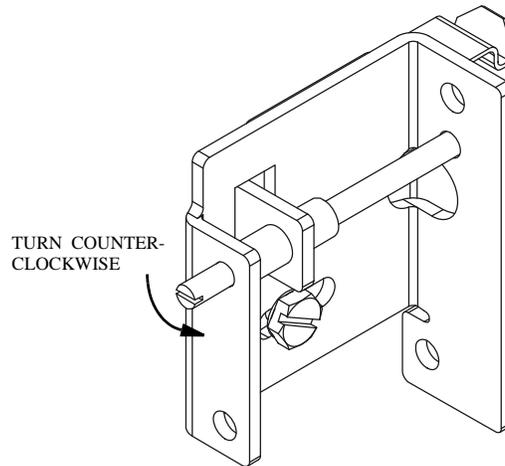


Figure 4.86 Adjustment if Holes Are Too Close to the Rear.

7. If the punched-holes are too close to the front of the machine, then you must turn the adjustment screw clockwise.

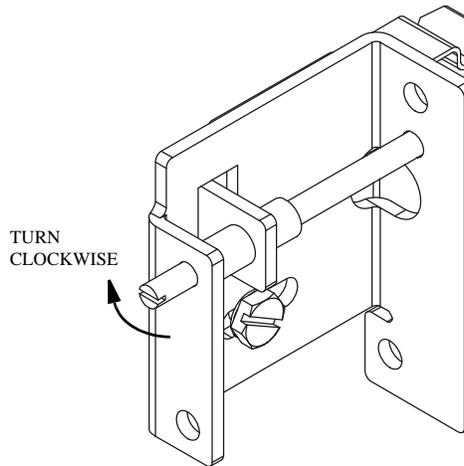


Figure 4.87 Adjustment if Holes Are Too Close to the Front.

---

**Note:** Seven full turns of the adjustment screw result in a 1/4" change in the punched hole position.

---

8. Before tightening the lock-down screw, tilt or bias the assembly towards the bottom of the machine and tighten the lock-down screw. This will ensure positive engagement between the locking lever and the die set.

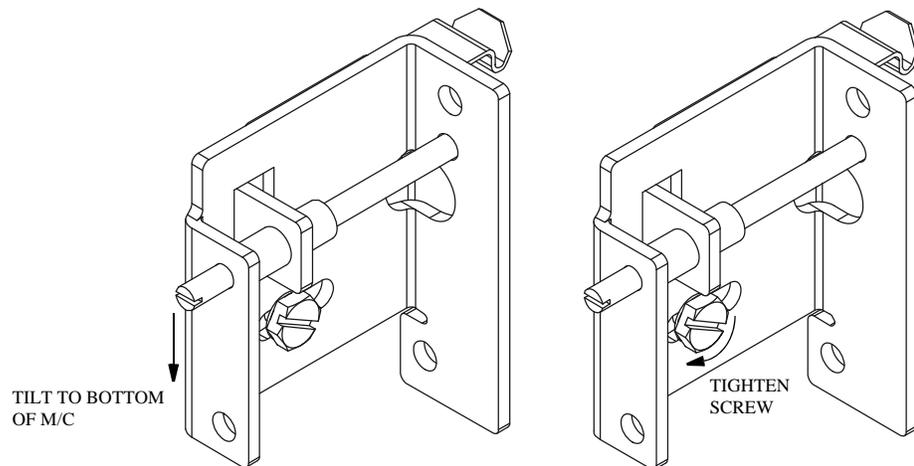


Figure 4.88 Tightening the Lock-Down Screw.

9. Run a test sample of punched paper and recheck paper alignment. Re-adjust if necessary

## 4.12 Replacement - ChipTray Microswitch

### Procedure

- To Replace of Chip Tray Microswitch
1. Remove the rear cover & side panel as per Sec 4.1.2
  2. Remove the two mounting screws [1] & nuts [2], cut the wire tie and disconnect the harness.
  3. To install the new switch, reverse the removal steps.

No adjustment is required. The Chip tray snap (micro) switch should be pushed towards the front of the AdvancedPunch and then tightened.

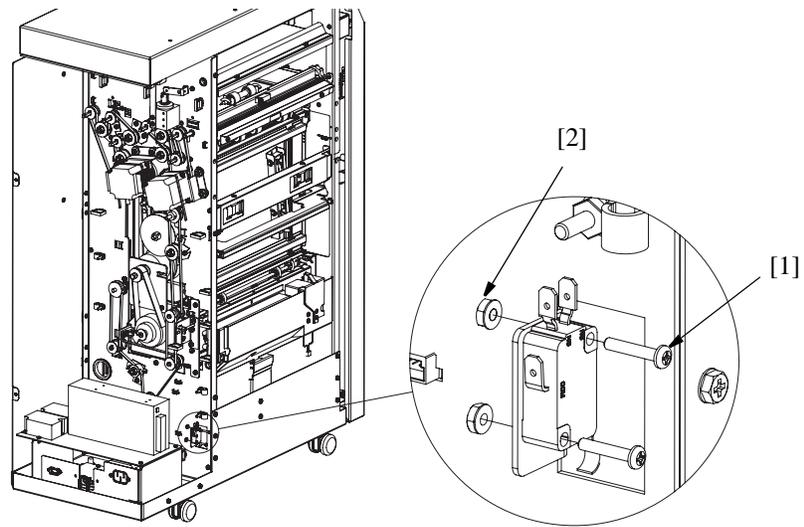


Figure 4.89 Chip Tray Microswitch

## 4.13 Sensor Replacement

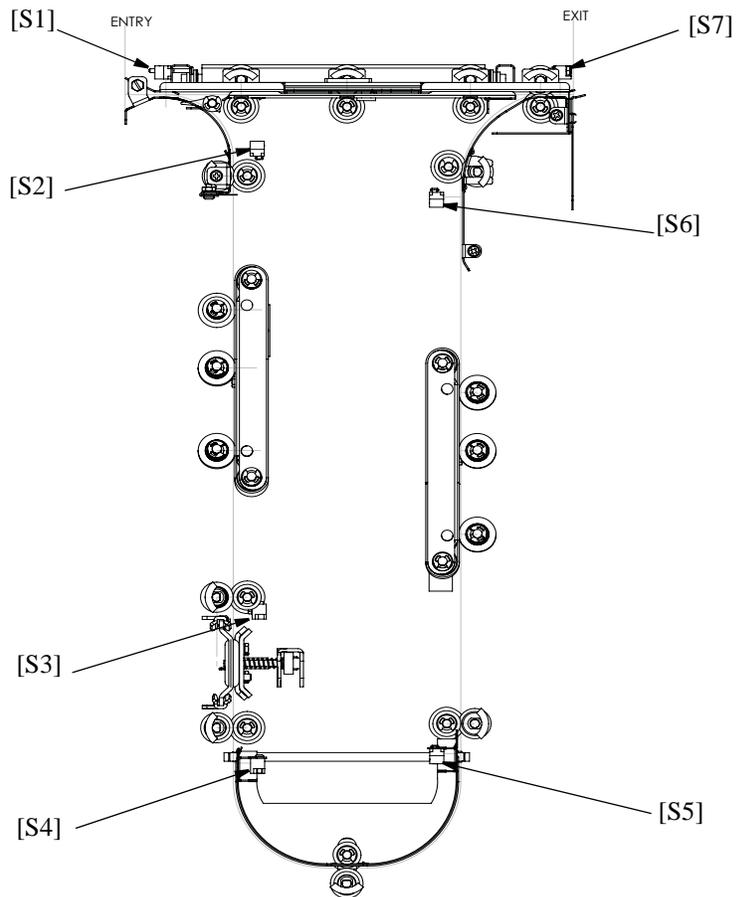


Figure 4.90 Sensors

### Procedure

- Replacement of sensor S1 and S7 (See below images)
1. Sensor S1 is located on entry side and S7 is located on exit side.
  2. Disconnect the sensor wires from the rear frame [1].
  3. Remove the screw [2] and nut [3] that secure the sensor to the sheet metal part.
  4. Reverse the above steps to install the sensor.

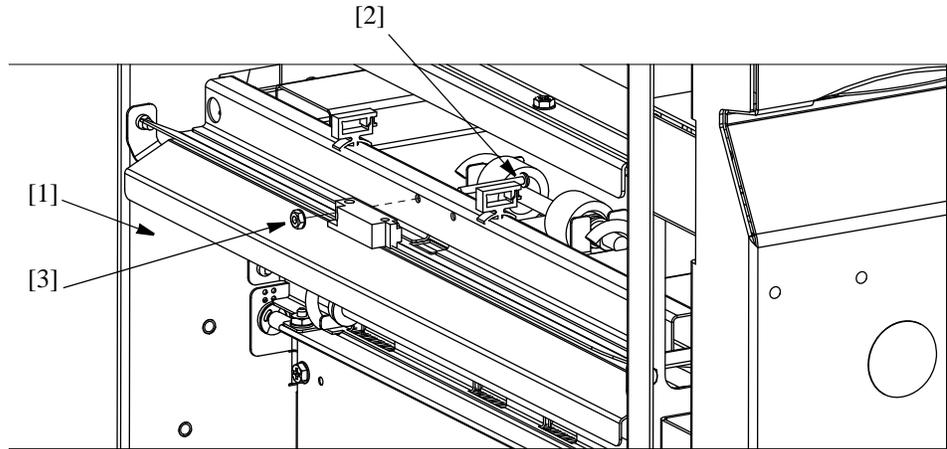


Figure 4.91 Sensor S1 Replacement

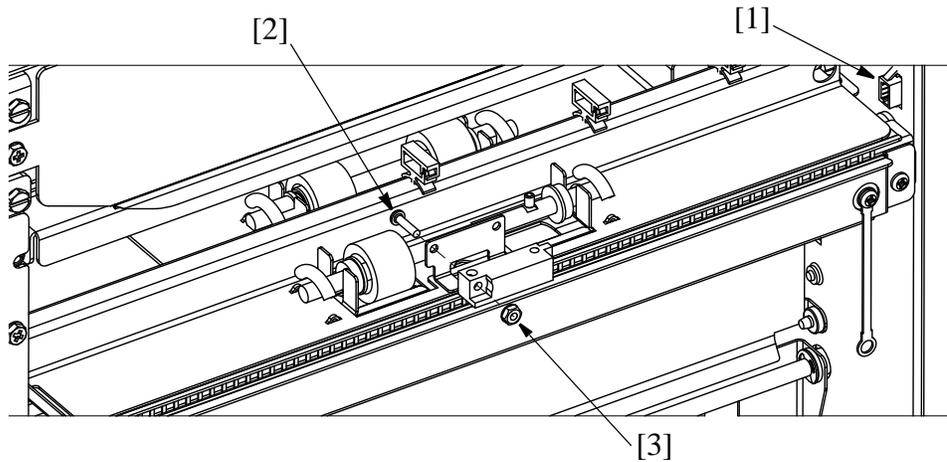


Figure 4.92 Sensor S7 Replacement

- Replacement of sensor S2 and S6 (See below images)
1. Sensor S2 is located on on entry side and S6 is located on exit side
  2. First remove aligner panels entry or exit respectively as per [Sec 4.6.2](#)
  3. Remove the entrance side drive aligner panel as per [4.6.3.1](#) or exit side drive

aligner panel as per 4.6.3.4 (Exclude last step of removing green drive belt assembly)

4. Remove the screw [1] and nut [2] that secure the sensor to the sheet metal part.

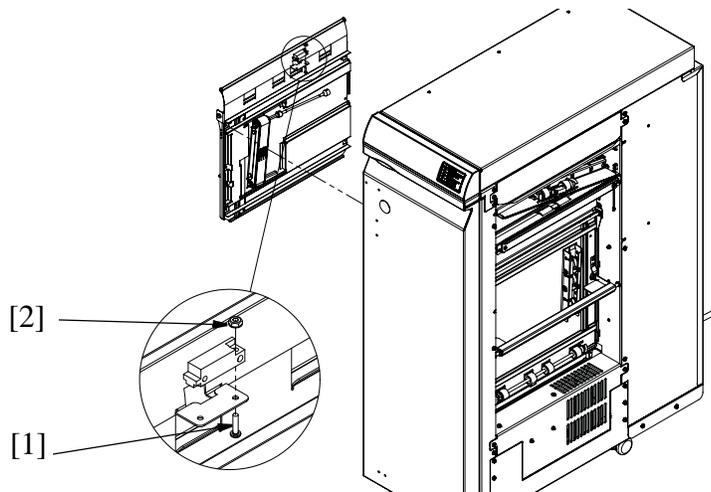


Figure 4.93 Sensor S2 Replacement

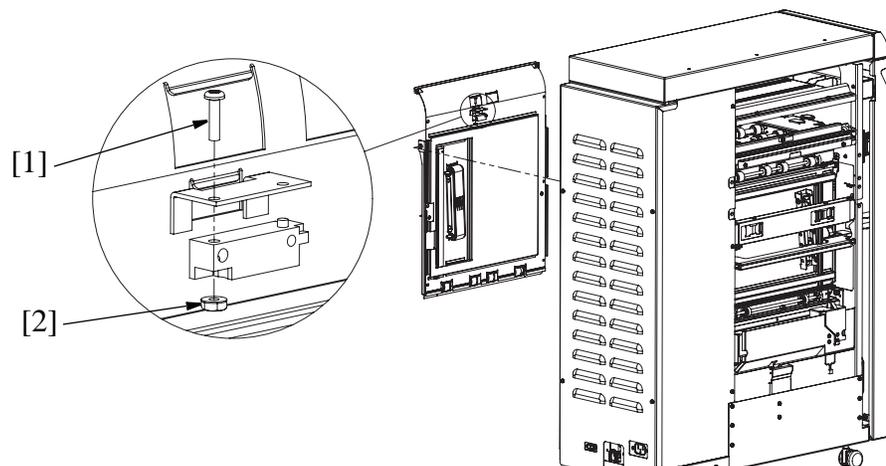


Figure 4.94 Sensor S6 Replacement

- Replacement of sensor S4 and S5 (See below image)
1. Remove the rear cover as per Sec 4.1.2
  2. Remove the punch module as per Sec 4.9.1

3. Disconnect the sensor wires from the rear frame.
4. Remove the screw [1] and nut [2] that secure the sensor to the sheet metal part.
5. Reverse the above steps to install the sensor.

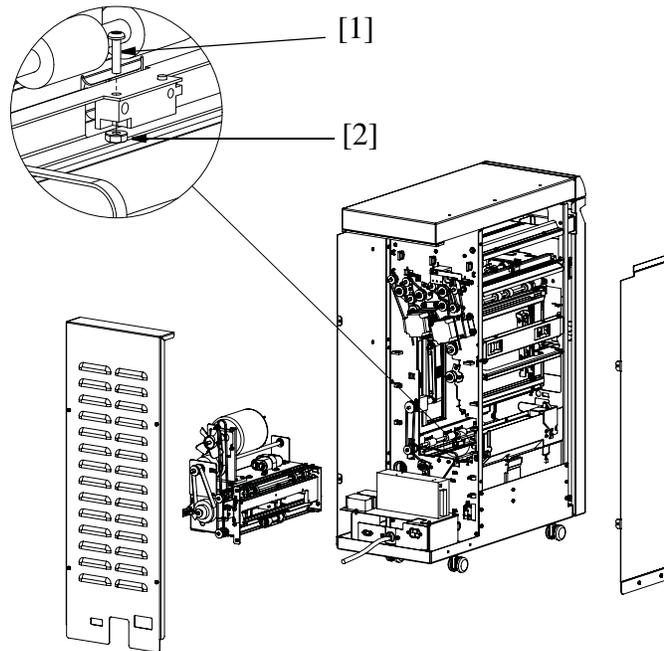


Figure 4.95 Sensor S4 & S5 Replacement

- Replacement of sensor S3 (See below image)
1. Remove the rear cover as per Sec 4.1.2
  2. Remove the punch module as per Sec 4.9.1
  3. Remove the two screws [1]
  4. Remove the e-ring & washer [2] from one end
  5. Pull the shaft [3] from other end and then push it upwards along with the bracket so that the sensor is accessible.
  6. Disconnect the sensor wires from the rear frame.
  7. Remove the screw [4] and nut [5] that secure the sensor to the sheet metal part.
  8. Reverse the above steps to install the sensor.

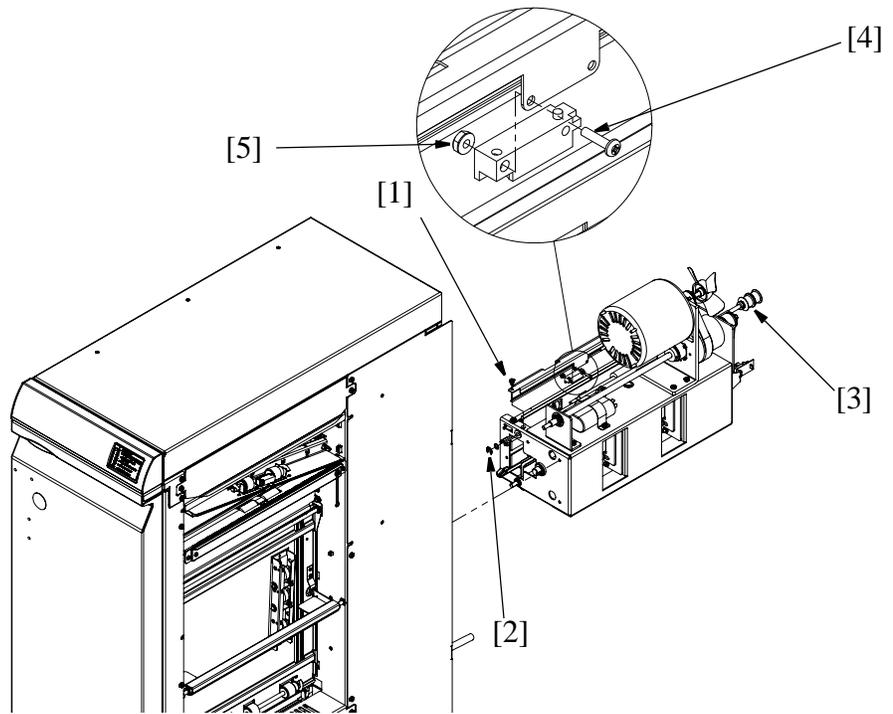


Figure 4.96 Sensor S3 Replacement

## 4.14 Diverter Gate Solenoid Adjustment

### Procedure

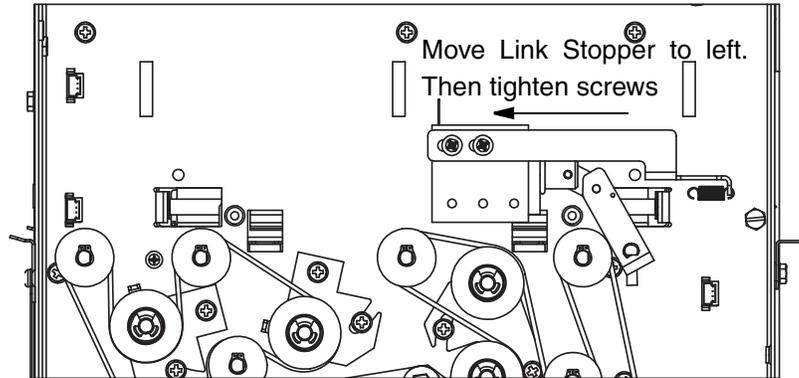


Figure 4.97 Solenoid Link Stopper

When looking into the paper entrance chute on the AdvancedPunch, the leading edge of the diverter gate should not be visible.

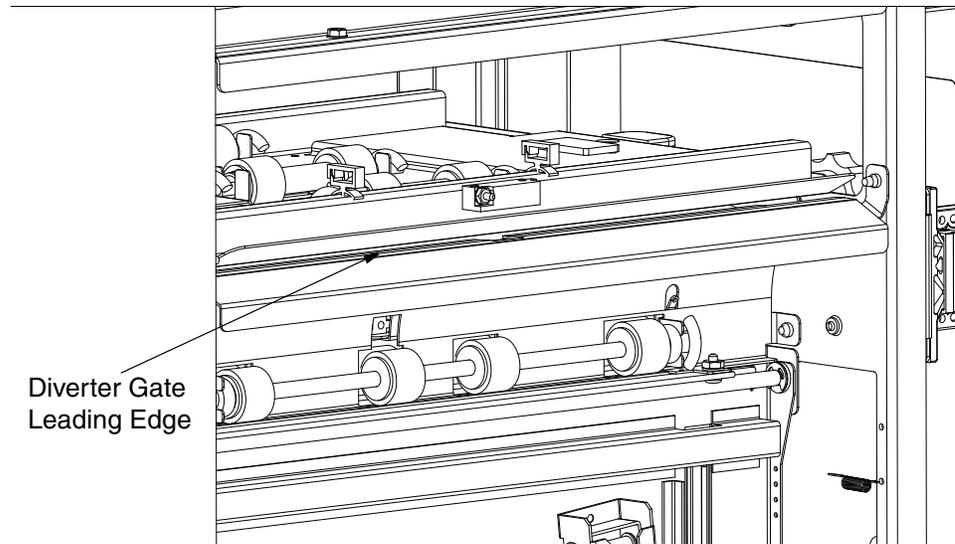


Figure 4.98 Diverter Gate

When the solenoid is depressed (the gate is moved upward) the leading edge of the diverter should not be visible.

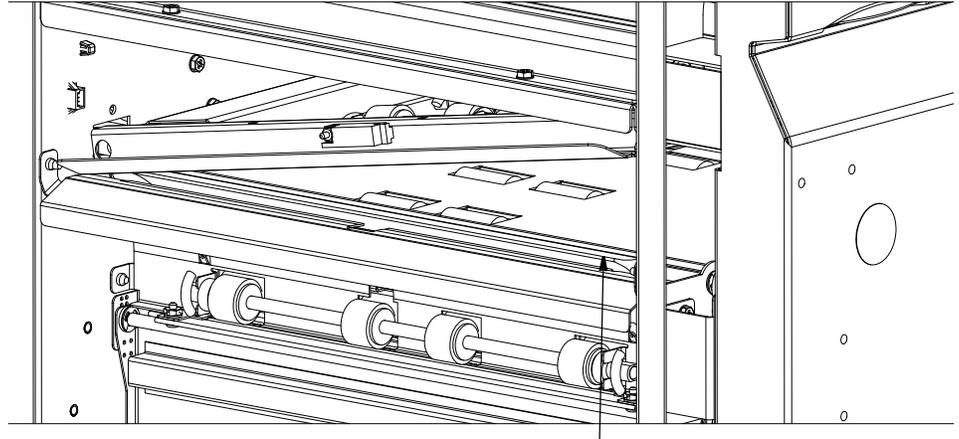


Figure 4.99 Diverter Gate Upward Position

This means the leading edge of the diverter gate should be high enough that it is hidden behind the flange on the upper bypass.

The travel of the diverter is adjusted by loosening the two screws [1] that mount the solenoid to the frame, then rotating the diverter.

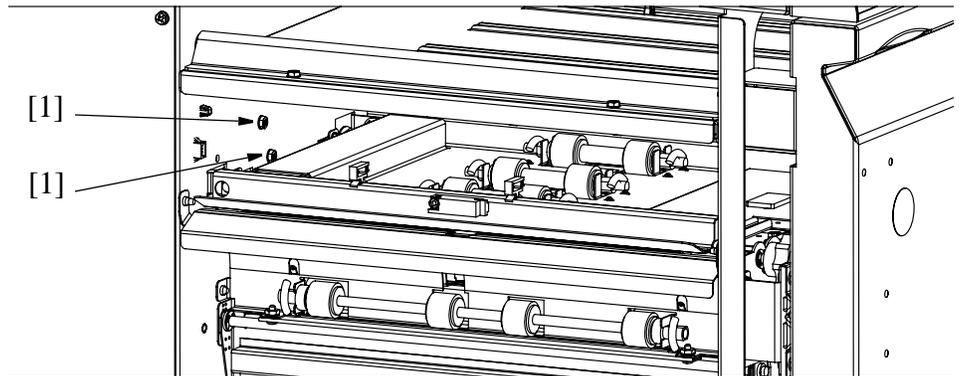


Figure 4.100 Solenoid Adjustment

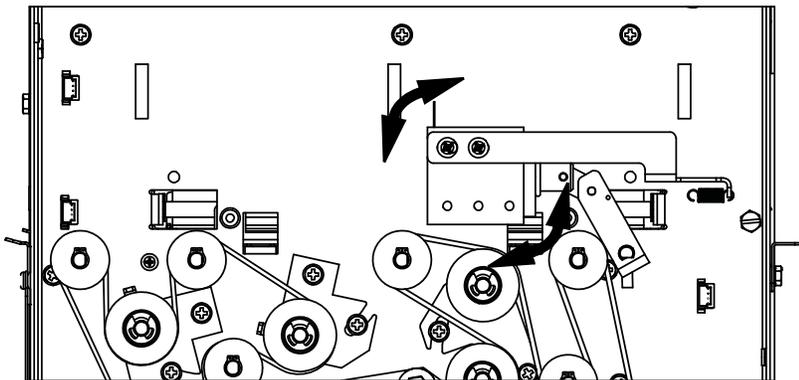


Figure 4.101 Diverter Rotation



# **Section 5**

## **Parts List**

**This section will contain all of the exploded view drawings, part numbers and part descriptions required to identify spare parts.**

### **Section Contents**

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## **PL 5.1 Introduction**

### **PL 5.1.1 Overview**

The Parts Lists section provides exploded view illustrations of all spared subsystem components and a listing of the corresponding part numbers. The illustrations show the relationships between parts.

### **PL 5.1.2 Organization of this section**

The following elements make up the parts List section:

#### **PL 5.1.2.1 Parts Lists (PL)**

Each item number in the part numbers listing corresponds to an item number in the illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations. The parts which are not spared are indicated by-in the part column.

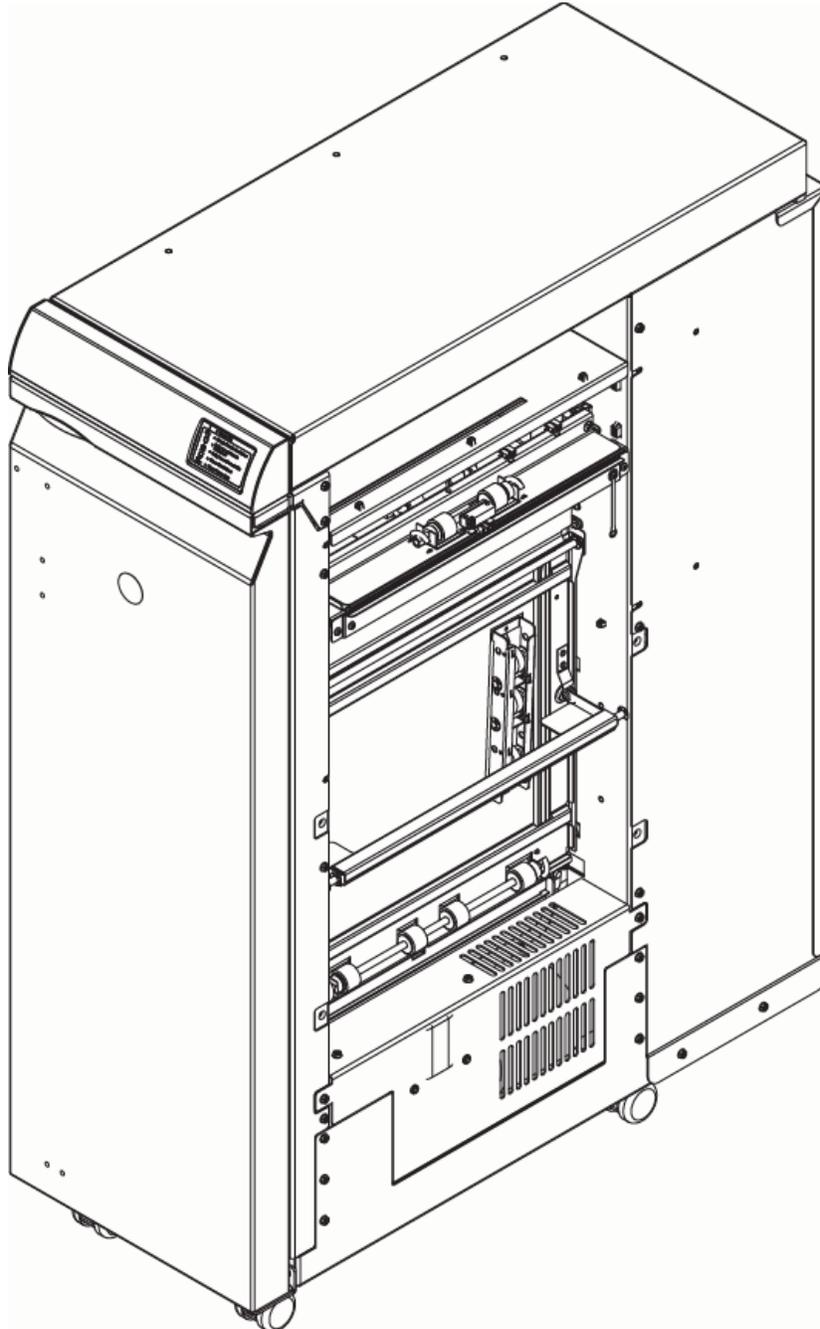
#### **PL 5.1.2.2 Exploded View Illustrations**

An item that is called out on an illustration has a corresponding listing within this section.

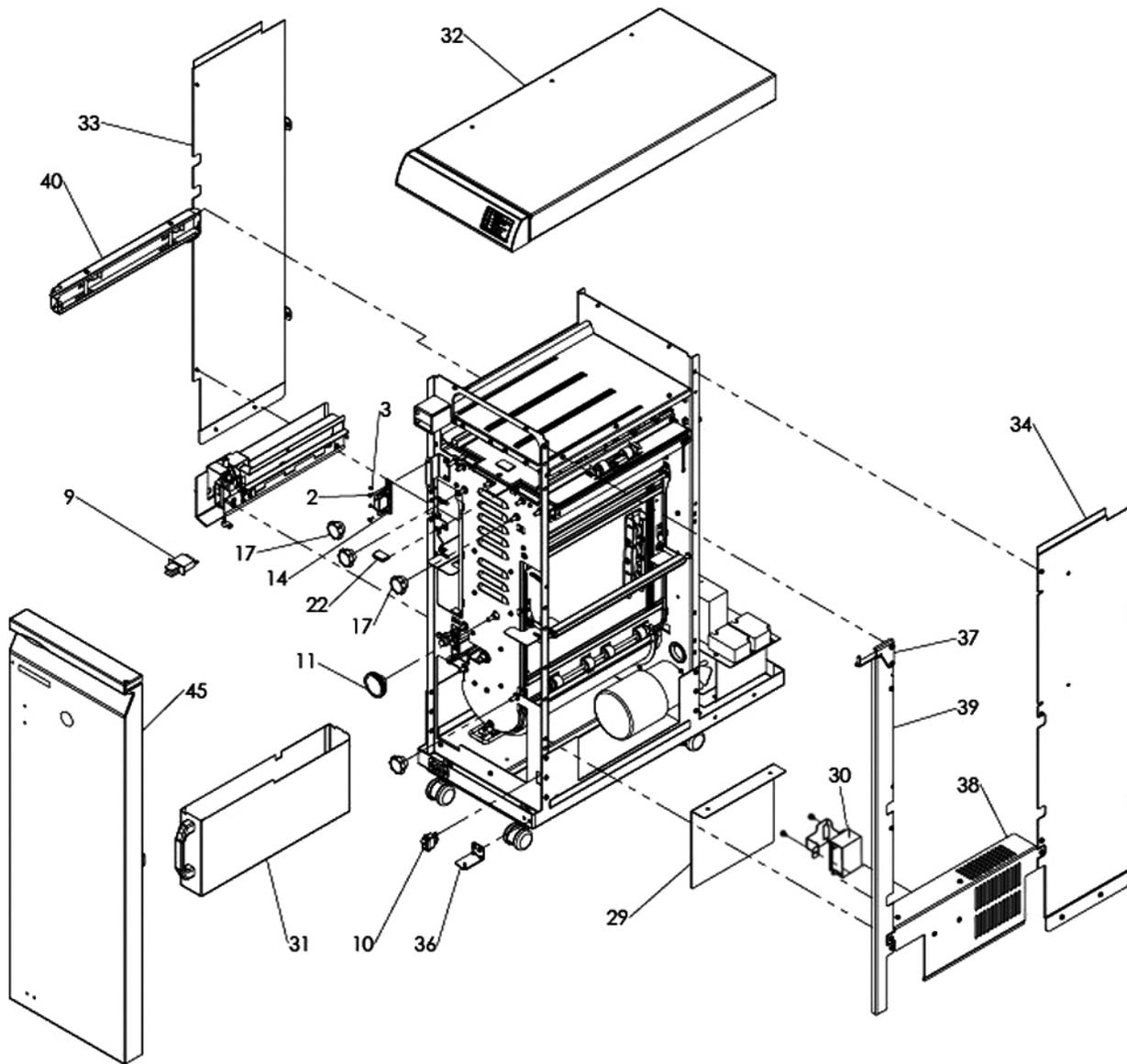
Components are given item numbers that correspond to the part number listings.

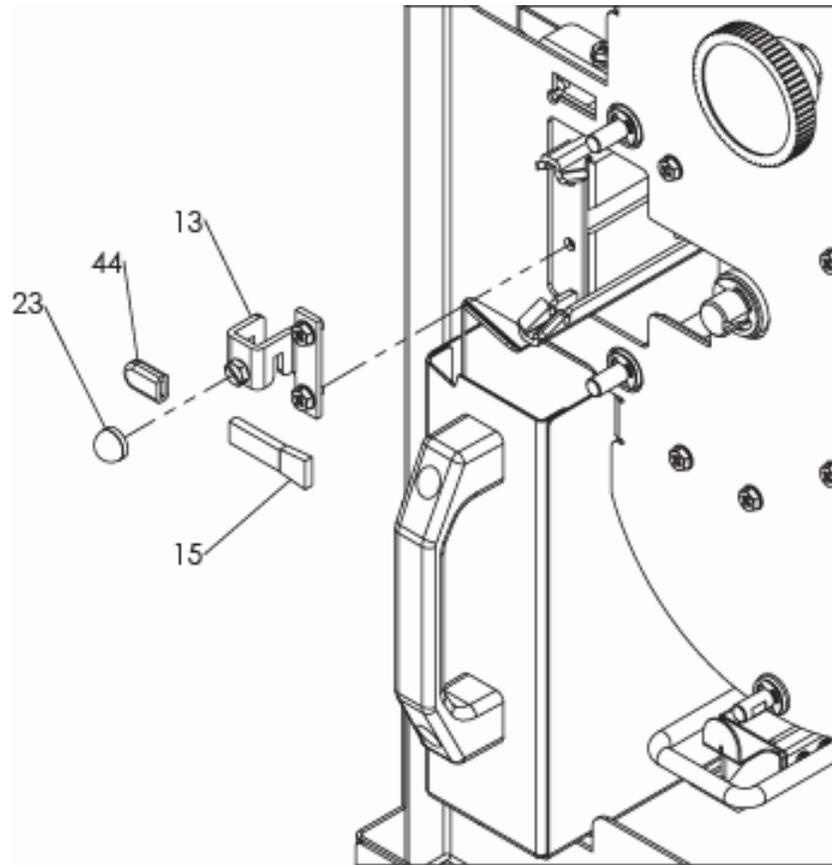
**PL 5.2 MAIN ASSEMBLY-**

UNIQUE	DESCRIPTION
115V	ADVANCED PUNCH, ASSEMBLY, LTR
230V	ADVANCED PUNCH, ASSEMBLY, A4



PART NUMBER	DESCRIPTION	QTY
600N3329	TOOLKIT	1

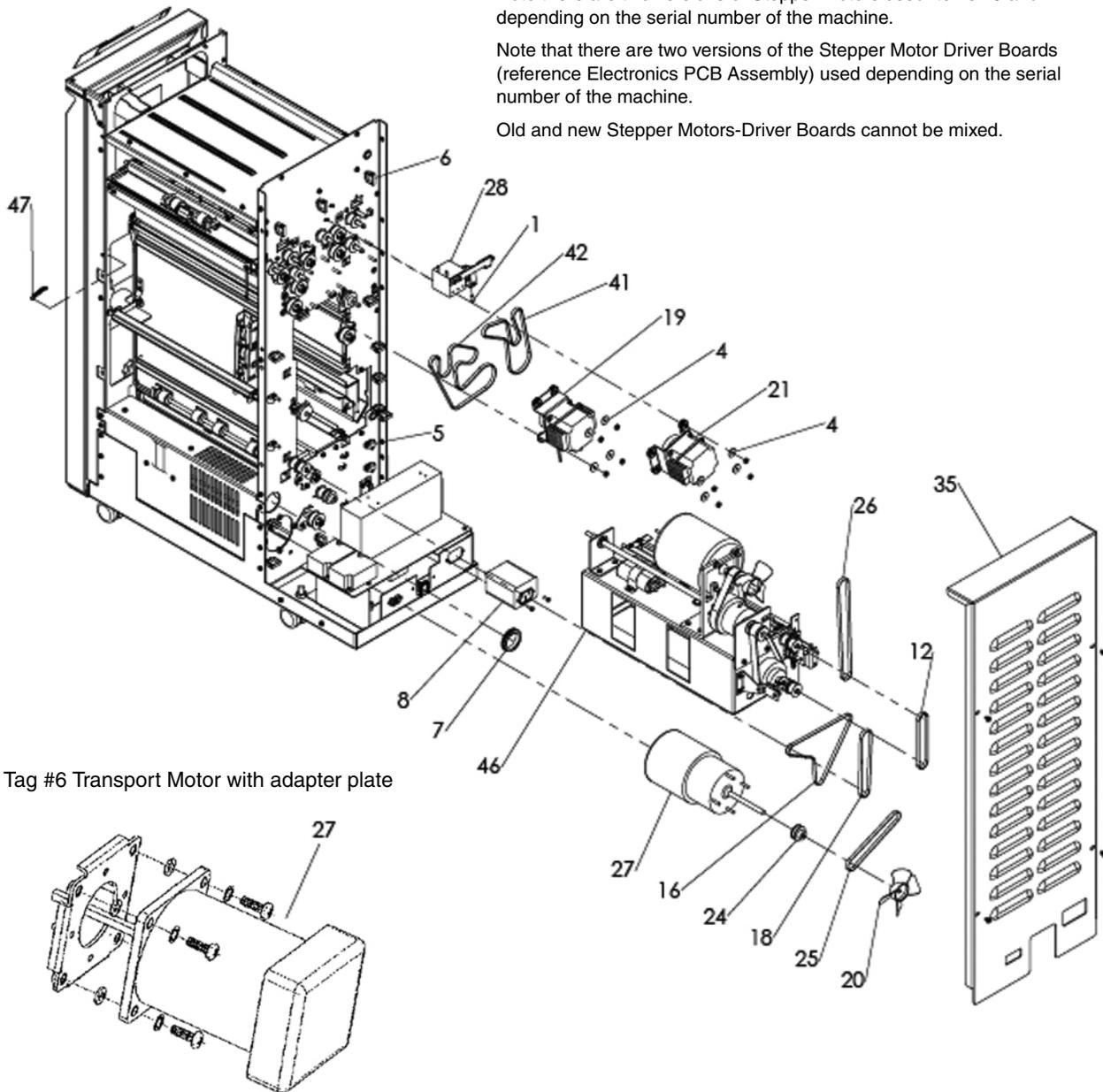




Note there are two versions of Stepper Motors used Items 19 and 21 depending on the serial number of the machine.

Note that there are two versions of the Stepper Motor Driver Boards (reference Electronics PCB Assembly) used depending on the serial number of the machine.

Old and new Stepper Motors-Driver Boards cannot be mixed.



Tag #6 Transport Motor with adapter plate

Note Item 27 is a kit. The Transport Motor in the kit has an adapter plate.

The adapter plate is used with machine serial number prior to UAD235364 (LTR units) and prior to 308244524 (A4 units).

The adapter plate is not used and should be discarded for machines with serial numbers from the ones listed above.

ITEM	PART NO	UNIQUE	DESCRIPTION	QTY.
1	-		SCR, HEX SOC HD, 8-32 X 1/4	1
2	-		SCR, PHIL PAN HD,	2
3	-		SSCR, PHIL PAN HD, #4-40 X 3/16	2
4	-		WSHR, .192 ID X .625 OD X .060 T	8
5	-		CABLE CLAMP CIRCULAR TYPE	7
6	-		WIRE SADDLE - LOCKING TOP	16
7	-		GROMMET, 1 1/4 I.D. X 1 1/2 O.D.	1
8	142N00168	115V	RFI POWER FILTER	1
9	142N00169	230V	RFI POWER FILTER, 3EP7	1
10	110N01437		INTERLOCK SWITCH	1
11	003N01054		KNOB	1
12	023N01214		BELT, 3MM PITCH X 6MM WIDTH X 84T	1
13	-		HOLDER, BRUSH BACK GAGE	1
14	003N01055		LATCH, PUSH TO-CLOSE	1
15	125N00096		BRUSH, BACK GAGE	1
16	023N01217		BELT HTD, 3MM PITCH X 6MM WIDTH X 148T	1
17	003N01056		KNOB, TRANSPORT	1
18	023N01219		BELT, 3MM PITCH X 6MM WIDTH X 100T	4
19	127N07623	Prior to SN UAD235301 LTR SN 308244515 A4	STEPPER MOTOR ASSEMBLY, EXIT	1
19	127N07831	From SN UAD235301 LTR SN 308244515 A4	STEPPER MOTOR ASSEMBLY	1
20	033N00249		FAN COOLING, TRANSPORT (CCW)	1
21	127N07622	Prior to SN UAD235301 LTR SN 308244515 A4	STEPPER MOTOR ASSEMBLY, ENTRANCE	1
21	127N07831	From SN UAD235301 LTR SN 308244515 A4	STEPPER MOTOR ASSEMBLY	1

Note there are two versions of Stepper Motors used Items 19 and 21 depending on the serial number of the machine.

