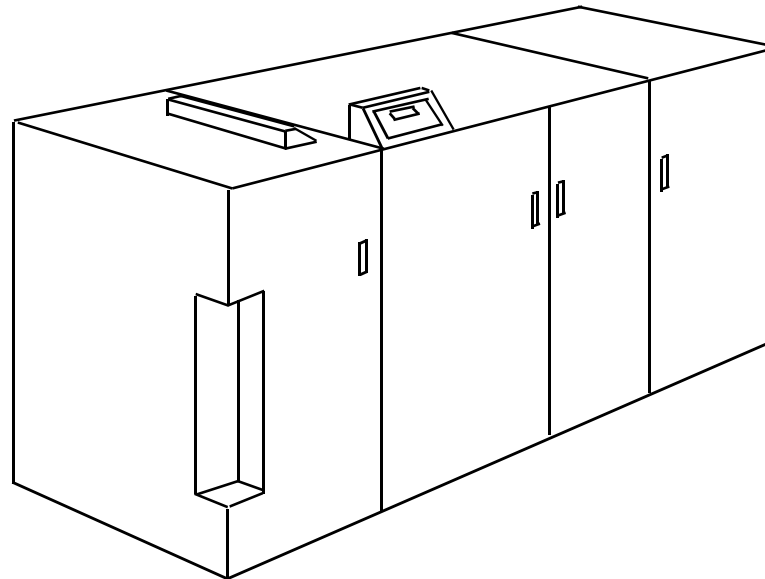

GBC FusionPunch II

With Stacker and Bypass

Service Manual



*Revision: 4.0
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Part Number: 1722683*



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

NOTICE

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Prepared by:
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9. FusionPunch II User Guide

Separate publication

Introduction

About this manual

This manual is part of the multinational documentation that is structured in a specified GBC format.

Organization

The Fusion Punch and Stacker Service Manual is the primary document used for repairing and maintaining the products. The manual contains this information divided into the following sections:

Section 1 Service Call Procedures

This section is used to identify the first audible or visual symptom for the problem. The procedures will then direct you to a RAP or identify a faulty component or subassembly.

Section 2 Status Indicator RAPs

This section contains Repair Analysis Procedures (RAPs). You will be directed to this section to isolate a faulty component or subassembly.

Section 3 Quality RAPs

This section contains Quality Repair Analysis Procedures (RAPs). You will be directed to this section if the defect is related to Punch or Stacker quality.

Section 4 Repairs / Adjustments

This section contains the instructions for removal, replacement, and adjustment of the spared parts within the machine.

Section 5 Parts Lists

This section consists of illustrations and part number lists. Any part that is spared is illustrated. Common hardware is

shown as a letter callout

Section 6 General Procedures

This section contains general procedures, product specifications, supplemental tools, supplies and modification information.

This section also contains Host Enablement procedures and Personality Profiles for Host Printer to Finisher.

Section 7 Wiring Data

This section contains illustrations and lists of the signals and connectors. The illustrations show the power, ground, and the control signal distribution. The lists show the signals and pin assignments for all connectors.

Section 8 Installation Instructions

This section contains the instructions for installation of the equipment.

Section 9 FusionPunch II User Guide

The FusionPunch II User Guide is a separate publication that describes operation and maintenance of the FusionPunch II.

How to use this manual

Start and end all service calls with the Service Call Procedures, Section 1. Perform Initial Actions and the System Check to identify a symptom.

Follow the instructions provided within the Service Call Procedures and proceed to the appropriate section of the manual.

After the repair is complete, verify the repair with the System Check.

Terminology and Symbols

The following are the terminology and symbols that are used in this manual for Warnings, Electrostatic Device or general Cautions, and Notes.



Electrostatic Discharge

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



WARNING

Improper operation may result in injury to a person.



CAUTION

Improper operation may result in machine damage.

NOTE: Hints or other information that may assist the user.

List of Abbreviations

| Acronym | Definition |
|---------|------------|
| BLK | Black |
| BLU | Blue |
| BRN | Brown |
| GRN | Green |
| ORGIORN | Orange |
| WHT | White |
| YEL | Yellow |

1. Service Call Procedures

Section Contents

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Introduction

This chapter describes the tasks that a service technician must complete when responding to a problem at a customer site. Collectively, these tasks are the Service Call Procedure.

These procedures direct you to other sections to diagnose and repair the FusionPunch II. You should return to this section to continue with the Service Call Procedure.

Complete the procedures in this chapter in the order given. By ignoring the sequence of procedures, you may diagnose a symptom incorrectly and cause the customer undue frustration and expense.

Initial Actions are used to gather information regarding the performance of the machine and to prepare the product for servicing.

System Checks are used to verify the normal operation of the machine. In the Y/N steps of the system checks, a Yes response will lead you to the next step. A No response will indicate the next step to perform or will direct you to a RAP.

RAPs will provide the instructions to isolate the faulty part or provide a list of suspect parts, when isolation is not possible.

Subsystem maintenance contains routine maintenance procedures.

Final Actions describe procedures you carry out when completing the service call.



Electrostatic Discharge

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

Technical Support Process

Technical Support

How to Call for Assistance.

Monday - Friday 9:00 AM to 5:00 PM Central Time.

1. Xerox CSE contacts GBC National Technical Specialist at 1-866-259-0101.
2. The GBC National Technical Specialist responds with support, and fills out a Help Desk Call Report Form, and logs information into a database.

Weekends and After Hour Support 5:00 PM to 9:00 AM Central Time.

1. Xerox CSE contacts GBC National Technical Specialist (Answering Service) at 1-866-259-0101.
2. Answering Service contacts GBC National Technical Specialist on call who responds within 30 minutes.
3. The GBC National Technical Specialist provides support, and fills out a Help Desk Call Report Form, and logs information into a database.

Partner Emergency On-site Support Procedure

1. The GBC National Technical Specialist works with Xerox CSE over the phone and determines that the problem cannot be resolved over the phone in a timely manner.
2. The GBC National Technical Specialist then asks Xerox CSE for the following:
 - a. CSE's Service Manager's name and phone number.
 - b. CSE's employee number.
 - c. A phone number to confirm travel arrangements.
 - d. Customer's address, phone number, and contact.
3. The GBC National Technical Specialist makes decision to go out on-site Next Flight Out (NFO), or sends the following:
 - a. A well trained, experienced GBC local technician if available.
 - b. GBC National Technical Specialist goes himself NFO if available.
 - c. If not available, asks another GBC National Technical Specialists to go on-site NFO.
4. The GBC National Technical Specialist notifies Xerox Partnership SEM about the Emergency On-site Request.
5. Once the GBC National Technical Specialist has made arrangements for this request as specified in Step 3, he then calls the Xerox CSE back to confirm the Travel Itinerary and to confirm that the CSE responsible for the account during the hours of GBC's arrival to be present.
6. The GBC National Technical Specialist notifies the Xerox CSE's Service Manager about the Emergency On-site Request.
Note: GBC can leave a voice mail or make this call early the next morning.
7. The GBC National Technical Specialist leaves a voice mail for the GBC Director of Service Operations to notify him of the Emergency On-site Request.
8. The GBC National Technical Specialist goes to the customer's site to resolve the problem.
9. The GBC National Technical Specialist fills out a trip report to be issued to Xerox Partnership SEM and the GBC Director of Service Operations.

GBC Training Process

GBC Factory Product Training for Xerox CSE's

1. Xerox contacts GBC National Technical Support at 1-866-259-0101, with the names of CSE's requiring training. GBC requires thirty (30) days prior notice to schedule training classes.
2. GBC National Technical Support will arrange training schedule.
3. GBC National Technical Support calls back Xerox with training dates and accommodations.
4. Class size is limited to maximum of Six (6) CSE's, minimum of two (2), and is two (2) days in length.
5. GBC National Technical Support will maintain training records and send to Xerox Partnership SEM upon completion of training.

Notes

Initial Actions

Description

Initial Actions are used to gather information about equipment performance and to direct the Customer Service Engineer (CSE) through the call.

Procedure

1. Ask the customer to describe or demonstrate the problem that causes the service call, and the job being finished when the problem occurred.
2. Inspect any rejected work for evidence of defects.
3. Note and record any errors displayed on the LCD.
4. Examine any customer maintenance records for previous problems or activities that may be related to this service call.
5. Go to System Checks.

System Checks

After you perform the Initial Actions, use the procedures in this section to check the operation of the equipment.

The System Check will help identify any problems and refer you to the appropriate RAP or REP.

After you have repaired any problems you may have found, perform this system check again, and then perform the Final Action procedure.

Procedure

1. Ensure that both the Punch and the Stacker(s) are plugged in and that the Main Power Switch\Circuit Breakers for all devices are switched on. Go to Step 2.
2. **Observe the Punch Control Panel.** Check the LCD panel to see if there are visible messages displayed, and if the Backlight is lit.

The backlight is operating normally **and** messages are visible on the LCD Panel.

- Y N
- The LCD Panel is completely blank (no backlight, no LCD Panel messages).
- Y N
- If the backlight is not lit, but the LCD Panel is displaying messages, go to RAP 1.3 +5 VDC Power RAP. If the backlight is OK, but there are no messages displayed, go to Step 2A.
- Go to Step 2A.
- Go to Step 3.

- 2A. Remove the rear covers of the Punch and the Stacker(s). Refer to the information in Table 1-1 to evaluate the Punch and Stacker LEDs for normal operation.

Table 1-1 Punch and Stacker LEDs

| LED/PWB | Normal Condition |
|--|---|
| LED 1 on Little Star Controller | On |
| LOA1 on Punch I/O | On when in Cycle up (55 sec delay) and in Online Mode, after Start is pressed |
| LOA2 on Punch I/O | On |
| LOA3 on Punch I/O | On |
| LED 1 on Punch AC/DC Dist. | On |
| LED 1 on Stacker 1 or 2 AC/DC Dist. | On |
| LOB1 on Stacker 1 I/O | Flashing brightly |
| LOB3 on Stacker 1 I/O | Flashing brightly |
| LOB4 on Stacker 1 I/O | Flashing brightly |

The LEDs are operating normally.

- Y N
- Refer to Table 1-2 for instructions.

Table 1-2 LED Conditions

| LED Condition | Go to RAP |
|---|---|
| All LEDs extinguished | RAP 1.1 AC Power to the Punch, and RAP 1.4 Punch +24 VDC Power. |
| Stacker 1 I/O LEDs LOB1, 3 and 4 flashing dimly, and Stacker 1 AC/DC Dist. LED 1 off, all Punch LEDs On. | RAP 1.5 Stacker +24 VDC Power |
| Stacker 2 AC/DC Dist. LED 1 off, all Stacker 1 and Punch LEDs On. | RAP 1.5 Stacker +24 VDC Power |

Go to RAP 2.1 Control Panel RAP.

3. **Evaluate error messages** on the FusionPunch II Control Panel. Compare any messages displayed to Table 1-3, and follow table instructions to locate the appropriate RAP. If no error messages are present, go to Step 4.

4. **Evaluate Host Printer Error Messages.**

- a. Go to the Host Printer User Interface. Note any failure messages on the screen. Compare them to the error messages listed in Table 1-4.
- b. Troubleshoot the Error Messages by going to the RAP listed in Table 1-4.
- c. If there are no Error Messages, go to Step 5.

5. **Run a Test Job**

- a. Open the top covers to the Punch and Stacker(s) and bypass the interlocks. Run a test job from the Host Printer and watch the sheets as they are punched and stacked. Refer to Table 1-5 for Punch/Stack Quality problems.

For jams, either note the error message associated with the jam, or refer to Table 1-6 to locate the correct RAP.

- b. (Optional for Stackers with a Bypass) Run several sheets through the Bypass and into the downstream device. Perform this step for each Bypass-configured Stacker in the system.
- c. Place several sheets into the Single Sheet Feeder to test the operation of that assembly.
- d. If the Test Job runs normally, go to Step 6.

6. **Run the Test Mode.**

- a. Open the Punch and Stacker Top Covers. Bypass the Interlock Switches.
- b. Press the Diagnostics button until the following message is displayed:

FOR SERVICE MENU

Enter Keycode

- c. Enter the Diagnostics keycode (1. Left Arrow, 2. Right Arrow, 3. Down Arrow, 4. Up Arrow).
- d. Press Stop/Reset.
- e. Press the Online/Offline button until the following message is displayed:

FUSION TEST MODE

Full Stop

7. Press the STOP/RESET to stop the test mode.
8. Switch main power to the Punch off and then on again to return to normal operation.



WARNING

When you press START in the following step, the Punch and Stacker will operate.

- f. Press the START button. The Punch and Stacker will operate.
- g. Using the information in Table 1-7, check the operation of the Punch and Stacker. For problems with specific components, use the information in the table to locate the appropriate RAP or ADJ to fix the problem.
- h. Operate the Stacker Tray for each Stacker in the system. While the Stacker Tray Motor will activate during the Test Mode, you should also test it by pressing the Raise/Lower Stacker button on the Control Panel. When the motor is running, observe the movement of the tray and the condition of the Stacker Tray 90xl Timing Belt (PL 5.1A). After driving the tray down, press the Raise/Lower Stacker button again to return the tray to the home position.

Table 1-3 FusionPunch II Control Panel Messages

| FusionPunch II Message | Meaning | Operator Action | Technician Action |
|------------------------|--|--|--|
| Jam Entrance Sensor | A sheet of paper blocks the Entrance Sensor. The Entrance Sensor is dirty or is not working correctly. | Remove the sheet of paper that blocks the Entrance Sensor. Use a dry cloth, a Q-tip or a can of air to clean the Entrance Sensor and the Reflector. | Go to RAP 4.1 Document Transport JAMs. |
| JamDocXportSensor1 | A sheet of paper blocks the Jam Document Transport Sensor1. The Jam Document Transport Sensor1 is dirty or is not working correctly. | Use a dry cloth, a Q-tip or a can of air to clean the Document Transport Sensor 1 and the Reflector. | Go to RAP 4.1 Document Transport JAMs. |
| JamDocXportSensor2 | A sheet of paper blocks the Jam Document Transport Sensor2. The Jam Document Transport Sensor2 is dirty or is not working correctly. | Remove the sheet of paper that blocks the Document Transport Sensor 2. Use a dry cloth, a Q-tip or a can of air to clean the Document Transport Sensor 2 and the Reflector. | Go to RAP 4.1 Document Transport JAMs. |
| Jam At Punch Sensor | A sheet of paper blocks the Jam at Punch Sensor. The Jam at Punch Sensor is dirty or is not working correctly. | Remove any paper from the Punch Sensor and press Reset. Use a dry cloth, a Q-tip or a can of air to clean the Punch Sensor and the Reflector. | Go to RAP 4.1 Document Transport JAMs. |
| Jam PunchExit Sensor | A sheet of paper blocks the Punch Exit Sensor. The Jam Punch Exit Sensor is dirty or is not working correctly. | Remove any paper from the Punch Exit Sensor and press Reset. Use a dry cloth, a Q-tip or a can of air to clean the Punch Exit Sensor and the Reflector. Switch on the main power to the Stacker. | <p>For jams in the Document Transport only, go to RAP 4.1 Document Transport JAMs.</p> <p>For jams in the Stacker that block the Punch Exit Sensor, go to RAP 5.3 Stacker Jams.</p> <p>If the job was to stack in Stacker 1, but entered the Stacker 1 Bypass instead and jammed there, check LOB6 and LOB7 at P/J22 on the Stacker 1 I/O PWB. If these LEDs are lit, go to RAP 3.2 and troubleshoot a failure of the Front Door Interlock for Stacker 1.</p> <p>If the job was NOT to stack in Stacker 1 but still originates in the Bypass and backs up into the Punch, go to RAP 5.4 Stacker Bypass Jams.</p> |

Table 1-3 FusionPunch II Control Panel Messages (Continued)

| FusionPunch II Message | Meaning | Operator Action | Technician Action |
|------------------------|---|---|--|
| Jam Bypass Sensor | Paper has jammed at the Stacker 1 Bypass Sensor | Remove any paper from the Stacker Bypass Exit Sensor and press Reset. Use a dry cloth, a Q-tip or a can of air to clean the Punch Exit Sensor and the Reflector. Switch on the main power to the Stacker. | If the job was to stack in Stacker 2, but entered the Stacker 2 Bypass instead and jammed there, check LOB6 and LOB7 at P/J22 on the Stacker 2 I/O PWB. If these LEDs are lit, go to RAP 3.2 and troubleshoot a failure of the Front Door Interlock for Stacker 2. For all other jams, go to RAP 5.4 Stacker Bypass Jams. |
| Jam Bypass2 Sensor | Paper has jammed at the Stacker 2 Exit Sensor | Remove any paper from the Stacker Bypass Exit Sensor and press Reset. Use a dry cloth, a Q-tip or a can of air to clean the Punch Exit Sensor and the Reflector. Switch on the main power to the Stacker. | For jams that originate in a downstream device, troubleshoot that failure first. If the jam does not originate in the downstream device, go to RAP 5.4 Stacker Bypass Jams. |
| Next Device Faulted | The downstream device has an error, or the Stacker Exit Sensor has failed. | Call for service | Check the downstream device for failure indications. If there are no indications of failure, go to RAP 5.5 Stacker Exit Sensors. |
| Punch Covers Open | The Covers did not actuate one or both of the IS4 and IS5 Cover Interlock Switches. | Close the Punch Covers. | Go to RAP 3.1 Punch Interlock Switches |
| Punch Mid Door Open | The Middle Door did not actuate the IS2 Mid Door Interlock Switch. | Close the Punch Middle Door. | Go to RAP 3.1 Punch Interlock Switches |
| Punch RightDoor Open | The Right Door did not actuate the IS1 Right Door Interlock Switch. | Close the Punch Right Door. | Go to RAP 3.1 Punch Interlock Switches |
| Punch Left Door Open | The Left Door did not actuate the IS3 Left Door Interlock Switch. | Close the Punch Left Door. | Go to RAP 3.1 Punch Interlock Switches |
| Please Home Stackers | The Stacker Tray is not in the home position. | Raise the Stacker Tray, then press Reset. | Go to RAPs 5.1 Stacker Full, Stacker Almost Full and Stacker Upper Switches & RAP 5.2 Stacker Tray Direction |
| Stacker Running-Wait | The Lower/Raise Stacker Switch has been pressed and the Stacker Tray Motor is running. Machine will not process any other commands until motor stops. | Wait until Stacker Tray Motor has stopped running. | N/A |

Table 1-3 FusionPunch II Control Panel Messages (Continued)

| FusionPunch II Message | Meaning | Operator Action | Technician Action |
|---|---|---|---|
| Please Empty Stacker | The Stacker is full. The Stacker Tray was left in the down position. | Lower the Stacker Tray, unload the paper, raise the Tray, then press Reset. | Go to RAPs 1.2 AC Power to the Stacker, RAP 5.1 Stacker Full, Stacker Almost Full and Stacker Upper Switches, and RAP 5.2 Stacker Tray Direction. |
| Stacker Direction?? | The Stacker Tray is moving in the incorrect direction. | Press STOP. Press Raise/Lower Stacker #1 to lower the Stacker. Press Raise/Lower Stacker #1 again to raise the Stacker. If error persists or returns, call for service. | Go to RAP 5.1 Stacker Full, Stacker Almost Full and Stacker Upper Switches, and RAP 5.2 Stacker Tray Direction. |
| Stacker 1 Door Open <i>Note: This dialog may appear with other interlock related dialogs. If it occurs with Stacker 1 Cover Open, Stacker 2 Door Open, and Stacker 2 Cover Open, ensure all covers and doors are closed and see the related error information below in this table.</i> | The Stacker Door did not actuate the Stacker Door Interlock Switch. | Close the Stacker Door. | Remove the rear cover of the Stacker and observe LED LOB1, LOB3 and LOB4 on the Stacker I/O PWB. If they are flashing dimly, go to RAP 1.5 Stacker +24 VDC Power. If the LEDs are normal (flashing brightly) go to RAP 3.2 Stacker Interlock Switches. |
| Stacker 1 Cover Open <i>Note: This dialog may appear with other interlock related dialogs. If it occurs with Stacker 1 Door Open, Stacker 2 Door Open, and Stacker 2 Cover Open, ensure all covers and doors are closed and see the related error information below in this table.</i> | The Stacker Cover did not actuate the Stacker Cover Interlock Switch. | Close the Stacker Cover | Remove the rear cover of the Stacker and observe LED LOB1, LOB3 and LOB4 on the Stacker I/O PWB. If they are flashing dimly, go to RAP 1.5 Stacker +24 VDC Power. If the LEDs are normal (flashing brightly) go to RAP 3.2 Stacker Interlock Switches. |

Table 1-3 FusionPunch II Control Panel Messages (Continued)

| FusionPunch II Message | Meaning | Operator Action | Technician Action |
|---|---|----------------------------------|--|
| <p>Stacker2 Door Open</p> <p><i>Note: This dialog may appear with other interlock related dialogs.</i></p> <p><i>If may occur with: Stacker 1 Cover Open, Stacker 1 Door Open, and Stacker 2 Cover Open.</i></p> <p><i>It may also occur with Stacker 2 Cover Open.</i></p> <p><i>If either of these situations occurs, ensure all covers and doors are closed and see the related error information below in this table.</i></p> | <p>The Stacker 2 Door did not actuate the Stacker 2 Door Interlock Switch.</p> | <p>Close the Stacker 2 Door</p> | <p>Go to RAP 3.2 Stacker Interlock Switches.</p> |
| <p>Stacker2 Cover Open</p> <p><i>Note: This dialog may appear with other interlock related dialogs.</i></p> <p><i>If may occur with: Stacker 1 Cover Open, Stacker 1 Door Open, and Stacker 2 Door Open.</i></p> <p><i>It may also occur with Stacker 2 Door Open.</i></p> <p><i>If either of these situations occurs, ensure all covers and doors are closed and see the related error information below in this table.</i></p> | <p>The Stacker2 Cover did not actuate the Stacker 2 Cover Interlock Switch.</p> | <p>Close the Stacker 2 Cover</p> | <p>Go to RAP 3.2 Stacker Interlock Switches.</p> |

Table 1-3 FusionPunch II Control Panel Messages (Continued)

| FusionPunch II Message | Meaning | Operator Action | Technician Action |
|--|---|------------------|---|
| Stacker 1 Cover Open Stacker 1 Door Open Stacker 2 Cover Open Stacker 2 Door Open <u>or</u> Stacker 2 Cover Open Stacker 2 Door Open | Failure of +24VDC to Stacker 1 <u>or</u> Failure of +24VDC to Stacker 2 | Call for Service | Go to RAP 1.5 Stacker +24VDC Power |
| Stacker Upper Switch?? | The Stacker Upper Switch did not release during an emptying operation. | | Go to RAPs 1.2 AC Power to the Stacker, and RAP 5.2 Stacker Tray Direction. |

Table 1-4 Printer Control Panel Messages

| Printer Message | Meaning | Operator Action | Technician Action |
|---|---|---|--|
| <i>Docutech 61XX</i> displays: Jam in area 20 and external finisher. (Fault Code P12-400) | Indicates that the printer has lost communications with the external device. | Clear any jams, press Stop/Reset, resume the printer. Check device profiles are correctly set. | Go to RAP 6.2 Printer Connectivity. Go to RAP 4.2 Punch Jam Sensors and troubleshoot a failure with the PUNCH EXIT SENSOR . |
| <i>Docutech 61XX</i> displays: External Finisher Jam. (Fault Code P12-401) | Indicates that a fault has occurred in the external device. | Clear any jams, press Stop/Reset, resume the printer. Check device profiles are correctly set. | Ensure that there are no fault indications at the downstream device. If no faults are present on the downstream device, go to RAP 5.5 Stacker Bypass Exit Sensors |
| <i>Docutech 61XX</i> displays: Jam in area 20 and external finisher. (Fault Code P12-403) | Indicates that the external device did not respond within the specified time to a sheet that the IOT sent it. | Clear any jams, press Stop/Reset, resume the printer. Check device profiles are correctly set. | Clear any jams, press Stop/Reset, resume the printer. Check device profiles are correctly set. If the failure continues to occur, go to RAP 5.5 Stacker Bypass Exit Sensors. |
| <i>Docutech 135</i> displays: Clear External Finisher to run jobs to the Bypass Transport/ External Finisher Not Ready | The current job is faulted and requires a reset. The FusionPunch II is not on-line. | Click on the Printer Icon. Select reset if the reset option is available. Press Stop/Reset, then press Online/Offline to ensure that the FusionPunch II is in online mode. | Go to RAP 6.2 Printer Connectivity |
| <i>Docutech 135, 61xx</i> displays: External Finisher Full Xerox 4xxx Printer displays: External Finisher Full | The Stacker is full and requires unloading. | Unload the Stacker. Start the FusionPunch II in online mode. | Go to RAP 5.1 Stacker Full, Stacker Almost Full and Stacker Upper Switches. |
| <i>Docutech 135, 61xx</i> displays: Clear External Finisher to run jobs to the Bypass Transport or External Finisher Not Ready Xerox 4xxx Printer displays: External Finisher Not Ready | The FusionPunch II is not in online mode. | Press Stop/Reset, then press Online/Offline to check that the FusionPunch II is in online mode. Then, press Start. | Go to RAP 6.2 Printer Connectivity |
| <i>Docutech 135, 61xx</i> does not recognize the Finisher. Xerox 4xxx Printer does not recognize the Finisher. | The Host Printer has no error message displayed or has no External Finisher option. | Check that the Profile is loaded in the Printer and set up correctly. Contact your System Administrator to verify proper Host Enablement. | Enable the Host Printer |

Table 1-5 Punch/Stack Quality Checkout.

| Punch/Stack Quality Problem | Technician Action |
|---|--------------------------|
| Sets do not offset. | Go to Quality RAP 5.3 |
| Trailing Edges of documents are torn, marked, or creased. | Go to Quality RAP 5.4 |
| The document stack is shingled | Go to Quality RAP 5.5 |
| Documents are not punched | Go to Quality RAP 5.6 |
| Documents are punched in the center of the sheet | Go to Quality RAP 5.7 |

Table 1-6 Jam Locations

| Jam Location | Technician Action |
|-----------------------------|---|
| Punch Document Transport | Go to RAP 4.1 Document Transport Jams |
| Stacker (not in the Bypass) | <p>If there is no Bypass installed, go to RAP 5.3 Stacker Jams.</p> <p>If there is a Bypass installed, and the jam is in Stacker 2 that backs up into the Stacker 1 Bypass, check the LEDs on the Stacker 1 Exit Sensor. Normal conditions are; Green LED - always lit, Red LED - lit when the sensor is NOT BLOCKED, extinguished when the sensor is BLOCKED. If these conditions do not exist, go to RAP 5.5 Stacker Bypass Exit Sensors.</p> |
| Stacker Bypass | Go to RAP 5.4 Stacker Bypass Jams |

Table 1-7 Test Mode Checkout.

| Punch Component | Normal Operation | Corrective Action |
|---|---|--|
| Document Transport Motor | The Document Transport Timing Belt moves smoothly without excessive noise. | Go to ADJ 4.1 Document Transport Main Timing Belt Adjustment |
| Punch Motor | The Die Pins move up and down. | Go to Quality RAP 5.6 and ADJ 4.4 & 4.5. |
| Back Gauge Solenoid | The Back Gauge Solenoid actuates three times each second. | Go to Quality RAP 5.4 or Quality RAP 5.7 |
| Punch Clutch | The Punch Clutch actuates three times each second. | Go to Quality RAP 5.6 and ADJ 4.4 & 4.5 |
| Stacker Tappers | The Stacker Tappers actuate three times each second. | Go to Quality RAP 5.5 |
| Offset Solenoids | The Offset Solenoids actuate alternately each second. | Go to Quality RAP 5.3 |
| Stacker Tray Motor | If the Stacker Tray is in the maximum vertical position, the Tray Motor lowers the Tray one position a second when the Upper Switch is deactivated. | Go to RAP 5.3 |
| Stacker Bypass Motor (if installed) | The Stacker Bypass Motor drives the Stacker Bypass Assembly Belt. | Go to RAP 1.2 AC Power to the Stacker. |
| Stacker Bypass Gate Solenoid (if installed) | The Stacker Bypass Gate Solenoid energizes to direct sheets to the Stacker. It de-energizes to direct sheets to the Stacker Bypass. | Go to RAP 5.4 Stacker Bypass Jams. |

Cleaning and Maintenance

The Punch and Stacker require periodic cleaning. When you are servicing the FusionPunch II, perform the following maintenance procedures:

Every Call

The following maintenance should be completed during each service call:

1. Clean all Sensors and Reflectors.
2. Use alcohol to clean all Rollers, Belts, and O-rings.

Subsystem Maintenance

The following maintenance should be completed when servicing a subsystem:

1. Remove the Covers and inspect all Belts, Bearings, and Shafts for excessive wear.
2. Remove the Deck Covers. Use a vacuum to clean the inside of the machine.
3. Clean the Punch Motor and the Deck Motor.
4. Check that all Motor and Sensor wires and connections are tight.

Final Actions

1. Use a lint free cloth and water or Formula A to clean the exterior of the FusionPunch II and Stacker.
2. Ensure that the Punch main power has been turned off and on to exit the Diagnostics Mode.

Notes

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RAP 1.1 AC Power to the Punch

Initial Actions

Make sure that the Punch Main Power Switch/Circuit Breaker is switched on. Check fuse FS-1 on the +24VDC Power Supply PWB (PL 3.1). If this fuse is blown, the machine may appear to have a problem with main AC Power.

Procedure

1. Remove the Punch Rear Covers.



WARNING

AC voltages are dangerous. Use extreme care to check the voltages.

2. Connect the Power Cord and switch on the main power.
3. Measure the AC input voltage at the P/J1 Line Connector, across the brown and blue wires, on the Punch AC/DC Distribution PWB.

The voltage is within 108 VAC to 120 VAC tolerance.

Y | **N**
|
| Go to Step 5.
Go to Step 4.

4. Measure the AC input voltages at P/J2 on the AC/DC Distribution PWB, across the brown and blue wires.

The voltages are within 108 VAC to 120 VAC tolerance.

Y | **N**
|
| Replace the Punch AC/DC
| Distribution PWB (PL 3.1).

Check the input voltage at CN 1 on the +24 VDC Power Supply PWB.

The voltage is within 108 VAC to 120 VAC tolerance.

Y | **N**
|
| Replace the harness between P/J 2
| on the Punch AC/DC Distribution
| PWB and CN1 on the +24 VDC
| Power Supply PWB (PL 6.1B).

Go to Step 5.

5. Measure the AC input voltages at P/J 3 on the AC/DC Distribution PWB, across the brown and blue wires.

The voltages are within 108 VAC to 120 VAC tolerance.

Y | **N**
|
| Replace the Punch AC/DC
| Distribution PWB (PL 3.1).

Check the input voltage at CN 1 on the +5 VDC Power Supply PWB.

The voltage is within 108 VAC to 120 VAC tolerance.

Y | **N**
|
| Replace the harness between P/J 3
| on the Punch AC/DC Distribution
| PWB and CN1 on the +5 VDC Power
| Supply PWB (PL 6.1B).

Go to Step 6.

6. Measure the AC voltage at the Punch Power Switch/Circuit Breaker, across the brown and blue wires.

The voltage is within 108 VAC to 120 VAC tolerance.

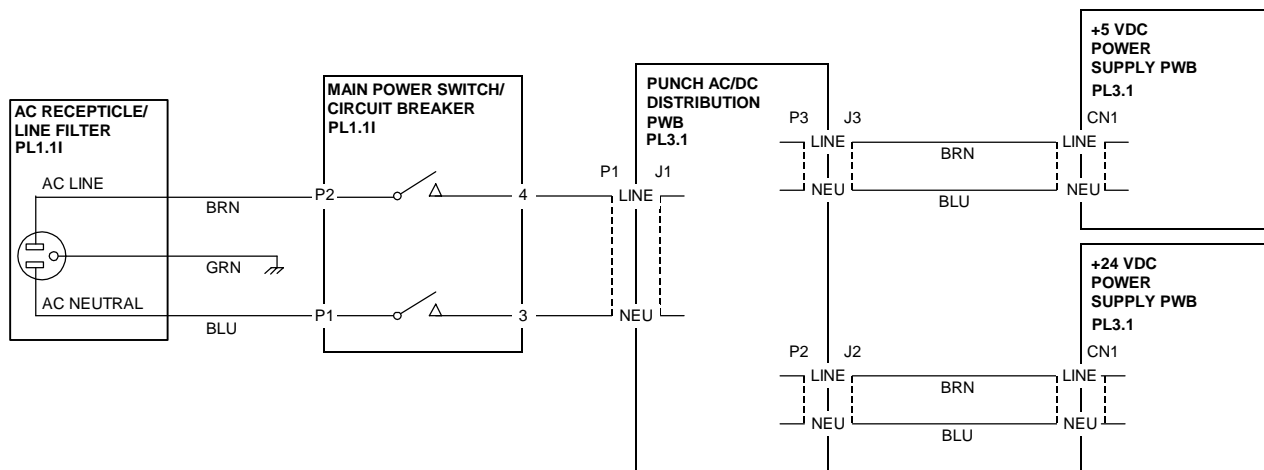
Y | **N**
|
| Unplug the Punch from the wall outlet.
| Disconnect the Line Filter from Punch
| Main Power Circuit Breaker.
| Reconnect the Punch to the wall
| outlet. Check for 108 VAC to 120
| VAC between the Line Filter and the
| Main Power Circuit Breaker.

There is 108 VAC to 120 VAC between these two points.

Y | **N**
|
| Verify the wall outlet voltage.
| Check continuity on the Power
| Cord, replace if necessary. If the
| problem still exists, replace the
| Punch Main Power Circuit
| Breaker (PL 1.1I).

Replace the Line Filter (PL 1.1I).

Replace the harness between the Punch Main Power Switch/Circuit Breaker and the Punch AC/DC Distribution PWB (PL 6.1C).



RAP 1.2 AC Power to the Stacker

Description

This RAP is to be used for AC Power problems in the Stacker. It can be used for Stackers that are configured with or without a Bypass.

For machines configured with a Bypass, this RAP will also provide procedures to troubleshoot AC Power to a second GBC Stacker. This RAP does not contain procedures for other downstream devices.

NOTE: For machines without a Bypass installed, this procedure will still refer to the single stacker as Stacker 1.

Initial Action

Make sure that the Main Power Switch/Circuit Breaker for the Punch and Stacker(s) are switched on. Check fuse FS-1 on the Punch +24VDC Power Supply PWB (PL 3.1). If this fuse is blown, the machine may appear to have a problem with main AC Power. Remove the rear panel to the problem stacker.

Procedure

1. Connect the Power Cord and switch on the main power. Ensure all interlocks are closed.



WARNING

AC voltages are dangerous. Use extreme care to check the voltages.

2. Using the information in the table below, enter the Diagnostics mode (GP1) and use the left/right keys to select the desired output.

| Component | Diagnostic |
|---------------------------|--|
| Stacker 1 Tray | S1 OUTC6 StackerDeck 0000000000000000 |
| Stacker 1Tray Direction | S1 OUTC7 StackerDir 0000000000000000 |
| Stacker 1 O-ring Motor | S1 OUTC8 Stack Oring 0000000000000000 |
| Stacker 1 Bypass Motor** | S1 OUTB2 StackBypass 0000000000000000 |
| Stacker 2* Tray | S2 OUTC6 StackerDeck 0000000000000000 |
| Stacker 2* Tray Direction | S2 OUTC7 StackerDir 0000000000000000 |
| Stacker 2* O-ring Motor | S2 OUTC8 Stack Oring 0000000000000000 |
| Stacker 2 Bypass Motor** | S2 OUTB2 StackBypass 0000000000000000 |

* If installed

** Only on Stackers with Bypass installed.

Activate the Stacker Tray Motor, the Stacker O-Ring Motor, and if installed, the Stacker Bypass Motor in the problem stacker.

NOTE: The Stacker Dir output is used to change the direction of the Stacker Tray so that it can be moved up and down. Toggle this output to change the direction of the tray.

The Stacker Tray Motor, Stacker O-Ring Motor and Stacker Bypass Motor (if installed) in the problem stacker all operate when the outputs are active.

Y N

The Stacker Tray Motor, Stacker O-Ring Motor **AND** the Stacker Bypass Motor (if installed) all **FAIL** to run.

Y N

If the Stacker Tray Motor only failed to run, go to Step 7. If the Stacker O-Ring Motor only failed to run, go to Step 8. If the Stacker Bypass Motor only failed to run, go to Step 9.

Go to Step 3.

The AC Outputs from the Stacker AC/DC Distribution PWB are all functioning correctly.

3. Measure the AC input voltage at the P/J1 Line Connector, across the brown and blue wires, on the problem Stacker AC/DC Distribution PWB.

The voltage is within 108 VAC to 120 VAC tolerance.

Y N

Go to Step 4.

Go to Step 5.

4. Measure the AC voltage at the problem Stacker Power Switch/Circuit Breaker, across the brown and blue wires.

The voltage is within 108 VAC to 120 VAC tolerance.

Y **N**

Unplug the Stacker from the wall outlet. Disconnect the Line Filter from the Stacker Main Power Switch/Circuit Breaker. Reconnect the Stacker to the wall outlet. Check for 108 VAC to 120 VAC between the Line Filter and the Main Power Switch/Circuit Breaker.

There is 108 VAC to 120 VAC between these two points.

Y **N**

Verify the wall outlet voltage. Check continuity on the Power Cord, replace if necessary. If the problem still exists, replace the problem Stacker Main Power Switch/Circuit Breaker (PL 1.2A).

Replace the Line Filter (PL 1.2A).

Replace the harness between the Stacker 1 Main Power Switch/Circuit Breaker and the Stacker 1 AC/DC Distribution PWB (PL 6.2C).

5. This is a dual Stacker configuration.

Y **N**

Go to Step 6.

The failure is occurring in Stacker 1.

Y **N**

On the Stacker 2 AC/DC Distribution PWB, check +24 VDC to Stacker 2 by placing the meter leads across P/J 13-24V and P/J13-0V.

There is +24 VDC at this point.

Y **N**

On the Stacker 1 AC/DC Distribution PWB, check +24 VDC across P/J 13-24V and P/J13-0V. If there is +24 VDC at this point, replace the harness between P/J 13 on Stacker 1 and Stacker 2 (PL 6.2B). If +24 VDC is not present, go to Step 6.

Replace the Stacker 2 AC/DC Distribution PWB (PL 3.2).

Go to Step 6.

6. On the Stacker 1 AC/DC Distribution PWB, check +24 VDC to Stacker 1 by placing the meter leads across P/J 14-24V and P/J14-0V.

There is +24 VDC at this point.

Y **N**

Go to RAP 1.5 Stacker +24 VDC Power.

Replace the Stacker 1 AC/DC Distribution PWB (PL 3.2).

7. On the problem Stacker AC/DC Distribution PWB, disconnect P/J 7 to the Stacker Tray Motor. Activate the Stacker Tray Motor using the information in the table below.

| | | | | | |
|---------------------------|----|-------|-------------|----|------------------|
| Stacker 1 Tray | S1 | OUTC6 | StackerDeck | O6 | 0000000000000000 |
| Stacker 1 Tray Direction | S1 | OUTC7 | StackerDir | O7 | 0000000000000000 |
| Stacker 2* | S2 | OUTC6 | StackerDeck | O6 | 0000000000000000 |
| Stacker 2* Tray Direction | S2 | OUTC7 | StackerDir | O7 | 0000000000000000 |

* If installed

With the output active, Check for 108 VAC to 120 VAC between J7-NUI and J7-FWD, and then J7-NUI and J7-REV.

NOTE: Check voltages across both J7-FWD and J7-REV with the Stacker Direction output in both positions.

With the outputs active, there is 108 VAC to 120 VAC between J7-NUI and J7-FWD, and between J7-NUI and J7-REV.

Y **N**

Replace the Stacker AC/DC Distribution PWB (PL 3.2) in the problem Stacker.

Check continuity between P7 and the Stacker Tray Motor. If the harness is OK, replace the Stacker Tray Motor (PL 1.2B).

8. On the problem Stacker AC/DC Distribution PWB, disconnect P/J 8 to the Stacker O-Ring Motor. Activate the Stacker O-Ring Motor using the information in the table below.

| | | | | | |
|-------------------------|----|-------|-------------|----|------------------|
| Stacker 1 O-ring Motor | S1 | OUTC8 | Stack Oring | O8 | 0000000000000000 |
| Stacker 2* O-ring Motor | S2 | OUTC8 | Stack Oring | O8 | 0000000000000000 |

* If installed

With the output active, check for 108 VAC to 120 VAC between J8-NUI and J8-RMT2.

There is 108 VAC to 120 VAC between these points.

Y **N**

Replace the Stacker AC/DC Distribution PWB (PL 3.2) in the problem Stacker.

Check continuity between P8 and the Stacker O-Ring Motor. If the harness is OK, replace the Stacker O-Ring Motor (PL 1.2B).

9. The Stacker Bypass Motor does not run. On the problem Stacker AC/DC Distribution PWB, disconnect P/J 10 to the Stacker Bypass Motor. Activate the Bypass Motor using the information in the table below.

| | |
|--------------------------|---|
| Stacker 1 Bypass Motor** | S1 OUTB2 StackBypass O10 000000000 <u>0</u> 000000 |
| Stacker 2 Bypass Motor** | S2 OUTB2 StackBypass O10 000000000 <u>0</u> 000000 |

*** Only on Stackers with Bypass installed.*

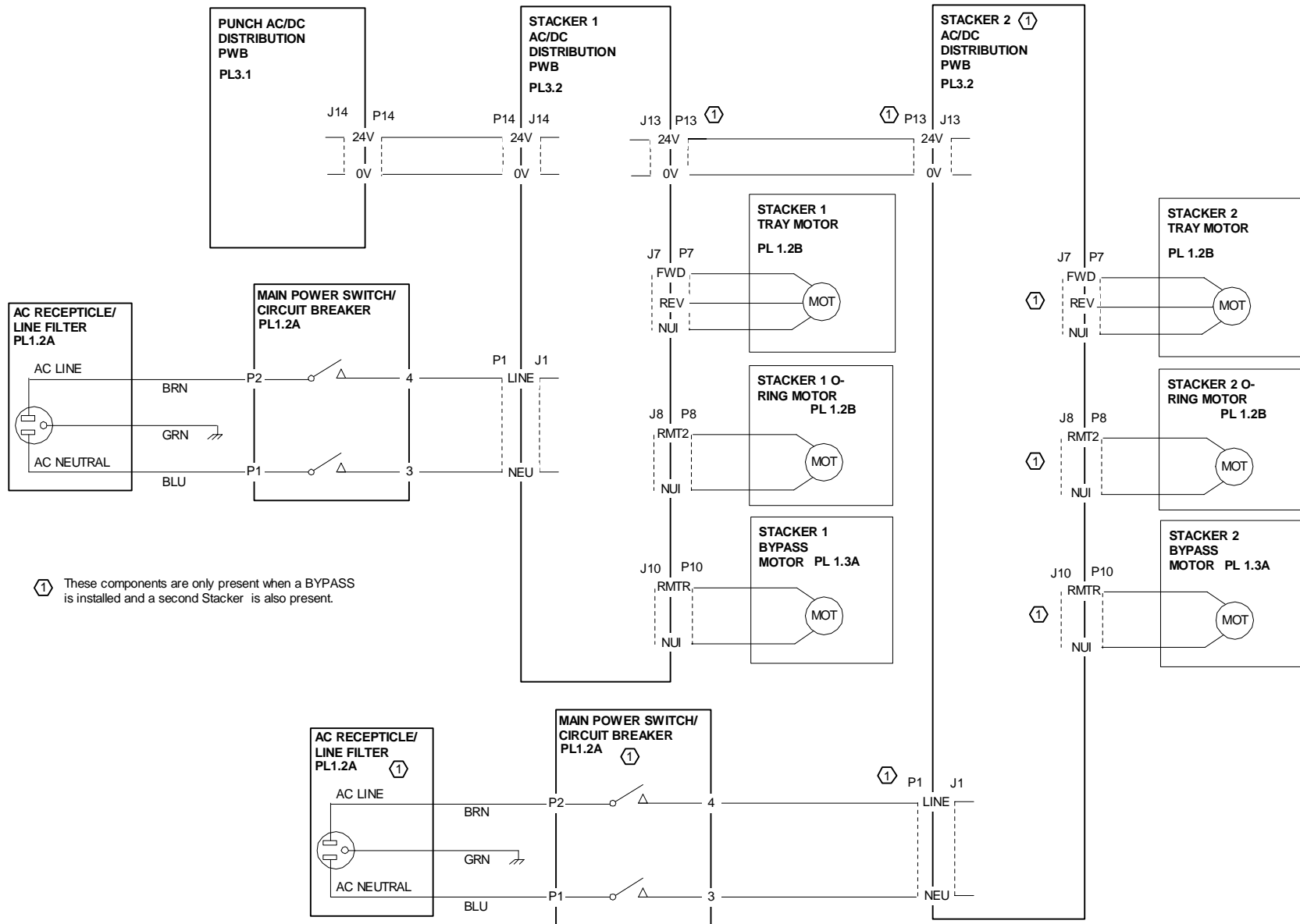
With the output active, check for 108 VAC to 120 VAC between J10-NUI and J10-RMTR.

There is 108 VAC to 120 VAC between these points.

Y N

Replace the Stacker AC/DC Distribution PWB (PL 3.2) in the problem Stacker.

Check continuity between P10 and the Stacker O-Ring Motor. If the harness is OK, replace the Stacker Bypass Motor (PL 1.3A).



RAP 1.3 +5VDC Power

Description

This RAP is used to troubleshoot +5 VDC power to the backlight in the Control Panel.

Procedure

1. Remove the Back Panel.
2. Switch on the Main Power Switch/Circuit Breaker.



WARNING

There are areas of high voltage on the Power Supply. Use caution when working in this area with the digital multimeter probes.

3. Using a digital multimeter, place the common lead on CN2, Pin 3 or 4 (black wire) and the positive lead on Pin 1 or 2 (red wire) on the +5VDC Power Supply PWB.

The voltage is +4.75 VDC to +5.25 VDC.

Y N
|
Go to Step 4.

Go to Step 5.

4. On the +5 VDC Power Supply PWB, check for AC voltage on CN1, across the brown and blue wires.

There is 108 to 120 Volts AC across the brown and blue wires at CN1.

Y N
|
Go to RAP 1.1 AC Power to the Punch.

Go to Step 5.

5. Switch off the Main Power Switch/Circuit Breaker.
6. Disconnect the Power Supply Connector CN2 from the +5 VDC Power Supply PWB.
7. Switch on the Main Power Switch/Circuit Breaker.
8. Using a digital multimeter, place the common lead on CN2, Pin 3 or 4 (black wire) and the positive lead on Pin 1 or 2 (red wire) on the +5VDC Power Supply PWB.

The +5 VDC voltage is within tolerance.

Y N
|
Replace the +5 VDC Power Supply (PL 3.1).

Go to Step 9.

9. Switch off the Main Power Switch/Circuit Breaker. Reconnect the CN2 Connector and disconnect P/J12 from the AC/DC Distribution PWB. Then, switch on the Main Power Switch/Circuit Breaker.
10. On the AC/DC Distribution PWB check for +5 VDC at P/J5, across the black wires (Pin 3 or 4) and red wires (Pin 1 or 2).

The voltage is +4.75 VDC to +5.25 VDC.

Y N
|
Check the wires and connections between the +5 VDC Power Supply PWB and the AC/DC Distribution PWB. Repair or replace, as necessary (PL 6.1B).

Go to Step 11.

11. On the AC/DC Distribution PWB, check for +5 VDC across P/J12-+5V and P/J12-0V.

The voltage at this point is +4.75 VDC to +5.25 VDC.

Y N
|
Replace the Punch AC/DC Distribution PWB (PL 3.1).

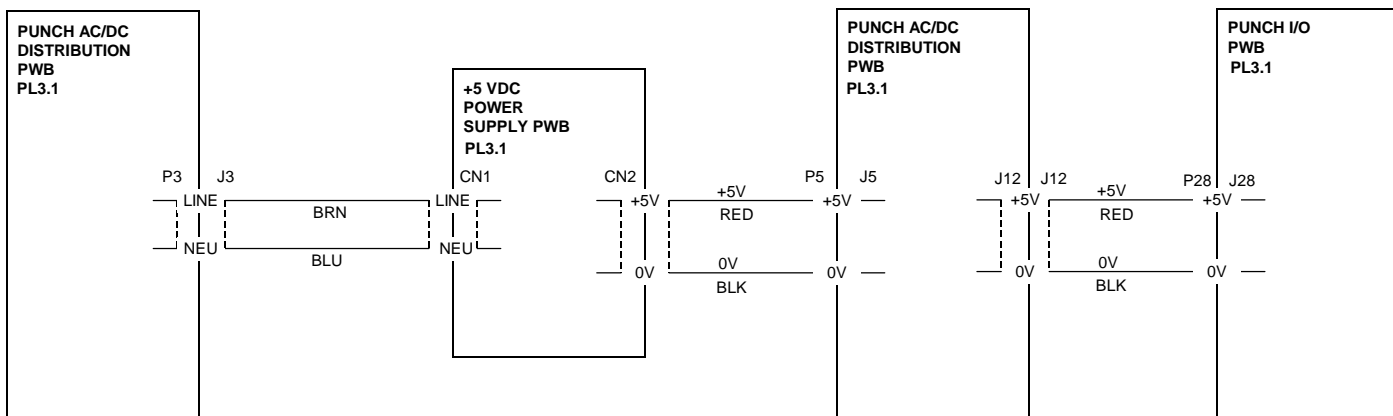
Reconnect P/J12. Go to Step 12.

12. On the Punch I/O PWB, check for +5 VDC across P/J 28-+5V and P/J 28-0V.

The voltage at this point is +4.75 VDC to +5.25 VDC.

Y N
|
Check the wires and connections between the AC/DC Distribution PWB and the Punch I/O PWB. Repair or replace, as necessary (PL 6.1B).

The +5VDC Circuit is OK.



RAP 1.4 Punch +24VDC Power

Initial Actions

Check fuse FS-1 on the +24VDC Power Supply PWB (PL 3.1). If this fuse is blown, the machine may appear to have a problem with main AC Power.

Procedure

1. Ensure all machine interlocks are closed. Switch off Machine Main Power and remove the Punch Right Rear Panel.
2. On the Punch I/O PWB, disconnect P/J 6. Check continuity between P 6-24VI and P 6-24V.

There is continuity through the closed Punch Interlocks.

Y N

Go to RAP 3.1 Punch Interlock Switches.

Reconnect P/J 6 and go to Step 3.

3. Switch on the Main Power.



WARNING

There are areas of high voltage on the Power Supply. Use caution when working in this area with the multimeter probes.

4. On the +24 VDC Power Supply PWB, check for AC voltage on CN1, across the brown and blue wires.

There is 108 to 120 Volts AC across the brown and blue wires at CN1.

Y N

On the AC/DC Distribution PWB, check for AC voltage on P/J 2, across the brown and blue wires.

Y N

On the AC/DC Distribution PWB, check for AC voltage on P/J 1, across the brown and blue wires. If the voltage is OK, replace the Punch AC/DC Distribution PWB (PL 3.1). If the reading at this point is bad, go to RAP 1.1 AC Power to the Punch.

Replace the harness between J2 on the AC/DC Distribution PWB and the +24 VDC Power Supply PWB (PL 6.1B).

Place the common lead on CN2, Pin 5, 6, 7, and 8 (black wires) and the positive lead on Pin 1, 2, 3, and 4 (orange wires) on the +24VDC Power Supply PWB.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the Punch +24 VDC Power Supply PWB (PL 3.1).

On the Punch AC/DC Distribution PWB, check for +24 VDC between P/J 4-24V and P/J 4-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the harness between P/J 4 on the Punch I/O PWB and CN2 on the +24 VDC Power Supply PWB. (PL 6.1B)

On the Punch AC/DC Distribution PWB, check for +24 VDC between P/J 12-24V and P/J 12-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the Punch AC/DC Distribution PWB (PL 3.1).

On the Punch I/O PWB, check for +24 VDC between P/J 28-24V and P/J 28-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the harness between P/J 28 on the Punch I/O PWB and P/J 12 on the Punch AC/DC Distribution PWB. (PL 6.1A)

On the Punch I/O PWB, check for +24 VDC between P/J 26-24V and P/J 26-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the Punch I/O PWB (PL 3.1).

On the Little Star Controller PWB, check for +24 VDC between P/J 1-DC IN and P/J 1-GND.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the harness between the Punch I/O PWB P/J 26 and the Little Star Controller PWB P/J 1 (PL 6.1A).

On the Punch AC/DC Distribution PWB, check for +24 VDC between P/J 14-24V and P/J 14-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the Punch AC/DC
Distribution PWB (PL 3.1).

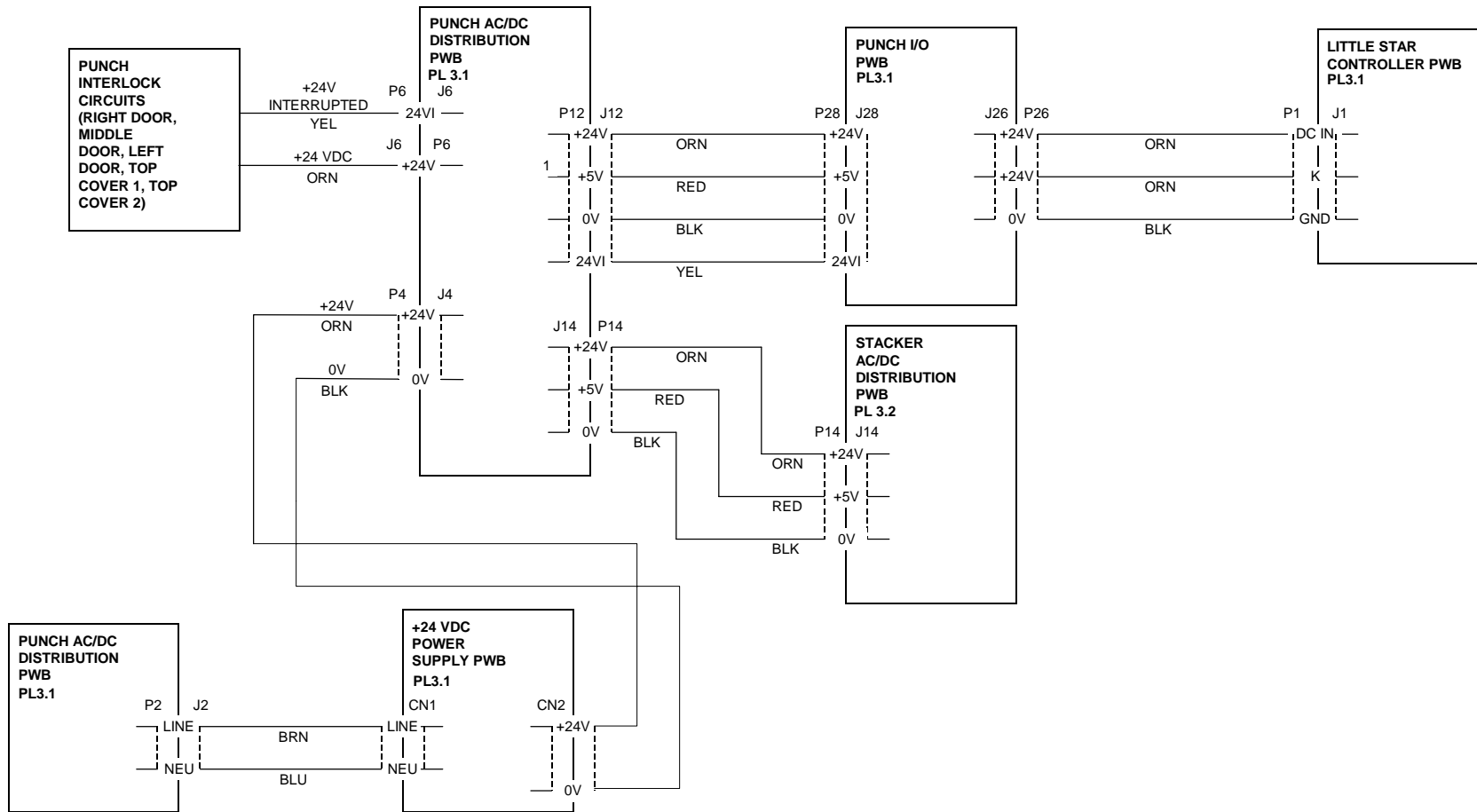
On the Stacker AC/DC Distribution PWB,
check for +24 VDC between P/J 14-24V
and P/J 14-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the harness between the
Punch AC/DC Distribution PWB P/J
14 and the Stacker AC/DC
Distribution PWB P/J 14 (PL 6.1B).

The +24 VDC Power Circuit are OK.



RAP 1.5 Stacker +24VDC Power

Description

This RAP is used to troubleshoot problems with +24VDC power to the Stacker. It can be used for Stackers that are configured with or without a Bypass.

For machines configured with a Bypass, this RAP will also provide procedures to troubleshoot +24VDC power to a second GBC Stacker. This RAP does not contain procedures for other downstream devices.

NOTE: For machines without a Bypass installed, this procedure will still refer to the single stacker as Stacker 1.

Initial Actions

Check fuse FS-1 on the Punch +24VDC Power Supply PWB (PL 3.1). If this fuse is blown, the machine may appear to have a problem with main AC Power.

Procedure

1. Ensure all machine interlocks are closed. Switch off Stacker Main Power and remove the Stacker 1 Rear Panel.
2. The Stacker is equipped with a Bypass.

Y N

On the Stacker AC/DC Distribution PWB, disconnect the 4 pin connector that makes up P/J 6A and P/J16A. Check continuity between:

- P 6A-24VI and P 6A-24V.
- P 16A-24VI and P 16A-24V.

There is continuity through the closed Stacker Interlocks.

Y N

Go to RAP 3.2 Stacker Interlock Switches.

Reconnect P/J 6A and P/J16A and go to Step 4.

Go to Step 3.

3. On the Stacker 1 AC/DC Distribution PWB, disconnect P/J 16B. Check continuity between P 16B-24VI and P 16B-24V (across the orange and yellow wires).

There is continuity through the closed Stacker 1 Top Cover Interlock.

Y N

Reconnect P/J 16 and go to RAP 3.2 Stacker Interlock Switches.

Reconnect P/J 16 and go to Step 4.

4. Switch on the Main Power.



WARNING

There are areas of high voltage in the Stacker. Use caution when working in this area with the multimeter probes.

5. On the Stacker 1 AC/DC Distribution PWB, check for +24 VDC between P/J 14-24V and P/J 14-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Remove the Punch Right Rear Panel and on the Punch AC/DC Distribution PWB, check for +24 VDC between P/J 14-24V and P/J 14-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Go to RAP 1.4 Punch +24VDC Low Voltage Power Supply RAP.

Replace the harness between P/J 14 on the Punch AC/DC Distribution PWB and P/J 14 on the Stacker AC/DC Distribution PWB (PL 6.1B).

Go to Step 6.

6. On the Stacker 1 AC/DC Distribution PWB, check for +24 VDC between P/J 12-24V and P/J 12-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the Stacker 1 AC/DC Distribution PWB (PL 3.2).

On the Stacker 1 I/O PWB, check for +24 VDC between P/J 28-24V and P/J 28-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y N

Replace the harness between P/J 28 on the Stacker 1 I/O PWB and P/J 12 on the Stacker 1 AC/DC Distribution PWB (PL 6.2A).

The Stacker 1 +24 VDC Power Circuit are OK. Go to Step 7 to check +24 VDC Power for Stacker 2.

7. On the Stacker 2 AC/DC Distribution PWB, check for +24 VDC between P/J 13-24V and P/J 13-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y **N**

On the Stacker 1 AC/DC Distribution PWB, check for +24 VDC between P/J 13-24V and P/J 13-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y **N**

Replace the Stacker 1 AC/DC Distribution PWB (PL 3.2)

Replace the harness between P/J 13 on the Stacker 1 AC/DC Distribution PWB and P/J 13 on the Stacker 2 AC/DC Distribution PWB (PL 6.2B).