Note that there are two versions of the Stepper Motor Driver Boards (reference Electronics PCB Assembly) used depending on the serial number of the machine.

Old and new Stepper Motors-Driver Boards cannot be mixed.

22	021N02267		CAP, RUBBER .032x1.00	1
23	021N02268		CAP, RUBBER .312 x .250	1
24	-		PULLEY, MOTOR HTD TIMING, 3MM PITCH, 24G	1
25	023N01221		BELT, 3MM PITCH X 6MM WIDTH X 98T	1
26	023N01222		BELT, 3MM PITCH X 6MM WIDTH X 156G	1
27	600N03417	115V	KIT, MOTOR, TRANSPORT, 115V	1
	600N03418	230V	KIT, MOTOR, TRANSPORT, 230V	1

Note Item 27 is a kit. The Transport Motor in the kit has an adapter plate.

The adapter plate is used with machine serial number prior to UAD235364 (LTR units) and prior to 308244524 (A4 units).

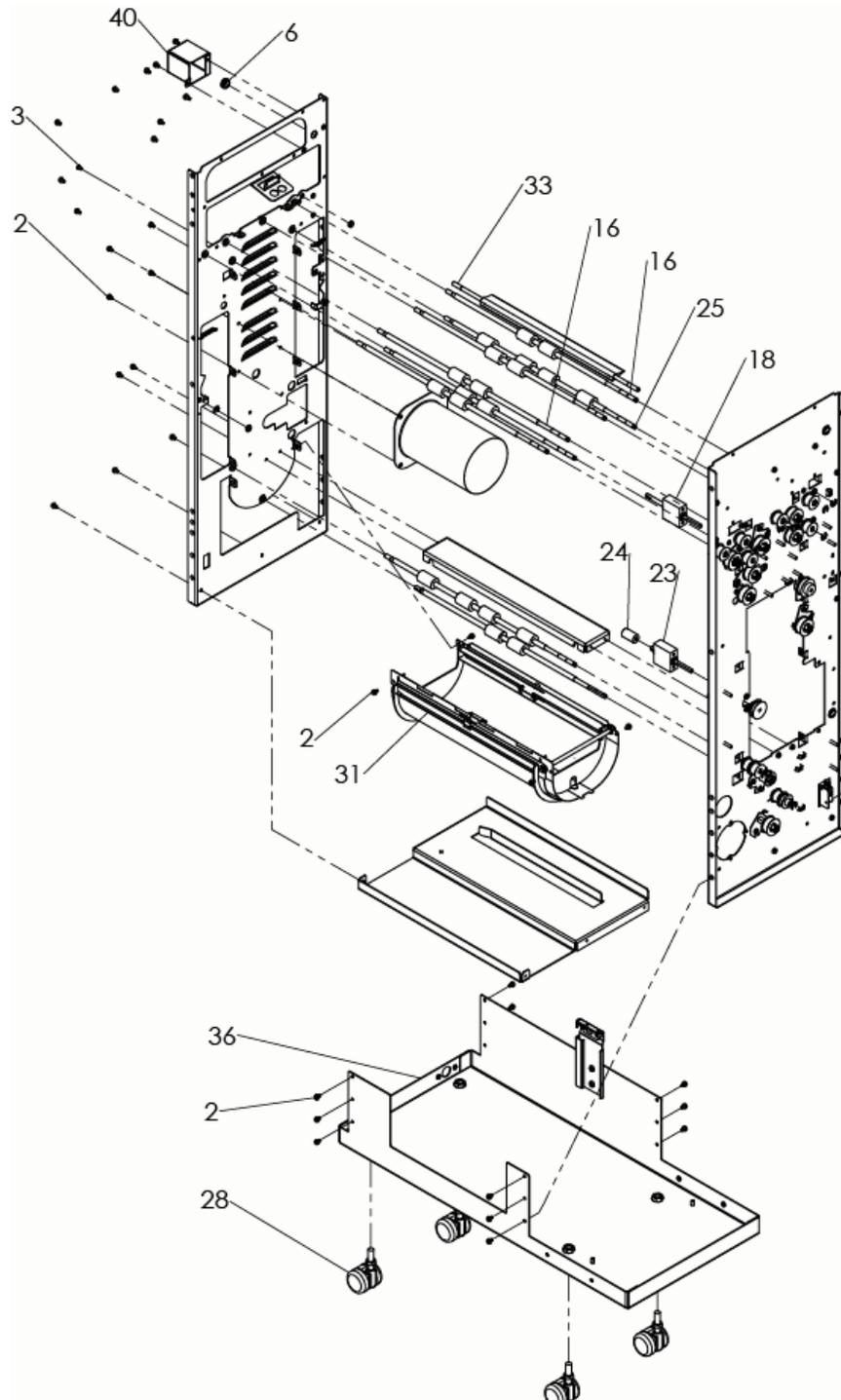
The adapter plate is not used and should be discarded for machines with serial numbers from the ones listed above.

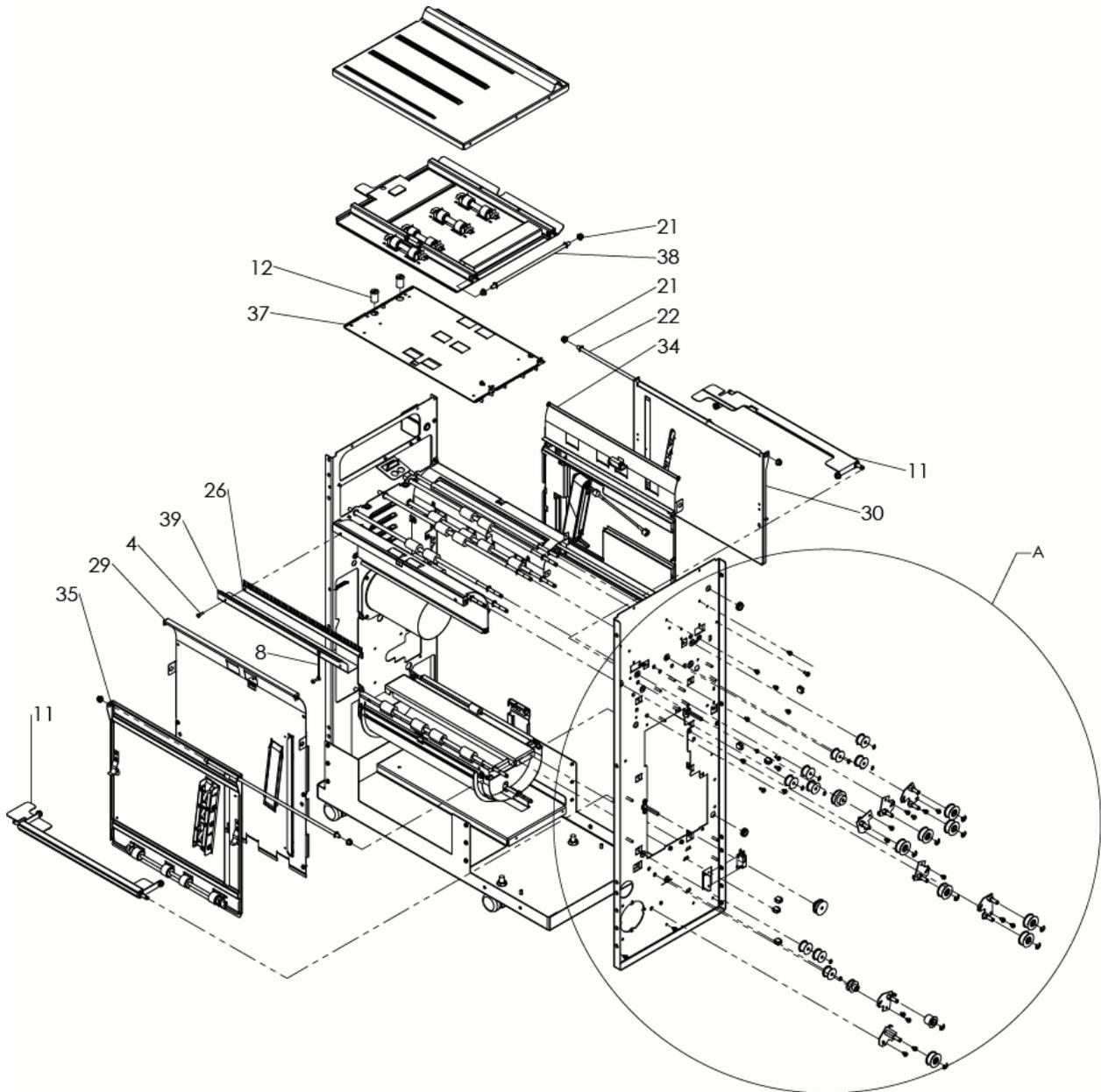
28	-		DIVERter SOLENOID ASM	1
29	-		COVER, I/O SWITCH	1
30	-		CAPACITOR	1
31	050N00544		CHIP TRAY ASSEMBLY	1
32	002N02892		TOP COVER ASSEMBLY	1
33	-		COVER REAR LEFT ASM	1
34	-		COVER REAR RIGHT ASM	1
35	002N02893		REAR COVER	1

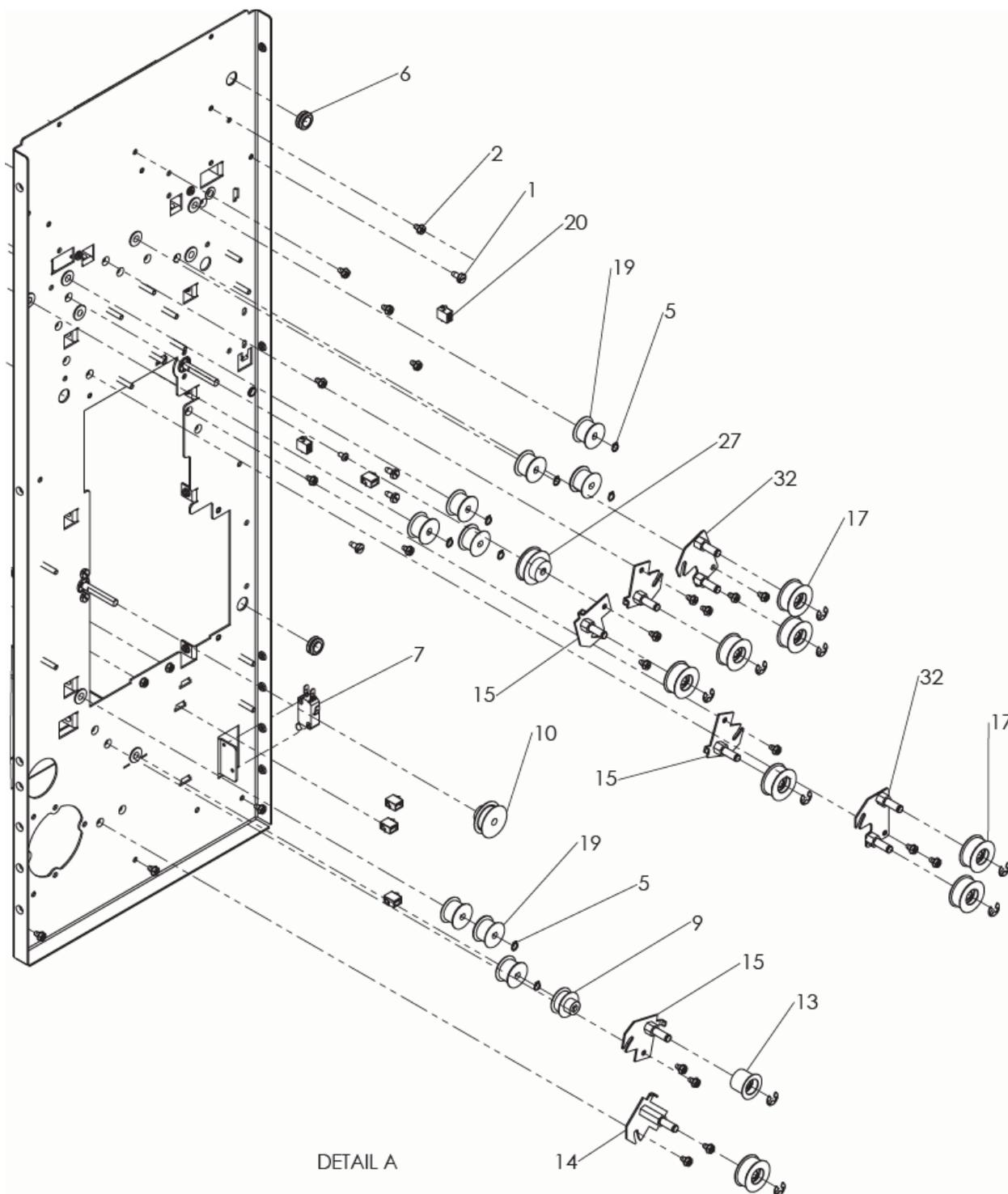
ITEM	PART NO	UNIQUE	DESCRIPTION	QTY.
36	-		BRACKET, HINGE, BOTTOM, DOOR	1
37	-		BRACKET TOP FRONT DOOR	1
38	-		BRACKET,MOTOR COVER	1
39	-		COVER LEFT SIDE	1
40	030N00763		BRACKET,DOCKING ASM	1
41	023N01223		BELT, 2 SIDED,3mm PITCH X 6mm WIDTH X 179T	1
42	023N01224		BELT, 2 SIDED, 3mm PITCH X 6mm WIDTH X 232T	1
43	-		BACK GAGE ASM	1
44	-		CUSHION, DRIVE ARM RUBBER	1
45	002N02895		FRONT DOOR ASSEMBLY	1
46	180N00017	115V	PUNCH MODULE, 115V	1
	180N00016	230V	PUNCH MODULE, 230V	1
47	-		SPRING EXTENSION	2
48	600N03353	-	FRENCH LANGUAGE LABEL	

**PL 5.3 FRAME ASSEMBLY-**

UNIQUE	DESCRIPTION	QTY/MACHINE
115V	FRAME TRANSPORT ASSEMBLY, ADVANCED PUNCH, LTR	1
230V	FRAME TRANSPORT ASSEMBLY, ADVANCED PUNCH, A4	1





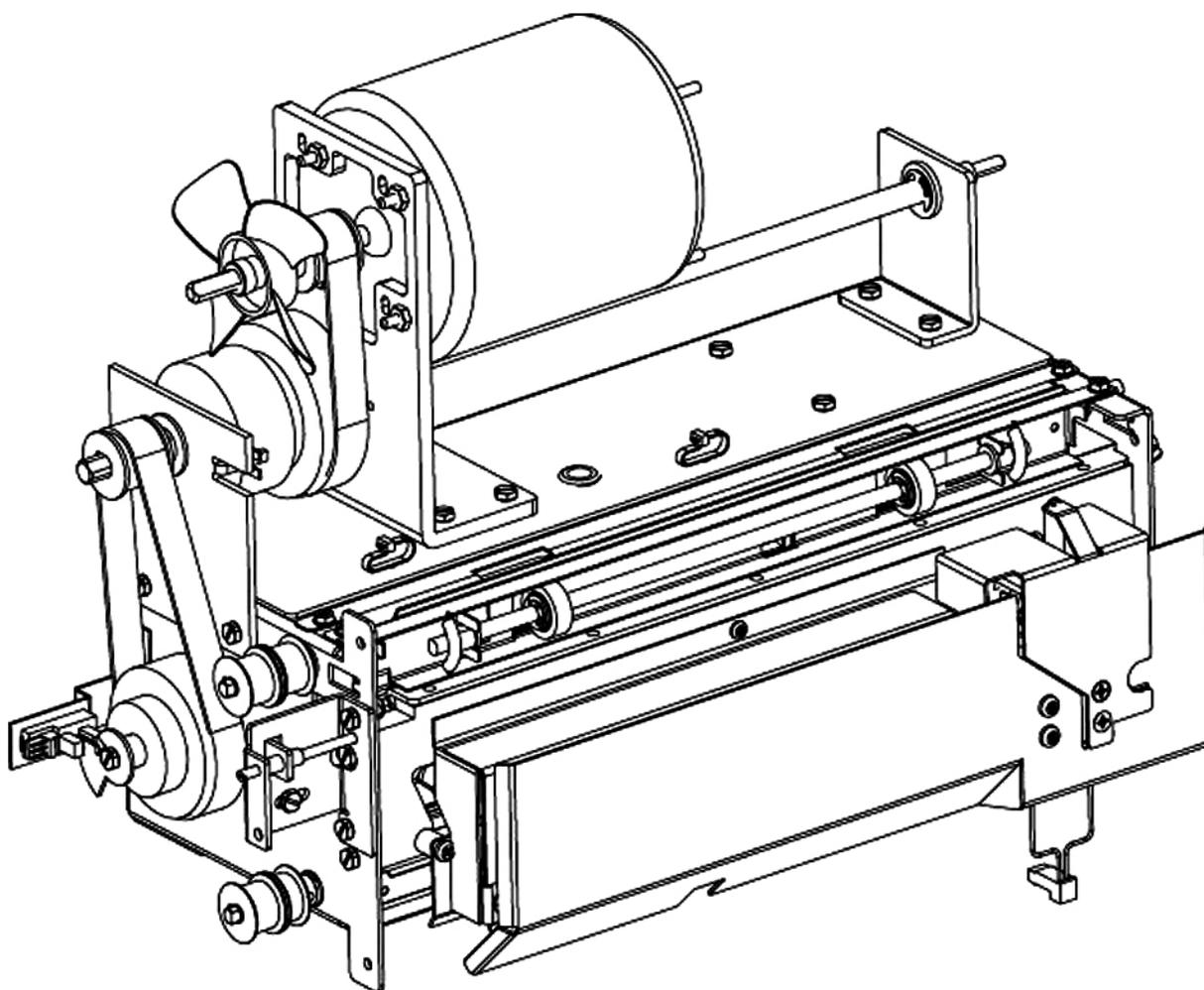


Section 5

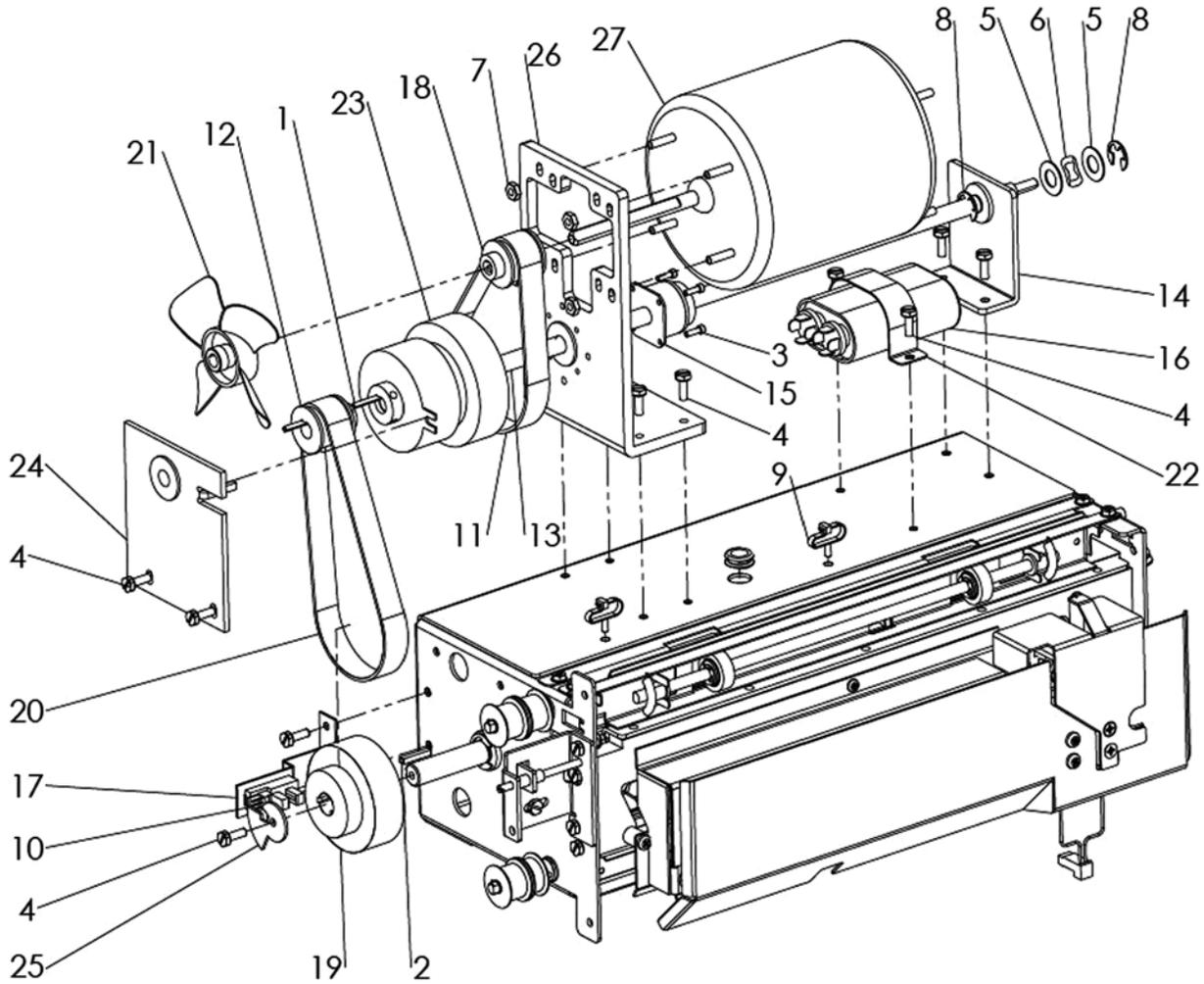
ITEM	PART NO.	UNIQUE	DESCRIPTION	QTY.
1	-		SCR, SLT IND HEX HD, EXIT SEMS WSHR, 8-32 X .38	7
2	-		SCR, HEX WASH HD, THRD FORMING 8-32X1/4	75
3	-		SCR, PHIL PAN HD, SEMS 6-32 X1/4	2
4	-		SCR,PHL PAN HD, EX SEMS,6-32 X .50	2
5	-		RI, RETAINING 1/4	8
6	-		GROMMET, 3/8 I.D X 1/2 O.D	3
7	110N01436		SNAP SWITCH	1
8	-		GROUND STRAP ASSY	1
9	020N00881		PULLEY HTD 20T, 3mm PITCH, .752 P.D.	1
10	020N00882		PULLEY, ALIGNER, 3MM PITCH, 24T	1
11	003N01053		LATCH ASSEMBLY, ALIGNER	2
12	-		MAGNET	2
13	022N02417		ROLLER IDLER, DRIVE ASSEMBLY	1
14	-		TENSIONER DRIVE, ASSEMBLY (LONG)	1
15	-		TENSIONER DRIVE, ASSEMBLY (SHORT)	4
16	022N02416		2 ROLLER, TRANSPORT DRIVE	6
17	020N00883		IDLER DRIVE, PULLEY ASSEMBLY	8
18	013N13898		HOUSING, BEARING ASSEMBLY	1
19	020N00884		PULLEY, HTD TIMING,3mm PITCH, .752 P.D.	9
20	130N01573		HEADER SENSOR	6
21	-		BEARING FLANGE	6
22	-		SHAFT, ALIGNER DOOR PIVOT	2
23	013N13899		HOUSING BEARING ASSEMBLY, EXIT ALIGNER	1
24	011N00552		HELICAL FLEXURED U-JOINT	1
25	022N02415		ROLLER, TRANSPORT DRIVE	2
26	125N00097		BRUSH, ANTI-STATIC EXIT	1
27	020N00886		PULLEY, ALIGNER 3MM PITCH,30G	1
28	017N00285		CASTOR	4
29	055N00306	115V	ALIGNER EXIT DRIVE ASSY, LTR	1
	055N00304	230V	ALIGNER EXIT DRIVE ASSY, A4	1
30	055N00300	115V	ALIGNER ROLLER ENTRANCE, RV, IDLER ASSY, LTR	1
	055N00303	230V	ALIGNER ROLLER ENTRANCE, RV, IDLER ASSY, A4	1
31	038N00530		PAPER GUIDE, LOOP PIVOT ASSEMBLY	1
32	006N01328		TENSIONER DRIVE ASSEMBLY (SHORT)	1
33	7711581		DIVERTER ASSEMBLY	1
34	055N00299	115V	ALIGNER ENT, RV, DRIVE, ASSY, LTR	1
	055N00302	230V	ALIGNER ENT, RV, DRIVE, ASSY, A4	1
35	055N00301	115V	ALIGNER EXIT, RV, IDLER, ASSY, LTR	1
	055N00305	230V	ALIGNER EXIT, RV, IDLER, ASSY, A4	1
36	-		BASE FRAME, ADJUSTABLE CASTER	1
37	-		PAPER GUIDE BYPASS LOWER WELDMENT	1
38	-		SHAFT, BYPASS DOOR PIVOT	1
39	-		PAPER EXIT BOT ANG SUPPORT	1
40	-		LOCK BRACKET	1

## PL 5.4 PUNCH MODULE

PART NO	UNIQUE	DESCRIPTION	QTY/MACHINE
180N00017	115V	PUNCH MODULE, RV, ASSEMBLY (LTR)	1
180N00016	230V	PUNCH MODULE, RV, ASSEMBLY (A4)	1



PL 5.4.1 PUNCH MODULE- MOTOR ASSEMBLY

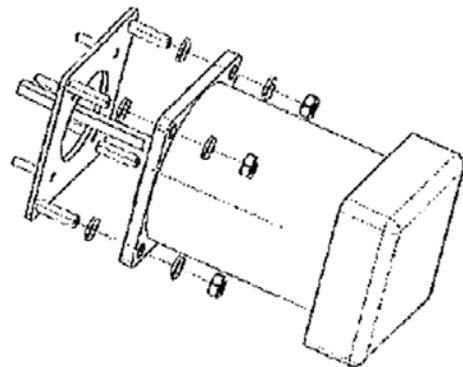


Tag #5 Punch Motor with adapter plate

Note Item 27 is a kit. The Punch Motor in the kit has an adapter plate.

The adapter plate is used with machine serial number prior to UAD235359 (LTR units) and prior to 308244496 (A4 units).

The adapter plate is not used and should be discarded for machines with serial numbers from the ones listed above.

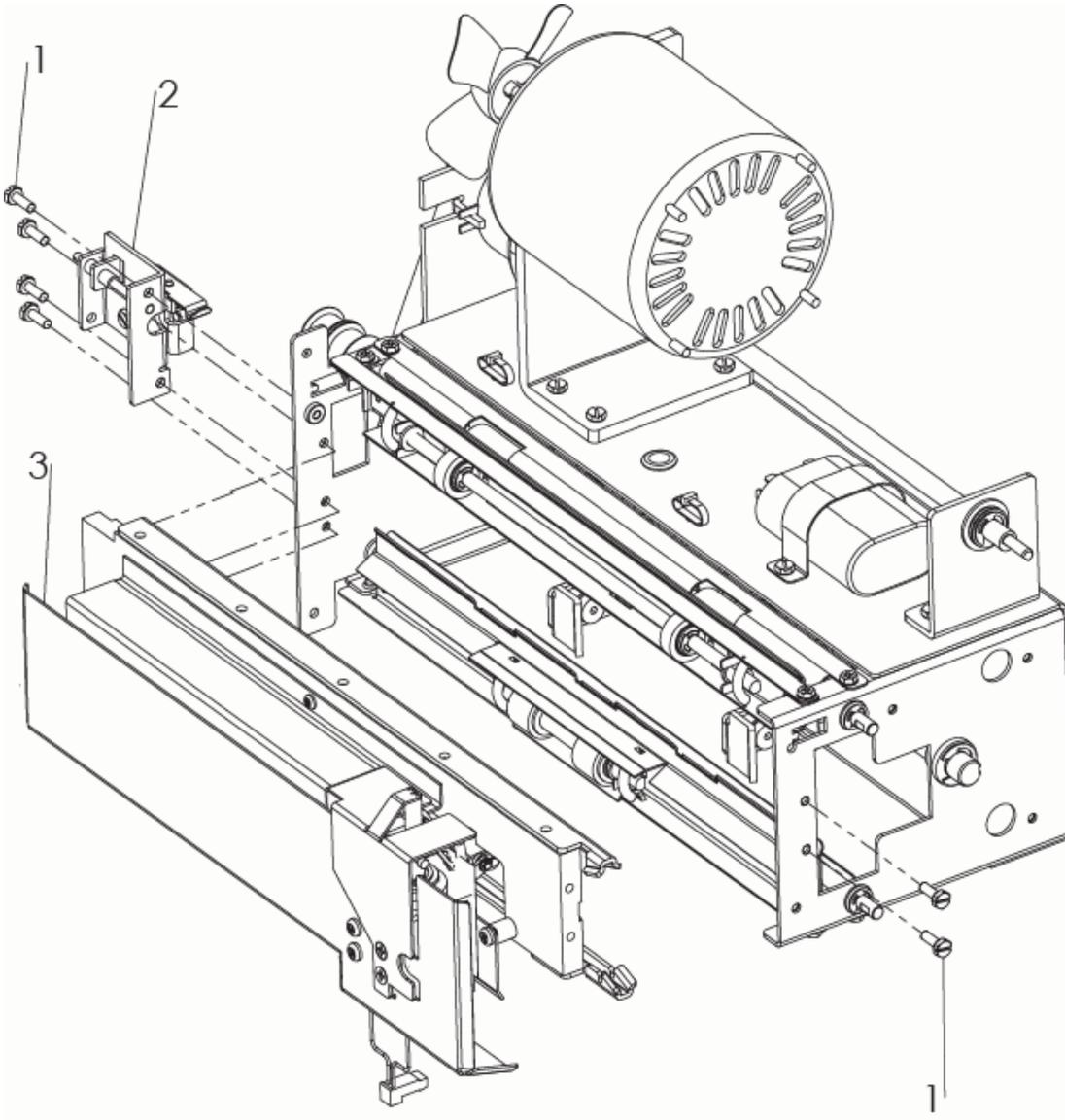


ITEM	PART NO	UNIQUE	DESCRIPTION	QTY
1	-		KEY, 3/32 X 3/32 X 3/4	2
2	-		KEY, .125 X .125 X .75	1
3	-		SCR, SOC HD CAP 4-40, 3/8L	4
4	-		SCR, SLT HX WASH HD, SEMS 8-32,1/2	13
5	-		WASHER, 3/4 X 3/8 X.030	2
6	-		WASHER, WAVY, .661X.395 X.005X.052 MAX DEF.	1
7	-		NUT, KEPS #8-32	4
8	-		RING, E 3/8	2
9	-		TIE WRAP	2
10	130N01572		SENSOR, OPTICAL	1
11	023N01213		BELT, HTD, 60TX 15MM WX 5MM PITCH	1
12	-		PULLEY, CLUTCH SHAFT,15 T	1
13	-		SHAFT, CLUTCH DRIVE	1
14	-		BRACKET, IDLER	1
15	121N01182		BRAKE	1
16	-		CAPACITOR	1
17	-		BRACKET, OPTICAL SWITCH	1
18	-		PULLEY, MOTOR SHAFT,15 T	1
19	020N00885		PULLEY, DRIVE SHAFT, 38 T	1
	020N00887		PULLEY, DRIVE SHAFT, 32 T	1
20	023N01218		BELT, HTD 72 TX 15MM WX 5MM PITCH	1
	023N01220		BELT, HTD 69 TX 15MM WX 5MM PITCH	1

Note: Check the Tag Matrix. If Tag 7 is marked, use upgrade kit 600N03424 (60Hz) in place of 020N00887 and 023N01220. Use upgrade kit 600N03423 (50 Hz) in place of 020N00885 and 023N01218.

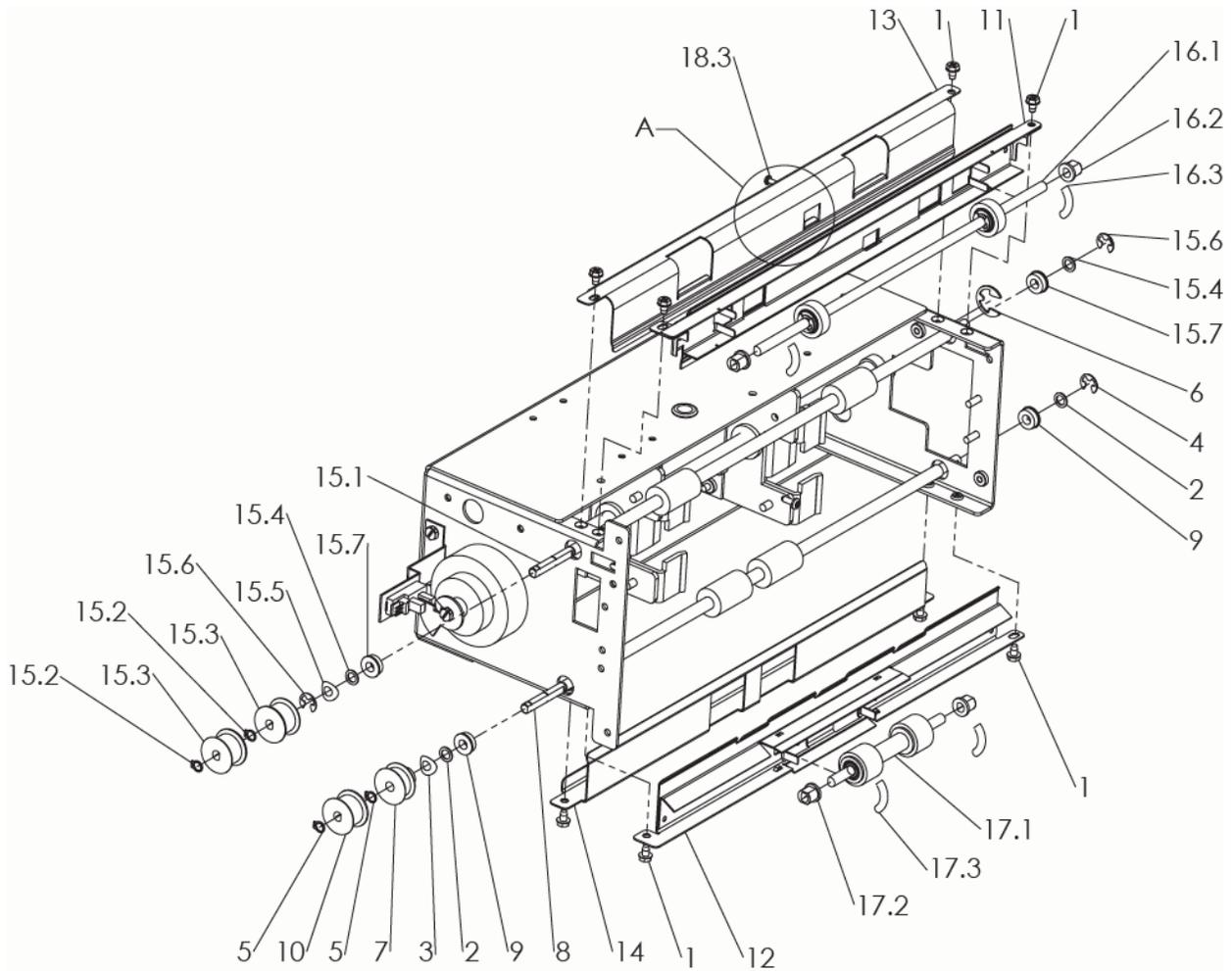
21	033N00249		FAN COOLING, (CCW)	1
22	-		BRACKET, CAPACITOR	1
23	121N01183		CLUTCH ASM, SL22	1
24	-		BRACKET,RV, CLUTCH	1
25	-		FLAG,RV,66 DEG, 20-10	1
26	-		BRACKET PUNCH,RV,MOTOR	1
27	600N03415	115V	KIT, MOTOR, PUNCH, 115V	1
	600N03416	230V	KIT, MOTOR, PUNCH, 230V	1

PL 5.4.2 PUNCH MODULE- BACK GAGE AND RAIL ASSEMBLY

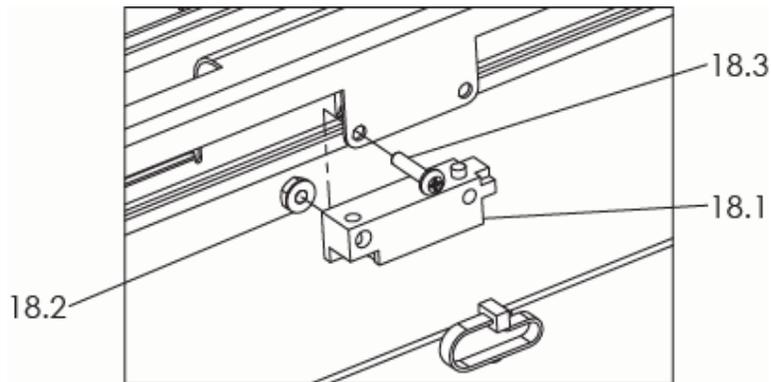


ITEM	PART NO.	DESCRIPTION	QTY.
1	-	SCR, SLT HX WASH HD, SEMS 8-32,1/2	6
2	038N00531	POSITIONING,ASSY, RV, DIESET	1
3	001N00516	BACKGAGE RV RAIL ASSEMBLY	1

PL 5.4.3 PUNCH MODULE- ROLLER ASSEMBLY



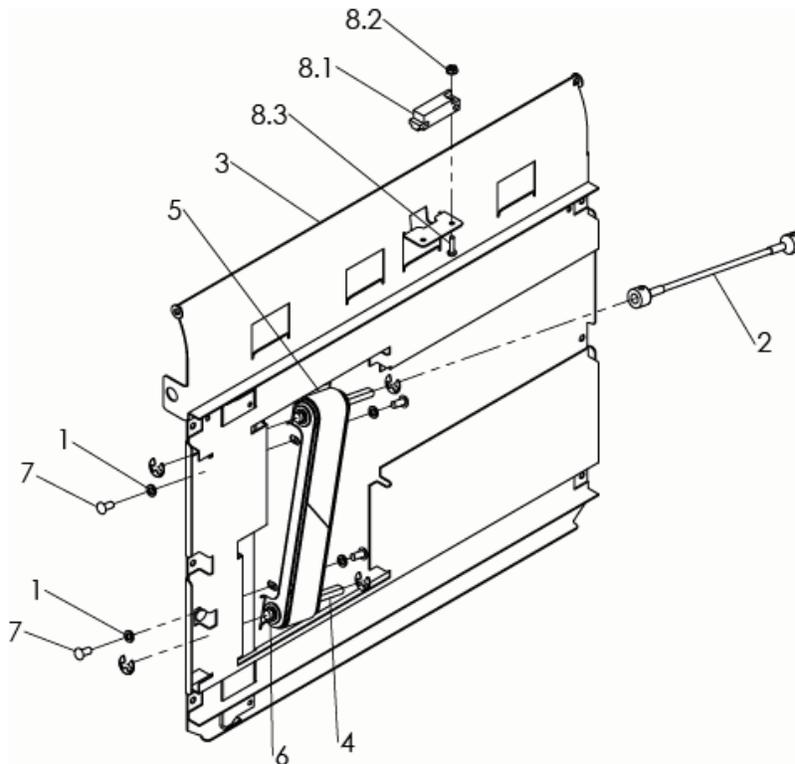
DETAIL A- SENSOR



ITEM	PART NO.	DESCRIPTION	QTY.
1	-	SCR, HEX WASH HD, THRD FORMING 8-32X1/4	8
2	-	WASHER FLAT, NON-METALLIC 1/4X3/8X1/32	2
3	-	WASHER, CURVED,FORMED SPRING	1
4	-	RING, E, 1/4	1
5	-	RING, RETAINING, 1/4	2
6	-	RING, E, 1/2	6
7	020N00881	PULLEY HTD 20T, 3mm PITCH, .752 P.D.	1
8	022N02416	2 ROLLER, TRANSPORT DRIVE	1
9	-	BEARING BALL FLANGE	2
10	020N00884	PULLEY, HTD TIMING,3mm PITCH, .752 P.D.	1
11	-	PAPER GUIDE, RV, ENERGY NIP ASM.	1
12	-	PAPER GUIDE ASM.,RV, PUNCH EXIT IDLER	1
13	-	PAPER GUIDE,RV,PUNCH INFEED	1
14	-	PAPER GUIDE,RV,PUNCH EXIT DRIVE	1
15	600N03323	ENERGY ROLLER, TRANSPORT, DRIVE KIT	
15.1	-	ENERGY ROLLER, TRANSPORT, DRIVE	1
15.2	-	RING, RETAINING, 1/4	2
15.3	020N00884	PULLEY, HTD TIMING,3mm PITCH, .752 P.D.	2
15.4	-	WASHER FLAT, NON-METALLIC 1/4X3/8X1/32	2
15.5	-	WASHER, CURVED,FORMED SPRING	1
15.6	-	RING, E, 1/4	2
15.7	-	BEARING BALL FLANGE	2
16	600N03324	IDLER E ROLLER ASSEMBLY KIT	
16.1	-	IDLER E ROLLER ASSEMBLY	1
16.2	-	BEARING, DOUBLE D FLANGE	2
16.3	-	EXTENSION SPRING .203ODX.94	2
17	600N03325	IDLER 2 ROLLER ASSEMBLY KIT	
17.1	-	IDLER 2 ROLLER ASSEMBLY	1
17.2	-	BEARING, DOUBLE D FLANGE	2
17.3	-	EXTENSION SPRING .203ODX.94	2
18	600N03326	SENSOR, REFLECTIVE KIT	
18.1	-	SENSOR, REFLECTIVE	1
18.2	-	NUT, KEPS, 4-40	1
18.3	-	SCR,MACHINE PHIL PAN HD #4-40 X 15/32	1