Go to Step 8.

8. On the Stacker 2 AC/DC Distribution PWB, check for +24 VDC between P/J 12-24V and P/J 12-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y **N**

Replace the Stacker 2 AC/DC Distribution PWB (PL 3.2).

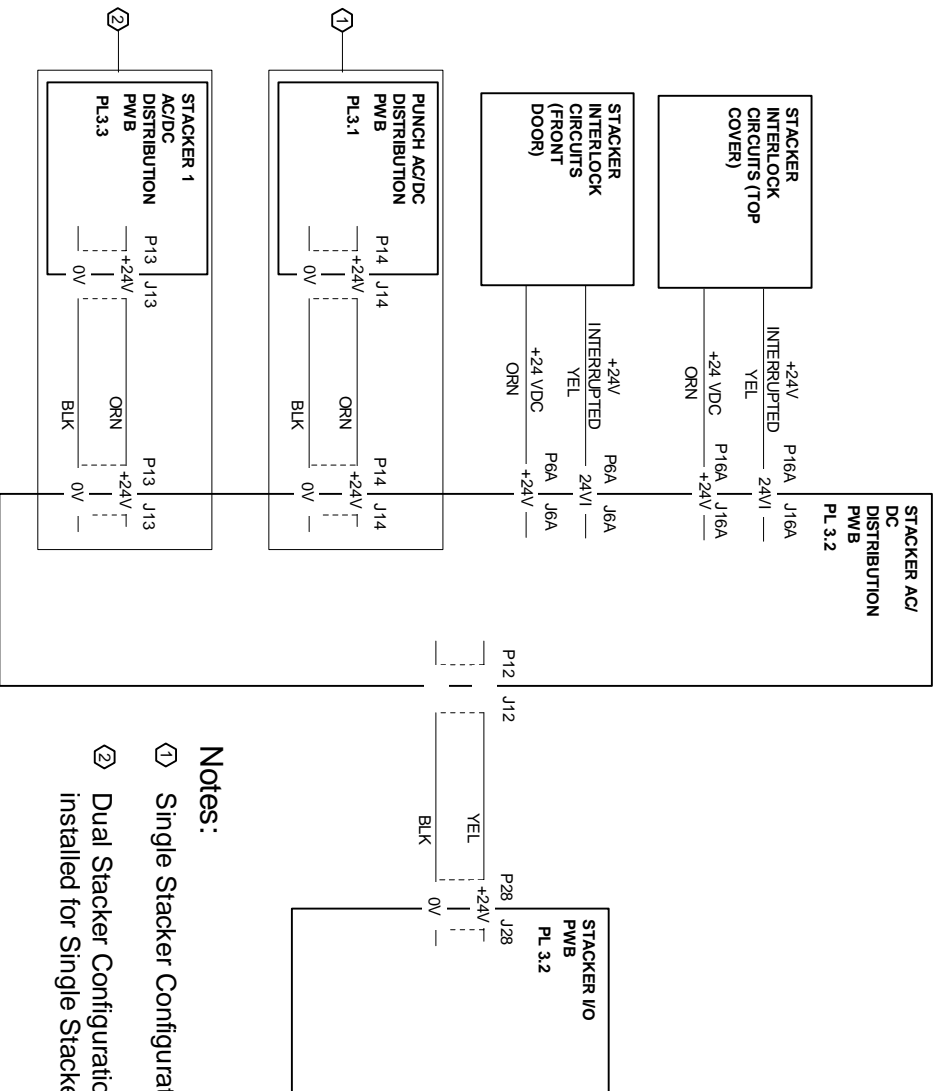
On the Stacker 2 I/O PWB, check for +24 VDC between P/J 28-24V and P/J 28-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y **N**

Replace the harness between P/J 28 on the Stacker 2 I/O PWB and P/J 12 on the Stacker 2 AC/DC Distribution PWB (PL 6.2A).

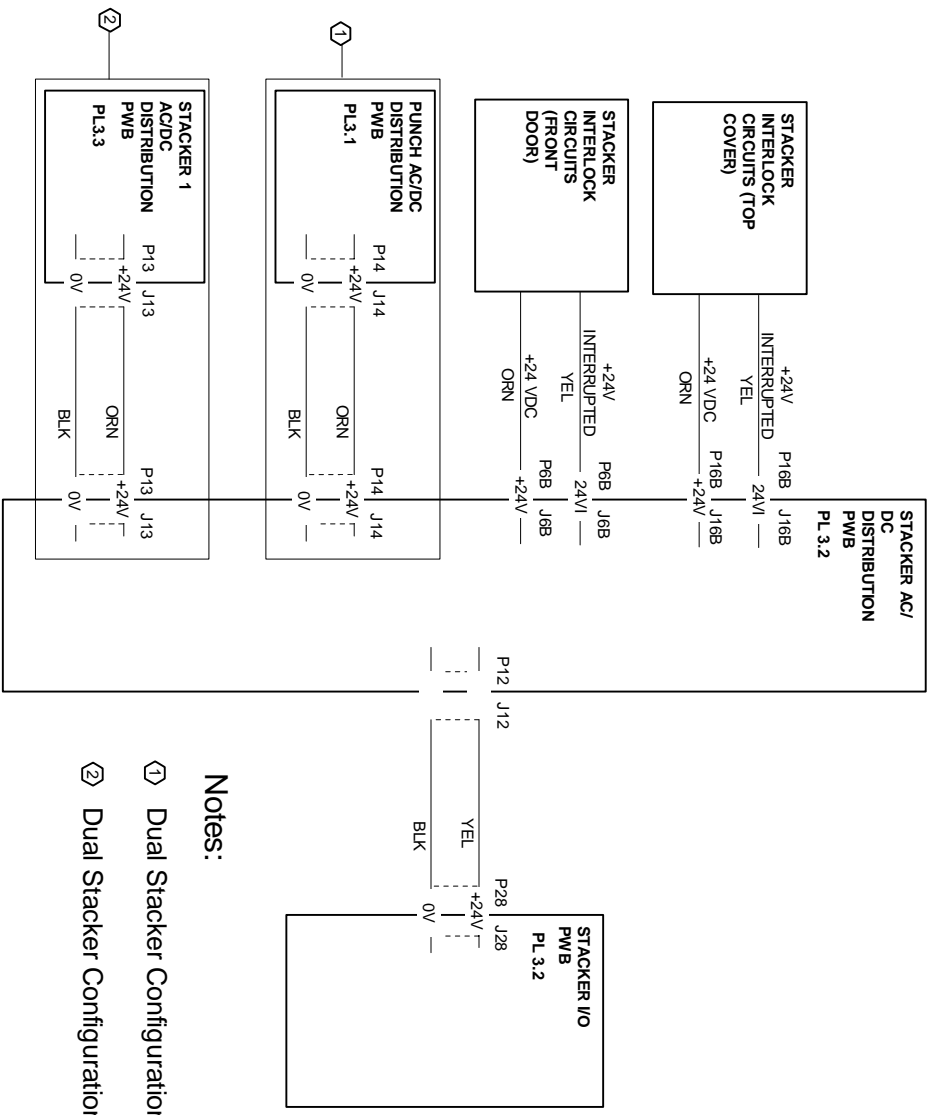
The Stacker 2 +24 VDC Power Circuit are OK.



Stacker with **no** Bypass

Notes:

- ① Single Stacker Configuration, or, Stacker 1 of 2.
- ② Dual Stacker Configuration, Stacker 2 only. Not installed for Single Stacker Configuration.



Stacker configured with Bypass

Notes:

- ① Dual Stacker Configuration, Stacker 1 of 2 only.
- ② Dual Stacker Configuration, Stacker 2 only.

RAP 2.1 Control Panel

Description

This RAP will isolate a Control Panel problem to the failed component.

Initial Actions

Ensure that the Punch Main Power Switch/Circuit Breaker is switched on. Remove the Punch Rear Covers.

Procedure

1. Observe the condition of the LCD Panel.

The LCD Panel is blank (no messages are displayed).

Y **N**
|
| Go to Step 2.

Open the Control Panel Assembly. Check continuity on the ribbon cable between P/J 3 on the Punch Daughter PWB, and the connector to the LCD Panel Assembly.

The continuity on the ribbon cable is OK.

Y **N**
|
| Replace the ribbon cable (PL 6.1D).
Replace the LCD Panel (PL 2.1A).

The problem is still present.

Y **N**
|
| The LCD Panel is working correctly.
Replace the Daughter PWB (PL 3.1).

The problem is still present.

Y **N**
|
| The LCD Panel is working correctly.
Go to Step 1A.

1A. Check continuity in the ribbon cable between J2 on the Daughter PWB and connector H1 on the Little Star Controller PWB.

The continuity is OK.

Y **N**
|
| Replace the ribbon cable (PL 6.1D).
Replace the Little Star Controller PWB (PL 3.1).

2. The LCD Panel Backlight is lit and messages are displayed.

Y **N**
|
| The backlight is not lit. On the Daughter PWB, check for +5 VDC across J1-red wire and J1-black wire.
There is +5 VDC at this point.

Y **N**
|
| Go to RAP 1.3 +5 VDC Power.
Go to Step 3.

Go to Step 4.

3. Open the Control Panel Assembly. Check continuity on the ribbon cable between P/J 3 on the Punch Daughter PWB and the connector to the LCD Panel Assembly.

The continuity on the ribbon cable is OK.

Y **N**
|
| Replace the ribbon cable (PL 6.1D).
Replace the LCD Panel (PL 2.1A).

The problem is still present.

Y **N**
|
| The LCD Panel is working correctly.
Replace the Daughter PWB (PL 3.1).

The problem is still present.

Y **N**
|
| The LCD Panel is working correctly.
Check continuity in the ribbon cable between J2 on the Daughter PWB and connector H1 on the Little Star Controller PWB.

The continuity is OK.

Y **N**
|
| Replace the ribbon cable (PL 6.1D).
Replace the Little Star Controller PWB (PL 3.1).

4. Perform the Diagnostics Keypad Test (GP3).

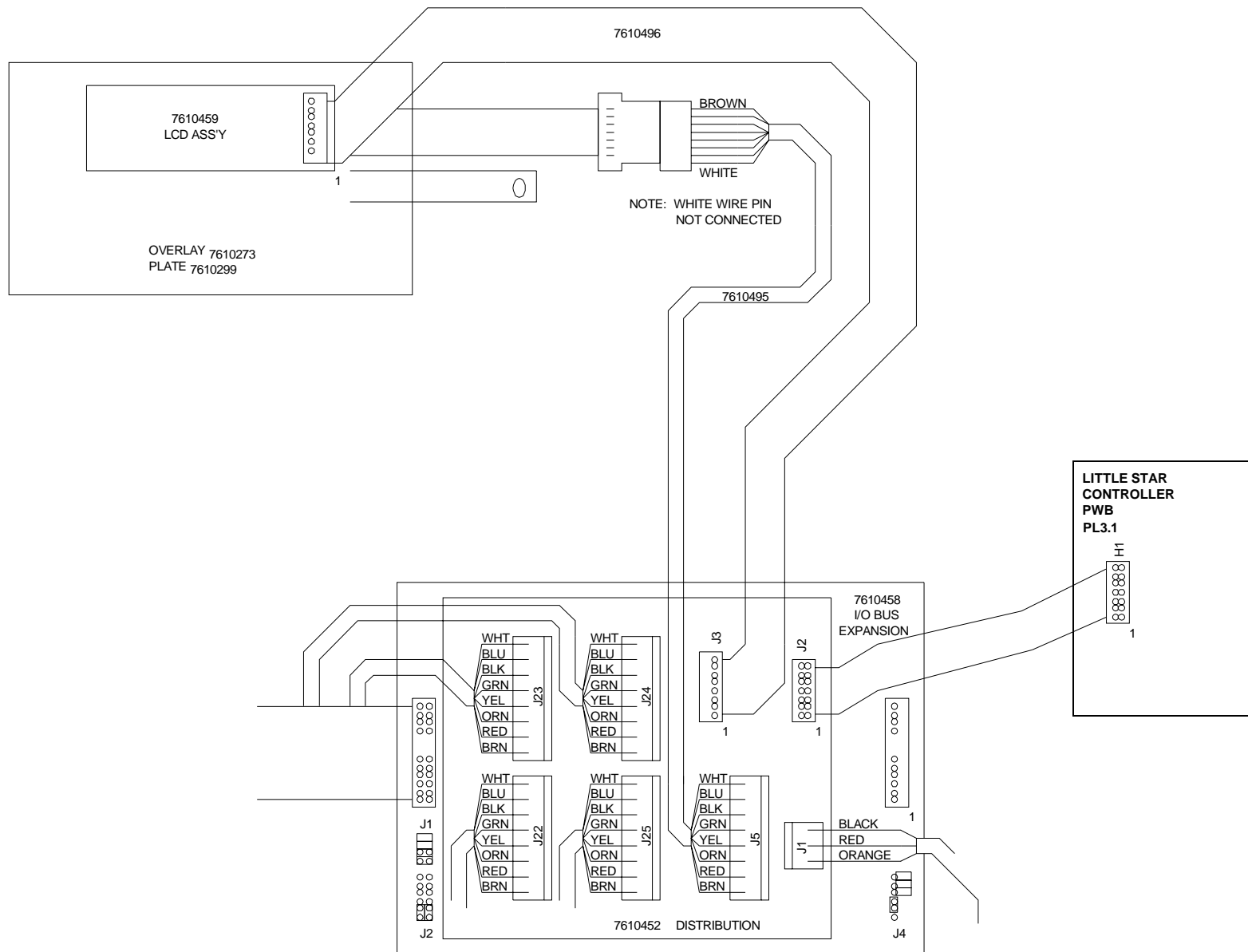
The Keypad Test is OK.

Y **N**
|
| Go to Step 5.
The LCD Panel, Keypad and Backlight are working normally.

5. Check continuity on the harness between the Keypad and P/J 5 on the Daughter PWB.

The continuity on the harness is OK.

Y **N**
|
| Replace the harness (PL 6.1D).
Replace the Keypad (PL 2.1A) if the problem is still present, replace the Daughter PWB (PL 3.1).



RAP 3.1 Punch Interlock Switches

Description

This RAP is used to troubleshoot failures of all Punch Interlocks (Doors and Covers). Specific problems would be when an open interlock is continually indicated, even when the doors and covers are closed.

Procedure

- Using the information in the table below, enter the Diagnostics mode and use the left/right keys to select the desired input.

| Interlock | Diagnostic |
|-------------|---|
| Top Covers | P INA6 Top Covers I3 11 <u>0</u> 0110011001100 |
| Left Door | P INB3 Left Door I14 1100110011001 <u>1</u> 00 |
| Middle Door | P INB2 Middle Door I15 11001100110011 <u>0</u> 0 |
| Right Door | P INB1 Right Door I16 110011001100110 <u>0</u> |

Sequentially activate and deactivate the interlock and observe the Control Panel for a change in state (0 to 1, or 1 to 0).

There is a change in state when the interlock is activated and deactivated.

Y N
|
Go to step 2.

Go to Step 7.

- Using the information in the following table, on the Punch I/O PWB check the LED that corresponds with the interlock. Sequentially activate and deactivate the

interlock and observe the LED for a change in state (Interlock closed = Off, Interlock open = On).

| Interlock | I/O PWB LED |
|-------------|-------------|
| Top Covers | LIA6 |
| Left Door | LIB3 |
| Middle Door | LIB2 |
| Right Door | LIB1 |

There is a change in LED state when the interlock is activated and deactivated.

Y N
|
Go to Step 4.

Go to step 3.

- Using the information in the following table, check the continuity of the cable between the P25 pin corresponding to the Interlock and the corresponding pin on P3.

| Interlock | Check |
|-------------|-------------------|
| Top Covers | P25-INA6 to P3-13 |
| Left Door | P25-INB3 to P3-14 |
| Middle Door | P25-INB2 to P3-15 |
| Right Door | P25-INB1 to P3-16 |

The continuity is OK.

Y N
|
Replace the cable between the Punch I/O PWB and the Little Star Controller PWB (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

- Using the information in the following table, disconnect P/J 19 on the Punch I/O PWB. Check the corresponding I/O PWB LED to see if it is lit when the connector is disconnected.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

| Interlock | I/O PWB LED |
|-------------|-------------|
| Top Covers | LIA6 |
| Left Door | LIB3 |
| Middle Door | LIB2 |
| Right Door | LIB1 |

The LED corresponding to the suspect interlock remains lit when P/J 19 is disconnected.

Y N
|
Leave the connector disconnected and go to Step 5.

Leave the connector disconnected and go to Step 6.

6. Using the information in the following table, check the continuity of the cable between the Punch I/O PWB P25 pin corresponding to the Interlock and the corresponding pin on P3 on the Controller PWB.

| Interlock | Check |
|-------------|-------------------|
| Top Covers | P25-INB4 to P3-13 |
| Left Door | P25-INB3 to P3-14 |
| Middle Door | P25-INB2 to P3-15 |
| Right Door | P25-INB1 to P3-16 |

The continuity is OK.

- Y N**
 |
 | Replace the harness between P25 and P 3 (PL 6.1A).
 |
 | Replace the Little Star Controller PWB (PL 3.1).

7. Using the information in the following table, place a jumper between the signal input on J19 and the 0 VDC pin on J19. With the jumper in place, the corresponding Punch I/O PWB LED should extinguish.

| Interlock | Jumper Between Pins | I/O PWB LED |
|-------------|---------------------|-------------|
| Top Covers | 0V and INA6 | LIA6 |
| Left Door | 0V and INB3 | LIB3 |
| Middle Door | 0V and INB2 | LIB2 |
| Right Door | 0V and INB1 | LIB1 |

With the jumper in place, the corresponding Punch I/O PWB LED extinguishes.

- Y N**
 |
 | Replace the Punch I/O PWB (PL 3.1).
 |
 | Re-connect P/J 19 and go to Step 7.

8. Isolate the +24 VDC circuit across the interlock by disconnecting the two NO1 connectors. Check continuity across the contacts while activating the interlock.

When the interlock is closed, there is continuity across the NO1 contacts.

- Y N**
 |
 | Replace the Interlock Switch (PL 1.1A).
 |
 | Reconnect the NO1 connectors and go to Step 8.

9. Isolate the circuit across the interlock by disconnecting the two NO3 connectors. Check continuity across the contacts while activating the interlock.

When the interlock is closed, there is continuity across the NO3 contacts.

- Y N**
 |
 | Replace the Interlock Switch (PL 1.1A).
 |
 | Reconnect the NO3 connectors and go to Step 9.

10. With all other interlocks closed, check continuity in the +24 VDC harness between P/J 6-24V on the Punch AC/DC Distribution PWB and P/J 6-24VI on the Punch AC/DC Distribution PWB.

The continuity check is good.

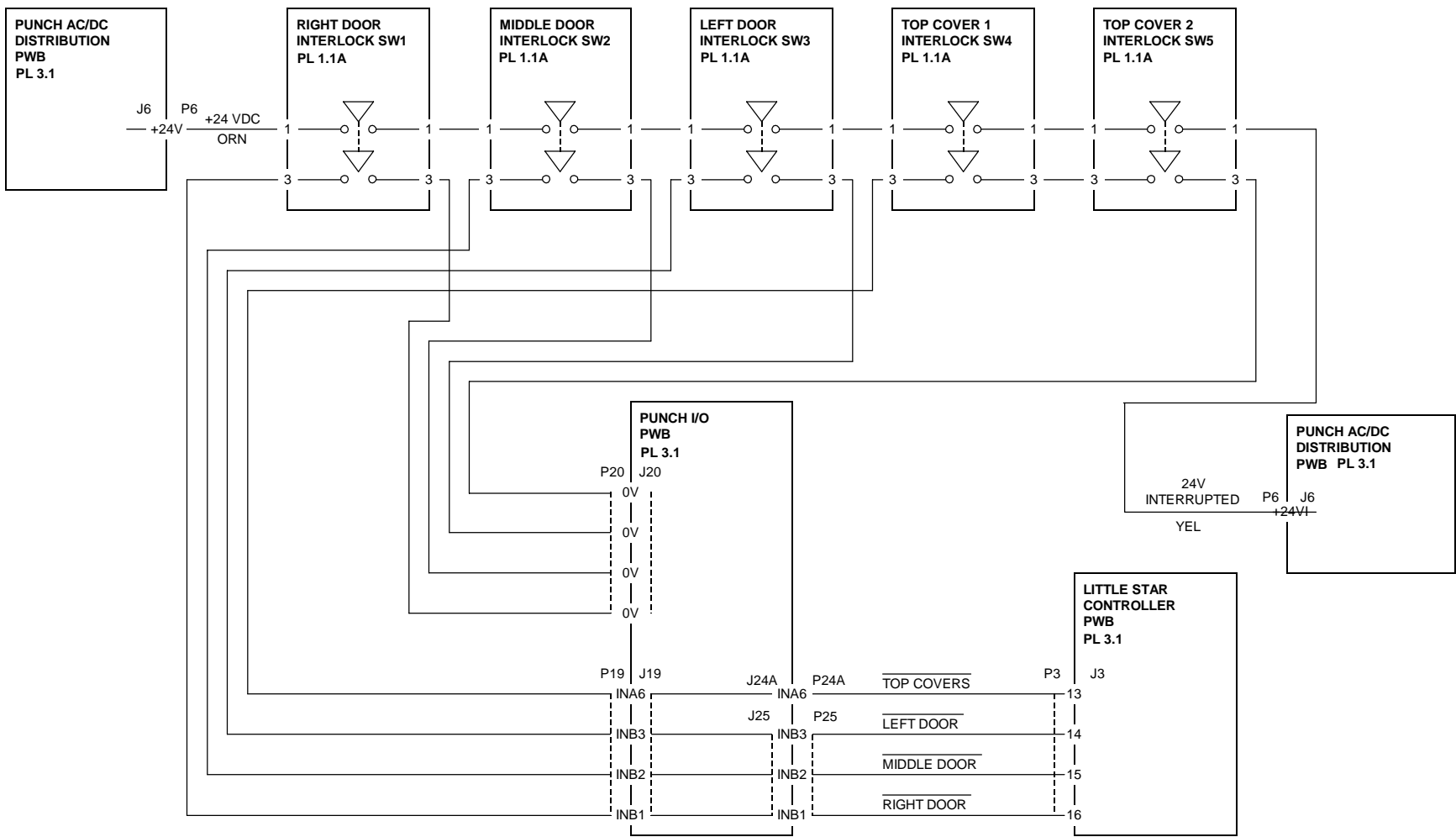
- Y N**
 |
 | Replace the harness (PL 6.1B).
 |
 | Go to Step 10.

11. Ensure all other interlocks are closed. Using the information in the table below, check the harness between P/J 20 and P/J 19 on the Punch I/O PWB.

| Interlock | P/J 20 Pin | P/J 19 Pin |
|-------------|------------|------------|
| Top Covers | 0V | INA6 |
| Left Door | 0V | INB3 |
| Middle Door | 0V | INB2 |
| Right Door | 0V | INB1 |

The continuity check is good.

- Y N**
 |
 | Replace the harness (PL 6.1A).
 |
 | Replace the Little Star Controller PWB (PL 3.1). If the problem is still present, replace the Punch I/O PWB (PL 3.1).



RAP 3.2 Stacker Interlock Switches

Description

This RAP is used to troubleshoot failures of all Stacker Interlocks (Front Door and Top Cover). It can be used for Stackers that are configured with or without a Bypass.

For machines configured with a Bypass, this RAP will also provide procedures to troubleshoot interlock problems in a second GBC Stacker. This RAP does not contain procedures for other downstream devices.

*NOTE: For machines without a Bypass installed, this procedure will still refer to the single stacker as Stacker 1. In instances where the Stacker in question is the first **or** second in a series, it will be referred to simply as the Stacker.*

Procedure

1. There is a Bypass installed in Stacker 1.

Y **N**
 |
 | Go to Step 2.
 |
 Go to Step 3.

2. On the Stacker 1 AC/DC Distribution PWB, check for +24 VDC between P/J 14-24V and P/J 14-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y **N**
 |
 | Go to RAP 1.5 Stacker +24 VDC Power.
 |
 Go to Step 4.

3. On the Stacker 2 AC/DC Distribution PWB, check for +24 VDC between P/J 13-24V and P/J 13-0V.

The voltage is +23.5 VDC to +25.5 VDC.

Y **N**
 |
 | Go to RAP 1.5 Stacker +24 VDC Power.
 |
 Go to Step 4.

4. The table below contains information for Stacker 1 and Stacker 2. Depending on your configuration, use the information in the table to enter the Diagnostics mode and select the desired input with the left/right keys.

| Interlock | Diagnostic |
|----------------------|--|
| Stacker 1 Top Cover | S1 INA6 Top Cover I7 11001 <u>1</u> 0011001100 |
| Stacker 1 Front Door | S1 INB1 Front Door I6 110011 <u>0</u> 011001100 |
| Stacker 2 Top Cover | S2 INA6 Top Cover I7 11001 <u>1</u> 0011001100 |
| Stacker 2 Front Door | S2 INB1 Front Door I6 110011 <u>0</u> 011001100 |

Sequentially activate and deactivate the interlock and observe the Control Panel for a change in state (**0** to **1**, or **1** to **0**).

There is a change in state when the interlock is activated and deactivated.

Y **N**
 |
 | Go to step 5.

Go to Step 10 (+24VDC Loop Problem).

5. The table below contains information for Stacker 1 and Stacker 2. Depending on your configuration, use the information in the table to check the LED on the Stacker 1 or Stacker 2 I/O PWB that corresponds with the interlock.

Sequentially activate and deactivate the interlock and observe the LED for a change in state (Interlock closed = Off, Interlock open = On).

| Interlock | Stacker I/O PWB LED |
|----------------------|---------------------|
| Stacker 1 Top Cover | Stacker 1 I/O LIA6 |
| Stacker 1 Front Door | Stacker 1 I/O LIB1 |
| Stacker 2 Top Cover | Stacker 2 I/O LIA6 |
| Stacker 2 Front Door | Stacker 2 I/O LIB1 |

There is a change in LED state when the interlock is activated and deactivated.

Y **N**
 |
 | Go to Step 7.
 |
 Go to step 6.

6. The table below contains information for Stacker 1 and Stacker 2. Depending on your configuration, use the information in the table to check the continuity of the cable between the Stacker 1 or Stacker 2 I/O PWB and the Punch Daughter PWB with which it corresponds.

| Interlock | Check |
|----------------------|--|
| Stacker 1 Top Cover | Stacker 1 I/O P24A-INA6* to Punch Daughter PWB 1 P24-6 |
| Stacker 1 Front Door | Stacker 1 I/O P25-INB1 to Punch Daughter PWB 1 P25-1 |
| Stacker 2 Top Cover | Stacker 2 I/O P24A-INA6 to Punch Daughter PWB 2 P24-6 |
| Stacker 2 Front Door | Stacker 2 I/O P25-INB1 to Punch Daughter PWB 2 P25-1 |

* If two Stackers are installed, this connector will be P24B.

The continuity is OK.

Y N
 |
 Replace the cable between the Stacker I/O PWB and its corresponding Daughter PWB (PL 6.2A).

Replace the Little Star Controller PWB (PL 3.1).

7. The table below contains information for Stacker 1 and Stacker 2. Using the information in the table, disconnect P/J 19 on the Stacker 1 or Stacker 2 I/O PWB. Check the corresponding I/O PWB LED to see if it is lit when the connector is disconnected.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

| Interlock | LED |
|----------------------|------------------------|
| Stacker 1 Top Cover | Stacker 1 I/O PWB LIA6 |
| Stacker 1 Front Door | Stacker 1 I/O PWB LIB1 |
| Stacker 2 Top Cover | Stacker 2 I/O PWB LIA6 |
| Stacker 2 Front Door | Stacker 2 I/O PWB LIB1 |

The LED corresponding to the suspect interlock remains lit when P/J 19 is disconnected.

Y N
 |
 Leave the connector disconnected and go to Step 8.

Leave the connector disconnected and go to Step 9.

8. The table below contains information for Stacker 1 and Stacker 2. Depending on your configuration, use the information in the table to check the continuity of the cable between the Stacker 1 or Stacker 2 I/O PWB and the Punch Daughter PWB with which it corresponds.

| Interlock | Check |
|----------------------|--|
| Stacker 1 Top Cover | Stacker 1 I/O P24A-INA6* to Punch Daughter PWB 1 P24-6 |
| Stacker 1 Front Door | Stacker 1 I/O P25-INB1 to Punch Daughter PWB 1 P25-1 |

| Interlock | Check |
|----------------------|---|
| Stacker 2 Top Cover | Stacker 2 I/O P24A-INA6 to Punch Daughter PWB 2 P24-6 |
| Stacker 2 Front Door | Stacker 2 I/O P25-INB1 to Punch Daughter PWB 2 P25-1 |

* If two Stackers are installed, this connector will be P24B.

The continuity is OK.

Y N
 |
 Replace the faulty harness (PL 6.2A).

Depending on the problem Stacker, replace Daughter PWB 1 or Daughter PWB 2 (PL 3.1).

9. The table below contains information for Stacker 1 and Stacker 2. Using the information in the table, place a jumper between the signal input on J19 and the 0 VDC pin on J19 on Stacker 1 or Stacker 2. With the jumper in place, the corresponding Punch I/O PWB LED should extinguish.

| Interlock | Jumper Between J 19 Pins | LED |
|----------------------|--------------------------------|--------------------|
| Stacker 1 Top Cover | Stacker 1 I/O J 19 0V and INA6 | Stacker 1 I/O LIA6 |
| Stacker 1 Front Door | Stacker 1 I/O J 19 0V and INB1 | Stacker 1 I/O LIB1 |
| Stacker 2 Top Cover | Stacker 2 I/O J 19 0V and INA6 | Stacker 2 I/O LIA6 |

| Interlock | Jumper Between J 19 Pins | LED |
|----------------------|--------------------------------|--------------------|
| Stacker 2 Front Door | Stacker 2 I/O J 19 0V and INB1 | Stacker 2 I/O LIB1 |

With the jumper in place, the corresponding Stacker I/O PWB LED extinguishes.

Y N
 |
 | Replace the Stacker 1 or Stacker 2 I/O PWB (PL 3.2).

Re-connect P/J 19 and go to Step 10.

10. For the problem interlock, isolate the +24 VDC circuit across the interlock by disconnecting the two NO1 connectors. Check continuity across the contacts while activating the interlock.

When the interlock is closed, there is continuity across the NO1 contacts.

Y N
 |
 | Replace the Interlock Switch (PL 1.2A).

Reconnect the NO1 connectors and go to Step 11.

11. For the problem interlock, isolate the circuit across the interlock by disconnecting the two NO3 connectors. Check continuity across the contacts while activating the interlock.

When the interlock is closed, there is continuity across the NO3 contacts.

Y N
 |
 | Replace the Interlock Switch (PL 1.2A).

Reconnect the NO3 connectors. Go to Step 12.

12. Refer to the following table. Select your configuration and the Stacker in which the problem occurred. Then, go to the Checkout for your selection.

| Config. | Stacker 1 Interlocks Checkout | Stacker 2 Interlocks Checkout |
|---|------------------------------------|------------------------------------|
| Single Stacker No Bypass | Checkout A Go to Step 13 | N/A |
| Single Stacker with a Bypass | Checkout B Go to Step 17 | N/A |
| Dual Stacker, Bypass installed in Stacker 1 <u>Only</u> | Checkout B Go to Step 17 | Checkout A Go to Step 13 |
| Dual Stacker, Bypass installed in <u>both Stacker 1 and Stacker 2</u> | Checkout B Go to Step 17 | Checkout B Go to Step 17 |

13. **Interlocks Checkout A.**

If the problem is with the Front Door Interlock, go to Step 14. If the problem is with the Top Cover Interlock, go to Step 15.

14. With all interlocks closed, on the Stacker AC/DC Distribution PWB, check continuity between P/J 6A-24V and P/J 6A-24VI (Front Door Interlock).

The continuity check is good.

Y N
 |
 | Replace the harness (PL 6.2A).
 Go to Step 16.

15. With all interlocks closed, on the Stacker AC/DC Distribution PWB, check continuity between P/J 16A-24V and P/J 16A-24VI (Top Cover Interlock).

The continuity check is good.

Y N
 |
 | Replace the harness (PL 6.2A).
 Go to Step 16.

16. Ensure all other interlocks are closed. Using the information in the table below, check the harness between P/J 20 and P/J 19 on the Stacker I/O PWB.

| Interlock | P/J 20 Pin | P/J 19 Pin |
|------------|------------|------------|
| Top Cover | 0V | INA6 |
| Front Door | 0V | INB1 |

The continuity check is good.

Y N
 |
 | Replace the harness (PL 6.2A).
 Replace the Daughter PWB (PL 3.1). If the problem is still present, replace the Stacker I/O PWB (PL 3.2).

17. **Interlocks Checkout B**

With all interlocks closed, on the Stacker AC/DC Distribution PWB, check continuity between P/J 6B-24V and P/J 6B-24VI (Front Door Interlock).

The continuity check is good.

Y N
 |
 | Replace the harness (PL 6.2A).
 Go to Step 19.

18. With all interlocks closed, on the Stacker AC/DC Distribution PWB, check continuity between P/J 16B-24V and P/J 16B-24VI (Top Cover Interlock).

The continuity check is good.

Y N

 | |
 | | Replace the harness (PL 6.2A).

Go to Step 19.

19. Ensure all other interlocks are closed. Using the information in the table below, check the harness between P/J 20 and P/J 19 on the Stacker I/O PWB.

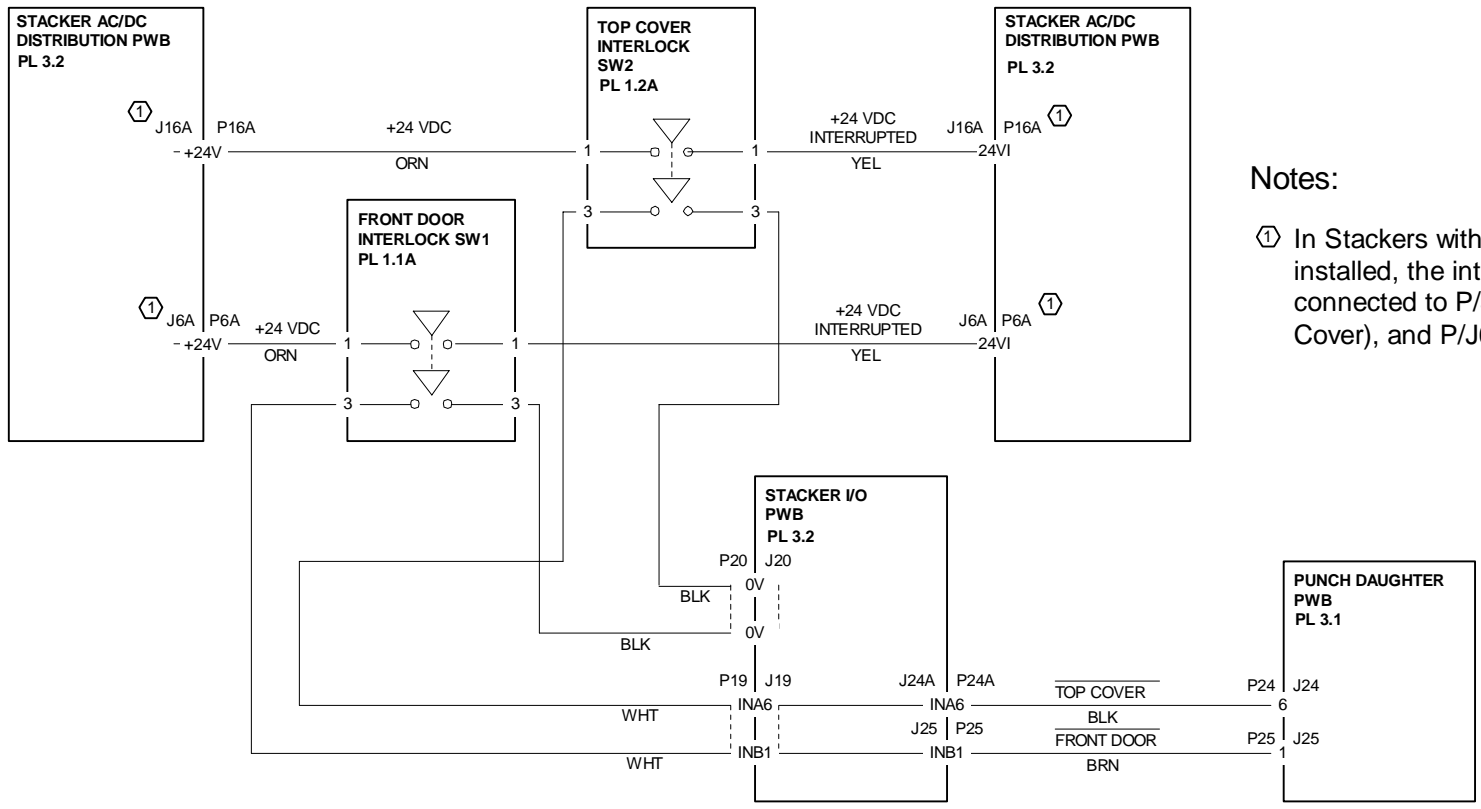
| Interlock | P/J 20 Pin | P/J 19 Pin |
|------------------|-------------------|-------------------|
| Top Cover | 0V | INA6 |
| Front Door | 0V | INB1 |

The continuity check is good.

Y N

 | |
 | | Replace the harness (PL 6.2A).

Replace the Daughter PWB (PL 3.1). If the problem is still present, replace the Stacker I/O PWB (PL 3.2).



Notes:

① In Stackers with a Bypass installed, the interlocks are connected to P/J16B (Top Cover), and P/J6B (Front Door).

RAP 4.1 Document Transport Jams

Description

This RAP will help isolate document transport jam problems in the FusionPunch II.

Initial Actions

Close all covers and doors and run the printer to feed paper into the punch. When the paper jams, open the punch top covers to determine the location of the jam. Lift the Punch Tension Strap Assembly (PL 4.3H) and ensure that the Punch Assembly Side Guide (PL 4.3H) is adjusted to the correct location, and that the edge of the guide is situated under the Side Guide Infeed Strip (PL 4.3H). To adjust the Side Guide, refer to the *User Manual* and the procedure entitled **Setting the Side Guide** in Section 2.

If there is a jam indication, but the paper is NOT jamming in the Punch, go to RAP 4.2 Punch Jam Sensors RAP. If the paper is jamming at the Punch Exit Sensor (or the Stacker Bypass Exit Sensor, if installed) because of a problem in the Stacker, go to RAP 5.3 Stacker Jams.

Procedure

1. The paper jams in the Punch Interface Assembly.

Y | **N**
 | |
 | | Go to Step 4.

Using the information in the table below, enter the Diagnostics mode and use the left/right keys to select the Deck Motor output.

Activate the Document Transport Motor.

| Output | Diagnostic |
|--------------------------|---|
| Document Transport Motor | P OUTA8 XportMotor O8 1100110Q11001100 |

The motor activates.

Y | **N**
 | |
 | | Activate the motor output again. Check LED L0A8 on the Punch I/O PWB. If the LED is lit when the output is on, go to Step 2. If it is off when the output is on, go to Step 3.

Check the condition of the Document Transport Main Drive Timing Belt.

The belt is loose or faulty.

Y | **N**
 | |
 | | When the motor activates, the infeed belts in the Interface Assembly drive smoothly.

Y | **N**
 | |
 | | Grasp the Document Transport Main Drive Timing Belt and pull it in a counterclockwise direction to test its motion, and the motion of the infeed belts in the subsystem in which the jam is occurring. If the belts in any area binding, loose, or are not rotating smoothly, check the belts, pulleys, idlers and shafts to ensure proper operation. Repair as required (PL 4.1A - 4.1E).

Go to Step 1A.

Go to Step 1B.

1A. Check the Interface Assembly for obstructions, burrs, bent or missing components. Repair/replace as required (PL 4.1A - 4.1E).

1B. If the belt is loose, perform ADJ 4.1 and recheck for jams. If the belt is faulty, replace the Document Transport Main Drive Belt (PL 1.1G).

2. On the Punch I/O PWB, disconnect P/J30. Repeatedly activate and deactivate the output.

LED L0A8 lights/extinguishes as the output is activated/deactivated.

Y | **N**
 | |
 | | Reconnect J30. Check continuity and for shorts to ground between P22-OUTB1 on the Punch I/O PWB and J1-HV08 on the Little Star Controller PWB.

If the harness is faulty, replace it (PL 6.1A). If not, replace the Little Star Controller PWB (PL 3.1).

Check continuity and for shorts to ground between P 30-OUTA,C8 on the Punch I/O PWB and P11-MT2 on the Punch AC/DC Distribution PWB.

The harness is OK.

Y | **N**
 | |
 | | Replace the harness (PL 6.1A).

Go to Step 2A.

2A. The Document Transport Motor is enabled by a ground on P11-MT2. When the output is activated, there should be 0VDC at this point. When it is deactivated, there should be +24 VDC at this point.

Activate and then deactivate the output and check for 0 VDC and then +24 VDC between P/J11-MT2 and P/J 12-0V on the Punch AC/DC Distribution PWB.

There is 0 VDC when the output is activated and +24VDC when the output is deactivated.

Y N
| Replace the Punch I/O PWB (PL 3.1).

Activate the output and check AC voltage across J8-NUI and J8-MT2 on the Punch AC/DC Distribution PWB.

There is 110 VAC at this point.

Y N
| Replace the Punch AC/DC Distribution PWB (PL 3.1).

Check the harness from J8-NUI on the Punch AC/DC Distribution PWB to the Document Transport Motor, and from J8-MT2 on the Punch AC/DC Distribution PWB to the Document Transport Motor. If the harness is OK, replace the Document Transport Motor (PL 1.1B).

3. Disconnect P/J30 on the Punch I/O PWB. Activate the output again and check LED L0A8 on the Punch I/O PWB.

The LED is lit when the output is active.

Y N
| Check continuity between J1-HV08 on the Little Star Controller PWB and P22-OUTB1 on the Punch I/O PWB. Go to Step 3A.

Go to Step 3B.

3A. If faulty, replace the harness (PL 6.1D). If the harness is OK, replace the Little Star Controller PWB (PL 3.1).

3B. Check continuity and for shorts to ground between P 30-OUTA,C8 on the Punch I/O PWB and P11-MT2 on the Punch AC/DC Distribution PWB.

The harness is OK.

Y N
| Replace the harness (PL 6.1A)

The Document Transport Motor is enabled by a ground on P11-MT2. When the output is activated, there should be 0VDC at this point. When it is deactivated, there should be +24 VDC at this point.

Activate and then deactivate the output and check for 0 VDC and then +24 VDC between P/J11-MT2 and P/J 12-0V on the Punch AC/DC Distribution PWB.

There is 0 VDC when the output is activated and +24VDC when the output is deactivated.

Y N
| Replace the Punch I/O PWB (PL 3.1).

Activate the output and check AC voltage across J8-NUI and J8-MT2 on the Punch AC/DC Distribution PWB.

There is 110 VAC at this point.

Y N
| Replace the Punch AC/DC Distribution PWB (PL 3.1).

Check the harness from J8-NUI on the Punch AC/DC Distribution PWB to the Document Transport Motor, and from J8-MT2 on the Punch AC/DC Distribution PWB to the Document Transport Motor. If the harness is OK, replace the Document Transport Motor (PL 1.1B).

4. The paper jams in the Punch Document Transport Assembly.

Y N
| Go to Step 5.

Using the information in the table below, enter the Diagnostics mode and use the left/right keys to select the Deck Motor output. Activate the Document Transport Motor.

| Output | Diagnostic |
|--------------------------|---|
| Document Transport Motor | P OUTA8 Deck Motor O8 1100110Q11001100 |

When the motor activates, the infeed belts in the Document Transport Assembly drive smoothly.

Y N
| Grasp the Document Transport Main Drive Timing Belt and pull it in a counterclockwise direction to test its motion, and the motion of the infeed belts in the subsystem in which the jam is occurring.

If the belts in any area binding, loose, or are not rotating smoothly, check the belts, pulleys, idlers and shafts to ensure proper operation. Repair/replace as required (PL 4.2A - 4.2E).

Check the Document Transport Assembly for obstructions, burrs, bent or missing components. Repair/replace as required (PL 4.2A - 4.2E).

5. The paper jams in the Punch Assembly.

Using the information in the table below, enter the Diagnostics mode and use the left/right keys to select the Deck Motor output. Activate the Document Transport Motor.

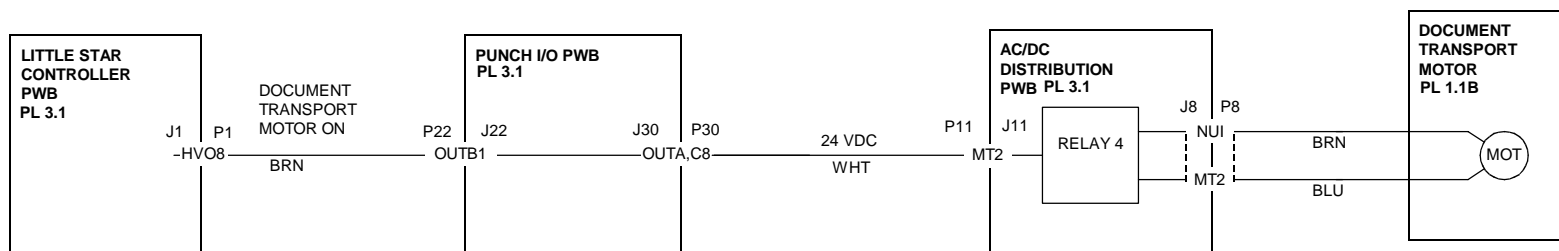
| Output | Diagnostic |
|--------------------------|--|
| Document Transport Motor | P OUTA8 Deck Motor O8 1100110 <u>0</u> 11001100 |

When the motor activates, the infeed belts in the Punch Assembly drive smoothly.

Y N

Grasp the Document Transport Main Drive Timing Belt and pull it in a counterclockwise direction to test its motion, and the motion of the infeed belts in the subsystem in which the jam is occurring. If the belts in any area binding, loose, or are not rotating smoothly, check the belts, pulleys, idlers and shafts to ensure proper operation. Repair/replace as required (PL 4.3A - 4.3N).

Check the Punch Assembly for obstructions, burrs, bent or missing components. Repair/replace as required (PL 4.3A - 4.3N).



RAP 4.2 Punch Jam Sensors

Description

This RAP is used to troubleshoot failures of all punch paper path sensors.

This RAP can be used if so directed by RAP 4.1, or if there is some other indication that one or more of the Punch Jam sensors are faulty.

If the document is jamming in the Punch, first troubleshoot the jam by going to RAP 4.1 Document Transport JAMs.

Initial Actions

Check the Punch Paper Path Sensors for obstructions. Clear all obstructions and clean the sensor and sensor reflector before continuing with this RAP.

Procedure

- Using the information in the table below, enter the Diagnostics mode and use the left/right keys to select the desired input.

| Sensor | Diagnostic |
|----------------------|---|
| Entrance | P INB4 Enter Sensor I13 110011001100 1 100 |
| Document Transport 1 | P INB5 XportSensor1 I12 110011001100 0 1100 |
| Document Transport 2 | P INB6 XportSensor2 I11 1100110011 0 01100 |
| Punch | P INB7 Punch Sensor I10 110011001 1 001100 |
| Exit | P INB8 Exit Sensor I9 11001100 1 1001100 |

Sequentially block and unblock the sensor and observe the Control Panel for a change in state (**0** to **1**, or **1** to **0**).

There is a change in state when the sensor is blocked and unblocked.

Y N
| |
Go to step 2.

The sensor and related circuits are working correctly.

- Using the following table, on the Punch I/O PWB check the LED that corresponds with the sensor. Sequentially block and unblock the sensor and observe the LED for a change in state (Blocked = Off, Unblocked = On).

| Sensor | I/O PWB LED |
|----------------------|-------------|
| Entrance | LIB4 |
| Document Transport 1 | LIB5 |
| Document Transport 2 | LIB6 |
| Punch | LIB7 |
| Exit | LIB8 |

There is a change in state when the sensor is blocked and unblocked.

Y N
| |
Go to Step 4.
Go to step 3.

- Using the information in the following table, check the continuity of the cable between the P25 pin corresponding to the sensor and the corresponding pin on P3.

| Sensor | Check |
|----------------------|-------------------|
| Entrance | P25-INB4 to P3-13 |
| Document Transport 1 | P25-INB5 to P3-12 |
| Document Transport 2 | P25-INB6 to P3-11 |
| Punch | P25-INB7 to P3-10 |
| Exit | P25-INB8 to P3-9 |

The continuity is OK.

Y N
| |
Replace the cable between the I/O PWB and the Controller PWB (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

- Using the information in the following table, disconnect the Punch I/O PWB connector corresponding to the suspect sensor. Check the corresponding I/O PWB LED to see if it is lit when the connector is disconnected.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

| Sensor | I/O PWB P/J | I/O PWB LED |
|----------------------|-------------|-------------|
| Entrance | P/J 11 | LIB4 |
| Document Transport 1 | P/J 10 | LIB5 |
| Document Transport 2 | P/J 9 | LIB6 |
| Punch | P/J 2 | LIB7 |
| Exit | P/J 1 | LIB8 |

The LED corresponding to the suspect sensor remains lit when its I/O PWB connector is disconnected.

Y | **N**
 |
 | Leave the connector disconnected and go to Step 5.

Leave the connector disconnected and go to Step 6.

- Using the information in the following table, check continuity of the cable between the P25 pin corresponding to the sensor and the P3 pin corresponding to the sensor.

| Sensor | Check |
|----------------------|-------------------|
| Entrance | P25-INB4 to P3-13 |
| Document Transport 1 | P25-INB5 to P3-12 |
| Document Transport 2 | P25-INB6 to P3-11 |
| Punch | P25-INB7 to P3-10 |
| Exit | P25-INB8 to P3-9 |

There is continuity between these two points.

Y | **N**
 |
 | Replace the harness (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

- Using the information in the following table, place a jumper between the signal input and the 0 VDC pin. With the jumper in place, the corresponding Punch I/O PWB LED should extinguish.

| Sensor | I/O PWB Jack | Jumper Between Pins | I/O PWB LED |
|----------------------|--------------|---------------------|-------------|
| Entrance | J 11 | 0V and INB4 | LIB4 |
| Document Transport 1 | J 10 | 0V and INB5 | LIB5 |
| Document Transport 2 | J 9 | 0V and INB6 | LIB6 |
| Punch | J 2 | 0V and INB7 | LIB7 |
| Exit | J 1 | 0V and INB8 | LIB8 |

With the jumper in place, the corresponding Punch I/O PWB LED extinguishes.

Y | **N**
 |
 | Replace the Punch I/O PWB (PL 3.1).

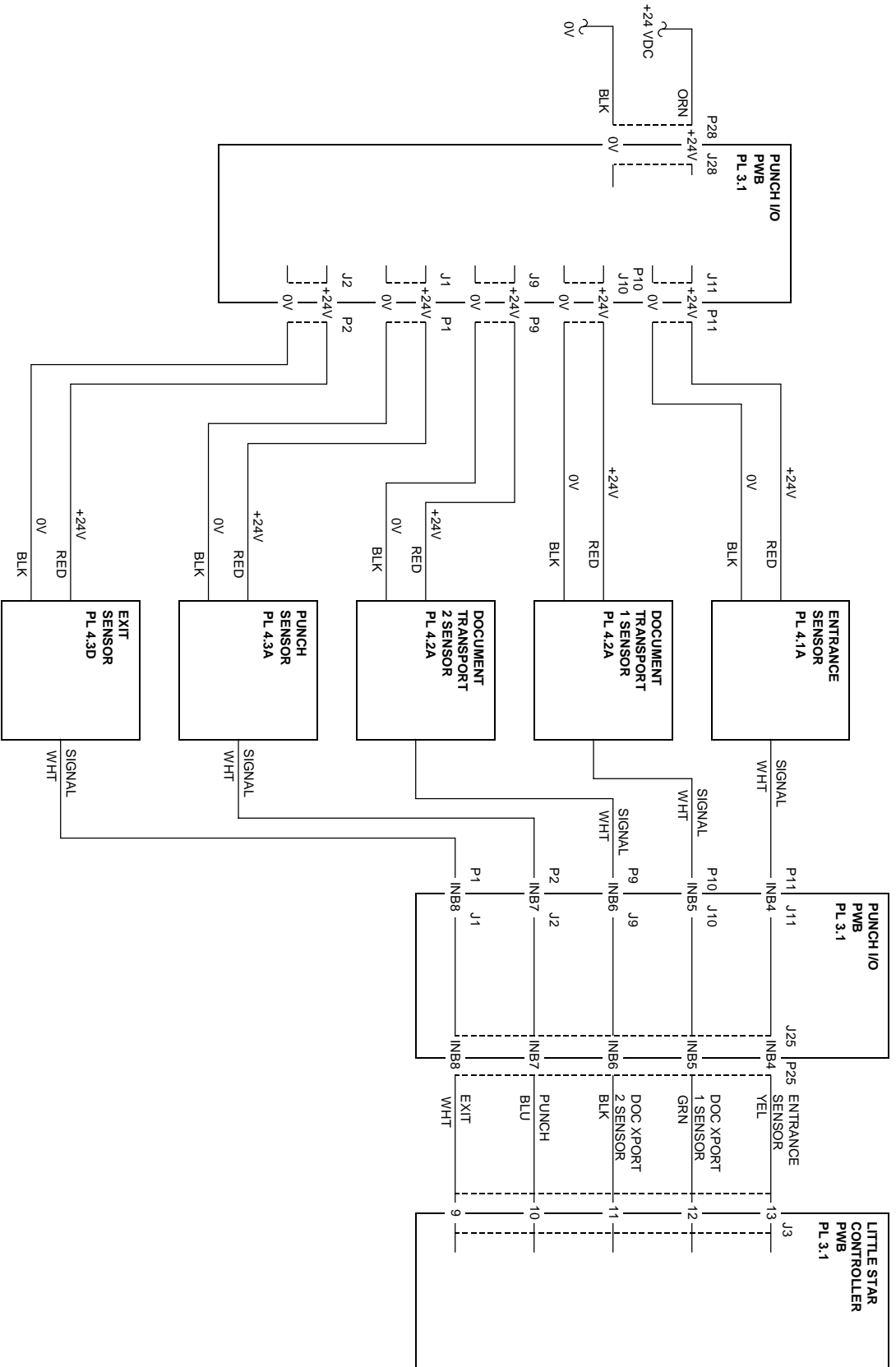
Leave the connector disconnected and go to Step 7.

- Check for +24 VDC between the 0 VDC pin and the +24 VDC pin on the disconnected jack.

There is +24 VDC at this point.

Y | **N**
 |
 | Replace the Punch I/O PWB (PL 3.1).

Check the harness between the sensor and its plug on the Punch I/O PWB. If the harness is OK, replace the sensor (Entrance - PL 4.1A, Document Transport 1 and 2 - 4.2A, Punch - 4.3A, Exit - 4.3D).



RAP 5.1 Stacker Full, Almost Full, and Upper Switch

Description

This RAP is used for Stacker Full and Stacker Almost Full faults and to test communication between the Stacker and the Punch. It can be used for Stackers that are configured with or without a Bypass.

For machines configured with a Bypass, this RAP will also provide procedures to troubleshoot problems in a second GBC Stacker. This RAP does not contain procedures for other downstream devices.

NOTE: For machines without a Bypass installed, this procedure will still refer to the single stacker as Stacker 1.

Procedure

To check each switch, use the information in the following table:

| Sensor | Go to... |
|----------------------------|---|
| Stacker Full Switch | Step 1. Stacker Full Switch Checkout |
| Stacker Almost Full Switch | Step 5. Stacker Almost Full Switch Checkout |
| Stacker Upper Switch | Step 9. Stacker Upper Switch Checkout |

- Stacker Full Sensor Checkout.
Select the table for Stacker 1 or Stacker 2 below. Enter the Diagnostics mode and use the left/right keys to select the desired input.

Stacker 1:

| | |
|-----|------------------|
| S1 | INB5 Full Switch |
| I13 | 1100110011001100 |

Stacker 2:

| | |
|-----|------------------|
| S2 | INB5 Full Switch |
| I13 | 1100110011001100 |

Manually activate the Stacker Full switch and observe the Control Panel for a change in state.

The display indicates a change in state.

Y N
|
Go to Step 2.

The Stacker Full Switch and related circuits are good.

- Disconnect the Stacker Full Switch. With the switch deactivated, check for continuity across the switch.

NOTE: You may need to disconnect J10 on the Stacker I/O PWB to isolate the circuit.

There is continuity across the switch.

Y N
|
Go to Step 3.

Replace the Stacker Full Switch (PL 5.1A).

- Examine the cable from P10 on the Stacker I/O PWB to the Stacker Full Sensor. Check for shorts to ground or opens in this harness.

The harness is shorted to ground or open.

Y N
|
Go to Step 4.

Replace the harness (PL 6.2A)

- For Stacker 1 or Stacker 2, examine the cable from P25-INB5 on the Stacker I/O PWB to P25-5 on the Punch I/O Daughter PWB with which it corresponds. Check for shorts to ground or opens in this harness.

The harness is shorted to ground or open.

Y N
|
Replace the Stacker I/O PWB (PL 3.2) on Stacker 1 or Stacker 2. If the problem is still present, replace the Punch I/O Daughter PWB (PL 3.1).

Replace the harness (PL 6.2A)

- Stacker Almost Full Checkout.
Select the table for Stacker 1 or Stacker 2 below. Enter the Diagnostics mode and use the left/right keys to select the desired input

Stacker 1:

| | |
|-----|-------------------|
| S1 | INB4 AlmostFullSw |
| I15 | 1100110011001100 |

Stacker 2:

| | |
|-----|-------------------|
| S2 | INB4 AlmostFullSw |
| I15 | 1100110011001100 |

Manually activate the Stacker Almost Full switch and observe the Control Panel for a change in state.

The display indicates a change in state.

Y N
|
Go to Step 6.

The Stacker Almost Full Switch and related circuits are good.

- 6. Disconnect the Stacker Almost Full Switch. With the switch deactivated, check for continuity across the switch.

There is continuity across the switch.

Y N
|
Go to Step 7.

Replace the Stacker Almost Full Switch (PL 5.1A).

- 7. Examine the cable from P11 on the Stacker I/O PWB to the Stacker Almost Full Sensor. Check for shorts to ground or opens in this harness.

The harness is shorted to ground or open.

Y N
|
Go to Step 8.

Replace the harness (PL 6.2A)

- 8. Examine the cable from P25-INB4 on the Stacker I/O PWB to P25-4 on the Punch I/O Daughter PWB. Check for shorts to ground or opens in this harness.

The harness is shorted to ground or open.

Y N
|
Replace the Stacker I/O PWB (PL 3.2). If the problem is still present, replace the Punch I/O Daughter PWB (PL 3.1).

Replace the harness (PL 6.2A)

- 9. Stacker Upper Switch Checkout

Select the table for Stacker 1 or Stacker 2 below. Enter the Diagnostics mode and use the left/right keys to select the desired input.

Stacker 1:

| | | |
|-----|---------------|--------------|
| S1 | INB6 | Upper Switch |
| I14 | 1100110011001 | <u>100</u> |

Stacker 2:

| | | |
|-----|---------------|--------------|
| S2 | INB6 | Upper Switch |
| I14 | 1100110011001 | <u>100</u> |

Manually activate the Stacker Upper switch and observe the Control Panel for a change in state.

The display indicates a change in state.

Y N
|
Go to Step 10.

The Stacker Upper Switch and related circuits are good.

- 10. Disconnect the Stacker Upper Switch. With the switch deactivated, check for continuity across the switch.

There is continuity across the deactivated switch.

Y N
|
Go to Step 11.

Replace the Stacker Upper Switch (PL 5.1A).

- 11. Examine the cable from P9 on the Stacker I/O PWB to the Stacker Upper Sensor. Check for shorts to ground or opens in this harness.