**PL 5.5 ALIGNER ENTRANCE, RV, DRIVE, ASSEMBLY**

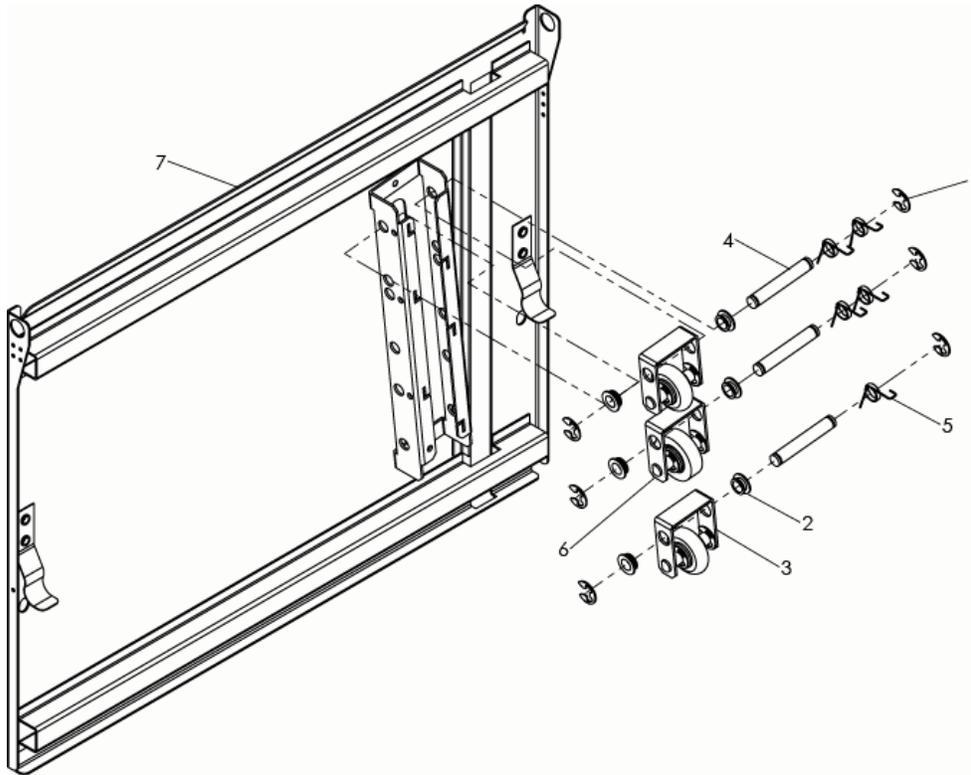
PART NUMBER	UNIQUE	DESCRIPTION	QTY/MACHINE
055N00299	115V	ALIGNER ENT, RV, DRIVE, ASSY, LTR	1
055N00302	230V	ALIGNER ENT, RV, DRIVE, ASSY, A4	1



ITEM	PART NO.	UNIQUE	DESCRIPTION	QTY.
1	-		LOCK WASHER #8	4
2	006N01327		FLEXIBLE SHAFT	1
3	-	115V	ALIGNER, RV, PAPER GUIDE WELDENT, LTR	1
	-	230V	ALIGNER, RV, PAPER GUIDE WELDENT, A4	1
4	-		SHAFT,ALIGNER PIVOT	2
5	023N01216		BELT	1
6	023N01215		ALIGNER DRIVE,BELT ASSY.	1
7	-		SCR BHSCS #8-32 X 3/8	4
8	600N03326		SENSOR, REFLECTIVE KIT	
8.1	-		SENSOR, REFLECTIVE	1
8.2	-		NUT, KEPS,4-40	1
8.3	-		SCR,MACHINE PHIL PAN HD #4-40 X 15/32	1

**PL 5.6 ALIGNER ROLLER ENTRANCE, RV, IDLER ASSEMBLY**

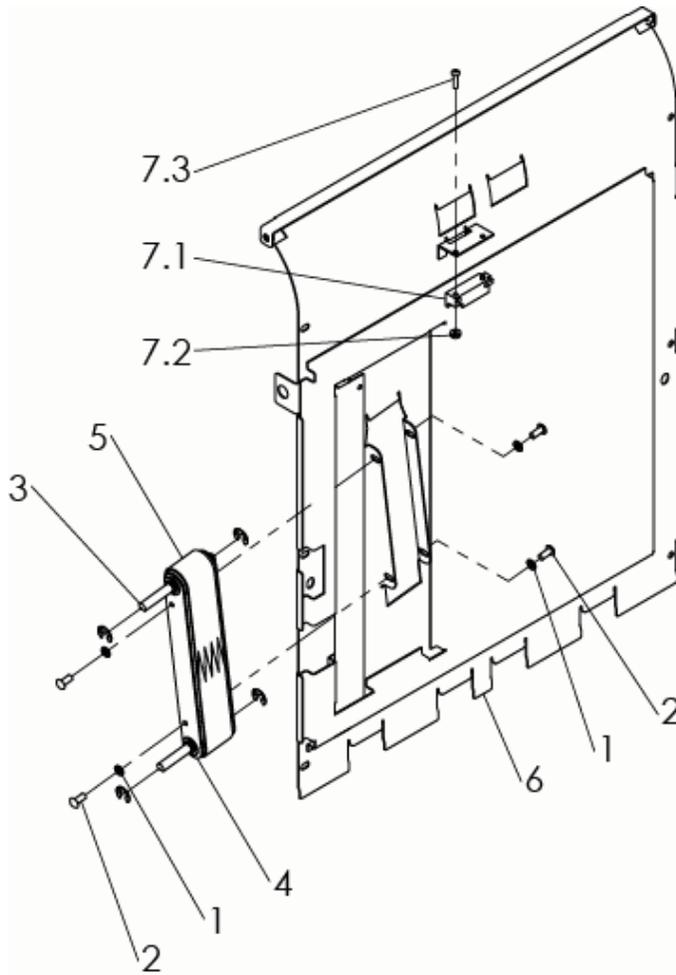
PART NUMBER	UNIQUE	DESCRIPTION	QTY/MACHINE
055N00300	115V	ALIGNER ROLLER ENTRANCE, RV, IDLER ASSY, LTR	1
055N00303	230V	ALIGNER ROLLER ENTRANCE, RV, IDLER ASSY, A4	1



ITEM	PART NO.	UNIQUE	DESCRIPTION	QTY.
1	-		RING, RETAINING E 1/4 SHAFT	6
2	-		BEARING	6
3	022N02414		ALIGNER, PLASTIC IDLER ROLLER ASSEMBLY	2
4	-		SHAFT, ALIGNER PIVOT	3
5	009N01655		SPRING, TORSION, ALIGNER	5
6	022N02418		ASSY, ALIGNER, IDLER ROLLER	1
7	-	115V	PAPER GUIDE, RV, IDLER ALIGNER WELDMENT, LTR	1
	-	230V	PAPER GUIDE, RV, IDLER ALIGNER WELDMENT, A4	1

**PL5.7 ALIGNER EXIT DRIVE ASSEMBLY**

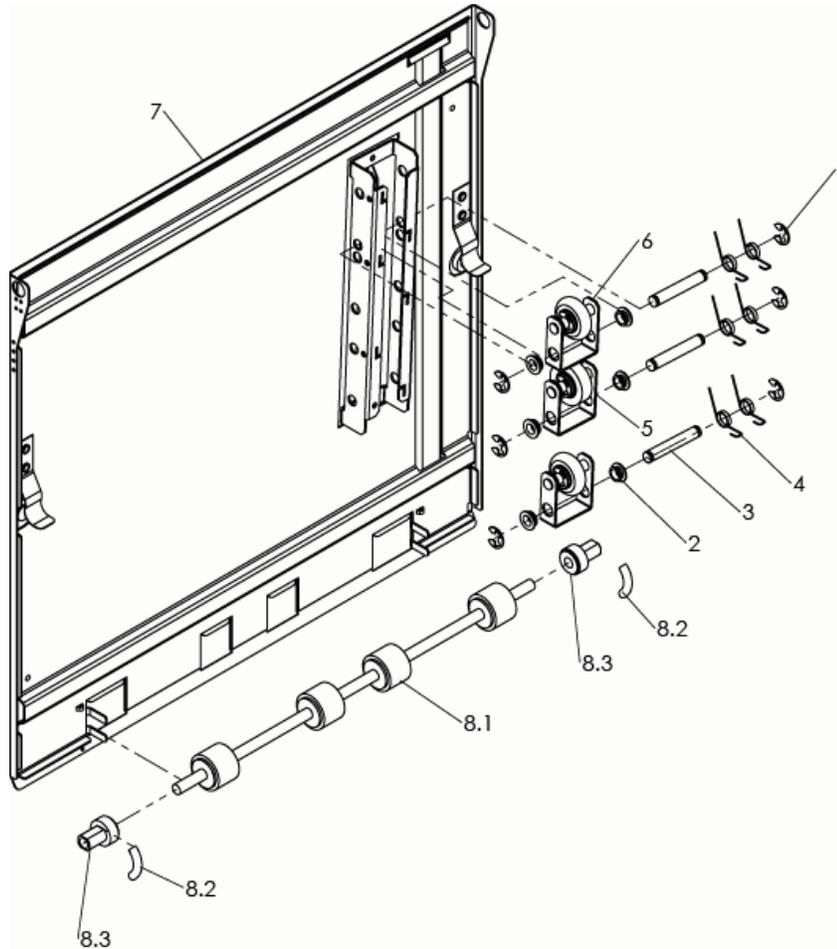
PART NUMBER	UNIQUE	DESCRIPTION	QTY/MACHINE
055N00306	115V	ALIGNER EXIT DRIVE ASSY, LTR	1
055N00304	230V	ALIGNER EXIT DRIVE ASSY, A4	1



ITEM	PART NO.	UNIQUE	DESCRIPTION	QTY.
1	-		LOCK WASHER #8	4
2	-		SCR BHSCS #8-32 X 3/8	4
3	-		SHAFT,ALIGNER PIVOT	2
4	023N01215		ALIGNER DRIVE,BELT ASSY.	1
5	023N01216		BELT	1
6	-	115V	ALIGNER, EXIT DRIVE, WELDMENT	1
	-	230V	ALIGNER, EXIT DRIVE, WELDMENT, A4	1
7	600N03326		SENSOR, REFLECTIVE KIT	
7.1	-		SENSOR, REFLECTIVE	1
7.2	-		NUT, KEPS,4-40	1
7.3	-		SCR,MACHINE PHIL PAN HD #4-40 X 15/32	1

**PL 5.8 ALIGNER EXIT, RV, IDLER ASSY**

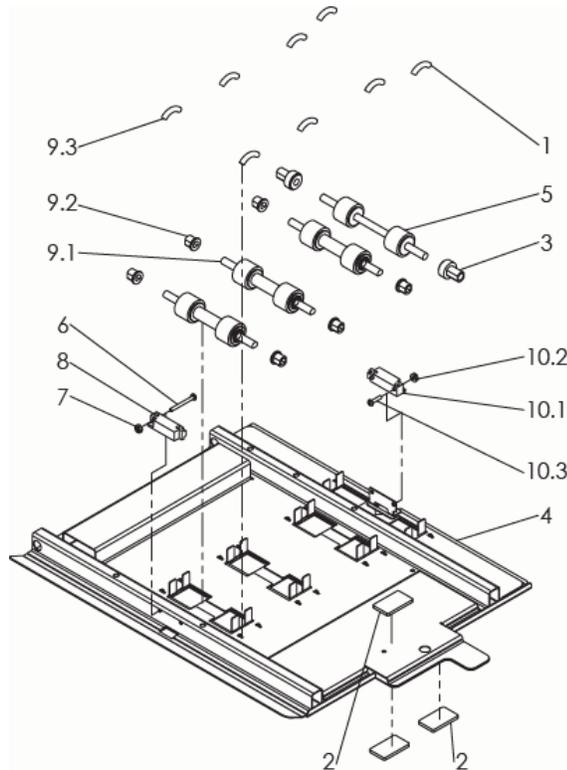
PART NUMBER	UNIQUE	DESCRIPTION	QTY/MACHINE
055N00301	115V	ALIGNER EXIT, RV, IDLER, ASSY, LTR	1
055N00305	230V	ALIGNER EXIT, RV, IDLER, ASSY, A4	1



ITEM	PART NO.	UNIQUE	DESCRIPTION	QTY.
1	-		RING, RETAINING E 1/4 SHAFT	6
2	-		BEARING	6
3	-		SHAFT,ALIGNER PIVOT	3
4	009N01655		SPRING,TORSION,ALIGNER	6
5	022N02418		ASSY,ALIGNER, IDLER ROLLER	1
6	022N02414		ALIGNER, PLASTIC IDLER ROLLER ASSEMBLY	2
7	-	115V	ALIGNER,RV,EXIT IDLER,WELDMENT, LTR	1
	-	230V	ALIGNER,RV,EXIT IDLER,WELDMENT, A4	1
8	600N03327		IDLER ROLLER ASSY KIT	
8.1	-		IDLER ROLLER ASSY	1
8.2	-		SPRING EXTENSION	2
8.3	-		BEARING ASSY 4 ROLLER DRIVE	2

**PL 5.9 PAPER GUIDE BYPASS, UPPER, ASSY**

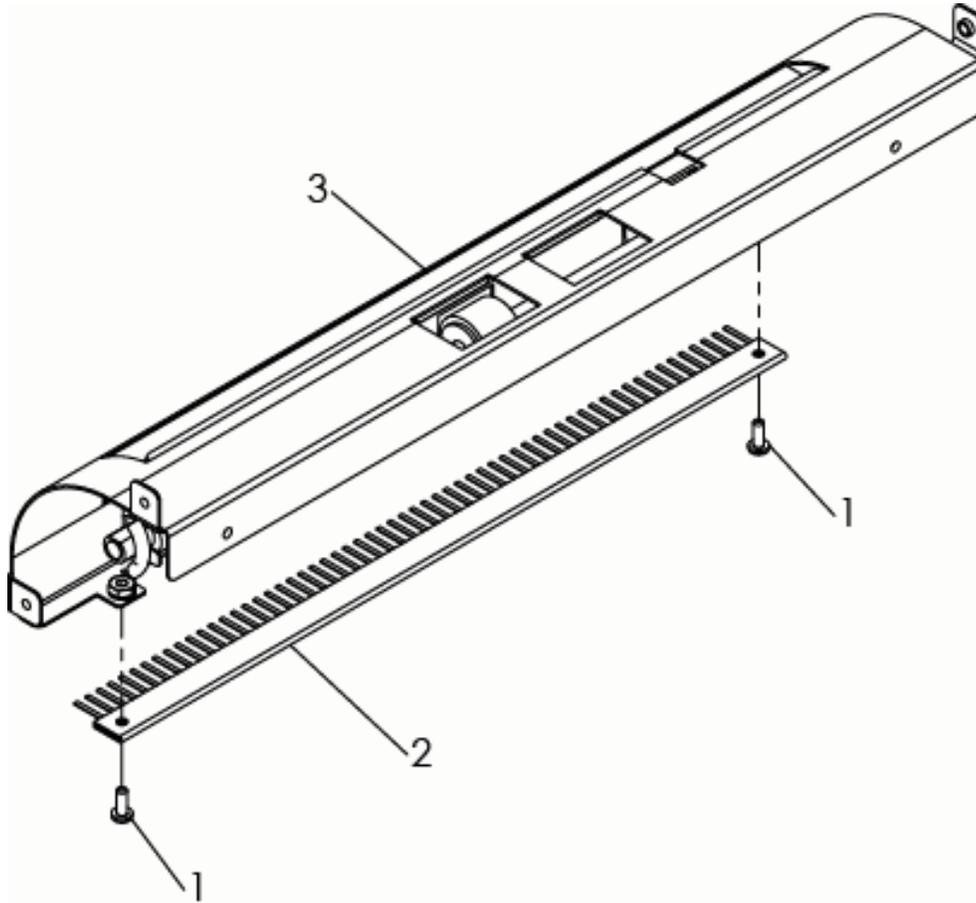
DESCRIPTION	QTY/MACHINE
PAPER GUIDE BYPASS, UPPER, ASSY	1



ITEM	PART NO.	DESCRIPTION	QTY.
1	-	SPRING EXTENSION	2
2	-	STEEL STRIKE,MAGNETIC CATCH	3
3	-	BEARING ASSY 4 ROLLER DRIVE	2
4	-	BYPASS,RV,PAPER GUIDE WELDMENT	1
5	-	IDLER, EXIT ROLLER ASSEMBLY	1
6	-	SCR,PHL PAN HD, 4-40 X 1.13	1
7	-	NUT & WSHR, KEPS,4-40	1
8	-	SENSOR, REFLECTIVE	1
9	600N03325	IDLER 2 ROLLER ASSEMBLY KIT	
9.1	-	IDLER 2 ROLLER ASSEMBLY	3
9.2	-	BEARING, DOUBLE D FLANGE	6
9.3	-	SPRING EXTENSION	6
10	600N03326	SENSOR, REFLECTIVE KIT	
10.1	-	SENSOR, REFLECTIVE	1
10.2	-	NUT & WSHR, KEPS,4-40	1
10.3	-	SCREW,MACHINE PAN #4-40 X 15/32 PHILLIPS	1

**PL 5.10 PAPER GUIDE LOWER ENTRY ASSEMBLY**

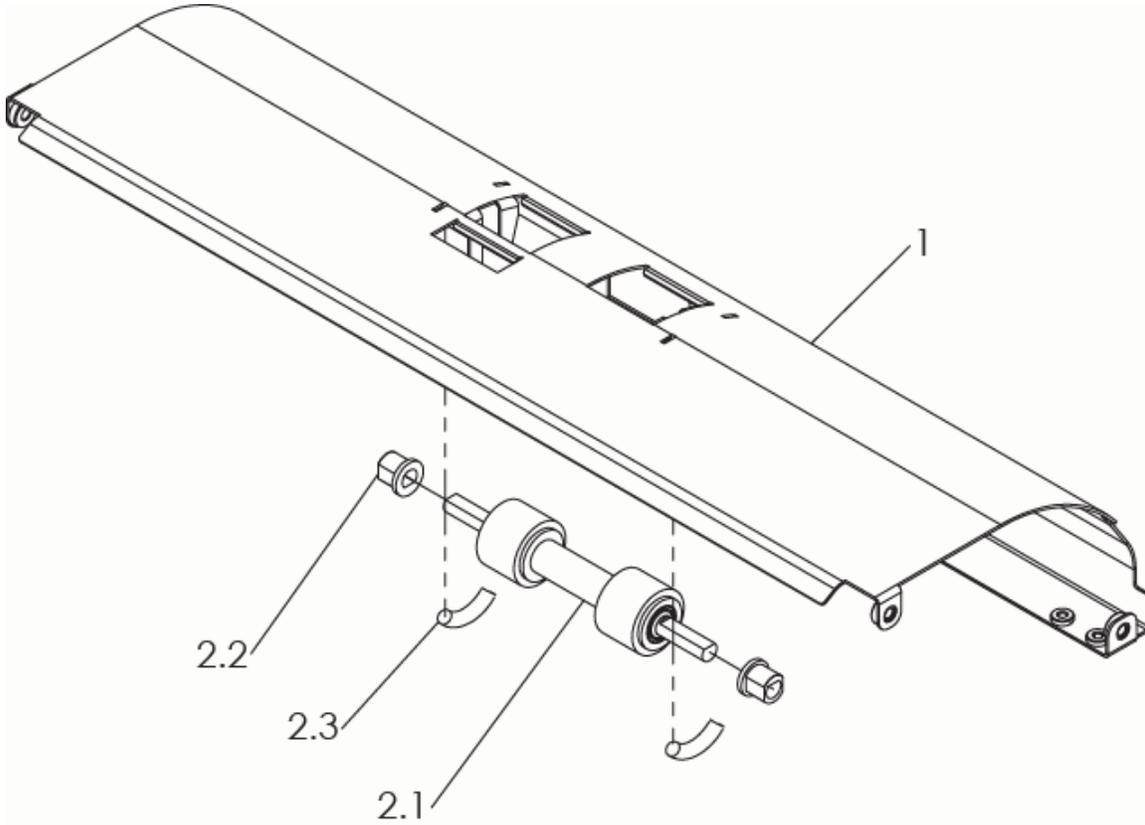
DESCRIPTION	QTY/MACHINE
PAPER GUIDE LOWER ENTRY	1



ITEM	PART NO.	DESCRIPTION	QTY.
1	-	SCR SEMS UNIT 6-32X3/8	2
2	125N00095	BRUSH	1
3	-	PAPER GUIDE,LOWER ENTRY WELDMENT	1

**PL 5.11 PAPER GUIDE LOWER EXIT ASSEMBLY**

DESCRIPTION	QTY/MACHINE
PAPER GUIDE LOWER EXIT ASSY	1



ITEM	PART NO.	DESCRIPTION	QTY.
1	-	PAPER GUIDE,LOWER EXIT	1
2	600N03325	IDLER 2 ROLLER, ASSEMBLY KIT	
2.1	-	IDLER ROLLER, ASSEMBLY	1
2.2	-	BEARING, DOUBLE "D" FLANGE	2
2.3	-	SPRING EXTENSION	2

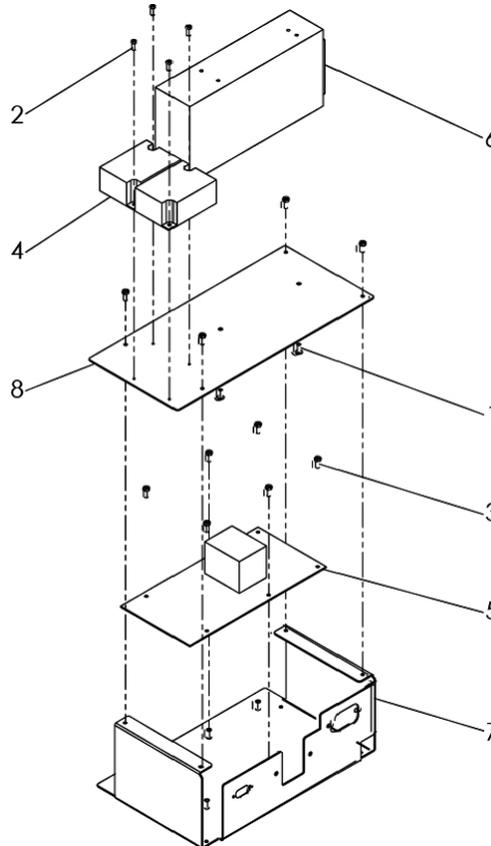
**PL 5.12 ELECTRONICS PCB ASSEMBLY**

DESCRIPTION	QTY/MACHINE
ELECTRONICS PCB ASSY	1

Note there are two versions of Driver PCBs used Item 4 depending on the serial number of the machine.

Note that there are two versions of the Stepper Motors (reference Main Assembly) used depending on the serial number of the machine.

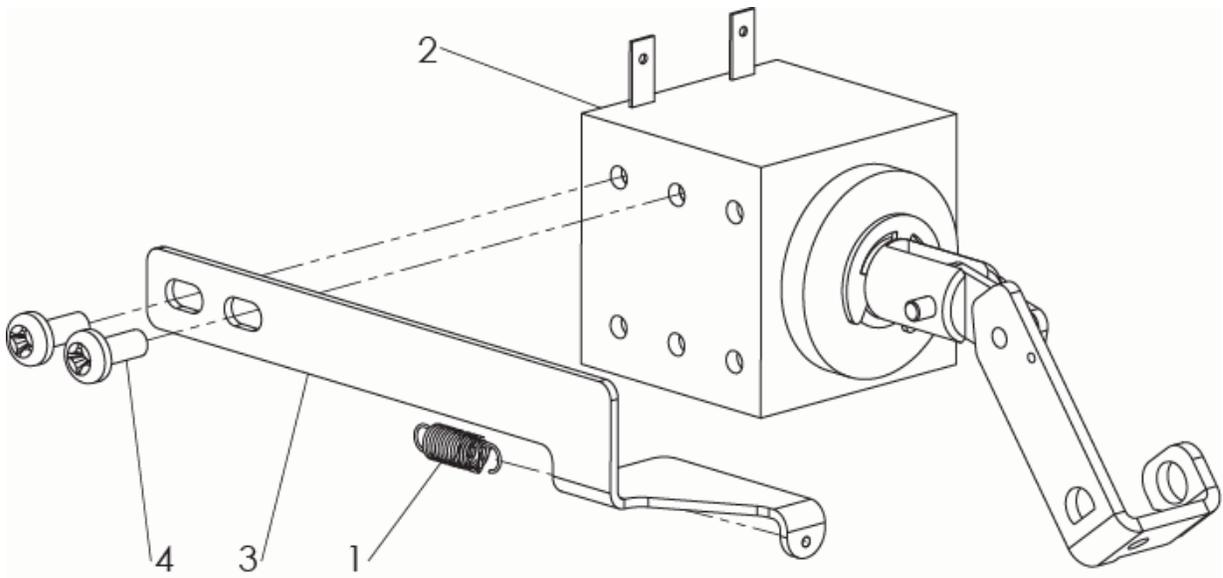
Old and new Stepper Motors-Driver Boards cannot be mixed.



ITEM	PART NO	UNIQUE	DESCRIPTION	QTY
1	-		SCR, MACH, PH, PAN, HD, M4x6)	2
2	-		SCR, SOC HD CAP 4-40,3/8	4
3	-		SCR, SLTD HX WASH HD 6-32x3/8	10
4	127N07621	Prior to SN UAD235301 LTR SN 308244515 A4	DRIVER, PCB, STEPPER MOTOR	2
4	127N07832	From SN UAD235301 LTR SN 308244515 A4	DRIVER, PCB, STEPPER MOTOR	2
5	140N63652		PCB,CONTROL BRD	1
6	105N02169		POWER SUPPLY 24V, 8.4 A, 5V SW	1
7	-		BRACKET PCB MOUNT	1
8	-		BRACKET, PWR MOUNT	1
9	113N01315		JUMPER (A4)	1

**PL 5.13 DIVERTER SOLENOID ASSEMBLY**

DESCRIPTION	QTY/MACHINE
DIVERTER SOLENOID ASSY	1



ITEM	PART NO.	DESCRIPTION	QTY.
1	009N01654	EXTENSION SPRING	1
2	121N01185	SOLENOID, LINK ASSEMBLY	1
3	121N01184	LIMITER SOLENOID	1
4	-	SCR 8-32X1/4, HEX HEAD	2



# *Section 6*

## *General Procedures*

This section contains general information relating to this product, the service and/or the maintenance of this product.

The GBC Advanced Punch is designed to operate with a minimal amount of misfeeds. Like any electro-mechanical machine, some problems occur. The acceptable level of misfeeds with the Advanced Punch is approximately 1 in 5000 sheets of paper.

### **Section Contents**

Component Control And Diagnostic Modes Entry and Exit Procedures

Adjustments and Feature Control General Procedures

GBC AdvancedPunch Input Component Control

GBC AdvancedPunch Output Component Control

GBC AdvancedPunch NVM Setting List

GBC AdvancedPunch Fault Code List

Tools

Lubrication

Principle of Operation

Paper Flow

Glossary of Terms

Specifications

## 6.1 Component Control And Diagnostic Modes Entry and Exit Procedures

### 6.1.1 Entering and Exiting Maintenance/Diagnostic Tools Mode

Certain diagnostic routines and reports are available locally (on the UI) through Maintenance/Diagnostic Tools mode, including Component Control and NVM Read/Write modes.

#### Entering

To enter the Maintenance/Diagnostic Tools mode:

1. Press and hold the **0** key for 5 seconds, then while still holding down the **0** key, press the **Start** button. The **Maintenance/Diagnostic Tools Access Number** screen will appear.
2. Enter **6789** and press **Confirm**.
3. The topmost area of the UI display will change to a white banner with black lettering to let the user know that the mode has changed to the Maintenance/Diagnostic Tools mode.

**NOTE:** *If a system failure has occurred when the machine is turned ON but it has not been rectified, the diagnostic operation will not be guaranteed.*

#### Exiting

There are three ways to exit from Maintenance/Diagnostic Tools mode:

- Switch the power Off then On (If actions performed in Maintenance/Diagnostic Tools mode cause the machine to restart upon exiting, the machine will come back up in normal user mode).
- Press and hold the **0** key then press the **Start** button.
- Select **Abort the Operation and Exit** on the **Maintenance/Diagnostics** screen.

### 6.1.2 Component Control

#### Purpose

The purpose of Component Control is to display the logic state of input signals and to energize output components. Up to 12 components, including Input and Output components can be operated simultaneously. If the selected components cannot output simultaneously, the prior input component is turned OFF and the latter input component is turned ON (Last Precedence Control). When multiple components that cannot output simultaneously are selected, the relevant components are all turned OFF and then the latter input components are turned ON.

**Procedure**

1. Enter UI Diagnostic mode (see Entering and Exiting Maintenance/Diagnostic Tools Mode).
  2. Select the "Machine Status" button on the UI Control Panel (the right side hard button immediately below the touch display).
  3. Select the "Tools" tab.
  4. Scroll to the bottom of the "Features" group.
  5. Select the "Maintenance/Diagnostics" button on the UI screen.
  6. Select the "IO Check" button.
  7. Enter Chain-Link values as directed in the Component Control Tables, Section [6.3](#) and [6.4](#)
  8. From the **IO Check** menu, select **Component Control**. The following are displayed:
    - **Chain - Link** dialog boxes (Refer to the appropriate table for the Chain-Link code number)
      - Table 1 GBC Inputs
      - Table 2 GBC Outputs
    - **Enter Number** button
    - **Show Current Status** button
    - **Cyclic Motion** check box
    - **Input / Output** dialog box
    - **Counter** dialog box
    - **Status** dialog box
  9. Enter the 6-digit chain-link (code) number for the component.
  10. Press the **Start** button on the UI to energize the output component or to read the status of the input component.
  11. Select **Cyclic Motion** for the component to repeat the operation.
  12. Input/Output column (component type), Status column (Operation status), and Counter column (Operation Count) are displayed on the **Component Control** screen.
  13. Press the **Stop** button on the UI to halt the component operation.
- Select **Close** to exit from Component Control.

**6.1.3 NVM Read/Write****Purpose**

The purpose of this section is to provide a method to check and adjust certain machine parameters stored and adjusted electronically. Adjustments to values are retained after exiting this mode.

**Procedure**

1. Enter UI Diagnostics Mode (see Entering and Exiting Maintenance/Diagnostic

Tools Mode).

2. Select the "Machine Status" button on the UI Control Panel (the right side hard button immediately below the touch display).
3. Select the "Tools" tab.
4. Scroll to the bottom of the "Features" group.
5. Select the "Maintenance/Diagnostics" button on the UI screen.
6. Select the "NVM Read/Write" button.
7. Enter Chain-Link values as directed in ["Adjustments and Feature Control General Procedures"](#) on page 6-4 or as described in the NVM Settings List.

## 6.2 Adjustments and Feature Control General Procedures

Item #	Description	Adjustment Procedure
GP1	Punch Counter	Enter Chain Link #769-253 (Value range from 0 to 18,000,000 and is resettable)
GP2	Adjusting counter for "Almost Full" message	Enter Chain Link #769-244 Adjust value from nominal = 30 (x100 punch cycles) to higher value if message occurs before Punch Waste Container is near full or to a lower value if "Full Waste Container" message occurs before "Near Full" message is displayed.
GP3	Punch "Almost Full" message ON/OFF	Enter Chain Link # 769-250 0 = Detect 1 = Do not detect
GP4	Configuration recognition *related to GP5	Enter Chain Link # 769-252 0 = Disabled 1 = Enabled
GP5	Configuration definition *valid only if NVM 769-252 = 0	Enter Chain Link # 769-226 0 = No AdvancedPunch 1 = A4 AdvancedPunch connected 2 = Letter AdvancedPunch connected
GP6	AdvancedPunch SW version display	Enter Chain Link #769-251

## 6.3 GBC AdvancedPunch Input Component Control

Chain No	Link No	Component Name	Description	Signal Level		
				Not Detected	Detected	Meaning
040	100	AdvancedPunch Ent SNR	AdvancedPunch Ent SNR detects paper. *	High	Low	Paper detected
040	101	AdvancedPunch Path Ent SNR	AdvancedPunch Path Ent SNR detects paper. *	High	Low	Paper detected
040	102	AdvancedPunch Ent SNR	AdvancedPunch Ent SNR detects paper. *	High	Low	Paper detected
040	103	AdvancedPunch Exit SNR	AdvancedPunch Exit SNR detects paper. *	High	Low	Paper detected
040	104	AdvancedPunch Path Exit SNR	AdvancedPunch Path Exit SNR detects paper. *	High	Low	Paper detected
040	105	AdvancedPunch Bypass Ent SNR AdvancedPunch Path Exit SNR	AdvancedPunch Bypass Ent SNR detects paper. * AdvancedPunch Path Exit SNR detects paper. *	High	Low	Paper detected
040	106	AdvancedPunch Bypass Exit SNR	AdvancedPunch Bypass Exit SNR detects paper. *	High	Low	Paper detected
040	200	AdvancedPunch Dust Box Full SNR	AdvancedPunch Dust Box detects Full status. *	Low	High	Full
040	201	AdvancedPunch Die Set SW	Whether AdvancedPunch Die Unit is correctly detected (inserted).	Low	High	Miss Set
040	202	AdvancedPunch Dust Box Set SW	Whether AdvancedPunch Container is correctly detected (inserted).	Low	High	Miss Set
040	203	AdvancedPunch Bypass Chute Open SNR	AdvancedPunch Bypass Chute being open is detected. *	High	Low	Open
040	204	AdvancedPunch Rotation SNR	AdvancedPunch Cam in its home position is detected. *	Low	High	Home
040	300	AdvancedPunch Front Door Open SW	Status (open/close) of AdvancedPunch Front Door is detected. *	Low	High	Open

## 6.4 GBC AdvancedPunch Output Component Control

Chain No	Link No	Component Name	Description
040	001	AdvancedPunch Stepping Mot1(1000mm/s)	Operate the AdvancedPunch Stepping Mot1 at the speed of 1,000mm/s. *
040	002	AdvancedPunch Stepping Mot1(606mm/s)	Operate the AdvancedPunch Stepping Mot1 at the speed of 606mm/s. *
040	003	AdvancedPunch Stepping Mot1(350.3mm/s)	Operate the AdvancedPunch Stepping Mot1 at the speed of 350.3mm/s. *
040	004	AdvancedPunch Stepping Mot2(1000mm/s)	Operate the AdvancedPunch Stepping Mot2 at the speed of 1,000mm/s. *
040	005	AdvancedPunch Stepping Mot2(606mm/s)	Operate the AdvancedPunch Stepping Mot2 at the speed of 606mm/s. *
040	006	AdvancedPunch Stepping Mot2(350.3mm/s)	Operate the AdvancedPunch Stepping Mot2 at the speed of 350.3mm/s. *
040	007	AdvancedPunch Transport Mot	Operate the AdvancedPunch Transport Mot. *
040	008	AdvancedPunch	Conduct AdvancedPunch operation (one time).
040	009	AdvancedPunch Cyclic	Conduct AdvancedPunch operation successively at 3-second intervals with Punch Mot, Punch CI, Punch Brake, and Punch Rotation SNR. *
040	010	AdvancedPunch Mot	Operate the AdvancedPunch Mot. *
040	011	AdvancedPunch CI	Operate the AdvancedPunch CI continuously. *
040	012	AdvancedPunch CI Cyclic	Repeat the set of AdvancedPunch CI ON for 1 second and OFF for 2 seconds. *
040	013	AdvancedPunch Gate Sol	Operate the AdvancedPunch Gate Sol continuously. *
040	014	AdvancedPunch Gate Sol Cyclic	Repeat the set of AdvancedPunch Gate Sol ON for 1 second and OFF for 2 seconds. *
040	015	AdvancedPunch Backstop Sol	Operate the AdvancedPunch Backstop Sol continuously. *
040	016	AdvancedPunch Backstop Sol Cyclic	Repeat the set of AdvancedPunch Backstop Sol ON for 1 second and OFF for 2 seconds. *

## 6.5 GBC AdvancedPunch NVM Setting List

Chain No	Link No	Parameter Name	Feature Description	Default Value	Setting Range (Minimum Value)	Setting Range (Maximum Value)
769	226	AdvancedPunch Configuration	Determine whether AdvancedPunch is connected or not, and the supported paper size, when connected. 0: No AdvancedPunch 1: A4 AdvancedPunch connected 2: Letter AdvancedPunch connected When the setting value of NVM769-252 is 0, this NVM setting is valid.	0	0	2
769	243	AdvancedPunch: Dust Box Miss Set detection timer	Set the timer to detect the status that AdvancedPunch Dust Box is not installed. (Unit: 1sec) When the setting value is 5, the Miss Set status is detected 5 seconds after the Dust Box is drawn out.	5	1	200
769	244	AdvancedPunch: Dust Box Near Full	Set the number of punch operations to be counted to determine AdvancedPunch Dust Box Near Full. (Unit: 100 times, The default is 3,000 times.)	30	1	100
769	245	AdvancedPunch: Dust Box Punch Count	Number of the counted punch operations which produce the punch waste put into the AdvancedPunch Dust Box. (Unit: 0.1 time, The value of 10 indicates 1-time punch.) Decimals exist since different coefficients are used depending on the paper type, which ar	0	0	120000
769	246	AdvancedPunch: Coefficient for Dust Box Punch Count with Paper Type (Light weight paper / Plain paper / backside of used paper / recycled paper / punched paper)	Determine the coefficient value to be used at counting the number of punch operations which produce the punch waste put into the AdvancedPunch Dust Box. This NVM item is applied when the sheet to be punched is any of light weight paper / plain paper / bac	10	1	200
769	250	AdvancedPunch Dust Box Near Full detectoion	Determine whether to detect AdvancedPunch Dust Box Near Full. 0: Detect Near Full 1: Not detect Near Full	0	0	1
769	251	Advanced Puncher Soft Version	AdvancedPunch software version	0	0	31
769	252	Advanced Puncher Auto Recognition	Determine whether to automatically recognize if AdvancedPunch is connected or not. 0: Auto recognition disabled (Follow the setting of NVM769-226) 1: Auto recognition enabled	0	0	1

## 6.6 GBC AdvancedPunch Fault Code List

Chain No	Link No	Fault Name	Description	Corrective Action	Function Inhibited after Occurrence
40	100	AdvancedPunch Bypass Jam	AdvancedPunch Jam is detected when the paper is transported through the AdvancedPunch Bypass Path.	AdvancedPunch Front Door Open/Close, plus no AdvancedPunch Jam	Print
40	101	AdvancedPunch Path Jam	AdvancedPunch Jam is detected when the paper is transported through the AdvancedPunch Path.	AdvancedPunch Front Door Open/Close, plus no AdvancedPunch Jam	Print
40	900	Paper Remain at AdvancedPunch Bypass	Paper remaining on the Advanced-Punch Bypass Path is detected.	AdvancedPunch Front Door Open/Close, plus no AdvancedPunch Jam	Print
40	901	Paper Remain at AdvancedPunch Path	Paper remaining on the Advanced-Punch Path is detected.	AdvancedPunch Front Door Open/Close, plus no AdvancedPunch Jam	Print
40	300	AdvancedPunch Front Door Open	AdvancedPunch Front Door being opened is detected.	AdvancedPunch Front Door Close	Print
40	940	AdvancedPunch Die Miss Set	When the Punch Die is not set in AdvancedPunch, the IFM notifies the status. Then, Controller creates the corresponding Chain Link.	Punch Die Set	Punch
40	941	AdvancedPunch Dust Box Miss Set	When the Punch Dust Box is not set in AdvancedPunch, the IFM notifies the status. Then, Controller creates the corresponding Chain Link.	Punch Dust Box Set	Punch
40	942	AdvancedPunch Dust Box Full	When the status of punch waste full is detected in AdvancedPunch, the IFM notifies the status. Then, Controller creates the corresponding Chain Link.	Front Door Open --> Punch Dust Box pull out --> Punch Dust Box Set --> Front Door Close After the above procedure, AdvancedPunch notifies Not Full.	Punch
140	700	AdvancedPunch Dust Box Near Full	When the status of punch waste almost full (Near Full) is detected in AdvancedPunch, the IFM notifies the status and also Chain Link.	Front Door is Open and Punch Dust Box is pulled out (not set) for 5 seconds.	

## 6.7 Tools

Tools recommended for service of the GBC Advanced Punch:

### Standard Measure Tools (English as opposed to metric)

- Open end ignition wrench - 1/4" (required only for chad kit installation)
- Phillips screwdriver or 1/4" (6.5 mm), 5/16" (8 mm) and 11/32" (9 mm) nut drivers
- Hex wrenches, 3/32", 5/64", 9/64" and 0.050"

### Other Recommended Tools and Supplies

- Needle nose pliers
- Wire cutters
- Screw driver, flat head, small
- Supply of wire tie wraps
- Snap Ring pliers

### GBC Supplied Tool Kit Part Number

- 600N03329 - TOOL KIT W/WRENCH

## 6.8 Lubrication

For General lubrication please see the following sections

- Dieset pins- [1.3.4](#)
- Dieset shoulder bolts- [1.3.4](#)
- Punch Drive cam- [4.9.2](#)

## 6.9 Principle of Operation

The GBC Advanced Punch is a machine that punches various die set hole patterns into single sheets of paper. The machine is placed between a printer or copier and a finisher. The punch has two paper paths.

- The bypass section.
- The punch path.

The bypass moves the paper from the printer to the finisher without punching holes. The punch path routes the paper from the printer through the punch to be punched and then routes the paper to the finisher. The punch path can be selected by pressing the green button on the top of the Advanced Punch.

The Advanced Punch consists of several input and output devices to operate the machine functions. The system intelligence is a Microchip micro-controller PIC17C752. The I/O devices are listed in the tables below.

Refer to the electrical wiring information, when reading the following material. Also refer to [Figure 6.1](#).

### 6.9.1 Inputs

The input signals can be verified using the printer routines using NVMs.

**Table 6.1 Input Devices**

Input	Type	Function
Sensor 1	Optical	Sheet speed measurement, misfeed detect
Sensor 2	Optical	Stepper 1 control, Sheet speed measurement, misfeed detect
Sensor 3	Optical	Punch mechanism control, Backstop raiser, misfeed detect
Sensor 4	Optical	misfeed detect at entrance of U-Channel
Sensor 5	Optical	Jam detection
Sensor 6	Optical	Stepper 2 Control, misfeed detect
Sensor 7	Optical	Exit sensor, misfeed detect
Sensor 8	Optical	Bypass sensor, Sheet speed measurement, misfeed detect
Sensor 9	Optical Vane	Monitors rotation of punch mechanism, Controls clutch and brake
Switch 2A	Mechanical	Interlock Voltage, no machine movement if door is open
Switch 2B	Mechanical	Door open signal
Switch 3	Mechanical	Chip tray switch
Switch 4	Mechanical	Die Set switch

## 6.9.2 Outputs

The output signals can be exercised using the printer routines using NVMs.

**Table 6.2 Output Devices**

Output	Type	Function
Diverter	DC Solenoid	Diverts paper from bypass to punch sections
Brake	DC Brake	Stops the punch mechanism, keeps it in correct position
Clutch	DC Clutch	Clutches the punch mechanism to drive through paper
Backstop	DC Solenoid	Provides stop for paper to rest against during punching
Transport	AC Motor	Provides paper movement through machine
Punch	AC Motor	Provides power to punch the paper
Stepper 1	PWM Signal	Controls Stepper Motor 1
	Winding	ON signal for stepper holding current
Stepper 2	PWM Signal	Controls Stepper Motor 2
	Winding	ON signal for stepper holding current
LED 1	Chip Tray	ON: Chip Tray missing, FLASHING: Chip Tray may be full
LED 2	Die Set	ON: Die Set not installed properly
LED 3	Door	ON: Door is Open
LED 4	misfeed	ON: Paper mis-fed in Machine
LED 5	Punch On	ON: Punch Enabled

## 6.9.3 Printer Communication

**Table 6.3 Printer Communication Devices**

Device	Type	Function
Punch	Input	Printer turns on Punch enabled mode
Motor	Input	Printer turns on Advanced Punch Motor MT-C3 & VC-1
misfeed	Output	Punch signals a misfeed or the door is open (no operation allowed)
Tray/Die	Output	Punch indicates tray or die set missing (bypass only allowed)
Motor	Input	Printer turns on Advanced Punch motor BC-3 only

## 6.9.4 Serial EEPROM Control

**Table 6.4 Serial EEPROM Device**

Device	Type	Function
1 Input	3 Outputs	Counts number of punches for die set full, Saves value

For the Advanced Punch to operate, all optical sensors must be clear. Any blocked sensor or open door will prevent operation. The machine may operate in bypass mode with or without a chip tray or die set. Both of these must be present to punch.

### **6.9.5 Stepper #1 Control**

If punch is not enabled, the Advanced Punch will run in bypass mode (no punching). Either the printer or the first sheet entering the machine will turn on both stepper motors. The time is measured for the leading edge of the first sheet to pass sensor 8. Knowing the distance between sensors and the time it takes for the sheet to pass both sensors, we can determine the speed of the paper. The time is compared to a list and Stepper 1 and stepper 2 are adjusted to closely match the incoming speed.

If the punch is enabled, the backstop is raised, the brake is engaged, and both the transport and punch motors are started. Also, the divert solenoid is activated to direct the sheets into the punch path. As above, the input speed is measured, this time using Sensor 1 and 2. Stepper 1 is adjusted to meet the measured input speed; Stepper 2 is accelerated to the speed of the transport motor. Sensor 2 now delays for a time period based on the input speed to ensure that the sheet has cleared the printer exit roller. After this delay, stepper 1 accelerates the sheet to match the transport speed. 19 msec after the sheet's trailing edge passes sensor 2, Stepper 1 is decelerated to match the previously measured input speed.

### **6.9.6 Punch Control**

The punch cycle begins 40 msec after the leading edge of the sheet reaches Sensor 3. The brake is released, and the clutch is engaged. Sensor 9 now looks for the leading edge of its flag, and when seen, the clutch is disengaged, and the backstop is lowered. When the trailing edge of the flag is seen, the brake is engaged. When Sensor 3 sees the trailing edge of the sheet, the backstop is raised.

### **6.9.7 Stepper #2 Control**

72 msec after the leading edge of the sheet passes Sensor 6, Stepper 2 is decelerated to match the measured input speed from the printer. This delay ensures that the sheet exits from the transport rollers. When the trailing edge of the sheet passes Sensor 6, Stepper 2 is accelerated to match the speed of the transport motor.

## 6.10 Paper Flow

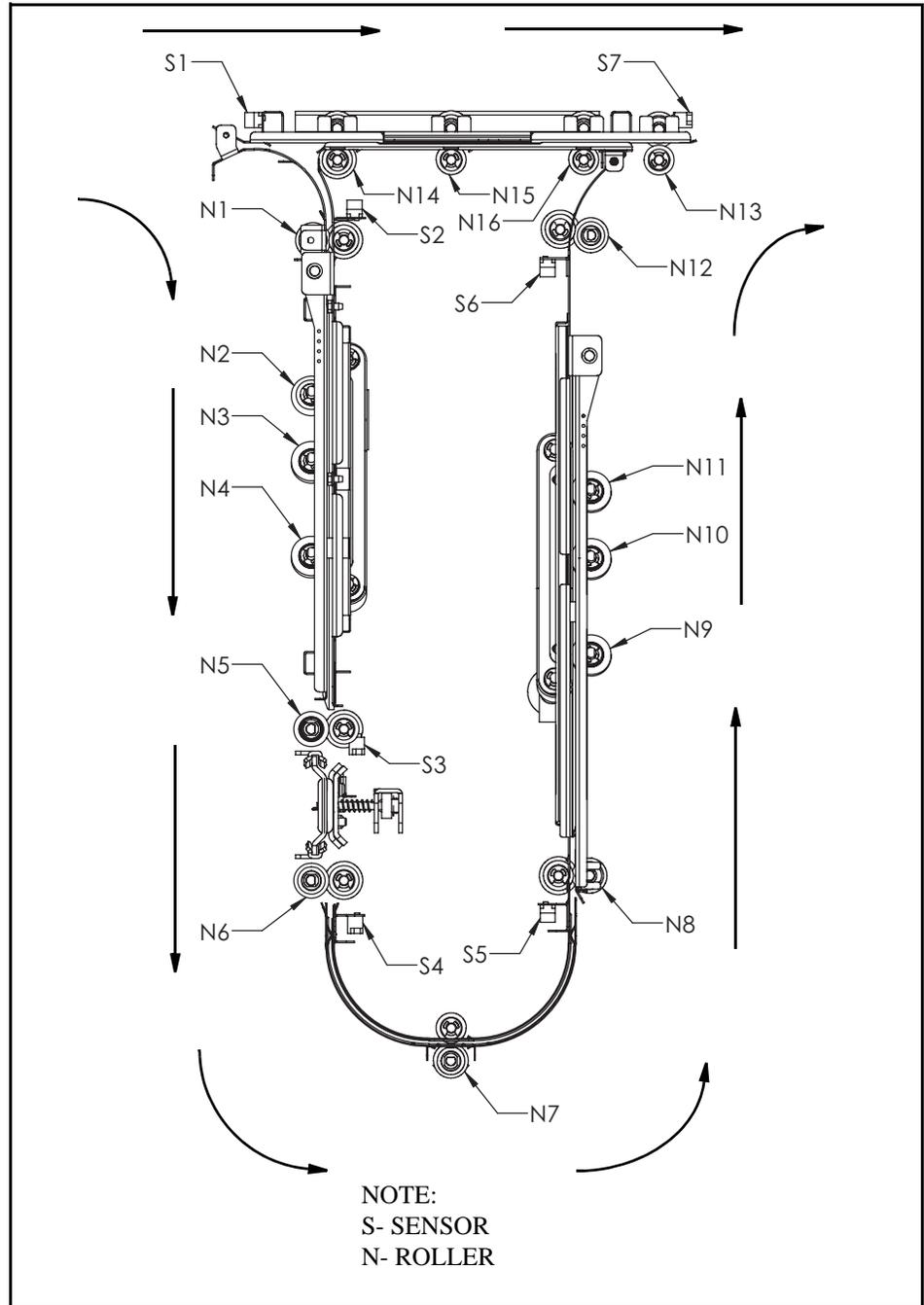


Figure 6.1 Principle of Operation Schematic.

## 6.11 Glossary of Terms

These terms are common to the punch and bindery industry.

<b>Cerlox</b>	The trade name GBC uses for its Plastic Binding
<b>Color coil</b>	A plastic coil that looks like a spring which is threaded through round holes punched in the document then the ends are cut off and crimped. The holes are either 4:1 or 5:1 (4 holes per inch or 5 holes per inch). This type of bind lays flat and even folds around for easy handling of the document.
<b>Flush-cut covers</b>	Covers stock that is the same size as the paper contents and has round corners.
<b>Plastic binding</b>	The name used to describe GBC's most common binding method. The 19 and 21 rectangular hole, Plastic Comb type.
<b>ProClick</b>	A plastic element that snaps together. This style requires holes that appear to be the same as Twin Loop but are actually slightly larger. The larger holes enable correct operation of the ProClick Pronto finishing device.
<b>Tabbing (hanging chad)</b>	Tabbing or hanging chad is when a hole is not punched cleanly through the material leaving a piece of paper hanging from the edge. This condition occurs when a die set is worn and will usually result in miss-feeds.
<b>Twin loop</b>	Looped wire element that is feed into square or round holes in the document in a similar fashion to Plastic Binding. The holes are either 2:1 or 3:1 (2 holes per inch or 3 holes per inch). It is then squeezed together or crimped to create an attractive bind that lays flat.
<b>Velobind</b>	A heat seal plastic bind that is best known for it's security and it's attractive look. The one draw-back for VeloBind is that it is not a lay-flat bind style. It is most often used in the Legal market for it's security feature.

## 6.12 Specifications

To be determined:

Per the Technical Writing department, the recommendation is that "Specifications" be contained and maintained in the User Manual only. The Technical Service Manual should refer to the user manual.

**Table 6.5 Specifications**

	<b>115V MACHINES</b>	<b>230V MACHINES</b>
Speed	Up to 127 sheets per minute	Up to 127 sheets per minute
Punch Sheet Size	8 -1/2" x 11	A4 - 21.59cm x 29.74cm
Punch Edge	11" edge of 8 -1/2" x 11	29.74 cm edge of A4
Paper Stock	Refer to User Manual	Refer to User Manual
Paper Bypass Mode Sheet size	Paper sizes and stocks same as printer	Paper sizes and stocks same as printer
Punch Capacity	Single Sheet	Single Sheet
Power Supply	115V 60 Hz Single Phase Amps - 3.0 A Watts - 340W BTUs/Hour - 1160 BTU/HR	230V 50 Hz Single Phase Amps - 1.6 A Watts - 340W BTUs/Hour - 1160 BTU/HR
Safety	TUV	TUV/GS, CE
Dimensions	12" (W) 38.5" (H) 28.5" (D)	30.5cm (W) 97.8cm (H) 72.3cm (D)
Weight	154 lbs.	70 Kg
Shipping Weight	235 lbs.	115.5 Kg
Manufactured	Made in Taiwan	Made in Taiwan

Specifications are subject to change without notification



# ***Section 7***

## ***Wiring and Electrical Data***

This section contains service information related to the wiring and the electrical components.

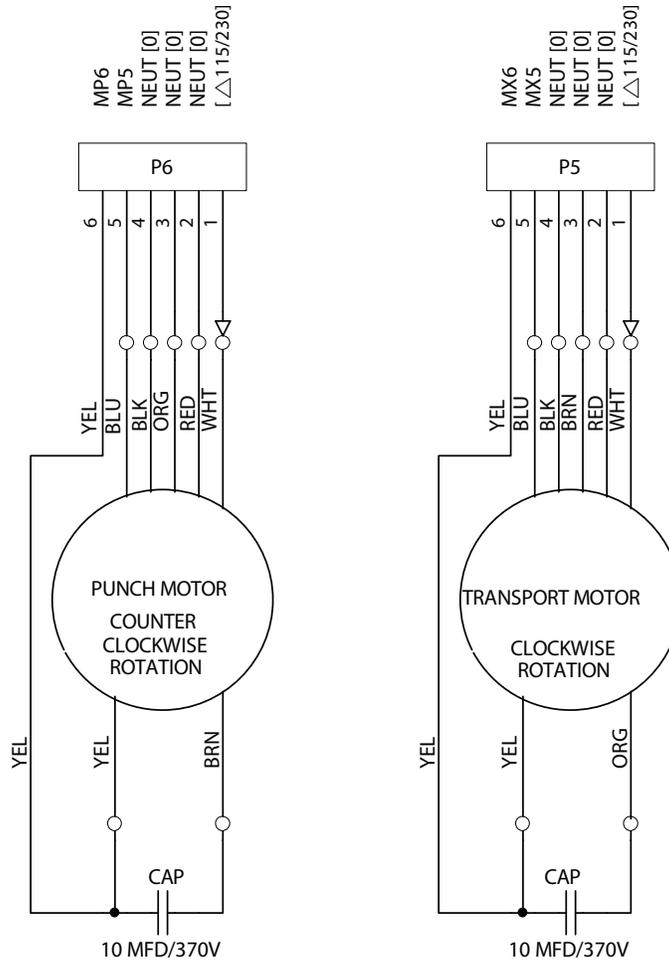
**Electrical Schematic**

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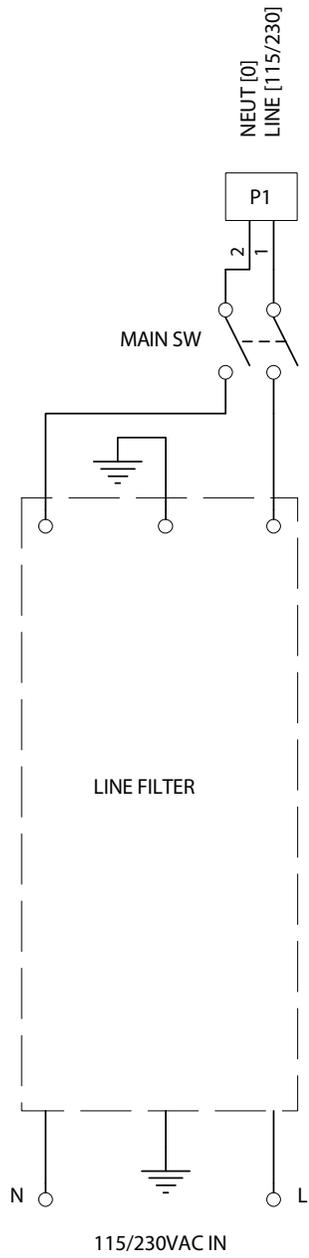


### 7.1.1 AC Motors Punch / Transport -

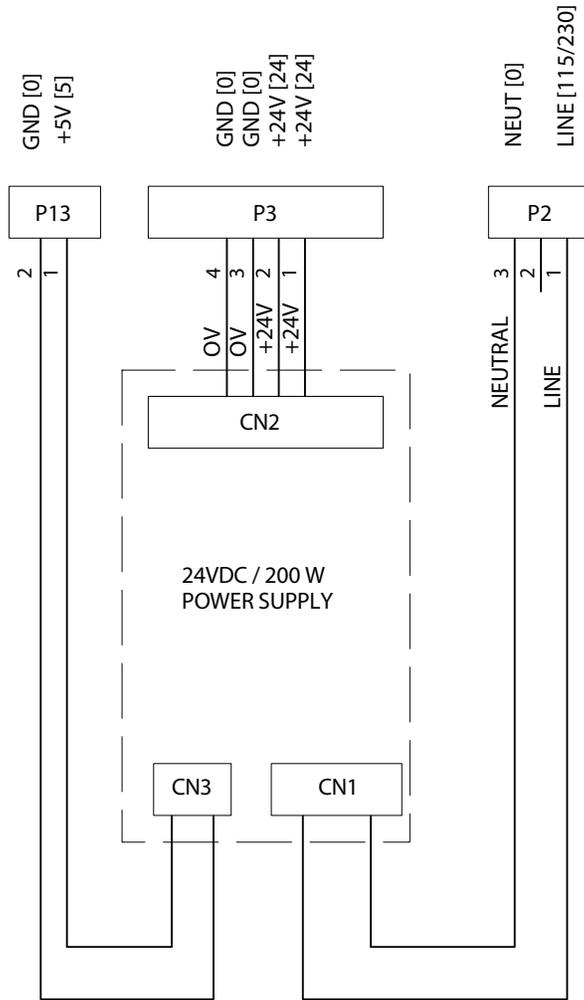


NOTE: ALTERNATE CONSTRUCTION  
MOTOR CONNECTIONS  
PINS 1 AND 4 ONLY

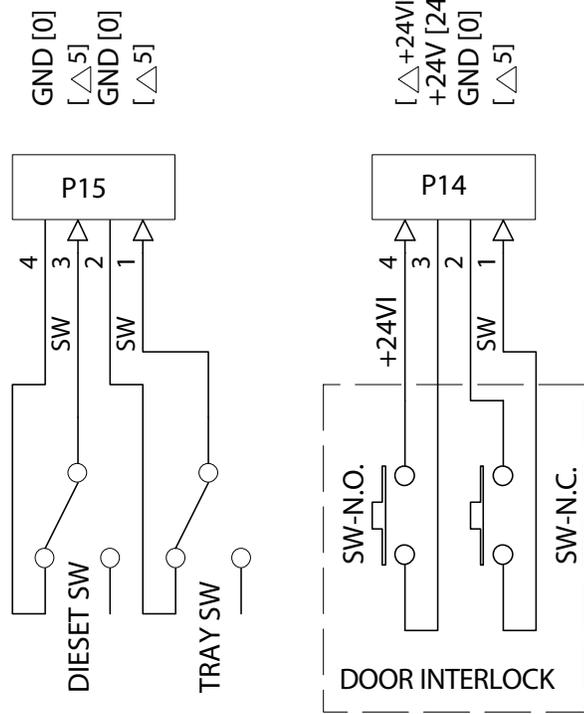
### 7.1.2 AC Filter -



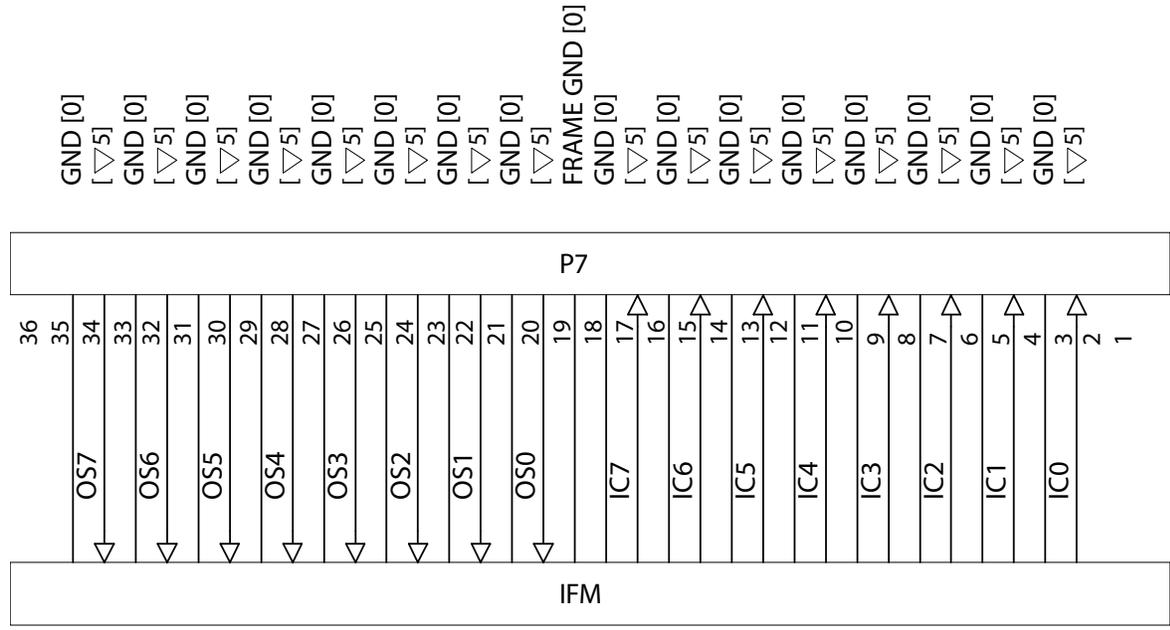
### 7.1.3 Safety Relay -



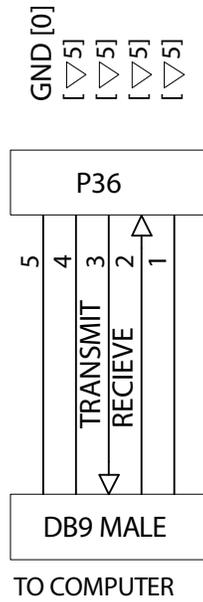
### 7.1.4 Door Chiptray DS Switches / Inputs -



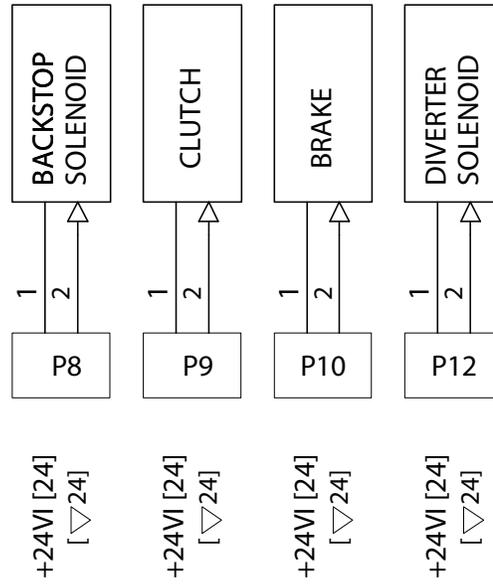
### 7.1.5 Communication Cable -



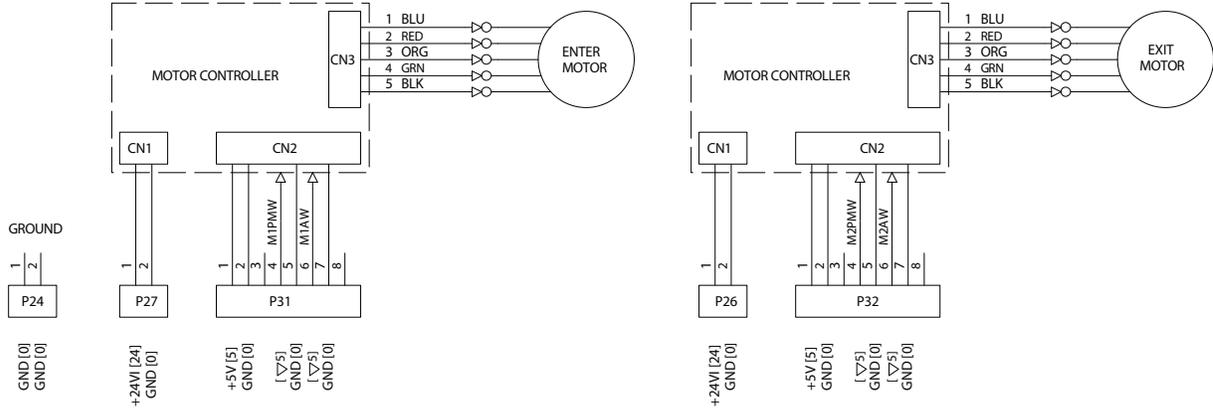
### 7.1.6 Boot Load -



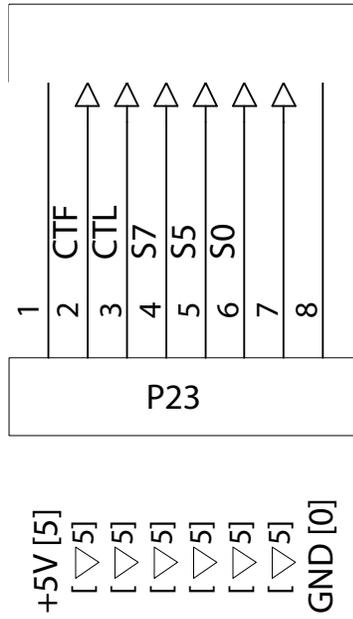
### 7.1.7 24 Volts Output -



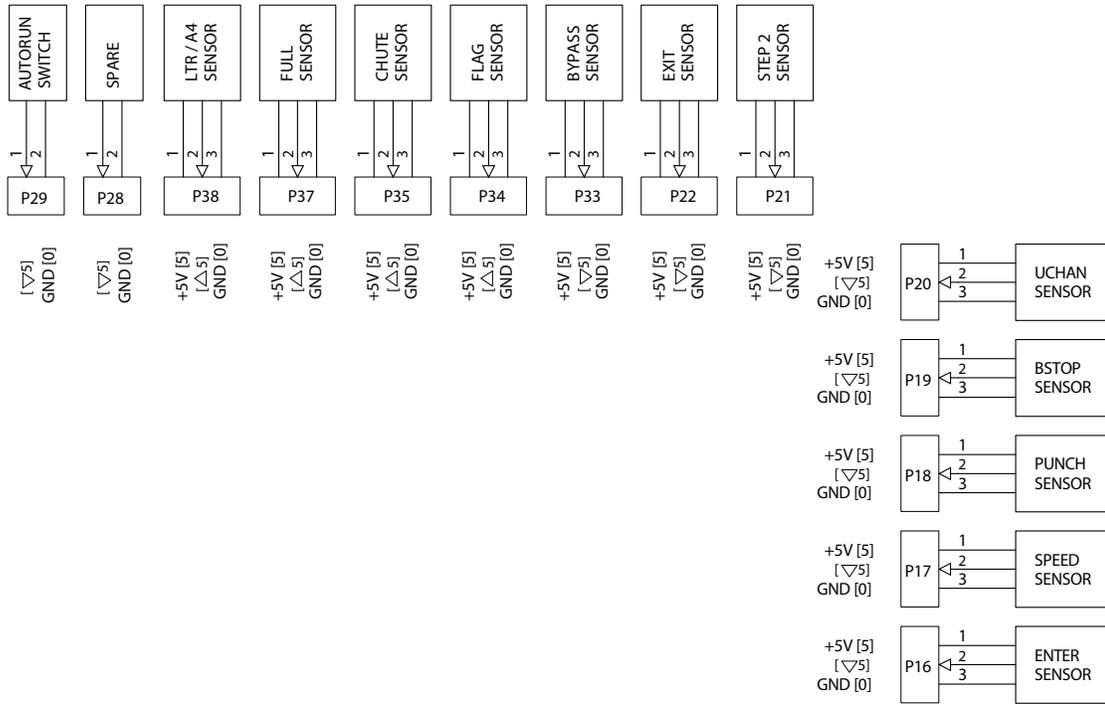
### 7.1.8 Steppers -



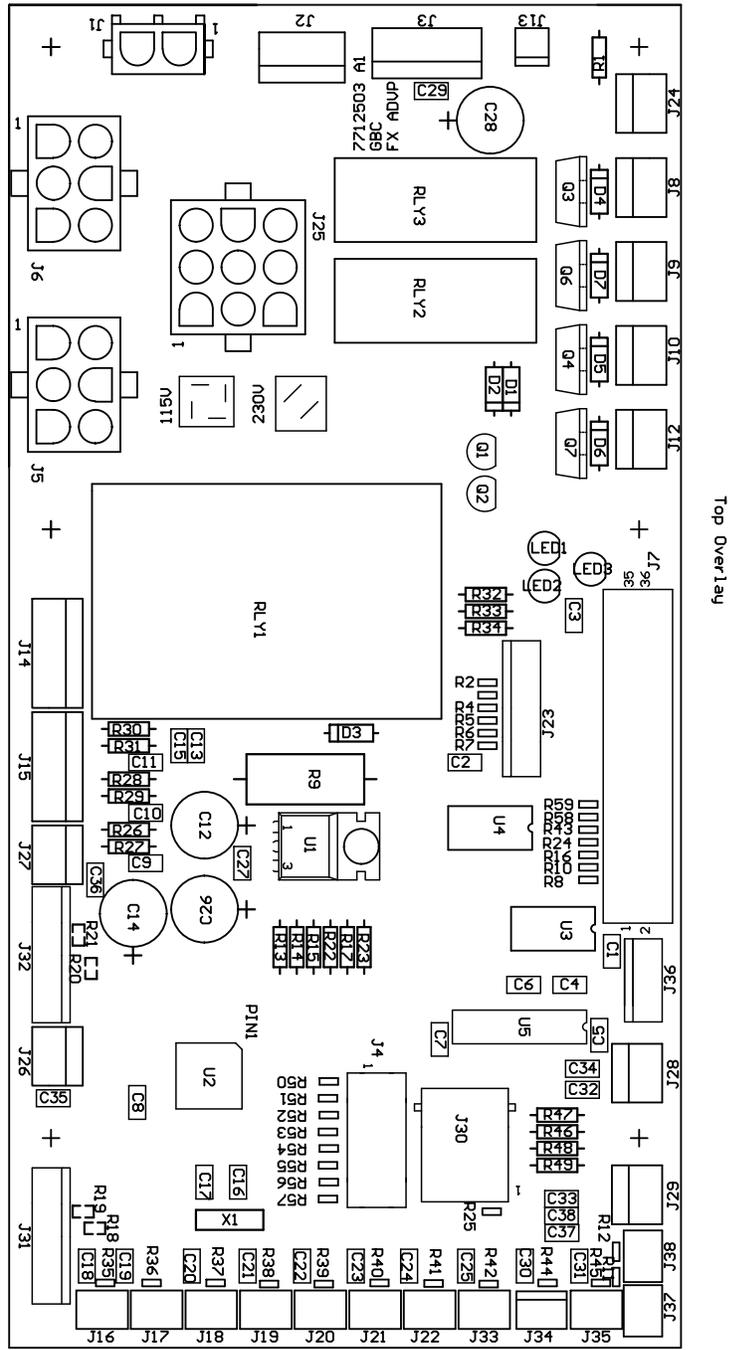
### 7.1.9 Overlay -



### 7.1.10 Sensor Inputs Config-



# 7.2 PCB Assembly -





## ***Section 8***

# ***Installation and Set Up***

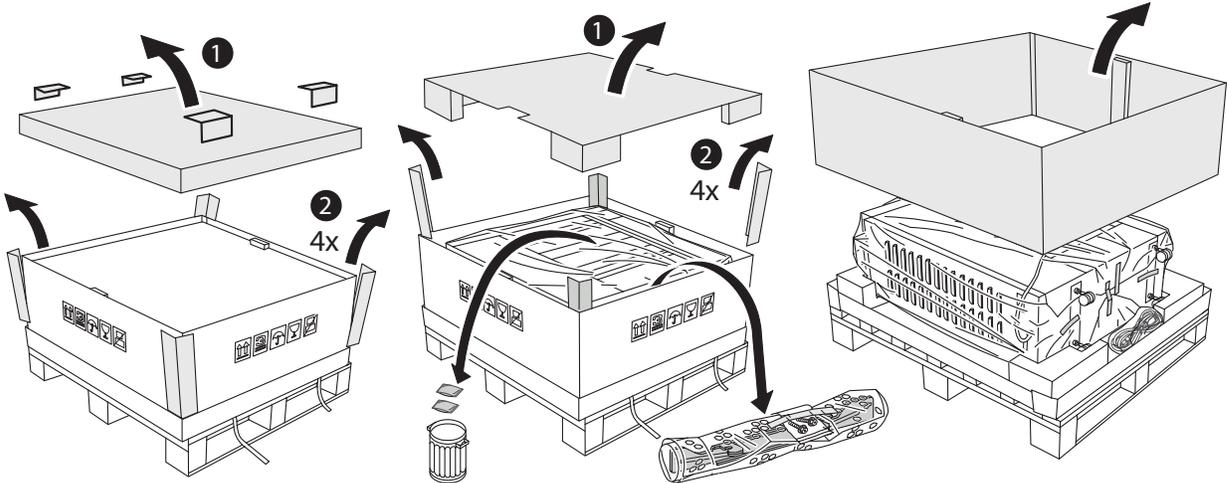
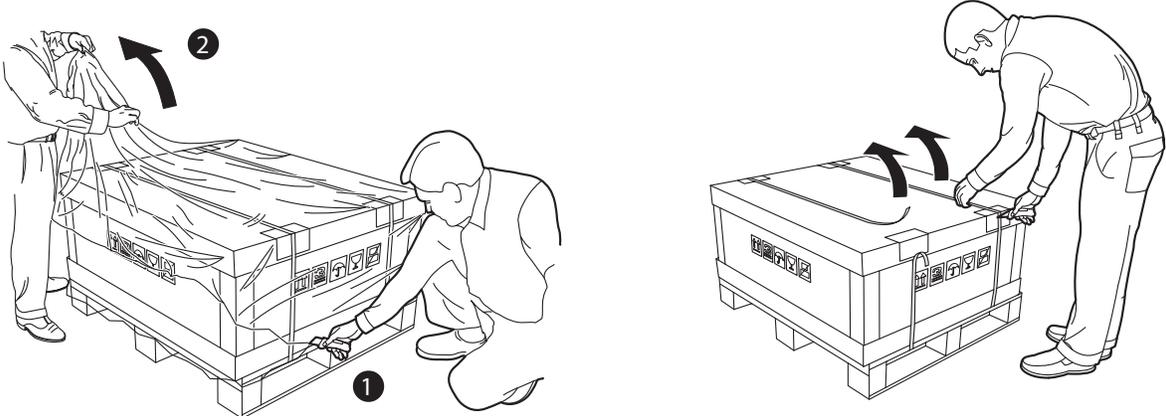
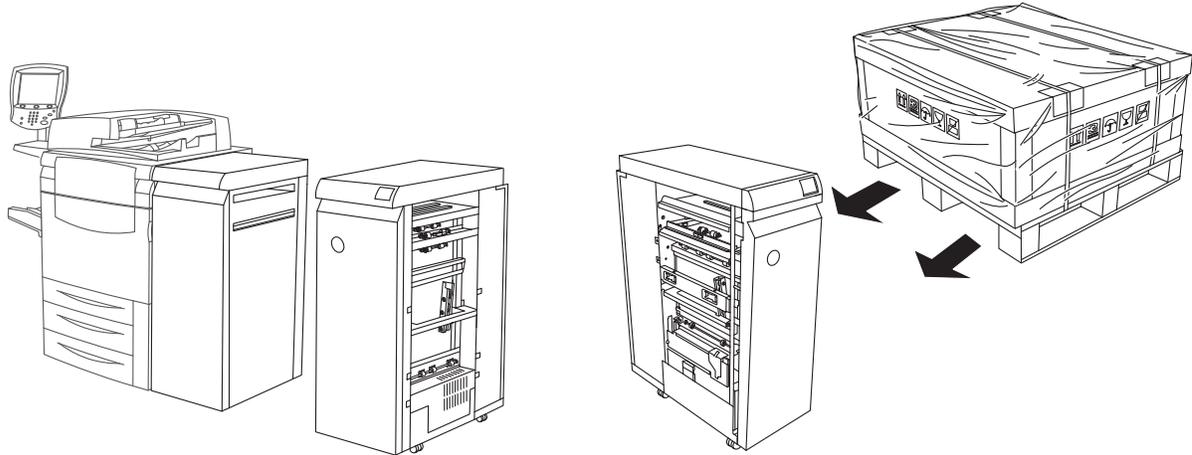
This section contains a few general installation points regarding the unpacking and setup of the Advanced punch. For more detailed instructions, please refer to the complete installation and set-up instructions included with the cable and hardware box that ships with each machine.