The harness is shorted to ground or open.

Y N
|
Go to Step 12.

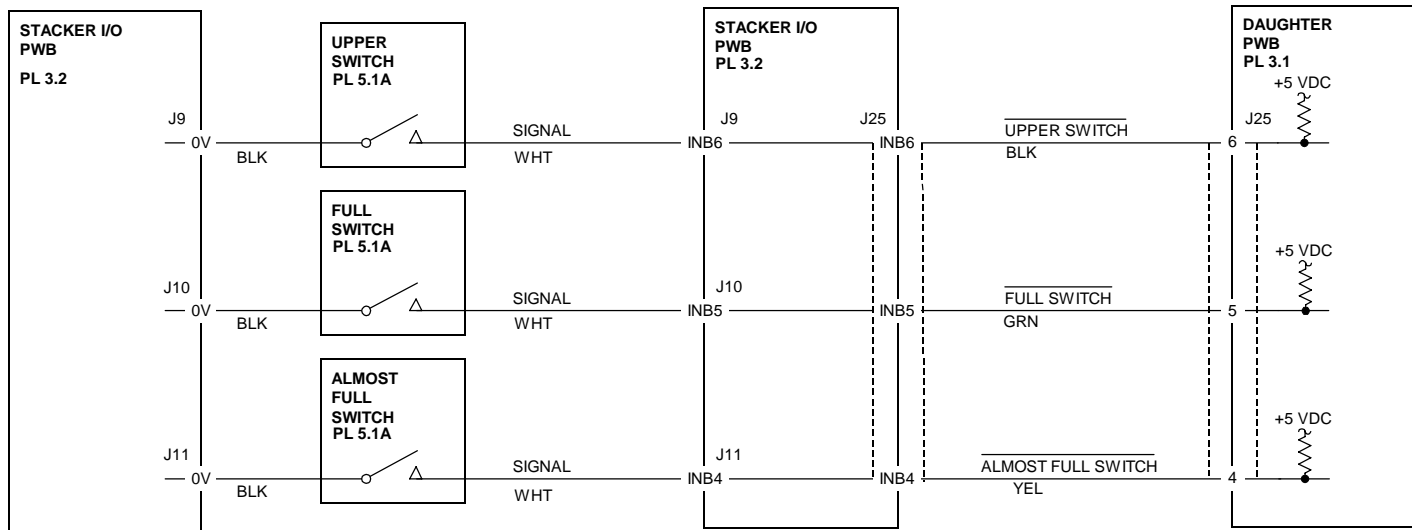
Replace the harness (PL 6.2A)

- 12. Examine the cable from P25-INB6 on the Stacker I/O PWB to P25-6 on the Punch I/O Daughter PWB. Check for shorts to ground or opens in this harness.

The harness is shorted to ground or open.

Y N
|
Replace the Stacker I/O PWB (PL 3.2). If the problem is still present, replace the Punch I/O Daughter PWB (PL 3.1).

Replace the harness (PL 6.2A)



RAP 5.2 Stacker Tray Direction

Description

This RAP will help isolate a continuous or recurring problem with the Stacker Tray not being able to reverse direction. It can be used for Stackers that are configured with or without a Bypass.

For machines configured with a Bypass, this RAP will also provide procedures to troubleshoot problems in a second GBC Stacker. This RAP does not contain procedures for other downstream devices.

NOTE: For machines without a Bypass installed, this procedure will still refer to the single stacker as Stacker 1.

Procedure

- Select the table for Stacker 1 or Stacker 2 below. Enter the Diagnostic Mode (GP1) and, in the Stacker Output menu, select:
Stacker 1:

| | | |
|----|--------|-------------|
| S1 | OUTC7 | Stacker Dir |
| 07 | 110011 | 0011001100 |

Stacker 2:

| | | |
|----|--------|-------------|
| S2 | OUTC7 | Stacker Dir |
| 07 | 110011 | 0011001100 |

Toggle the up and down arrows on the Control Panel to reverse direction repeatedly. Listen for Relay RLY2 on the AC/DC Distribution PWB to change state.

Relay RY2 changes state when toggled.

Y N
|
Go to Step 2.
Go to Step 5.

- Replace Relay RLY2 on the Stacker AC/DC Distribution PWB (PL 3.2). Then, raise and lower the Stacker Tray. The error message returns after the Stacker Tray is lowered and raised.

Y N
|
Problem resolved.
Go to Step 3.

- Check the wiring harness connecting P30 on the Stacker I/O PWB to P11 on the Stacker AC/DC Distribution PWB. Check for continuity between P30 OUTA,C7 and J11 DIR.

There is continuity between P30 OUTA,C7 and P11 DIR.

Y N
|
Repair or replace the harness (PL 6.2A).
Go to Step 4.

- Check the continuity of the following cables. The cable designations are the same for single stacker or dual configurations, however, depending on the problem stacker, be sure to check the cable between the Stacker 1 I/O and its Punch I/O Daughter PWB **or** the Stacker 2 I/O PWB and its Punch I/O PWB.

| Punch I/O Daughter PWB | Stacker I/O PWB |
|------------------------|-----------------|
| P23-7 Blue Wire | P23A-OUTA7 |
| P24-8 White Wire | P24A-INA8 |

There is continuity between the cable connectors on the Punch I/O Daughter PWB and the Stacker I/O PWB.

Y N
|
Repair or replace the harness (PL 6.2A).
Replace the Punch I/O Daughter PWB (PL 3.1).

- Check for continuity between P15-R_ON on the Stacker AC/DC Distribution PWB and P29-INC8 on the Stacker I/O PWB. There is continuity between P15-R_ON and P29-INC8.

Y N
|
Repair or replace the harness (PL 6.2B).
Go to Step 6.

6. Check for continuity between P24A-INA8 on the Stacker I/O PWB and P24-8 on the Punch I/O Daughter PWB. The cable designation is the same for single stacker or dual configurations, however, depending on the problem stacker, be sure to check the cable between the Stacker 1 I/O and its Punch I/O Daughter PWB or the Stacker 2 I/O PWB and its Punch I/O PWB
- There is continuity between P24A-INA8 and P-8.

Y N

 | |
 | | Repair or replace the harness
 | | (PL 6.2A).

Replace the Punch I/O Daughter PWB
(PL 3.1).

RAP 5.3 Stacker Jams

Description

This RAP is used for jams that occur in the Stacker. If there is a Bypass installed in the Stacker, this RAP can be used for jams that occur in the Stacker only. **If the jam is occurring in the Bypass, go to RAP 5.4 Stacker Bypass Jams.**

For machines configured with a Bypass, this RAP will also provide procedures to troubleshoot problems in a second GBC Stacker. This RAP does not contain procedures for other downstream devices.

NOTE: For machines without a Bypass installed, this procedure will still refer to the single stacker as Stacker 1.

Note that jams that actually occur because of a problem in the Stacker may appear to be a jam in the Punch, specifically at the Punch Exit Sensor.

Initial Actions

For the Stacker in which the jam occurred, make sure that the Stacker Main Power Switch/ Circuit Breaker is switched on. Feed several sheets from the Host Printer or the Manual Bypass. As the sheets are entering the Stacker, observe the Stacker operation. Pay particular attention to the operation of the Stacker Tray and the O-Ring Assembly.

If Stacker 1 is configured with a Bypass, feed several sheets through the Bypass to be stacked in Stacker 2. If Stacker 2 is configured with a Bypass, feed several sheets through the Stacker 2 Bypass to the downstream device.

If paper is not jamming in the Stacker or the Punch, refer to RAP 4.2 Punch Jam Sensors.

Procedure

1. Refer to the following table of conditions to isolate the problem:

| Condition | Action |
|-----------------------------------|---|
| The paper is jamming in Stacker 1 | Go to Step 2 |
| The paper is jamming in Stacker 2 | Check the lights on the Stacker 1 Exit Sensor . If the lights are not lit, go to RAP 5.5 and troubleshoot a problem with the Stacker 1 Exit Sensor. If the lights are lit, go to Step 2. |

2. Perform a visual inspection of the Stacker O-Ring Assembly (PL 5.1B and C). Ensure that the assembly O-rings are in proper position, and are in good condition.

The O-Rings on the Stacker O-Ring Assembly are in good condition.

Y N
 | |
 Replace the assembly O-Rings as required (PL 5.1C).

Go to Step 3.

3. Enter the Diagnostic Mode (GP1) and using the information in the following table, check the O-Ring Motor for proper operation.

Use the left/right keys to select the desired input

Stacker 1:

| Motor | Diagnostic |
|--------------|---|
| O-Ring Motor | S1 OUTC8 Stack Oring O8 1100110Q11001100 |

Stacker 2:

| Motor | Diagnostic |
|--------------|---|
| O-Ring Motor | S2 OUTC8 Stack Oring O8 1100110Q11001100 |

The O-Ring Motor in the Stacker energizes when the output is activated.

Y N
 | |
 Go to Step 6.

Go to Step 4.

4. Check the Stacker Tray.
 - a. Ensure that the Stacker Tray 90xl Timing Belt (PL 5.1A) is in place and in good condition.
 - b. Enter the Diagnostic Mode (GP1) and using the information in the following table, check the Stacker Tray Motor for proper operation. Use the left/right keys to select the desired output.

NOTE: The Stacker Tray moves under the control of the Stacker Direction Signal. A value of 1 moves the tray up and a value of 0 moves the tray down. Depending on the position of the tray, to move the tray in the Diagnostics Mode, you may need to change the value of Stacker Dir. See the table below.

Stacker 1:

| Motor | Diagnostic |
|--------------------|--|
| Stacker Tray Motor | S1 OUTC6 StackerDeck O6 11001 <u>1</u> 0011001100 |
| Stacker Direction | S1 OUTC7 Stacker Dir O7 110011 <u>0</u> 011001100 |

Stacker 2:

| Motor | Diagnostic |
|--------------------|--|
| Stacker Tray Motor | S2 OUTC6 StackerDeck O6 11001 <u>1</u> 0011001100 |
| Stacker Direction | S2 OUTC7 Stacker Dir O7 110011 <u>0</u> 011001100 |

The Stacker Tray Motor energizes when the output is activated, and the Stacker Tray moves up or down.

Y N
| |
Go to Step 14.

Go to Step 5.

5. Check the Exit Chute on the Punch for obstructions. Also ensure that there are no obstructions in the Stacker tray that would cause the paper to stall or jam.

6. In the Diagnostics Mode, sequentially activate and deactivate the O-Ring Motor output. Observe LED L0A8 on the Stacker I/O PWB.

LED L0A8 illuminates when the output is active.

Y N
| |
Go to Step 7.

Go to Step 9.

7. On the Stacker I/O PWB, disconnect P/J 30. In the Diagnostics Mode, activate the Stacker O-Ring Motor output. While the output is active, observe L0A8 on the Stacker I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED L0A8 remains lit when P/J30 is disconnected.

Y N
| |
Reconnect P/J 30 and go to Step 8.

Go to Step 11.

8. Check the continuity of the harness between the Punch Daughter PWB P23-8 and Stacker I/O PWB P23A-OUTA8.

The continuity is OK.

Y N
| |
Replace the harness between the Punch Daughter PWB P23 and Stacker I/O PWB P23 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

9. On the Stacker I/O PWB, disconnect P/J 30. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker O-Ring Motor output. Observe L0A8 on the Stacker I/O PWB.

LED L0A8 lights when the output is activated.

Y N
| |
Reconnect P/J 30 and go to Step 10.

Reconnect P/J 30 and go to Step 11.

10. Check the continuity of the harness between the Punch Daughter PWB P23-8 and Stacker I/O PWB P23A-OUTA8.

The continuity is OK.

Y N
| |
Replace the harness between the Punch Daughter PWB P23 and Stacker I/O PWB P23 (PL 6.D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

11. The O-Ring Motor is enabled by a ground on P30-OUTA,C8. When the output is deactivated, there should be +24 VDC at this point. When the output is active, there should be 0 VDC.

In the Diagnostics Mode, deactivate the O-Ring Motor output. While the output is deactivated, on the Stacker I/O PWB, check for +24 VDC between P/J30-OUTA,C8, and P/J 28-0VDC. Then, activate the output and check for 0 VDC at the same location.

Activate and then deactivate the output and check P30-OUTA8 for 0VDC and +24 VDC.

There is 0VDC when the output is activated and +24 VDC with the output deactivated.

Y N
| |
Replace the Stacker I/O PWB (PL 3.2).

While the output is active, on the Stacker AC/DC Distribution PWB, check for 0 VDC between P/J11-MT2, and P/J 13-0VDC. Then, deactivate the output and check for +24 VDC.

There is +24 VDC with the output deactivated and 0 VDC when it is activated.

Y | **N**
|
| Replace the harness between Stacker I/O PWB P30 and Stacker AC/DC Distribution PWB P11 (PL 6.2A).

Go to Step 12.

12. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker O-Ring Motor output. Observe Relay3 on the Stacker AC/DC Distribution PWB.

The Relay activates and deactivates as the output is toggled.

Y | **N**
|
| Replace the Stacker AC/DC Distribution PWB (PL 3.2).

Go to Step 13.

13. In the Diagnostics Mode, activate the Stacker O-Ring Motor output. On the Stacker AC/DC Distribution PWB, check for 110VAC across J8-NUI and J8-MT2.

There is 110VAC at this point.

Y | **N**
|
| Go to Section 2 RAP 1.2 AC Power to the Stacker.

Check the harness between P8 on the Stacker AC/DC Distribution PWB and the O-Ring Motor. If the harness is OK, replace the O-Ring Motor (PL 1.2B).

14. In the Diagnostics Mode, sequentially activate and deactivate the Stacker Tray Motor output. Observe LED L0A6 on the Stacker I/O PWB.

LED L0A6 illuminates when the output is active.

Y | **N**
|
| Go to Step 15.

Go to Step 17.

15. On the Stacker I/O PWB, disconnect P/J 30. In the Diagnostics Mode, activate the Stacker Tray Motor output. While the output is active, observe L0A6 on the Stacker I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED L0A6 remains lit when P/J30 is disconnected.

Y | **N**
|
| Reconnect P/J 30 and go to Step 16.

Go to Step 19.

16. Check the continuity of the harness between the Punch Daughter PWB P23-6 and Stacker I/O PWB P23A-OUTA6.

The continuity is OK.

Y | **N**
|
| Replace the harness between the Punch Daughter PWB P23 and Stacker I/O PWB P23 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

17. On the Stacker I/O PWB, disconnect P/J 30. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker Tray Motor output. Observe L0A6 on the Stacker I/O PWB.

LED L0A6 lights when the output is activated.

Y | **N**
|
| Reconnect P/J 30 and go to Step 18.

Reconnect P/J 30 and go to Step 19.

18. Check the continuity of the harness between the Punch Daughter PWB P23-6 and Stacker I/O PWB P23A-OUTA6.

The continuity is OK.

Y | **N**
|
| Replace the harness between the Punch Daughter PWB P23 and Stacker I/O PWB P23 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

19. The Stacker Tray Motor is enabled by a ground on P30-OUTA6. When the output is activated, there should be 0VDC at this point. When the output is deactivated, there should be +24 VDC.

In the Diagnostics Mode, activate the Stacker Tray Motor output. While the output is active, on the Stacker I/O PWB, check between P/J30-OUTA6, and P/J 28-0VDC.

There is 0VDC when the output is activated and +24 VDC with the output deactivated.

Y | **N**
|
| Replace the Stacker I/O PWB (PL 3.2).

While the output is active, on the Stacker AC/DC Distribution PWB, check between P/J11-MT1, and P/J 12-0VDC.

There is 0VDC when the output is activated and +24 VDC with the output deactivated.

Y | **N**
|
|

Replace the harness between Stacker I/O PWB P30 and Stacker AC/DC Distribution PWB P11 (PL 6.2A).

Go to Step 20.

20. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker Tray Motor output. Observe Optical Relay OPTO1 on the Stacker AC/DC Distribution PWB.

The LED on the relay activates and deactivates as the output is toggled.

Y N

Replace the Stacker AC/DC Distribution PWB (PL 3.2).

Go to Step 21.

21. In the Diagnostics Mode, activate the Stacker Tray Motor output. Disconnect P/J 7 on the Stacker AC/DC Distribution PWB.

Using the information in the following table, check for 110VAC to the Stacker Tray Motor.

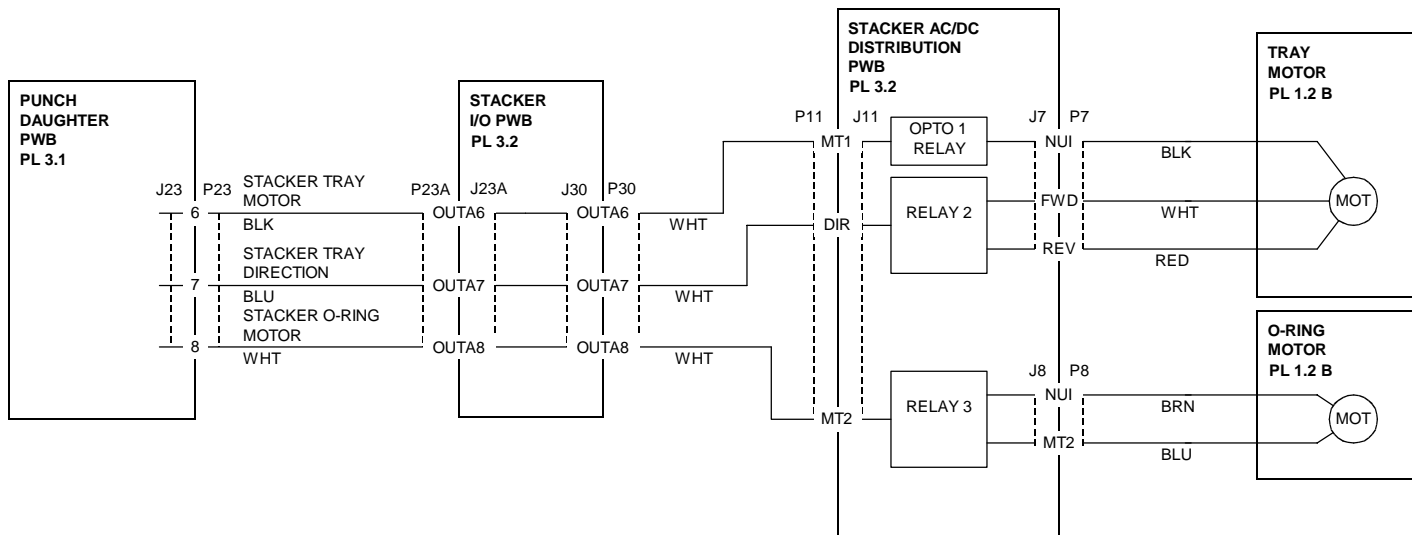
| Tray Position | Stacker Dir Output Value | AC/DC Dist. PWB Reading |
|---------------|--------------------------|---------------------------------|
| Up | 0 | 110 VAC J 7-NUI to J7-Rev |
| Down | 1 | 110 VAC J 7-NUI to J7-Fwd |

There is 110VAC as described in the above table.

Y N

Go to Section 2 RAP 1.2 AC Power to the Stacker.

Check the harness between P7 on the Stacker AC/DC Distribution PWB and the Stacker Tray Motor. If the harness is OK, replace the Stacker Tray Motor (PL 1.2B).



RAP 5.4 Stacker Bypass Jams

Description

This RAP is used for jams that occur in the Stacker Bypass. It can be used ONLY for Stackers that are configured with a Bypass.

This RAP can be used to troubleshoot jams in the first or second Stacker in a series. This RAP does not contain procedures for other downstream devices.

Initial Actions

For the Stacker in which the jam occurred, make sure that the Stacker Main Power Switch/Circuit Breaker is switched on. Feed several sheets from the Host Printer or the Manual Bypass. If Stacker 1 is configured with a Bypass, feed several sheets through the Bypass to be stacked in Stacker 2. If Stacker 2 is configured with a Bypass, feed several sheets through the Stacker 2 Bypass to the downstream device.

Observe the operation of the Bypass, paying particular attention to the Stacker Gate, the Bypass Assembly Belt, and where in the system the paper is jamming.

Clear all jammed paper before proceeding.

Procedure

1. With all jammed paper cleared, there is still a Jam Bypass (or Jam Bypass2) Sensor dialog on the Control Panel.

| | |
|----------------|---------------|
| Y | N |
| | |
| | Go to Step 2. |
| Go to Step 21. | |

2. Depending upon where the jam is occurring, refer to the table for Stacker 1 or Stacker 2 below. Enter the Diagnostic Mode (GP1) and select the Stacker Gate output:

Stacker 1:

| | |
|-----|---------------------------|
| S1 | OUTB5 StackerGate |
| 013 | 110011001100 <u>1</u> 100 |

Stacker 2:

| | |
|-----|---------------------------|
| S2 | OUTB5 StackerGate |
| 013 | 110011001100 <u>1</u> 100 |

Toggle the Stacker Gate Solenoid and watch the gate fingers as the output is toggled.

The Stacker Gate fingers move up and down normally as the output is toggled.

| | |
|----------------|---------------|
| Y | N |
| | |
| | Go to Step 3. |
| Go to Step 12. | |

3. In the Diagnostics Mode, sequentially activate and deactivate the Stacker Gate output for the Stacker in which the jam is occurring. Observe LED LOB5 at P/J 22 on the Stacker I/O PWB.

LED LOB5 illuminates when the output is active.

| | |
|---------------|---------------|
| Y | N |
| | |
| | Go to Step 4. |
| Go to Step 7. | |

4. On the Stacker I/O PWB in the problem Stacker, disconnect P/J 6B. In the Diagnostics Mode, activate the Stacker Gate output. While the output is active, observe LOB5 at P/J 22 on the Stacker I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED LOB5 remains lit when its Stacker I/O PWB connector is disconnected.

| | |
|---------------|------------------------------------|
| Y | N |
| | |
| | Reconnect P/J 6B and go to Step 5. |
| Go to Step 7. | |

5. On the Stacker I/O PWB, in the problem Stacker, disconnect Optical Relay Opto4. Activate the Stacker Gate output and observe LED LOB5 at P/J 22 on the Stacker I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the relay is disconnected, NOT flashing.

LED LOB5 remains lit when its Stacker I/O PWB optical relay is disconnected.

| | |
|--|---------------------------------------|
| Y | N |
| | |
| | Reconnect the relay and go to Step 6. |
| Replace Optical relay Opto4 on the Stacker I/O PWB (PL 3.3). | |

6. Check the continuity of the harness between the Punch Daughter PWB P/J 22 and Stacker I/O PWB P22-OUTB5 in the problem Stacker.

The continuity is OK.

Y N

Replace the harness between the Punch Daughter PWB P/J 22 and Stacker I/O PWB P22 (PL 6.2A).

Replace the Punch Daughter PWB (PL 3.1) associated with the problem Stacker. If the problem is still present, replace the Little Star Controller PWB (PL 3.1).

7. On the Stacker I/O PWB in the problem Stacker, disconnect P/J 6B and Optical Relay Opto4. In the Diagnostics Mode, sequentially activate and deactivate the Stacker Gate output. Observe L0B5 at P/J 22 on the Stacker I/O PWB.

LED L0B5 sequentially lights and extinguishes when the output is toggled.

Y N

Reconnect P/J 6B, reinstall the Optical Relay, and go to Step 8.

Reconnect P/J 6B, reinstall the Optical Relay, and go to Step 9.

8. Check the continuity of the harness between the Punch Daughter PWB P/J 22 and Stacker I/O PWB P22-OUTB5 in the problem Stacker.

The continuity is OK.

Y N

Replace the harness between the Punch Daughter PWB P/J 22 and Stacker I/O PWB P22 (PL 6.2A).

Replace the Punch Daughter PWB (PL 3.1) associated with the problem Stacker. If the problem is still present, replace the Little Star Controller PWB (PL 3.1).

9. With the Stacker Gate output active, check Optical Relay Opto4 on the Stacker I/O PWB in the problem Stacker.

The light on the relay is lit when the output is active.

Y N

Replace Optical Relay Opto4 on the Stacker I/O PWB (PL 3.3).

Go to Step 10.

10. Check the 3-60 VDC, 3 amp fuse on the Optical Relay.

The fuse is OK

Y N

Replace the fuse (PL 3.2).

Go to Step 11.

11. With the output active, check for +24VDC supplied to the Stacker Gate Solenoid in the problem Stacker, by placing the meter leads across P/J 6B-24VP and P/J 6B-OUTB5.

There is +24VDC across these points.

Y N

Replace the Stacker I/O PWB (PL3.3).

In the problem Stacker check continuity and for shorts to ground in the harness between the P/J 6B on the Stacker I/O PWB and the Stacker Gate Solenoid.

The harness is open or shorted to ground.

Y N

Replace the Stacker Gate Solenoid (PL 5.2A).

Replace the harness (PL 6.2A).

12. Depending upon where the jam is occurring, refer to the table for Stacker 1 or Stacker 2 below. Enter the Diagnostic Mode (GP1) and select the Stacker Bypass Motor output:

Stacker 1:

| | |
|-----|---------------------------|
| S1 | OUTB5 StackBypass |
| 010 | 110011001 <u>1</u> 001100 |

Stacker 2:

| | |
|-----|---------------------------|
| S2 | OUTB5 StackBypass |
| 010 | 110011001 <u>1</u> 001100 |

Observe the operation of the Bypass Assembly Belt in the problem Stacker. It should be in position and running smoothly when the output is active.

The Bypass Assembly Belt runs smoothly when the output is active.

Y N

With the output active, check to see if the Bypass Motor is running.

The Bypass motor is running when the output is active.

Y N

Go to Step 13.

Check the Bypass Assembly Belt.

The belt is securely in place, and is in good condition.

Y N

Replace the Bypass Assembly Belt (PL5.2C).

Check the Bypass Drive 85T Timing Belt. The belt is securely in place, and is in good condition.

Y **N**

Replace the Bypass Drive 85T Timing Belt (PL1.3A).

Check all Bypass Shafts, Rollers and Idlers for proper operation. If any of these components is faulty, replace it. (PL5.2 A-C).

Carefully check the Bypass assembly in the problem Stacker for other obstructions and clear them. Check all Bypass Shafts, Rollers and Idlers for proper operation. If any of these components is faulty, replace it. (PL5.2 A-C).

13. Sequentially activate and deactivate the Stacker Bypass Motor output. Observe LED L0B2 at P/J 22 on the Stacker I/O PWB in the problem Stacker.

LED L0B2 illuminates when the output is active.

Y **N**

Go to Step 14.

Go to Step 16.

14. On the Stacker I/O PWB in the problem Stacker, disconnect P/J 30. In the Diagnostics Mode, activate the Bypass Motor output. While the output is active, observe L0B2 at P/J 22 on the Stacker I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED L0B2 remains lit when P/J30 is disconnected.

Y **N**

Reconnect P/J 30 and go to Step 15.

Go to Step 18.

15. Check the continuity of the harness between the Punch Daughter PWB P22-2 and Stacker I/O PWB P22-OUTB2 in the problem Stacker.

The continuity is OK.

Y **N**

Replace the harness between the Punch Daughter PWB P22 and Stacker I/O PWB P22 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1) for the problem Stacker.

16. On the Stacker I/O PWB in the problem Stacker, disconnect P/J 30. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker Bypass Motor output. Observe L0B2 on the Stacker I/O PWB.

LED L0B2 lights when the output is activated.

Y **N**

Reconnect P/J 30 and go to Step 17.

Reconnect P/J 30 and go to Step 18.

17. Check the continuity of the harness between the Punch Daughter PWB P22-2 and Stacker I/O PWB P22-OUTB2 in the problem Stacker.

The continuity is OK.

Y **N**

Replace the harness between the Punch Daughter PWB P22 and Stacker I/O PWB P22 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

18. The Bypass Motor is enabled by a ground on P30-OUTB2. When the output is activated, there should be 0VDC at this point. When the output is deactivated, there should be +24 VDC.

In the Diagnostics Mode, activate the Stacker Bypass Motor output. While the output is active, on the Stacker I/O PWB, check for +24 VDC between P/J30-OUTB2, and P/J 28-0VDC.

There is 0VDC when the output is activated and +24 VDC with the output deactivated.

Y **N**

Replace the Stacker I/O PWB (PL 3.2.) in the problem Stacker.

Go to Step 19.

19. Disconnect P/J 10 on the Stacker AC/DC Distribution PWB in the problem Stacker. In the Diagnostics Mode, activate the Bypass Motor output. With the output active, check for 110 VAC across P/J 10-NUI and P/J 10-RMTR.

There is 110VAC at this point.

Y **N**

Check the Top Cover Interlock by disconnecting P/J 16B on the Stacker AC/DC Distribution PWB and placing a jumper across J16B-24V and J16B-24VR. Activate the Bypass Motor output and check for 110 VAC across P/J 10-NUI and P/J 10-RMTR.

There is 110 VAC at this point when the output is active.

Y **N**

Go to Step 20.

Go to RAP 3.2 Stacker Interlock Switches to troubleshoot a problem with the Stacker Top Cover Interlock.

Check the harness between P10 on the Stacker AC/DC Distribution PWB and the Stacker Bypass Motor. If the harness is OK, replace the Stacker Bypass Motor (PL 1.3A).

20. On the Stacker AC/DC Distribution PWB in the problem Stacker, check for 110 VAC across P/J 1-NEU and P/J 1-LINE. There is 110 VAC at this point.

Y | **N**
 |
 | Go to RAP 1.2 AC Power to the Stacker.

Replace the Stacker AC/DC Distribution PWB (PL 3.3).

21. On the Stacker I/O PWB in the problem Stacker, disconnect P/J 1 to the Bypass Exit Sensor. Observe the Control Panel display.

With P/J 1 disconnected, the Jam Bypass (2) Sensor dialog is still present on the Control Panel display.

Y | **N**
 |
 | Ensure that there is no paper blocking the Bypass Exit Sensor. If the sensor is unobstructed, replace it (PL 1.3 A).

Go to Step 22.

22. Depending upon where the jam is occurring, refer to the table for Stacker 1 or Stacker 2 below. Enter the Diagnostic Mode (GP1) and select the Bypass Exit Sensor input.

Stacker 1:.

| Sensor | Diagnostic |
|-------------|--|
| Bypass Exit | S1 INB8 BypassSensor 116 1100110011001100 |

Stacker 2:.

| Sensor | Diagnostic |
|-------------|--|
| Bypass Exit | S2 INB8 BypassSensor 116 1100110011001100 |

Sequentially block and unblock the sensor and observe the Control Panel for a change in state (**0** to **1**, or **1** to **0**).

There is a change in state when the sensor is blocked and unblocked.

Y | **N**
 |
 | Go to Step 23.

Go to Step 24.

23. Using the following table, on the Stacker I/O PWB check the LED that corresponds with the sensor. Sequentially block and unblock the sensor and observe the LED for a change in state (Blocked = Off, Unblocked = On).

| Sensor | LED |
|-----------------------|-------------------------------|
| Stacker 1 Bypass Exit | Stacker 1 I/O PWB LIB8 |
| Stacker 2 Bypass Exit | Stacker 2 I/O PWB LIB8 |

There is a change in state when the sensor is blocked and unblocked.

Y | **N**
 |
 | Go to Step 25.

Go to step 24.

24. Check the continuity of the cable between the Stacker I/O P25-INB8 and the Punch Daughter PWB P/J25-8.

The continuity is OK.

Y | **N**
 |
 | Replace the cable between the Stacker I/O PWB P/J 25 and the Punch Daughter PWB P/J 25 (PL 6.2A).

Replace the Punch Daughter PWB (PL 3.1). If the problem is still present, replace the Little Star Controller (PL 3.1).

25. On the Stacker I/O PWB disconnect P/J 1. Check LED LIB8 to see if it is lit when the connector is disconnected.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED LIB8 remains lit when P/J1 is disconnected.

Y | **N**
 |
 | Leave the connector disconnected and go to Step 26.

Leave the connector disconnected and go to Step 27.

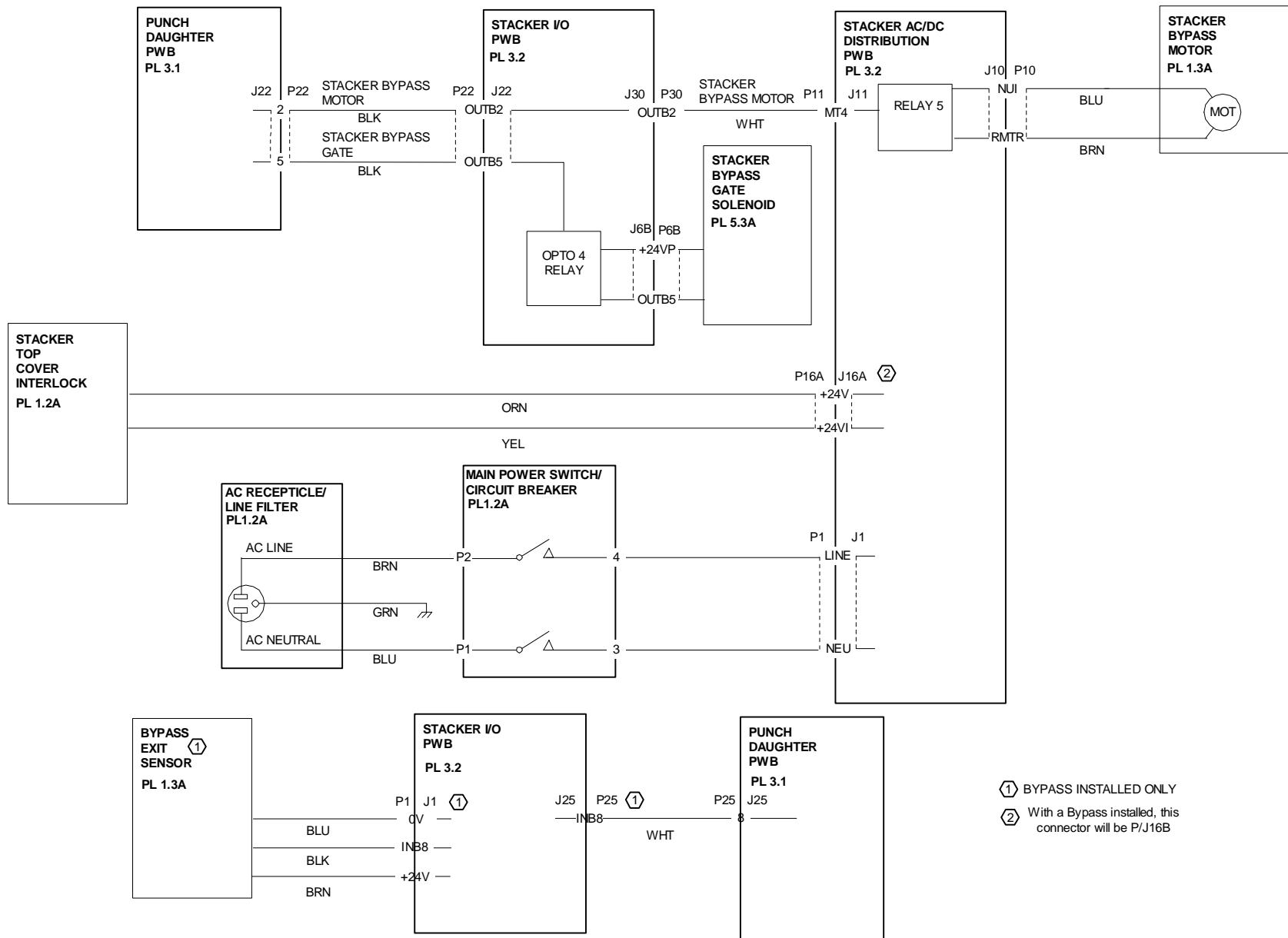
26. Check the continuity of the cable between the Stacker I/O P25-INB8 and the Punch Daughter PWB P/J25-8

The continuity is OK.

Y | **N**
 |
 | Replace the cable between the Stacker I/O PWB P/J 25 and the Punch Daughter PWB P/J 25 (PL 6.2A).

Replace the Punch Daughter PWB (PL 3.1). If the problem is still present, replace the Little Star Controller (PL 3.1).

27. On the Stacker I/O PWB, place a jumper between the P/J 1-INB8 and P/J1-0V. With the jumper in place, LED LIB8 should extinguish.



① BYPASS INSTALLED ONLY
 ② With a Bypass installed, this connector will be P/J16B

RAP 5.5 Stacker Bypass Exit Sensors

Description

This RAP is used to troubleshoot problems with the Stacker Bypass Exit Sensors for Stacker 1 and Stacker 2. Problems with these sensors can result in jams, and declarations of faults in other areas. **This RAP is only used with Stackers that have a Bypass installed.**

Procedure

1. Refer to the table for Stacker 1 or Stacker 2 below. If two Stackers are installed, test both. Enter the Diagnostic Mode (GP1) and select the Bypass Exit Sensor input.
Stacker 1:.

| Sensor | Diagnostic |
|-----------------------|---|
| Stacker 1 Bypass Exit | S1 INB8 BypassSensor I16 110011001100110 <u>0</u> |

Stacker 2:.

| Sensor | Diagnostic |
|-----------------------|---|
| Stacker 2 Bypass Exit | S2 INB8 BypassSensor I16 110011001100110 <u>0</u> |

Sequentially block and unblock the sensor and observe the Control Panel for a change in state (0 to 1, or 1 to 0).

There is a change in state when the sensor is blocked and unblocked.

Y N
| |
Go to Step 2.

Go to Step 3.

2. Using the following table, on the Stacker I/O PWB check the LED that corresponds with the sensor. Sequentially block and unblock the sensor and observe the LED for a change in state (Blocked = Off, Unblocked = On).

| Sensor | PWB LED |
|-----------------------|---------------------------|
| Stacker 1 Bypass Exit | Stacker 1 I/O LIB8 |
| Stacker 2 Bypass Exit | Stacker 2 I/O LIB8 |

There is a change in the LED state when the sensor is blocked and unblocked.

Y N
| |
Go to Step 4.

Go to step 3.

3. In the problem Stacker, check the continuity of the cable between the Stacker I/O P25-INB8 and the Punch Daughter PWB P/J25-8.

The continuity is OK.

Y N
| |
In the problem Stacker, replace the cable between the Stacker I/O PWB P/J 25 and the Punch Daughter PWB P/J 25 (PL 6.2A).

Replace the Punch Daughter PWB associated with the problem Stacker (PL 3.1). If the problem is still present, replace the Little Star Controller (PL 3.1).

4. On the Stacker I/O PWB in the problem Stacker, disconnect P/J 1. Check LED LIB8 to see if it is lit when the connector is disconnected.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED LIB8 remains lit when P/J1 is disconnected.

Y N
| |
Leave the connector disconnected and go to Step 5.

Leave the connector disconnected and go to Step 6.

5. In the problem Stacker, check the continuity of the cable between the Stacker I/O P25-INB8 and the Punch Daughter PWB P/J25-8

The continuity is OK.

Y N
| |
In the problem Stacker, replace the cable between the Stacker I/O PWB P/J 25 and the Punch Daughter PWB P/J 25 (PL 6.2A).

Replace the Punch Daughter PWB associated with the problem Stacker (PL 3.1). If the problem is still present, replace the Little Star Controller (PL 3.1).

6. On the Stacker I/O PWB in the problem Stacker, place a jumper between the P/J 1-INB8 and P/J1-0V. With the jumper in place, LED LIB8 should extinguish.

With the jumper in place, LED LIB8 extinguishes.

| | |
|----------|---------------------------------------|
| Y | N |
| | |
| | Replace the Stacker I/O PWB (PL 3.3). |

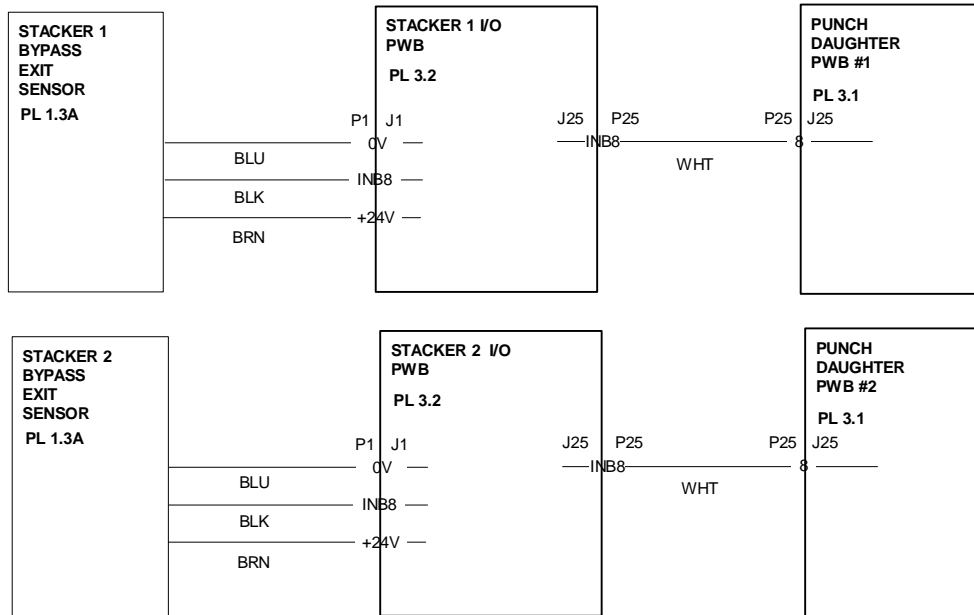
Leave the connector disconnected and go to Step 7.

7. On the problem Stacker, check for +24 VDC between P/J 1-0 V and P/J 1-24 V.

There is +24 VDC at this point.

| | |
|----------|---------------------------------------|
| Y | N |
| | |
| | Replace the Stacker I/O PWB (PL 3.3). |

Check the harness between the sensor and its plug on the Stacker I/O PWB. If the harness is OK, replace the Bypass Exit sensor (PL1.3A).



RAP 6.2 Printer Connectivity

Description

This RAP tests the communication between the Host Printer and the FusionPunch II.

Initial Actions

Check the User Interface of the Host Printer. If the Error message states “Clear External finisher to run Jobs to the Bypass Transport” or “External Finisher Not Ready”, ensure the following:

- the FusionPunch II is in Cycle Up Mode (except DT135).
OR,
- the FusionPunch II is in Online Mode and the machine has been started (all models, including DT 135).

If the problem still exists, go to **Procedure**.

Procedure

1. Switch on the Main Power Switch/Circuit Breaker and enter Diagnostic Mode (GP1). Select Punch Output and toggle the following signals between 0 and 1.
 - OUTA1 > Printer Stop
 - OUTA2 > Printer FAULT
 - OUTA3 > Printer FULL
 - OUTA4 > Printer Page Ack
 - OUTA5 > Printer Set Ack

The Host Printer fault screen error status changes with toggling.

Y |
N |
Go to Step 2.

Outputs from the Punch to the Printer are working normally. Go to Step 5 to check inputs from the Printer to the Punch.

2. Activate each output. Using the table below, check the LED's on the Punch I/O PWB.

Output Signals and Punch I/O LEDs

| Output Signal | Punch I/O LED |
|------------------------|---------------|
| OUTA1 Printer Stop | LOA1 |
| OUTA2 Printer FAULT | LOA2 |
| OUTA3 Printer FULL | LOA3 |
| OUTA4 Printer Page Ack | LOA4 |
| OUTA5 Printer Set Ack | LOA5 |

The LED for each output lit when the output was activated.

Y |
N |
Check the wiring harness between P/J23A on the Punch I/O PWB and P/J1 on the Little Star Controller. If the harness is open or shorted, replace it (PL 6.1A). If the harness is OK, replace the Little Star Controller PWB (PL 3.1)
Go to Step 3.

3. Unplug the DFA cable at the rear panel to the punch. Using the information in the table below, activate each output and check for 3 to 4.5 VDC across the pins listed for the active output.

Output Signals and Jumpered DFA Pins

| Output Signal | DFA Connector Pins |
|------------------------|--------------------|
| OUTA1 Printer Stop | 4 and 22 |
| OUTA2 Printer FAULT | 5 and 23 |
| OUTA3 Printer FULL | 6 and 24 |
| OUTA4 Printer Page Ack | 7 and 25 |
| OUTA5 Printer Set Ack | 8 and 26 |

The voltage is between 3 and 4.5 VDC when the output is activated.

Y |
N |
Go to Step 4.

- Communication between the Punch and Printer is operating correctly. Refer to the Service Manual for the Host Printer.
4. Check the Internal DFA Cable that runs from the rear panel to P1 on the Punch I/O PWB for proper seating, opens or shorts. If the cable is faulted, replace it (PL 6.1A). If the cable is OK, replace the Punch I/O PWB (PL 3.1).

5. Ensure the Main Power Switch / Circuit Breaker is switched on and enter Diagnostic Mode (GP1). Select Punch Inputs. Using the information below, select the desired input.

- INA1 > Page Signal
- INA2 > Set Signal
- INA3 > Cycle Up Signal
- INA4 > Function 1
- INA5 > Function 2

Unplug the DFA from the rear panel of the Punch. Using the information in the table below, jumper between the listed female pins on the jack, and check the display to see if each input changed state.

Input Signals and Jumpered DFA Pins

| Input Signal | DFA Connector Pins |
|----------------------|--------------------|
| INA1 Page Signal | 12 and 30 |
| INA2 Set Signal | 13 and 31 |
| INA3 Cycle Up Signal | 14 and 32 |
| INA4 Function 1 | 18 and 36 |
| INA5 Function 2 | 19 and 37 |

The input changes state when the corresponding pins are jumpered.

Y N
| |
Go to Step 6.

Communication between the FusionPunch II and the host printer is OK. Refer to the Service Manual for the printer.

6. Using the information in the table below, check the LED's on the Punch I/O PWB while applying the jumper to the pins listed.

Output Signals and Punch I/O LEDs

| Input Signal | Jumper Pins | Punch I/O LED |
|----------------------|-------------|---------------|
| INA1 Page Signal | 12 and 30 | LIA1 |
| INA2 Set Signal | 13 and 31 | LIA2 |
| INA3 Cycle Up Signal | 14 and 32 | LIA3 |
| INA4 Function 1 | 18 and 36 | LIA4 |
| INA5 Function 2 | 19 and 37 | LIA5 |

The LED for each input EXTINGUISHED when the pins for the input were jumpered.

Y N
| |
Go to Step 7.

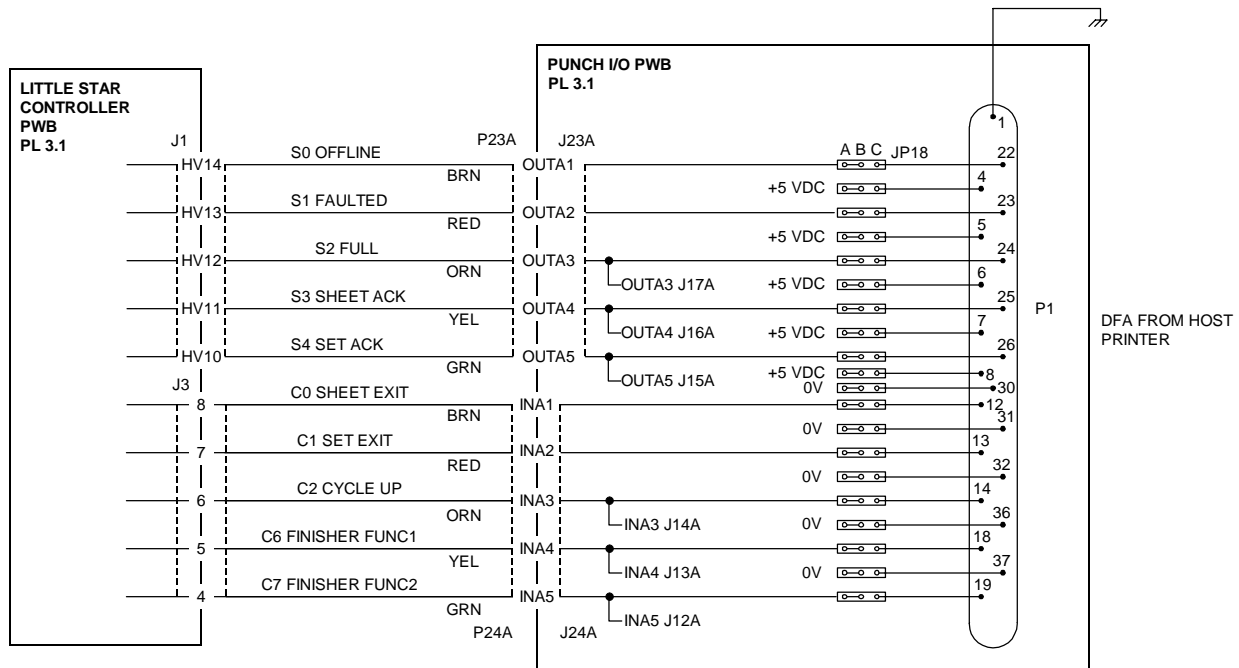
Replace the Little Star Controller PWB (PL 3.1).

7. Check the Internal DFA Cable that runs from the rear panel to P1 on the Punch I/O PWB for proper seating, opens or shorts.

The continuity of the cable is OK.

Y N
| |
If the cable is faulted, replace it (PL 6.1A).
Go to Step 8.

8. Check the wiring harness between P/J24A on the Punch I/O PWB and P/J3 on the Little Star Controller. If the harness is open or shorted, replace it (PL 6.1A). If the harness is OK, replace the Little Star Controller PWB (PL 3.1).



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| Quality RAP 5.5 Document Stack Shingled - - - - - | 3-10 |
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Quality RAP 5.3 Sets Do Not Offset

Description

This RAP is used to troubleshoot Offsetting problems in the Stacker.

Initial Actions

Open the Top Cover of the Stacker and bypass the interlock. Run several sets to the Punch and Stacker and observe the O-Ring Drive assembly. Ensure that the O-Rings are in good condition and that they are not slipping or binding. Replace as required (PL 5.1C).

Procedure

1. Enter the Diagnostic Mode (GP1) and using the information in the following table, check the O-Ring Motor for proper operation.

Use the left/right keys to underscore the desired input.

| Motor | Diagnostic |
|--------------|---|
| O-Ring Motor | S1 OUTC8 Stack Oring O8 11001100 <u>0</u> 11001100 |

The O-Ring Motor in the Stacker energizes when the output is activated.

Y N
| Go to Step 11.
| Go to Step 2.

2. Enter the Diagnostic Mode (GP1) and using the information in the following table, check the sensors in the punch for proper operation.

Use the left/right keys to underscore the desired input.

| Sensor | Diagnostic |
|----------------------|---|
| Entrance | P INB4 Enter Sensor I13 110011001100 <u>1</u> 100 |
| Document Transport 1 | P INB5 XportSensor1 I12 110011001100 <u>0</u> 1100 |
| Document Transport 2 | P INB6 XportSensor2 I11 1100110011 <u>0</u> 01100 |
| Punch | P INB7 Punch Sensor I10 110011001 <u>1</u> 001100 |
| Exit | P INB8 Exit Sensor I9 11001100 <u>1</u> 1001100 |

Sequentially block and unblock the sensor and observe the Control Panel for a change in state (0 to 1, or 1 to 0).

There is a change in state when the sensor is blocked and unblocked.

Y N
| Go to RAP 4.2 Punch Jam Sensors.
| Go to Step 3.

3. In the Diagnostics Mode, select End of Set Beeper and set the value to 1. Run a job from the host printer consisting of 5 sets. While the job is running, listen for the beep tone at the end of each set.

A beep is heard at the end of each set.

Y N
| Go to RAP 6.2 Printer Connectivity.
| Go to Step 4.

4. In Diagnostic Mode, set Offset Mode On to a value 2. This will cause the Punch to offset every 4 sheets of paper instead of at the end of set signal.

Feed sheets from the Host Printer.

The Punch offsets every four sheets.

Y N
| Go to Step 5.

Return the Offset Mode On value to 1 and go to Step 8.

5. With Offset Mode On set to 2, run the Punch in Test Mode (GP2). Check the following LEDs on the Stacker I/O-PWB:

L0B7 - Stacker Offset1 Output

L0B6 - Stacker Offset2 Output

LEDs L0B7 and L0B6 illuminate alternately approximately once every second.

Y N
| Go to Step 6.
| Go to Step 8.

6. Disconnect P/J 4A and P/J 5A on the Stacker I/O PWB. Using the information in the table below, enter the Diagnostics mode and use the left/right keys to underscore each offset solenoid.

| Offset Solenoid | Diagnostic |
|-----------------|---|
| Offset1 | S1 OUTB7 Offset 1 O15 1100110011001 <u>0</u> |
| Offset2 | S1 OUTB6 Offset 2 O14 1100110011001 <u>0</u> |

While the output is active, observe L0B6 and L0B7.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing

LEDs for L0B7 and L0B6 remain lit when its Stacker I/O PWB connector is disconnected.

Y N
| Reconnect P/J 4A and P/J 5A go to Step 7.

Leave the connector disconnected and go to Step 10.

7. Using the information in the following table, check the continuity of the cable between the Punch Daughter PWB P22 pins corresponding to the Offset Solenoids and the corresponding pin on P22 of the Stacker I/O PWB.

| Solenoid | Check |
|----------|---|
| Offset 1 | Daughter PWB P22-7 to Stacker I/O PWB OUTB7 |
| Offset 2 | Daughter PWB P22-6 to Stacker I/O PWB OUTB6 |

The continuity is OK.

Y N
| Replace the cable between the Stacker I/O PWB and the Daughter PWB (PL 6.2A).

Replace the Little Star Controller Expansion PWB (PL 3.1).

8. Disconnect P/J 4A and P/J 5A on the Stacker I/O PWB. Using the information in the table below, enter the Diagnostics mode and use the left/right keys to underscore each offset solenoid.

| Offset Solenoid | Diagnostic |
|-----------------|---|
| Offset1 | S1 OUTB7 Offset 1 O15 1100110011001 <u>0</u> |
| Offset2 | S1 OUTB6 Offset 2 O14 1100110011001 <u>0</u> |

Sequentially activate and deactivate the output and observe L0B6 and L0B7 on the Stacker I/O PWB.

LEDs L0B7 and L0B6 illuminate when their outputs are active.

Y N
| Reconnect P/J 4A and P/J 5A go to Step 9.

Reconnect P/J 4A and P/J 5A go to Step 10.

9. Using the information in the following table, check the continuity of the cable between the Punch Daughter PWB P22 pins corresponding to the Offset Solenoids and the corresponding pin on P22 of the Stacker I/O PWB.

| Solenoid | Check |
|----------|---|
| Offset 1 | Daughter PWB P22-7 to Stacker I/O PWB OUTB7 |
| Offset 2 | Daughter PWB P22-6 to Stacker I/O PWB OUTB6 |

The continuity is OK.

Y N
| Replace the cable between the Stacker I/O PWB and the Daughter PWB (PL 6.2A).

Replace the Little Star Controller Expansion PWB (PL 3.1).

10. In the Diagnostics Mode, sequentially turn on the outputs for each Offset Solenoid. Using the information in the following table, on the Stacker I/O PWB, check for +24VDC supplied to each offset solenoid.

| Solenoid | Check Voltage Between |
|----------|----------------------------|
| Offset 1 | P/J4A 24VI and P/J4A-OUTB7 |
| Offset 2 | P/J5A 24VI and P/J5A-OUTB6 |

There is +24VDC across these points.

Y N

Replace the Stacker I/O PWB (PL3.2).

Check continuity and shorts to ground between the Stacker I/O PWB and each offset solenoid.

The harness is open or shorted to ground.

Y N

Replace the defective Offset Solenoid (PL 5.1C).

Replace the harness (PL 6.2A).

11. In the Diagnostics Mode, sequentially activate and deactivate the O-Ring Motor output. Observe LED L0A8 on the Stacker I/O PWB.

LED L0A8 illuminates when the output is active.

Y N

Go to Step 12.

Go to Step 14.

12. On the Stacker I/O PWB, disconnect P/J 30. In the Diagnostics Mode, activate the Stacker O-Ring Motor output. While the output is active, observe L0A8 on the Stacker I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED L0A8 remains lit when P/J30 is disconnected.

Y N

Reconnect P/J 30 and go to Step 13.
Go to Step 16.

13. Check the continuity of the harness between the Punch Daughter PWB P23-8 and Stacker I/O PWB P23A-OUTA8.

The continuity is OK.

Y N

Replace the harness between the Punch Daughter PWB P23 and Stacker I/O PWB P23 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

14. On the Stacker I/O PWB, disconnect P/J 30. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker O-Ring Motor output. Observe L0A8 on the Stacker I/O PWB.

LED L0A8 lights when the output is activated.

Y N

Reconnect P/J 30 and go to Step 15.

Reconnect P/J 30 and go to Step 16.

15. Check the continuity of the harness between the Punch Daughter PWB P23-8 and Stacker I/O PWB P23A-OUTA8.

The continuity is OK.

Y N

Replace the harness between the Punch Daughter PWB P23 and Stacker I/O PWB P23 (PL 6.1D).

Replace the Little Star Controller Expansion PWB (PL 3.1).

16. The O-Ring Motor is enabled by a ground on P30-A8. When the output is deactivated, there should be +24 VDC at this point. When the output is active, there should be 0 VDC.

In the Diagnostics Mode, deactivate the O-Ring Motor output. While the output is deactivated, on the Stacker I/O PWB, check for +24 VDC between P/J30-OUTA8, and P/J 12-0VDC. Then, activate the output and check for 0 VDC at the same location.

There is +24 VDC with the output deactivated and 0 VDC when it is activated.

Y N

Replace the Stacker I/O PWB (PL 3.2).

Activate and deactivate the O-Ring Motor output. While the output is active, on the Stacker AC/DC Distribution PWB, check for 0 VDC and +24VDC between P/J11-MT2, and P/J 12-0VDC.

Go on to the next page...

There is +24 VDC with the output deactivated and 0 VDC when it is activated.

Y **N**
|
| Replace the harness between
| Stacker I/O PWB P30 and Stacker
| AC/DC Distribution PWB P11 (PL
| 6.2A).

Go to Step 17.

17. In the Diagnostics Mode, repeatedly activate and deactivate the Stacker O-Ring Motor output. Observe Relay3 on the Stacker AC/DC Distribution PWB.

The Relay activates and deactivates as the output is toggled.

Y **N**
|
| Replace the Stacker AC/DC
| Distribution PWB (PL 3.2).

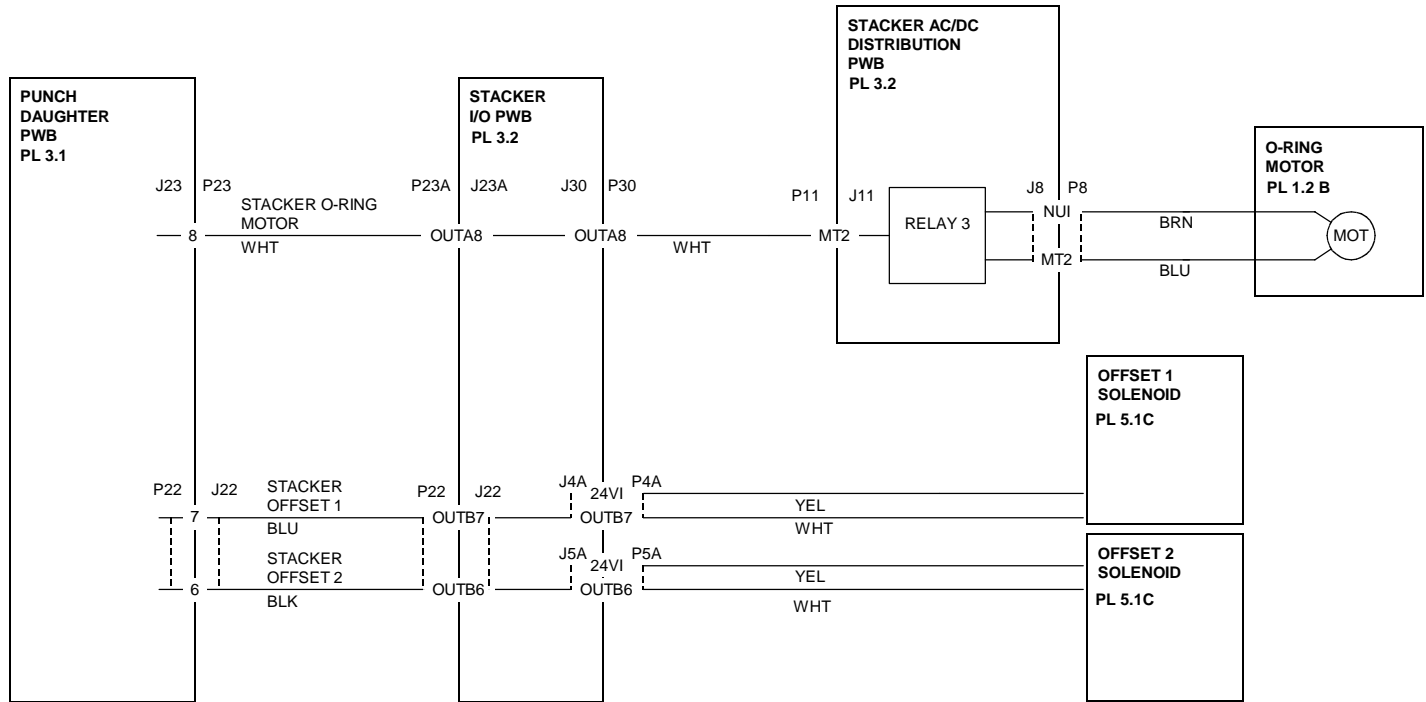
Go to Step 18.

18. In the Diagnostics Mode, activate the Stacker O-Ring Motor output. Disconnect P/J 8 on the Stacker AC/DC Distribution PWB. Check for 110VAC across J8-NUI and J8-MT2.

There is 110VAC at this point.

Y **N**
|
| Go to Section 2 RAP 1.2 AC Power
| to the Stacker.

Check the harness between P8 on the Stacker AC/DC Distribution PWB and the O-Ring Motor. If the harness is OK, replace the O-Ring Motor (PL 1.2B).



Quality RAP 5.4 Trail Edge Torn, Marked, or Creased

Description

This RAP is used when the trailing edge of the punched documents are torn, marked or creased.

Initial Action

Switch on the Main Power to the Punch, open the Top Covers and bypass the interlocks.

Procedure

1. Feed a set of documents from the host printer. Observe the sheets as they progress through the Punch.

The documents are stalling when exiting the Punch.

Y | **N**
 | |
 | | Advance to Step 2.

Refer to the FusionPunch II User Guide and ensure that the Side Guide Adjustment is correct and not too tight.

2. Check the Back Gauge Fingers for burrs or sharp edges.

The Back Gauge Fingers are free of burrs or sharp edges.

Y | **N**
 | | Sand any burrs or sharp edges that are present.

Go to Step 3.

3. Perform the Back Gauge Fingers Adjustment ADJ 4.3.

The trailing edges of the documents are still torn, marked or creased.

Y | **N**
 | | Problem resolved.
 | | Go to Step 4.

4. Enter Diagnostics (GP-3) and increase the Clutch On Set value by one increment.

The trailing edge of the documents are still torn, marked or creased.

Y | **N**
 | | Problem resolved.

Return the Clutch On Set Value to its original value and go to Step 5.

5. Using the information in the table below, enter the Diagnostics mode and use the left/right keys to underscore the test for the Back Gauge Fingers.

| Solenoid | Diagnostic |
|--------------------|---|
| Back Gauge Fingers | P O2B7 Backgauge O2 1100110011001100 |

Sequentially activate and deactivate the output and observe the action of the Back Gauge Fingers.

The Back Gauge Fingers activate and deactivate quickly and smoothly when the output is toggled, and snap firmly into position.

Y | **N**
 | | Go to Step 6.

Check the rest of the Punch and Stacker Paper Path for obstructions, burrs, and sharp edges.

6. In the Diagnostics Mode, sequentially activate and deactivate the Back Gauge Fingers output. Observe LED L0B7 on the Punch I/O PWB.

LED L0B7 illuminates when the output is active.

Y | **N**
 | | Go to Step 7.

Go to Step 9.

7. On the Punch I/O PWB, disconnect P/J 4B. In the Diagnostics Mode, activate the Back Gauge Fingers output. While the output is active, observe L0B7 on the Punch I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED L0B7 remains lit when its Punch I/O PWB connector is disconnected.

Y | **N**
 | | Reconnect P/J 4B and go to Step 8.
 | | Go to Step 10.

8. On the Punch I/O PWB, disconnect Optical Relay Opto2. Activate the Back Gauge Fingers output and observe LED L0B7.

NOTE: In this step, you are checking to see if the LED remains LIT when the relay is disconnected, NOT flashing.

LED L0B7 remains lit when its Punch I/O PWB optical relay is disconnected.

Y | **N**
|
| Reconnect the relay and go to Step 9.

Replace Optical relay Opto2 on the Punch I/O PWB (PL 3.1).

9. Check the continuity of the harness between the Little Star Controller PWB P1-HV02 and Punch I/O PWB P22-OUTB7

The continuity is OK.

Y | **N**
|
| Replace the harness between the Punch I/O PWB P/J22 and the Little Star Controller PWB P1 (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

10. On the Punch I/O PWB, disconnect P/J 4B and Optical Relay Opto2. In the Diagnostics Mode, sequentially activate and deactivate the back Gauge Fingers output. Observe L0B7 on the Punch I/O PWB.

LED L0B7 sequentially lights and extinguishes when the output is toggled.

Y | **N**
|
| Reconnect P/J 4B, reinstall the Optical Relay, and go to Step 11.

Reconnect P/J 4B, reinstall the Optical Relay, and go to Step 12.

11. Check the continuity of the harness between the Little Star Controller PWB P1-HV02 and Punch I/O PWB P22-OUTB7

The continuity is OK.

Y | **N**
|
| Replace the harness between the Punch I/O PWB P/J22 and the Little Star Controller PWB P1 (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

12. With the output active, check Optical Relay Opto2 on the Punch I/O PWB.

The light on the relay is lit when the output is active.

Y | **N**
|
| Replace Optical Relay Opto2 on the Punch I/O PWB (PL 3.1).

Go to Step 13.

13. Check the 3-60 VDC, 3 amp fuse on the Optical Relay.

The fuse is OK

Y | **N**
|
| Replace the fuse.

Go to Step 14.

14. With the output active, check for +24VDC supplied to the Back Gauge Solenoid by placing the meter leads across P/J 4B-24VI and P/J 4B-OUTB7.

There is +24VDC across these points.

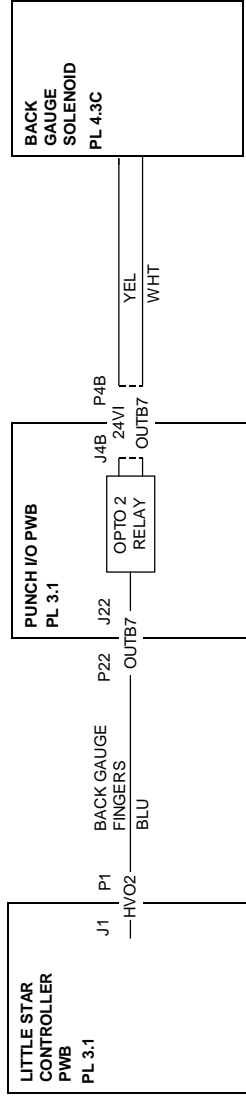
Y | **N**
|
| Replace the Punch I/O PWB (PL3.1).

Check continuity and shorts to ground in the harness between the P/J 4B on the Punch I/O PWB and the Back Gauge Solenoid.

The harness is open or shorted to ground.

Y | **N**
|
| Replace the Back Gauge Solenoid (PL 4.3C).

Replace the harness (PL 6.1A).



Quality RAP 5.5 Document Stack Shingled

Description

This RAP is used when the output stack is not laying with each sheet within a set directly on top of the sheet below it. This condition causes the stack to slant from right to left within the output tray.

Procedure

1. Send a job **without tabs** through the GBC One-Sided Print Queue.

The document stack is still shingled.

| | |
|----------|-------------------|
| Y | N |
| | |
| | Problem resolved. |

Load paper in the Host Printer in the opposite direction to correct for curl up/ curl down.

The document stack is still shingled.

| | |
|----------|--|
| Y | N |
| | |
| | Problem resolved. Instruct the operator to watch for this condition in the future. |

Go to Step 2.

2. With no paper in the Stacker Tray, observe the distance between the Stacker Tapper and the Tray.

The Stacker Tappers are 1mm +/- 1/2 mm from the Tray.

| | |
|----------|--|
| Y | N |
| | |
| | Perform ADJ 5.2 Stacker Tray Stop Position and then ADJ 5.3 Tapper Assembly. |

Go to Step 3.

3. Perform the Stacker Upper Switch Checkout in RAP 5.1.

8. On the Punch I/O PWB, disconnect P/J 3B and Optical Relay Opto1. In the Diagnostics Mode, sequentially activate and deactivate the Punch Clutch output. Observe L0B8 on the Punch I/O PWB.

LED L0B8 sequentially lights and extinguishes when the output is toggled.

Y | **N**
 |
 | Reconnect P/J 3B, reinstall the Optical Relay, and go to Step 9.

Reconnect P/J 3B, reinstall the Optical Relay, and go to Step 10.

9. Check the continuity of the harness between the Little Star Controller PWB P1-HV01 and Punch I/O PWB P22-OUTB8.

The continuity is OK.

Y | **N**
 |
 | Replace the harness between the Punch I/O PWB P/J22 and the Little Star Controller PWB P1 (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

10. With the output active, check Optical Relay Opto1 on the Punch I/O PWB.

The light on the relay is lit when the output is active.

Y | **N**
 |
 | Replace Optical Relay Opto1 on the Punch I/O PWB (PL 3.1).

Go to Step 11.

11. Check the fuse on the Optical Relay.

The fuse is OK.

Y | **N**
 |
 | Replace the fuse (PL 3.1).

Go to Step 12.

12. With the output active, check for +24VDC supplied to the Punch Clutch Solenoid by placing the meter leads across P/J 3B-24VI and P/J 3B-OUTB8.

There is +24VDC across these points.

Y | **N**
 |
 | Replace the Punch I/O PWB (PL3.1).

Check continuity and shorts to ground in the harness between the P/J 3B on the Punch I/O PWB and the Punch Clutch Solenoid.

The harness is open or shorted to ground.

Y | **N**
 |
 | Replace the Punch Clutch Solenoid (PL 4.3C).

Replace the harness (PL 6.1A).

13. Using the information in the table below, enter the Diagnostics mode and use the left/right keys to underscore the Punch Motor output. Activate the Punch Motor.

| Output | Diagnostic |
|-------------|---|
| Punch Motor | P OUTB1 Punch Motor O7 110011 <u>0</u> 011001100 |

The motor activates.

Y | **N**
 |
 | Activate the motor output again. Check LED L0B1 on the Punch I/O PWB. If the LED is lit when the output is on, go to Step 14. If it is off when the output is on, go to Step 15.

Check the Punch Document Transport Assembly for obstructions, burrs, bent or missing components. Repair/replace as required (PL 4.2A to 4.2E).

14. On the Punch I/O PWB, disconnect P/J30. Repeatedly activate and deactivate the Punch Motor output.

LED L0B1 lights\extinguishes as the output is activated\deactivated.

Y | **N**
 |
 | Reconnect J30. Check continuity and for shorts to ground between P22-OUTB2 on the Punch I/O PWB and J1-HV07 on the Little Star Controller PWB.

If the harness is faulty, replace it (PL 6.1A). If not, replace the Little Star Controller PWB (PL 3.1).

Check continuity and for shorts to ground between P 30-OUTB1 on the Punch I/O PWB and P11-MT3 on the Punch AC/DC Distribution PWB.

The harness is OK.

Y | **N**
 |
 | Replace the harness (PL 6.1A).

The Punch Motor is enabled with a ground on P/J11-MT4. When the output is activated, there should be 0VDC at this point. When the output is deactivated, there should be +24 VDC.

Activate and then deactivate the output and check for 0VDC and then +24 VDC between P/J11-MT4 and P/J 12-0V on the Punch AC/DC Distribution PWB.

There is 0VDC when the output is activated and +24VDC when it is deactivated.

Y | **N**
 |
 | Replace the Punch I/O PWB (PL 3.1).

Go to Step 14A.

14A. Activate the output and check AC voltage across J9-NUI and J9-MT2 on the Punch AC/DC Distribution PWB.

There is 110 VAC at this point.

Y N

Replace the Punch AC/DC Distribution PWB (PL 3.1).

Check the harness from J9-NUI on the Punch AC/DC Distribution PWB to the Punch Motor, and from J9-MT3 on the Punch AC/DC Distribution PWB to the Punch Motor. If the harness is OK, replace the Punch Motor (PL 1.1F).

15. Disconnect P/J30 on the Punch I/O PWB. Activate the output again and check LED L0B1 on the Punch I/O PWB.

The LED is lit when the output is active.

Y N

Check continuity between J1-HV07 on the Little Star Controller PWB and P22-OUTB2 on the Punch I/O PWB.

If the harness is faulty, replace it (PL 6.1D). If the harness is OK, replace the Little Star Controller PWB (PL 3.1).

Check continuity and for shorts to ground between P 30-OUTB1 on the Punch I/O PWB and P11-MT3 on the Punch AC/DC Distribution PWB.

The harness is OK.

Y N

Replace the harness (PL 6.1A)

Go to Step 15A.

15A. The Punch Motor is enabled with a ground on P/J11-MT4. When the output is activated, there should be 0VDC at this point. When the output is deactivated, there should be +24 VDC.

Activate and then deactivate the output and check for 0VDC and then +24 VDC between P/J11-MT4 and P/J 12-0V on the Punch AC/DC Distribution PWB.

There is 0VDC when the output is activated and +24VDC when it is deactivated.

Y N

Replace the Punch I/O PWB (PL 3.1).

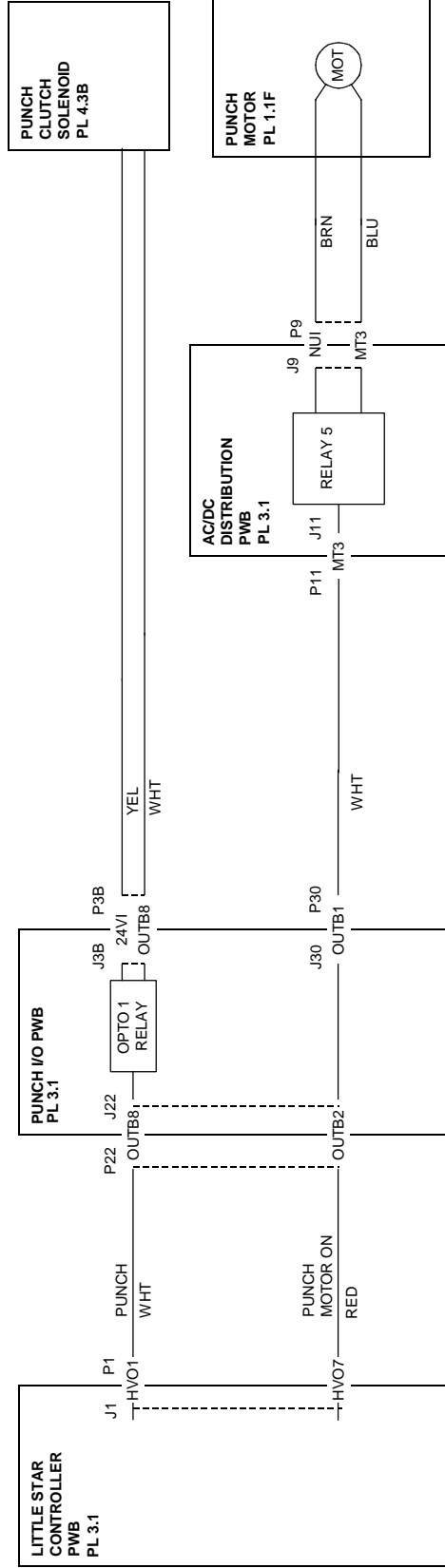
Activate the output and check AC voltage across J9-NUI and J9-MT3 on the Punch AC/DC Distribution PWB.

There is 110 VAC at this point.

Y N

Replace the Punch AC/DC Distribution PWB (PL 3.1).

Check the harness from J9-NUI on the Punch AC/DC Distribution PWB to the Punch Motor, and from J9-MT3 on the Punch AC/DC Distribution PWB to the Punch Motor. If the harness is OK, replace the Punch Motor (PL 1.1F).



Quality RAP 5.7 Documents Punched in Center of Sheet

Description

This RAP is used when some or all of the sheets in the set are punched at or near the center of the sheet.

Procedure

- Using the information in the table below, enter the Diagnostics mode and use the left/right keys to underscore the test for the Back Gauge Fingers.

| Solenoid | Diagnostic |
|--------------------|--|
| Back Gauge Fingers | P OUTB7 Backstops O2 <u>1</u> 100110011001100 |

Sequentially activate and deactivate the output and observe the action of the Back Gauge Fingers.

The Back Gauge Fingers activate and deactivate quickly and smoothly when the output is toggled, and snap firmly into position.

Y N
| Go to Step 2.

Check the rest of the Punch and Stacker Paper Path for obstructions, burrs, and sharp edges.

- In the Diagnostics Mode, sequentially activate and deactivate the Back Gauge Fingers output. Observe LED L0B7 on the Punch I/O PWB.

LED L0B7 illuminates when the output is active.

Y N
| Go to Step 3.

Go to Step 5.

- On the Punch I/O PWB, disconnect P/J 4B. In the Diagnostics Mode, activate the back Gauge Fingers output. While the output is active, observe L0B7 on the Punch I/O PWB.

NOTE: In this step, you are checking to see if the LED remains LIT when the P/J is disconnected, NOT flashing.

LED L0B7 remains lit when its Punch I/O PWB connector is disconnected.

Y N
| Reconnect P/J 4B and go to Step 4.

Go to Step 6.

- On the Punch I/O PWB, disconnect Optical Relay Opto2. Activate the Back Gauge Fingers output and observe LED L0B7.

NOTE: In this step, you are checking to see if the LED remains LIT when the relay is disconnected, NOT flashing.

LED L0B7 remains lit when its Punch I/O PWB optical relay is disconnected.

Y N
| Reconnect the relay and go to Step 5.

Replace Optical relay Opto2 on the Punch I/O PWB (PL 3.1).

- Check the continuity of the harness between the Little Star Controller PWB P1-HV02 and Punch I/O PWB P22-OUTB7

The continuity is OK.

Y N
| Replace the harness between the Punch I/O PWB P/J22 and the Little Star Controller PWB P1 (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

- On the Punch I/O PWB, disconnect P/J 4B and Optical Relay Opto2. In the Diagnostics Mode, sequentially activate and deactivate the back Gauge Fingers output. Observe L0B7 on the Punch I/O PWB.

LED L0B7 sequentially lights and extinguishes when the output is toggled.

Y N
| Reconnect P/J 4B, reinstall the Optical Relay, and go to Step 7.

Reconnect P/J 4B, reinstall the Optical Relay, and go to Step 8.

- Check the continuity of the harness between the Little Star Controller PWB P1-HV02 and Punch I/O PWB P22-OUTB7

The continuity is OK.

Y N
| Replace the harness between the Punch I/O PWB P/J22 and the Little Star Controller PWB P1 (PL 6.1A).

Replace the Little Star Controller PWB (PL 3.1).

8. With the output active, check Optical Relay Opto2 on the Punch I/O PWB.
The light on the relay is lit when the output is active.

Y **N**
 |
 | Replace Optical Relay Opto2 on the Punch I/O PWB (PL 3.1).
 |
 | Go to Step 9.

9. Check the fuse on the Optical Relay.
The fuse is OK

Y **N**
 |
 | Replace the fuse.
 |
 | Go to Step 10.

10. With the output active, check for +24VDC supplied to the Back Gauge Solenoid by placing the meter leads across P/J 4B-24VI and P/J 4B-OUTB7.

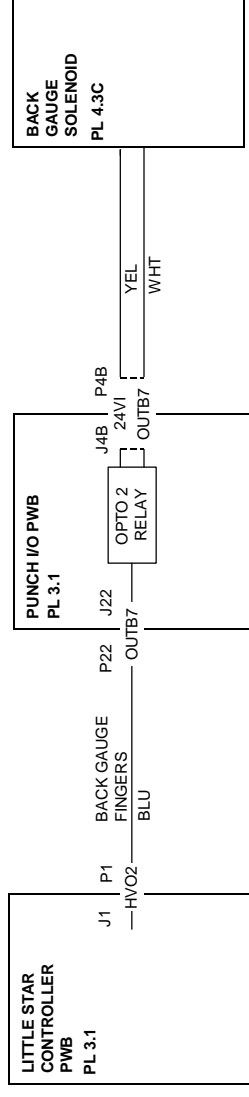
There is +24VDC across these points.

Y **N**
 |
 | Replace the Punch I/O PWB (PL3.1).

Check continuity and shorts to ground in the harness between the P/J 4B on the Punch I/O PWB and the Back Gauge Solenoid.

The harness is open or shorted to ground.

Y **N**
 |
 | Replace the Back Gauge Solenoid (PL 4.3C).
 |
 | Replace the harness (PL 6.1A).



4. Repairs/Adjustments

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Introduction

The Section Contents gives references for all procedures in the repair section.

The repair section contains removal and replacement procedures. If a part procedure cannot be found in this section, it means that removal or replacement is supported by the parts list, or that there is no requirement to remove the part.

Removal

Removal contains step by step removal procedures for a specific part or assembly.

You should refer to the specific parts list illustration (listed under the repair title) for locating most parts within a procedure.

Replacement

Replacement contains procedures to reinstall or replace a part or assembly.

If a replacement can be completed in the exact reverse order of the removal, a generic replacement statement is provided.

If you are in one replacement procedure and are directed to go to another procedure to reinstall a part, reinstall that part, then return to the original procedure. The original procedure provides the best sequence for reinstalling each part removed.

Adjustment

A purpose and a check for each adjustment is listed before the procedure. Some procedures may also contain a prerequisite that will instruct you to do some steps before you can start the adjustment procedure.

REP 1.1 Punch AC/DC Distribution PWB

Parts List 3.1



WARNING

Switch off the main power.
Disconnect the Power Cord.

Removal

1. Remove the Punch Rear Panels.
2. Disconnect the following Connectors from the Punch AC/DC Distribution PWB:
 - P1 - AC Receptacle / Line Filter
 - P2 - 24 VDC Power Supply PWB CN1
 - P4 - 24 VDC Power Supply PWB CN2
 - P6 - Punch Interlock High
 - P8 - Document Transport Motor
 - P9 - Punch Motor
 - P11 - Punch I/O PWB P/J 30
 - P12 - Punch I/O PWB P/J 28
 - P14 - Stacker AC/DC Distribution PWB P/J 14
 - P15 - Punch I/O PWB P/J 29
3. Remove the 4 Allen Head Cap screws and the Punch AC/DC Distribution PWB.

Replacement

1. Reinstall the parts in reverse order.

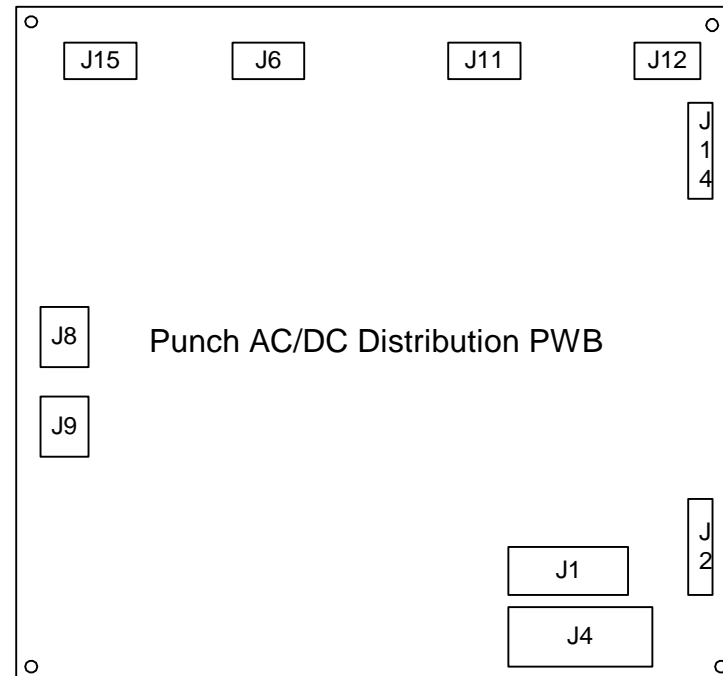


Figure 1.

REP 2.1 Control Panel LCD Display PWB

Parts List: 2.1 A



WARNING

Switch off the main power.
Disconnect the Power Cord.



Electrostatic Discharge

The Display PWB is susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Removal

1. Remove 2 Allen Head Cap screws to remove Access Plate.
2. Remove 6 Hex Nuts and Lock Washers.
3. Disconnect the LCD Display Connector and the Keypad Connector.
4. Remove the 4 Allen Head Cap screws from the LCD Display PWB.

Replacement

1. Reinstall the components in the reverse order.

NOTE: Make sure that the white wire on the connector going to the Button Flat Cable is not connected.

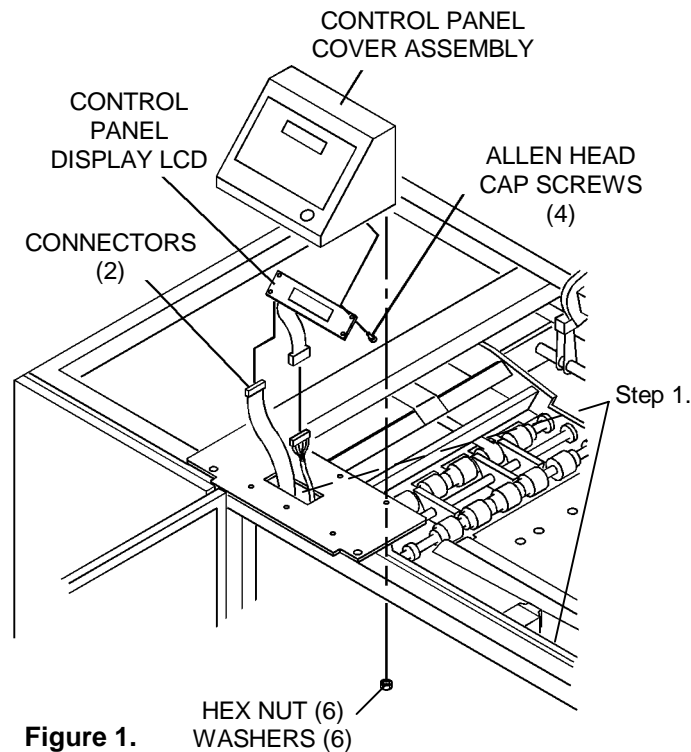


Figure 1.

REP 3.1 Little Star Controller PWB

Parts List: 3.1



WARNING

Switch off the main power. Disconnect the power cord.



Electrostatic Discharge

The Controller PWB is susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

Removal

1. Remove the Punch Rear Panels.
2. Disconnect the ribbon cables that go to the Little Star Expansion PWB.
3. Disconnect P/J 1 and 3 from the Little Star Controller PWB.
4. Remove the 4 Allen Head Cap screws and the Little Star Controller PWB.
5. Remove the EPROM and the RAM chip from the old PWB.

Replacement

1. Install the EPROM and the RAM chip with the notch on the chips aligned with the notch on the socket.
2. Compare the Jumpers on the existing PWB with the Jumpers on the new PWB. Install Jumpers to configure the new PWB.
3. Reinstall the components in the reverse order.

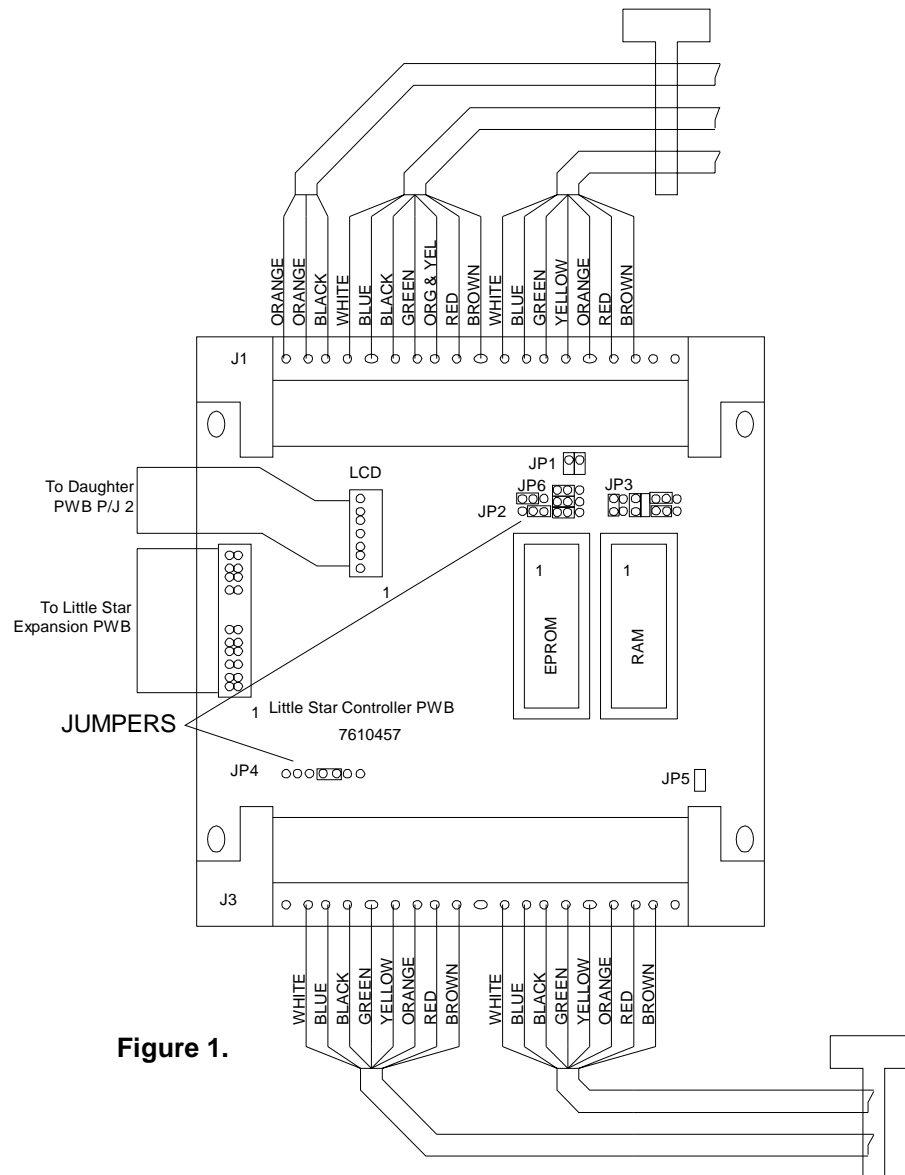


Figure 1.

REP 4.1 Swing Frame Flat Belts

Parts List: 4.1 A



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal / Replacement

1. Remove the Punch Rear Panels.
2. Remove the 4 screws and the Swing Frame Ball Track Assembly.
3. Remove the 10 Allen Head Cap screws and the 4 Deck Plates.
4. On the Drive Shaft to the right, loosen:
 - 4.1 the 4 setscrews in the 4 Bearing Collars.
 - 4.2 the 5 setscrews in the 5 Crowned Rollers.
5. On the Drive Shaft to the left, loosen:
 - 5.1 the 2 setscrews in the 2 Bearing Collars.
 - 5.2 the 3 setscrews in the 3 Crowned Rollers.

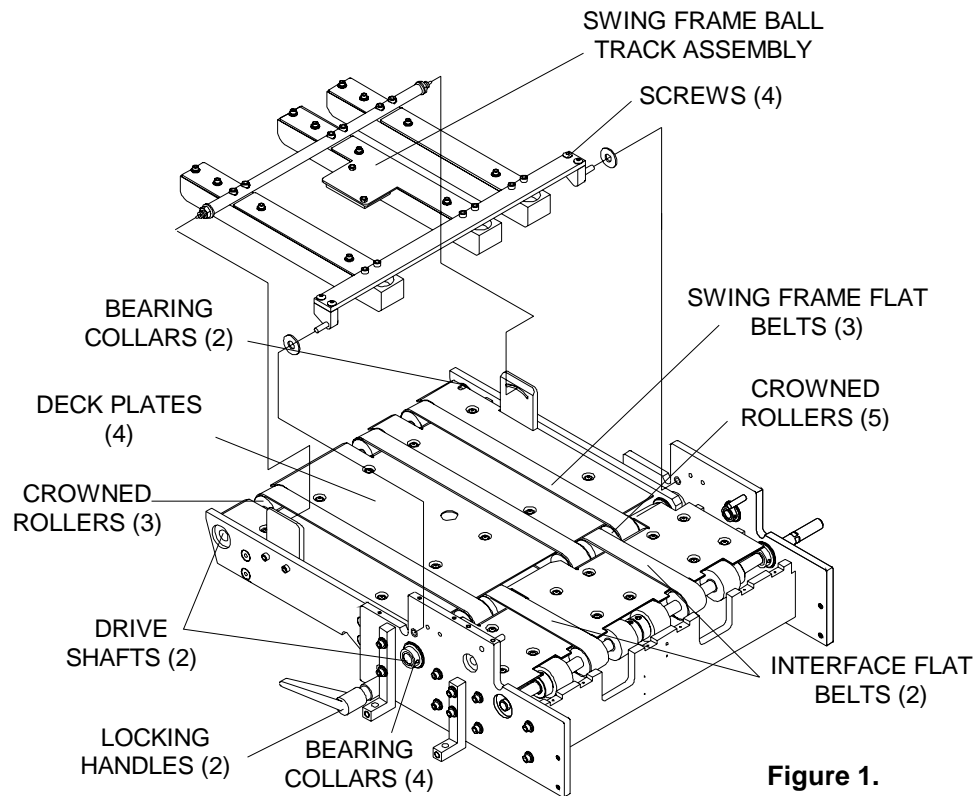
NOTE: All Crowned Rollers are mounted on a flat surface on the Drive Shaft. Ensure that the Rollers slide without obstructions on the Drive Shafts.

6. Slide the 2 Drive Shafts toward the back of the machine to remove the Front and Center Swing Frame Flat Belts.
7. Clean the Front and Center Crowned Rollers with Isopropyl alcohol and then install the new Front and Center Swing Frame Flat Belts.

8. Slide the 2 Drive Shafts towards the front of the machine, through the Bearing Collars and the Crowned Rollers.
9. Loosen the Locking Handles and lower the Swing Frame Assembly.
10. Slide the 2 Drive Shafts further to the front of the machine to remove the Swing Frame Rear Flat Belt.
11. Clean the Rear Crowned Rollers with Isopropyl alcohol and then replace the Swing Frame Rear Flat Belts.
12. Slide the 2 Drive Shafts towards the back of the machine, through the Bearing Collars and the Crowned Rollers.
13. Tighten the 6 setscrews in the 6 Bearing Collars and the 8 setscrews in the 8 Crowned Rollers.

NOTE: Ensure that the setscrews in the Crowned Rollers are properly tightened on the flat surfaces of the 2 Drive Shafts.

14. Reinstall the 4 Deck Plates and the Punch Rear Panels.



REP 4.2 Interface Flat Belts

Parts List: 4.1 B



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Remove the Punch Rear Panels.
2. Remove the 4 screws and the Swing Frame Ball Track Assembly.
3. Remove the 12 Allen Head Cap screws and the 3 Deck Plates.
4. On the Drive Shaft to the right, loosen:
 - 4.1 the 2 setscrews in the 2 Bearing Collars.
 - 4.2 the 2 setscrews in the 2 Crowned Rollers.
 - 4.3 the 4 setscrews in the 4 Rubber Drive Rollers.
5. On the Drive Shaft to the left, loosen:
 - 5.1 the 4 setscrews in the 4 Bearing Collars.
 - 5.2 the 5 setscrews in the 5 Crowned Rollers.
6. Loosen the Allen Head Cap screw on the Document Transport Timing Belt Take Up Assembly and remove the Document Transport Timing Belt.

NOTE: All Crowned Rollers are mounted on a flat surface on the Drive Shaft. Ensure that the Rollers slide without obstructions on the Drive Shafts.

7. Slide the 2 Drive Shafts towards the back of the machine.
8. Remove the Interface Flat Belts.

9. Clean the Crowned Rollers with Isopropyl alcohol.

Replacement

1. Replace the Interface Flat Belts.
2. Reinstall all the parts in reverse order.
3. Tighten the 6 setscrews in the 6 Bearing Collars, the 4 setscrews in the 4 Rubber Drive Rollers and the 7 setscrews in the 7 Crowned Rollers.
4. Perform ADJ 4.1 Document Transport Timing Belt Tension before turning the machine on again.

NOTE: Ensure that the setscrews in the Crowned Rollers are properly tightened on the flat surfaces of the 2 Drive Shafts.

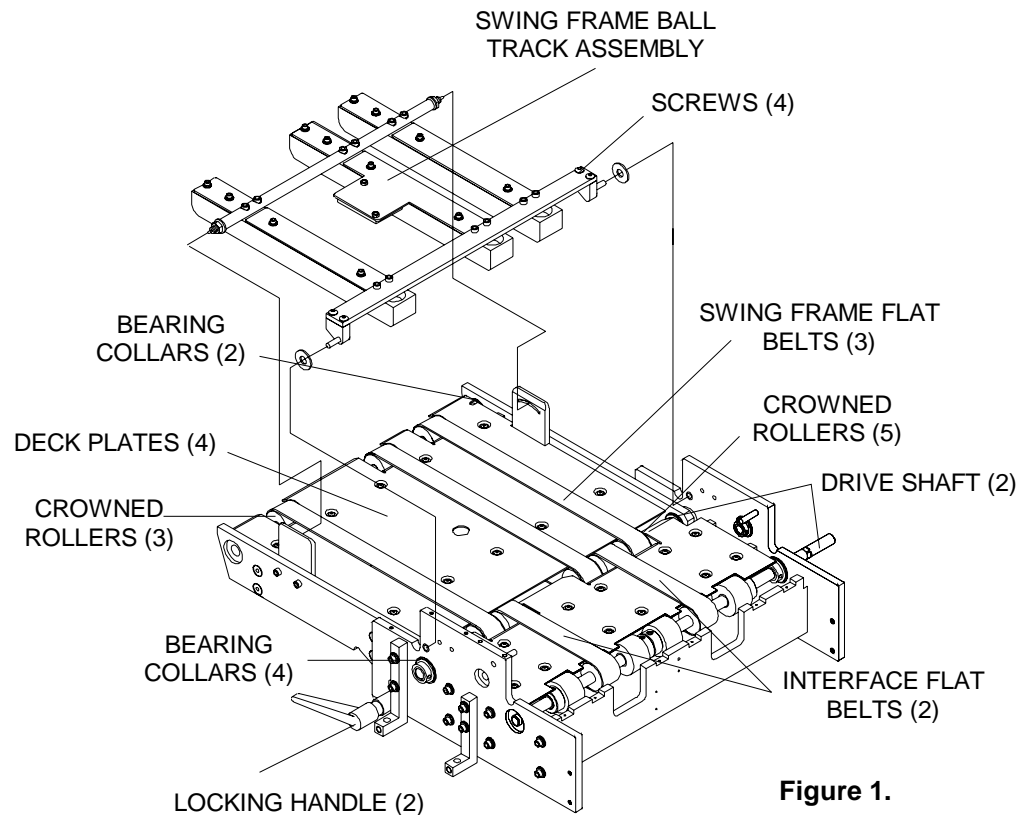


Figure 1.

REP 4.3 Document Transport Flat Belt

Parts List: 4.2 D



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Remove the 9 Allen screws and the Document Transport Deck.
2. Loosen the 2 setscrews in the Flex Coupler.
3. Move the Flex Coupler toward the back of the machine.
4. Remove the 4 Allen Head Cap screws and the Document Transport Flat Belt Assembly.
5. Remove the Document Transport Flat Belt.

NOTE: Before replacing the Belt, clean the surface of the Crowned Rollers with Isopropyl alcohol.

Replacement

1. Replace the Document Transport Flat Belt.
2. Install the Document Transport Flat Belt Assembly. Tighten the 4 Allen Head Cap screws.
3. Move the Flex Coupler onto the Shaft.
4. Ensure that the two Shafts extend into the Coupler the same distance, but not more than 0.375 in. (1.0 cm).
5. Tighten the 2 setscrews in the Flex Coupler.
6. Install the Document Transport Deck and the 9 Allen screws.

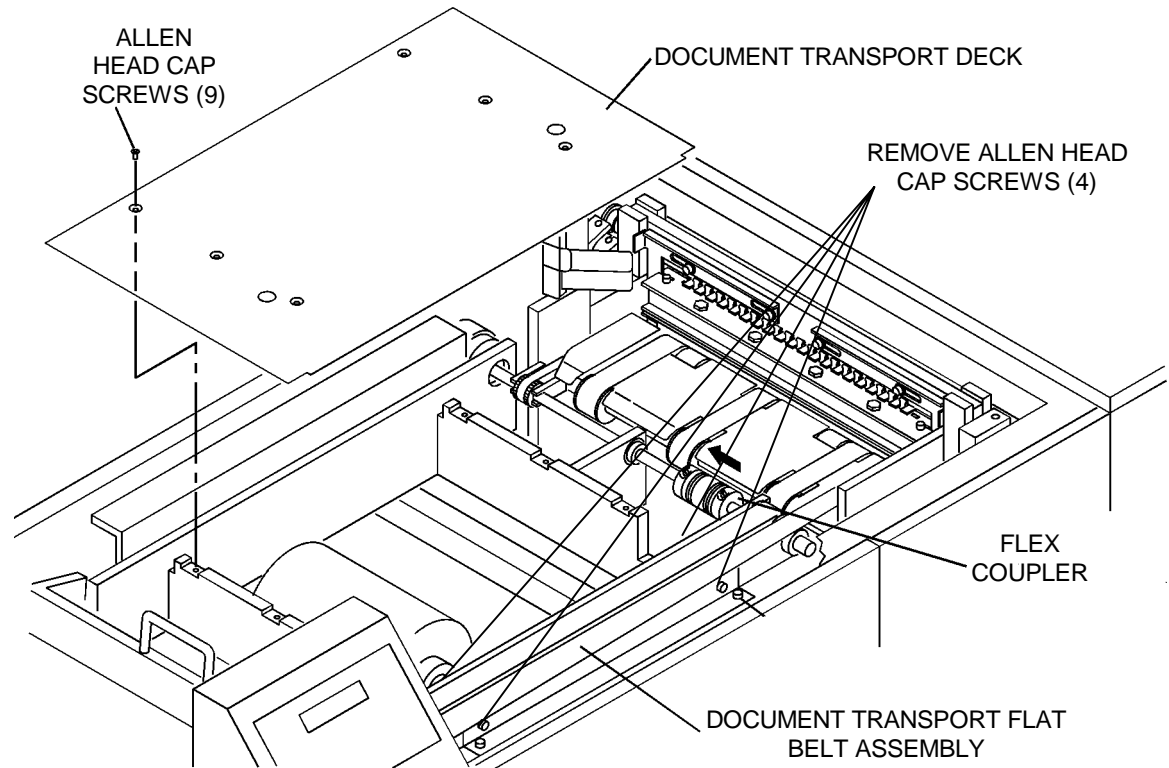


Figure 1.

REP 4.4 Punch Infeed Timing Belt

Parts List: 4.3 B



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Remove the Punch Rear Panels.
2. Loosen the Allen Head Cap screw on the Document Transport Timing Belt Take Up Assembly.
3. Remove:
 - 3.1 the Document Transport Timing Belt.
 - 3.2 the 9 Allen screws and the Document Transport Deck.
 - 3.3 the Die Set.
4. Loosen:
 - 4.1 the rear setscrew in the Flex Coupler (Figure 1).
 - 4.2 the setscrew in the Bearing Collar (Figure 1).
 - 4.3 the 2 Idler screws on the Punch Infeed Idler Pulley Assembly (Figure 2).
5. Slide the Flex Coupler Shaft toward the back of the machine.
6. Loosen:
 - 6.1 the 4 setscrews in the 4 Bearing Collars on the 2 Punch Drive Shafts (Figure 2).
 - 6.2 the 6 setscrews in the 6 Crowned Rollers (Figure 1).
 - 6.3 the 2 setscrews in the 2 Rubber Drive Rollers (Figure 1).
 - 6.4 the 2 setscrews in the Punch Output Drive Timing Belt Pulley (Figure 3).
7. Slide the 2 Drive Shafts towards the front of the machine and remove the Timing Belt (Figure 3).

6.2 the 6 setscrews in the 6 Crowned Rollers (Figure 1).

6.3 the 2 setscrews in the 2 Rubber Drive Rollers (Figure 1).

6.4 the 2 setscrews in the Punch Output Drive Timing Belt Pulley (Figure 3).

NOTE: Ensure that the setscrews in the Punch Output Timing Belt Pulley are loosened enough to clear the round part of the shaft. All Crowned Rollers are mounted on a flat surface on the Drive Shafts. Ensure that the Crowned Rollers slide without obstructions on the Drive Shafts.

7. Slide the 2 Drive Shafts towards the front of the machine and remove the Timing Belt (Figure 3).

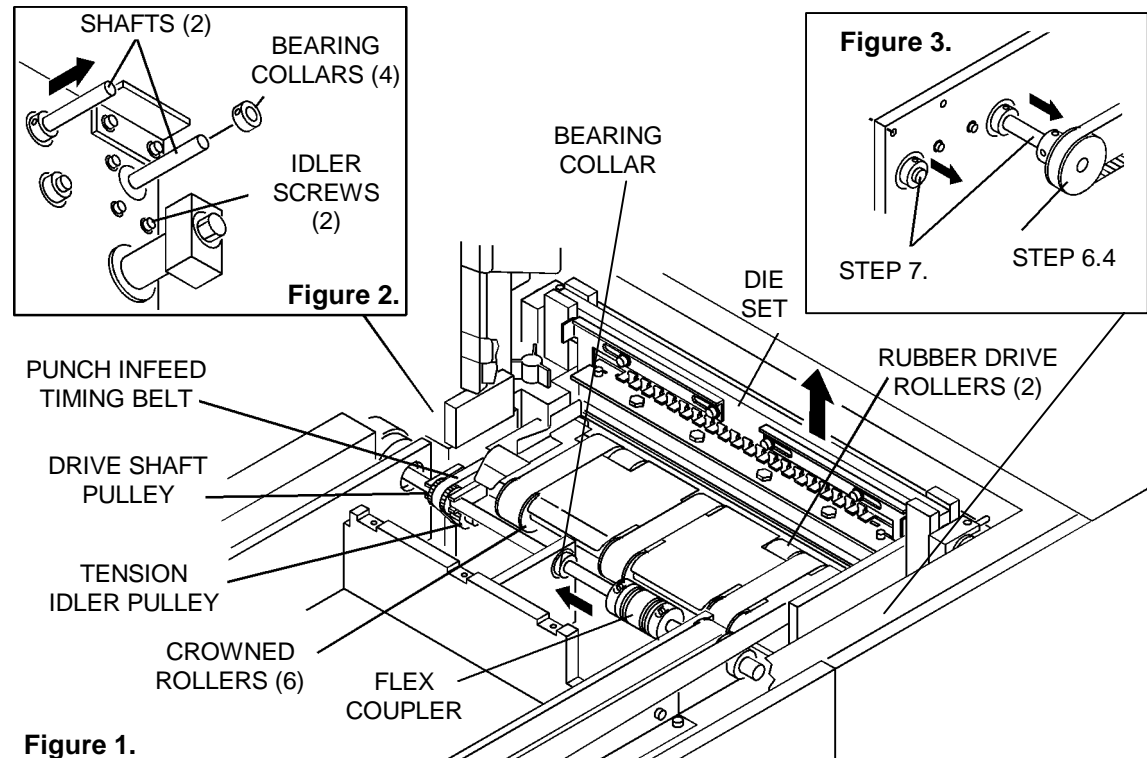


Figure 1.

Continued from Page 4 - 8.

Replacement

1. Install the new Punch Infeed Timing Belt.
2. Reinstall the parts in reverse order.
3. Tighten the 5 setscrews in the 5 Bearing Collars, the rear setscrew in the Flex Coupler, the 2 setscrews in the 2 Rubber Drive Rollers and the 6 setscrews in the 6 Crowned Rollers.
4. Adjust the Punch Infeed Timing Belt Idler Pulley Assembly to take up the tension in the Timing Belt. If tightened too much the belt may walk off the pulley. If too loose, the belt may skip.
5. Perform ADJ 4.1 Document Transport Timing Belt Tension before turning the machine on again.

NOTE: Ensure that the setscrews in the Crowned Rollers are properly tightened on the flat surfaces of the 2 Drive Shafts.

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REP 4.5 Punch Infeed Flat Belts

Parts List: 4.3 B



WARNING

Switch off the Main Power.
Disconnect the power cord.

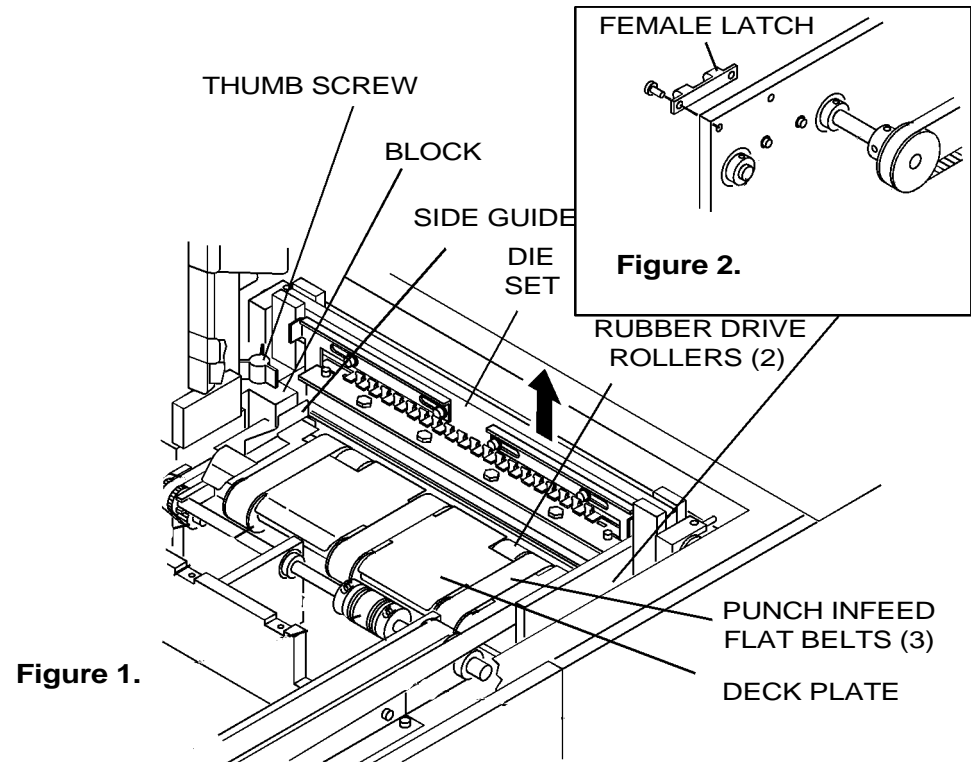
Removal

1. Perform REP 4.4, Steps 1 to 7.
2. Remove:
 - 2.1 the Thumb Screw and the Side Guide (Figure 1).
 - 2.2 the 2 Allen Head Cap screws and the Block (Figure 1).
 - 2.3 the 2 Allen Head Cap screws and the Female Latch Assembly (Figure 2).
 - 2.4 the 4 Allen screws in the Deck Plates.
3. Remove the Punch Infeed Flat Belts by sliding them off the Punch Infeed Deck towards the back of the machine.
4. Clean the Crowned Rollers with Isopropyl alcohol.

Replacement

1. Install the new Punch Infeed Flat Belts.
2. Reinstall the parts in reverse order.

NOTE: Ensure that the setscrews in the Crowned Rollers are properly tightened on the flat surfaces of the 2 Drive Shafts.



REP 4.6 Punch Clutch Output Timing Belt

Parts List: 4.3 C



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

- To access the Punch Clutch Output Timing Belt you will have to undock the Stacker(s) from the Punch. To undock the Stacker(s):
 - 1.1 Remove the Stacker(s) and Punch Rear Panels.
 - 1.2 Lower the Casters on the Stacker(s) until they make contact with the floor.
 - 1.3 Raise the Leveling Pads on the Stacker(s).
 - 1.4 On the Punch Daughter PWB(s), disconnect P22, 23, 24 and 25 coming from the Stacker I/O PWB (s).
 - 1.5 On the Punch AC/DC Power Distribution PWB, disconnect P14 coming from the Stacker #1 AC/DC Power Distribution PWB.
 - 1.6 Pull the connectors and wire harnesses through the hole in the frame and secure them in the back of Stacker #1.
 - 1.7 Unlatch Stacker #1 and push the Stacker(s) aside.
 - Remove the Punch Right Panel (10 screws).
 - Remove the Die Set.
 - Remove:
 - 4.1 the Allen Head Cap screw and 3 Washers on the Front Punch Crank Arm (Figure 1).
 - 4.2 the Front Punch Crank Arm (Figure 1).
 - Remove the Roll Pin in the Front Crank Arm Block (Figure 1).
 - Remove the Front Crank Arm Block (Figure 1).
- Loosen the 2 setscrews in the 2 Bearing Collars (Figure 2).
 - Move the Punch Clutch Output Timing Belt from the Pulley. (Figure 3).
 - In the back of the machine, grasp the Rear Crank Arm and gently slide the shaft out about 2 inches (5 cm).
 - Fully loosen the Anti-rotation screw (Figure 2).
 - Remove:
 - 12.1 the 4 Allen Head Cap screws and 8 Washers holding the Flanged Bearings (Figure 2).
 - 12.2 the Front and Rear Flanged Bearings (Figure 2).
 - 12.3 Punch Clutch Output Timing Belt (Figure 3).

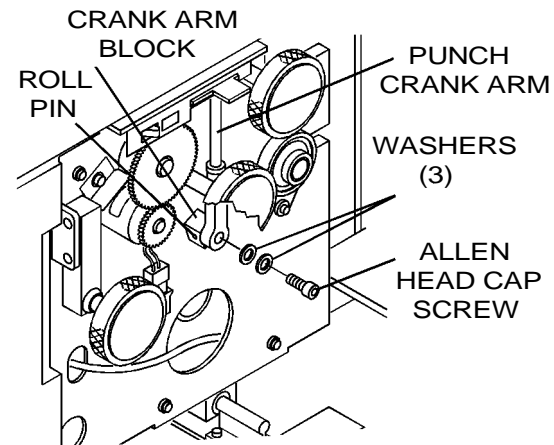


Figure 1.

Continued from Page 4 - 12.

Replacement

1. Replace the Punch Clutch Output Timing Belt.
2. Reinstall the parts in reverse order.
3. Before reinstalling the Punch Right Panel, check ADJ 4.4 Punch Clutch Home Position.

NOTE: Be sure to hold the Front Crank Arm Block when tightening the Allen Head Cap screw on the Crank Arm. Failure to do so might result in damage to the new Punch Clutch Output Timing Belt. Check that the Stacker(s) are level with the Punch and that the Stacker(s) are resting on the Leveling Pads (see Section 8 Install Procedure).

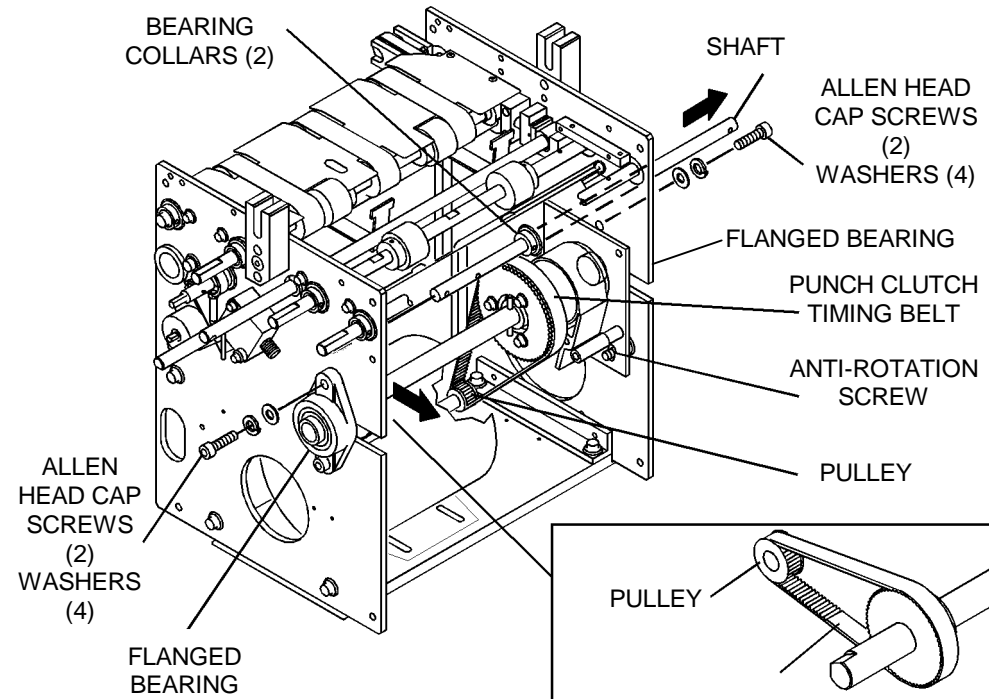


Figure 2.

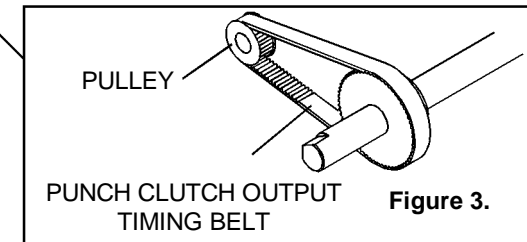


Figure 3.

REP 4.7 Punch Clutch Timing Belt

Parts List: 4.3 C



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Perform REP 4.6, Steps 1 to 12.3.
2. Move the Punch Clutch Timing Belt from the Punch Motor Pulley.
3. Slide the Shaft and the Clutch Assembly out of the machine.
4. Remove the Punch Clutch Timing Belt.

Replacement

1. Replace the Punch Clutch Timing Belt.
2. Reinstall the parts in reverse order.
3. Before reinstalling the Punch Right Panel, perform ADJ 4.4 Punch Clutch Home Position.