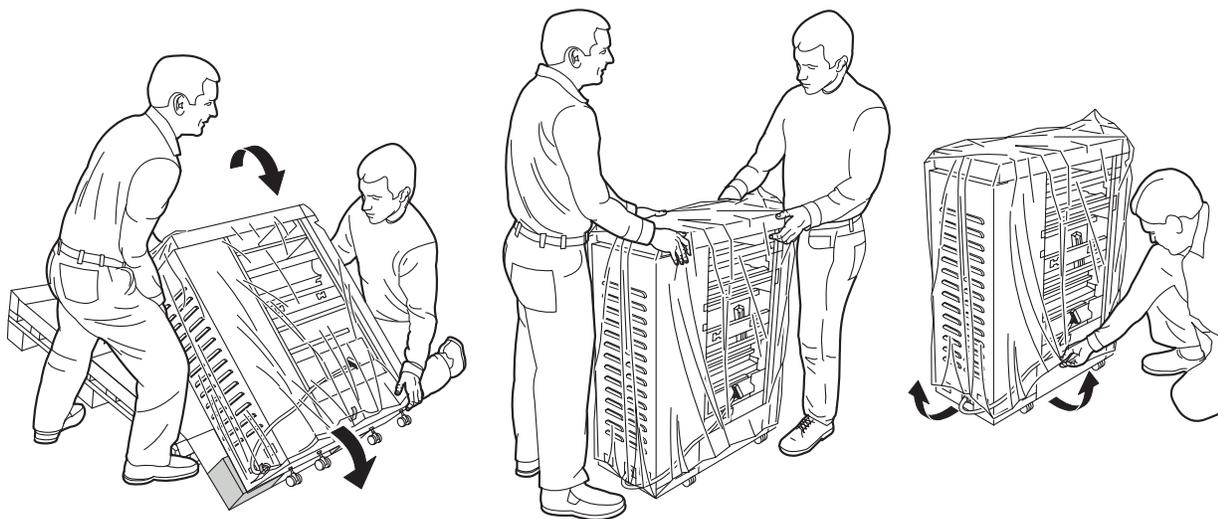
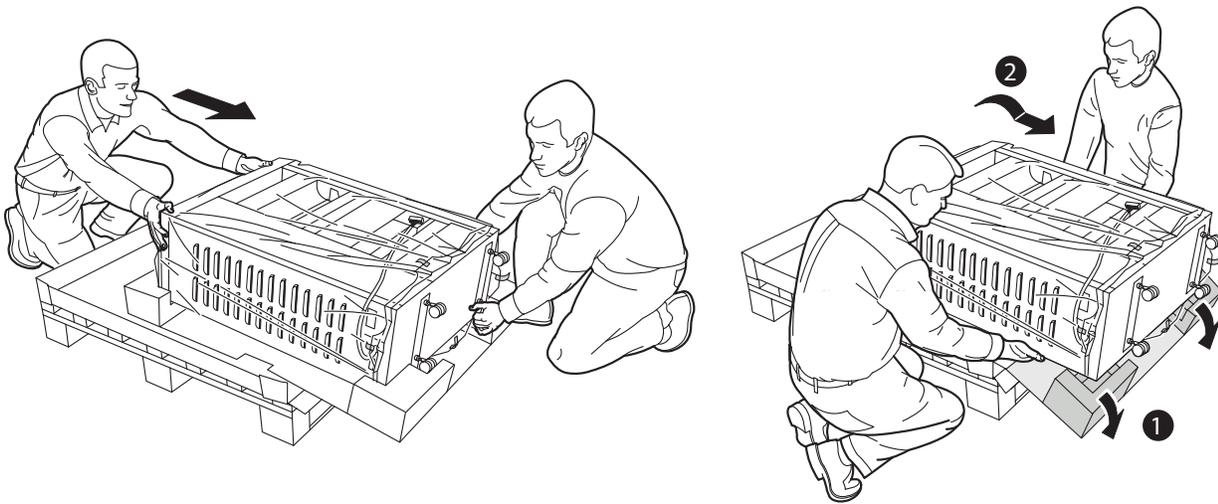
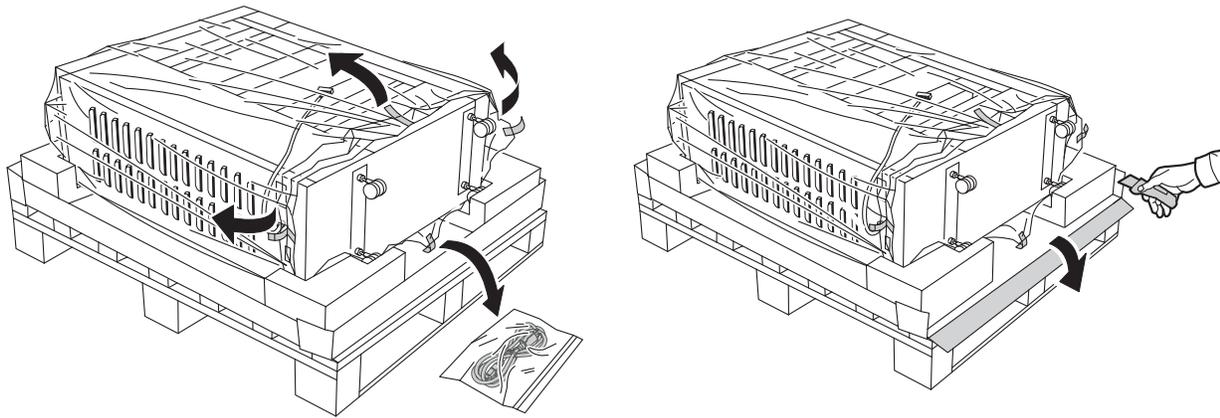
## 8.1 Installation

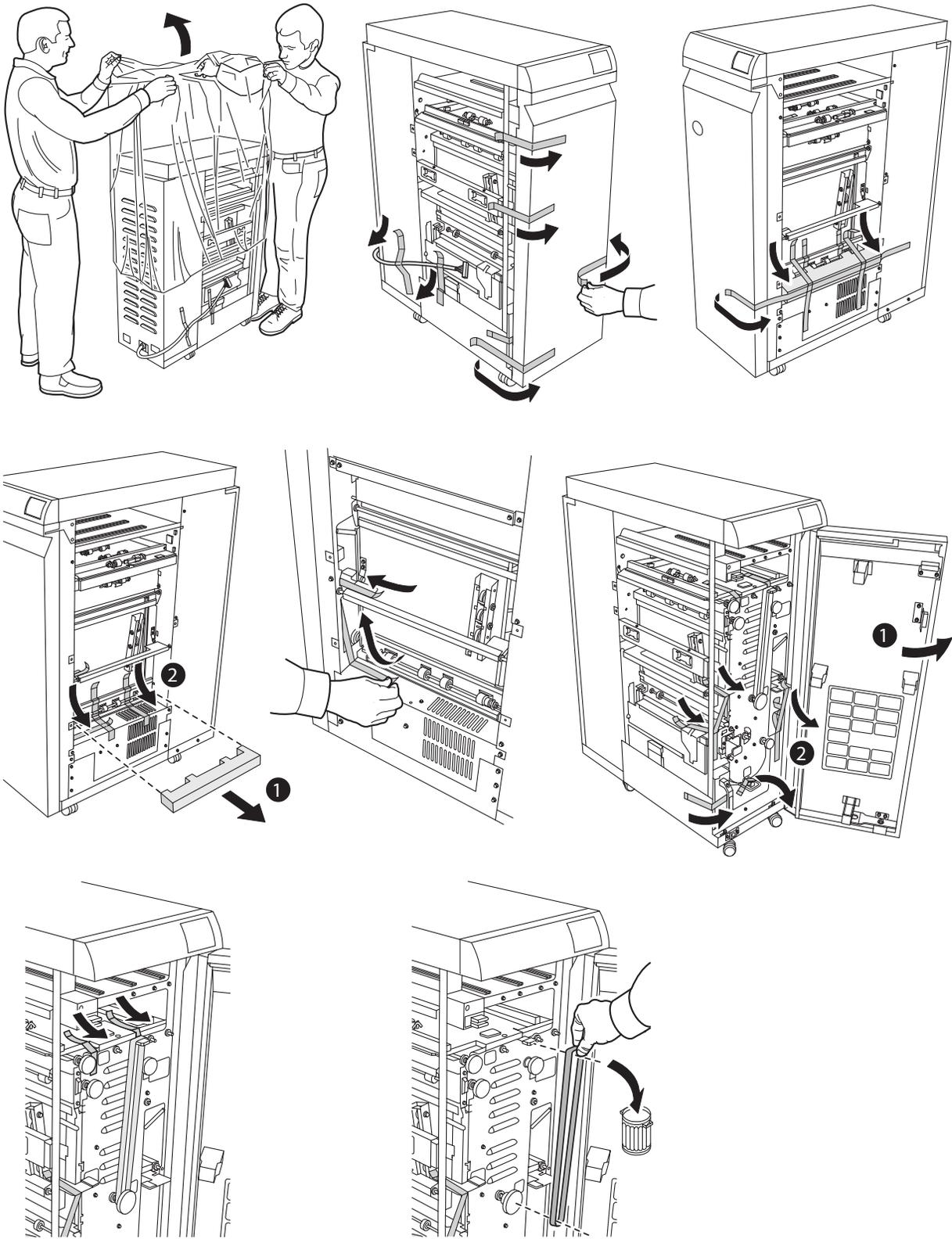
### **Introduction:**

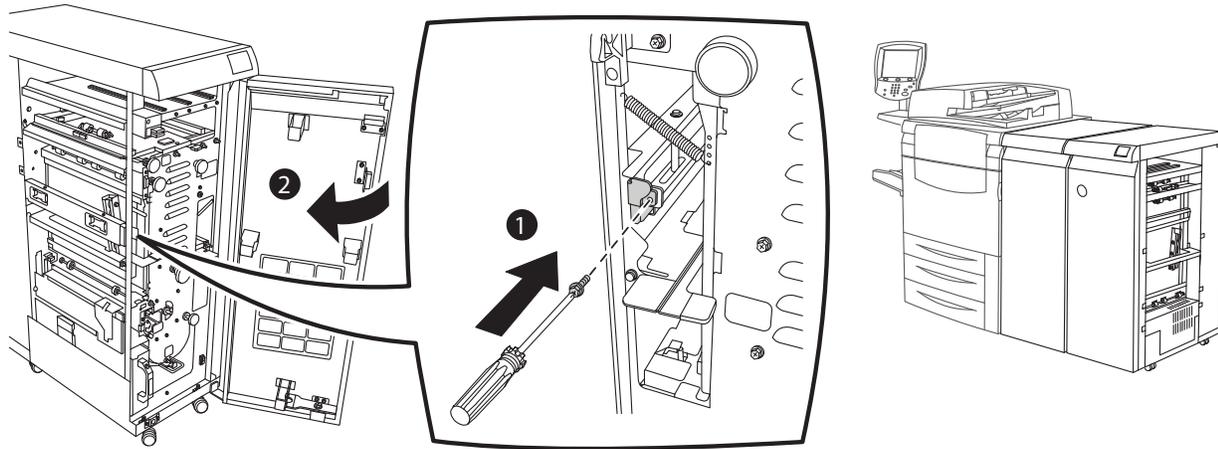
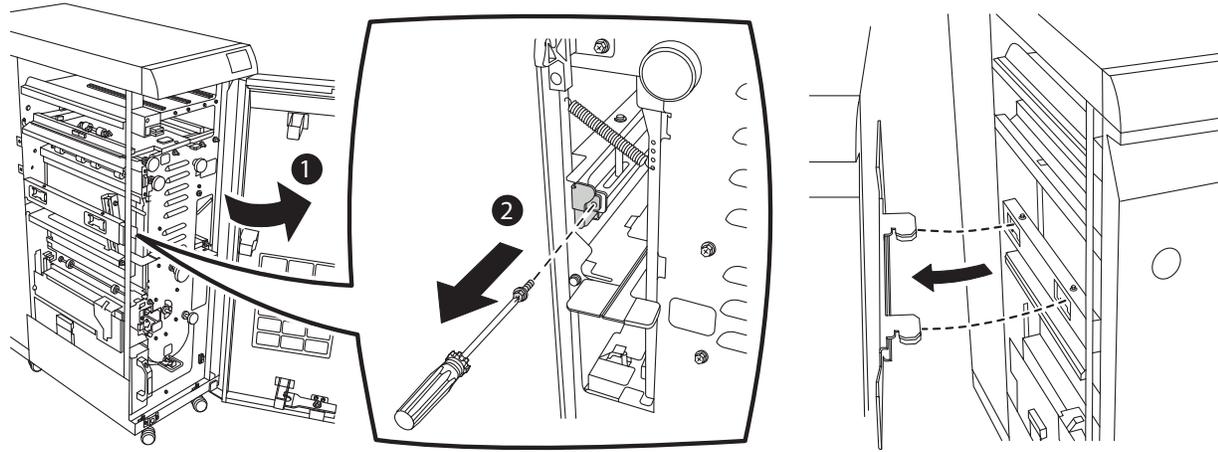
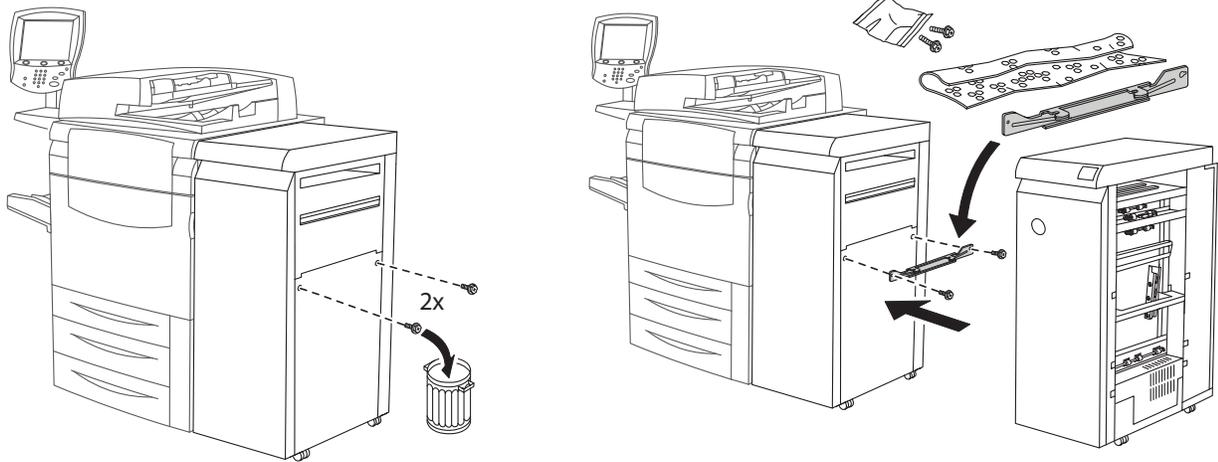
#### **Copyright Statement**

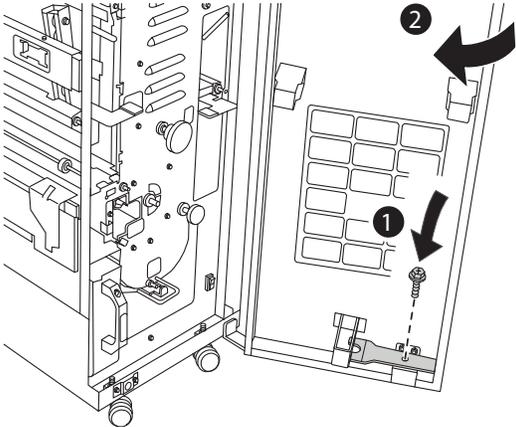
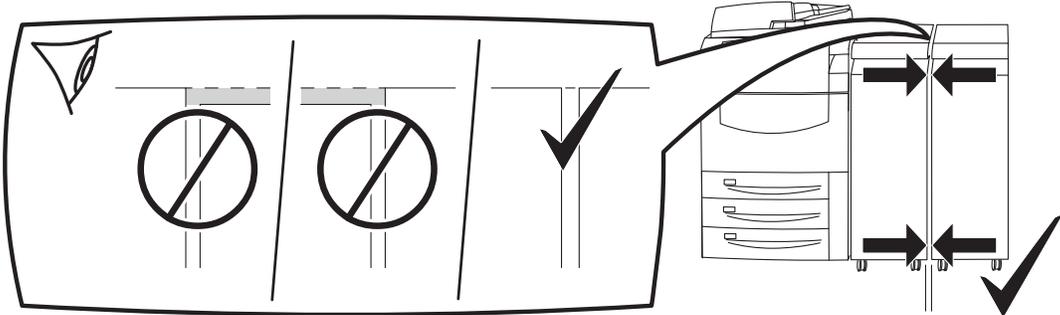
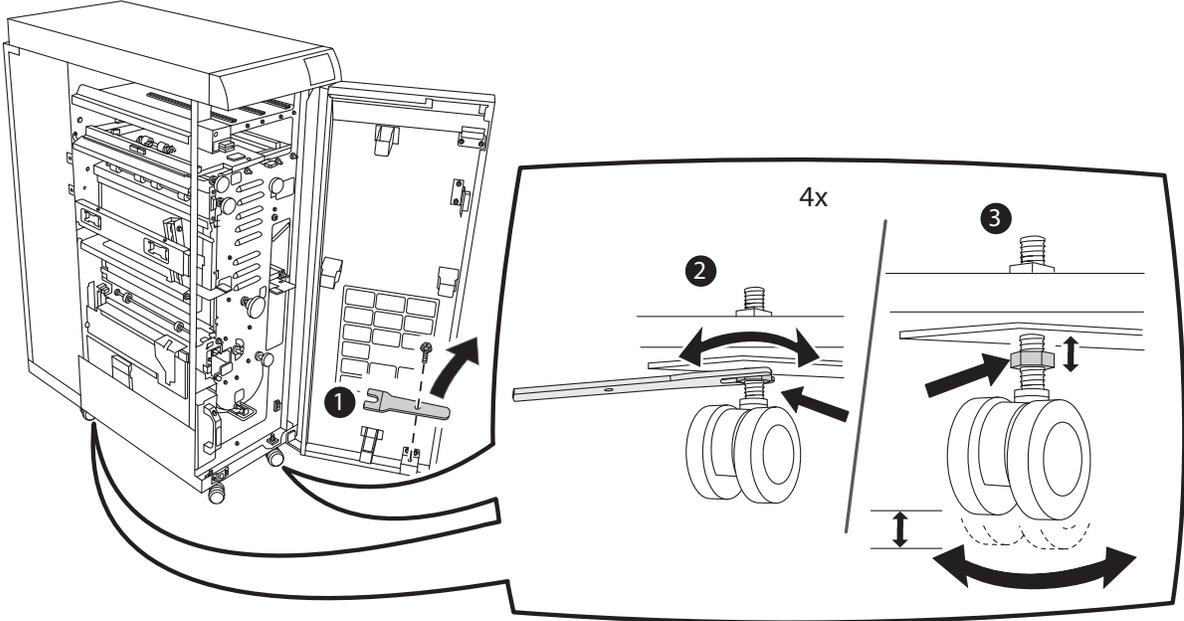
The content shown in section 8.1 of this manual is the property of Xerox Corporation and has been reproduced in this service manual with the permission of Xerox Corporation for the convenience of Xerox installers.

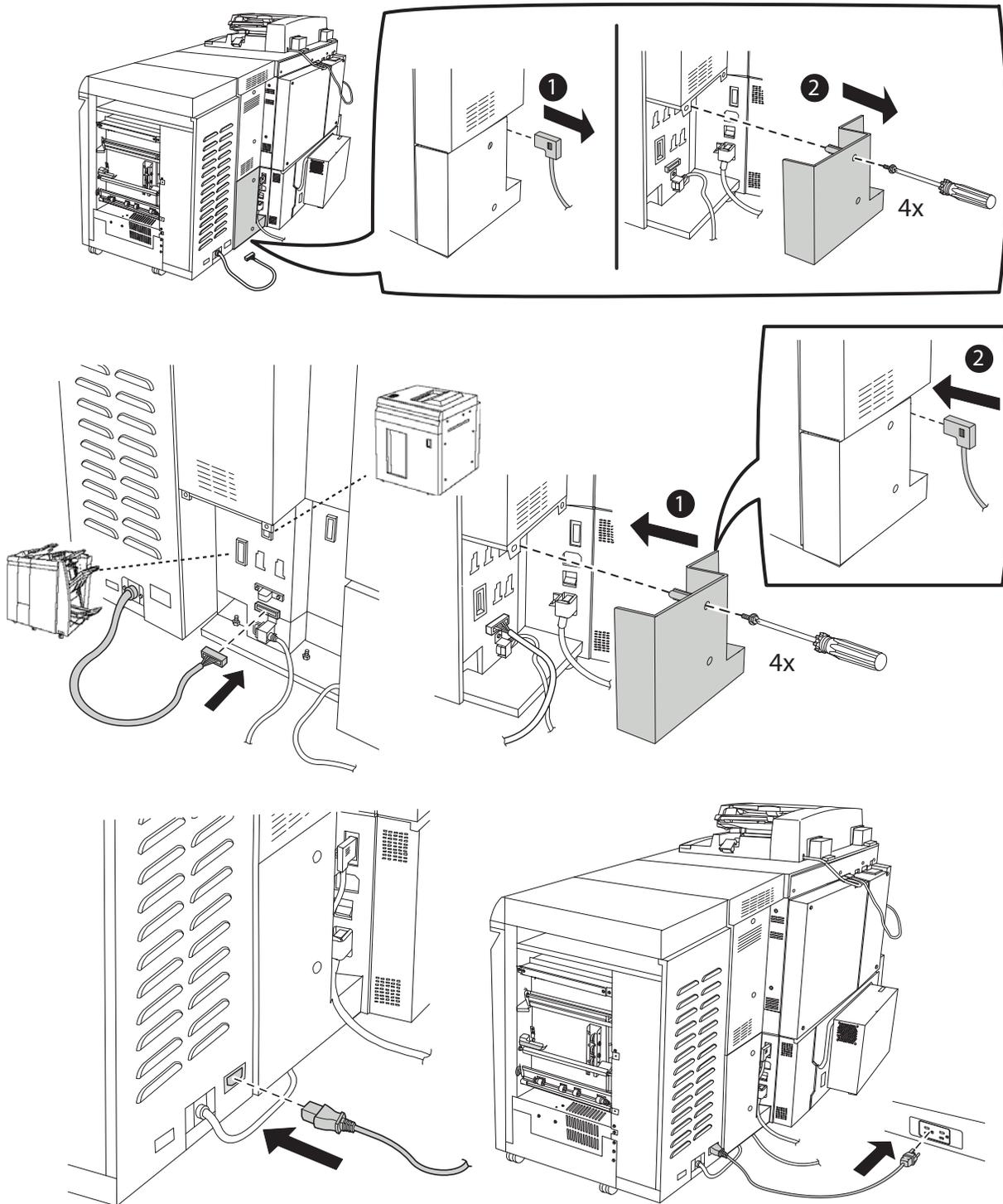


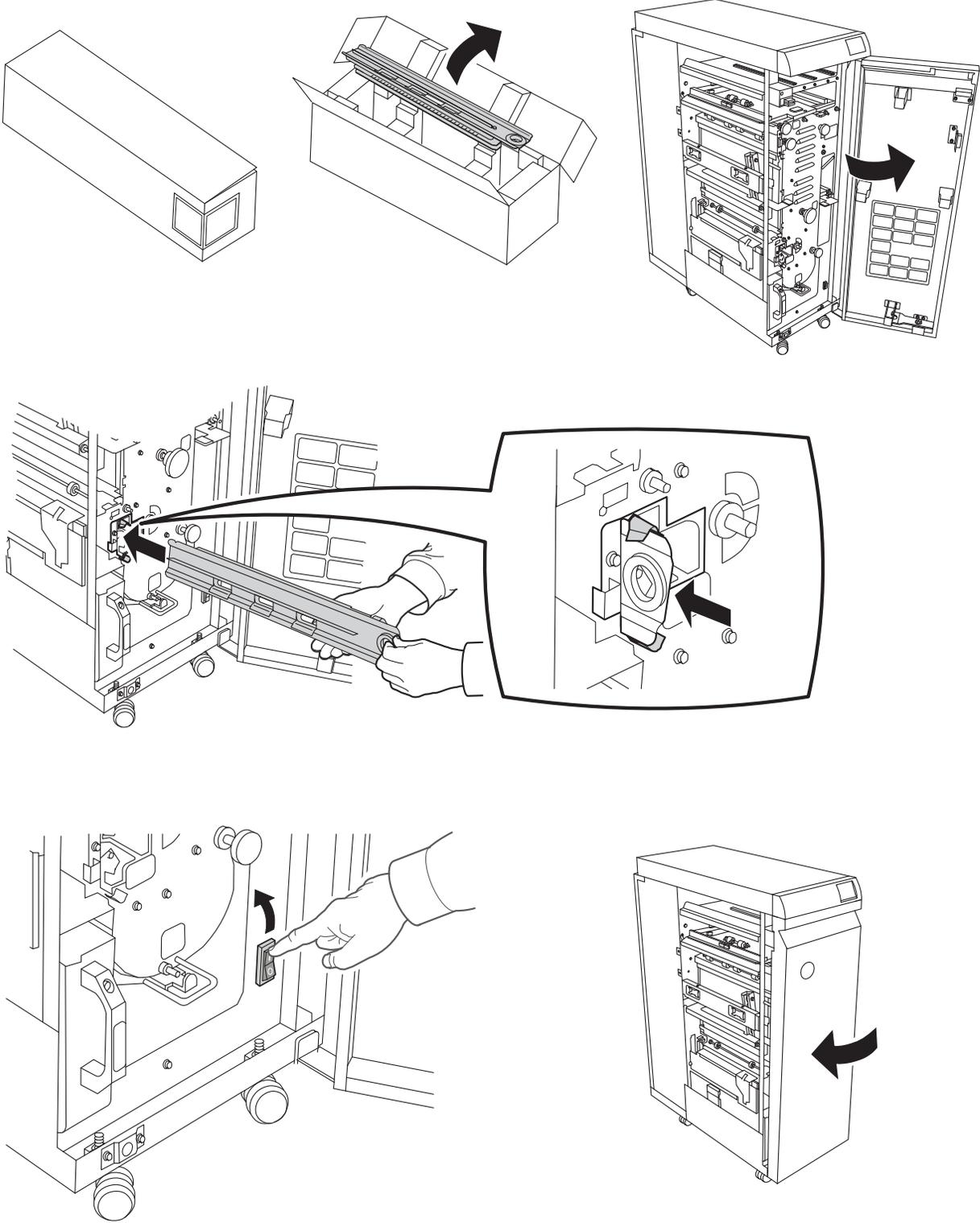












## 8.2 Space Requirements

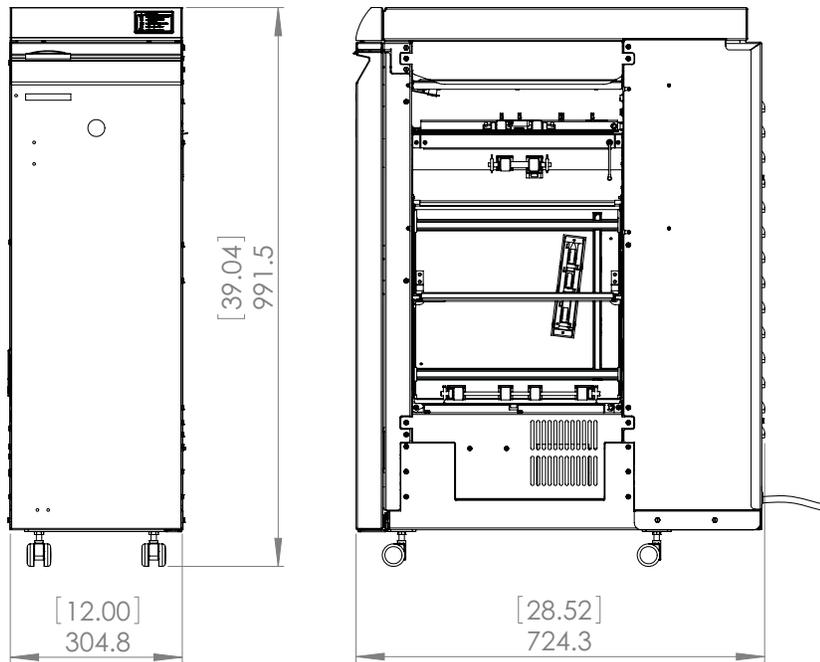


Figure 8.1 GBC Advanced Punch system Dimensions.

## **8.3 Unpacking**

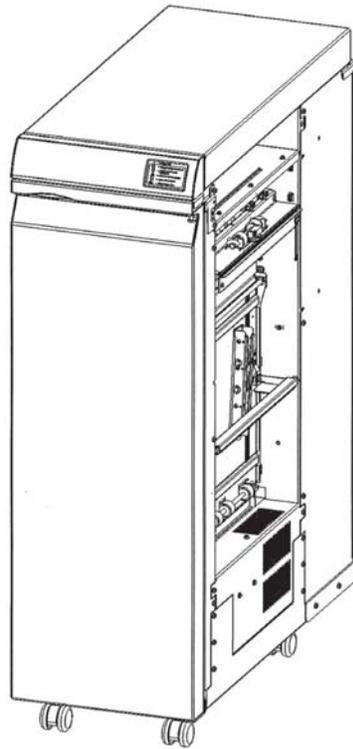
- Inspect the outside of the package for shipping damage. If there is evidence of shipping damage, contact the shipping carrier immediately.
- Remove the punch from its shipping carton.
- Inspect for any concealed damage to unit. If there is evidence of concealed shipping damage, contact the shipping carrier immediately.
- Remove all shipping tape from doors and levers.

## **8.4 Test Operation**

- Check to ensure that the paper chip tray is securely in place.
- Check to ensure that a Die Set is installed properly and that any extra Die Sets are securely stored in the Die Storage Area.
- Run a small test job in Bypass mode. Check to ensure that the job is not punched and bypasses properly.
- Run a small job with Punch Enabled. Check the punched holes of the job.
- Ensure the paper output is stacking properly.
- Ensure the hole quality of the sheet output is proper



**AdvancedPunch**



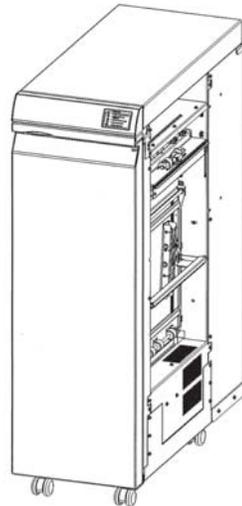
- Ⓒ *Operation Instructions Manual*
- Ⓕ *Manuel d'utilisation*
- Ⓖ *Manual de instrucciones*
- Ⓓ *Bedienungsanleitung*
- Ⓘ *Manuale d'istruzioni*
- Ⓝ *Gebruiksaanwijzingx*

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**AdvancedPunch**

ⒸGB



<b>English</b>	<b>3</b>
<b>Français</b>	<b>9</b>
<b>Español</b>	<b>15</b>
<b>Deutsch</b>	<b>21</b>
<b>Italiano</b>	<b>27</b>
<b>Nederlands</b>	<b>33</b>

- ⒸGB Please read these instructions carefully and keep them in a safe place for future reference.
- ⒸF Lisez attentivement le présent manuel et conservez-le en lieu sûr afin de pouvoir le consulter en cas de besoin.
- ⒸE Lea detenidamente el manual de instrucciones y consérvelo para futuras consultas.
- ⒸD Bitte lesen Sie diese Bedienungsanleitung sorgfältig durch und bewahren Sie sie zum späteren Nachschlagen gut auf.
- ⒸI Si prega di leggere attentamente le presenti istruzioni d'uso e di conservarle a portata di mano per ogni ulteriore consultazione.
- ⒸNL Lees deze gebruiksaanwijzing aandachtig door en bewaar deze op een veilige plaats voor later.

7712568





# AdvancedPunch



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## 1. SAFETY INSTRUCTIONS

THE SAFETY OF YOU AND OTHERS IS VERY IMPORTANT TO GBC. IMPORTANT SAFETY MESSAGES AND INFORMATION ARE CONTAINED IN THIS MANUAL AS WELL AS ON THE MACHINE ITSELF. PLEASE MAKE SURE YOU CAREFULLY READ AND UNDERSTAND ALL OF THESE BEFORE OPERATING THE MACHINE.

THE SAFETY ALERT SYMBOL PRECEDES EACH SAFETY MESSAGE IN THIS OPERATION INSTRUCTIONS MANUAL. THIS SYMBOL INDICATES A POTENTIAL PERSONAL SAFETY HAZARD THAT COULD HURT YOU OR OTHERS.

THE FOLLOWING PICTORIAL IS FOUND ON THE ADVANCEDPUNCH:



This safety message means you could get an electrical shock because disconnecting power from this section does not cut off power from adjacent sections of the machine.



This safety message means that you might get seriously hurt or killed if you open the product and expose yourself to hazardous voltage. NEVER remove the screwed on covers. ALWAYS refer service requirements to qualified service personnel.

## Important safeguards

- Use the AdvancedPunch only for its intended purpose of punching paper and covers according to the indicated specifications.
- Retain this Operation Instructions manual for future use.

CAUTION: THE PRINTER ON/OFF SWITCH DOES NOT CUT OFF POWER FROM THE PUNCH.

CAUTION: THE PUNCH ON/OFF SWITCH DOES NOT CUT OFF POWER FROM THE PRINTER.

- The AdvancedPunch must be connected to a supply voltage corresponding to the electrical rating of the machine operation instructions (also listed on the serial number label).
- 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 AdvancedPunch. It is provided for your safety.
- Unplug the AdvancedPunch before moving the machine or whenever the machine is not in use for an extended period of time.
- Do not operate the AdvancedPunch if the machine has a damaged power supply cord or plug. Do not operate the machine after any malfunction. Do not operate the machine in case of liquid spills, or if the machine has been damaged in any other way.
- Do not overload electrical outlets beyond their capacity. To do so may result in fire or electrical shock.

## Cleaning

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



## AdvancedPunch



### Safety messages



#### MAIN CORDSET SELECTION

(THE FOLLOWING NOTE ONLY APPLIES TO THE UNITS RATED 230V 50HZ, AND LOCATED IN THE EUROPEAN UNION)

**CAUTION: WHEN CHOOSING A DETACHABLE LINE CORD FOR USE WITH YOUR ADVANCEDPUNCH, ALWAYS FOLLOW THE FOLLOWING PRECAUTIONS**

The cordset consists of three parts: the attachment plug, the cord and the appliance inlet. Each of these components must have European regulatory safety approvals.

The following minimum electrical ratings for the specific cordset are published for safety purposes.

**DO NOT USE CORDSETS THAT DO NOT MEET THE FOLLOWING MINIMUM ELECTRICAL REQUIREMENTS.**

**PLUG:** 3 amperes, 250 volts, 50/60 Hz, Class 1, 3 conductor, European safety approved.

**CORD:** Type H05VV-F3G0.75, Harmonized (< HAR>). The "< >" symbols indicate cord approved according to appropriate European standard (NOTE: "HAR" may be substituted for approval mark of European safety agency that approved the cord. An example would be "< VDE >").

**APPLIANCE CONNECTOR:** 3 amperes, 250 volts, 50/60 Hz, European safety approved, Type IEC 320. The cordset shall not exceed 3 meters in length. A cordset with component electrical ratings greater than the minimum specified electrical ratings may be substituted.

### Service, AdvancedPunch

Do not attempt to service your AdvancedPunch yourself. Contact an authorized service representative for any required repairs or major maintenance for your AdvancedPunch.

**DO NOT REMOVE THE MACHINE'S COVER.**

There are NO user-serviceable parts inside the machine in order to avoid potential personal injury and/or damage to property or the machine itself.

### Service, Diesets

Every dieset is thoroughly oiled at the factory prior to shipping. During normal use this oil will be exhausted and should be replaced. As part of regular maintenance, each dieset should be oiled after approximately 50K punch cycles. GBC recommends use of brand 3-IN-ONE oil as it is readily available. Other light machine oils can also be used.

To oil the dieset, simply apply a small bead of oil along the entire length of the felt strip that is located on the dieset. After oil has been applied, re-install the dieset into the AdvancedPunch and run a small test print job. Please note that it is normal for oil to be present on the first set of sheets punched after oiling the dieset. After approximately 25 to 50 sheets oil will no longer be found on the punched sheet. At this time the AdvancedPunch can be utilized for punching of print jobs.

### Safety messages



#### FCC NOTE

(THE FOLLOWING NOTE ONLY APPLIES 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 Operation Manual, may cause harmful interference with 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.

## 2. INTRODUCTION

Thank you for purchasing the AdvancedPunch. It is a versatile production system that will enable you to punch documents for a variety of binding styles by means of a simple die change. It has also been designed for easy operation.

The AdvancedPunch is an innovative solution for punching paper and offers the following design features:

- Quick-change die sets that are self-latching without tools or levers.
- All AdvancedPunch die sets include an Identification Label providing the user with the hole pattern and name.
- Convenient storage area for three extra Die Sets located above the sheet bypass.



# AdvancedPunch

(GB)

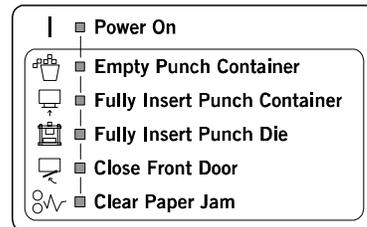
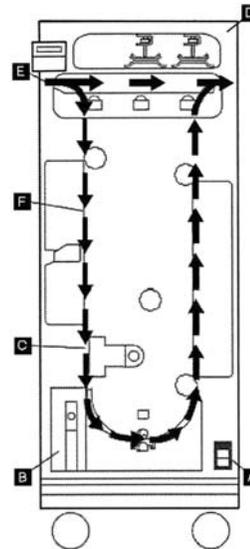
## 3. OPERATION CONTROLS

- A. On/Off Switch "I/O"**  
Must be in the "ON" position at all times
- B. Punch Container:**  
Easy-to-access chip tray for quick chip disposal
- C. Die Set Changes:**  
Are completed without tools and only take seconds to perform
- D. Die Set Storage:**  
Holds up to 3 spare Die Sets
- E. Punch Bypass:**  
Short straight-through paper path for unpunched documents
- F. Punch Mode Path:**  
Wide radius turn can support stocks up to 216 g/m<sup>2</sup> cover

Located on the front of the AdvancedPunch is a panel that provides information relating to the operational state of the punch unit. LED lights indicate when the AdvancedPunch requires attention from the operator.

- 1. Power On:**  
The green LED will illuminate when the power switch on the AdvancedPunch is set to the on position. NOTE: The power cord for the AdvancedPunch must be plugged into the appropriate power source prior to setting the power switch to the on position.
- 2. Empty Punch Container:**  
When the punch container becomes full of waste paper chips, the yellow LED will illuminate.
- 3. Fully Insert Punch Container:**  
When the punch container is removed or not fully inserted into the punch unit, the yellow LED will illuminate.
- 4. Close Front Door:**  
When the front door is open or not completely closed the yellow LED will illuminate.
- 5. Clear Paper Jam:**  
When a sheet of paper becomes jammed within the punch unit, the yellow LED will illuminate. See the section of this manual titled PAPER JAMS for instructions on how to remove a sheet that has become jammed within the AdvancedPunch.

**NOTE:** The LED lights on the AdvancedPunch will glow dimly if the printer is turned on while the AdvancedPunch power switch is in the off position. After setting the AdvancedPunch power switch to the on position, the LED lights will illuminate to their full intensity.





**AdvancedPunch**



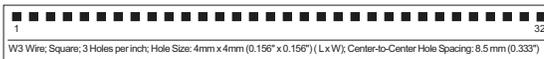
**4. PUNCHING PATTERNS**

The AdvancedPunch uses a variety of easily interchangeable die sets that allow you to punch documents in line for several different binding styles. By selecting the appropriate die set, you can use your AdvancedPunch to punch documents in any of the binding styles indicated in Table 1.

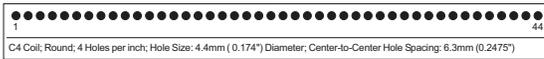
For Plastic Comb Binding choose from:



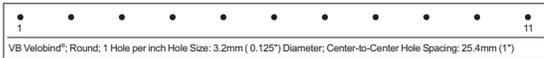
For Twin Loop™ Binding choose from:



For Color Coil™ Binding choose from:



For Velo® Bind choose from:



For Looseleaf Binding choose from:



For Proclick® Binding choose from:



©2003 GBC, Northbrook Illinois - All rights reserved. Rev 10/02 R2 3/03 *Graphics do not represent actual punch pattern dimensions or spacing.*

Xerox Part Number:

XEROX PB-19H	008R13066
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XEROX W3-32H-SQ	008R13069
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XEROX W2-21H-SQ	008R13068
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XEROX C4-44H	008R13067
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XEROX VB-11H	008R13070
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XEROX 3H	008R13072
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XEROX PC-32H	008R13071
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# AdvancedPunch



## 5. CHANGING THE INTERCHANGEABLE DIE SETS

Your AdvancedPunch offers the convenience of interchangeable die sets, allowing you to economically punch documents for a wide variety of binding styles. Changing the machine's die sets is both quick and easy, as the following instructions illustrate:

**Removing Die Sets from the Machine:** The inter-changeable die set slot of the AdvancedPunch is located on the left front side of the machine. If a die set is already installed in your AdvancedPunch, you can easily remove the die set by following these instructions:

- Step 1:** Stop the printer/copier.
- Step 2:** Open the AdvancedPunch access door panel.
- Step 3:** Securely grasp the handle and pull firmly. This firm pull disengages the Automatic Latching Mechanism and allows the die set to slide out.
- Step 4:** Continue to pull the handle until the Die Set is fully removed, supporting it with both hands.
- Step 5:** Properly store the removed Die Set in the Die Set storage area at the top of the AdvancedPunch (keep away from dust, dirt, accidental falls from the edge of counters, etc.).
- Step 6:** Select the desired Die Set for your new job and slide it into the Die Set slot. Push Die Set in firmly until it latches.

**⚠ WARNING: POSSIBLE PINCH POINT HAZARD. WHEN INSTALLING DIE SETS IN YOUR ADVANCEDPUNCH, ALWAYS KEEP FINGERS AND OTHER BODY PARTS OUT OF THE MACHINE'S DIE SET SLOT AND AWAY FROM ALL AREAS OF THE DIE SET, EXCEPT FOR THE FINGER HOLE IN THE DIE SET. FAILURE TO FOLLOW THESE PRECAUTIONS MAY RESULT IN INJURY.**

- Step 7:** Close the Access Door Panel.
  - Step 8:** Proceed with your printing and punching job.
- Please note that when using a new die some oil will be present around the punched holes on the sheet. After punching 25 to 50 sheets the die will no longer leave oil on the sheets. It is recommended that a short test print job be run after installing a new die or a die that has recently been oiled.

## 6. PUNCHING OPERATIONS

Prior to beginning a print job in which the punching feature of the AdvancedPunch will be used, make certain that no yellow LED lights are illuminated on the front panel of the AdvancedPunch. If a yellow LED light is illuminated, then correct the fault prior to starting the punch job. See section (3. OPERATION CONTROLS) for information regarding the LED lights. The AdvancedPunch will not operate in punch mode if any yellow LED is illuminated.

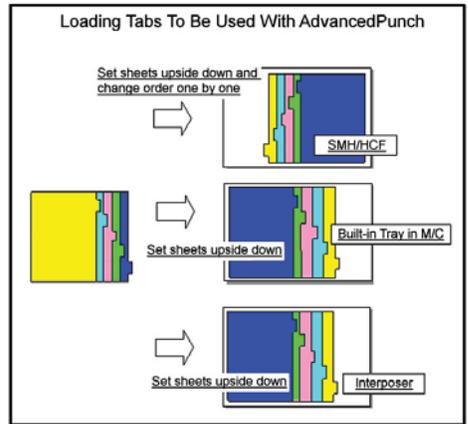
Prior to starting the punch job, check to make certain that the punch die installed in the AdvancedPunch is the correct die/hole pattern for the job. If the die is not the correct die, then replace it at this time.