NOTE: Check that the Stacker/Stackers are level with the Punch and that the Stacker(s) are resting on the Leveling Pads (see Section 8 Install Procedure).ADJ 4.1 Document Transport Timing Belt Tension

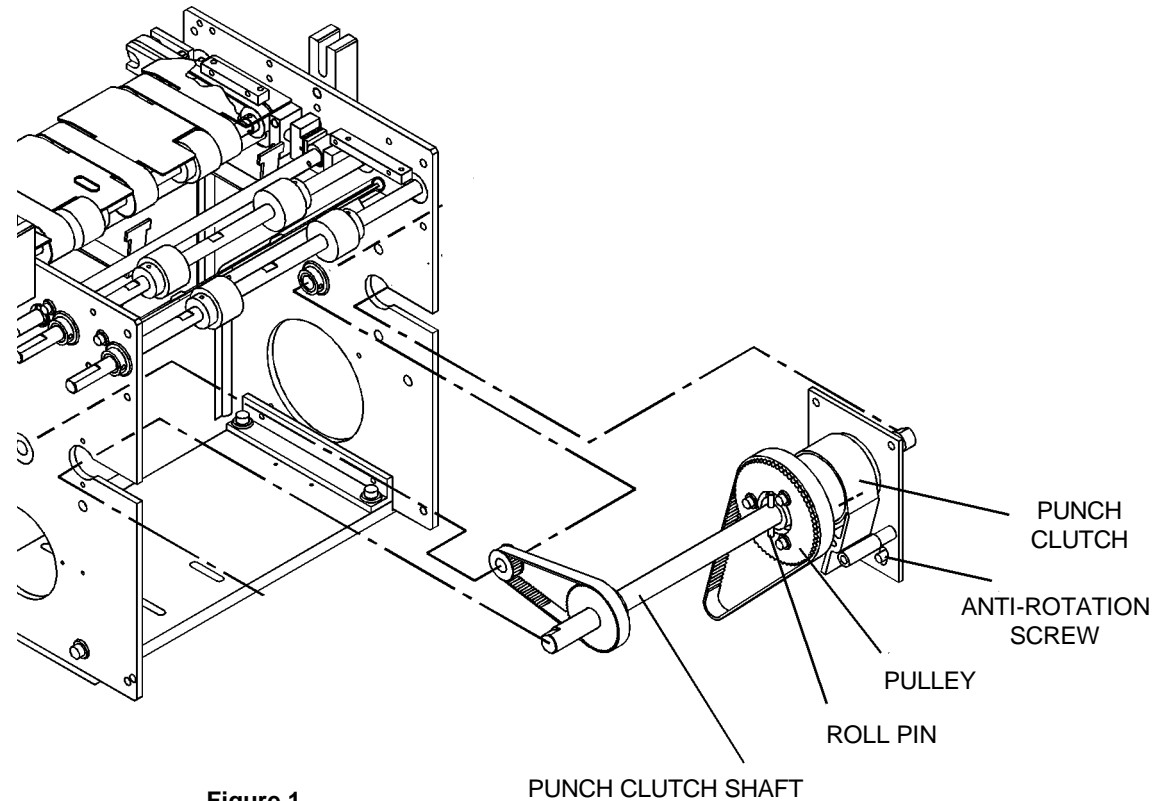


Figure 1.

REP 4.8 Punch Motor

Parts List: 1.1 F



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Perform REP 4.6, Steps 1 and 2.
2. Remove the 2 screws holding the shielding plate over the cable connectors for the Punch Motor Cable Assembly.
3. Record the location of the wires and then remove the connectors from the Punch Motor.
4. Remove the 4 Carriage screws, the 4 Hex Nuts and the 8 Washers holding the Punch Motor.
5. Remove the Punch Clutch Timing Belt from the Punch Motor Pulley and slide the Punch Motor out of the Punch Main Assembly.
6. Remove the Punch Motor Pulley from the old Punch Motor and install it on the new Punch Motor.

Replacement

1. Reinstall the parts in reverse order.
2. Perform ADJ 5.4 Punch Clutch Timing Belt Tension.

Make sure that the Punch Motor Cable Assembly is being installed as recorded in Step 3 in the removal procedure. Check that the Stacker(s) are level with the Punch and that the Stacker(s) are resting on the Leveling Pads (see Section 8 Install Procedure).

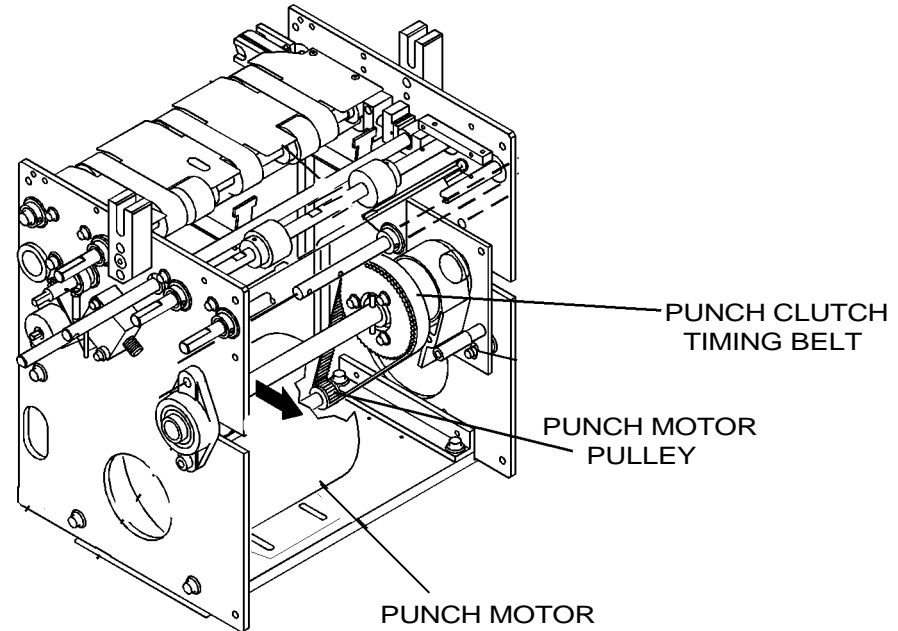


Figure 1.

REP 4.9 Document Transport Motor

NOTE: Make sure that the Document Transport Motor Cable Assembly is being installed as recorded in Step 5 in the removal procedure.

Parts List: 1.1 B



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Remove the Punch Rear Panels.
2. Loosen the Allen Head Cap screw on the Document Transport Timing Belt Take Up Assembly.
3. Remove the Document Transport Timing Belt.
4. Remove the 2 screws holding the shielding plate over the cable connectors for the Document Transport Motor Cable Assembly.
5. Record the location of the wires and then remove the connectors from the Document Transport Motor.
6. Remove the 4 Carriage screws, the 4 Hex Nuts and the 8 Washers holding the Document Transport Motor.
7. Remove the Punch Motor Pulley from the old Punch Motor and install it on the new Punch Motor.

Replacement

1. Reinstall the parts in reverse order.
2. Perform ADJ 4.1 Document Transport Timing Belt Tension before turning on the machine.

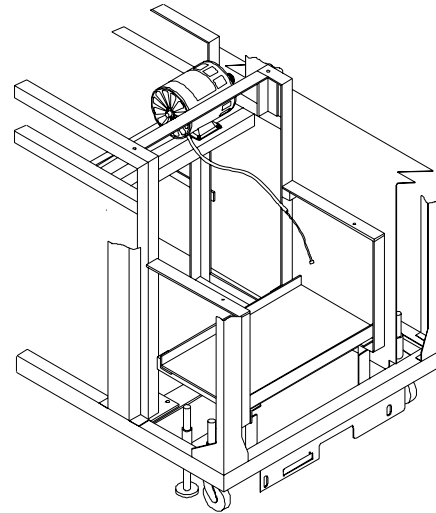


Figure 1.

REP 5.1 Stacker Drive O-ring

Parts List: 5.1 C



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. If the Stacker has a Bypass Assy installed, perform REP 5.2 Bypass Assy removal.
2. Make a mark on the O-ring Drive Shaft (Figure 2).
3. Remove the Stacker Drive O-ring from the V-pulleys (Figure 2).
4. Loosen:
 - 4.1 the 2 setscrews in the 2 V-pulleys (Figure 2).
 - 4.2 the 2 setscrews in the 2 Clamp Collars (Figure 2).
 - 4.3 the setscrew in the Clamp Collar holding the O-ring Drive Belt Pulley (Figure 1).
5. Remove the e-clip (Figure 2).
6. Slide the Transfer Shaft towards the back of the machine and remove the Stacker Drive O-ring from that Shaft (Figure 2).
7. Slide the Drive Shaft towards the front of the machine until you can remove the O-ring from the Drive Shaft.

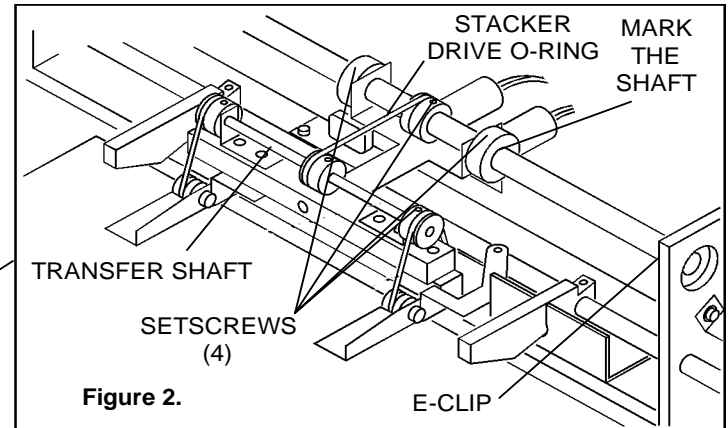
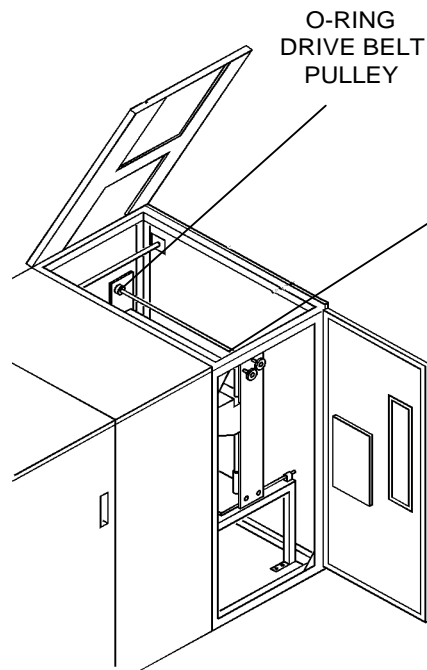


Figure 1.

Replacement

1. Replace the Stacker Drive O-ring.
2. Reinstall the parts in reverse order.

REP 5.2 Bypass Assy removal

Parts List: 1.3 A



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Perform REP 5.5 Bypass Motor and Timing Belt, Steps 1 to 4.
2. Remove the 2 Allen Head Cap screws and 2 Lock Washers holding the Bypass Motor Assy (Figure 1). Place the Bypass Motor Assy on the bottom of the Stacker.
3. Remove the two Allen Head Cap screws holding the Bypass Gate Solenoid connector and disconnect the Bypass Gate Solenoid connector (Figure 3).
4. Remove the 2 Allen screws and the 2 Lock Washers holding the Sensor Bracket (Figure 2).
5. Gently move the Sensor Bracket and Exit Sensor Assy to the side without unplugging the Exit Sensor.
6. Remove the 2 Allen Head Cap screws, 2 Lock Washers and 2 Flat Washers holding the Bypass Assy (Figure 3).
7. Gently lift out the Bypass Unit.

Replacement

1. Reinstall the parts in the reverse order.
2. Perform ADJ 5.5 Bypass Motor Timing Belt Tension.

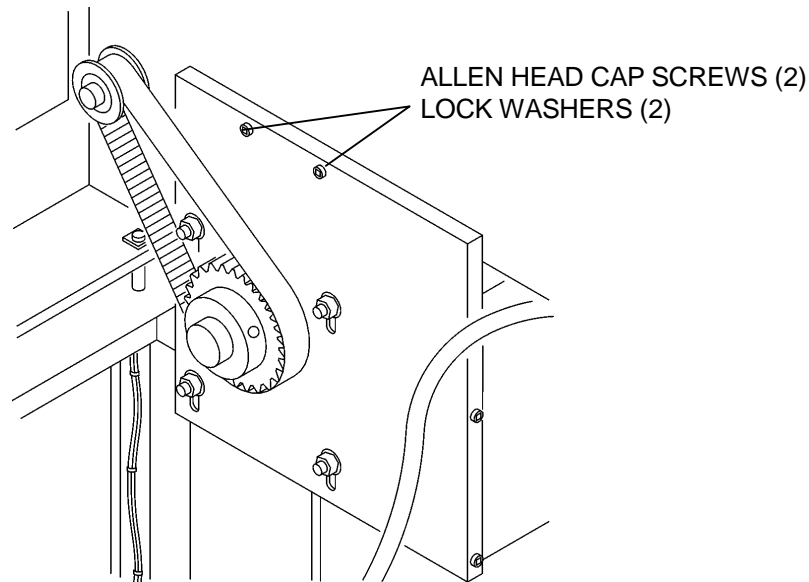


Figure 1.

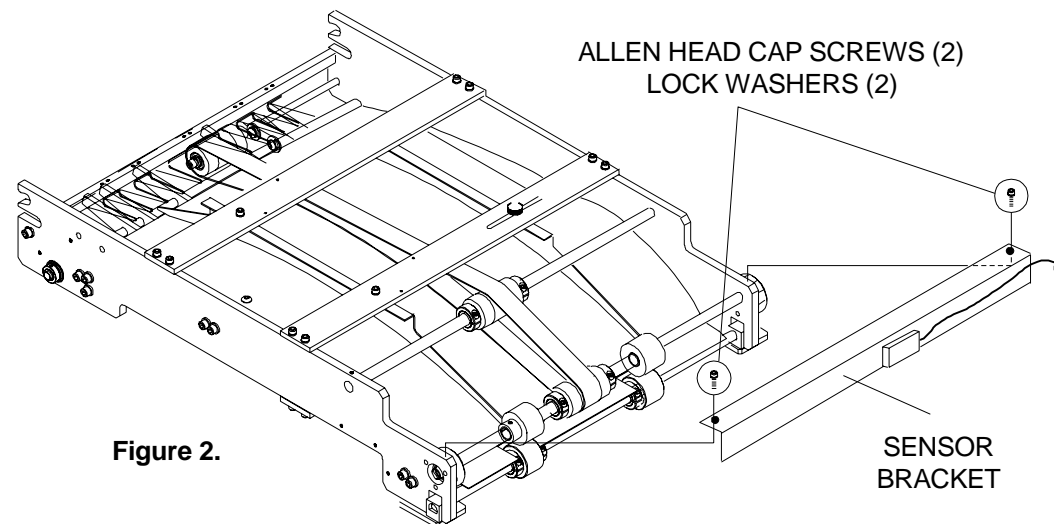
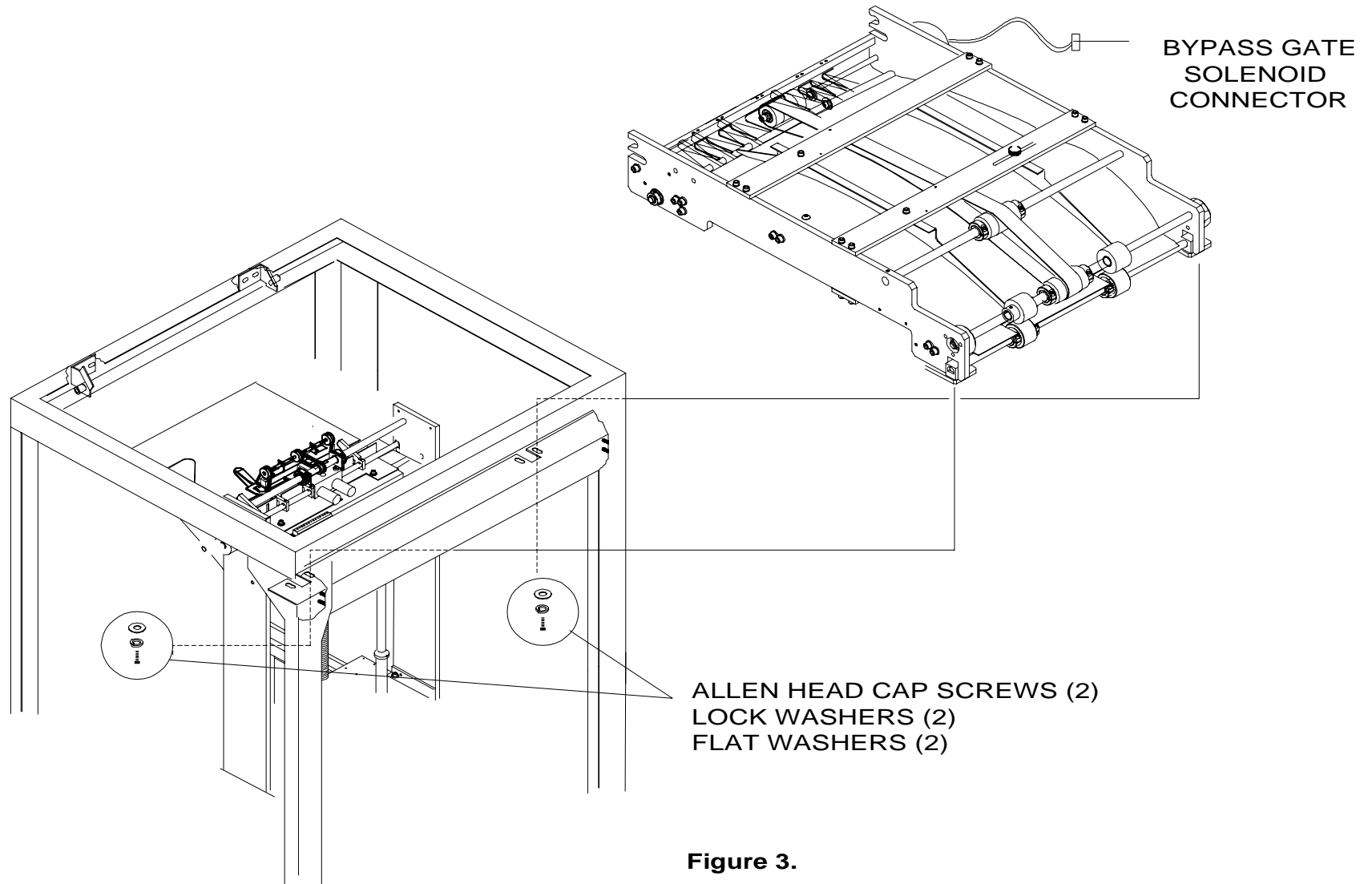


Figure 2.

REP 5.2 Bypass Assy removal (continued)



REP 5.3 Bypass Gate Solenoid

Parts List: 5.2 A



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Remove the Stacker Rear Panel.
2. Unplug the Bypass Gate Solenoid connector.
3. Loosen the Allen screw in the Bypass Gate Solenoid Spur Gear and remove the Bypass Gate Solenoid Spur Gear (Figure 1).
4. Remove the 2 Allen Head Cap screws and 2 Lock Washers holding the Bypass Gate Solenoid Mounting Bracket (Figure 1).
5. Remove the Bypass Gate Solenoid from the Bypass Gate Solenoid Mounting Bracket (Figure 1), 2 Hex Nuts and 2 Lock Washers.

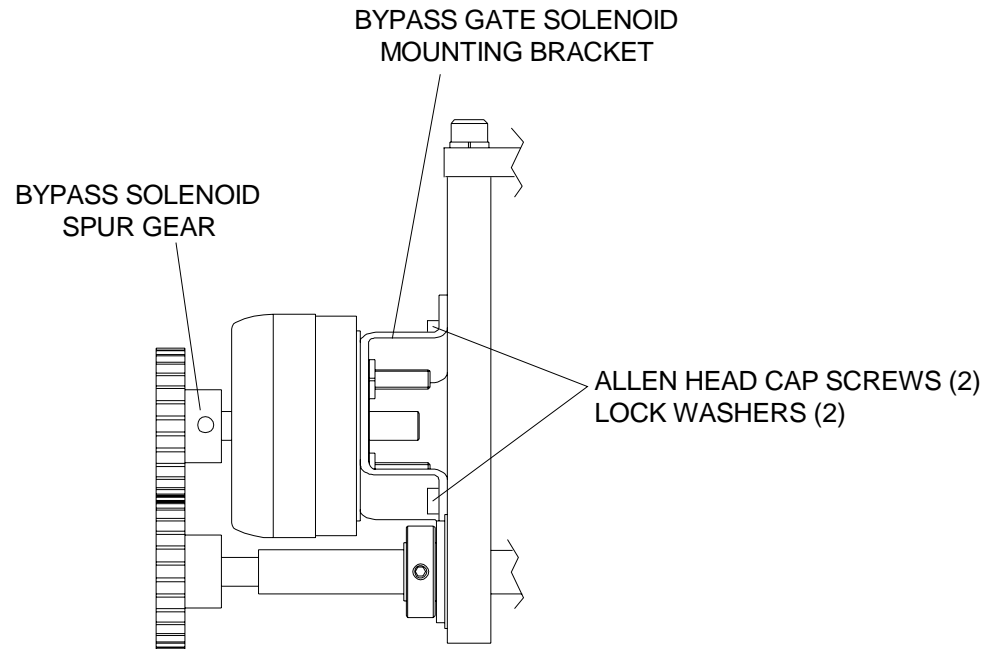


Figure 1.

Replacement

1. Reinstall the parts in the reverse order.
NOTE: Ensure that the Spur Gear on the Solenoid and the Spur Gear on the Deflector Shaft are properly aligned.
2. Perform ADJ 5.4 Bypass Gate Solenoid and Gate Fingers.

REP 5.4 Bypass Gate Fingers

Parts List: 5.2 A

Prerequisite

Lower the Stacker Tray.



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Open the Stacker Top Cover and Front Door.
 2. Make marks on the Bypass Gate Shaft (Figure 1).
 3. Loosen:
 - 3.1 the 7 Allen screws in the 7 Gate Fingers.
 - 3.2 the Allen screw in the Bearing Collar (Figure 1).
- NOTE: Ensure that the setscrews in the Gate Fingers are loosened enough to clear the round part of the shaft.*
4. Remove the Bearing Collar.
 5. Slide the Bypass Gate Shaft towards the back of the machine until you can remove the Gate Fingers (Figure 1).

Replacement

1. Reinstall the parts in the reverse order.
2. Perform ADJ 5.4 Bypass Gate Solenoid and Gate Fingers.

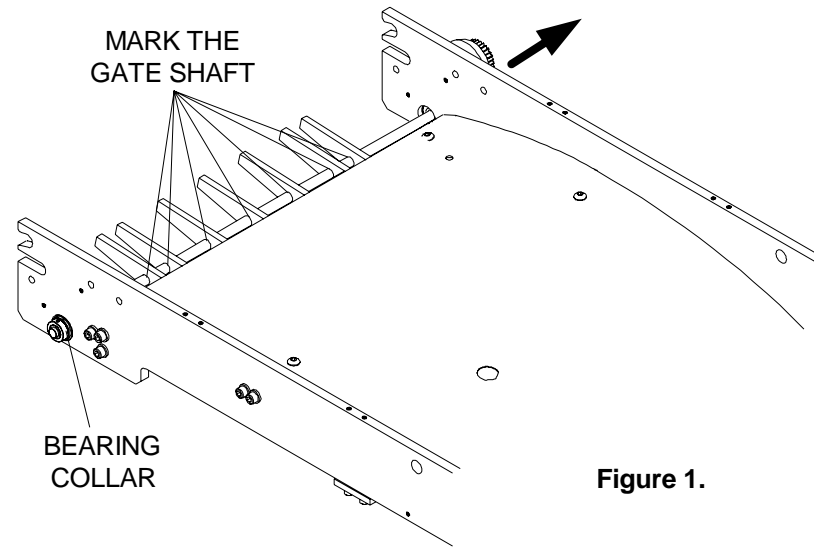


Figure 1.

REP 5.5 Bypass Motor and Timing Belt

Parts List: 1.3 A



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Remove the Stacker Rear Panel.
2. Remove the Bypass Pulley Top Cover (4 Allen Head Cap screws and 4 Lock Washers) and the Bypass Pulley Bottom Cover (2 Allen Head Cap screws and 2 Lock Washers) (Figure 3).
3. Loosen the 4 Hex Nuts holding the Bypass Motor (Figure 1).
4. Remove the Bypass Motor Timing Belt (Figure 1). (If only replacing the Bypass Motor Timing Belt, proceed to Replacement, Step 1.)
5. Loosen the 2 Allen screws in the Bypass Motor Pulley and remove the Bypass Motor Pulley (Figure 1).
6. Remove the 4 Allen Head Cap screws and 4 Lock Washers holding the Bypass Motor Cover (Figure 1).
7. Gently slide the Bypass Motor Cover to the side.
8. Disconnect the Bypass Motor Harness from the Bypass Motor connection (Figure 2).
9. Remove the 4 Hex Nuts, 4 Lock Washers and 4 Flat Washers holding the Bypass Motor (Figure 1).

NOTE: Be aware that after removing the Hex Nuts and Washers on the Bypass Motor, the gearbox and the motor can separate from each other.

10. Replace the Bypass Motor.

Replacement

1. Reinstall the parts in the reverse order.
2. Perform ADJ 5.5 Bypass Motor Timing Belt Tension.

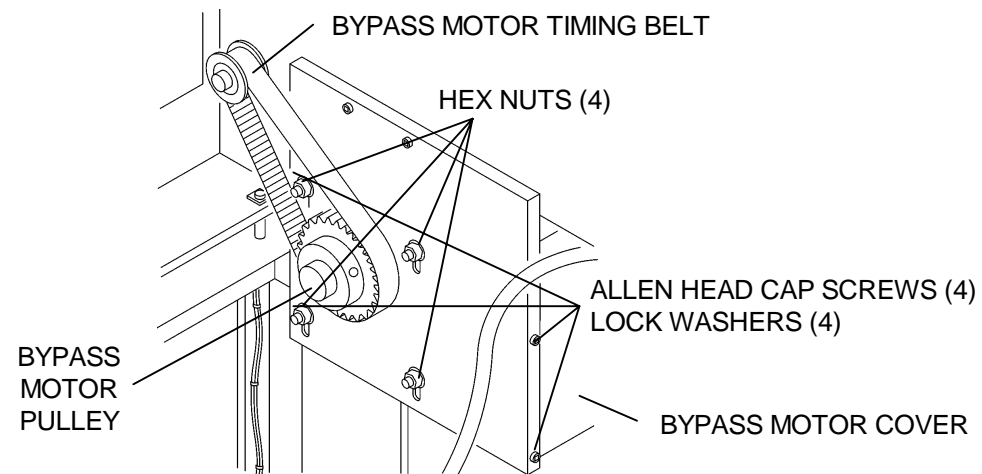


Figure 1.

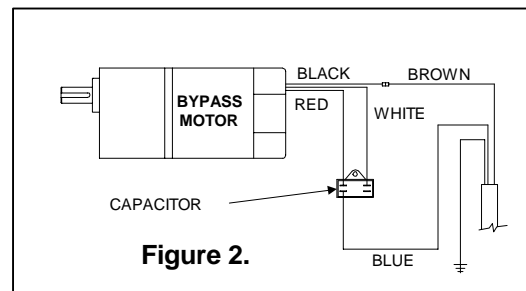


Figure 2.

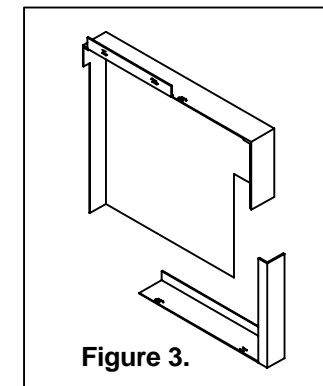


Figure 3.

REP 5.6 Bypass Flat Belt

Parts List: 5.2 C



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Perform REP 5.5 Bypass Motor and Timing Belt, Steps 1 to 4.
2. Loosen the 2 Allen screws in the Timing Belt Pulley and remove the Timing Belt Pulley (Figure 1).
3. Loosen the 2 Allen screws on the Idler Roller Shaft and slide the shaft towards the front of the machine (Figure 1).
4. Make a mark on the Drive Shaft next to the Clamp Collar (Figure 1).
5. Loosen:
 - 6.1 the 3 Allen screws in the 3 Rubber Drive Rollers (Figure 1).
 - 6.2 the 2 Allen screws in the 2 Clamp Collars (Figure 1).
6. Remove the E-ring on the Drive Shaft (Figure 1).
7. Slide the Drive Shaft towards the front of the machine.
8. Remove the Bypass Flat Belt.
9. Clean the Idler Rollers with Isopropyl alcohol.

Replacement

1. Reinstall the parts in the reverse order.

NOTE: Ensure that the Rubber Drive Rollers are centered over the Idler Rollers.

2. Perform ADJ 5.5 Bypass Motor Timing Belt Tension.

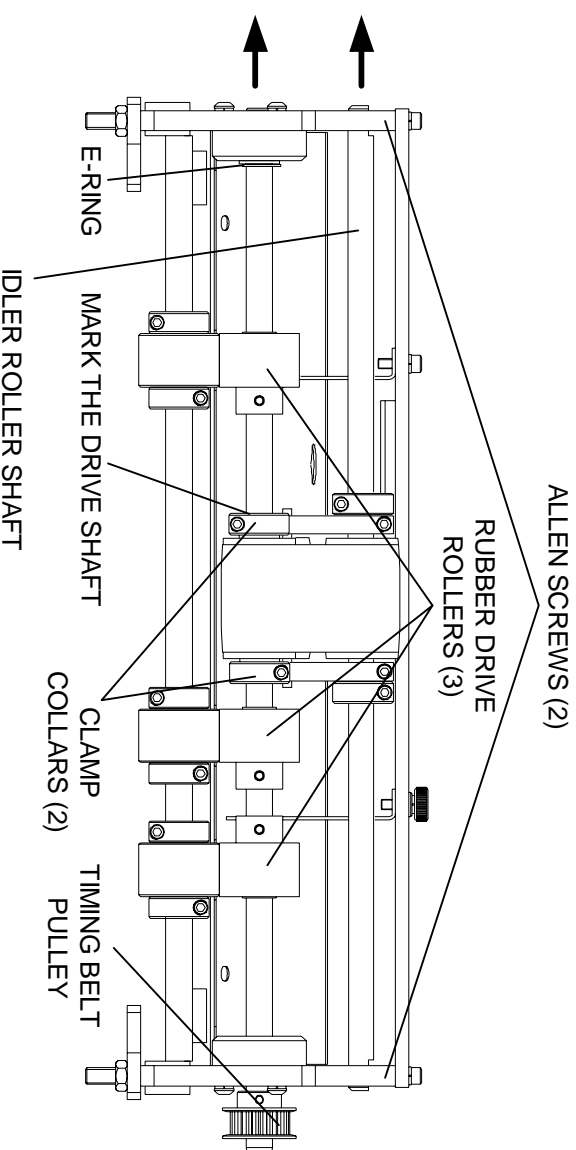


Figure 1.

REP 5.7 Rubber Drive Rollers

Parts List: 5.2 C



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Perform REP 5.5 Bypass Motor and Timing Belt, Steps 1 to 4.
2. Remove the Bypass Flat Belt from the 2 Idler Rollers.
3. Make a mark on the Drive Shaft next to the Clamp Collar (Figure 1).
4. Loosen:
 - 4.1 the 2 Allen screws in the Timing Belt Pulley (Figure 1).
 - 4.2 the 3 Allen screws in the 3 Rubber Drive Rollers (Figure 1).
 - 4.3 the 2 Allen screws in the 2 Clamp Collars (Figure 1).
5. Remove:
 - 5.1 the Timing Belt Pulley (Figure 1).
 - 5.2 the E-ring (Figure 1).
6. Slide the Drive Shaft towards the front of the machine.
7. Clean the Idler Rollers with Isopropyl alcohol.

Replacement

1. Reinstall the parts in the reverse order.
2. Perform ADJ 5.5 Bypass Motor Timing Belt Tension.

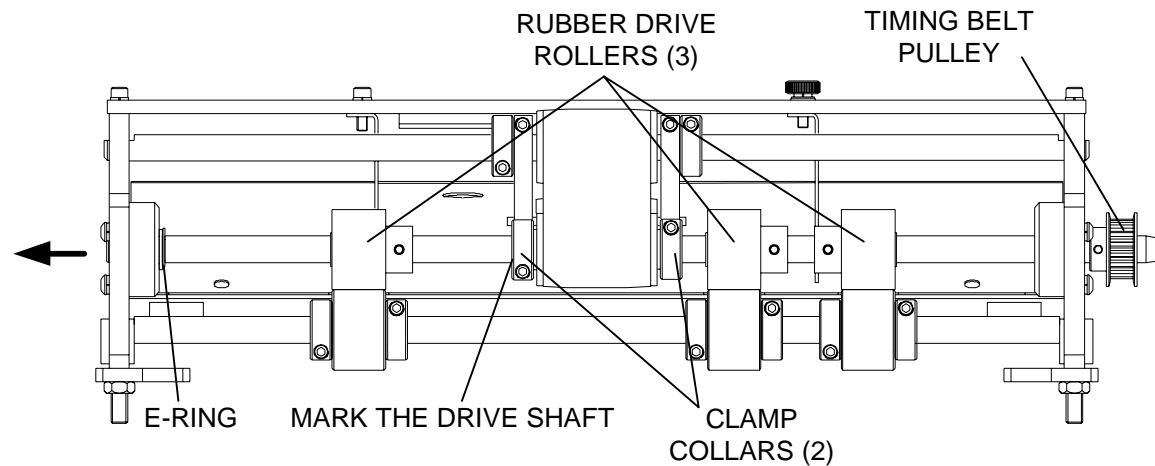


Figure 1.

REP 5.8 Compression Springs

Parts List: 5.2 A



WARNING

Switch off the Main Power.
Disconnect the power cord.

Removal

1. Perform REP 5.2 Bypass Assy removal, Steps 1 to 7.
2. Place the Bypass Assy upside down (Figure 1).
3. Remove the 4 Allen Head Cap screws and the 4 Lock Washers holding the 2 Nut Plates (Figure 1).

NOTE: Do not loosen the Hex Nuts on the Spring Adjustment screws.

Replacement

1. Reinstall the parts in the reverse order.
2. Perform ADJ 5.5 Bypass Motor Timing Belt Tension.

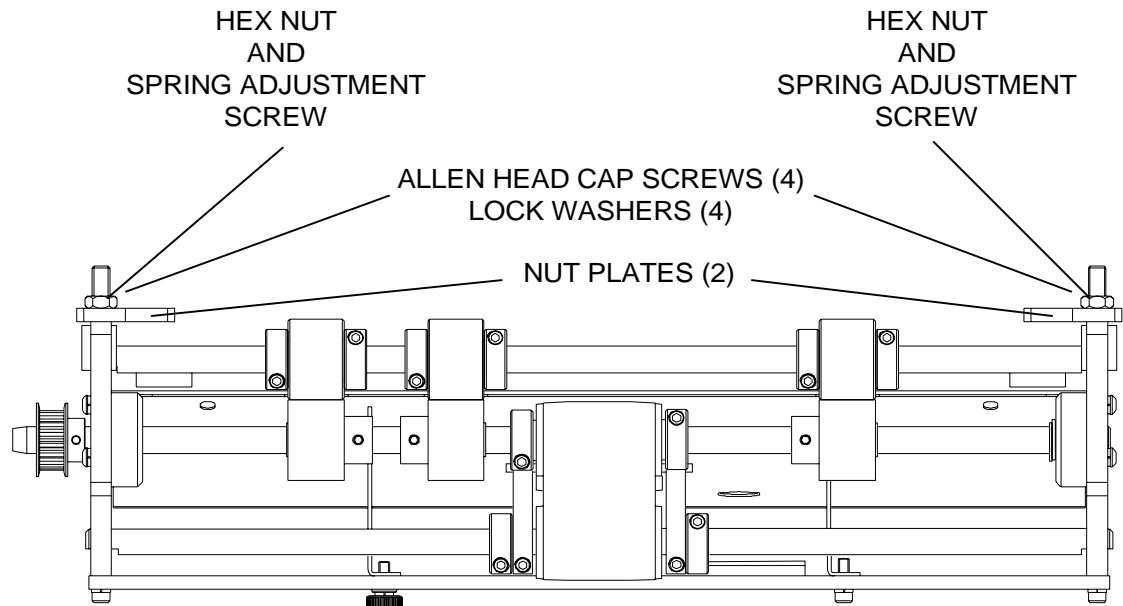


Figure 1.

ADJ 4.1 Document Transport Timing Belt Tension

Purpose

To prevent noise or excessive wear on the Document Transport Timing Belt.

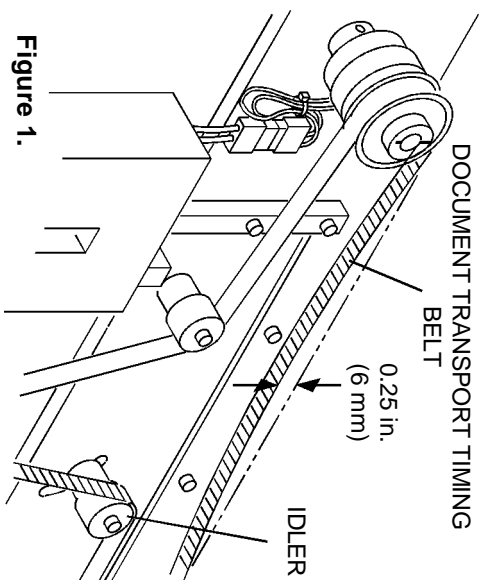
Check

Check that the Document Transport Timing Belt operates smoothly and deflects 0.25 in. (6 mm).

Adjust Sequence

1. Loosen the Allen Head Cap screw in the Idler.
2. Adjust the Idler until the Document transport Timing Belt deflects 0.25 in. (6 mm).
3. Tighten the Allen Head Cap screw in the Idler.

NOTE: If the belt skips, tension is too loose. If the Power Switch/Circuit Breaker blows, tension is too tight.



ADJ 4.2 Sheet Eject Solenoid

Purpose

To prevent paper jams in the Punch.

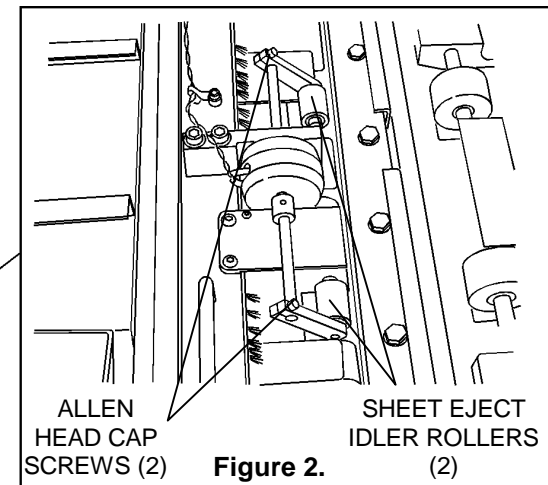
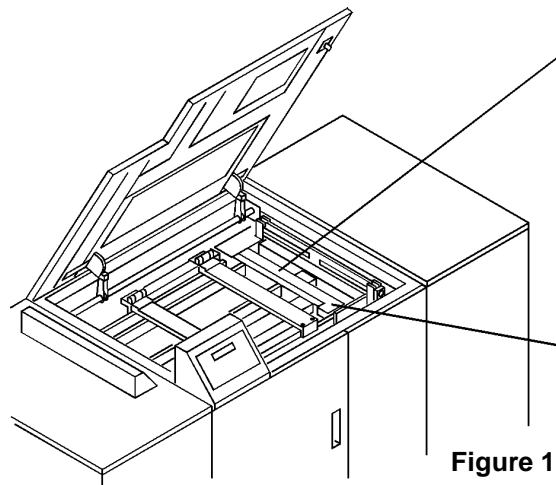
Check

Check that cover stock and tab stock transports through the Punch without a jam, or without stalling.

NOTE: Ensure that the Side Guide adjustment is not too tight (see Side Guide Adjustment in the User Guide - Chapter 2, General Procedures).

Adjust Sequence

1. With the Sheet Eject Idler Rollers in the up position, check the distance between the Idler Rollers and the Rubber Drive Rollers. The distance should be approx. 3 - 4 mm.
2. To adjust, slightly loosen the 2 Allen Head Cap screws and raise or lower the Sheet Eject Idler Rollers until the distance is equal between the back and front rollers.
3. Manually press the Sheet Eject Idler Rollers down so that they touch the Rubber Drive Rollers. Make sure that the Idler Rollers are centered over the Rubber Drive Rollers.
4. To adjust, slightly loosen the 2 Allen Head Cap screws and move the Sheet Eject Idler Rollers forward or backward to center the Idler Rollers over the Rubber Drive Rollers.
5. Check that the Sheet Eject Idler Rollers are both centered over the Rubber Drive Rollers and at the same distance above the Rubber Drive Rollers.



ADJ 4.3 Back Gauge Fingers

Purpose

To set up the machine for the minimal margin between the lead edge of the print and the punched holes.

Check

Check that the margin between the leading edge of the copy and the punched holes is correct.

Check that the Back Gauge moves freely and stops just below the Output Deck.

NOTE: The Back Gauge Fingers should always be adjusted to the minimal setting (knob fully clockwise) for all die sets except the GBC Cerlox 19-hole die set. Note that when the Back Gauge adjustment knob is turned fully clockwise, the fingers should come all the way back to any die set that is installed, including the GBC Cerlox.

Adjust Sequence



WARNING

Switch off the main power. Disconnect the Power Cord.

1. Rotate the Back Gauge Stop Adjustment Knob until the Cam is in the minimum position (Figure 1).
2. Loosen the setscrew in the Back Gauge Stop Collar (Figure 1).
3. Rotate the Back Gauge Gear until the Back Gauge Fingers are against the GBC Die Set, if GBC Die Set is available (Figure 2).

4. Hold the Back Gauge Fingers against the Die Set. Rotate the Back Gauge Stop Collar until the red protrusion is against the Cam (Figure 1).
5. Tighten the setscrew in the Back Gauge Stop Collar (Figure 1).
6. Check that the Back Gauge Solenoid does not bind (Figure 1).
7. Check that the Back Gauge Fingers stops just below the Output Deck. Adjust the Back Gauge Solenoid, if necessary.

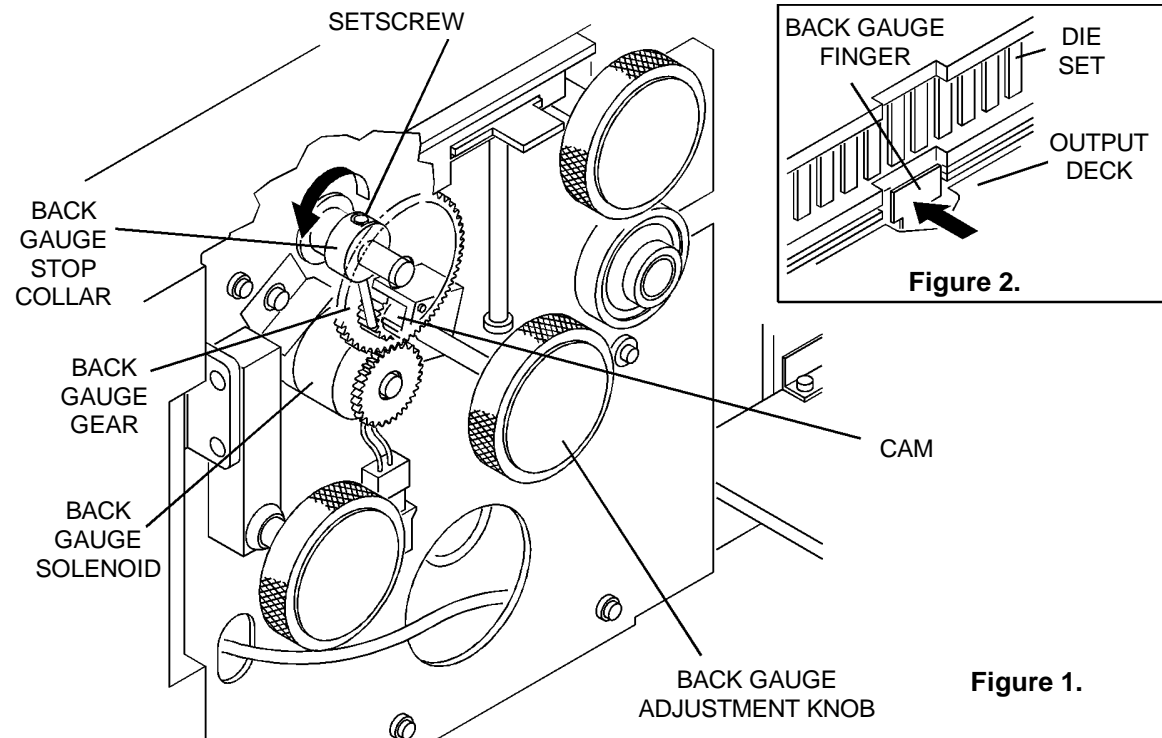


Figure 1.

Figure 2.

ADJ 4.4 Punch Clutch Home Position

Purpose

To prevent excessive Crank Arm over travel.

Prerequisite

Perform REP 4.6, Steps 1 and 2.

Check

Check the over travel of the Crank Arm:

1. Actuate the Stop Pawl.
2. Rotate the Punch Clutch Pulley clockwise until the Stop Pawl captures the next Clutch Housing Stop.
3. Grasp the Punch Clutch Shaft and firmly rotate the shaft clockwise to remove the overtravel from the Punch Clutch. (Refer to figure 2 for Top Dead Center +1° specification.)

Adjust Sequence



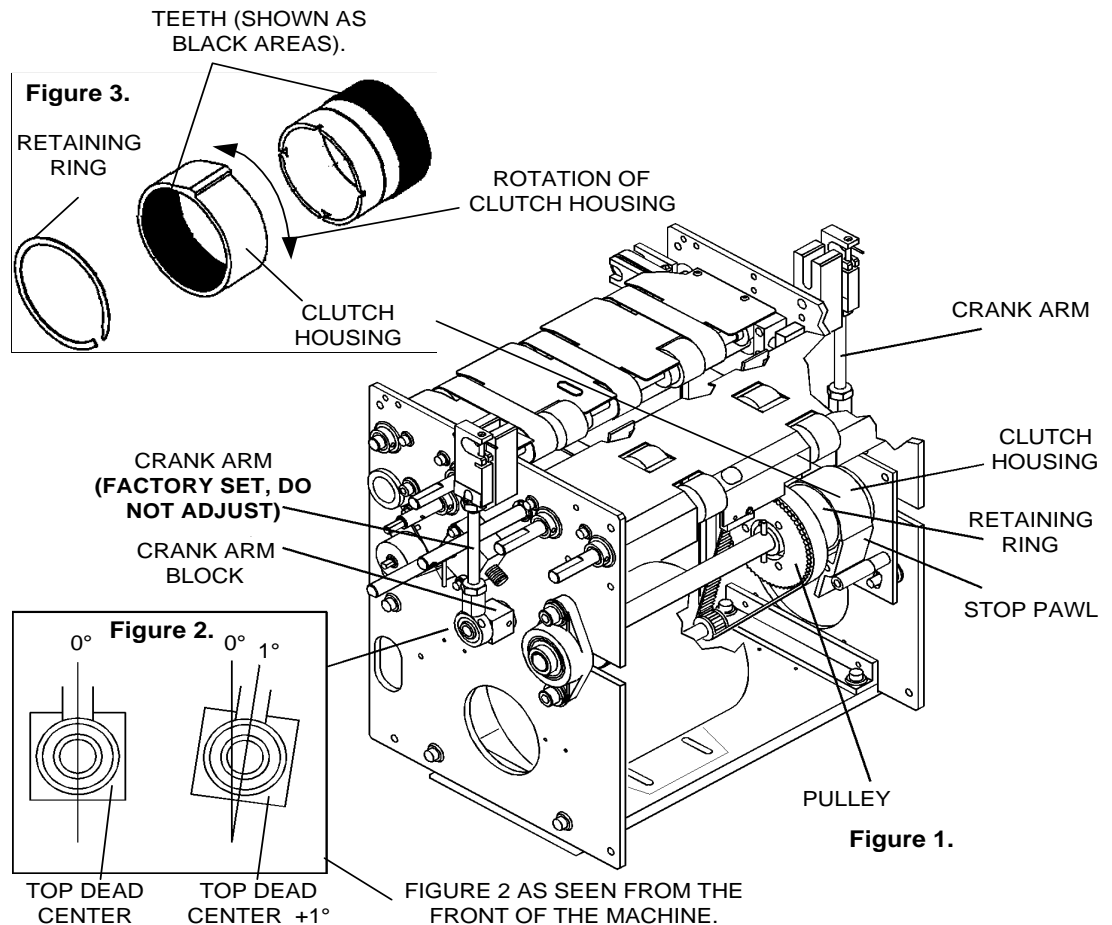
WARNING

Switch the Main Power off and disconnect the Power Cord.

1. Move the Retaining Ring toward the Pulley (Figure 3).
2. Move the Clutch Housing toward the Pulley (Figure 3).
3. Rotate the Clutch Housing a couple of teeth according to figure 3 to achieve the Top Dead Center +1° specifications shown in figure 2.

4. Slide the Retaining Ring all the way back into the groove on the Punch Clutch to secure the Punch Clutch Housing.
5. Check the over travel and then return the machine to operating condition.

NOTE: The die pins should not move up or down while overtravel is being checked.



ADJ 4.5 Punch Clutch Eccentric Stop

Purpose

To prevent excessive Clutch rotation, which could cause double punch or lack of any Clutch rotation, which would result in no punch.

Prerequisite

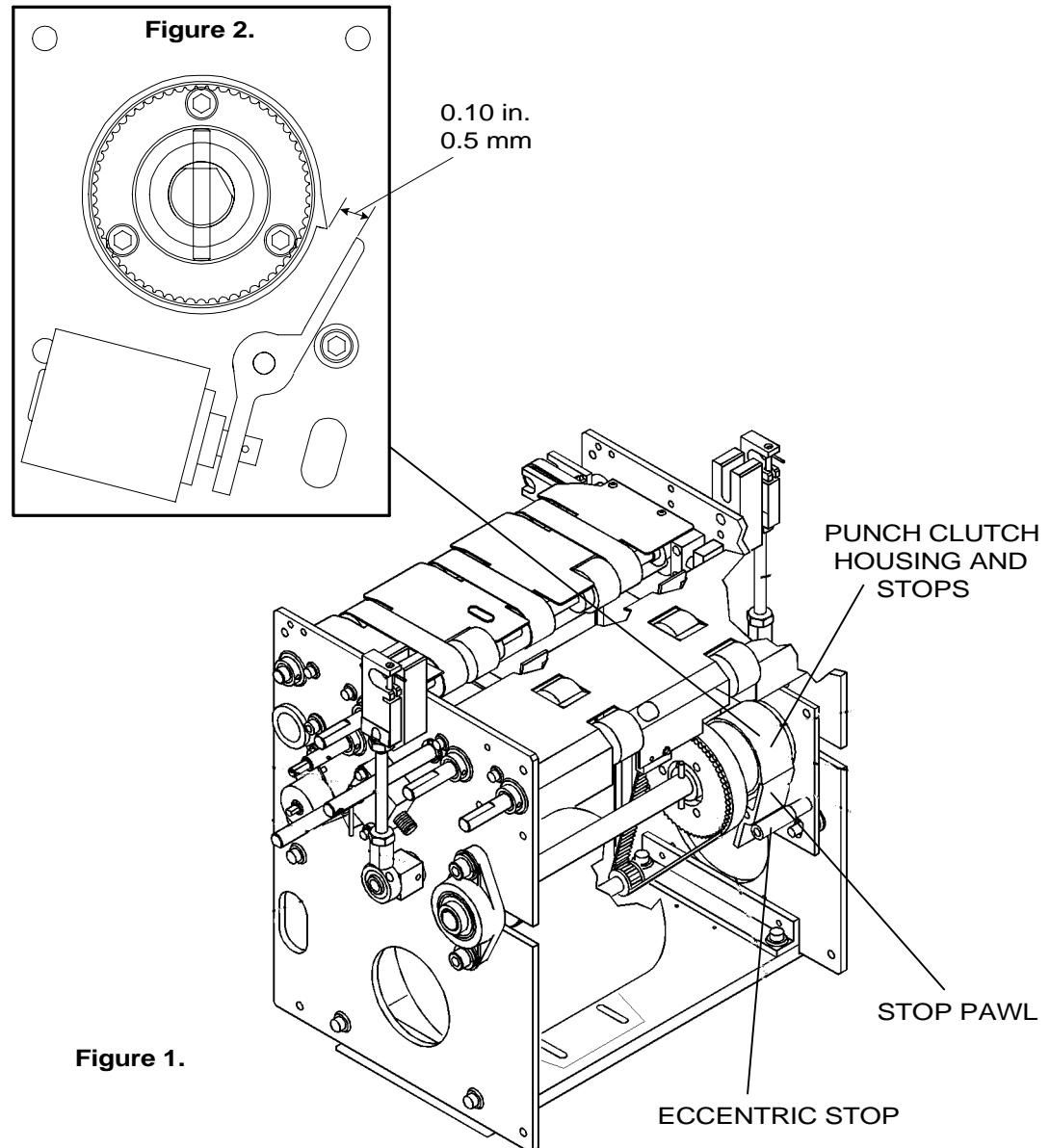
Perform REP 4.6, Steps 1 and 2.

Check

Check the Clutch actuation.

Adjust Sequence

1. Rotate the Punch Clutch Housing at the same time as you press the Punch Stop Pawl.
2. Check the clearance between the Punch Clutch Stop Pawl and both stops on the Punch Clutch Housing (Figure 2).
3. With the Stop Pawl pressed in, rotate the Eccentric Stop until the clearance between the Stop Pawl and the Punch Clutch Housing Stops are 0.05 in (0.5 mm).



ADJ 4.6 Punch Clutch Timing Belt Tension

Purpose

To prevent the Punch Clutch Timing Belt from wearing down and / or damaging the Punch Motor.

Prerequisite

Perform REP 4.6, Steps 1 and 2.

Check

Check that the Punch Clutch Timing Belt operates smoothly and deflects 0.10 in. (2-3 mm). Also check alignment of the Punch Clutch Pulley and the Punch Motor Pulley.

Adjust Sequence

1. Slightly loosen the 4 Hex Nuts under the Punch Motor.
2. Slide the Punch motor backward or forward until the Punch Clutch Timing Belt Tension is 0.10 in. (2-3 mm).
3. Tighten the 4 Hex Nuts.

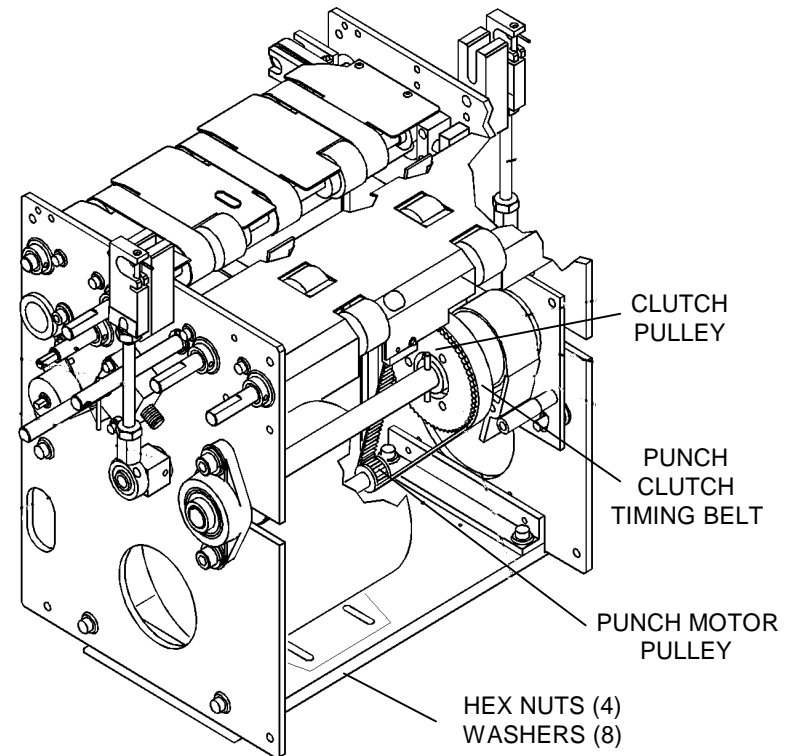


Figure 1.

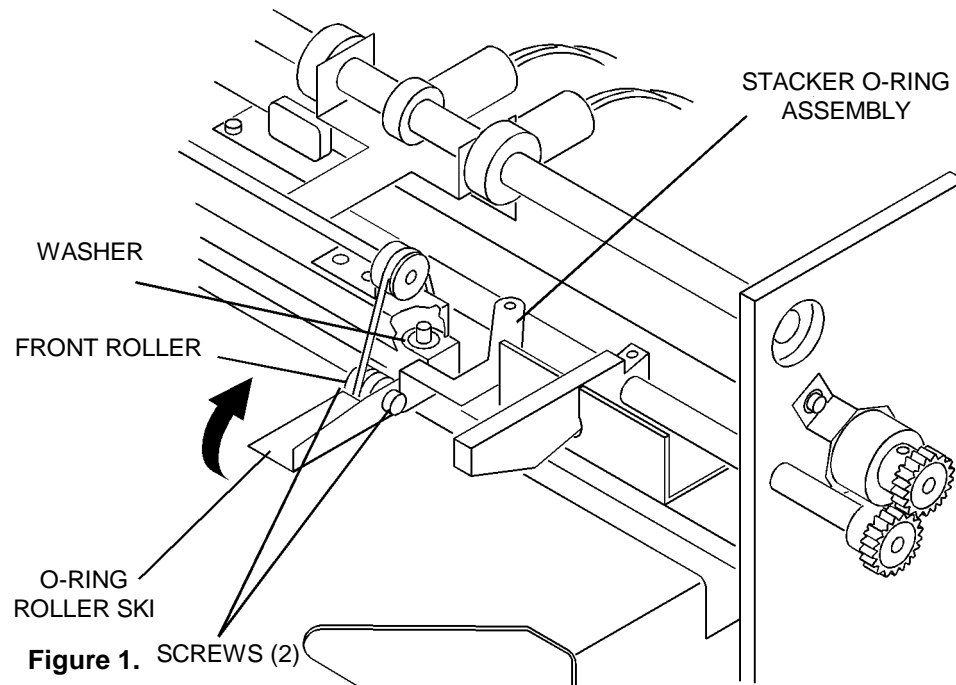
ADJ 5.1 Stacker O-Ring Roller Assembly

Purpose

To adjust the O-ring Assembly to prevent jams in the Stacker and / or poor stacking quality.

Adjust Sequence

1. Remove the Stacker O-ring Assembly (PL 5.1 C).
NOTE: Keep the washer on the top of the Stacker O-ring Assembly.
2. Loosen the two screws.
3. Press down and hold the Front Roller.
4. Adjust the O-Ring Roller Ski until the Ski is at the same height or just below the Roller.
5. Tighten the two screws.
6. Rotate the O-Ring Roller Ski upwards to an 45° angle.
7. Retighten the two screws to ensure that they do not work loose.



ADJ 5.2 Stacker Tray Stop Position

Purpose

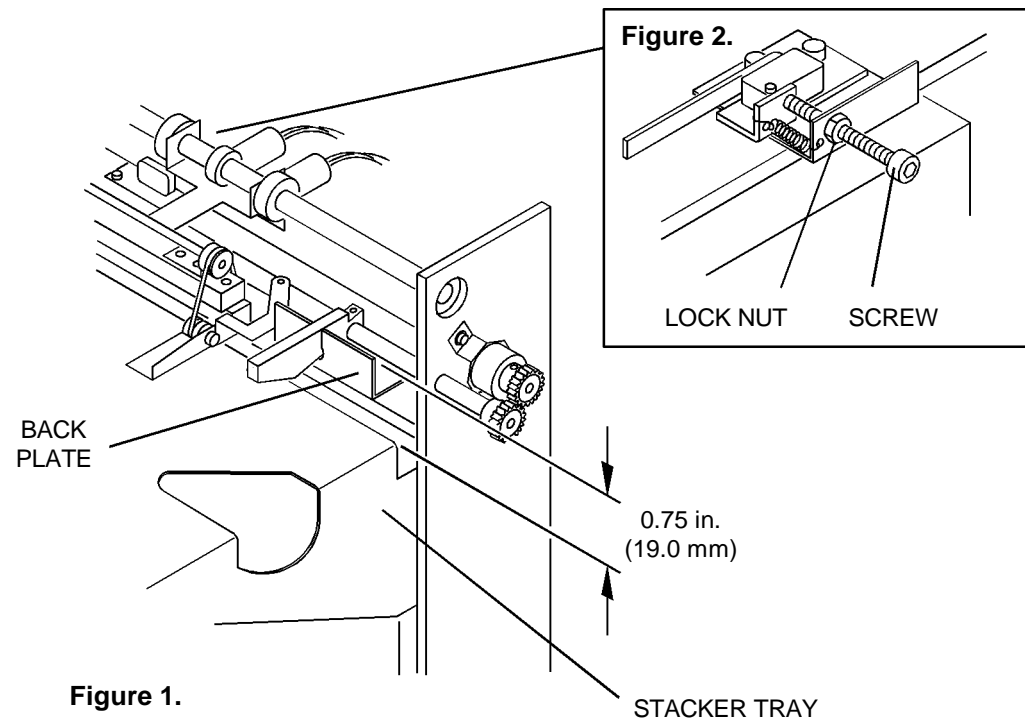
To prevent excessive overtravel or undertravel of the paper on the Stacker Tray.

Check

Check that the Stacker Tray stops 0.75 in. (19.0 mm) from the top of the Back Plate.

Adjust Sequence

1. Loosen the Locknut on the Stacker Upper Switch Assembly (Figure 2).
2. To adjust the Stacker Tray Stop position, turn the screw clockwise to decrease the measured distance, or counterclockwise to increase the measured distance (Figure 2).
3. Press "RAISE/LOWER STACKER#1" (or # 2 if a second Stacker is installed and needs to be adjusted) on the Control Panel once to lower the Stacker Tray, and once again to raise the the Stacker Tray.
4. Recheck the adjustment.
5. Repeat steps 2 - 4, if necessary.
6. Tighten the Locknut on the Stacker Upper Switch Assembly (Figure 2).



ADJ 5.3 Tapper Assembly

Purpose

To prevent excessive pressure on the Tapper Assembly and shingled stack.

Prerequisite

Perform ADJ 5.2 Stacker Tray Stop Position.

Check

Check that the Tapper Assembly is 1 mm, \pm ½ mm, above the Stacker Tray when the Tray is in the maximum vertical position and the Tapper Solenoid is active.

Adjust Sequence

1. Press "RAISE/LOWER STACKER # 1" (or # 2 if a second Stacker is installed and needs to be adjusted) on the Control Panel to move the Stacker Tray to its maximum up position.
2. Enter Diagnostics (GP 1), open Stacker Top Cover and install a cheater in the Interlock Switch.
3. Go to Stacker 1 or Stacker 2 Output Test and activate location:

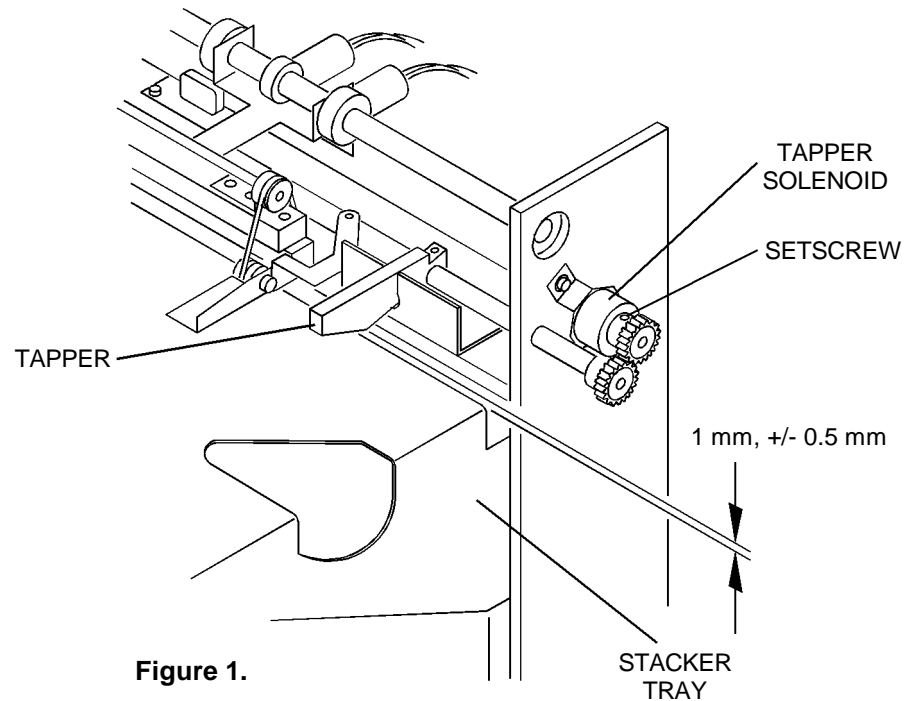
Stacker # 1

| | |
|-----|-------------------|
| S1 | OUTB8 Stacker Tap |
| 016 | 1000000000000100 |

Stacker # 2

| | |
|-----|-------------------|
| S2 | OUTB8 Stacker Tap |
| 016 | 1000000000000100 |

4. Loosen the setscrew in the Gear on the Tapper Solenoid.
5. Rotate the Tapper Shaft clockwise (as viewed from the front of the machine) to increase the gap, or, counterclockwise to decrease the gap.
6. Tighten the setscrew.
7. Deactivate the location.
8. Operate the Stacker to check the adjustment of the Tapper Assembly.
9. Repeat Steps 1 through 8, if necessary.



ADJ 5.4 Bypass Gate Solenoid and Gate Fingers

Purpose

To prevent jams as the paper is being directed to the Stacker or the Bypass.

Check

- Check that the Gate Fingers do not block the paper path when they are in the lowest or highest position (Figure 1).
- Check the distance between each Gate Finger (Figure 2).

Adjust sequence

1. Remove the Stacker Rear Panel.
2. Loosen the Allen screw in the Bypass Gate Solenoid Spur Gear.
3. Manually raise or lower the Gate Fingers until they are just below the out-feed slot in the Punch or Stacker Right Panel.
4. Tighten the Allen screw in the Bypass Gate Solenoid Spur Gear.
5. Go to Stacker 1 or Stacker 2 Output Test and activate location:

Stacker # 1

| | |
|-----|--------------------|
| S1 | OUTB5 Stacker Gate |
| 013 | 1000000000000_100 |

Stacker # 2

| | |
|-----|--------------------|
| S2 | OUTB5 Stacker Gate |
| 013 | 1000000000000_100 |

6. With the Gate Solenoid activated, ensure that the Gate Fingers are above the out-feed slot in the Punch or Stacker Right Panel.

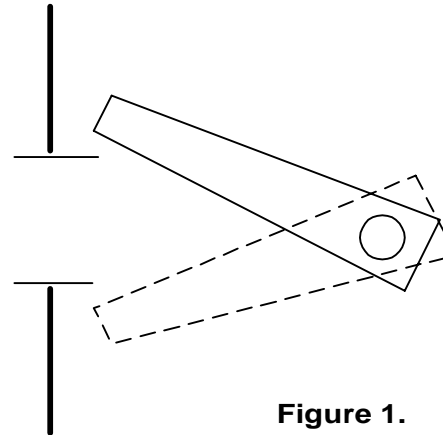


Figure 1.

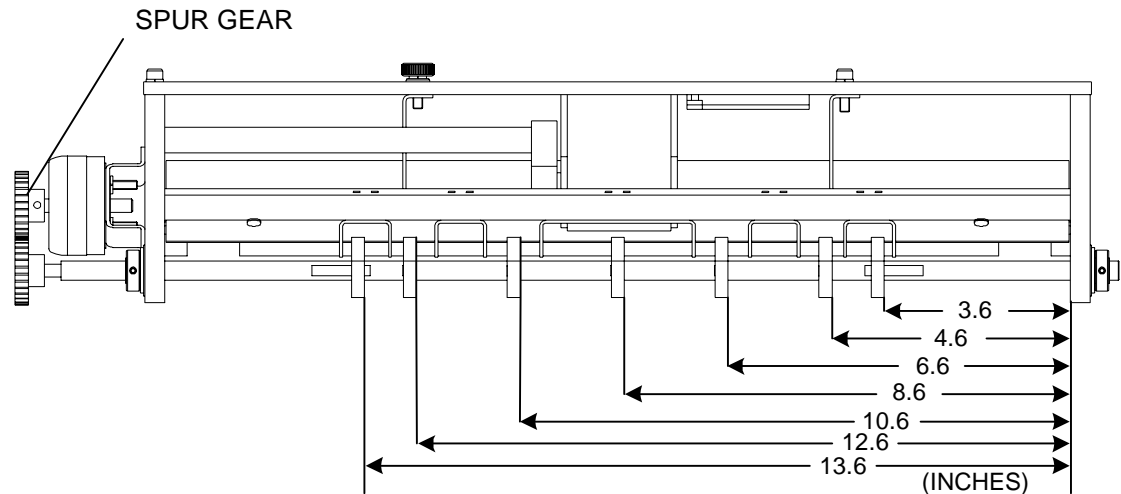


Figure 2.

ADJ 5.5 Bypass Motor Timing Belt Tension

Purpose

To prevent the Bypass Motor Timing Belt from wearing down and / or damaging the Bypass Motor.

Check

- Check that the Bypass Motor Timing Belt operates smoothly and deflects 0.10 in. (2-3 mm).
- Check the alignment of the Bypass Motor Pulley and the Timing Belt Pulley.

Adjust sequence

1. Perform REP 5.5 Bypass Motor and Timing Belt, Steps 1 to 3.
2. Slide the Bypass Motor up or down until the Bypass Motor Timing Belt deflects 0.10 in. (2-3 mm).
3. Tighten the 4 Hex Nuts.

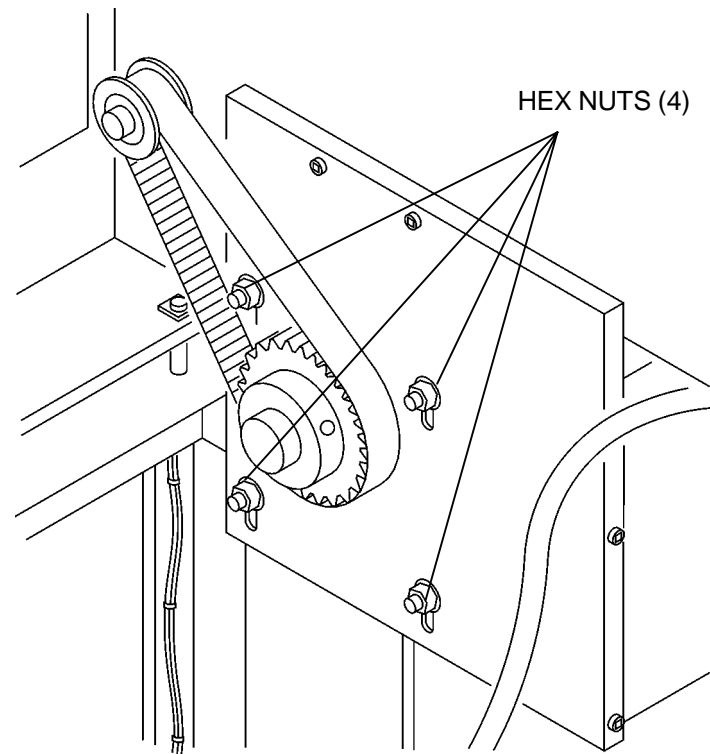


Figure 1.

5. Parts Lists

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Introduction

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.

Organization of this Section

The following elements make up the Parts List section:

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.

Exploded View Illustrations

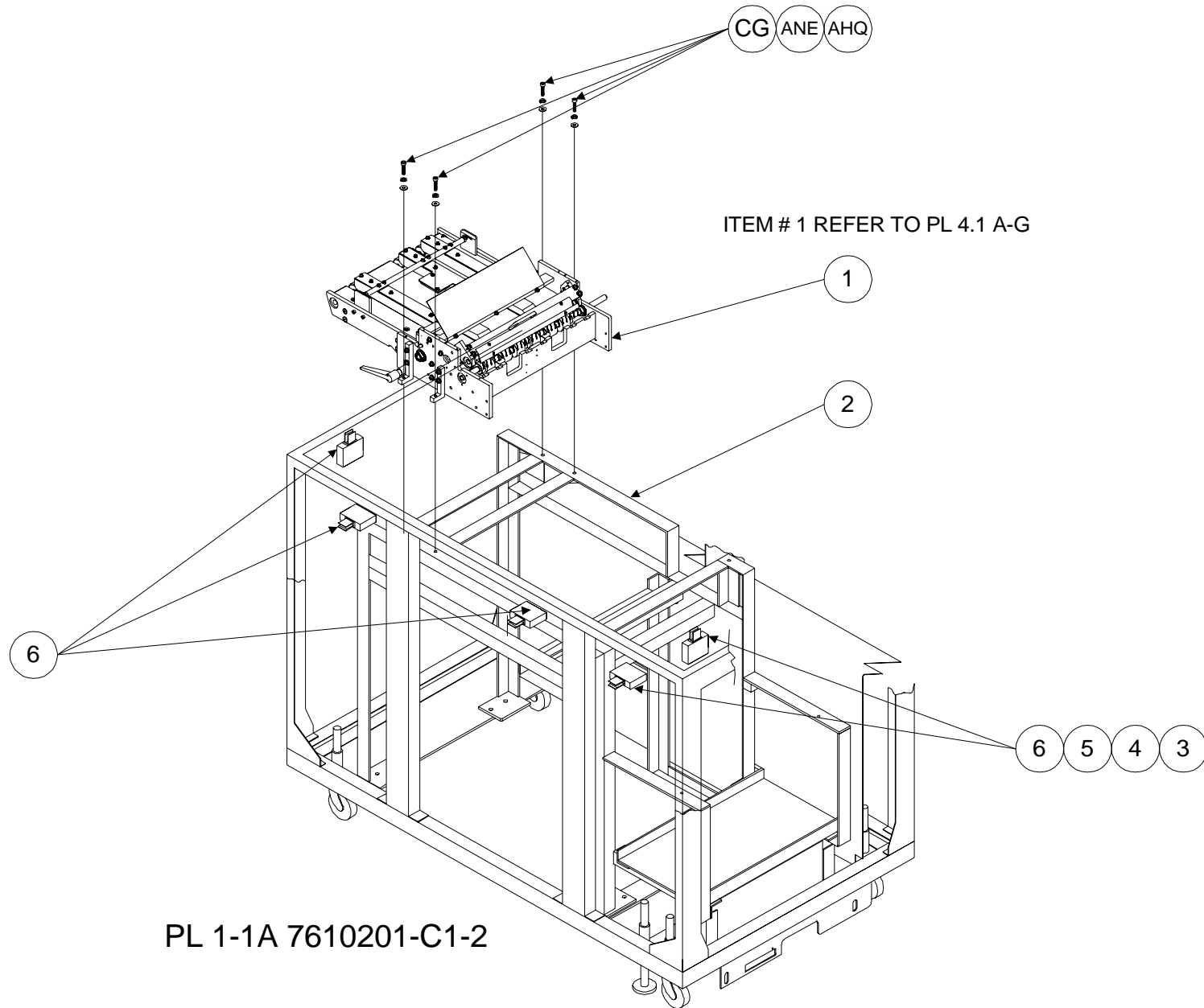
An item that is called out on an illustration has a corresponding listing within this section.

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

Part Number Index

This index lists all the spared parts in the system in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

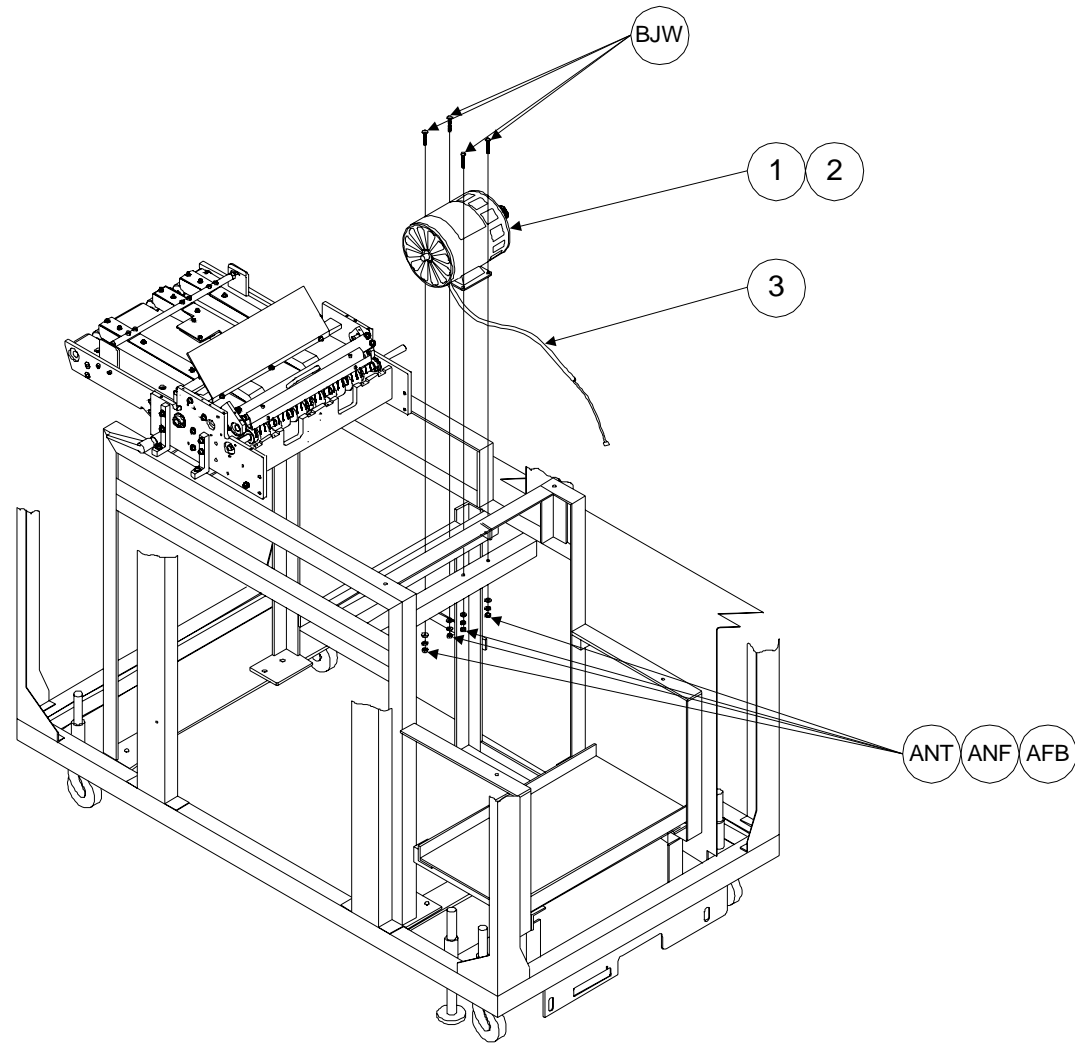
PL 1.1 A Punch Main Assy.



PL 1.1 A Punch Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610378 | Assy., Interface (refer to PL 4.1 A-G)..... | NA |
| 2 | 7610599 | Enclosure, Punch Assy. | 1 |
| 3 | 7610470 | Cable Assy., Punch Interlock High..... | 1 |
| 4 | 7610471 | Cable Assy., Punch Interlock Low | 1 |
| 5 | 7610472 | Cable Assy., Punch Interlock Jumpers | 1 |
| 6 | 7610501 | Switch, Punch Interlock (Xerox Part Number 110P2340) | 5 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 4 |
| ANE | 1926064 | Washer, Lock 1/4 | 4 |
| CG | 1980098 | SHCS 1/4-20 x 1 | 4 |

PL 1.1 B Punch Main Assy.

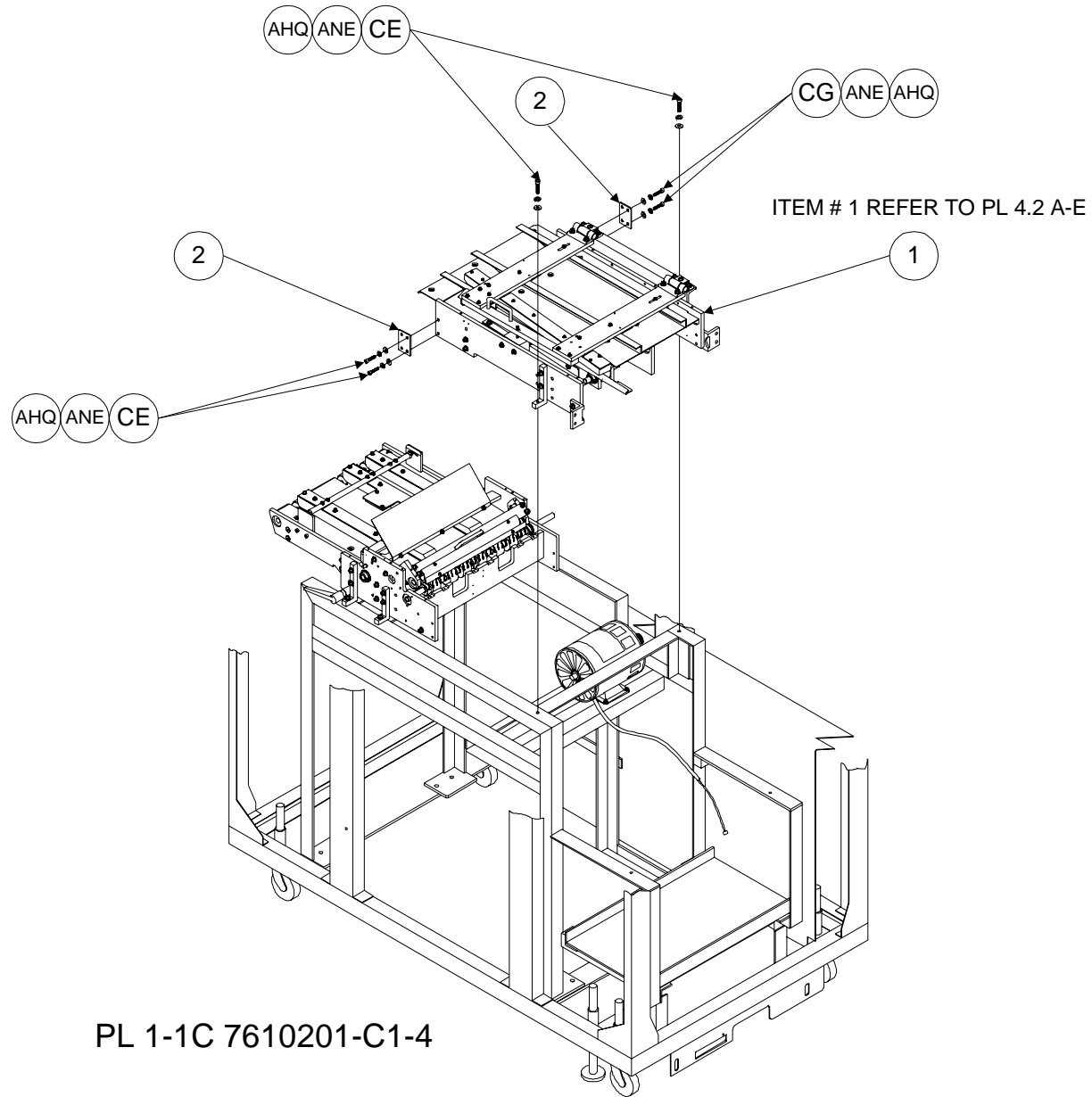


PL 1-1B 7610201-C1-3

PL 1.1 B Punch Main Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610418 | Motor, 115 VAC 60 HZ, Document Transport..... | 1 |
| 2 | 7610425 | Motor, 230 VAC 50 HZ, Document Transport..... | 1 |
| 3 | 7610473 | Cable Assy., Document Transport Motor | 1 |
| BJW | 1914721 | Carriage Screw 5/16-18 X 1-1/4 | 4 |
| AFB | 1925001 | Washer, Flat 5/16..... | 4 |
| ANF | 1926065 | Washer, Lock 5/16 | 4 |
| ANT | 1926706 | Nut, Hex 5/16-18..... | 4 |

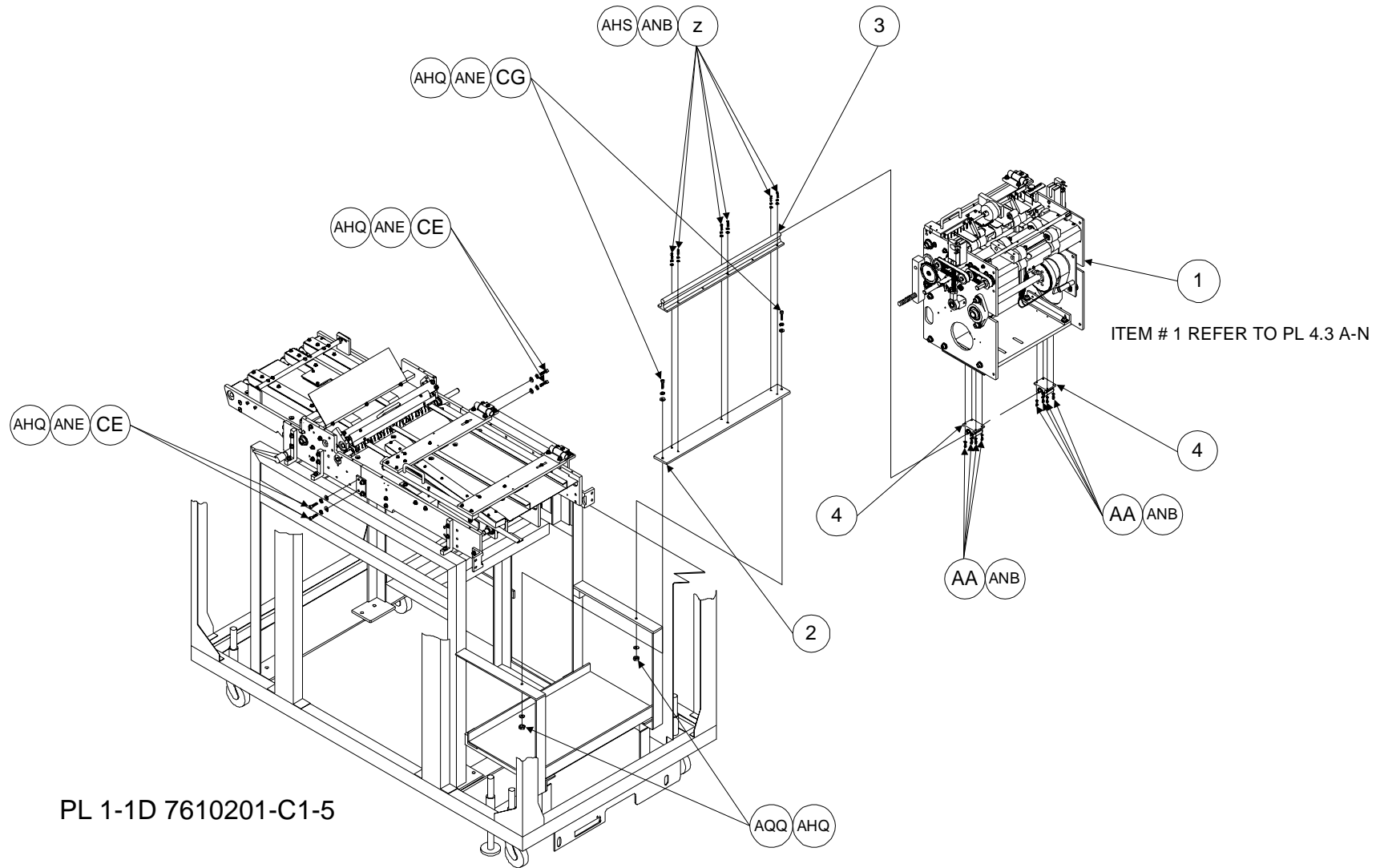
PL 1.1 C Punch Main Assy.



PL 1.1 C Punch Main Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 7610380 | Assy., Document Transport (refer to PL 4.2 A-E) | 1 |
| 2 | 0130003500 | Plate, Interface - Document Transport..... | 2 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 6 |
| ANE | 1926064 | Washer, Lock 1/4 | 6 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 4 |
| CG | 1980098 | SHCS 1/4-20 x 1 | 2 |

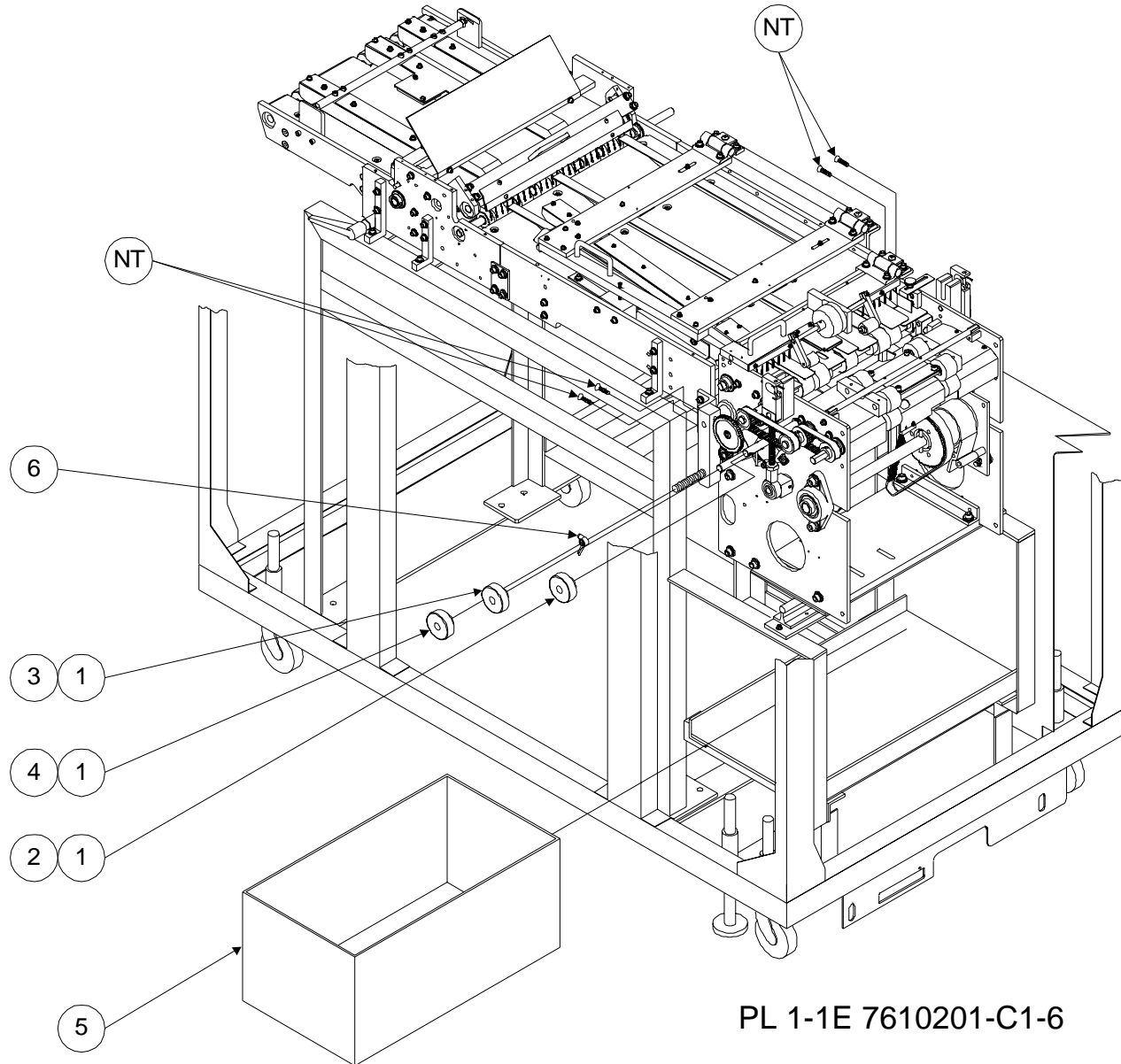
PL 1.1 D Punch Main Assy.



PL 1.1 D Punch Main Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610382 | Assy., Punch (refer to PL 4.3 A-N)..... | 1 |
| 2 | 7610414 | Plate, Rail, Punch Slide Assy..... | 1 |
| 3 | 7610415 | Rail, Linear, Punch Slide Support | 1 |
| 4 | 7610189 | Bearing, Pillow Block, Punch Slide Assy. | 2 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 8 |
| AHS | 1925063 | Washer, Flat #6..... | 6 |
| ANB | 1926061 | Washer, Lock #6 | 14 |
| ANE | 1926064 | Washer, Lock 1/4 | 6 |
| AQQ | 1927300 | Nut, Jam 1/4-20 | 2 |
| Z | 1980029 | SHCS 6-32 x 1/2 | 6 |
| AA | 1980030 | SHCS 6-32 x 5/8 | 8 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 4 |
| CG | 1980098 | SHCS 1/4-20 x 1 | 2 |

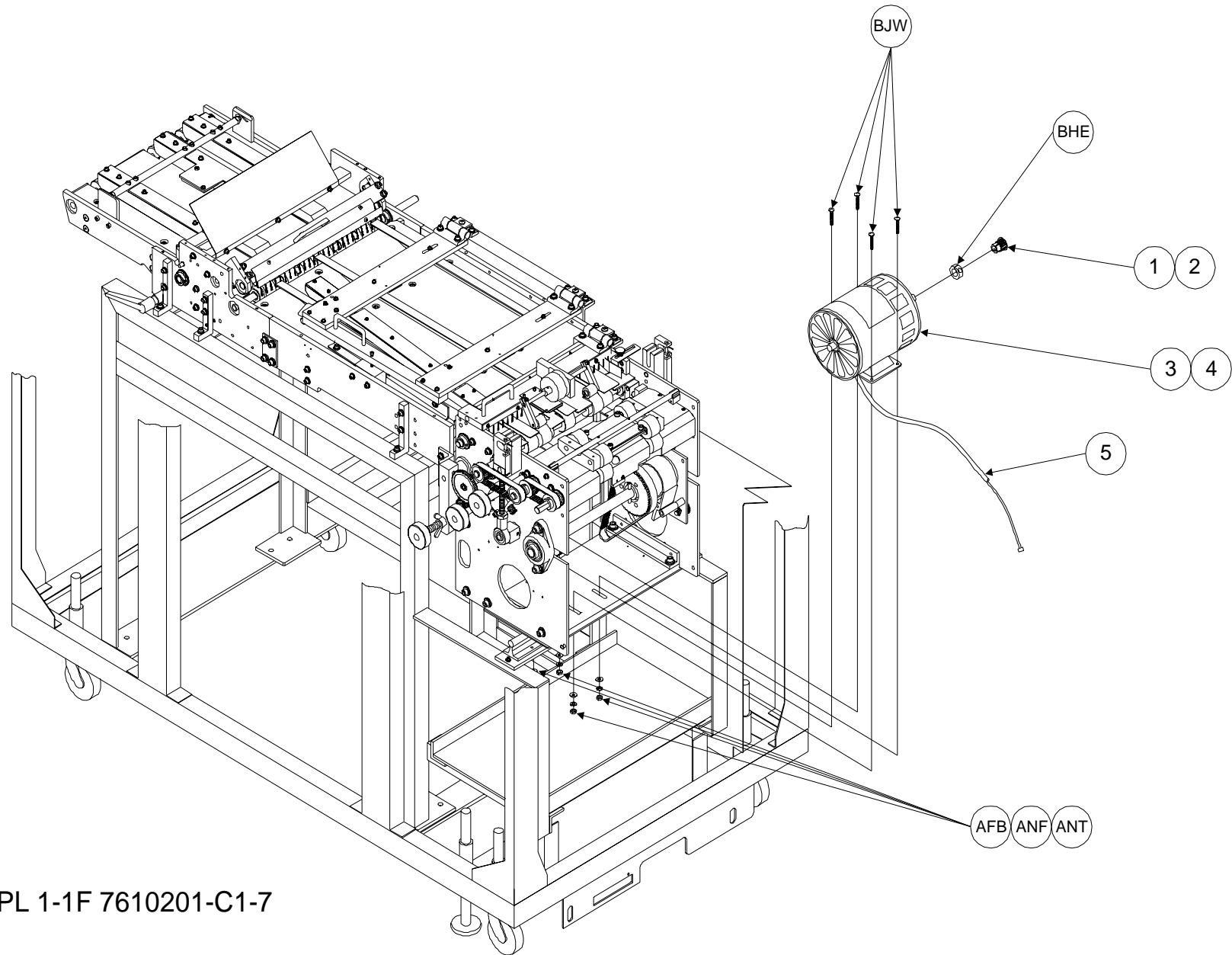
PL 1.1 E Punch Main Assy.



PL 1.1 E Punch Main Assy.

| Item | Part # | Description | Qty |
|------|---------|-------------------------------|-----|
| 1 | 7610112 | Knob, Punch Assy..... | 3 |
| 2 | 7610435 | Label, Die Lock Knob..... | 1 |
| 3 | 7610436 | Label, Back Gauge Knob..... | 1 |
| 4 | 7610437 | Label, Edge Guide Knob..... | 1 |
| 5 | 7610439 | Bucket, Slug, Punch Assy..... | 1 |
| 6 | 1928203 | Wing Nut, Punch Assy. | 1 |
| NT | 1980505 | FHCS 1/4-20 x 3/4 | 4 |

PL 1.1 F Punch Main Assy.

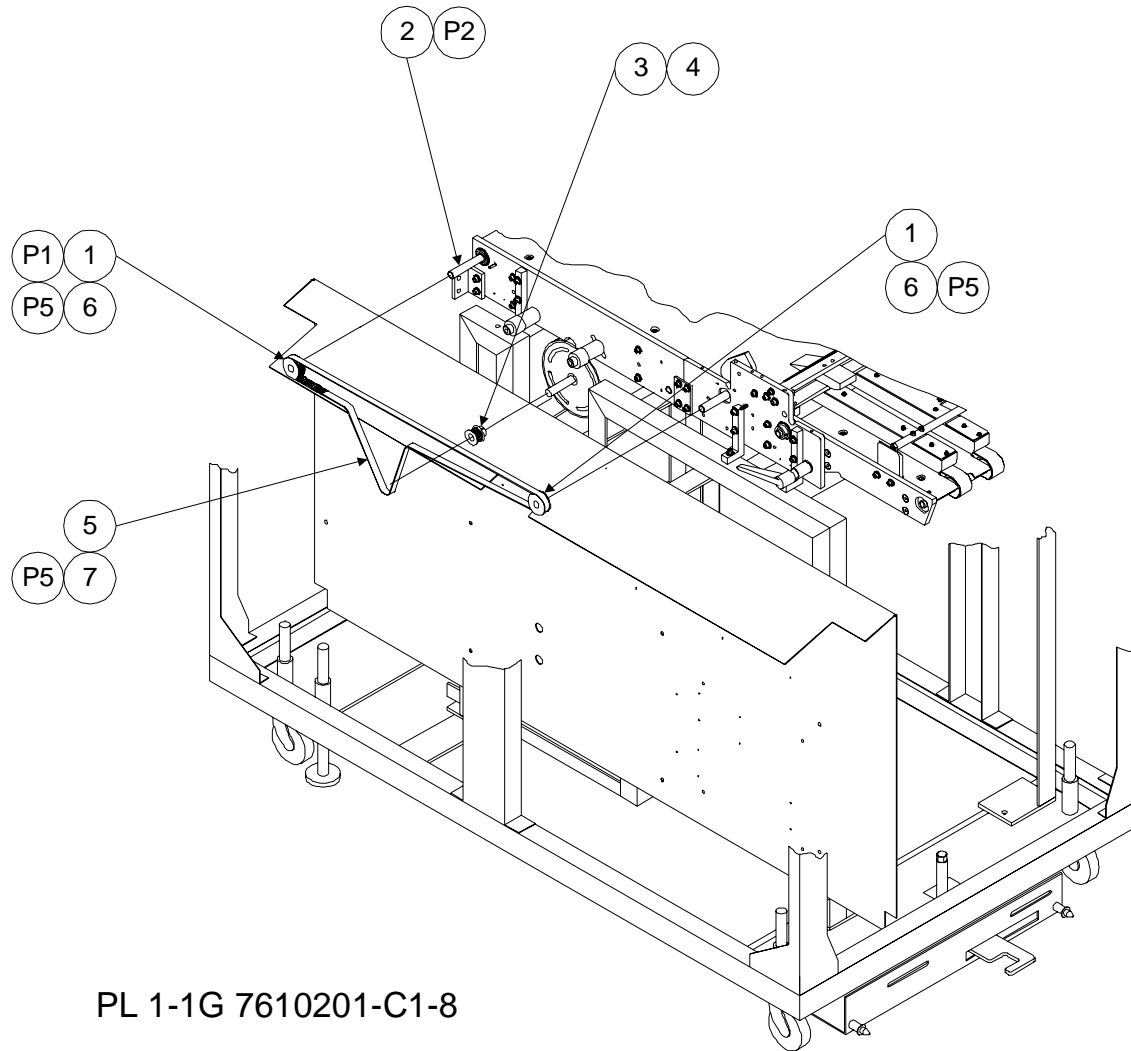


PL 1-1F 7610201-C1-7

PL 1.1 F Punch Main Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 0130032100 | Pulley, 14 Tooth, 115 VAC 60 HZ Punch Motor | 1 |
| 2 | 0130039100 | Pulley, 17 Tooth, 230 VAC 50 HZ Punch Motor | 1 |
| 3 | 7610418 | Motor, 115 VAC 60 HZ, Punch | 1 |
| 4 | 7610425 | Motor, 230 VAC 50 HZ, Punch | 1 |
| 5 | 7610474 | Cable Assy., Punch Motor | 1 |
| BJW | 1914721 | Carriage Screw 5/16-18 X 1-1/4 | 4 |
| AFB | 1925001 | Washer, Flat 5/16..... | 4 |
| ANF | 1926065 | Washer, Lock 5/16 | 4 |
| ANT | 1926706 | Nut, Hex 5/16-18..... | 4 |
| BHE | 1932705 | Collar, Split Lock, Punch Motor Pulley..... | 1 |

PL 1.1 G Punch Main Assy.

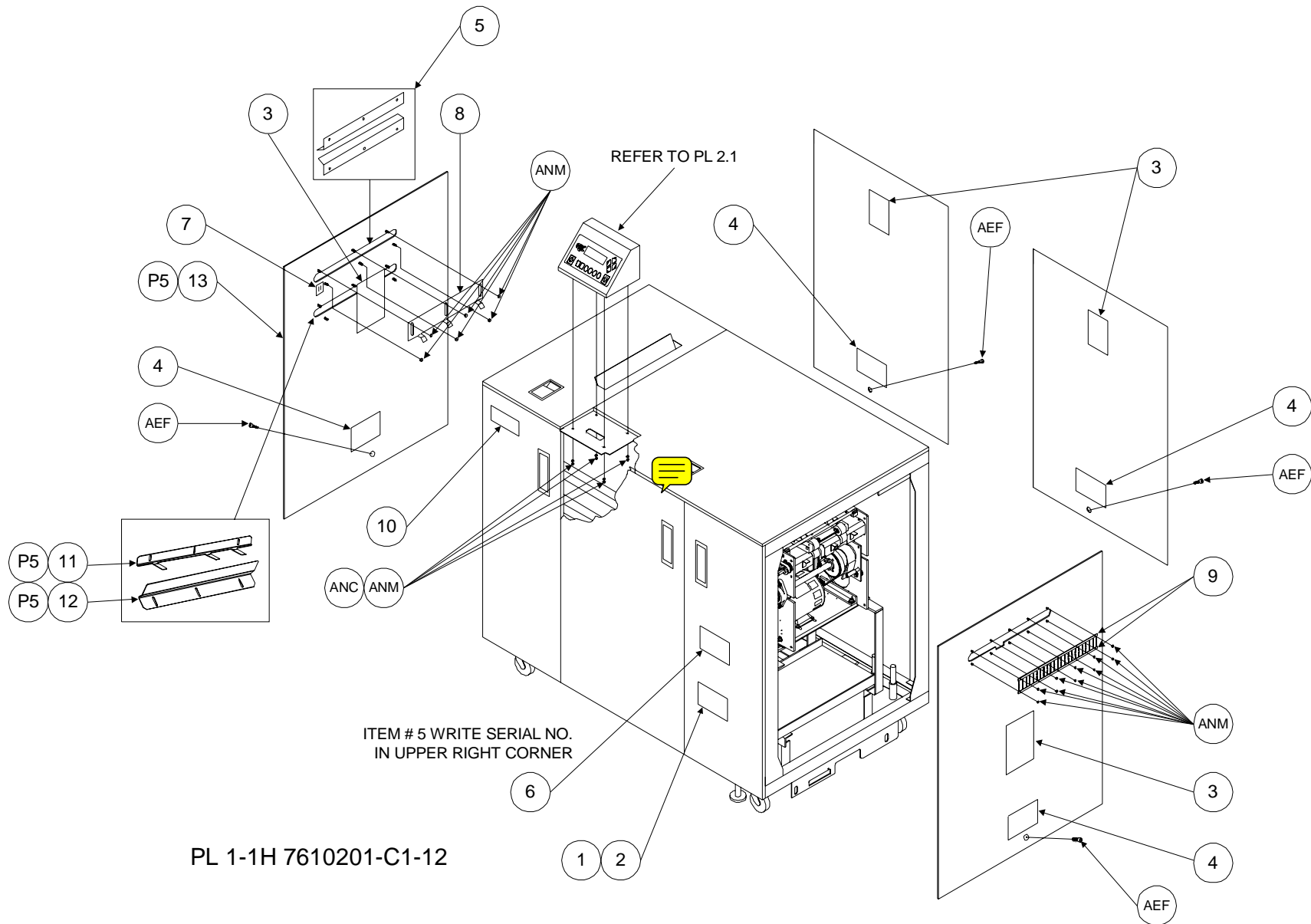


PL 1-1G 7610201-C1-8

PL 1.1 G Punch Main Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130017200 | Pulley, 32 Tooth, Interface / Document Transport Main Drive (Tag # P1) | 2 |
| 2 | 7610521 | Shaft, Document Transport Main Drive (Tag # P2)..... | 1 |
| 3 | 7610743 | Pulley, 15 Tooth, Document Transport 115 VAC 60 HZ Motor | 1 |
| 4 | 0130040200 | Pulley, 18 Tooth, Document Transport 230 VAC 50 HZ Motor | 1 |
| 5 | 1981350 | Belt, Timing, Document Transport Main Drive | 1 |
| 6 | 7610532 | Pulley, 48 Tooth, Document Transport Main Drive, 6060 / iGen3 (Tag # P5) | 2 |
| 7 | 7610533 | Belt, Timing, Document Transport Main Drive, 6060 / iGen3 (Tag # P5) | 1 |

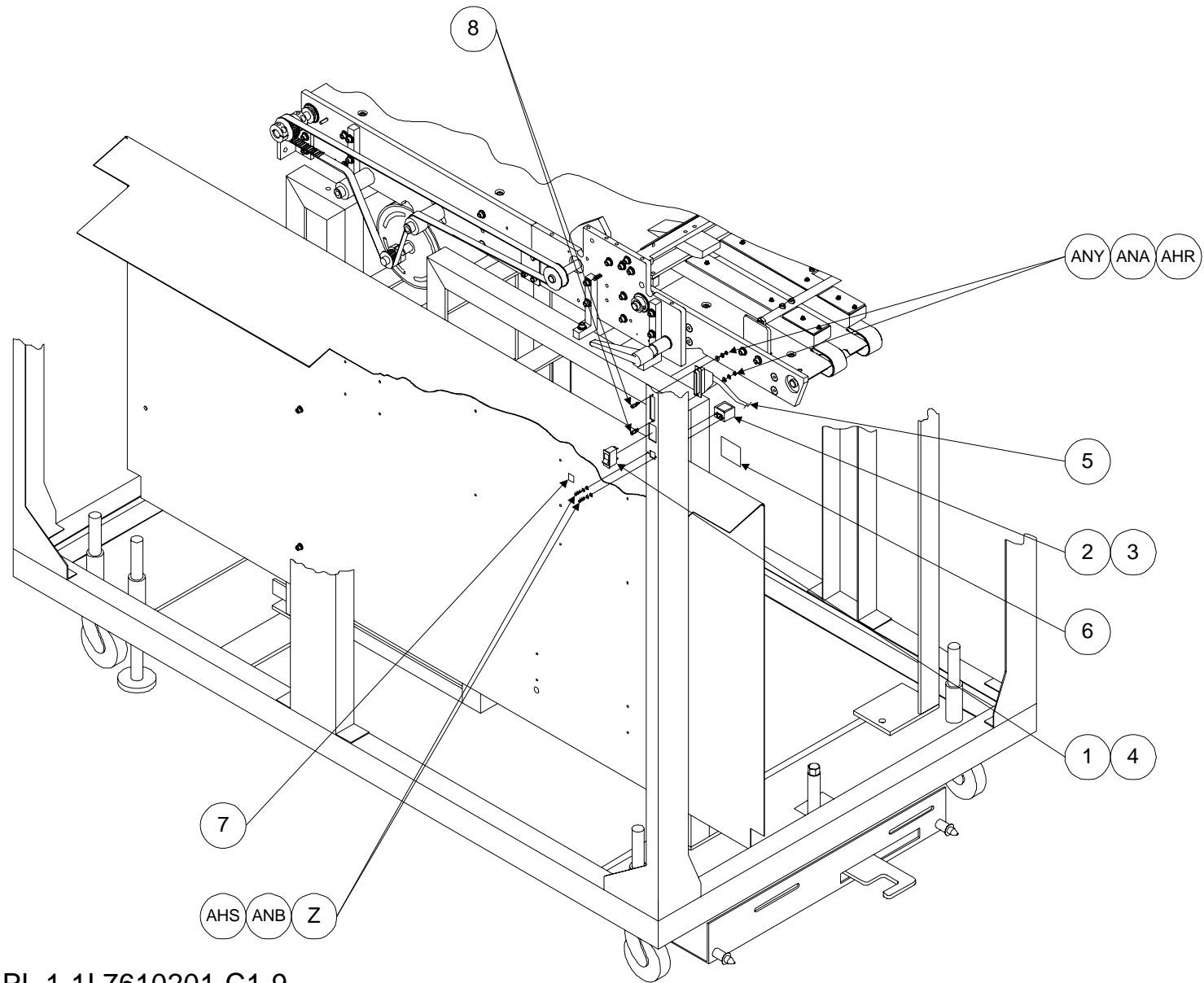
PL 1.1 H Punch Main Assy.



PL 1.1 H Punch Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 1722658 | CD Envelope | 1 |
| 2 | 1722675 | SVC History Log Book | 1 |
| 3 | 6009401 | Labe, Electrical Shock | 4 |
| 4 | 6009410 | Label, Re-Install Screw | 4 |
| 5 | 7610227 | Guide, Paper, Input Panel..... | 2 |
| 6 | 7610236 | Label, Tag Matrix | 1 |
| 7 | 7610237 | Label, Punch Alingment | 1 |
| 8 | 7610238 | Backet, Entrance Paper Guide | 1 |
| 9 | 7610318 | Brush, Anti-Static, Punch R.H. Side Panel | 2 |
| 10 | 7610440 | Label, LOGO | 1 |
| 11 | 7610530 | Paper Guide, Entrance, Top, 6060 / iGen3 (Tag # P5)..... | 1 |
| 12 | 7610531 | Paper Guide, Entrance, Bottom, 6060 / iGen3 (Tag # P5) | 1 |
| 13 | 7610621 | Panel, Punch Entrance, 4xxx / 6060 / iGen3 (Tag # P5) | 1 |
| AEF | 1911106 | SEMS Screw 8-32 x 3/8 | 4 |
| ANC | 1926062 | Washer, Lock #8 | 4 |
| ANM | 1926701 | Nut, Hex 8-32 | 17 |

PL 1.1 I Punch Main Assy.

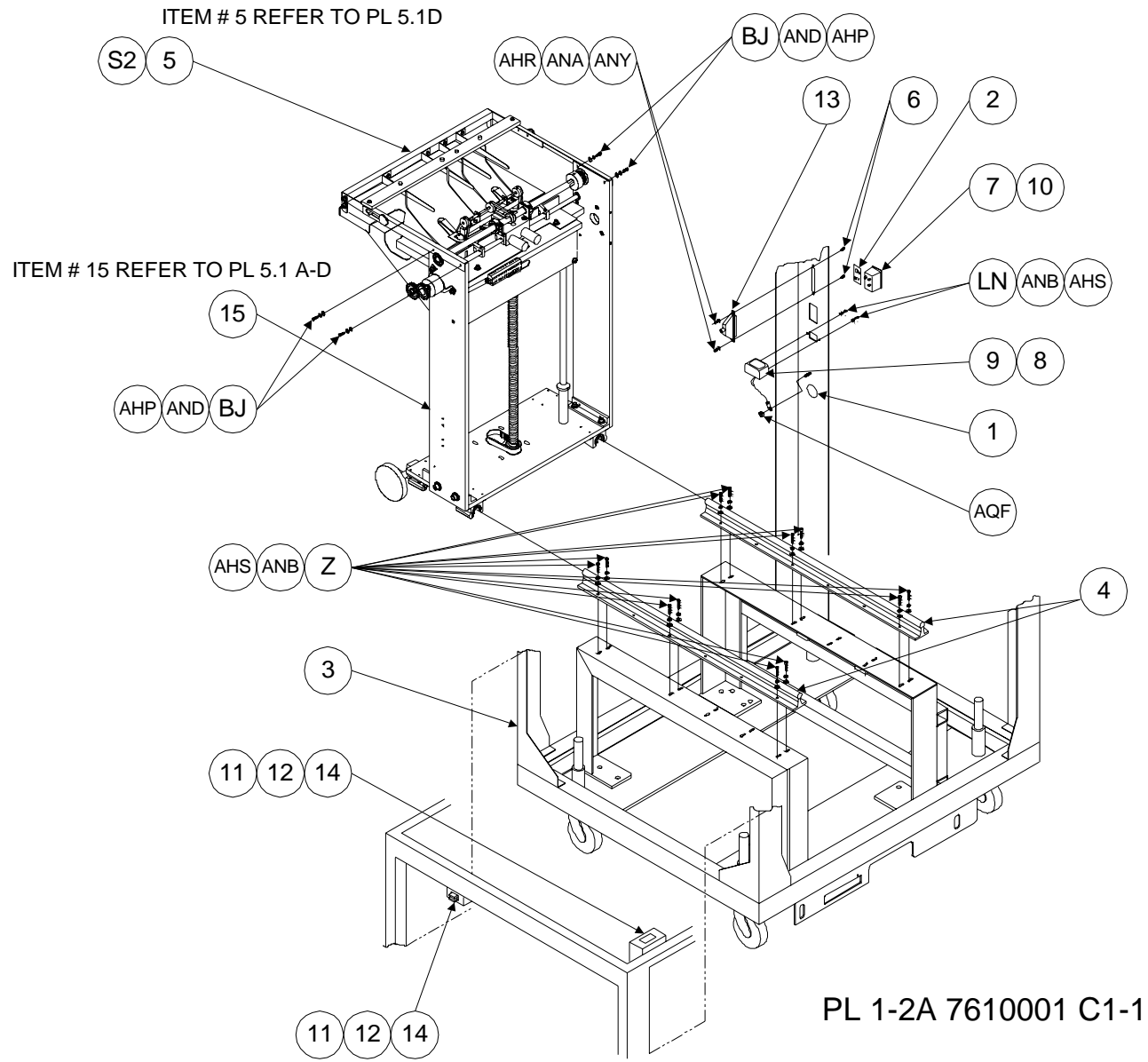


PL 1-1I 7610201-C1-9

PL 1.1 I Punch Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610455 | Switch / Circuit Breaker, Punch Main Power | 1 |
| 2 | 7610456 | AC Receptical / Line Filter, Punch Main Power | 1 |
| 3 | 7610464 | Cable Assy., Line Filter - Power Switch | 1 |
| 4 | 7610465 | Cable Assy., Power Switch - AC/DC Power Distribution PWB | 1 |
| 5 | 7610500 | Cable Assy., DFA From Printer..... | 1 |
| 6 | 1128416 | Label, Ground Symbol | 1 |
| 7 | 6009160 | Label, Stacker On / Off | 1 |
| 8 | 7610228 | Standoff, Hex 4-40 | 2 |
| AHR | 1925062 | Washer, Flat #4..... | 2 |
| AHS | 1925063 | Washer, Flat #6..... | 2 |
| ANA | 1926060 | Washer, Lock #4 | 2 |
| ANB | 1926061 | Washer, Lock #6 | 2 |
| ANY | 1926711 | Nut, Hex 4-40..... | 2 |
| Z | 1980029 | SHCS 6-32 x 1/2 | 2 |

PL 1.2 A Stacker Main Assy.