To enable the AdvancedPunch punching feature, use the printer user interface screen. Follow the steps below to enable the punch feature.

Using the printer user interface screen, go to the **Copy** menu. Then select **Copy Output** to enter the **Hole Punch & More** menu. Once in this menu an option will appear in the hole punch column titled **AdvancedPunch**. Select this option, then press **Save** to return to the **Copy** menu. The AdvancedPunch will now operate in the punch mode.

### Punching Tabs

The AdvancedPunch punches the leading edge of a sheet. Because of this Tabs must be fed with the tab on the trailing edge. The manner in which Tabs are loaded into the tray to cause the correct tab-trailing feeding varies depending upon the tray that is utilized.



## 7. PAPER JAMS

 This symbol indicates a paper jam. To assist in clearing paper jams in any of the following areas, turn one or more of the small knobs to advance the paper.

Area	Description
 8v-1	If paper is jammed in the Punch Bypass, lift the paper guide plate located just inside, reach in and remove the jammed paper.
 8v-4	If paper is jammed in the downward paper path chute, move the door to the right, reach in and remove the jammed paper.
 8v-3	If paper is jammed or the Die Set is jammed, turn Knob J3 to the HOME position, (arrows line up) slide the Die Set out and remove paper.
 8v-3	If paper is jammed in the bottom chute of the Punch Paper path, press the bottom chute latch, reach in and remove any jammed paper.
 8v-2	If paper is jammed in the upward paper path chute, move the door to the left, reach in and remove the jammed paper.



## AdvancedPunch



### 8. PUNCH CONTAINER

The Punch Container for your AdvancedPunch is located at the front of the machine's base. The drawer should periodically be pulled out and emptied. The AdvancedPunch uses a sensor to determine when the punch container is full. Once the punch container becomes full the LED light on the front panel of the AdvancedPunch will illuminate and a message will appear on the printer's user interface screen.

### 9. PROBLEM SOLVING

Probable Cause	Probable Cause
No power, won't punch	Power cord not attached to back of machine or not properly plugged into the wall Power On/Off Switch not activated
Die Set will not come out using a moderate pull	The Die Set is in partial cycle. Turn the Die Set knob (J3) to the HOME position. Home position is when the arrows line up. The Die Set should now slide out easily. Also see Paper Jams.

#### Fault Codes

Fault codes for the AdvancedPunch are displayed on the machine's UI as an AdvancedPunch fault code. Listed below are fault codes that apply specifically to the AdvancedPunch product.

Fault Code	Possible Cause	Recommended Solution
040-100 040-101 040-900 040-901	Jam is detected in AdvancedPunch.	Open front door and inspect for paper jam. Remove paperjam if found, then close front door.
040-300	Front door of AdvancedPunch is not closed.	Close front door of AdvancedPunch.
040-940	Dieset is missing or not fully installed.	Install dieset or fully insert dieset, then close front door.
040-941	Punch container is missing or not fully installed	Install and/or fully insert punch container, then close front door.
040-942	Punch container is full.	Empty punch container and then re-install.
140-700	Punch container is near full.	Empty punch container and then re-install.

### 10. SPECIFICATIONS

	115V Machines
Speed	Up to 127 sheets per minute
Punch Sheet Size	Letter - 8.5" x 11"
Punch Edge	11"
Paper Stock	20# bond to 80# cover
Paper Bypass Mode Sheet size	Paper sizes and stocks same as printer
Punch Capacity	Single Sheet
Power Supply	115V, 60 Hz, Single Phase
Electrical	BTUs/Hour 1057BTU/HR Watts 310W Amps 2.8A
Safety	TUV/GS, CE
Dimensions	12" (30.5cm) (W) x 38.5" (97.8cm) (H) x 28.5" (72.3cm) (D)
Weight	154 lbs. (70 Kg)
Shipping Weight	254 lbs. (115.5 Kg)
Manufactured	Assembled in Taiwan



# AdvancedPunch

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## 1. CONSIGNES DE SÉCURITÉ

VOTRE SÉCURITÉ ET LA SÉCURITÉ DES PERSONNES QUI VOUS ENTOURENT SONT TRÈS IMPORTANTES POUR GBC. LES CONSIGNES ET MESSAGES DE SÉCURITÉ ESSENTIELS DÉLIVRÉS DANS LE PRÉSENT MANUEL APPARAISSENT ÉGALEMENT SUR LA MACHINE. VEUILLEZ LIRE ATTENTIVEMENT CE MANUEL AVANT D'UTILISER LA MACHINE.

**!** DANS CE MANUEL D'UTILISATION, VOUS TROUVEREZ UN SYMBOLE D'AVERTISSEMENT EN REGARD DE CHAQUE MESSAGE DE SÉCURITÉ. CE SYMBOLE SIGNALE UN RISQUE POTENTIEL. VOUS POURRIEZ VOUS BLESSER, BLESSER UN TIERS OU ENDOMMAGER LE PRODUIT.

VOUS TROUVEREZ LES ÉTIQUETTES SUIVANTES SUR L'ADVANCEDPUNCH:



Ce message de sécurité indique que vous pouvez recevoir un choc électrique, car débrancher le courant de cette section ne coupe pas le courant des sections adjacentes de la machine.



Ce message signale qu'une décharge électrique pourrait vous blesser gravement, voire vous tuer si vous ouvrez la machine. Ne retirez JAMAIS les plaques vissées sur les couvercles de la machine. Faites TOUJOURS confiance au personnel d'entretien qualifié.

## Consignes importantes

- Utilisez l'AdvancedPunch uniquement pour perforer le papier et les couvertures conformément aux spécifications indiquées.
- Gardez ce manuel d'utilisation à portée de main.

**!** ATTENTION: L'INTERRUPTEUR MARCHÉ/ARRÊT DE L'IMPRIMANTE NE MET PAS LA PERFORATRICE HORS TENSION.

**!** ATTENTION: L'INTERRUPTEUR MARCHÉ/ARRÊT DE LA PERFORATRICE NE MET PAS L'IMPRIMANTE HORS TENSION.

- La tension d'alimentation de l'AdvancedPunch doit correspondre aux caractéristiques électriques de la machine (elles sont indiquées sur l'étiquette du numéro de série).
- Une prise de terre est prévue par mesure de sécurité. Elle doit être raccordée à une prise électrique prévue à cet effet. Si vous ne parvenez pas à introduire la fiche dans la prise, faites appel à un électricien qualifié pour qu'il installe une prise adéquate.
- Ne modifiez pas la fiche située au bout du cordon d'alimentation de l'AdvancedPunch (si elle est fournie). Elle a été conçue pour votre sécurité.
- Débranchez l'AdvancedPunch avant de déplacer la machine ou si vous prévoyez de ne pas l'utiliser durant une longue période.
- N'utilisez pas l'AdvancedPunch si le cordon ou la fiche d'alimentation de la machine est endommagé. N'utilisez pas la machine après un quelconque dysfonctionnement. Ne mettez pas la machine sous tension si vous avez renversé un liquide ou si elle est endommagée de quelque façon que ce soit.
- Ne surchargez pas les prises électriques. Cela pourrait provoquer un incendie ou une décharge électrique.

## Nettoyage

- Vous pouvez nettoyer la surface externe de l'AdvancedPunch à l'aide d'un chiffon doux et humide.
- N'utilisez pas de détergent ou de solvants, car vous pourriez endommager la machine.



## AdvancedPunch

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### Messages de sécurité



#### SÉLECTION DU CORDON D'ALIMENTATION SECTEUR

(LE PARAGRAPHE SUIVANT NE S'APPLIQUE QU'AUX MODÈLES ALIMENTÉS PAR UN COURANT DE 230V 60HZ UTILISÉS DANS L'UNION EUROPÉENNE.)

**ATTENTION: LORSQUE VOUS CHOISISSEZ UN CORDON D'ALIMENTATION AMOVIBLE POUR VOTRE ADVANCEDPUNCH, RESPECTEZ TOUJOURS LES PRÉCAUTIONS SUIVANTES.**

Le cordon est constitué de trois parties: la fiche, le cordon et la connexion à la machine. Chacun de ces composants dispose de l'homologation européenne requise en matière de sécurité.

Les caractéristiques électriques minimales applicables au cordon sont publiées pour des raisons de sécurité.

#### N'UTILISEZ PAS DE CORDONS NE RESPECTANT PAS LES EXIGENCES ÉLECTRIQUES MINIMALES SUIVANTES.

**FICHE:** 3 A, 250 V, 60 Hz, Classe 1, à 3 conducteurs, homologuée par l'Union Européenne.

**CORDON:** Type H05VV-F3G0.75, harmonisé (< HAR >). Les symboles «< >» indiquent que le cordon est homologué conformément à la norme européenne appropriée (REMARQUE: «HAR» équivaut à la marque d'homologation de l'agence de sécurité européenne qui a approuvé le cordon. Exemple: «< VDE >»).

**CONNECTEUR DE L'APPAREIL:** 3 A, 250 V, 60 Hz, homologué par l'Union Européenne, type IEC 320. Le cordon ne doit pas excéder 3 m de long. Vous pouvez remplacer le cordon électrique par un câble d'alimentation présentant des caractéristiques électriques supérieures aux minima indiqués.

### Entretien, AdvancedPunch

Ne tentez pas de réparer votre AdvancedPunch par vous-même. Contactez un représentant agréé pour effectuer les réparations ou le gros entretien de votre AdvancedPunch.

**NE RETIREZ PAS LES COUVERCLES DE LA MACHINE.**

AUCUNE pièce interne ne peut être remplacée par l'utilisateur. Les risques de blessure et/ou d'endommagement de la machine sont ainsi éliminés.

### Entretien des matrices

Chaque matrice doit être soigneusement lubrifiée en usine avant d'être livrée au client. Dans des conditions normales d'utilisation, ce lubrifiant disparaît progressivement et doit être remplacé. Dans le cadre de l'entretien de routine de l'appareil, chaque matrice doit être lubrifiée après environ 50 000 cycles de perforation. GBC recommande d'utiliser de l'huile 3-IN-ONE disponible chez tous les bons revendeurs. D'autres huiles pour machine légère peuvent également être utilisées.

Pour lubrifier la matrice, il suffit d'appliquer une petite goutte d'huile sur toute la longueur de la bande de feutrine située sur la matrice. Une fois l'huile appliquée, réinstallez la matrice dans l'AdvancedPunch et effectuez un petit test d'impression. À noter qu'il est tout à fait normal que de l'huile soit présente sur le premier jeu de feuilles perforé après avoir lubrifié la matrice. Au bout d'environ 25 à 50 feuilles, toute trace d'huile sur les feuilles perforées aura disparu. L'AdvancedPunch peut désormais être utilisé pour perforer des travaux d'impression.

### Messages de sécurité



#### NOTE FCC

(LE PARAGRAPHE SUIVANT NE S'APPLIQUE QU'AUX MODÈLES ALIMENTÉS PAR UN COURANT DE 115 V 60 HZ.)

Cet équipement a été testé et il satisfait aux normes relatives aux appareils numériques de Classe A, conformément à la Partie 15 des règles FCC. Ces limites ont été prévues pour garantir une protection raisonnable contre les interférences nocives lors de l'utilisation de l'équipement dans une zone de travail.

Cet équipement génère, utilise et irradie des ondes radio. Par conséquent, si vous ne l'installez pas ou ne l'utilisez pas conformément au manuel d'utilisation, vous risquez de provoquer des interférences dans les communications par radio. L'utilisation de cet équipement dans une zone habitée risque de provoquer des interférences. Dans ce cas, vous devrez corriger ces interférences à vos frais.

**ATTENTION: LE FAIT D'EFFECTUER UNE MODIFICATION OU UN CHANGEMENT SANS L'ACCORD EXPLICITE DE GENERAL BINDING CORPORATION ANNULE VOTRE DROIT D'UTILISER L'ÉQUIPEMENT.**

*Canada Class A Notice - Avis Canada, Classe A*

Cet appareil numérique de Classe A est conforme à la norme canadienne ICES-3.

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

## 2. INTRODUCTION

Nous tenons à vous remercier d'avoir acheté un AdvancedPunch. Ce système de production polyvalent vous permettra de perforer des documents de nombreuses manières en remplaçant tout simplement le bloc à colonnes. Cet appareil a été conçu dans un souci de simplicité d'utilisation.

L'AdvancedPunch est une solution innovante pour perforer le papier. Il offre en outre les caractéristiques suivantes:

- Les blocs à colonnes peuvent être remplacés rapidement sans outil ni levier.
- Tous les blocs à colonnes de l'AdvancedPunch disposent d'une étiquette d'identification indiquant la configuration de perforation et son nom.
- Une zone de stockage des matrices de rechange a été aménagée au-dessus du By-pass.



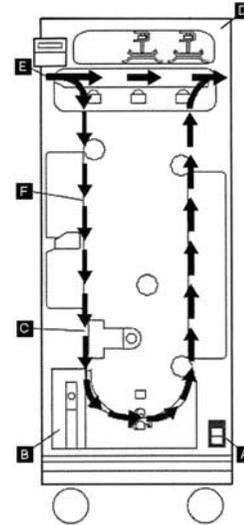
## AdvancedPunch

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### 3. COMMANDES

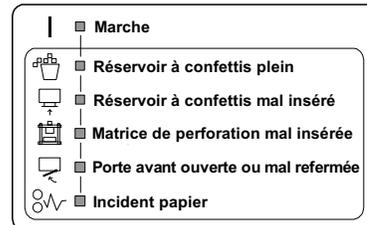
- A. Interrupteur marche/arrêt: "I/O"**  
Il doit être en position "ON" à tout moment
- B. Réservoir à confettis:**  
Plateau facile d'accès permettant une évacuation rapide des confettis
- C. Changement de blocs à colonnes:**  
Facile, sans outil et en quelques secondes
- D. Stockage des matrices:**  
Prévu pour stocker jusqu'à trois matrices
- E. By-pass perforatrice:**  
Chemin papier court et direct pour les documents non perforés
- F. Chemin papier en mode perforation:**  
Le grand rayon de la courbe permet d'utiliser des supports d'un grammage allant jusqu'à 216 g/m<sup>2</sup>.

L'avant de l'AdvancedPunch comporte un panneau qui fournit des informations concernant l'état de fonctionnement de la perforatrice. Un voyant s'allume lorsque l'AdvancedPunch requiert l'attention de l'opérateur.



- 1. Marche:**  
Le voyant vert s'allume lorsque le bouton marche/arrêt de l'AdvancedPunch est placé en position « on » (marche).  
**REMARQUE :** le cordon d'alimentation de l'AdvancedPunch doit être branché sur une prise murale adaptée avant de mettre le bouton marche/arrêt en position « on » (marche).mpel.
- 2. Réservoir à confettis plein:**  
Lorsque le réservoir à confettis est plein, le voyant jaune s'allume.
- 3. Réservoir à confettis mal inséré:**  
Lorsque le réservoir à confetti a été retiré ou est mal inséré dans le module de perforation, le voyant jaune s'allume.
- 4. Porte avant ouverte ou mal refermée:**  
Lorsque la porte avant est ouverte ou mal refermée, le voyant jaune s'allume.
- 5. Incident papier:**  
Lorsqu'une feuille de papier se coince dans le module de perforation, le voyant jaune s'allume. Consultez la section INCIDENTS PAPIER du présent manuel pour plus d'instructions concernant la manière de retirer une feuille coincée dans l'AdvancedPunch.

**REMARQUE:** Les voyants de l'AdvancedPunch s'allument avec une faible intensité si l'imprimante est mise sous tension alors que l'interrupteur marche/arrêt de l'AdvancedPunch est en position « off » (arrêt). Une fois l'interrupteur marche/arrêt de l'AdvancedPunch en position « on » (marche), les voyants s'allument avec une intensité lumineuse normale.





# AdvancedPunch

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## 4. MODÈLES DE PERFORATION

L'AdvancedPunch utilise une grande variété de matrices faciles à remplacer afin de perforer les documents en fonction des différents styles de reliure. En sélectionnant la matrice appropriée, vous pouvez utiliser votre AdvancedPunch pour perforer les documents en fonction des différents styles indiqués dans le tableau 1.

Pour une reliure à anneaux plastiques, choisissez la matrice:

PB Plastic Bind; taille de l'orifice: 8 mm (0,313") (L) x 2,9 mm (0,116") (l); distance entre les orifices (de centre à centre): 14,3 mm (0,563")

Pour une reliure Twin Loop™, choisissez la matrice:

W3 Wire; Carr; 3 orifices par pouce; taille de l'orifice: 4 mm (0,156") (L) x 4 mm (0,156") (l); distance entre les orifices (de centre à centre): 8,5 mm (0,333")

W2 Wire; rectangle; 2 orifices par pouce; taille de l'orifice: 6,4 mm (0,250") (L) x 5,4 mm (0,214") (l); distance entre les orifices (de centre à centre): 12,7 mm (0,500")

Pour une reliure Color Coil™, choisissez la matrice:

C4 Coil; rond; 4 orifices par pouce; taille de l'orifice: 4,4 mm (0,174") de diamètre; distance entre les orifices (de centre à centre): 6,3 mm (0,2475")

Pour une reliure VeloBind®, choisissez la matrice:

VB VeloBind®; rond; 1 orifice par pouce; taille de l'orifice: 3,2 mm (0,125") de diamètre; distance entre les orifices (de centre à centre): 25,4 mm (1")

Pour une reliure à feuillets mobiles, choisissez la matrice:

3 Ring Binder; U.S. (modèles standard de feuillets mobiles); taille de l'orifice: 8 mm (0,316") de diamètre

Pour une reliure Proclick® choisissez la matrice:

W3 Proclick®; rectangle; taille de l'orifice: 4,9 x 5,5 mm; 0,196" x 0,215" (L x l); distance entre les orifices (de centre à centre): 8,5 mm (0,333")

Réf. Xerox:

XEROX PB-19H	008R13066
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XEROX W3-32H-SQ	008R13069
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XEROX W2-21H-SQ	008R13068
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XEROX C4-44H	008R13067
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XEROX VB-11H	008R13070
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XEROX 3H	008R13072
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XEROX PC-32H	008R13071
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### 5. CHANGEMENT DE MATRICE

Votre AdvancedPunch utilise des matrices interchangeables, ce qui vous permet de perforer, à moindres frais, les documents en fonction de différents styles de reliure. Le remplacement des matrices de la machine est rapide et facile. Pour ce faire, suivez les instructions suivantes:

**Retrait des matrices de la machine:** La fente des matrices interchangeables de l'AdvancedPunch est située sur la droite, à l'avant de la machine. Si une matrice est déjà installée dans votre AdvancedPunch, vous pouvez facilement la retirer en procédant comme suit:

**Étape 1:** Arrêtez l'imprimante/copieur.

**Étape 2:** Ouvrez la porte d'accès à l'AdvancedPunch.

**Étape 3:** Tenez fermement la poignée et tirez. Ce faisant, vous déclenchez le loquet automatique et vous pouvez retirer la matrice.

**Étape 4:** Continuez de tirer la poignée jusqu'à ce que le bloc à colonnes soit complètement retiré, en le soutenant avec les deux poignées.

**Étape 5:** Rangez la matrice dans la zone de stockage située en haut de l'AdvancedPunch (protégez-la de la poussière, des chutes accidentelles, etc.).

**Étape 6:** Choisissez une matrice appropriée pour le travail que vous souhaitez accomplir et placez-la dans la fente pour matrices. Poussez la matrice jusqu'à ce qu'elle s'enclenche.

**⚠ ATTENTION: FAITES ATTENTION DE NE PAS VOUS COINCER LES DOIGTS. LORS DE LA MISE EN PLACE DE LA MATRICE DANS L'ADVANCEDPUNCH, ÉLOIGNEZ VOS DOIGTS DE LA FENTE POUR MATRICE ET NE TENEZ LA MATRICE QU'À L'AIDE DE L'ORIFICE PRÉVU À CET EFFET. SOYEZ PRUDENT, CAR VOUS POURRIEZ VOUS BLESSER.**

**Étape 7:** Fermez la porte d'accès.

**Étape 8:** Poursuivez votre travail d'impression/perforation.

À noter que lorsque vous utilisez une matrice neuve, quelques traces d'huile peuvent être présentes autour des trous de perforation de la feuille. Après environ 25 à 50 feuilles, la matrice ne laissera plus aucune trace d'huile sur les feuilles. Il est recommandé d'effectuer un court test d'impression après avoir installé une matrice neuve ou récemment lubrifiée.

### 6. PERFORATION

Avant de commencer un travail d'impression impliquant l'utilisation de la fonction de perforation de l'AdvancedPunch, assurez-vous qu'aucun voyant jaune n'est allumé sur le panneau avant de l'AdvancedPunch. Si un voyant jaune est allumé, résolvez la panne avant de commencer le travail de perforation. Consultez la section (3. COMMANDES) pour plus d'informations concernant les voyants. L'AdvancedPunch ne fonctionnera pas en mode Perforation si un voyant jaune est allumé.

Avant de commencer un travail d'impression impliquant l'utilisation de la fonction de perforation de l'AdvancedPunch, assurez-vous qu'aucun voyant jaune n'est allumé sur le panneau avant de l'AdvancedPunch. Si un voyant jaune est allumé, résolvez la panne avant de commencer le travail de perforation. Consultez la section (3. COMMANDES) pour plus d'informations concernant les voyants. L'AdvancedPunch ne fonctionnera pas en mode Perforation si un voyant jaune est allumé.

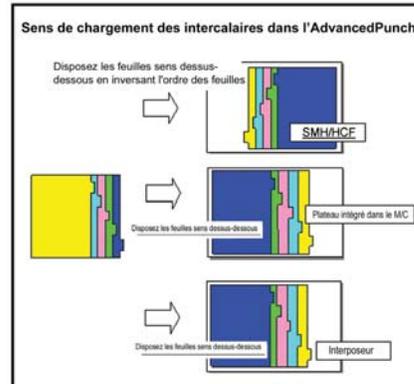
Dans l'écran de l'interface utilisateur de l'imprimante, allez dans le menu **Copier**. Puis, sélectionnez **Sortie copie** pour accéder au menu **Perforation et autres**. Dans ce menu, l'option **AdvancedPunch** apparaît dans la colonne perforation. Sélectionnez cette option, puis appuyez sur **Enregistrer** pour revenir au menu **Copier**. L'AdvancedPunch fonctionne maintenant en mode Perforation.

#### Perforation d'intercalaires

L'AdvancedPunch perce le bord d'attaque des feuilles. De ce fait, les intercalaires doivent être chargés en veillant à ce que les onglets se trouvent sur le bord de queue. La manière dont les Intercalaires sont chargés dans le plateau de manière à être perforés du bon côté varie en fonction du plateau utilisé.

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### 7. INCIDENTS PAPIER



Ce symbole indique un incident papier. Pour éliminer un incident papier dans une des zones suivantes, tournez la (ou les) manette(s) nécessaires pour faire avancer le papier.

Zone	Description
<p>8v-1</p>	Si l'incident papier se produit au niveau du Bypass, relevez la plaque de guidage du papier située à l'intérieur et retirez les restes de papier.
<p>8v-4</p>	Si l'incident se produit au niveau de la descente du chemin papier, poussez la porte vers la droite et retirez les restes de papier.
<p>8v-3</p>	Si l'incident papier se produit au niveau de la matrice, tournez la manette J3 en position initiale (les flèches s'alignent), retirez la matrice et éliminez les restes de papier.
<p>8v-3</p>	Si l'incident papier se produit dans la partie basse du chemin papier, appuyez sur le loquet du canal et retirez les restes de papier.
<p>8v-2</p>	Si l'incident papier se produit dans la montée du chemin papier, poussez la porte vers la gauche et retirez les restes de papier.



## AdvancedPunch

### 8. RÉSERVOIR À CONFETTIS

Le réservoir à confettis de votre AdvancedPunch est situé à l'avant de la base de la machine. Le tiroir doit être périodiquement retiré et vidé. Un capteur permet à l'AdvancedPunch de savoir lorsque le réservoir à confettis est plein. Lorsque tel est le cas, le voyant situé sur le panneau avant de l'AdvancedPunch s'allume et un message apparaît sur l'écran de l'interface utilisateur.

### 9. EN CAS DE PROBLÈME

Problème	Cause possible
Hors tension, la perforatrice ne fonctionne pas	Le cordon d'alimentation n'est pas correctement branché au secteur. La touche marche/arrêt n'est pas activée
La matrice ne peut pas être extraite en tirant en douceur	La matrice est en cours d'utilisation. Tournez le bouton de la matrice (J3) en position initiale. Pour ce faire, alignez les flèches. Retirez alors la matrice. Voir aussi les incidents papier.

#### Codes de panne

Fault codes for the AdvancedPunch are displayed on the machine's UI as an AdvancedPunch fault code. Listed below are fault codes that apply specifically to the AdvancedPunch product.

Code de panne	Cause possible	Solution préconisée
040-100 040-101 040-900 040-901	Un incident papier s'est produit dans l'AdvancedPunch.	Ouvrez la porte avant et recherchez les feuilles de papier coincées. Le cas échéant, retirez le papier coincé, puis refermez la porte avant.
040-300	La porte avant de l'AdvancedPunch n'est pas fermée.	Refermez la porte avant de l'AdvancedPunch.
040-940	La matrice de perforation est absente ou mal insérée.	Installez ou insérez complètement une matrice, puis refermez la porte avant.
040-941	Le réservoir à confettis est absent ou mal inséré	Installez et/ou insérez complètement un réservoir à confettis, puis refermez la porte avant.
040-942	Le réservoir à confettis est plein.	Videz le réservoir à confettis, puis remettez-le en place.
140-700	Le réservoir à confettis est presque plein.	Videz le réservoir à confettis, puis remettez-le en place.

### 10. SPÉCIFICATIONS

	Modèles 115V
Vitesse	Jusqu'à 127 feuilles par minute
Format de la feuille à perforer	Letter - 8.5" x 11"
Marge de perforation	11"
Types de papier	20# bond à 80# couverture
Format Feuille en Mode Contournement Papier	Mêmes formats et types que ceux supportés par l'imprimante
Capacité de la perforatrice	Simple feuille
Alimentation	115 V, 60 Hz, monophasé
Puissance	BTU/heure 1057 BTU/h Watts 310 W Ampères 2,8 A
Certification de sûreté	TUV/GS, CE
Dimensions	12" (30,5 cm) (L) x 38,5" (97,8 cm) (H) x 28,5" (72,3 cm) (P)
Poids	154 lb. (70 kg)
Poids à l'expédition	254 lb. (115,5 kg)
Fabriqué	Assemblé à Taiwan



# AdvancedPunch



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## 1. INSTRUCCIONES DE SEGURIDAD

SU SEGURIDAD Y LA DE LAS PERSONAS QUE LE RODEAN SON MUY IMPORTANTES PARA GBC. LOS MENSAJES E INSTRUCCIONES DE SEGURIDAD IMPORTANTES APARECEN EN ESTE MANUAL Y EN LA MÁQUINA. LEA ATENTAMENTE ESTE MANUAL ANTES DE USAR LA MÁQUINA.

**!** EN ESTE MANUAL DE USO ENCONTRARÁ UN SÍMBOLO DE ADVERTENCIA EN CADA MENSAJE DE SEGURIDAD. ES UN SÍMBOLO O INDICA UN RIESGO POTENCIAL: PODRÍA LESIONARSE, LESIONAR A TERCEROS O DAÑAR EL PRODUCTO.

LAS SIGUIENTES ETIQUETAS APARECEN EN EL ADVANCEDPUNCH:



Este mensaje de seguridad le alerta que puede recibir una descarga eléctrica aunque haya desconectado la corriente en esta sección, ya que la corriente no está desconectada en las secciones adyacentes.



Este mensaje señala que una descarga eléctrica podría lesionarle gravemente e incluso provocarle la muerte si abre la máquina. NUNCA retire las placas atornilladas en las tapas de la máquina. Refiera SIEMPRE los requisitos del servicio al servicio cualificado personal.

## Instrucciones importantes

- Use el AdvancedPunch únicamente para perforar el papel y la cubierta de acuerdo con las especificaciones indicadas.
- Conserve este manual de instrucciones para usos en el futuro.

**!** PRECAUCIÓN: EL INTERRUPTOR PARA ENCENDER O APAGAR LA IMPRESORA NO DESCONECTA LA PERFORADORA.

**!** PRECAUCIÓN: EL INTERRUPTOR PARA ENCENDER O APAGAR LA PERFORADORA NO DESCONECTA LA IMPRESORA.

- La tensión de alimentación del AdvancedPunch debe corresponder a las características eléctricas de la máquina (están indicadas en la etiqueta del número de serie).
- La máquina dispone de una toma de tierra para garantizar su seguridad. Debe conectarse a un enchufe adecuado para toma de tierra. Si no consigue conectar el enchufe a la toma, contacte a un electricista calificado para que instale una toma adecuada.
- No modifique el conector del cable de alimentación del AdvancedPunch (en caso de haberlo). Se ha diseñado para garantizar su seguridad.
- Desconecte el AdvancedPunch si desea desplazar la máquina o si no la va a usar durante un largo periodo
- No use el AdvancedPunch si el cable o la toma de alimentación de la máquina están dañados. No use la máquina en caso de avería, derrame de algún líquido o si está dañada.
- No sobrecargue la toma de alimentación. Podría provocar un incendio o una descarga eléctrica.

## Limpieza

- Puede limpiar la superficie externa del AdvancedPunch con un trapo suave y húmedo.
- No use detergente ni disolventes, ya que podría dañar la máquina.



## AdvancedPunch

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### Avisos de seguridad



#### SELECCIÓN

(LA SECCIÓN SIGUIENTE SÓLO ES VÁLIDA PARA LAS UNIDADES 230V 50/60HZ UTILIZADAS EN LA UNIÓN EUROPEA)



**PRECAUCIÓN: A LA HORA DE SELECCIONAR UN CABLE DE ALIMENTACIÓN AMOVIBLE PARA SU ADVANCEDPUNCH, RESPETE SIEMPRE LAS PRECAUCIONES SIGUIENTES.**

El cable está compuesto por tres partes: el enchufe, el cable y la conexión a la máquina. Cada uno de esos componentes dispone de la homologación europea para la seguridad.

A continuación le indicamos las características eléctricas correspondientes al cable de alimentación.

**NO USE CABLES QUE NO RESPETEN LAS EXIGENCIAS ELÉCTRICAS MÍNIMAS AQUÍ MENCIONADAS.**

**ENCHUFE:** 3 amperios, 250 voltios, 50/60 Hz, Clase 1,3 conductores, homologado por la Unión Europea.

**CABLE:** Tipo H05VV-F3G0.75, armonizado (< HAR >). Los símbolos "< >" indican que el cable ha sido homologado de acuerdo con la norma europea correspondiente (NOTA: "HAR" equivale a la marca de homologación de la agencia de seguridad europea que aprobó el cable. Ejemplo: "< VDE >").

**CONEXIÓN A LA MÁQUINA:** 3 amperios, 250 voltios, 50/60 Hz, homologado por la Unión Europea, Tipo IEC 320. El cable no debe sobrepasar 3 metros de largo. Puede sustituir el cable por uno que tenga las características eléctricas superiores a las mínimas aquí especificadas.

### Reparación, AdvancedPunch

No trate de reparar su AdvancedPunch por su cuenta. Contacte a un representante certificado para efectuar reparaciones o el mantenimiento de su AdvancedPunch.



**NO RETIRE LAS TAPAS DE LA MÁQUINA.**

NINGUNA pieza interna puede ser reemplazada por el usuario para así evitar que se lesione que se lesione, que se produzcan daños en la propiedad o en la máquina.

### Servicio, juegos de troqueles

Cada juego de troqueles viene bien lubricado de la fábrica antes de enviarse. Durante el uso regular, el lubricante se gastará y tendrá que reemplazarse. Como parte del mantenimiento regular, cada juego de troqueles debe lubricarse después de cada 50 mil ciclos de perforación. GBC recomienda utilizar el lubricante de la marca 3-IN-ONE, que se encuentra disponible. También se pueden utilizar otros lubricantes ligeros para máquinas.

Para lubricar el juego de troqueles, simplemente añada una gota de lubricante a lo largo de la cinta de fieltro ubicado en el juego de troqueles. Luego de aplicar el lubricante, reinstale el juego de troqueles en el AdvancedPunch y haga una prueba pequeña de impresión. Tenga en cuenta que es normal que el primer conjunto de hojas perforadas contenga lubricante luego de aplicarlo al juego de troqueles. El lubricante desaparecerá de las hojas perforadas luego de la perforación de 25 a 50 hojas. A partir de ese momento, el AdvancedPunch podrá ser utilizado para perforar trabajos impresos.

### Avisos de seguridad



#### NOTA SOBRE LA FCC

(LA SECCIÓN SIGUIENTE SÓLO ES VÁLIDA PARA LAS UNIDADES 115V 60HZ.)

Este equipo ha sido probado y satisface las normas relativas a los aparatos digitales de la Clase A (Parte 15 de las normas de la FCC). Se han previsto esos límites para garantizar una protección razonable contra las interferencias durante el uso del equipo en un entorno comercial.

Este equipo genera, usa y emite ondas de radio. Por lo tanto, si no lo instala o si no lo usa de acuerdo con el manual de instrucciones, podría provocar interferencias en las comunicaciones por radio. El uso de este equipo en una zona habitada podría provocar interferencias. En este caso, los gastos de corrección de las interferencias correrán a su cargo.



**PRECAUCIÓN: SI CAMBIA O MODIFICA LA MÁQUINA SIN LA APROBACIÓN EXPLÍCITA DE LA GENERAL BINDING CORPORATION, PERDERÁ EL DERECHO A USAR EL EQUIPO.**

*Canada Class A Notice – Advertencia de Canadá, Clase A*

Este aparato digital de la clase A cumple la norma ICES-3 de Canadá.

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

## 2. INTRODUCCIÓN

Ante todo, le damos las gracias por adquirir un AdvancedPunch. Este sistema de producción versátil le permitirá perforar documentos de numerosas maneras y sustituir simplemente el juego de troqueles. Este aparato ha sido concebido para ser fácil de manejar.

El AdvancedPunch es una solución innovadora para perforar el papel. Ofrece las características siguientes.

- Se pueden sustituir los juegos de troqueles rápidamente sin herramientas ni palancas.
- Cada juego de troqueles del AdvancedPunch dispone de una etiqueta de identificación con su nombre y su patrón de perforación.
- Una zona de almacenamiento para tres juegos de troqueles adicionales situada por encima del bypass.



# AdvancedPunch

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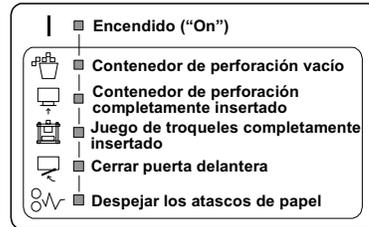
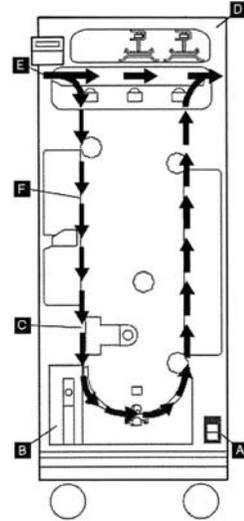
## 3. MANDOS DE OPERACIÓN

- A. Interruptor de puesta en marcha**  
Siempre debe estar en posición de encendido ("ON").
- B. Recipiente de perforación:**  
Bandeja de residuos de fácil acceso para desechar los residuos.
- C. Cambios de juegos de troqueles:**  
Fácil, sin herramienta y en unos segundos
- D. Almacén para juegos de troqueles:**  
Almacena hasta tres juegos de troqueles de repuesto
- E. Carril para los documentos sin perforar (bypass):**  
Carril para los documentos no perforados.
- F. Carril para el modo perforación:**  
El ángulo radial permite soportar hasta 216 g/m<sup>2</sup>

Hay un panel ubicado en la parte delantera del AdvancedPunch que ofrece información acerca del estado operativo de la unidad de perforación. Las luces LED indican cuando el AdvancedPunch necesite la atención del operador.

- 1. Encendido ("On"):**  
El indicador LED verde se iluminará cuando el interruptor del AdvancedPunch se coloque en la posición de encendido ("On").  
NOTA: El cable de toma de alimentación del AdvancedPunch debe estar conectado a una toma de corriente adecuada antes de colocar el interruptor en la posición de encendido.
- 2. Contenedor de perforación vacío:**  
El indicador LED amarillo se iluminará cuando el contenedor de perforación se llene de desechos de papel.
- 3. Contenedor de perforación completamente insertado:**  
El indicador LED amarillo se iluminará cuando se remueva el contenedor de perforación y no se inserte completamente.
- 4. Cerrar puerta delantera:**  
El indicador LED amarillo se iluminará cuando la puerta delantera esté abierta o no esté cerrada por completo.
- 5. Despejar los atascos de papel:**  
El indicador LED amarillo se iluminará cuando una hoja de papel se atasque en la unidad de perforación. Consulte la sección de este manual titulada ATASCOS DE PAPEL para leer las instrucciones sobre cómo remover una hoja que se haya atascado en el AdvancedPunch.

**! NOTA:** El indicador LED amarillo se iluminará de forma tenue si la impresora está encendida, mientras que el interruptor del AdvancedPunch está en la posición de apagado ("Off"). Luego de cambiar el interruptor del AdvancedPunch a la posición de encendido ("On"), el indicador LED amarillo se iluminará con toda su intensidad.





# AdvancedPunch

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## 4. PATRONES DE PERFORACIÓN

El AdvancedPunch utiliza una variedad de juegos de troqueles intercambiables que le permiten perforar documentos en serie para utilizar con diversos estilos de encuadernación. Al seleccionar el juego de troqueles adecuado, puede usar su AdvancedPunch para perforar documentos en maneras que correspondan con cualquiera de los estilos de encuadernación que aparecen en la Tabla 1.

Para una encuadernación con anillas plásticas, seleccione:

1 19

PB Plastic Bind; tamaño de orificio: 8 mm (0,313") (L) x 2,9 mm (0,116") (l); distancia entre los orificios (de centro a centro): 14,3 mm (0,563")

Para una encuadernación Twin Loop™, seleccione:

1 32

Alambre W3; cuadrado; 3 orificios por pulgada; tamaño del orificio: 4 mm (0,156") (L) x 4 mm (0,156") (l); distancia entre los orificios (de centro a centro): 8,5 mm (0,333")

1 21

Alambre W2; rectángulo; 2 orificios por pulgada; tamaño del orificio: 6,4 mm (0,250") (L) x 5,4 mm (0,214") (l); distancia entre los orificios (de centro a centro): 12,7 mm (0,500")

Para una encuadernación Color Coil™, seleccione:

1 44

C4 Coil; redondo; 4 orificios por pulgada; tamaño del orificio: 4,4 mm (0,174") de diámetro; distancia entre los orificios (de centro a centro): 6,3 mm (0,2475")

Para una encuadernación Velo® Bind, seleccione:

1 11

VB VeloBind®; redondo; 1 orificio por pulgada; tamaño del orificio: 3,2 mm (0,125") de diámetro; distancia entre los orificios (de centro a centro): 25,4 mm (1")

Para una encuadernación con hojas móviles, seleccione:

1 3

3 Ring Binder; U.S. (modelos estándar de hojas móviles); tamaño del orificio: 8 mm (0,316") de diámetro

Para una encuadernación Proclick® seleccione:

1 32

W3 Proclick®; rectángulo; tamaño del orificio: 4,9mm x 5,5mm; 0,196"x0,215" (LxW); distancia entre los orificios (de centro a centro): 8,5mm (0,333")

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Nº de pieza Xerox:

XEROX PB-19H	008R13066
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XEROX W3-32H-SQ	008R13069
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XEROX W2-21H-SQ	008R13068
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XEROX C4-44H	008R13067
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XEROX VB-11H	008R13070
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XEROX 3H	008R13072
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XEROX PC-32H	008R13071
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### 5. SUSTITUCIÓN DE LOS JUEGOS DE TROQUELES

Su AdvancedPunch usa juegos de troqueles intercambiables que le permiten perforar de manera económica, los documentos en función de los diferentes estilos de encuadernación. La sustitución de los juegos de troqueles de la máquina es rápida y fácil. Para ello, siga las instrucciones siguientes:

**Para extraer los juegos de troqueles de la máquina:** La ranura de los juegos de troqueles intercambiables del AdvancedPunch está situada a la derecha en la parte delantera de la máquina. Si el juego de troqueles ya está instalado en su AdvancedPunch, puede extraerlo fácilmente siguiendo las instrucciones siguientes:

**Paso 1:** Pare la impresora/copiadora.

**Paso 2:** Abra la puerta de acceso del AdvancedPunch.

**Paso 3:** Sujete firmemente el asa y tire de ella. Una vez suelto el mecanismo de bloqueo automático, puede extraer el juego de troqueles.

**Paso 4:** Continúe tirando el mango hasta quitar por completo el juego de troqueles, apoyándolo con ambos mangos.

**Paso 5:** Coloque el juego de troqueles en la zona de almacenado arriba del AdvancedPunch (protéjalo del polvo, de las caídas accidentales, etc.).