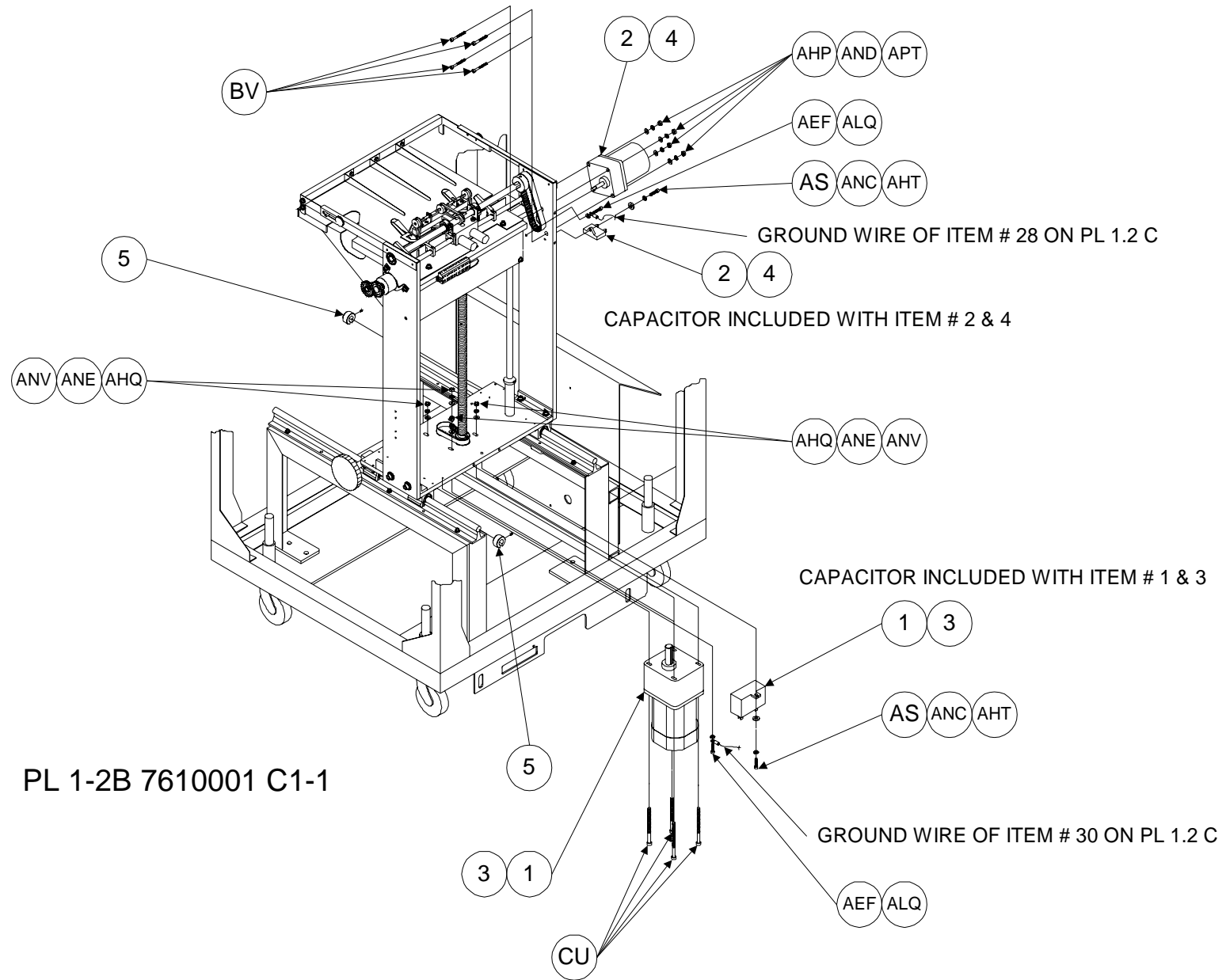


PL 1-2A 7610001 C1-1

PL 1.2 A Stacker Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 1128416 | Label, Ground Symbol | 1 |
| 2 | 6009160 | Label, Stacker On / Off | 1 |
| 3 | 7610105 | Assy., Enclosure, Stacker Assy. | 1 |
| 4 | 7610190 | Rail, Linear, Stacker Assy. Support | 2 |
| 5 | 7610223 | Assy., Paper Guide, Stacker Assy. (refer to PL 5.1 D) (Tag # S2) | 1 |
| 6 | 7610228 | Standoff, Hex 4-40 | 2 |
| 7 | 7610455 | Switch / Circuit Breaker, Stacker Main Power | 1 |
| 8 | 7610456 | AC Receptical / Line Filter, Stacker Main Power | 1 |
| 9 | 7610464 | Cable Assy., Line Filter - Power Switch | 1 |
| 10 | 7610465 | Cable Assy., Power Switch - AC/DC Power Distribution PWB | 1 |
| 11 | 7610485 | Cable Assy., Stacker Interlock Low | 2 |
| 12 | 7610486 | Cable., Stacker Interlock High | 2 |
| 13 | 7610500 | Cable Assy., Downstream DFA | 1 |
| 14 | 7610501 | Switch, Stacker Interlock (Xerox Part Number 11P2340) | 2 |
| 15 | 7611002 | Assy., Stacker (refer to PL 5.1 A-D)..... | 1 |
| AHP | 1925060 | Washer, Flat #10..... | 4 |
| AHR | 1925062 | Washer, Flat #4..... | 2 |
| AHS | 1925063 | Washer, Flat #6..... | 14 |
| ANA | 1926060 | Washer, Lock #4..... | 2 |
| ANB | 1926061 | Washer, Lock #6..... | 14 |
| AND | 1926063 | Washer, Lock #10..... | 4 |
| ANY | 1926711 | Nut, Hex 4-40..... | 2 |
| AQF | 1926802 | Nut, Kep 8-32..... | 1 |
| Z | 1980029 | SHCS 6-32 x 1/2..... | 12 |
| BJ | 1980072 | SHCS 10-32 x 1/2..... | 4 |
| LN | 1980432 | FHCS 6-32 X 3/8..... | 2 |

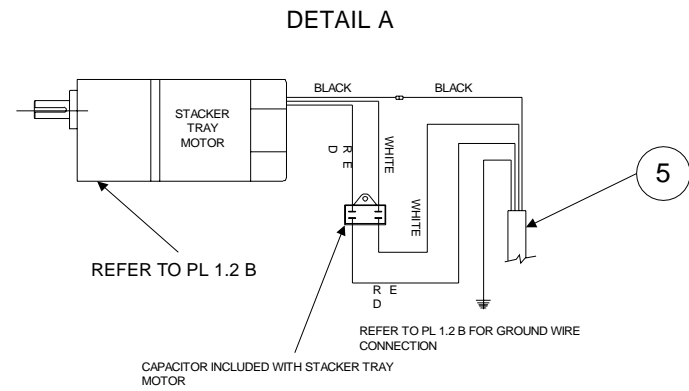
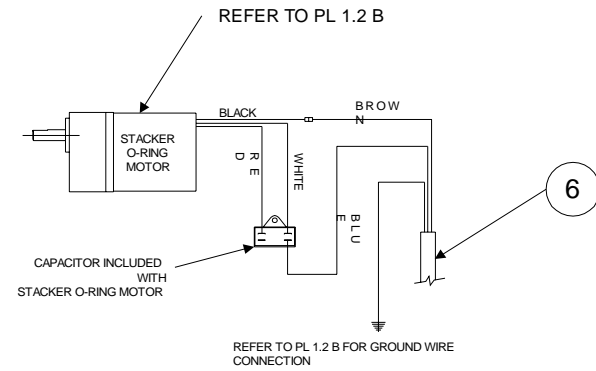
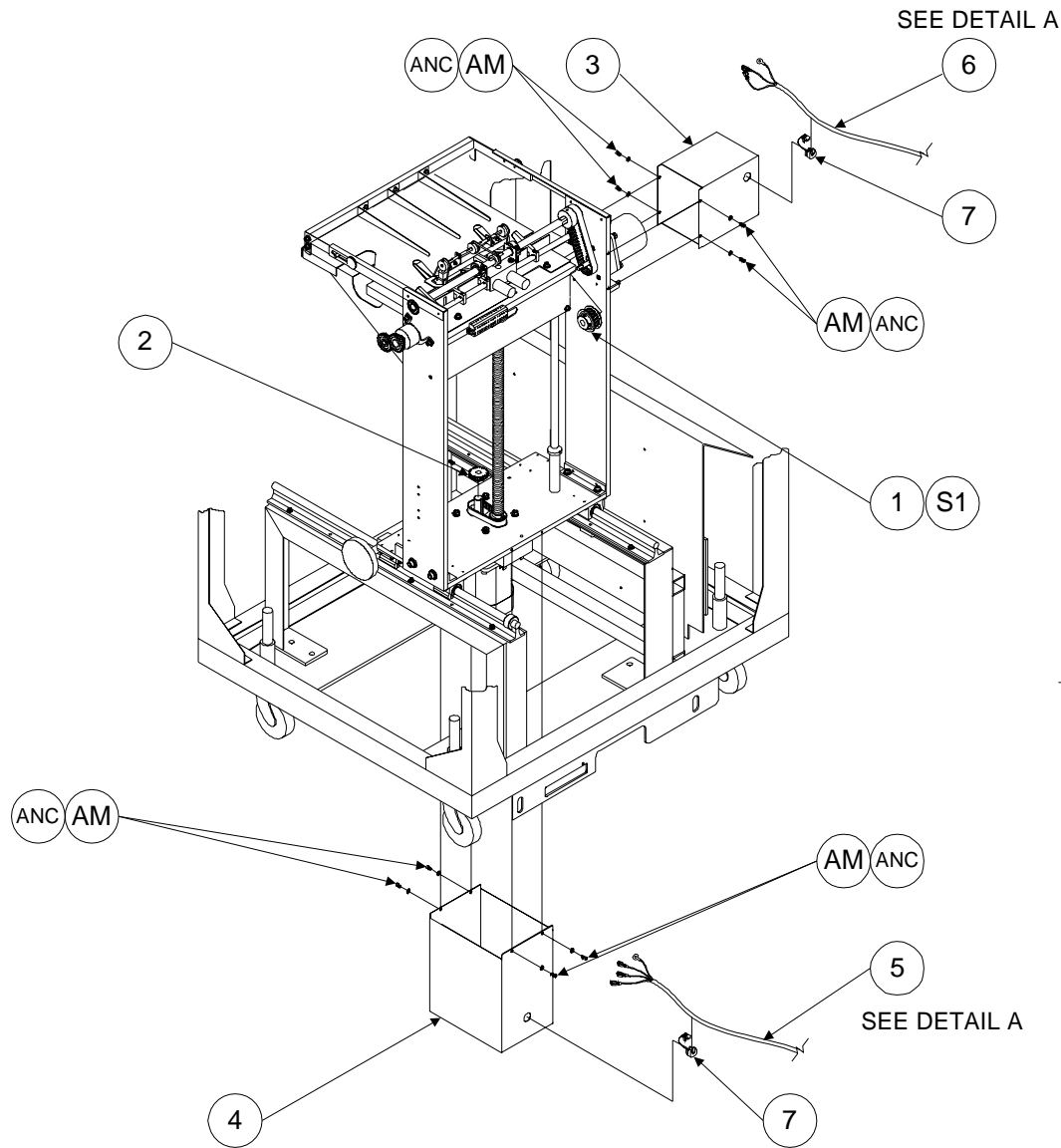
PL 1.2 B Stacker Main Assy.



PL 1.2 B Stacker Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610191 | Motor, 115 VAC 60 HZ, Stacker Tray | 1 |
| 2 | 7610192 | Motor, 115 VAC 60 HZ, Stacker O-ring | 1 |
| 3 | 7610194 | Motor, 230 VAC 50 HZ, Stacker Tray | 1 |
| 4 | 7610195 | Motor, 230 VAC 50 HZ, Stacker O-ring | 1 |
| 5 | 7610065 | Collar, Clamp, Stacker Slide Assy. | 2 |
| AEF | 1911106 | SEMS Screw 8-32 x 3/8 | 2 |
| AHP | 1925060 | Washer, Flat #10 | 4 |
| AHQ | 1925061 | Washer, Flat 1/4 | 4 |
| AHT | 1925064 | Washer, Flat #8 | 2 |
| ALQ | 1925903 | Washer, Star Lock #8 | 2 |
| ANC | 1926062 | Washer, Lock #8 | 2 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| ANV | 1926708 | Nut, Hex 1/4-20 | 4 |
| APT | 1926730 | Nut, Hex 10-32 | 4 |
| AS | 1980051 | SHCS 8-32 x 5/8 | 2 |
| BV | 1980083 | SHCS 10-32 x 2.5 | 4 |
| CU | 1980110 | SCHS 1/4-20 x 4.0 | 4 |

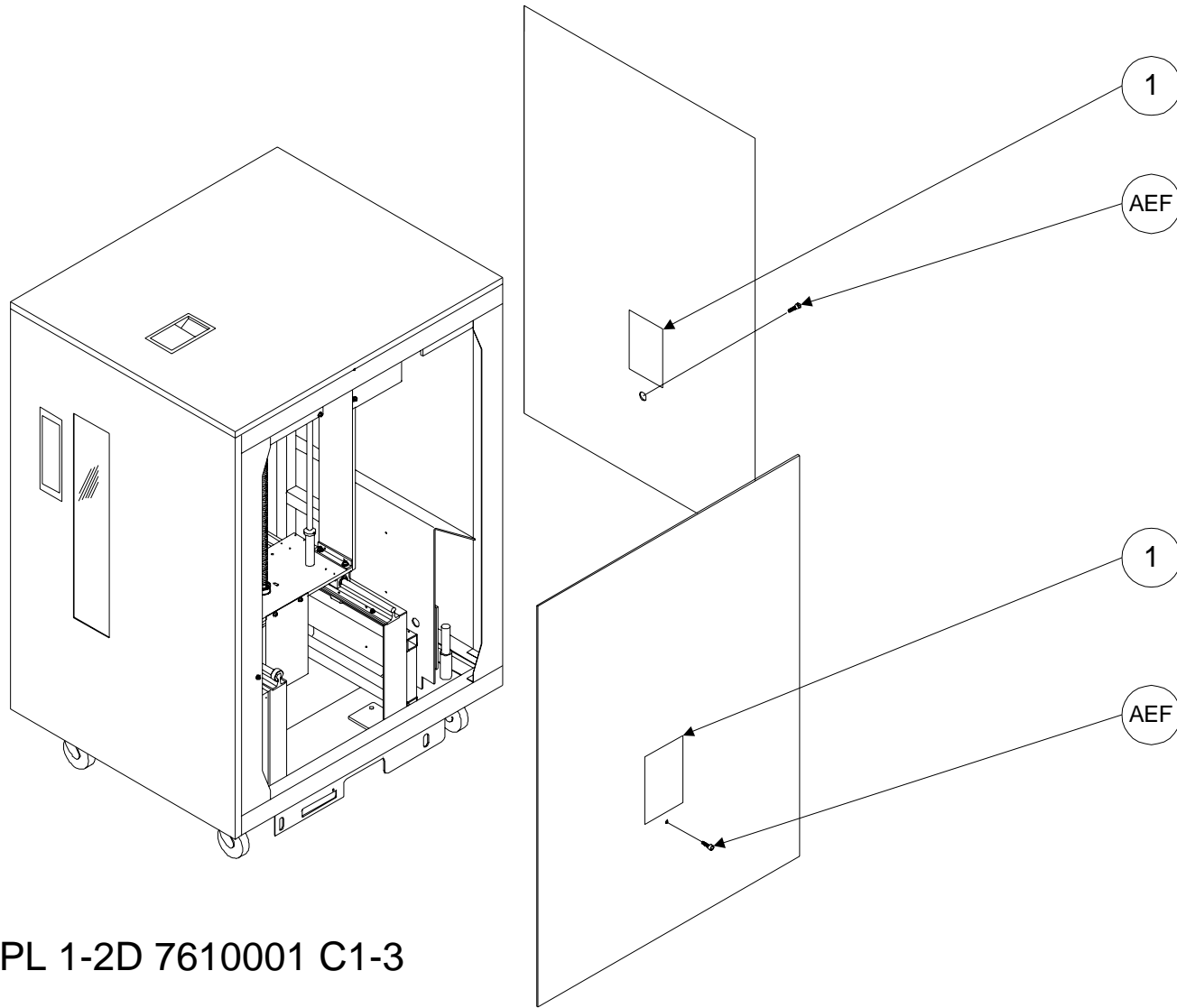
PL 1.2 C Stacker Main Assy.



PL 1.2 C Stacker Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610222 | Pulley, 18 Tooth, Stacker O-ring Motor (Tag # S1)..... | 1 |
| 2 | 7610045 | Pulley, Stacker Tray Motor..... | 1 |
| 3 | 7610113 | Cover, Stacker O-ring Motor | 1 |
| 4 | 7610114 | Cover, Stacker Tray Motor..... | 1 |
| 5 | 7610487 | Cable Assy., Stacker Tray Motor | 1 |
| 6 | 7610488 | Cable Assy., Stacker O-ring Motor | 1 |
| 7 | 1952407 | Strain Relief, Stacker Cable Assy..... | 2 |
| ANC | 1926062 | Washer, Lock #8 | 8 |
| AM | 1980046 | SHCS 8-32 X 1/4 | 8 |

PL 1.2 D Stacker Main Assy.

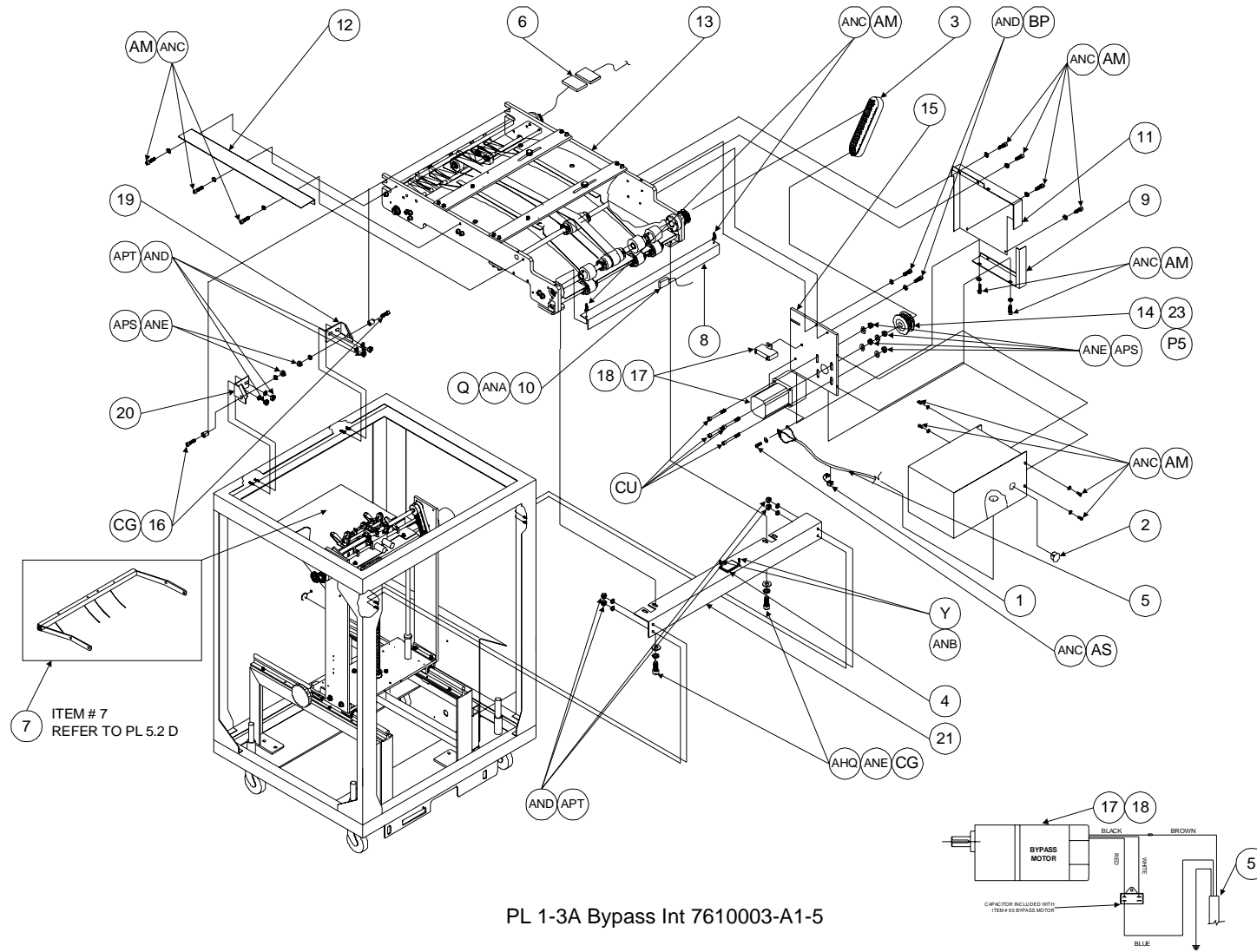


PL 1-2D 7610001 C1-3

PL 1.2 D Stacker Main Assy.

| Item | Part # | Description | Qty |
|------|---------|-------------------------------|-----|
| 1 | 6009410 | Label, Re-install Screw | 2 |
| AEF | 1911106 | SEMS Screw 8-32 x 3/8 | 2 |

PL 1.3 A Bypass Stacker Main Assy.

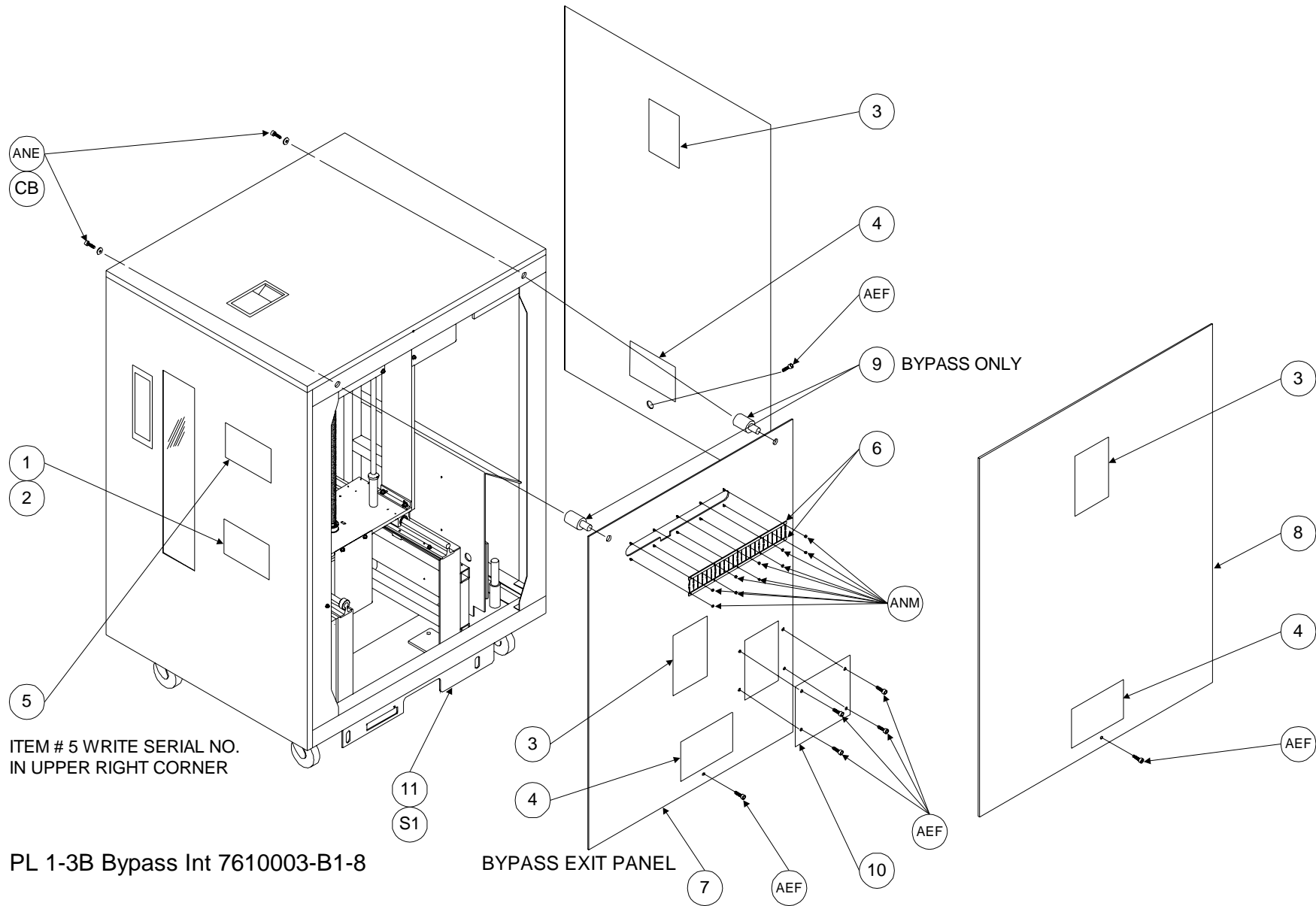


PL 1-3A Bypass Int 7610003-A1-5

PL 1.3 A Bypass Stacker Main Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 1952407 | Strain Relief | 1 |
| 2 | 1953114 | Plug, Button | 1 |
| 3 | 1981311 | Belt, Timing, 85xl, Bypass Drive | 1 |
| 4 | 7610365 | Reflector, Stacker Exit Sensor | 1 |
| 5 | 7610503 | Cable Assy., Bypass Motor | 1 |
| 6 | 7610504 | Cable Assy., Bypass Gate | 1 |
| 7 | 7611922 | Assy., Paper Guide, Bypass Stacker Assy. | 1 |
| 8 | 7611939 | Bracket, Stacker Exit Sensor | 1 |
| 9 | 7611942 | Cover, Bottom, Bypass Motor Pulley | 1 |
| 10 | 7611944 | Sensor, Stacker Exit, (7610424 = Sensor without Cable Assy.) | 1 |
| 11 | 7611946 | Cover, Top, Bypass Motor Pulley | 1 |
| 12 | 7611947 | Shield, Bypass Assy. | 1 |
| 13 | 7611951 | Assy., Bypass | 1 |
| 14 | 7611956 | Pulley, Bypass Motor | 1 |
| 15 | 7611969 | Plate, Bypass Motor | 1 |
| 16 | 7611989 | Pin, Docking, Bypass Assy. | 2 |
| 17 | 7611990 | Motor, Bypass, 230V | 1 |
| 18 | 7611991 | Motor, Bypass, 115V | 1 |
| 19 | 7611992 | Bracket, Docking, LH, Bypass Assy. | 1 |
| 20 | 7611993 | Bracket, Docking, RH, Bypass Assy. | 1 |
| 21 | 7611994 | Bar, Docking, Bypass Assy. | 1 |
| 22 | 7610516 | Cable Assy., Downstream DFA Tag # S3 | 1 |
| 23 | 7610534 | Pulley, 32 Tooth, Bypass Motor, 6060 / iGen3 (Tag# P5) | 1 |
| AHQ | 1925061 | Washer, Flat 1/4 | 2 |
| ANA | 1926060 | Washer, Lock #4 | 3 |
| ANB | 1926061 | Washer, Lock #6 | 2 |
| ANC | 1926062 | Washer, Lock #8 | 16 |
| AND | 1926063 | Washer, Lock #10 | 10 |
| ANE | 1926064 | Washer, Lock 1/4 | 8 |
| APS | 1926729 | Nut, Hex 1/4-20 | 6 |
| APT | 1926730 | Nut, Hex 10-32 | 8 |
| N | 1980013 | SHCS 4-40 x 3/8 | 3 |
| AM | 1980046 | SHCS 8-32 x 1/4 | 15 |
| AS | 1980051 | SHCS 8-32 x 5/8 | 1 |
| BP | 1980077 | SHCS 10-32 x 1 | 2 |
| CG | 1980098 | SHCS 1/4-20 x 1 | 4 |
| CU | 1980110 | SHCS 1/4-20 x 4 | 4 |

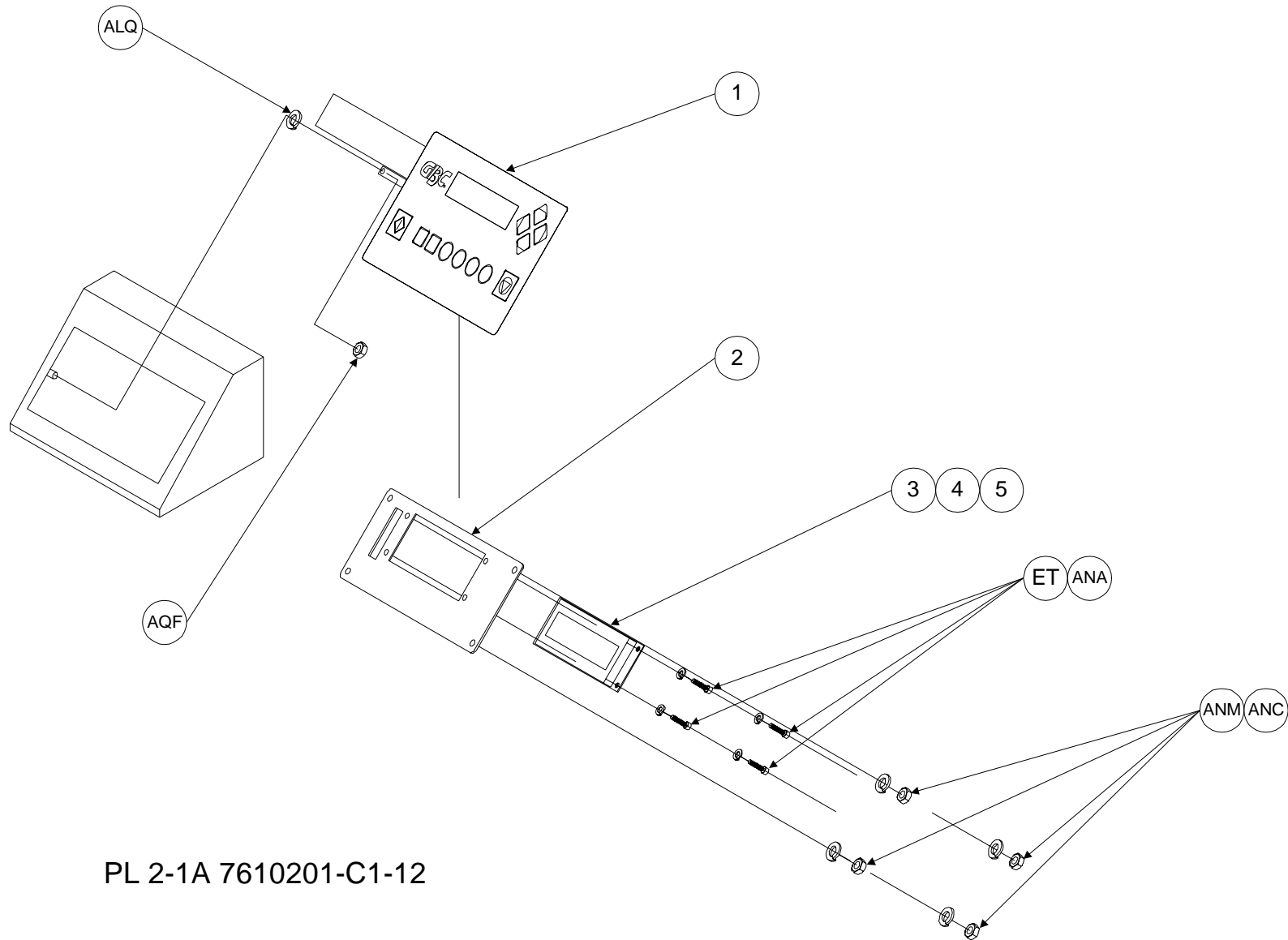
PL 1.3 B Bypass Stacker Assy.



PL 1.3 B Bypass Stacker Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 1722658 | Envelope, CD | 1 |
| 2 | 1722675 | Service History Log Book | 1 |
| 3 | 6009401 | Label, Electrical Shock | 3 |
| 4 | 6009410 | Label, Re-install Screw | 3 |
| 5 | 7610236 | Label, Tag Matrix Card | 1 |
| 6 | 7610318 | Brush, Static, Bypass Stacker Output | 2 |
| 7 | 7610573 | Panel, Bypass Stacker Output | 1 |
| 8 | 7610638 | Panel, Stacker Output | 1 |
| 9 | 7610678 | Pin, Docking, Top Alignment | 2 |
| 10 | 7610679 | Cover, Plate, Bypass Stacker Output Panel | 1 |
| 11 | 7610680 | Plate, Docking, Bypass Stacker Assy. (Tag # S1) | 1 |
| AEF | 1911106 | SEMS Screw 8-32 x 3/8 | 7 |
| ANE | 1926064 | Washer, Lock 1/4 | 2 |
| ANM | 1926701 | Nut, Hex 8-32 | 10 |
| CB | 1980094 | SHCS 1/4-20 x 1/2 | 2 |

PL 2.1 A Control Panel Assy.

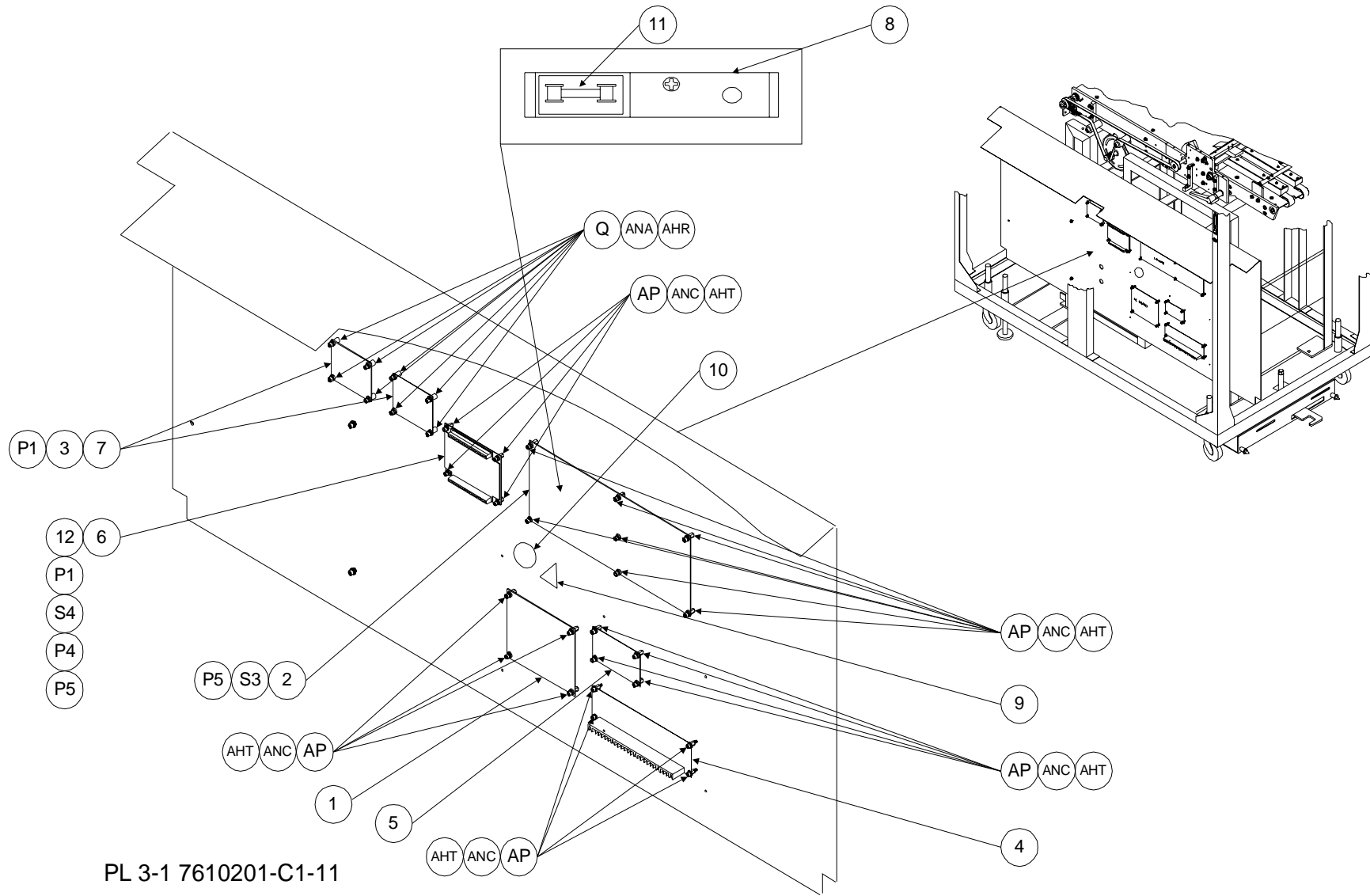


PL 2-1A 7610201-C1-12

PL 2.1 A Control Panel Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610273 | Key Pad, Control Panel..... | 1 |
| 2 | 7610299 | Plate, Backer, Control Panel Key Pad | 1 |
| 3 | 7610459 | LCD Display | 1 |
| 4 | 7610495 | Cable Assy., Key Pad | 1 |
| 5 | 7610496 | Cable Assy., LCD Display..... | 1 |
| ALQ | 1925903 | Washer, Star Lock #8 | 1 |
| ANA | 1926060 | Washer, Lock #4 | 4 |
| ANC | 1926062 | Washer, Lock #8 | 4 |
| ANM | 1926701 | Nut, Hex 8-32..... | 4 |
| AQF | 1926802 | Nut, Kep 8-32..... | 1 |
| ET | 1980215 | BHCS 4-40 X 1/4 | 4 |

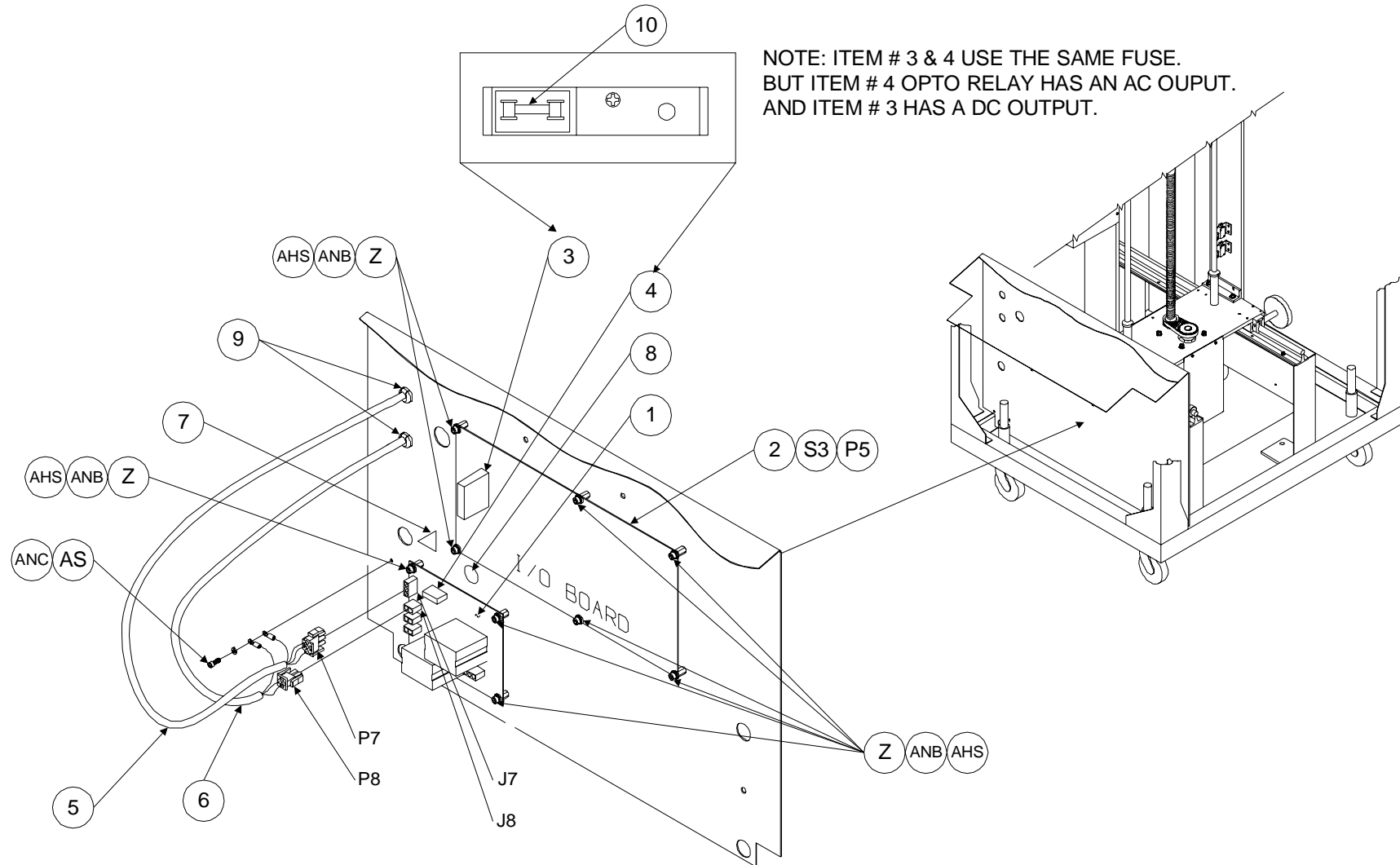
PL 3.1 Punch Electronic Assy.



PL 3.1 Punch Electronic Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610450 | PWB, Punch AC/DC Distribution | 1 |
| 2 | 7610529 | PWB, Punch I/O (Tag # S3 & P5) | 1 |
| 3 | 7610452 | PWB, Daughter (Tag # P1) | 2 |
| 4 | 7610453 | PWB, 24 VDC Power Supply | 1 |
| 5 | 7610454 | PWB, 5 VDC Power Supply | 1 |
| 6 | 7610457 | PWB, Little Star Controller (Tag # P1, S4, P4, & P5) | 1 |
| 7 | 7610458 | PWB, Little Star Controller Expansion (Tag # P1) | 2 |
| 8 | 7610460 | Relay, DC, Punch I/O Opto | 3 |
| 9 | 6009406 | Label, Electrical Shock Triangle | 1 |
| 10 | 6009409 | Label, Earth Ground | 1 |
| 11 | 7610729 | Fuse, 3A Slow Blow | 3 |
| 12 | 7610508 | Eprom with latest version programmed (Tag # P1, S4, P4, & P5) | 1 |
| AHR | 1925062 | Washer, Flat #4 | 8 |
| AHT | 1925064 | Washer, Flat #8 | 23 |
| ANA | 1926060 | Washer, Lock #4 | 8 |
| ANC | 1926062 | Washer, Lock #8 | 23 |
| Q | 1980015 | SHCS 4-40 x 5/8 | 8 |
| AP | 1980048 | SHCS 8-32 x 7/16 | 23 |

PL 3.2 Stacker Electronic Assy.

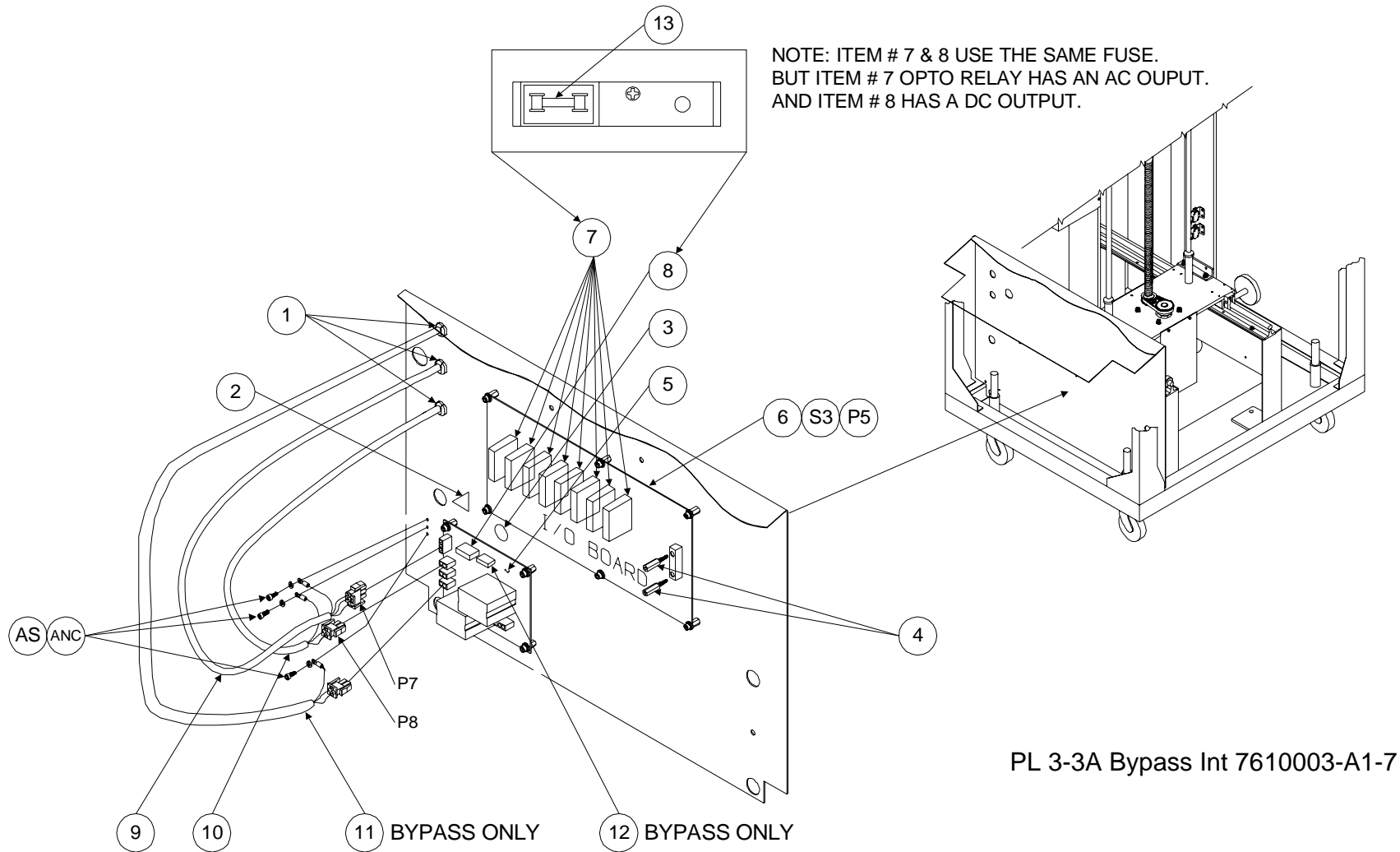


PL 3-2A1 7610001 C1-3

PL 3.2 Stacker Electronic Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610450 | PWB, Stacker AC/DC Power Distribution | 1 |
| 2 | 7610529 | PWB, Stacker I/O (Tag # S3, & P5) | 1 |
| 3 | 7610460 | Relay, DC, Stacker I/O Opto | 1 |
| 4 | 7610461 | Relay, AC, Stacker AC/DC Distribution Opto | 1 |
| 5 | 7610487 | Cable Assy., Stacker Tray Motor | 1 |
| 6 | 7610488 | Cable Assy., Stacker O-ring Motor | 1 |
| 7 | 6009406 | Label, Electrical Shock Triangle | 1 |
| 8 | 6009409 | Label, Earth Ground | 1 |
| 9 | 1952407 | Strain Relief | 2 |
| 10 | 7610729 | Fuse, 3A Slow Blow | 2 |
| AHS | 1925063 | Washer, Flat #6 | 10 |
| ANB | 1926061 | Washer, Lock #6 | 10 |
| ANC | 1926062 | Washer, Lock #8 | 1 |
| Z | 1980029 | SHCS 6-32 x 1/2 | 10 |
| AS | 1980051 | SHCS 8-32 x 5/8 | 1 |

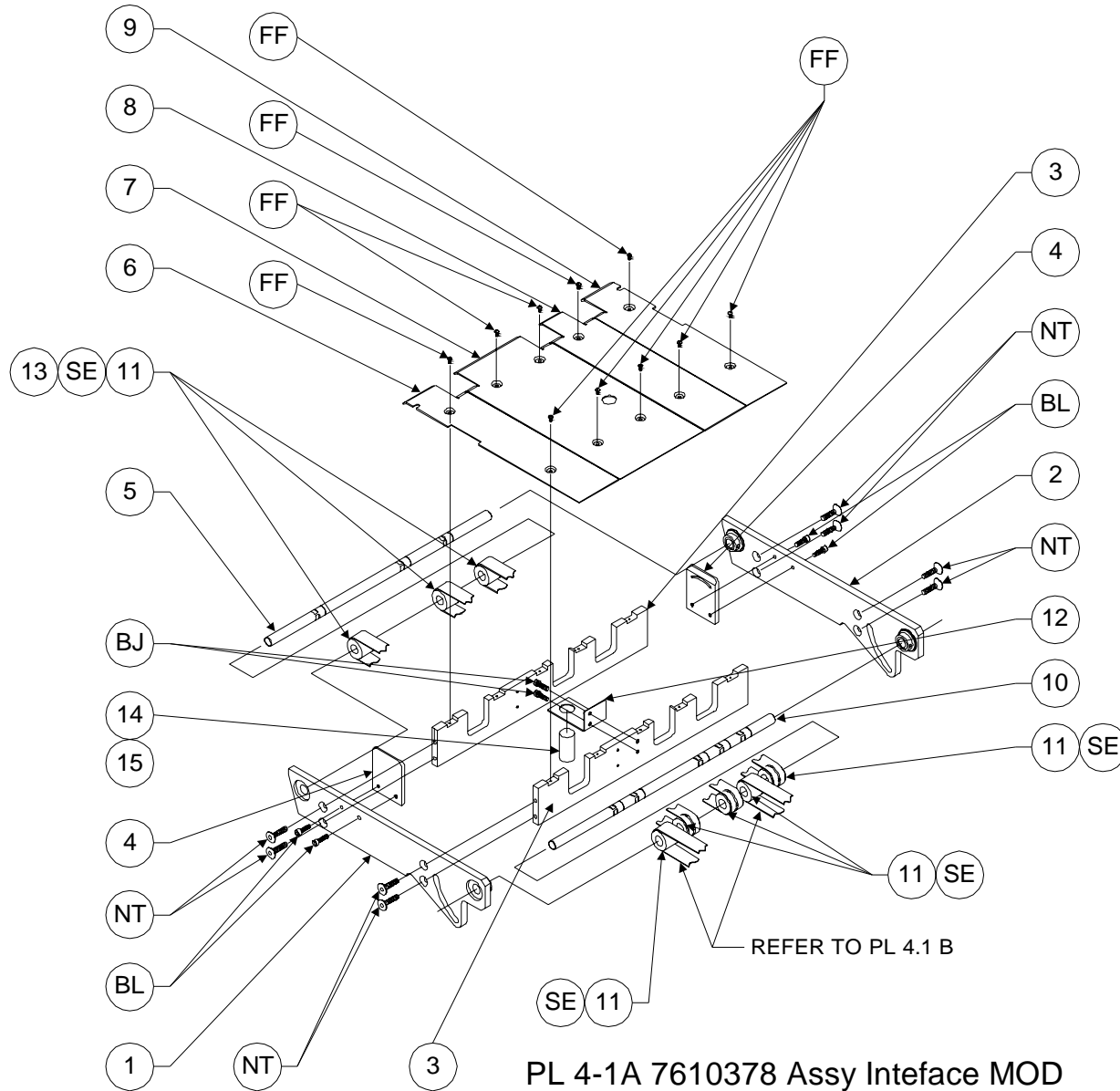
PL 3.3 Bypass Stacker Electronics Assy.



PL 3.3 Bypass Stacker Electronics Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 1952407 | Strain Relief | 3 |
| 2 | 6009406 | Label, Electrical Shock Triangle..... | 1 |
| 3 | 6009409 | Label, Earth Ground..... | 1 |
| 4 | 7610416 | Standoff, Hex 4-40 | 2 |
| 5 | 7610450 | PWB, Stacker AC/DC Power Distribution | 1 |
| 6 | 7610529 | PWB, Stacker I/O (Tag # S3 & P5) | 1 |
| 7 | 7610460 | Relay, DC, Stacker I/O Opto..... | 8 |
| 8 | 7610461 | Relay, AC, Stacker AC/DC Distribution Opto..... | 1 |
| 9 | 7610487 | Cable Assy., Tray Motor | 1 |
| 10 | 7610488 | Cable Assy., O-Ring, Motor | 1 |
| 11 | 7610503 | Cable Assy., Bypass Motor..... | 1 |
| 12 | 7610505 | Cable Assy., Stacker #1 AC/DC Distribution PWB P/J 13 - Stacker #2 AC/DC Distribution PWB P/J 14 | 1 |
| 13 | 7610729 | Fuse, 3A Slow Blow | 3 |
| ANC | 1926062 | Washer, Lock #8 | 3 |
| AS | 1980051 | SHCS 8-32 x 5/8 | 3 |

PL 4.1 A Swing Frame Assy.

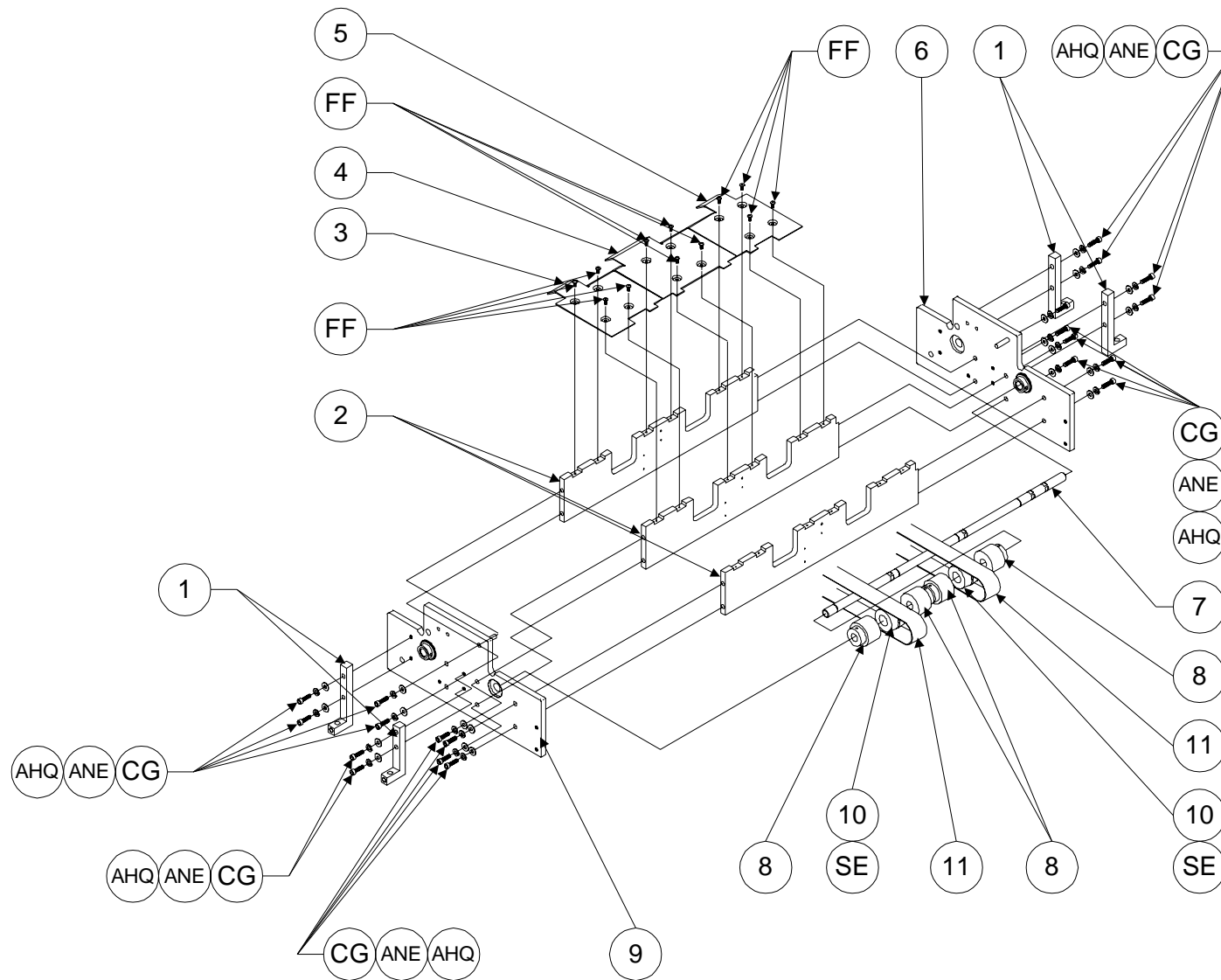


PL 4-1A 7610378 Assy Interface MOD

PL 4.1 A Swing Frame Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130021900 | Assy., L.H. Swing Frame | 1 |
| 2 | 0130022000 | Assy., R.H. Swing Frame | 1 |
| 3 | 0130019100 | Cross Member, Swing Frame | 2 |
| 4 | 0130014400 | Bracket, Detent | 2 |
| 5 | 0130014900 | Shaft, Swing Frame Entrance | 1 |
| 6 | 0130012900 | Deck, Swing Frame, R.H. | 1 |
| 7 | 0130013100 | Deck, Swing Frame, R.H.Center..... | 1 |
| 8 | 0130013200 | Deck, Swing Frame, L.H.Center | 1 |
| 9 | 0130013300 | Deck, Swing Frame, L.H. | 1 |
| 10 | 0130015100 | Shaft, Swing Frame Exit | 1 |
| 11 | 0130002200 | Roller,Crowned, Swing Frame | 8 |
| 12 | 0130016400 | Sensor Mounting Bracket, Entrance | 1 |
| 13 | 7610372 | Belt, Flat, Swing Frame .06 x 1 x 27 Endless | 3 |
| 14 | 7610423 | Sensor, Entrance | 1 |
| 15 | 1951309 | Connector, Entrance Sensor..... | 1 |
| SE | 1900028 | SHSS 10-32 x 3/16 | 8 |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 2 |
| BL | 1980074 | SHCS 10-32 x 5/8..... | 4 |
| FF | 1980233 | BHCS 6-32 x 1/2 | 10 |
| NT | 1980505 | FHCS 1/4-20 x 3/4 | 8 |

PL 4.1 B Interface Assy.

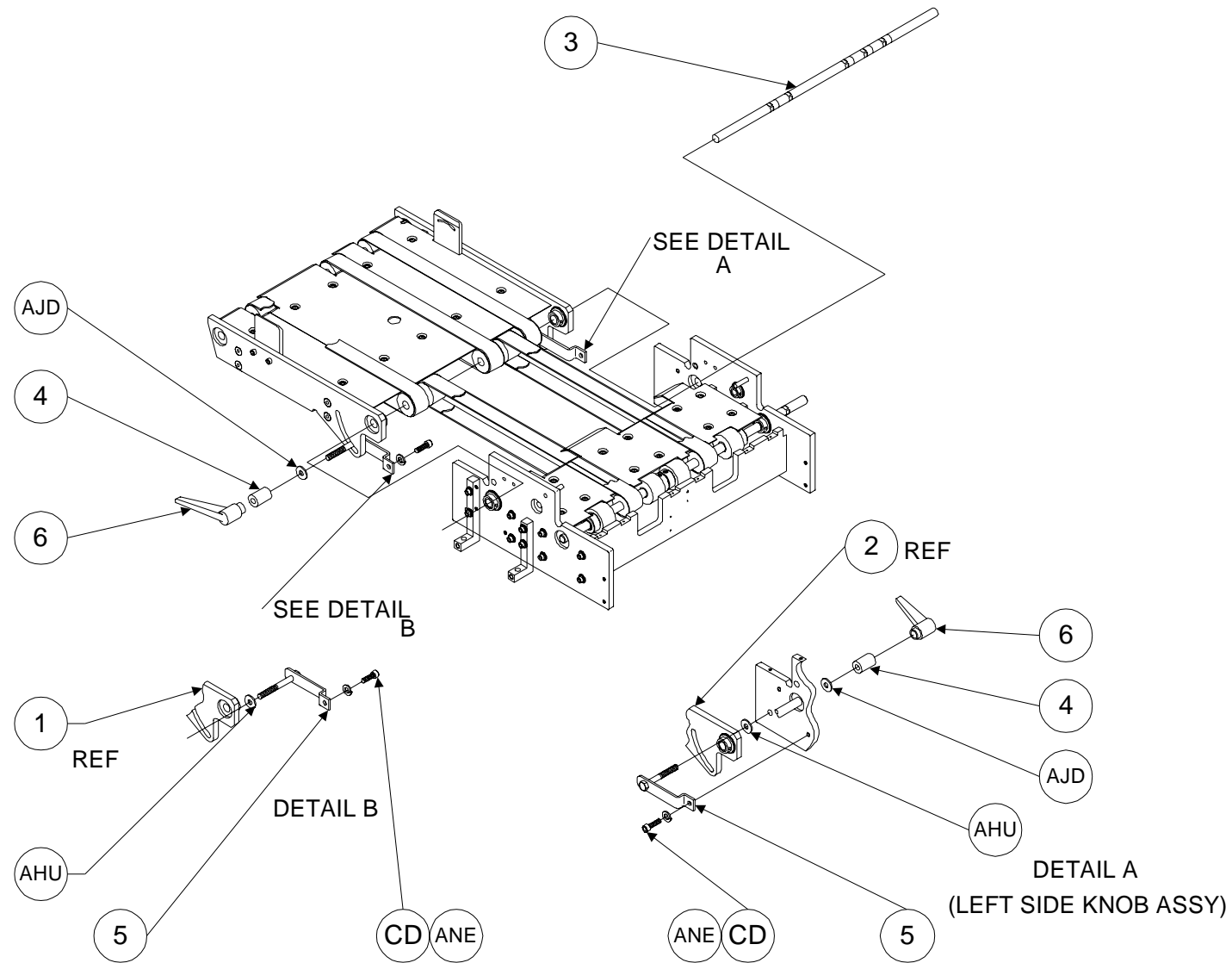


PL 4-1B 7610378 Assy Interface MOD

PL 4.1 B Interface Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130003300 | Mounting Bracket, Interface | 4 |
| 2 | 0130003400 | Cross Member, Interface | 3 |
| 3 | 0130013500 | Deck, Interface, R.H..... | 1 |
| 4 | 0130013600 | Deck, Interface, Center | 1 |
| 5 | 0130013700 | Deck, Interface, L.H. | 1 |
| 6 | 7610326 | Assy., Interface Side Frame, L.H. | 1 |
| 7 | 0130003600 | Shaft, Interface Exit..... | 1 |
| 8 | 0130002100 | Assy., Roller Interface | 4 |
| 9 | 7610324 | Assy., Interface Side Frame, R.H. | 1 |
| 10 | 0130017800 | Roller, Crowned, Interface Exit | 2 |
| 11 | 7610371 | Belt, Flat, Interface .06 x 1 x 14.4 Endless | 2 |
| SE | 1900028 | SHSS 10-32 x 3/16 | 2 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 20 |
| ANE | 1926064 | Washer, Lock 1/4 | 20 |
| CG | 1980098 | SHCS 1/4-20 x 1 | 20 |
| FF | 1980233 | BHCS 6-32 x 1/2 | 12 |

PL 4.1 C Swing Frame/Interface Assy.