**Paso 6:** Elija el juego de troqueles deseado para la operación siguiente y colóquelo en su ranura. Empuje el juego de troqueles hasta que encaje.

**PRECAUCIÓN:** TENGA CUIDADO DE NO PILLARSE LOS DEDOS. AL COLOCAR EL JUEGO DE TROQUELES EN EL ADVANCEDPUNCH, ALEJE LOS DEDOS DE LA RANURA PARA LA ORIFICIO PREVISTO PARA ELLO. SE APRUDENTE YA QUE PODRÍA LESIONARSE.

**Paso 7:** Cierre la puerta de acceso.

**Paso 8:** Proceda con su trabajo de perforación.

Tenga en cuenta que cuando utilice un nuevo juego de troqueles, puede haber un poco de lubricante en los orificios de la perforación. Luego de perforar de 25 a 50 hojas, el juego de troqueles dejará de manchar las hojas con lubricante. Se recomienda hacer una prueba pequeña de impresión después de instalar un nuevo juego de troqueles o de lubricar un juego de troqueles recientemente.

### 6. PERFORACIÓN

Antes de comenzar un trabajo de impresión para el que se utilizará el servicio de perforación del AdvancedPunch, asegúrese de que el indicador LED amarillo no esté iluminado en el panel delantero del AdvancedPunch. Si el indicador LED amarillo está iluminado, corrija la falla antes de comenzar el trabajo de perforación. Consulte la sección (3. MANDOS DE OPERACIÓN) para obtener más información acerca de los indicadores LED. El AdvancedPunch no operará en modo de perforación si hay un indicador LED amarillo encendido.

Antes de comenzar el trabajo de perforación, verifique y asegúrese de que el juego de troqueles instalado en el AdvancedPunch contiene el patrón correcto de perforación para este trabajo. Si el juego de troqueles no es el correcto, debe reemplazarlo en esta etapa.

Para activar la característica de perforación del AdvancedPunch, utilice la pantalla de la interfaz del usuario. Siga los pasos para poder activar esta característica.

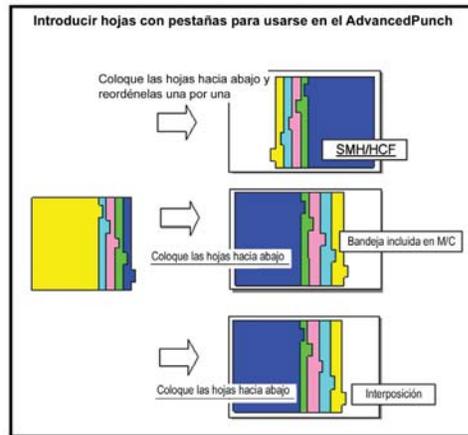
En la pantalla de la interfaz del usuario, vaya al menú **Copia**. Luego seleccione **Resultado de la copia** para ingresar al menú **Orificio de perforación y más**. Una vez entre a este menú, aparecerá una opción en la columna de los orificios de perforación llamada **AdvancedPunch**. Seleccione esta opción y luego oprima **Guardar** para regresar al menú **Copia**. El AdvancedPunch operará ahora en el modo de perforación.

#### Perforación de pestañas

El AdvancedPunch perfora el borde inicial de una hoja. Debido a esto, las hojas con pestañas deben ser introducidas con la pestaña en el borde del carril. La manera en que las hojas con pestañas se colocan en la bandeja para lograr la introducción encarrilada correcta depende del tipo de bandeja que se utilice.

## AdvancedPunch

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### 7. ATASCOS DE PAPEL



Este símbolo indica un atasco del papel. Para eliminar un atasco de papel en una de las zonas siguientes, gire el/los botones necesarios para empujar el papel.

Zona	Descripción
<p>8v-1</p>	Si el atasco del papel se produce en el Carril para los documentos sin perforar (bypass), levante la placa donde se coloca el papel ubicada adentro y retire los restos de papel.
<p>8v-4</p>	Si el atasco se produce del contenedor, empuje la puerta hacia la derecha y retire los restos de papel.
<p>8v-3</p>	Si el atasco se produce a la altura del juego de troqueles, gire el botón (J3) en posición inicial (la flechas están alineadas) retire el juego de troqueles y elimine los restos de papel.
<p>8v-3</p>	Si el atasco del papel se produce al final del carril de los documentos perforados, presione el bloqueo del contenedor y retire los restos de papel.
<p>8v-2</p>	Si el atasco se produce sobre el contenedor, empuje la puerta hacia la izquierda y retire los restos de papel.



## AdvancedPunch

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### 8. CONTENEDOR DE PERFORACIÓN

El contenedor de perforación de su AdvancedPunch está ubicado en la parte delantera de la base de la máquina. Debe sacar y vaciar la bandeja periódicamente. El AdvancedPunch utiliza un sensor para determinar cuando el contenedor está lleno. Una vez el contenedor de perforación se llena, el indicador LED del panel delantero del AdvancedPunch se iluminará y aparecerá un mensaje en la pantalla de la interfaz del usuario de la impresora.

### 9. SOLUCIÓN DE AVERÍAS

Problema	Posible causa
No hay corriente; la perforadora no funciona.	El cable de toma de alimentación no está conectado en la parte trasera de la máquina, no se conectó adecuadamente al enchufe de toma de tierra o no se activó la puesta en marcha mediante el botón para encender o apagar el aparato ("On/Off").
No consigue extraer el juego de troqueles	El juego de troqueles se está usando. Gire el botón del juego de troqueles (J3) hasta la posición inicial. Para ello, alinee las flechas. Ahora debe poder retirar el juego de troqueles.  Consulte la sección de Atascos de papel.

### Códigos de fallas

Los códigos de fallas del AdvancedPunch aparecen en la interfaz del usuario de la máquina como un código de falla del AdvancedPunch. producto continuación se enumeran los códigos de fallas que corresponden específicamente con el producto AdvancedPunch.

Código de falla	Posible causa	Solución recomendada
040-100 040-101 040-900 040-901	Se detectó un atasco de papel en el AdvancedPunch.	Abra la puerta delantera para inspeccionar el atasco de papel. Remueva el papel atascado y cierre la puerta delantera.
040-300	La puerta delantera del AdvancedPunch no está cerrada.	Cierre la puerta delantera del AdvancedPunch.
040-940	El juego de troqueles no se encuentra, o está instalado correctamente.	Instale el juego de troqueles o insértelo completamente y cierre la puerta delantera.
040-941	El contenedor de perforación no se encuentra, o no está instalado correctamente.	Instale y/o inserte completamente el contenedor de perforación y cierre la puerta delantera.
040-942	El contenedor de perforación está lleno.	Vacíe el contenedor de perforación y reinstálelo.
140-700	El contenedor de perforación está casi lleno.	Vacíe el contenedor de perforación y reinstálelo.

### 10. ESPECIFICACIONES

	230V Máquinas
Velocidad	Hasta 127 hojas por minuto
Tamaño de la hoja	8.5" x 11"
Borde del punzón	297mm
Stock de papel	Papel bond de 9 kg (20 libras) a papel de cubierta de 36 kg (80 libras)
Modo de alimentación Sheet size	Tamaños de papel similares y mismo almacén que para la impresora
Capacidad de la perforadora	Hoja simple
Alimentación	115V, 60Hz, Monofásico
Eléctrico	BTU/Hora 1057BTU/HR Vatios 310W Amperios 2.8A
Seguridad	TUV/GS, CE
Dimensiones	30,5 cm (12") (ancho) x 97,8 cm (38,5") (alto) x 72,3 cm (28,5") (profundidad)
Peso	154 lbs. (70 Kg)
Shipping Weight	115,5 kg (254 libras)
Fabricado	Ensamblado en Taiwán



# AdvancedPunch

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## INHALTSVERZEICHNIS

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### 1. SICHERHEITSHINWEISE



IHRE SICHERHEIT UND DIE SICHERHEIT ANDERER PERSONEN LIEGT GBC SEHR AM HERZEN. IN DIESEM HANDBUCH SOWIE AUF DEM GERÄT SELBST FINDEN SIE WICHTIGE SICHERHEITSHINWEISE UND -INFORMATIONEN. LESEN SIE BITTE DIESE HINWEISE UND INFORMATIONEN GENAU DURCH, BEVOR SIE DAS GERÄT BEDIENEN.



JEDER SICHERHEITSHINWEIS IN DIESEM HANDBUCH IST MIT EINEM WARNSYMBOL MARKIERT. DIESES WARNSYMBOL BEDEUTET, DASS EINE POTENTIELLE GEFAHR FÜR DIE SICHERHEIT VON PERSONEN BESTEHT, DIE SIE ODER ANDERE VERLETZEN KÖNNTE.

AUF DEM ADVANCEDPUNCH BEFINDEN SICH FOLGENDE BILDLICHE DARSTELLUNGEN:



Diese Sicherheitsmeldung bedeutet, dass Sie trotz abgeschalteten Stroms einen elektrischen Schlag bekommen können, da nicht alle Bereiche des Gerätes von der Stromversorgung unterbrochen sind.



Dieser Sicherheitshinweis bedeutet, dass schwere Verletzungs- oder sogar Lebensgefahr besteht, wenn Sie das Gerät öffnen und unter elektrischer Spannung stehende Teile berühren. Entfernen Sie NIE die angeschraubten Abdeckungen. Wenden Sie sich für Servicearbeiten IMMER an qualifiziertes Servicepersonal.

### Wichtige Sicherheitsinformationen



- Verwenden Sie den AdvancedPunch nur für seinen vorgesehenen Bestimmungszweck, nämlich das Lochen von Papier und Deckblättern gemäß den Angaben in "Technische Daten".
- Bewahren Sie dieses Benutzerhandbuch auf, damit Sie immer wieder darin nachschlagen können.



VORSICHT: MIT DEM EIN-/AUS-SCHALTER DES DRUCKERS WIRD DIE STROMZUFUHR ZUM LOCHER NICHT UNTERBROCHEN.



VORSICHT: MIT DEM EIN-/AUS-SCHALTER DES LOCHERS WIRD DIE STROMZUFUHR ZUM DRUCKER NICHT UNTERBROCHEN.

- Der AdvancedPunch muss an eine Stromzufuhr mit der korrekten, im Benutzerhandbuch und auf dem Seriennummernschild angegebenen Netzspannung angeschlossen werden.
- Der Sicherheitsstecker kann nur an eine ordnungsgemäß geerdete Steckdose angeschlossen werden. Wenn keine solche Steckdose vorhanden ist, beauftragen Sie einen qualifizierten Elektriker, eine geeignete Steckdose zu montieren.
- Nehmen Sie keine Änderungen am Stecker des AdvancedPunch-Anschlusskabels (falls mitgeliefert) vor. Es dient zu Ihrer Sicherheit.
- Ziehen Sie den Stecker heraus, bevor Sie den AdvancedPunch verschieben oder wenn das Gerät über eine längere Zeitdauer nicht in Betrieb ist.
- Nehmen Sie den AdvancedPunch nicht in Betrieb, wenn das Anschlusskabel oder der Stecker des Geräts beschädigt ist. Nach einer Störung, wenn Flüssigkeit über das Gerät verschüttet oder das Gerät auf irgendeine Weise beschädigt wurde, dürfen Sie es ebenfalls nicht betreiben.
- Überlasten Sie Steckdosen nicht. Wenn Sie die Kapazität einer Steckdose überschreiten, könnte dies zu Brand oder Stromschlag führen.

### Reinigen

- Die Außenseite des AdvancedPunch kann mit einem weichen, feuchten Tuch abgewischt werden.
- Verwenden Sie keine Reinigungs- oder Lösungsmittel, da dies zu Schäden am Gerät führen könnte



## AdvancedPunch

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### Sicherheitshinweise



#### WAHL DER ANSCHLUSSLEITUNG

(DIE NACHFOLGENDEN HINWEISE GELTEN NUR FÜR GERÄTE INNERHALB DER EUROPÄISCHEN UNION MIT EINER NENNSPANNUNG VON 230V 50/60 HZ.)

**⚠ VORSICHT: BITTE BEACHTEN SIE FOLGENDE VORSICHTSMASSNAHMEN, WENN SIE EINE ABNEHMBARE ANSCHLUSSLEITUNG FÜR IHREN ADVANCEDPUNCH WÄHLEN.**

Die Anschlussleitung besteht aus drei Teilen: Anschlussstecker, Kabel und Gerätestecker. Jedes dieser Bestandteile muss die europäischen Sicherheitsvorschriften erfüllen.

Zur Gewährleistung der Sicherheit werden im Folgenden die Minimalwerte für die elektrische Nennleistung der Anschlussleitung angegeben.

**VERWENDEN SIE KEINE ANSCHLUSSLEITUNGEN, WELCHE DIE FOLGENDEN MINIMALEN ELEKTRISCHEN ANFORDERUNGEN NICHT ERFÜLLEN.**

**STECKER:** 3 Ampère, 250 Volt, 50/60 Hz, Klasse 1, dreipolig, erfüllt europäische Sicherheitsnormen.

**KABEL:** Typ H05VV-F3G0.75, harmonisiert (<HAR>). Die Zeichen "< >" bedeuten, dass ein Kabel der entsprechenden europäischen Norm entspricht. (HINWEIS: "HAR" kann durch das Prüfzeichen der europäischen Prüfstelle, welche das Kabel genehmigt hat, ersetzt werden. Ein Beispiel dafür wäre "<VDE>".)

**GERÄTESTECKER:** 3 Ampère, 250 Volt, 50/60 Hz, erfüllt europäische Sicherheitsnormen, Typ IEC 320. Das Kabel darf nicht länger als 3 m sein. Es kann auch eine Anschlussleitung verwendet werden, deren Bestandteile eine höhere elektrische Nennleistung als die angegebenen Minimalwerte aufweisen.

### Instandsetzung, Advanced Punch

Führen Sie keine eigenhändigen Reparaturen am AdvancedPunch durch. Wenn Reparaturen oder aufwendigere Wartungsarbeiten am AdvancedPunch notwendig sind, wenden Sie sich an eine autorisierte Servicestelle.

**⚠ ENTFERNEN SIE AUF KEINEN FALL DIE GERÄTEABDECKUNG.**

Es gibt keine Teile im Innern des Geräts, die vom Benutzer gewartet werden müssten. Dadurch sollen mögliche Verletzungen und/oder eine Beschädigung des Geräts vermieden werden.

### Instandsetzung, Lochstempel

Jeder Lochstempel wird vor der Auslieferung im Werk gründlich geölt. Während des Normalbetriebs verbraucht sich dieses Öl und muss ersetzt werden. Als Teil der regelmäßigen Wartung muss jeder Lochstempel nach 50.000 Lochzyklen geölt werden. GBC empfiehlt dafür 3-IN-ONE Oil (Fahrradöl). Andere leichte Maschinenöle können auch verwendet werden.

Zum Ölen des Lochstempels tragen Sie einfach eine kleine Menge Öl entlang des gesamten Filzstreifens auf, der sich auf dem Lochstempel befindet. Nach dem Auftragen des Öls bauen Sie den Lochstempel wieder in den AdvancedPunch ein und führen einen kleinen Test-Druckauftrag durch. Beachten Sie bitte, dass sich nach dem Ölen des Lochstempels Öl auf den ersten gelochten Seiten befindet. Dies ist völlig normal. Nach ca. 25 bis 50 Blättern weisen die gelochten Seiten kein Öl mehr auf. Ab diesem Zeitpunkt kann der AdvancedPunch zum Lochen von Druckaufträgen eingesetzt werden.

### Sicherheitshinweise



#### FCC-STRAHLUNGSNORM

(DER NACHFOLGENDE HINWEIS GILT NUR FÜR GERÄTE MIT EINER NENNSPANNUNG VON 115V 60 HZ.)

Dieses Gerät wurde getestet und erfüllt die Grenzwerte für digitale Geräte der Klasse A gemäß Teil 15 der Richtlinien der Federal Communications Commission (FCC). Diese Grenzwerte gewährleisten angemessenen Schutz gegen Empfangsstörungen in Umgebungen mit kommerzieller Zweckbestimmung.

Das Gerät erzeugt und verwendet Signale im Frequenzbereich von Rundfunk und Fernsehen und kann diese abstrahlen. Wenn das Gerät nicht gemäß den Anweisungen im Benutzerhandbuch installiert und betrieben wird, kann es Störungen im Empfang verursachen. Bei Betrieb dieses Geräts im Wohnbereich können Störfrequenzen auftreten; die Behebung dieses Problems geht ggf. auf Kosten des Anwenders.

**⚠ VORSICHT: MODIFIKATIONEN, DIE NICHT AUSDRÜCKLICH VON GBC GENEHMIGT WURDEN, KÖNNEN ZUM ERLÖSCHEN IHRER BETRIEBSERLAUBNIS FÜR DIESES GERÄT FÜHREN.**

*Kanada Hinweis Klasse A - Avis Canada, Classe A*

Dieses digitale Gerät der Klasse A entspricht der kanadischen Richtlinie ICES-3.

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

## 2. EINFÜHRUNG

Vielen Dank, dass Sie sich für einen AdvancedPunch entschieden haben. Der AdvancedPunch ist ein vielseitiges Endverarbeitungssystem für Ihre Dokumente, das Ihnen erlaubt, mit einem einfachen Stempelwechsel Dokumente für verschiedene Bindearten zu lochen. Das Gerät wurde speziell für eine einfache Bedienung konzipiert.

Der AdvancedPunch stellt eine innovative Lösung für das Lochen von Papier dar und bietet die folgenden Konstruktionsmerkmale:

- Rasch austauschbare, selbsteinrastende Lochstempel (ohne Werkzeuge oder Hebel).
- Alle AdvancedPunch -Lochstempel sind mit einem Kennzeichnungsetikett versehen, auf dem Name und Lochmuster angegeben sind.
- Bequem erreichbarer Stauraum für drei zusätzliche Lochstempel über dem Papier-Bypass.

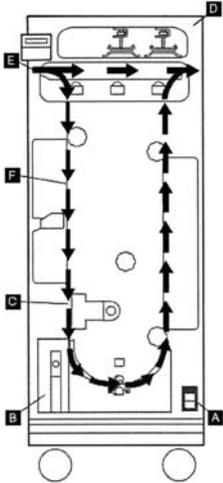


# AdvancedPunch

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## 3. BEDIENELEMENTE

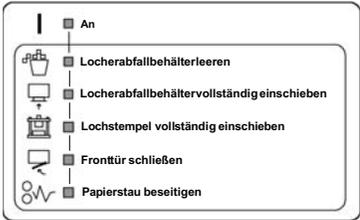
- A. EIN-/AUS-Schalter "I/O":**  
Muss sich jederzeit in "ON (AN)" Position befinden.
- B. Locherabfallbehälter:**  
Leichter Zugang zum Behälter für Papierschnitzel zur leichten Entsorgung der Lochabfälle
- C. Auswechseln der Lochstempel:**  
Erfordert keine Werkzeuge und dauert nur wenige Sekunden
- D. Aufbewahrung der Lochstempel:**  
Stauraum für bis zu drei Lochstempel.
- E. Bypass:**  
Kurzer Papierweg für Dokumente, die nicht gelocht werden sollen
- F. Papierweg für Lochmodus:**  
Großzügiger Radius in der Wendung, akzeptiert Pappen bis 216g/m<sup>2</sup>



Auf der Vorderseite des AdvancedPunch befindet sich ein Bedienfeld, das Informationen zum Status des Lochers gibt. LEDs weisen den Benutzer auf durchzuführende Maßnahmen hin

- 1. An:**  
Die grüne LED leuchtet, wenn der EIN-/AUS-Schalter am AdvancedPunch auf EIN geschaltet wird. **HINWEIS:** Das Anschlusskabel des AdvancedPunch muss vor dem Einschalten des Geräts in die entsprechende Steckdose eingesteckt sein
- 2. Locherabfallbehälter leeren:**  
Wenn der Locherabfallbehälter mit Papierschnitzeln voll ist, leuchtet die gelbe LED auf
- 3. Locherabfallbehälter vollständig einschieben:**  
Wenn der Locherabfallbehälter entfernt oder nicht vollständig eingeschoben wurde leuchtet die gelbe LED auf
- 4. Fronttür schließen:**  
Wenn die Fronttür offen oder nicht vollständig geschlossen ist, leuchtet die gelbe LED auf
- 5. Papierstau beseitigen:**  
Wenn sich ein Blatt Papier im Locher verklemmt hat, leuchtet die gelbe LED auf. Siehe Abschnitt PAPIERSTAUS in diesem Handbuch für Anweisungen, wie ein verklemmtes Blatt im AdvancedPunch zu entfernen ist.

**! HINWEIS:** Die LEDs am AdvancedPunch leuchten schwach, wenn der Drucker eingeschaltet wird, während der AdvancedPunch in AUS-Stellung ist. Nachdem der AdvancedPunch eingeschaltet wurde, leuchten die LEDs mit ihrer voller Intensität.





**AdvancedPunch**

(D)

**4. LOCHMUSTER**

Für den AdvancedPunch stehen Ihnen verschiedene, einfach auswechselbare Lochstempel zur Verfügung, mit denen Sie Dokumente für unterschiedliche Bindearten lochen können. Indem Sie die entsprechenden Lochstempel auswählen, können Sie mit dem AdvancedPunch Dokumente lochen, die nach einer der in Tabelle 1 aufgeführten Bindearten gebunden werden sollen.

Für Plastkrückenbindung wählen Sie den Lochstempel:	Xerox Bestellnummer		
 <p>19</p> <p>PB Plastikbindung; Lochgröße: 8 mm (0,313") L x 2,9 mm (0,116") B, Lochabstand von Mitte bis Mitte: 14,3 mm (0,563")</p>	<table border="1"> <tr> <td>XEROX PB-19H</td> <td>008R13066</td> </tr> </table>	XEROX PB-19H	008R13066
XEROX PB-19H	008R13066		
<p>Für "Twin Loop™"-Bindung wählen Sie den Lochstempel:</p>  <p>32</p> <p>W3 Draht; quadratisch; 3 Löcher pro Zoll; Lochgröße: 4mm (0,156") L x 4 mm (0,156") B, Lochabstand von Mitte bis Mitte: 6,5 mm (0,333")</p>	<table border="1"> <tr> <td>XEROX W3-32H-SQ</td> <td>008R13069</td> </tr> </table>	XEROX W3-32H-SQ	008R13069
XEROX W3-32H-SQ	008R13069		
 <p>21</p> <p>W2 Draht; rechteckig; 4 Löcher pro Zoll; Lochgröße: 4,4 mm (0,174") Durchmesser, Lochabstand von Mitte bis Mitte: 6,3 mm (0,2475")</p>	<table border="1"> <tr> <td>XEROX W2-21H-SQ</td> <td>008R13068</td> </tr> </table>	XEROX W2-21H-SQ	008R13068
XEROX W2-21H-SQ	008R13068		
<p>Für "Color Coil™"-Bindung wählen Sie den Lochstempel:</p>  <p>44</p> <p>C4 Spirale; rund; 4 Löcher pro Zoll; Lochgröße: 4,4 mm (0,174") Durchmesser, Lochabstand von Mitte bis Mitte: 6,3 mm (0,2475")</p>	<table border="1"> <tr> <td>XEROX C4-44H</td> <td>008R13067</td> </tr> </table>	XEROX C4-44H	008R13067
XEROX C4-44H	008R13067		
<p>Für "VeloBind®"-Thermobindung verwenden Sie den Lochstempel:</p>  <p>11</p> <p>VB VeloBind® rund; 1 Loch pro Zoll; Lochgröße: 3,2 mm (0,125") Durchmesser, Lochabstand von Mitte bis Mitte: 25,4 mm (1")</p>	<table border="1"> <tr> <td>XEROX VB-11H</td> <td>008R13070</td> </tr> </table>	XEROX VB-11H	008R13070
XEROX VB-11H	008R13070		
<p>Für Loseblattbindung verwenden Sie den Lochstempel:</p>  <p>3</p> <p>4-Ring-Ringbuch; US-Teilung (Standard-Loseringmuster); Lochgröße: 8 mm (0,316") Durchmesser</p>	<table border="1"> <tr> <td>XEROX 3H</td> <td>008R13072</td> </tr> </table>	XEROX 3H	008R13072
XEROX 3H	008R13072		
<p>Für Proclick® Bindung wählen Sie den Lochstempel:</p>  <p>32</p> <p>W3 Proclick®; Lochgröße: 4,9mm x 5,5mm; 0,196"x0,215" (LxB); Lochabstand von Mitte bis Mitte: 8,5mm(0,333")</p>	<table border="1"> <tr> <td>XEROX PC-32H</td> <td>008R13071</td> </tr> </table>	XEROX PC-32H	008R13071
XEROX PC-32H	008R13071		

©2003 GBC, Northbrook Illinois - Alle Rechte vorbehalten, Rev10/02 RZ 303 Die Zeichnungen stellen nicht die tatsächlichen Lochmusterabmessungen und -abstände dar



**5. AUSWECHSELN DER LOCHSTEMPEL**

Ihr AdvancedPunch verfügt über auswechselbare Lochstempel, damit Sie Dokumente für viele verschiedene Bindearten wirtschaftlich lochen können. Das Auswechseln der Lochstempel ist einfach und nimmt wenig Zeit in Anspruch, wie die nachfolgende Anleitung zeigt.

**Entfernen der Lochstempel aus dem Gerät:** Die Montagerinne für den auswechselbaren Lochstempel befindet sich an der vorderen linken Seite des Geräts. Wenn in Ihrem AdvancedPunch bereits ein Lochstempel montiert ist, können Sie diesen einfach entfernen, indem Sie wie folgt vorgehen:

**Schritt 1:** Drucker/Kopierer anhalten.

**Schritt 2:** Zugangstür des AdvancedPunch öffnen.

**Schritt 3:** Greifen Sie sicher den Handgriff und ziehen Sie fest daran. Durch das feste Ziehen wird der automatische Einrastmechanismus gelöst und der Lochstempel gleitet heraus.

**Schritt 4:** Ziehen Sie den Handgriff solange, bis der Lochstempel völlig entfernt ist, und halten Sie ihn mit beiden Händen.

**Schritt 5:** Den herausgenommenen Lochstempel im dafür vorgesehenen Stauraum des AdvancedPunch aufbewahren (Schutz vor Staub und Schmutz, versehentlichem Herunterfallen usw.).

**Schritt 6:** Den gewünschten Lochstempel für den neuen Lochauftrag auswählen und in die Führung hineinschieben. Lochstempel fest nach innen schieben, bis er einrastet.

**⚠ VORSICHT: EINKLEMMGEFAHR. BEI DER MONTAGE DÜRFEN FINGER UND ANDERE KÖRPERTEILE NICHT MIT DER MONTAGERINNE UND ANDEREN BEREICHEN DES LOCHSTEMPELS IN BERÜHRUNG KOMMEN, AUßER MIT DER FINGERÖFFNUNG AM LOCHSTEMPEL. EIN NICHT-EINHALTEN DIESER VORSICHTSMASSNAHMEN KANN ZU VERLETZUNGEN FÜHREN.**

**Schritt 7:** Zugangstür schließen.

**Schritt 8:** Fahren Sie mit Ihrem Druck- und Lochauftrag fort.

Beachten Sie, dass sich bei Verwendung eines neuen Stempels ein wenig Öl auf dem Blatt um die gestanzten Löcher sammelt. Nach dem Lochen von 25 bis 50 Blättern hinterlässt der Stempel kein Öl mehr auf den Blättern. Es wird empfohlen einen kleinen Test-Druckauftrag durchzuführen, wenn ein neuer Stempel oder ein frisch geölter Stempel eingebaut wurde.

**6. LOCHVORGANG**

Stellen Sie vor dem Beginn eines Druckauftrags, bei dem die Locherfunktion des AdvancedPunch verwendet wird, sicher, dass keine gelben LEDs auf dem vorderen Bedienfeld des AdvancedPunch leuchten. Wenn eine gelbe LED leuchtet, korrigieren Sie den Fehler, bevor Sie mit dem Druckauftrag beginnen. Informationen zu den LEDs finden Sie im Abschnitt 3. BEDIENELEMENTE. Der AdvancedPunch arbeitet nicht im Lochermodus, wenn eine gelbe LED leuchtet.

Prüfen Sie vor Beginn des Lochauftrags, dass der im AdvancedPunch installierte Lochstempel das richtige Stempel-/Lochmuster für den Auftrag hat. Wenn der Stempel nicht der richtige Stempel ist, tauschen Sie ihn jetzt aus.

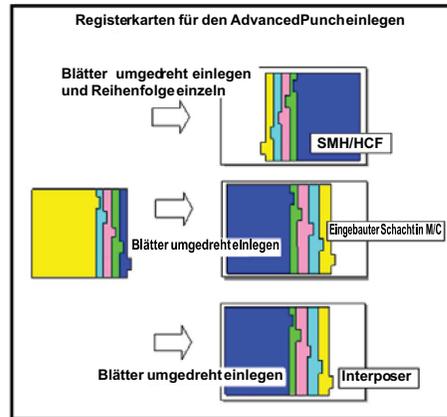
Verwenden Sie zum aktivieren der AdvancedPunch Locherfunktion die Benutzeroberfläche des Druckers. Führen Sie folgende Schritte durch, um die Locherfunktion zu aktivieren.

Gehen Sie in der Benutzeroberfläche des Druckers zum Menü Kopieren. Wählen Sie Kopierausgabe, um das Menü Lochen & mehr aufzurufen. In diesem Menü gibt es in der Spalte Lochen die Option AdvancedPunch. Wählen Sie diese Option und drücken Sie dann Speichern, um zum Menü Kopieren zurückzukehren. Der AdvancedPunch arbeitet nun im Lochermodus.

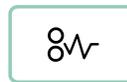
**Registerkarten lochen**

Der AdvancedPunch locht die Vorderkante eines Blattes. Daher müssen Registerkarten mit den Reitern zur Hinterkante hin eingelegt werden. Die Art, wie Registerkarten richtig herum in den Schacht geladen werden, hängt vom verwendeten Schacht ab

**AdvancedPunch**



**7. PAPIERSTAUS**



Dieses Symbol zeigt einen Papierstau an. Papierstaus in einem der folgenden Bereiche lassen sich leichter beheben, wenn einer oder mehrere der Drehknöpfe gedreht werden, um das Papier vorwärts zu bewegen.

Bereich	Beschreibung
<p>8v-1</p>	Falls sich Papier im Locher-Bypass staut, heben Sie das Papierführungsblech (PA) an, das sich direkt im Innenteil befindet, und entfernen Sie das gestaute Papier.
<p>8v-4</p>	Falls sich Papier in der nach unten führenden Papierzufuhr staut, bewegen Sie die Tür (PB2) nach rechts, greifen Sie hinein und entfernen Sie das gestaute Papier.
<p>8v-3</p>	Falls sich Papier staut oder der Lochstempel blockiert ist, drehen Sie den Knopf (J3) in Grundstellung (HOME), (Pfeile in Linie), schieben Sie den Lochstempel heraus und entfernen das Papier.
<p>8v-3</p>	Falls sich Papier in der unteren Papierzufuhr des Lochers staut, drücken Sie auf den unteren Hebel der Papierzufuhr, greifen hinein und entfernen alles gestaute Papier.
<p>8v-2</p>	Falls sich Papier in der nach oben führenden Papierzufuhr staut, bewegen Sie die Tür nach links, greifen hinein und entfernen das gestaute Papier.



## AdvancedPunch

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### 8. LOCHERABFALLBEHÄLTER

Der Locherabfallbehälter für Ihren AdvancedPunch befindet sich auf der Vorderseite der Gerätebasis. Die Schublade sollte regelmäßig herausgezogen und geleert werden. Der AdvancedPunch erkennt über einen Sensor, wann der Locherabfallbehälter voll ist. Wenn der Locherabfallbehälter voll ist, leuchtet die LED auf dem Bedienfeld des AdvancedPunch auf und auf der Benutzeroberfläche des Druckers erscheint eine Meldung.

### 9. FEHLERBEHEBUNG

Problem	Mögliche Ursache
Kein Strom, Lochvorgang wird nicht ausgeführt	Netzkabel nicht an der Rückseite des Geräts befestigt, steckt nicht richtig in der Anschlussbuchse oder der Netzschalter ist nicht eingeschaltet.
Lochstempel kann durch kräftiges Ziehen nicht entfernt werden	Der Lochstempel befindet sich in einem unvollständigen Arbeitszyklus. Drehen Sie den Lochstempelknopf (J3) in die Ausgangsposition. Die Ausgangsposition ist erreicht, wenn die Pfeile auf der gleichen Linie sind. Der Lochstempel sollte nun leicht herausgleiten.  Siehe auch PAPIERSTAU.

### Fehler-Codes

Fehler-Codes für den AdvancedPunch werden auf der Benutzeroberfläche des Geräts als AdvancedPunch Fehler-Code angezeigt. In der folgenden Liste finden Sie Fehler-Codes, die sich speziell auf den AdvancedPunch beziehen

Fehler-Code	Mögliche Ursache	Empfohlene Maßnahme
040-100 040-101 040-900 040-901	Papierstau im AdvancedPunch.	Fronttür öffnen und Papierstau suchen. Gefundenen Papierstau beheben und Fronttür schließen.
040-300	Fronttür des AdvancedPunch ist nicht geschlossen.	Fronttür des AdvancedPunch schließen.
040-940	Lochstempel fehlt oder ist nicht vollständig eingesetzt.	Lochstempel einsetzen oder vollständig einschieben. Fronttür schließen.
040-941	Locherabfallbehälter fehlt oder ist nicht vollständig eingesetzt	Locherabfallbehälter einsetzen oder vollständig einschieben. Fronttür schließen.
040-942	Locherabfallbehälter ist voll.	Locherabfallbehälter leeren und wieder einsetzen.
140-700	Locherabfallbehälter ist fast voll.	Locherabfallbehälter leeren und wieder einsetzen.

### 10. TECHNISCHE DATEN

	Geräte mit 115 Volt
<b>Geschwindigkeit</b>	Bis zu 127 Blatt pro Minute
<b>Blattgröße</b>	Letter - 215,9 x 279,4 mm
<b>Lochkante</b>	11"
<b>Papiervorrat</b>	#20 Bond bis #80 Cover
<b>Papier-Bypassmodus Blattgröße</b>	Papiergröße und -material wie beim Drucker
<b>Lochungskapazität</b>	Einzelblatt
<b>Stromversorgung</b>	115V, 60 Hz, einphasig
<b>Elektrische Daten</b>	BTU/ Stunde 1057BTU/ Stunde Watt 310 W Ampere 2,8 A
<b>Sicherheit</b>	TÜV/GS, CE
<b>Abmessungen</b>	B 30,5 cm (12") x H 97,8 cm (38,5") x T 72,3 cm (28,5")
<b>Gewicht</b>	70 kg (154 lbs.)
<b>Versandgewicht</b>	115,5 kg (254 lbs.)
<b>Hergestellt</b>	Hergestellt in Taiwan



# AdvancedPunch



## Sommario

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## 1. MESSAGGI RELATIVI ALLA SICUREZZA

L'UTILIZZO DELLA MACCHINA IN CONDIZIONI DI SICUREZZA È MOLTO IMPORTANTE PER GBC. ALL'INTERNO DI QUESTO MANUALE E SULLA MACCHINA STESSA SONO PRESENTI IMPORTANTI MESSAGGI E INFORMAZIONI RELATIVI ALLA SICUREZZA. ASSICURARSI DI LEGGERE ATTENTAMENTE E COMPRENDERE TUTTA LA DOCUMENTAZIONE RELATIVA ALLA SICUREZZA PRIMA DI UTILIZZARE LA MACCHINA.

TUTTI I MESSAGGI RELATIVI ALLA SICUREZZA PRESENTI IN QUESTO MANUALE DELL'OPERATORE SONO PRECEDUTI DA UN SIMBOLO DI PERICOLO. TALE SIMBOLO INDICA UN POTENZIALE PERICOLO DI LESIONI ALLE PERSONE O UN RISCHIO DI DANNI ALLA MACCHINA O AGLI IMPIANTI.

SU ADVANCEDPUNCH SONO PRESENTI LE SEGUENTI ETICHETTE:



Questo messaggio di sicurezza significa che potreste prendere una scossa, perché la disconnessione dell'alimentazione da questa sezione non interrompe la corrente nelle sezioni adiacenti della macchina.



Questo messaggio relativo alla sicurezza indica un potenziale pericolo di gravi lesioni personali o morte se si apre la macchina esponendosi a tensioni elettriche pericolose. Non rimuovere MAI i pannelli di copertura fissati sulla macchina con viti. Faccia riferimento sempre i requisiti di servizio a servizio qualificato personale

## Misure di sicurezza importanti

- Utilizzare AdvancedPunch esclusivamente per le funzioni per cui è stato progettato, ossia per la perforazione di carta e copertine, in base alle specifiche tecniche riportate.
- Conservare questo Manuale dell'operatore per consultazioni successive.

**ATTENZIONE:** L'INTERRUTTORE DI ALIMENTAZIONE DELLA STAMPANTE NON INTERROMPE L'ALIMENTAZIONE DELLA PERFORATRICE.

**ATTENZIONE:** L'INTERRUTTORE DI ALIMENTAZIONE DELLA PERFORATRICE NON INTERROMPE L'ALIMENTAZIONE DELLA STAMPANTE.

- La macchina AdvancedPunch deve essere collegato a una fonte di alimentazione con una tensione corrispondente alle specifiche relative alla tensione di alimentazione presenti nelle istruzioni operative della macchina (riportate anche sull'etichetta del numero di serie).
- Il terminale di terra fornisce un collegamento di sicurezza ed è funzionale esclusivamente con l'apposito tipo di presa di alimentazione con messa a terra. Se non è possibile inserire la spina nella presa, contattare un elettricista qualificato per l'installazione di una presa idonea.
- Non modificare la spina del cavo di alimentazione (se presente) di AdvancedPunch. È fornita per garantire la sicurezza dell'operatore.
- Scollegare dall'alimentazione AdvancedPunch se si desidera spostare la macchina oppure quando questa non viene utilizzata per un periodo di tempo prolungato.
- Non azionare AdvancedPunch se il cavo o la spina di alimentazione della macchina è danneggiato. Non azionare la macchina se presenta malfunzionamenti, se è stato versato liquido nella macchina o se la macchina presenta danni di qualsiasi tipo.
- Non sovraccaricare le prese di alimentazione oltre le loro capacità. Il sovraccarico delle prese può causare incendi o rischio di scosse elettriche.

## Pulizia

- Per pulire le parti esterne di AdvancedPunch, utilizzare un panno morbido inumidito.
- Non utilizzare detersivi o solventi: possono danneggiare la macchina.



## AdvancedPunch

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### Messaggi relativi alla sicurezza



#### CARATTERISTICHE DEL CAVO DI ALIMENTAZIONE PRINCIPALE

(LA NOTA SEGUENTE SI APPLICA ESCLUSIVAMENTE ALLE UNITÀ CON TENSIONE DI ALIMENTAZIONE DI 230V 50/60HZ, INSTALLATE NELL'AMBITO DELL'UNIONE EUROPEA)

**ATTENZIONE: PER LA SCELTA DI UN CAVO CON SPINA DI COLLEGAMENTO ALLA PRESA DI ALIMENTAZIONE DA UTILIZZARE CON ADVANCEDPUNCH, OSSERVARE SEMPRE LE SEGUENTI MISURE PRECAUZIONALI**

Il cavo di alimentazione -costituito da tre parti: spina di collegamento all'alimentazione, cavo e connettore alla macchina. Ciascuno di tali componenti deve essere conforme alla normativa di sicurezza CEE.

Di seguito sono riportati i requisiti elettrici minimi relativi al cavo di alimentazione specifico, a scopo di sicurezza.

**NON UTILIZZARE CAVI DI ALIMENTAZIONE NON CONFORMI AI REQUISITI ELETTRICI MINIMI RIPORTATI DI SEGUITO.**

**SPINA:** 3 ampere, 250 volt, 50/60 Hz, classe 1, 3 conduttori, conforme alle Norme di sicurezza CEE.

**CAVO:** tipo H05VV-F3G0.75, Norme armonizzate (< HAR> ). I simboli "< >" indicano i cavi conformi allo standard europeo specifico. (NOTA: "HAR" può essere sostituito dal marchio di approvazione di un'agenzia europea per la sicurezza che abbia approvato l'idoneità del cavo. Esempio: " < VDE > ").

**CONNETTORE ALLA MACCHINA:** 3 ampere, 250 volt, 50/60 Hz, conforme alle Norme di sicurezza CEE, tipo IEC 320. La lunghezza del cavo di alimentazione non deve essere superiore a 3 metri. È possibile utilizzare un cavo con caratteristiche elettriche superiori rispetto ai requisiti elettrici minimi indicati.

### Assistenza tecnica, Advanced Punch

Non eseguire tentativi di assistenza tecnica su AdvancedPunch in assenza di personale specializzato. Contattare un responsabile dell'assistenza tecnica autorizzato per qualsiasi tipo di riparazione necessaria o per i principali interventi di manutenzione di AdvancedPunch.

**NON RIMUOVERE IL PANNELLO DI COPERTURA DELLA MACCHINA.**

NESSUNO dei componenti interni alla macchina può essere riparato dall'utente. In tal modo si evitano potenziali rischi di lesioni personali e/ o danni alla macchina o agli impianti.

### Servizi, Matrici

Tutte le matrici vengono oleate in modo approfondito in fabbrica prima della spedizione. Durante il normale utilizzo, l'olio viene consumato e va sostituito. Nella normale manutenzione, ciascuna matrice deve essere oleata dopo i cicli di perforazione di 50K. GBC consiglia l'utilizzo dell'olio di marca 3-IN-ONE disponibile. È possibile utilizzare anche altri oli per macchine leggere.

Per oliare la matrice, è sufficiente applicare una piccola quantità di olio su tutta la lunghezza della fascia di feltro sulla matrice. Dopo avere applicato l'olio, reinstallare la matrice in AdvancedPunch ed eseguire una piccola stampa di prova. Comunemente, alcune tracce di olio possono essere presenti sulla prima serie di fogli perforati dopo l'oliatura della matrice. Dopo circa 25 - 50 fogli non sarà più presente alcuna traccia d'olio. A questo punto, sarà possibile utilizzare AdvancedPunch per la perforazione nell'attività di stampa.

### Messaggi relativi alla sicurezza



#### NOTA FCC

(LA NOTA SEGUENTE SI APPLICA ESCLUSIVAMENTE ALLE UNITÀ CON TENSIONE DI ALIMENTAZIONE DI 115V 60HZ)

In seguito a test, questo dispositivo è stato giudicato conforme ai limiti stabiliti per i dispositivi digitali classe A, definiti nella sezione 15 delle Norme FCC. Tali limiti consentono di fornire una protezione adeguata da interferenze dannose quando si utilizza il dispositivo in un ambiente aziendale.

Questo dispositivo genera, utilizza e può irradiare segnali elettromagnetici; pertanto, se non è installato e utilizzato in conformità alle indicazioni contenute nel manuale dell'operatore, può causare interferenze dannose alle radiocomunicazioni. L'utilizzo di questo dispositivo in un'area abitata può causare interferenze dannose. In tal caso l'utente deve risolvere il problema dell'interferenza a proprie spese.

**ATTENZIONE: LE SOSTITUZIONI O LE MODIFICHE ESEGUITE SENZA APPROVAZIONE ESPLICITA DI GENERAL BINDING CORPORATION POSSONO INVALIDARE L'AUTORIZZAZIONE ALL'UTILIZZO DEL DISPOSITIVO.**

*Canada Class A Notice - Avviso Canada, classe A*

Questo dispositivo digitale classe A è conforme allo standard canadese ICES-3.

Questo dispositivo digitale classe A è conforme allo standard canadese NMB-003.

## 2. INTRODUZIONE

Grazie per aver acquistato AdvancedPunch. È un sistema di produzione versatile che consente di perforare documenti secondo schemi diversi con la semplice sostituzione delle matrici di perforazione. È stato inoltre progettato in modo da essere facile da utilizzare.

AdvancedPunch rappresenta una soluzione innovativa per la perforazione della carta, con le seguenti caratteristiche tecniche:

- Set di matrici a sostituzione rapida con bloccaggio automatico (senza ausilio di strumenti né leve).
- Tutte le matrici di perforazione AdvancedPunch sono dotate di un'etichetta identificativa su cui sono riportati il tipo e lo schema di perforazione.
- Apposito alloggiamento per la conservazione delle tre matrici di perforazione supplementari, presente al di sopra del bypass fogli.

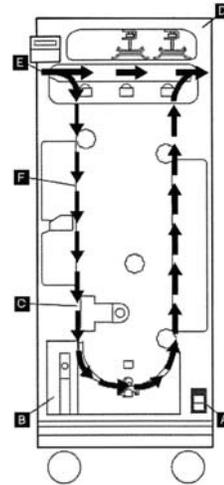


## AdvancedPunch

I

### 3. COMANDI OPERATIVI

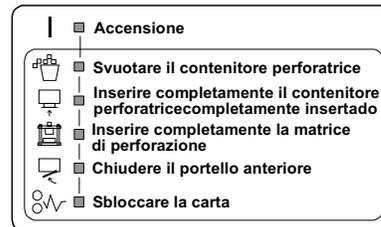
- A. Interruttore di alimentazione "I/O"**  
Deve essere sempre posizionato su "ON"
- B. Contenitore residui perforazione:**  
Contenitore facilmente accessibile per consentire un rapido smaltimento dei residui della perforazione
- C. Sostituzione matrici di perforazione:**  
Viene eseguita senza ausilio di strumenti e richiede solo alcuni secondi
- D. Alloggiamento per la conservazione delle matrici di perforazione:**  
Contiene fino a tre matrici di perforazione di riserva
- E. Bypass perforazione:**  
Percorso breve e diretto della carta per documenti da non perforare.
- F. Percorso in modalità perforazione:**  
La curva ad ampio raggio supporta carichi fino a 216g/m<sup>2</sup>



Nella parte anteriore di AdvancedPunch è presente un pannello che fornisce informazioni sullo stato operative dell'unità perforatrice. La spia LED indica quando è necessario l'intervento dell'operatore su AdvancedPunch.

- Accensione:**  
Il LED verde si illuminerà quando l'interruttore di accensione di AdvancedPunch è posizionato su ON. **NOTA:** il cavo di alimentazione di AdvancedPunch deve essere collegato alla fonte di alimentazione appropriata prima di impostare l'interruttore in posizione di accensione.
- Svuotare il contenitore perforatrice:**  
Quando il contenitore si riempie completamente di scarti di carta, il LED giallo si illuminerà.
- Inserire completamente il contenitore perforatrice:**  
Quando il contenitore viene rimosso o non inserito completamente nell'unità perforatrice, il LED giallo si illuminerà.
- Chiudere il portello anteriore:**  
Quando il portello anteriore è aperto o parzialmente chiuso, il LED si illuminerà.
- Sblocco carta:**  
Quando un foglio di carta si inceppa all'interno dell'unità perforatrice, il LED giallo si illuminerà. Consultare la sezione INCEPPAMENTO CARTA del presente manuale per istruzioni sulla rimozione di fogli inceppati in AdvancedPunch.

**! NOTA:** i LED di AdvancedPunch si accenderanno debolmente se la stampante viene accesa quando l'interruttore di AdvancedPunch è in posizione di spegnimento. Dopo avere impostato l'interruttore di AdvancedPunch in posizione di accensione, il LED si illuminerà completamente.





**AdvancedPunch**



**4. SCHEMI DI PERFORAZIONE**

AdvancedPunch è dotato di diversi set di matrici di perforazione a sostituzione rapida che consentono di perforare documenti in serie in base alla matrice scelta. È possibile utilizzare AdvancedPunch per perforare documenti in base a uno degli schemi di perforazione riportati nella Tabella 1 utilizzando la matrice di perforazione appropriata.

Per la rilegatura con pettini in plastica, utilizzare la seguente matrice:



Rilegatura a dorso plastico; dimensioni fori: 8 mm x 2,9 mm (0,313" x 0,116"); interasse fori: 14,3 mm (0,563")

Per la rilegatura Twin Loop™, utilizzare la seguente matrice:



Rilegatura a dorso metallico, filo W3; fori circolari; 3 fori per pollice; dimensioni fori: 4 mm x 4 mm (0,156" x 0,156"); interasse fori: 8,5 mm (0,333")



Rilegatura a dorso metallico, filo W2; fori circolari; 2 fori per pollice; dimensioni fori: 6,4 mm x 5,4 mm (0,250" x 0,214"); interasse fori: 12,7 mm (0,500")

Per la rilegatura Color Coil™ utilizzare la seguente matrice:



Spirali C4; fori circolari; 4 fori per pollice; diametro: 4,4 mm (0,174"); interasse fori: 6,3 mm (0,2475")

Per la rilegatura Velo™ utilizzare la seguente matrice:



Rilegatura VB Velobind™; fori circolari; 1 foro per pollice; diametro: 3,2 mm (0,125"); interasse fori: 25,4 mm (1")

Foratura di fogli sciolti per raccoglitori ad anelli, utilizzare la seguente matrice:



Raccoglitori a 4 anelli, formato standard U.S.A. per fogli sciolti; fori circolari; diametro 8 mm (0,316")

Per la rilegatura Proclick® utilizzare la seguente matrice:



W3 Proclick®; dimensioni fori: 4,9 mm x 5,5 mm; 0,196" x 0,215" (LxW); interasse fori: 8,5 mm (0,333")

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*Gli schemi di foratura rappresentati nei grafici mostrano le dimensioni reali di foratura e di spaziatura tra i fori.*

Numero pezzo Xerox

XEROX PB-19H	008R13066
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XEROX W3-32H-SQ	008R13069
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XEROX W2-21H-SQ	008R13068
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XEROX C4-44H	008R13067
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XEROX VB-11H	008R13070
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XEROX 3H	008R13072
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XEROX PC-32H	008R13071
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## 5. SOSTITUZIONE DELLE MATRICI DI PERFORAZIONE INTERCAMBIABILI

AdvancedPunch dispone di utili matrici di perforazione intercambiabili, che consentono di perforare documenti in modo economico con molti tipi di perforazione diversi. La sostituzione delle matrici di perforazione della macchina è un'operazione semplice e rapida, come risulta evidente dalle seguenti istruzioni:

**Rimozione delle matrici di perforazione dalla macchina:** l'alloggiamento per le matrici di perforazione intercambiabili di AdvancedPunch si trova nella parte anteriore destra della macchina. Se in AdvancedPunch è già installata una matrice di perforazione, è possibile rimuoverla in modo semplice seguendo le istruzioni riportate di seguito:

**Operazione 1:** Arrestare la stampante/copiatrice.

**Operazione 2:** Aprire lo sportello di accesso di AdvancedPunch.

**Operazione 3:** Impugnare saldamente la maniglia e tirare energicamente. Questa trazione energetica disinnesta il meccanismo di bloccaggio automatico, consentendo di estrarre la matrice di perforazione.

**Operazione 4:** Continuare a tenere la maniglia fino a che la serie di stampi non sia completamente rimossa, sostenendoli con tutte e due le maniglie.

**Operazione 5:** Conservare con cura la matrice di perforazione estratta nell'apposito alloggiamento di conservazione delle matrici presente nella parte superiore di AdvancedPunch (tenere lontano da polvere e impurità, evitare di far cadere piani di lavoro, ecc.).

**Operazione 6:** Selezionare la matrice desiderata per la nuova operazione di perforazione e inserirla nell'apposito alloggiamento. Esercitare una pressione energica sulla matrice di perforazione fino a quando non si blocca in posizione.



**ATTENZIONE: PERICOLO DI SCHIACCIAMENTO. DURANTE L'INSTALLAZIONE DELLE MATRICI DI PERFORAZIONE IN ADVANCEDPUNCH, TENERE SEMPRE LE DITA E ALTRE PARTI DEL CORPO FUORI DALL'ALLOGGIAMENTO PER LE MATRICI PRESENTI NELLA MACCHINA E LONTANO DA TUTTE LE PARTI DELLE MATRICI DI PERFORAZIONE, FATTA ECCEZIONE PER L'APPOSITO FORO DI PRESA PRESENTE SULLA MATRICE. LA MANCATA OSSERVAZIONE DI QUESTE MISURE PRECAUZIONALI PUÒ ESSERE CAUSA DI LESIONI PERSONALI.**

**Operazione 7:** Chiudere lo sportello di accesso.

**Operazione 8:** Procedere con la stampa e la perforazione.

Quando si utilizza una nuova matrice, è possibile che sia presente dell'olio intorno ai fori del foglio. Dopo la perforazione di 25 - 50 fogli, la matrice non lascerà più alcuna traccia di olio. Si consiglia di effettuare una stampa di prova dopo l'installazione o oliatura di una matrice.

## 6. OPERAZIONI DI PERFORAZIONE

Prima di iniziare la stampa con la funzione di perforazione di AdvancedPunch, accertarsi che i LED gialli non siano attivi nel pannello anteriore di AdvancedPunch. Se un Led giallo è illuminato, correggere l'errore prima di iniziare la perforazione. Consultare la sezione (3. COMANDI OPERAZIONI) per informazioni sui LED. AdvancedPunch non funzionerà in modalità di perforazione se un LED giallo è illuminato.

Prima di iniziare la perforazione, controllare che la matrice di perforazione installata in AdvancedPunch sia del modello di matrice/foro adatto all'attività. Se la matrice non è corretta, sostituirla.

Per attivare la funzione di perforazione di AdvancedPunch, utilizzare la schermata dell'interfaccia utente della stampante. Per attivare questa funzione, seguire la procedura riportata di seguito.

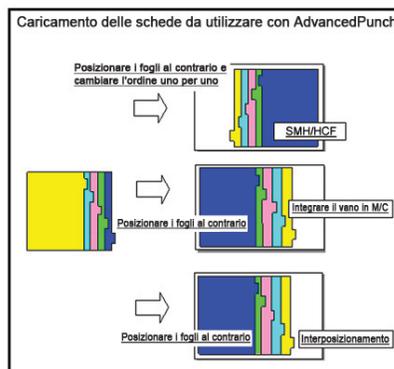
Dalla schermata di interfaccia utente della stampante, passare al menu **Copia**. Quindi selezionare **Uscita copia** per accedere al menu **Perforazione e altro**. In questo menu, verrà visualizzata un'opzione nella colonna di perforazione denominate **AdvancedPunch**. Selezionare l'opzione e premere **Salva** per tornare al menu **Copia**. A questo punto, AdvancedPunch funzionerà nella modalità di perforazione.

## AdvancedPunch

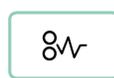
1

### Schede di perforazione

AdvancedPunch perfora il bordo principale di un foglio, dal momento che la Scheda deve essere inserita con la linguetta nel bordo di guida. Il posizionamento delle Schede nel vano per l'utilizzo corretto varia a seconda del modo d'uso del vano.



## 7. INCEPPAMENTI DELLA CARTA



Questo simbolo indica un inceppamento della carta. Per agevolare l'eliminazione di inceppamenti carta in una delle aree riportate di seguito, ruotare le piccole manopole disponibili per far avanzare la carta.

Area	Descrizione
<p>8w-1</p>	Se la carta si è inceppata nell'area di bypass perforazione, sollevare la piastra di guida della carta presente all'interno, quindi inserire la mano e rimuovere la carta inceppata.
<p>8w-4</p>	Se la carta si è inceppata nel collettore inferiore del percorso carta, spostare lo sportello verso destra, quindi inserire la mano nel collettore e rimuovere la carta inceppata.
<p>8w-3</p>	Se si è verificato un inceppamento della carta o della matrice di perforazione, ruotare la manopola J3 sulla posizione HOME (con le frecce allineate), estrarre la matrice di perforazione e rimuovere la carta.
<p>8w-3</p>	Se la carta si è inceppata nel collettore inferiore del percorso di perforazione della carta, premere la leva di blocco del collettore inferiore, quindi inserire la mano e rimuovere tutta la carta inceppata.
<p>8w-2</p>	Se la carta si è inceppata nel collettore superiore del percorso carta verso l'alto, spostare lo sportello verso sinistra, quindi inserire la mano nel collettore e rimuovere la carta inceppata.



## AdvancedPunch



### 8. CONTENITORE DI PERFORAZIONE

Il contenitore di perforazione di AdvancedPunch si trova nella parte anteriore della base della macchina. Estrarre periodicamente il cassetto e svuotarlo. AdvancedPunch utilizza un sensore per determinare quando il contenitore è pieno. Quando il contenitore è pieno, il LED del pannello anteriore di AdvancedPunch si illuminerà e verrà visualizzato un messaggio nella schermata di interfaccia utente.

### 9. RISOLUZIONE DEI PROBLEMI

Problema	Probabile causa
Alimentazione interrotta, non viene eseguita la perforazione	Il cavo di alimentazione non è collegato alla parte posteriore della macchina o la relativa spina non è inserita correttamente nella presa a muro. Interruttore di alimentazione non attivato
Die Set will not come out using a moderate pull	La matrice di perforazione è impostata in modalità ciclo parziale. Ruotare la manopola della matrice di perforazione (J3) sulla posizione HOME. La posizione Home è quella in cui le frecce sono allineate. A questo punto deve essere possibile estrarre semplicemente la matrice di perforazione.  Vedere anche INCEPPAMENTI DELLA CARTA.

#### Codici errore

I codici di errore per AdvancedPunch sono visualizzati nell'Interfaccia utente della macchina come errore di codice AdvancedPunch. Di seguito sono indicate dei codici di errore specifici per il prodotto AdvancedPunch.

Codice errore	Causa possibile	Soluzione consigliata
040-100 040-101 040-900 040-901	Inceppamento in AdvancedPunch.	Aprire il portello anteriore e individuare l'inceppamento. Rimuovere eventualmente la carta e chiudere il portello.
040-300	Il portello anteriore di AdvancePunch non è chiuso.	Chiudere il portello anteriore AdvancedPunch.
040-940	La matrice non è presente o non è stata installata completamente.	Installare la matrice o inserirla completamente e chiudere il portello anteriore.
040-941	Il contenitore non è presente o non è stata installato completamente	Installare o inserire il contenitore completamente e chiudere il portello anteriore.
040-942	Il contenitore è pieno.	Svuotare il contenitore e rimontarlo.
140-700	Il contenitore è quasi pieno.	Svuotare il contenitore e rimontarlo.

### 10. SPECIFICHE TECNICHE

	Macchine con alimentazione a 115V
Velocità	Fino a 127 fogli al minuto
Dimensione foglio perforato	Lettera - 8.5" x 11"
Bordo di perforazione	11"
Carico di carta	20# grassetto su 80# copertina
Dimensione del foglio nella modalità bypass della carta	Dimensioni e carichi di carta uguali a quelli per la stampante
Funzioni di perforazione	Foglio singolo
Alimentazione elettrica	115V, 60 Hz, Fase singola
Elettrico	BTUs/ora 1057BTU/HR Watts 310W Amps 2.8A
Sicurezza	TUV/GS,CE
Dimensioni	30,5 cm (12") (L) x 97,8 cm (38,5") (H) x 72,3 cm (28,5") (L)
Peso	70 Kg (154 lbs.)
Peso per la spedizione	115.5 Kg (254 lbs.)
Luogo di produzione	Fatto in Taiwan



## INHOUDSOPGAVE

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Onderhoud van de	34	<b>7. PAPIERSTORINGEN</b>	<b>37</b>
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### 1. VEILIGHEIDSVOORSCHRIFTEN

VOOR GBC IS UW VEILIGHEID EN DIE VAN ANDEREN VAN ESSENTIEEL BELANG. IN DEZE GEBRUIKSAANWIJZING EN OP HET APPARAAT TREFT U BELANGRIJKE VEILIGHEIDSVOORSCHRIFTEN EN WAARSCHUWINGEN AAN. LEES DEZE AANDACHTIG DOOR VOORDAT U HET APPARAAT IN GEBRUIK NEEMT.

**!** ELKE VEILIGHEIDSWAARSCHUWING IN DEZE GEBRUIKSAANWIJZING WORDT VOORAFGEGAAN DOOR EEN WAARSCHUWINGSSYMBOL. DIT SYMBOOL DUIDT OP MOGELIJK GEVAAR VOOR LETSEL BIJ UZELF OF DERDEN.

OP DE ADVANCEDPUNCH TREFT U DE VOLGENDE LABELS AAN:



Deze veiligheidswaarschuwing geeft aan dat u het risico loopt op een elektrische schok, omdat het afsluiten van de stroom van dit gedeelte niet de stroom afsluit van de aangrenzende gedeelten van het apparaat.



Deze veiligheidswaarschuwing geeft aan dat u ernstig of dodelijk gewond kunt raken door het apparaat te openen en uzelf bloot te stellen aan gevaarlijke spanning. Verwijder NOOIT de vastgeschroefde beschermkappen. Laat onderhoudswerkzaamheden ALTIJD uitvoeren door bevoegd personeel.

### Belangrijke veiligheidsvoorschriften

- Gebruik de AdvancedPunch enkel zoals bedoeld voor het perforeren van papier en covers die voldoen aan de opgegeven specificaties.
- Bewaar deze gebruiksaanwijzing goed, zodat u deze later nog eens kunt raadplegen.

**!** LET OP: MET DE AAN/UIT-SCHAKELAAR VAN DE PRINTER SCHAKELT U NIET DE STROOM NAAR HET PERFOREERAPPARAAT UIT.

**!** LET OP: MET DE AAN/UIT-SCHAKELAAR VAN HET PERFOREERAPPARAAT SCHAKELT U NIET DE STROOM NAAR DE PRINTER UIT.

- Sluit de AdvancedPunch aan op een voedingsspanning die overeenkomt met de spanning van het apparaat (staat ook aangegeven op het label met het serienummer).
- De geaarde stekker is een veiligheidsvoorziening en past alleen op een geschikte geaarde contactdoos. Neem contact op met een erkende installateur als u de stekker niet in de contactdoos kunt steken en laat een geschikte contactdoos plaatsen.
- Sluit geen andere stekker aan op het uiteinde van het netsnoer (indien geleverd) van de AdvancedPunch. De stekker is geleverd met het oog op uw veiligheid.
- Haal de stekker van de AdvancedPunch uit de contactdoos voordat u het apparaat verplaatst of wanneer u het apparaat gedurende langere tijd niet gebruikt.
- Gebruik de AdvancedPunch niet als het netsnoer of de stekker van het apparaat beschadigd is. Gebruik het apparaat niet in het geval van een storing, als er vloeistof in het apparaat is gemorst of als het apparaat op enigerlei wijze beschadigd is.
- Voorkom overbelasting van contactdozen. Overbelasting kan brand of een elektrische schok tot gevolg hebben.

### Schoonmaken

- U kunt de AdvancedPunch aan de buitenkant schoonmaken met een zachte, vochtige doek.
- Gebruik geen schoonmaak- of oplosmiddelen want deze kunnen het apparaat beschadigen.



## AdvancedPunch

### Veiligheidsinformatie



#### KIEZEN VAN DE NETSNOERSET

(HET ONDERSTAANDE IS ALLEEN VAN TOEPASSING OP APPARATEN MET EEN NOMINALE SPANNING VAN 230 V, 50/60 HZ EN GELDT ALLEEN BINNEN DE EUROPESE UNIE.)



**LET OP: HOUDT U ZICH ALTIJD AAN DE VOLGENDE VOORZORGSMAATREGELEN ALS U EEN LOS SNOER Kiest voor de AdvancedPunch**

De snoerset bestaat uit drie onderdelen: de netstekker, het netsnoer en de apparaatstekker. Elk van deze onderdelen moet voldoen aan de Europese veiligheidsvoorschriften.

Hieronder worden om veiligheidsredenen de minimale nominale spanningswaarden voor de snoerset vermeld.

**Gebruik geen snoersets die niet voldoen aan de volgende minimumeisen.**

**NETSTEKKER:** 3 ampère, 250 volt, 50/60 Hz, geleider Klasse 1, 3, conform Europese veiligheidsvoorschriften.

**NETSNOER:** type H05VV-F3G0.75, geharmonieerd (< HAR> ). De tekens "< >" geven aan dat het snoer voldoet aan de betreffende Europese norm. (OPMERKING: "HAR" kan worden vervangen door het keurmerk van de Europese veiligheidsinstantie die het snoer goedgekeurd heeft. Een voorbeeld hiervan is "< VDE >".)

**APPARAATSTEKKER:** 3 ampère, 250 volt, 50/60 Hz, conform Europese veiligheidsvoorschriften, type IEC 320. De snoerset mag niet langer zijn dan 3 meter. Een snoerset waarvan een onderdeel een nominale spanningswaarde heeft die hoger is dan de aangegeven minimale waarde kan eveneens worden gebruikt.

### Onderhoud van de AdvancedPunch

Voer het onderhoud van de AdvancedPunch niet zelf uit. Laat reparaties of groot onderhoud van de AdvancedPunch uitvoeren door een erkende servicevertegenwoordiger.



**VERWIJDER DE BESCHERMKAP VAN HET APPARAAT NIET.**

Om persoonlijk letsel en/of beschadiging van het apparaat of de omgeving te voorkomen bevat het apparaat GEEN onderdelen die u zelf kunt vervangen.

### Onderhoud van de ponsstempels

Elke ponsstempel is grondig geolied in de fabriek voor ze uitgeleverd zijn. Bij normaal gebruik zal deze olie opraken en moet deze vernieuwd worden. Als onderdeel van het normale onderhoud moet elke ponsstempel na ongeveer 50.000 perforaties geolied worden. GBC adviseert het gebruik van de kant-en-klare olie van het merk 3-IN-ONE. Een andere dunne machineolie mag ook gebruikt worden.

Om de ponsstempel te oliën, hoeft u alleen maar een klein beetje olie aan te brengen over de hele lengte van de villen strip die zich op de ponsstempel bevindt. Na het aanbrengen van de olie, plaatst u de ponsstempel terug in de AdvancedPunch en voert u een kleine test uit. Het is normaal als er op de eerste geperforeerde vellen wat olie zit meteen na het oliën van de ponsstempel. Na ongeveer 25 tot 50 vellen zal er geen olie meer achterblijven op de geperforeerde vellen. U kunt de AdvancedPunch nu weer gebruiken voor het perforeren van uw afdrukken.

### Veiligheidsinformatie



#### FCC-VOORSCHRIFTEN

(HET ONDERSTAANDE IS ALLEEN VAN TOEPASSING OP APPARATEN MET EEN NOMINALE SPANNING VAN 115 V, 60 HZ).

Dit apparaat is getest en voldoet aan de klasse A-normen voor digitale apparatuur, overeenkomstig hoofdstuk 15 van de FCC-voorschriften. Deze normen zijn bedoeld om redelijke bescherming te bieden tegen hinderlijke storingen wanneer het apparaat in een zakelijke omgeving gebruikt wordt.

Dit apparaat genereert en gebruikt radiofrequentie-energie en kan die ook uitzenden. Indien het apparaat niet geïnstalleerd en gebruikt wordt overeenkomstig de gebruiksaanwijzing, kunnen hinderlijke storingen optreden bij radiocommunicatie. Het gebruik van dit apparaat in een woonomgeving, veroorzaakt waarschijnlijk hinderlijke storingen. Van de gebruiker wordt in dat geval verlangd dat hij de storing op eigen kosten herstelt.



**LET OP: U KUNT UW GEBRUIKSBEVOEGDHEID KWIJTRAKEN ALS GEVOLG VAN WIJZIGINGEN OF AANPASSINGEN DIE NIET UITDRUKKELIJK ZIJN GOEDGEKEURD DOOR.**

*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.*

## 2. INLEIDING

Dank u voor uw aanschaf van de AdvancedPunch, een veelzijdig productiesysteem waarmee u documenten kunt perforeren voor verschillende inbindstijlen door eenvoudig de ponsstempel te verwisselen. Het apparaat is erg eenvoudig te bedienen.

De AdvancedPunch is een innovatieve oplossing voor het perforeren van papier en beschikt over de volgende functies

- Snel verwisselbare ponsstempels die automatisch vergrendelen zonder gereedschap of hendels.
- Alle ponsstempels van de AdvancedPunch zijn voorzien van een identificatielabel waarop het gatenpatroon en de naam staan.
- Handig opbergvak boven de rechtstreekse papierbaan voor drie extra ponsstempels.



## AdvancedPunch

### 3. BEDIENINGSONDERDELEN

- A. Aan/uit-schakelaar: "I/O"**  
Moet altijd op 'aan' staan.
- B. Snipperlade:**  
Gemakkelijk bereikbare snipperlade voor het snel verwijderen van de papiersnippers.
- C. Verwisselbare ponsstempels:**  
Wordt gedaan zonder gereedschap en neemt slechts enkele seconden in beslag.
- D. Opbergvak voor de ponsstempels:**  
Voor 3 reservestempels.
- E. Rechtstreekse papierbaan:**  
Korte, rechte papierbaan voor niet-geperforeerde documenten.
- F. Perforatiebaan:**  
Brede, U-vormige doorvoer geschikt voor papiersoorten tot 216g/m<sup>2</sup>.

Aan de voorkant van de AdvancedPunch bevindt zich een display dat informatie geeft over de bedieningsstatus van het perforeerapparaat. De indicators geven aan wanneer de gebruiker van de AdvancedPunch actie moet ondernemen.

#### 1. Apparaat aan:

De groene indicator brandt als de aan/uit-schakelaar van de AdvancedPunch op 'aan' staat. **OPMERKING:** Het netsnoer van de AdvancedPunch moet aangesloten zijn op een geschikte voedingsbron alvorens u de aan/uit-schakelaar van het apparaat op 'aan' zet.

#### 2. Snipperlade leegmaken:

Als de snipperlade vol is met papiersnippers, dan begint de gele indicator te branden.

#### 3. Snipperlade helemaal terugschuiven:

Als de snipperlade uitgehaald is en daarna niet helemaal teruggeschoven is in het perforeerapparaat, dan begint de gele indicator te branden.

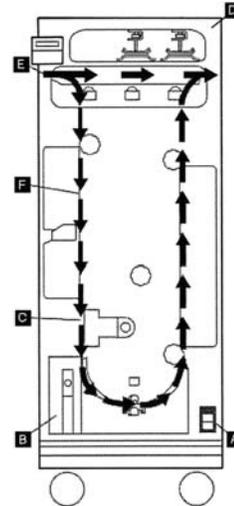
#### 4. Voorpaneel sluiten:

Als het voorpaneel geopend is en daarna niet goed gesloten is, dan begint de gele indicator te branden.

#### 5. Vastgelopen papier verwijderen:

Als er een vel papier vastloopt in het perforeerapparaat, dan begint de gele indicator te branden. Zie het hoofdstuk 'PAPIERSTORINGEN' voor de instructies voor het verwijderen van een vel papier dat vastgelopen is in de AdvancedPunch.

**⚠️ OPMERKING:** De indicators van de AdvancedPunch branden gedimd als de printer ingeschakeld is terwijl de aan/uit-schakelaar van de AdvancedPunch op 'uit' staat. Zodra de aan/uit-schakelaar van de AdvancedPunch op 'aan' gezet wordt, branden de indicators op volle kracht.



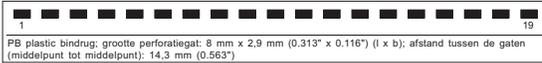


# AdvancedPunch

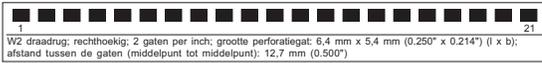
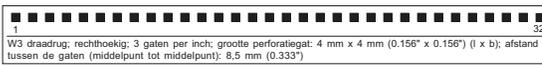
## 4. PERFORATIEPATRONEN

De AdvancedPunch is voorzien van verschillende, gemakkelijk te verwisselen ponsstempels, waarmee u doorlopend aangevoerde documenten kunt perforeren voor meerdere inbindstijlen. Door de juiste ponsstempel te kiezen, kunt u met de AdvancedPunch documenten perforeren voor elk van de in tabel 1 aangegeven inbindstijlen.

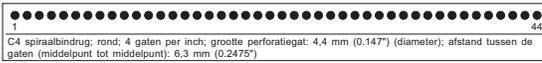
Voor inbinden met plastic bindruggen kiest u:



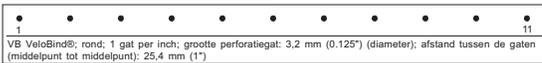
Voor inbinden met TwinLoop™ kiest u:



Voor inbinden met ColorCoil™ kiest u:



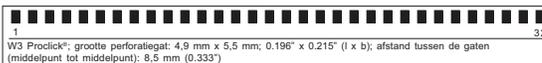
Voor inbinden met VeloBind® kiest u:



Voor inbinden van losse vellen kiest u:



Voor inbinden met Proclick® kiest u:



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De perforatiepatronen zijn niet op ware grootte afgebeeld.

Xerox -artikelnummer:

XEROX PB-19H 008R13066

XEROX W3-32H-SQ 008R13069

XEROX W2-21H-SQ 008R13068

XEROX C4-44H 008R13067

XEROX VB-11H 008R13070

XEROX 3H 008R13072

XEROX PC-32H 008R13071



## AdvancedPunch

### 5. VERWISSELEN VAN DE PONSSTEMPELS

De AdvancedPunch biedt u het gemak van verwisselbare ponsstempels, waardoor u voordelig documenten kunt perforeren voor een grote verscheidenheid aan inbindstijlen. De ponsstempels zijn snel en eenvoudig te verwisselen, zoals de onderstaande instructies duidelijk maken.

**Ponsstempels verwijderen uit het apparaat:** De sleuf voor de verwisselbare ponsstempels bevindt zich aan de linkervoorzijde van de AdvancedPunch. Als er al een ponsstempel geïnstalleerd is in de AdvancedPunch, kunt u deze eenvoudig als volgt verwijderen:

**Stap 1:** Stop de printer/het kopieerapparaat.

**Stap 2:** Open het toegangspaneel van de AdvancedPunch.

**Stap 3:** Pak de handgreep stevig vast en trek er hard aan. Hierdoor wordt het automatisch vergrendelingsmechanisme losgemaakt en kan de ponsstempel uitgenomen worden.

**Stap 4:** Trek aan de handgreep tot de ponsstempel volledig uitgehaald is, terwijl u deze ondersteunt met beide handen.

**Stap 5:** Plaats de verwijderde ponsstempel in de opbergvak aan de bovenkant van de AdvancedPunch (houd de ponsstempels uit de buurt van stof en vuil en zorg ervoor dat ze niet per ongeluk op de grond kunnen vallen).

**Stap 6:** Kies de gewenste ponsstempel voor de volgende toepassing en schuif deze in de sleuf. Druk de ponsstempel stevig in de sleuf totdat deze vastklikt.



**WAARSCHUWING: MOGELIJK GEVAAR VOOR SCHERPE PUNTEN. HOUD UW VINGERS EN ANDERE LICHAAMSDLEN BIJ HET INSTALLEREN VAN DE PONSSTEMPELS IN DE ADVANCEDPUNCH UIT DE BUURT VAN DE STEMPELSLEUF VAN HET APPARAAT, MET UITZONDERING VAN DE DAARVOOR BESTEMDE OPENING IN DE PONSSTEMPEL. HET NIET IN ACHT NEMEN VAN DEZE VOORZORGSMAATREGEL KAN LETSEL TOT GEVOLG HEBBEN.**

**Stap 7:** Sluit het toegangspaneel.

**Stap 8:** Ga verder met afdrucken en perforeren.

Wanneer een nieuwe ponsstempel in gebruik genomen wordt, kan er wat olie achterblijven rond de perforatiegaten op het papier. Na 25 tot 50 perforaties blijft er geen olie meer achter op het papier. Wij adviseren u een korte testopdracht uit te voeren na het installeren van een nieuwe of pas geoliede stempel.

### 6. PERFOREREN

Voor u begint met afdrucken waarbij de perforatiefunctie van de AdvancedPunch gebruikt wordt, moet u controleren of er geen gele indicators brandt in het display van de AdvancedPunch. Als er een gele indicator brandt, los dan eerst het probleem op voor u begint met de perforatieopdracht. Zie hoofdstuk 3. BEDIENINGSONDERDELEN voor meer informatie over de indicators. De perforatiefunctie van de AdvancedPunch werkt niet als er een gele indicator brandt.

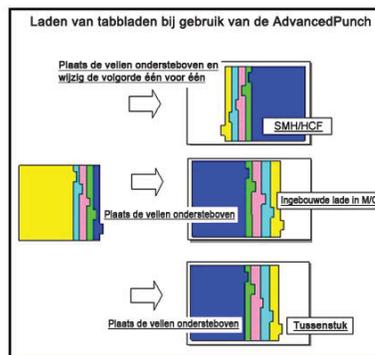
Voor u begint met de perforatieopdracht, moet u controleren of de juiste ponsstempel geïnstalleerd is in de AdvancedPunch voor het gewenste perforatie-/gatenpatroon voor de opdracht. Is niet de juiste stempel geïnstalleerd, vervang deze dan nu.

Gebruik voor het inschakelen van de perforatiefunctie van de AdvancedPunch het bedieningsscherm van de printer. Volg de onderstaande stappen om de perforatiefunctie in te schakelen.

Ga in het bedieningsscherm naar het menu **Copy**. Kies vervolgens **Copy Output** om het menu **Hole Punch & More** te openen. Als dit menu geopend is, ziet u in de kolom **Hole Punch** de optie **AdvancedPunch** staan. Kies deze optie en druk vervolgens op **Save** om terug te keren naar het menu **Copy**. De AdvancedPunch werkt nu in de perforaerstand.

### Perforeren van tabbladen

De AdvancedPunch perforaert de voorste rand van een vel. Daarom moeten tabbladen ingevoerd worden met de tabs naar de achterrand toe. De manier waarop de tabbladen in de lade geplaatst moeten worden zodat ze op de juiste manier ingevoerd worden, hangt af van de gebruikte lade.



### 7. PAPIERSTORINGEN



Dit symbool duidt op een papierstoring. Voor het verhelpen van papierstoringen in een van de volgende onderdelen van de AdvancedPunch, draait u aan één of meerdere van de knopjes om het papier vooruit te bewegen.

Onderdeel	Beschrijving
	Als er papier vastzit in de rechtstreekse papierbaan, beweegt u de papiergeleidingsplaat (PA), die aan de binnenkant zit, omhoog, waarna u het vastgelopen papier kunt verwijderen.
	Als er papier vastzit in de naar beneden lopende papierdoorvoer, beweegt u het paneel (PB2) naar rechts, waarna u het vastgelopen papier kunt verwijderen.
	Als er papier vastzit in de onderste deel van de perforatiebaan, drukt u op de vergrendeling van het onderste deel, waarna u het vastgelopen papier kunt verwijderen.
	Als er papier vastzit in de onderste deel van de perforatiebaan, drukt u op de vergrendeling van het onderste deel, waarna u het vastgelopen papier kunt verwijderen.
	Als er papier vastzit in de naar boven lopende papierdoorvoer, beweegt u het paneel naar links, waarna u het vastgelopen papier kunt verwijderen.



## AdvancedPunch

### 8. SNIPPERLADE

De snipperlade van uw AdvancedPunch bevindt zich vooraan aan de onderkant van het apparaat. De lade moet regelmatig uitgenomen en leeggemaakt worden. De AdvancedPunch geeft met behulp van een sensor aan wanneer de snipperlade vol is. Als de snipperlade vol is, dan begint de indicator op het voorpaneel van de AdvancedPunch te branden en verschijnt er een bericht in het bedieningsscherm van de printer.

### 9. VERHELPEN VAN STORINGEN

Storing	Mogelijke oorzaak
Geen voeding; apparaat prefeert niet	Het netsnoer is niet goed aangesloten op de achterkant van het apparaat of de contactdoos; de aan/uit-schakelaar is niet ingeschakeld.
Ponsstempel komt niet mee als er licht aan getrokken wordt.	De stempel is bezig een cyclus uit te voeren. Zet de ponsstempelknop (J3) in de beginstand. Dit is de stand waarin de pijlen één lijn vormen. De ponsstempel moet nu gemakkelijk uitgenomen kunnen worden. Zie ook PAPIERSTORINGEN.

### Foutcodes

De foutcodes voor de AdvancedPunch verschijnen in het bedieningsscherm als een AdvancedPunch-foutcode. In de onderstaande lijst staan de foutcodes die specifiek voor de AdvancedPunch gelden.

Fout code	Mogelijke oorzaak	Aanbevolen oplossing
040-100 040-101 040-900 040-901	Papierstoring in de AdvancedPunch.	Open het voorpaneel en kijk of er papier vastzit. Verwijder eventueel vastgelopen papier en sluit vervolgens het voorpaneel.
040-300	Het voorpaneel van de AdvancePunch is niet goed dicht	Sluit het voorpaneel van de AdvancedPunch.
040-940	De ponsstempel is niet of niet goed geïnstalleerd.	Installeer de ponsstempel of duw deze goed vast en sluit vervolgens het voorpaneel.
040-941	De snipperlade is niet of niet goed geïnstalleerd.	Installeer de snipperlade of duw deze goed vast en sluit vervolgens het voorpaneel.
040-942	De snipperlade is vol.	Maak de snipperlade leeg en zet deze terug op z'n plaats.
140-700	De snipperlade is bijna vol.	Maak de snipperlade leeg en zet deze terug op z'n plaats.

### 10. SPECIFICATIES

	115 V-apparaten
Snelheid	Tot 127 vellen per minuut
Papierformaat voor perforeren	Letter - 8.5" x 11"
Perforatiezijde	11"
Papiersoorten	20# Bond-papier tot 80# covers
Papierformaat rechtstreekse baan	Zelfde papierformaten en -soorten als bij de printer
Perforeercapaciteit	Enkel vel
Voeding	115 V, 60 Hz, éénfasestelsysteem
Elektrische gegevens	BTU/uur 1160 BTU/h Watts 310W Ampère 2.8A
Veiligheidskeurmerken	TUV/GS, CE
Afmetingen	30,5 cm (12") (b) x 97,8 cm (38.5") (h) x 72,3 cm (28.5") (d)
Gewicht	70 kg (154 lbs)
Verzendgewicht	115,5 kg (254 lbs)
Land van herkomst	Geassembleerd in Taiwan