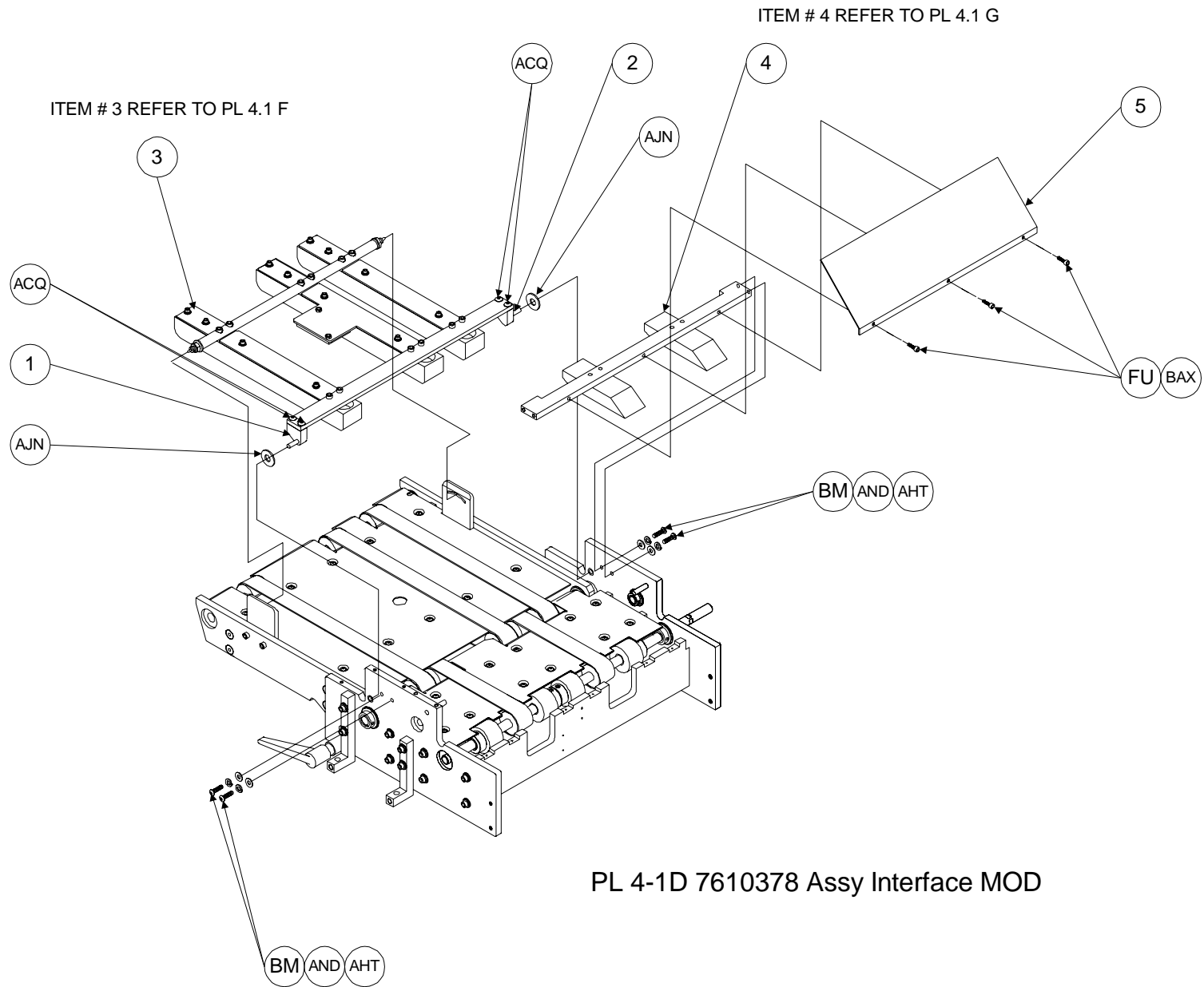


PL 4-1C 7610378 Assy Interface MOD

PL 4.1 C Swing Frame / Interface Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130021900 | Assy., L.H. Swing Frame | 1 |
| 2 | 0130022000 | Assy., R.H. Swing Frame | 1 |
| 3 | 0130015100 | Shaft, Swing Frame Exit | 1 |
| 4 | 0130007100 | Extension, Small | 2 |
| 5 | 0130014800 | Strap Nut, Swing Frame | 2 |
| 6 | 7610407 | Handle, Interface, Adjustable 5/16-1/8 THD | 2 |
| AHU | 1925065 | Washer, Flat 3/8 | 2 |
| AJD | 1925184 | Washer, Flat Extra Thick 3/8..... | 2 |
| ANE | 1926064 | Washer, Lock 1/4 | 2 |
| CD | 1980095 | SHCS 1/4-20 x 5/8 | 2 |

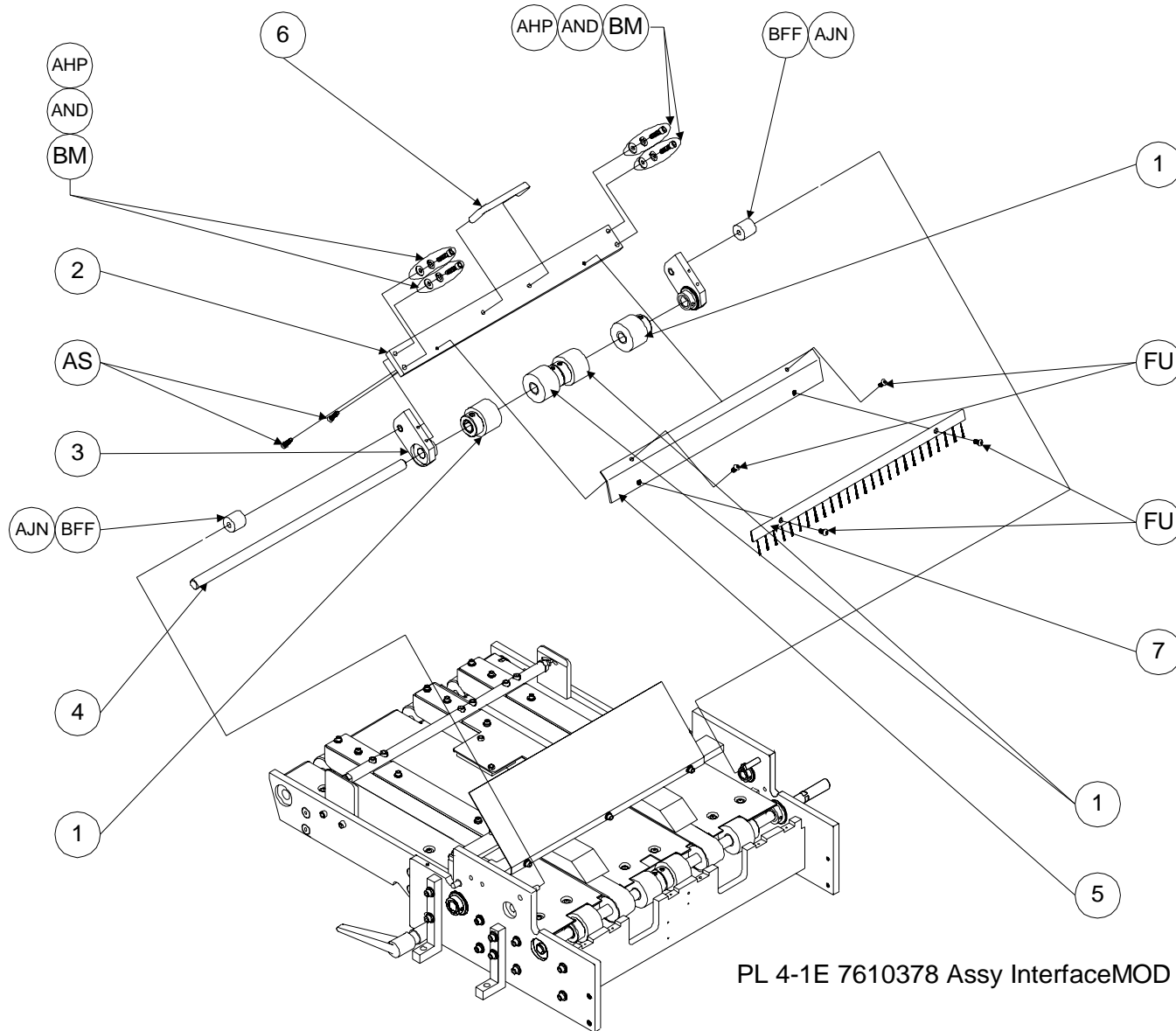
PL 4.1 D Swing Frame / Interface Assy.



PL 4.1 D Swing Frame / Interface Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-------|
| 1 | 0130012600 | Assy., Pivot Block R.H. | 1 |
| 2 | 0130012700 | Assy., Pivot Block L.H. | 1 |
| 3 | 7610341 | Assy., Ball Track Swing Frame (refer to PL 4.1 F)..... | 1 |
| 4 | 7610325 | Assy., Ball Track Interface (refer to PL 4.1 G) | 1 |
| 5 | 7610303 | Refeed Deck | 1 |
| ACQ | 1903026 | Truss Head Screw PH 10-32 x 1/2 | 4 |
| AHT | 1925064 | Washer, Flat #8 | 4 |
| AJN | 1925203 | Washer, Flat, Non-Metallic..... | 2 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| BAX | 1960509 | Loctite | 0.001 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 4 |
| FU | 1980256 | BHCS 8-32 x 3/8 | 3 |

PL 4.1 E Swing Frame / Interface Assy.

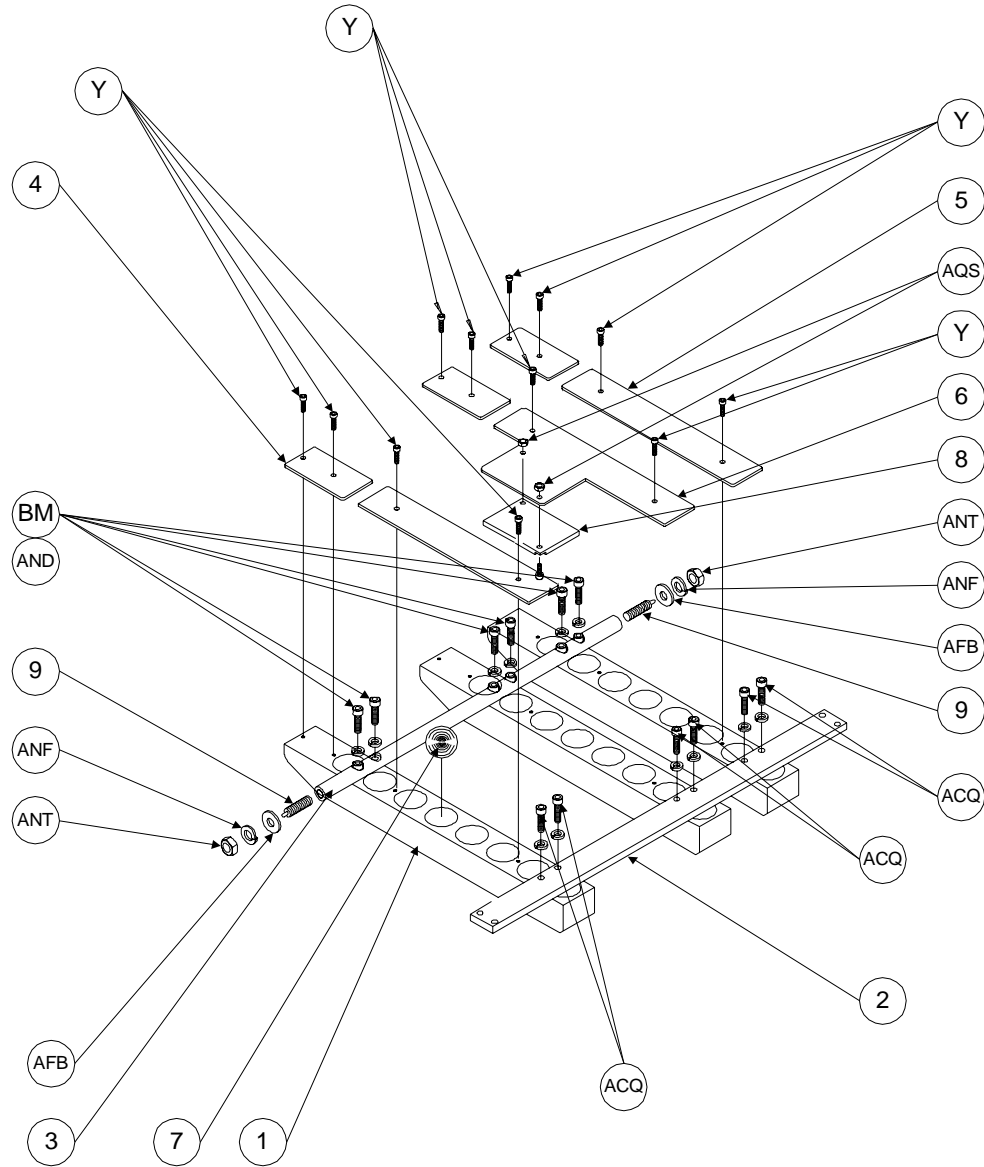


PL 4-1E 7610378 Assy InterfaceMOD

PL 4.1 E Swing Frame / Interface Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130002100 | Assy., Roller Interface | 4 |
| 2 | 7610264 | Cross Member Interface Idler Arm Short | 1 |
| 3 | 0130023000 | Assy., R.H. Interface Idler Arm Short | 1 |
| 4 | 7610267 | Shaft, Interface Idler Arm Long | 1 |
| 5 | 7610427 | Bracket, Static Brush, Interface | 1 |
| 6 | 7610377 | Handle, Aluminum, Interface Idler Assy. | 1 |
| 7 | 7610402 | Brush, Anti-static, Interface | 1 |
| AJN | 1925203 | Washer, Flat, Non-Metallic | 4 |
| BFF | 1925307 | Spacer, 1/4 x 3/4 x 3/4 | 2 |
| AHP | 1925060 | Washer, Flat #10 | 4 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| AS | 1980051 | SHCS 8-32 x 5/8 | 2 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 4 |
| FU | 1980256 | BHCS 8-32 x 3/8 | 4 |

PL 4.1 F Swing Frame Ball Track Assy.

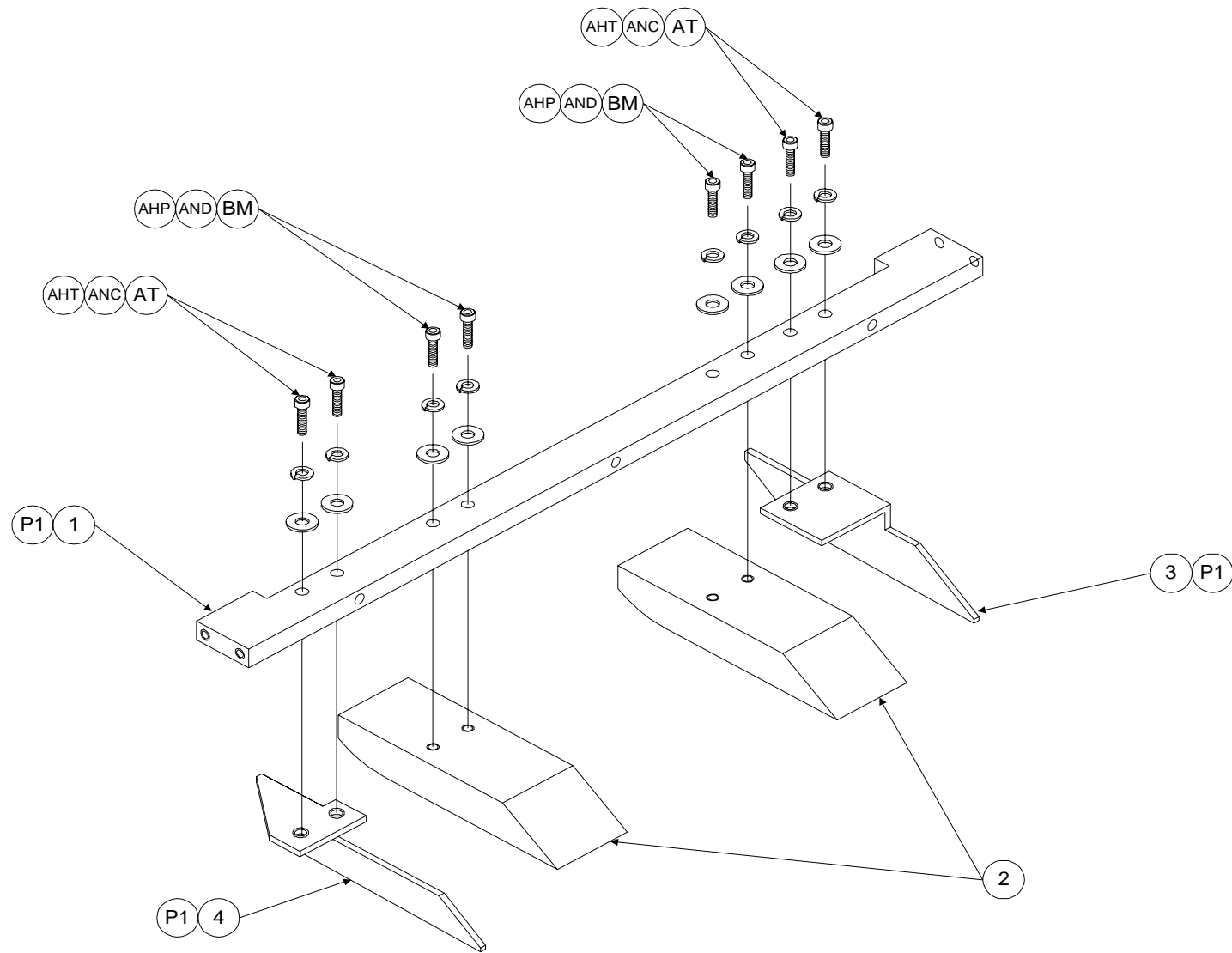


PL 4-1F 7610341 Assy Swing Frame Ball Track

PL 4.1 F Swing Frame Ball Track Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 7610245 | Swing Frame Ball Track | 3 |
| 2 | 0130013400 | Tiebar, Swing Frame Ball Track | 1 |
| 3 | 0130013900 | Shaft, Detent Ball Track | 1 |
| 4 | 7610246 | Cover, Swing Frame Ball Track Short | 3 |
| 5 | 0130014100 | Cover, Swing Frame Ball Track Long | 2 |
| 6 | 0130014300 | Cover, Swing Frame Ball Track Reflector Bracket | 1 |
| 7 | 7610374 | Ball, Delrin | 24 |
| 8 | 7610365 | Reflector, Coner Cube, Entrance Sensor | 1 |
| 9 | 7610360 | Plunger Spring Bolt | 2 |
| ACQ | 1903026 | Truss Head Screw 10-32 x 1/2 | 6 |
| AFB | 1925001 | Washer, Flat 5/16 | 2 |
| ANF | 1926065 | Washer, Lock 5/16 | 2 |
| AND | 1926063 | Washer, Lock #10 | 6 |
| ANT | 1926706 | Nut, Hex 5/16 - 18 | 2 |
| AQS | 1927302 | Nut, Jam 6-32 | 2 |
| Y | 1980028 | SHCS 6-32 x 3/8 | 12 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 6 |

PL 4.1 G Interface Ball Track Assy.



PL 4-1G 7610325 Assy Interface Ball Track

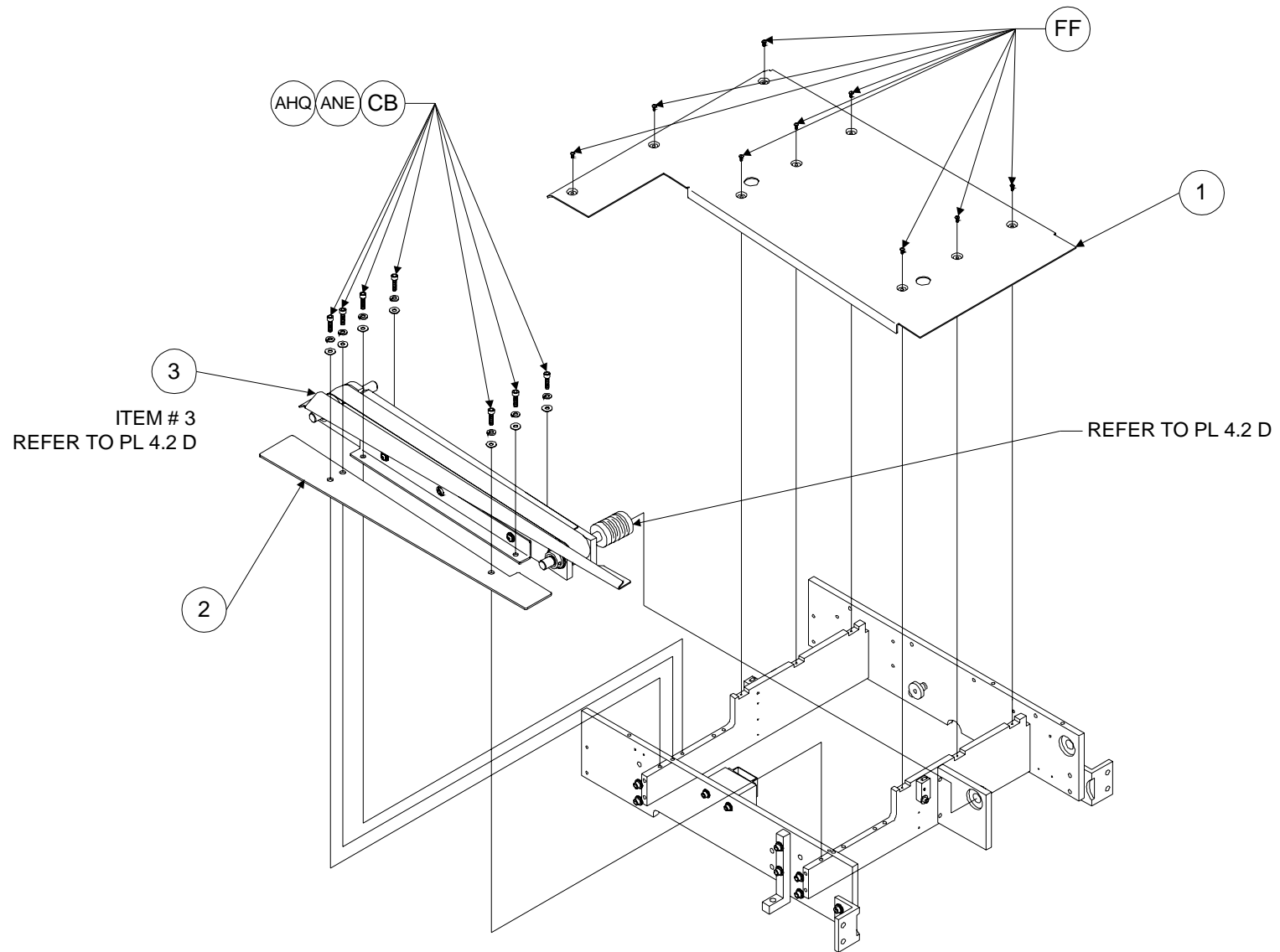
PL 4.1 G Interface Ball Track Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130014700 | Tie Bar, Interface Ball Track Assy (Tag # P1)..... | 1 |
| 2 | 7610248 | Interface Ball Track | 2 |
| 3 | 7610224 | Guide, Paper, Interface Left (Tag # P1)..... | 1 |
| 4 | 7610225 | Guide, Paper, Interface Right (Tag # P1) | 1 |
| AHP | 1925060 | Washer, Flat #10..... | 4 |
| AHT | 1925064 | Washer, Flat #8..... | 4 |
| ANC | 1926062 | Washer, Lock #8 | 4 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| AT | 1980052 | SHCS 8-32 x 3/4 | 4 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 4 |

PL 4.2 A Document Transport Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 0130002500 | Mount Angle, Document Transport..... | 2 |
| 2 | 0130003300 | Bracket, Mounting, Document Transport | 2 |
| 3 | 0130004600 | Side Frame, L.H., Document Transport | 1 |
| 4 | 0130004800 | Cross Member Main, Document Transport..... | 2 |
| 5 | 0130004900 | Nut Washer, Belt Take Up | 1 |
| 6 | 0130021300 | Side Frame, R.H., Document Transport | 1 |
| 7 | 0130005400 | Support Bearing Plate, Document Transport..... | 1 |
| 8 | 7610346 | Bearing w/Collar 1/2..... | "1 |
| 9 | 0130021500 | Assy., Belt Take Up Document Transport Timing Belt..... | 2 |
| 10 | 7610421 | Sensor, Document Transport (1 & 2)..... | 2 |
| 11 | 7610287 | Latch Block, Document Transport..... | 1 |
| 12 | 7610367 | Latch, Female Document Transport | 1 |
| 13 | 7610537 | Assy., Belt Take Up Document Transport Timing Belt, 6060 / iGen3 (Tag # P5) | 1 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 21 |
| AHR | 1925062 | Washer, Flat #4..... | 4 |
| AHS | 1925063 | Washer, Flat #6..... | 2 |
| AJC | 1925183 | Washer, Flat Extra Thick 1/4..... | 2 |
| ANB | 1926061 | Washer, Lock #6..... | 2 |
| ANE | 1926064 | Washer, Lock 1/4 | 21 |
| ANV | 1926708 | Nut, Hex 1/4-20..... | 1 |
| ARW | 1931532 | Roll Pin, 5/32 x 1 | 1 |
| T | 1980018 | SHCS 4-40 x 1 | 4 |
| Y | 1980028 | SHCS 6-32 x 3/8..... | 2 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 4 |
| CF | 1980097 | SHCS 1/4-20 x 7/8 | 2 |
| CG | 1980098 | SHCS 1/4-20 x 1 | 14 |
| CT | 1980109 | SHCS 1/4-20 x 3-1/2..... | 2 |

PL 4.2 B Document Transport Assy.

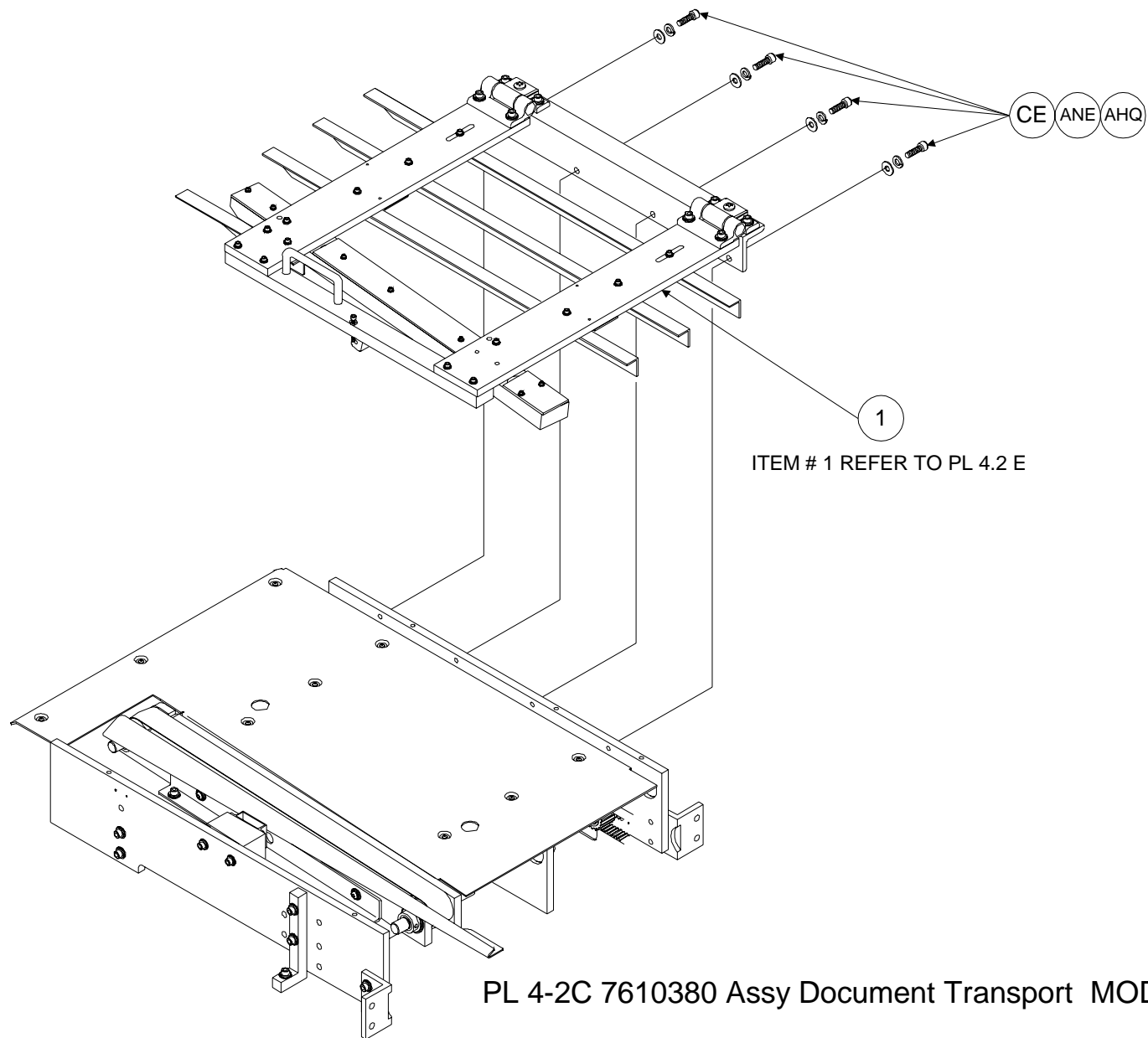


PL 4-2B 7610380 Assy Document Transport MOD

PL 4.2 B Document Transport Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 7610428 | Deck, Document Transport | 1 |
| 2 | 0130015500 | Shield, Document Transport Belt Assy. | 1 |
| 3 | 0130021200 | Assy., Document Transport Belt (refer to PL 4.2 D) | 1 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 7 |
| ANE | 1926064 | Washer, Lock 1/4 | 7 |
| CB | 1980094 | SHCS 1/4-20 x 1/2 | 7 |
| FF | 1980233 | BHCS 6-32 x 1/2 | 9 |

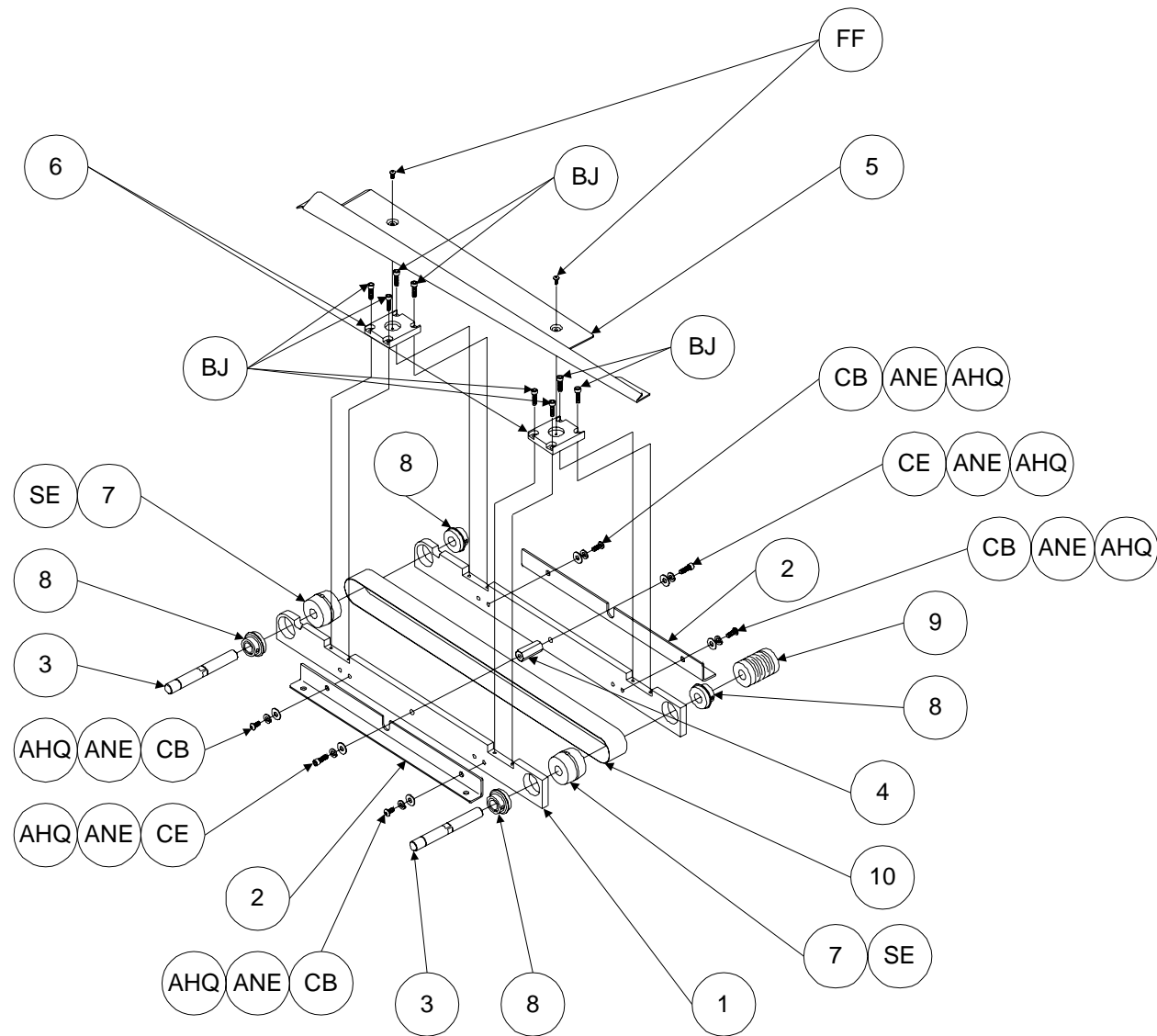
PL 4.2 C Document Transport Assy.



PL 4.2 C Document Transport Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610358 | Assy., Document Transport Ball Track (refer to PL 4.2 E) | 1 |
| AHQ | 1925061 | Washer, Flat 1/4 | 4 |
| ANE | 1926064 | Washer, Lock 1/4 | 4 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 4 |

PL 4.2 D Document Transport Flat Belt Assy.



PL 4-2 D0130021200 Assy Document Transport MOD

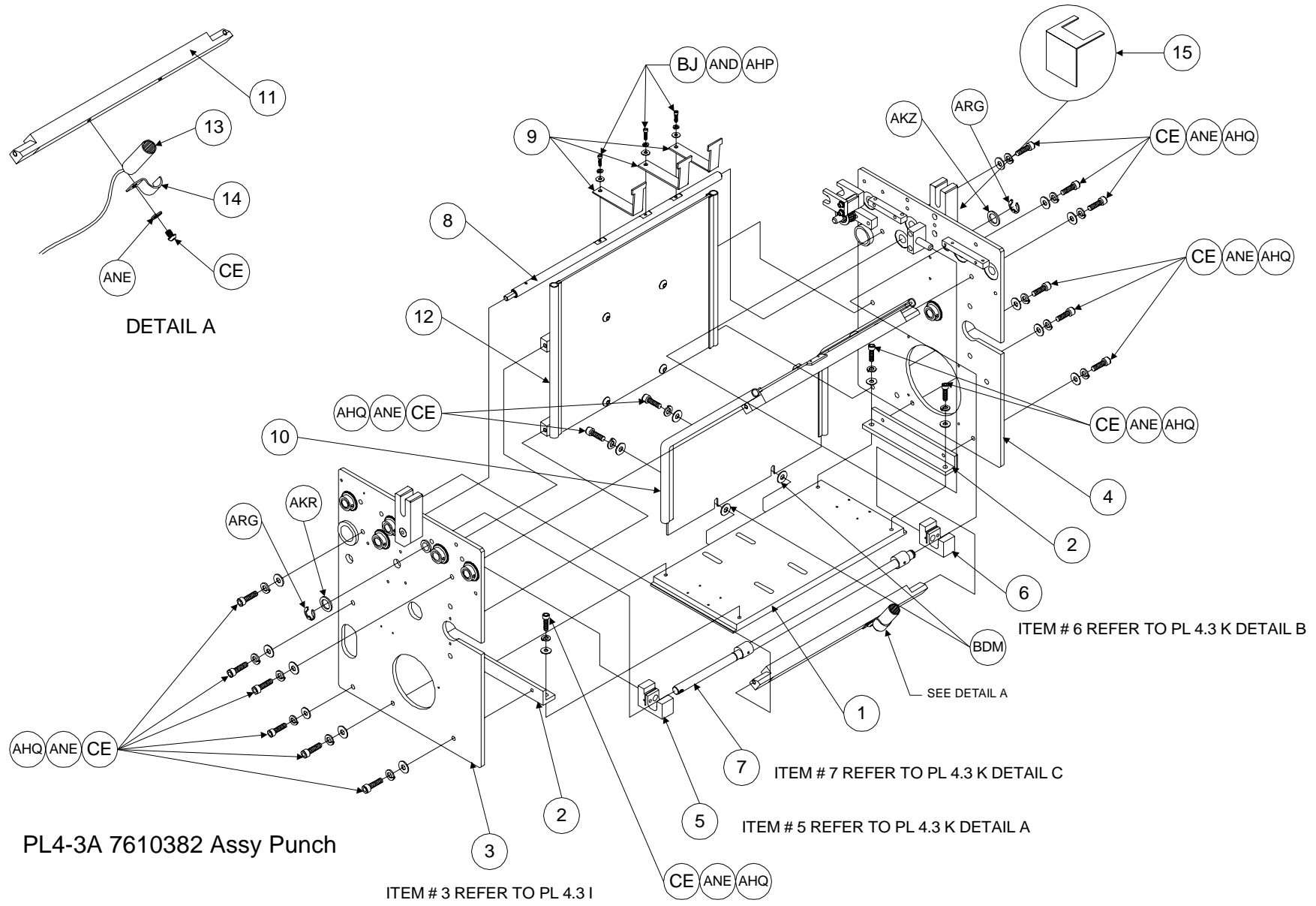
PL 4.2 D Document Transport Flat Belt Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130005200 | Side Frame, Document Transport Belt Assy..... | 2 |
| 2 | 0130005800 | Bracket, Angle, Document Transport Belt Assy..... | 2 |
| 3 | 0130005600 | Shaft, Document Transport Belt Assy..... | 2 |
| 4 | 0130005900 | Spacer, Document Transport Belt Assy..... | 1 |
| 5 | 0130006200 | Deck / Rail, Document Transport Belt Assy..... | 1 |
| 6 | 0130005100 | Bracket, Seperator Document Transport Belt Assy. | 2 |
| 7 | 0130017800 | Roller, Crowned, Document Transport Belt Assy. | 2 |
| 8 | 7610346 | Bearing w/Collar 1/2..... | 4 |
| 9 | 7610357 | Coupling, Flex Beam, Document Transport Belt Assy..... | 1 |
| 10 | 7610373 | Belt, Flat, Document Transport .06 x 1 x 36.75 endless | 1 |
| SE | 1900028 | SHSS 10-32 x 3/16 | 2 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 6 |
| ANE | 1926064 | Washer, Lock 1/4 | 6 |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 8 |
| CB | 1980094 | SHCS 1/4-20 x 1/2 | 4 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 2 |
| FF | 1980233 | BHCS 6-32 x 1/2 | 2 |

PL 4.2 E Document Transport Ball Track Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 7610259 | Cover, Document Transport Ball Track Exit Short | 1 |
| 2 | 0130005500 | Ball Track, Document Transport | 1 |
| 3 | 7610262 | Cover, Document Transport Ball Track Middle long | 1 |
| 4 | 7610263 | Cover, Document Transport Ball Track Entrance Short..... | 1 |
| 5 | 7610286 | Support, Document Transport Ball Track Assy. Front | 1 |
| 6 | 7610284 | Bracket, Hinge Support..... | 1 |
| 7 | 7610285 | Paper Guide Support Plate | 2 |
| 8 | 7610244 | Paper Guide, Document Transport Long (Tag # P1) | 3 |
| 9 | 7610282 | Paper Guide, Document Transport Short | 1 |
| 10 | 7610365 | Reflector, Document Transport Sensor 1 and 2 | 2 |
| 11 | 7610374 | Ball, Delrin (Tag # P1)..... | 10 |
| 12 | 7610375 | Ball, Steel (Tag # P1)..... | 2 |
| 13 | 7610377 | Handle, Aluminum, Document Transport Ball Track Assy. | 1 |
| 14 | 7610376 | Hinge, Plastic, Document Transport Ball Track Assy. | 2 |
| 15 | 7610367 | Latch, Male, Document Transport Assy..... | 1 |
| 16 | 7610239 | Guide, Paper, Document Transport Rail..... | 1 |
| AHP | 1925060 | Washer, Flat #10..... | 6 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 8 |
| AHS | 1925063 | Washer, Flat #6..... | 9 |
| AHT | 1925064 | Washer, Flat #8..... | 10 |
| ANB | 1926061 | Washer, Lock #6..... | 13 |
| ANC | 1926062 | Washer, Lock #8..... | 10 |
| AND | 1926063 | Washer, Lock #10..... | 6 |
| ANE | 1926064 | Washer, Lock 1/4..... | 8 |
| ANM | 1926701 | Nut, Hex 8-32..... | 1 |
| Z | 1980029 | SHCS 6-32 x 1/2..... | 13 |
| AS | 1980051 | SHCS 8-32 x 5/8..... | 8 |
| AV | 1980054 | SHCS 8-32 x 1..... | 3 |
| BM | 1980075 | SHCS 10-32 x 3/4..... | 6 |
| CD | 1980095 | SHCS 1/4-20 x 5/8..... | 8 |

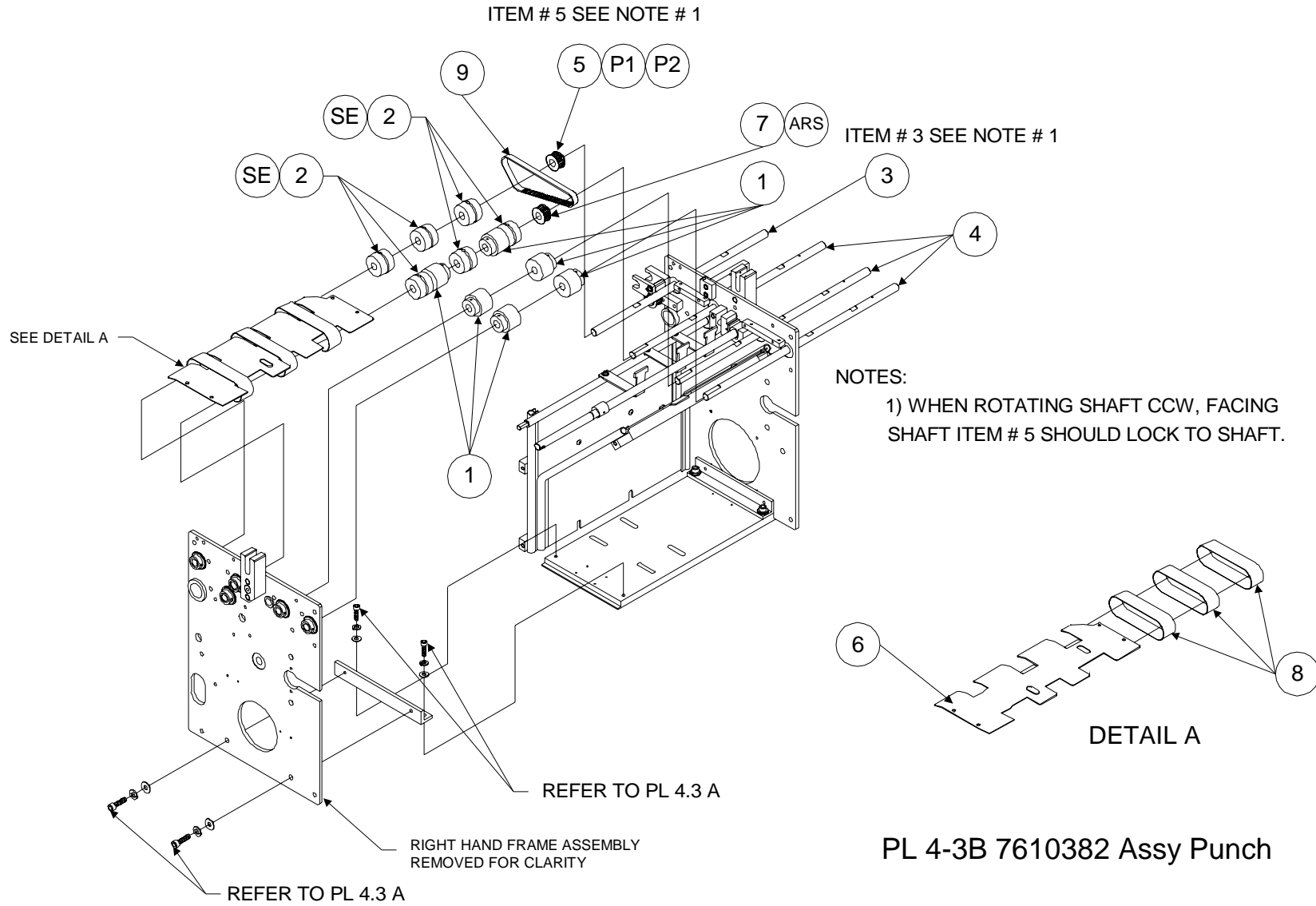
PL 4.3 A Punch Assy.



PL 4.3 A Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 7610292 | Base Plate, Punch Assy..... | 1 |
| 2 | 7610297 | Base Angle, Punch Assy..... | 2 |
| 3 | 7610328 | Assy., R.H. Punch Side Frame (refer to PL 4.3 I) | 1 |
| 4 | 7610327 | Assy., L.H. Punch Side Frame refer to PL 4.3 J) | 1 |
| 5 | 0130001900 | Assy., Right Yoke (refer to PL 4.3 K Detail A) | 1 |
| 6 | 0130001800 | Assy., Left Yoke (refer to PL 4.3 K Detail B)..... | 1 |
| 7 | 7610323 | Assy., Locking Cam (refer to PL 4.3 K Detail C)..... | 1 |
| 8 | 0130019400 | Shaft, Back Gauge..... | 1 |
| 9 | 0130031100 | Finger, Back Gauge | 3 |
| 10 | 7610337 | Assy., Slug Chute | 1 |
| 11 | 0130031400 | Cross Plate, Punch Assy. | 1 |
| 12 | 0130026900 | Assy., Slug Plate..... | 1 |
| 13 | 7610423 | Sensor, Punch | 1 |
| 14 | 7610393 | Strap/Bracket, Punch Sensor Assy..... | 1 |
| 15 | 7610447 | Bracket, Punch Crank Arm - Non Op Side..... | 1 |
| BDM | 1924818 | Spacer, 1/4 x 1/2 x 1/4 | 2 |
| AHP | 1925060 | Washer, Flat #10..... | 3 |
| AHQ | 1925061 | Washer, Flat 1/4 | 18 |
| AKR | 1925230 | Washer, Flat, Non-Metallic..... | 1 |
| AKZ | 1925238 | Washer, Flat, Non-Metallic..... | 1 |
| AND | 1926063 | Washer, Lock #10 | 3 |
| ANE | 1926064 | Washer, Lock 1/4 | 18 |
| ARG | 1930522 | E-Ring .5 | 2 |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 3 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 18 |

PL 4.3 B Punch Assy.

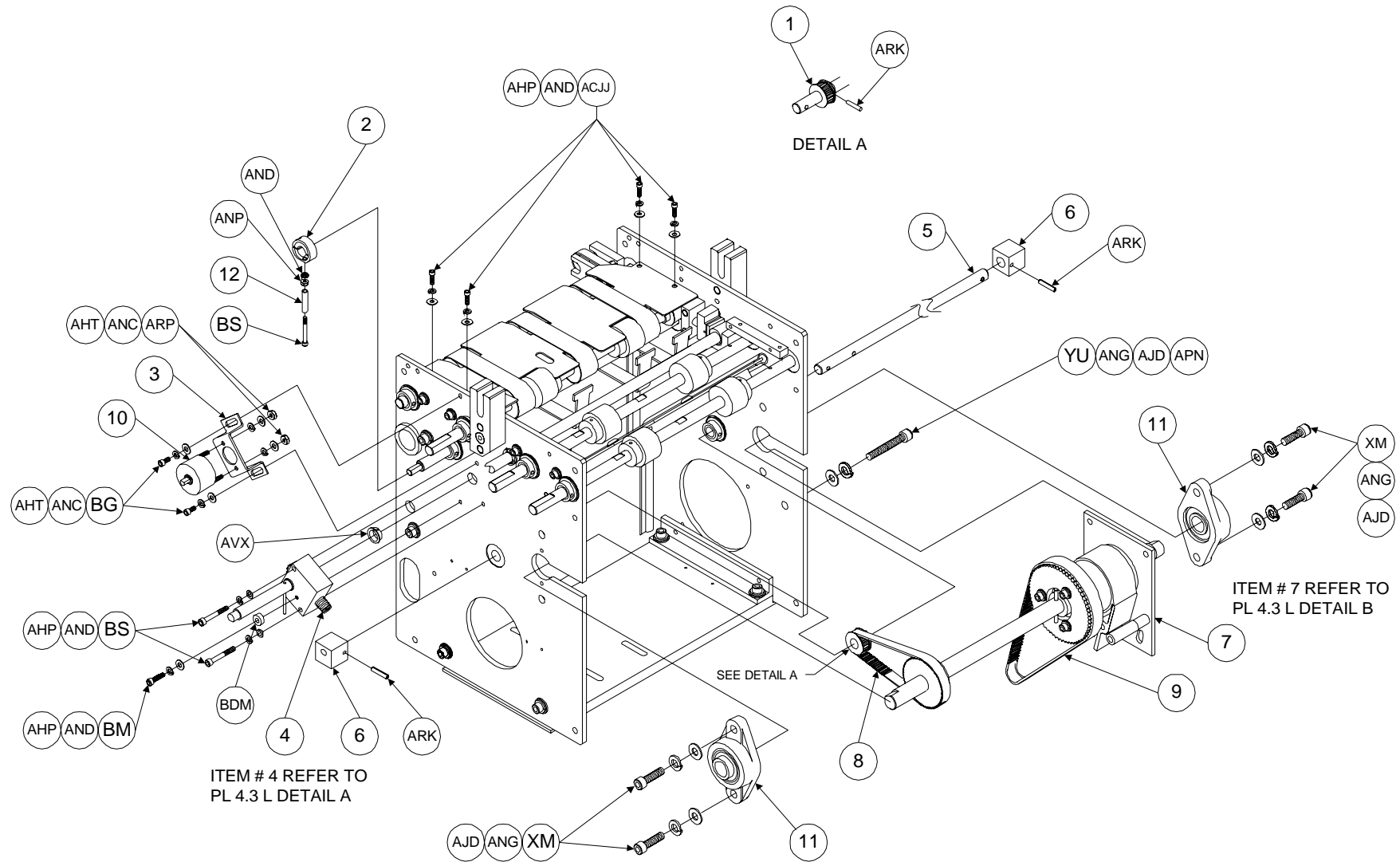


PL 4-3B 7610382 Assy Punch

PL 4.3 B Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130002100 | Assy., Roller, Punch Assy..... | 6 |
| 2 | 0130002200 | Roller, Crowned, Punch Assy | 6 |
| 3 | 0130019600 | Shaft, Idler, Punch Assy..... | 1 |
| 4 | 0130019700 | Shaft, Punch Assy..... | 3 |
| 5 | 7610517 | Assy., One Way Clutch Pulley, 16 Tooth (Tag # P1 & P2) | 1 |
| 6 | 0130034600 | Input Deck, Punch Assy..... | 1 |
| 7 | 0130037000 | Driver Pulley, Punch Assy..... | 1 |
| 8 | 7610370 | Belt, Flat, Punch Input .06 x 1 x 10.75 Endless | 3 |
| 9 | 1981309 | Belt, Timing, Punch Drive | 1 |
| SE | 1900028 | SHSS 10-32 x 3/16 | 6 |
| ARS | 1931528 | Roll Pin, 1/8 x 3/4..... | 1 |

PL 4.3 C Punch Assy.

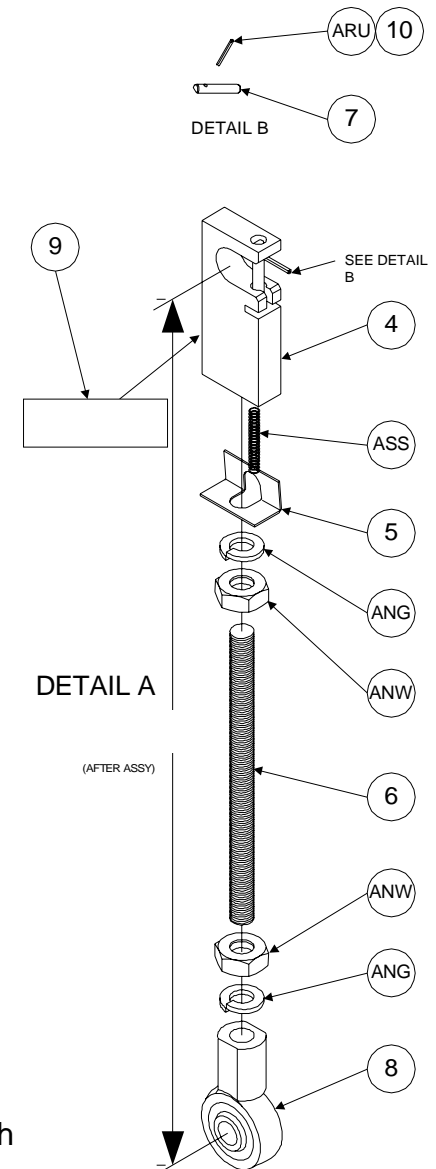
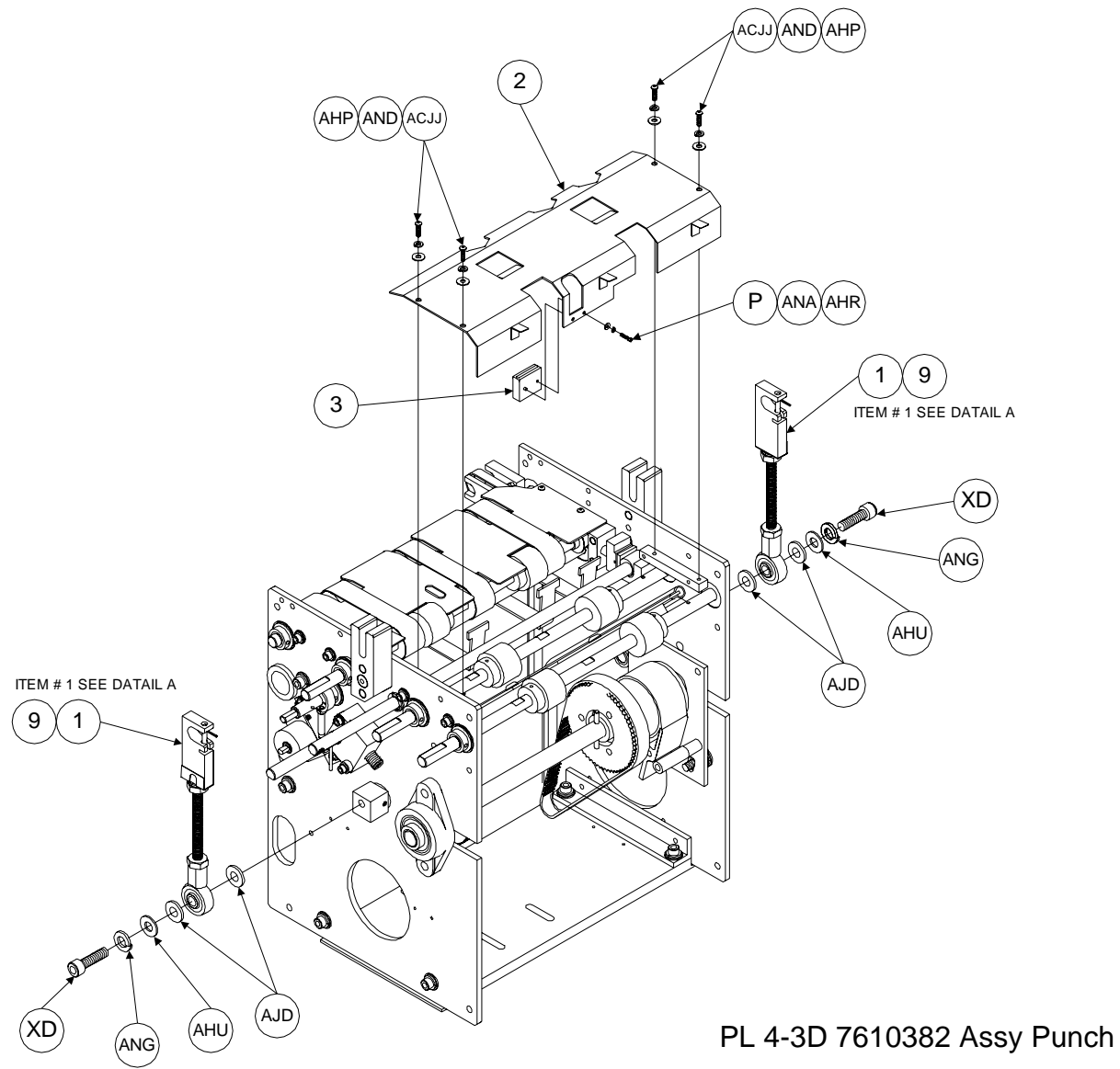


PL4-3 C 7610382 Assy Punch

PL 4.3 C Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130032000 | Pulley, Punch Drive..... | 1 |
| 2 | 0130037800 | Clamp, Back Gauge..... | 1 |
| 3 | 0130019800 | Solenoid Mount, Back Gauge | 1 |
| 4 | 0130026800 | Assy., Back Gauge Adjust Block (refer to PL 4.3 L Detail A)... | 1 |
| 5 | 0130033900 | Shaft, Punch Clutch | 1 |
| 6 | 0130019300 | Block, Punch Crank Arm..... | 2 |
| 7 | 0130025900 | Assy., Punch Clutch (refer to PL 4.3 L Detail B) | 1 |
| 8 | 1981400 | Belt, Timing, Punch Clutch Output..... | 1 |
| 9 | 1981401 | Belt, Timing, Punch Clutch..... | 1 |
| 10 | 7610193 | Solenoid, Rotary, Back Gauge..... | 1 |
| 11 | 7610343 | Bearing, Flanged, Punch Clutch Assy. | 2 |
| 12 | 7610361 | Tubbing, Polyurethane | 1 |
| YU | 1900589 | SHCS 3/8-16 x 2 | 1 |
| XM | 1900559 | SHCS 3/8-16 x 1-3/4..... | 4 |
| BDM | 1924818 | Spacer 1/4 x 1/2 x 1/4 | 1 |
| AHP | 1925060 | Washer, Flat #10..... | 7 |
| AHT | 1925064 | Washer, Flat #8..... | 4 |
| AJD | 1925184 | Washer, Flat Extra Thick 3/8..... | 6 |
| ANC | 1926062 | Washer, Lock #8 | 4 |
| AND | 1926063 | Washer, Lock #10 | 8 |
| ANG | 1926066 | Washer, Lock 3/8 | 6 |
| APN | 1926725 | Nut, Hex 3/8-16..... | 1 |
| ARP | 1926728 | Nut, Hex 8-32..... | 2 |
| ANP | 1926702 | Nut, Hex 10-32..... | 1 |
| ARK | 1931521 | Roll Pin, 3/16 x 1..... | 3 |
| AVX | 1953639 | Bushing, Flanged, Nylon 1/2..... | 1 |
| BG | 1980070 | SHCS 10-32 x 3/8 | 2 |
| BM | 1980075 | SHCS 10-32 x 3/4..... | 1 |
| BS | 1980080 | SHCS 10-32 x 1-1/2..... | 3 |
| ACJJ | 1903010 | Truss Head Screw 10-32 X 3/8..... | 4 |

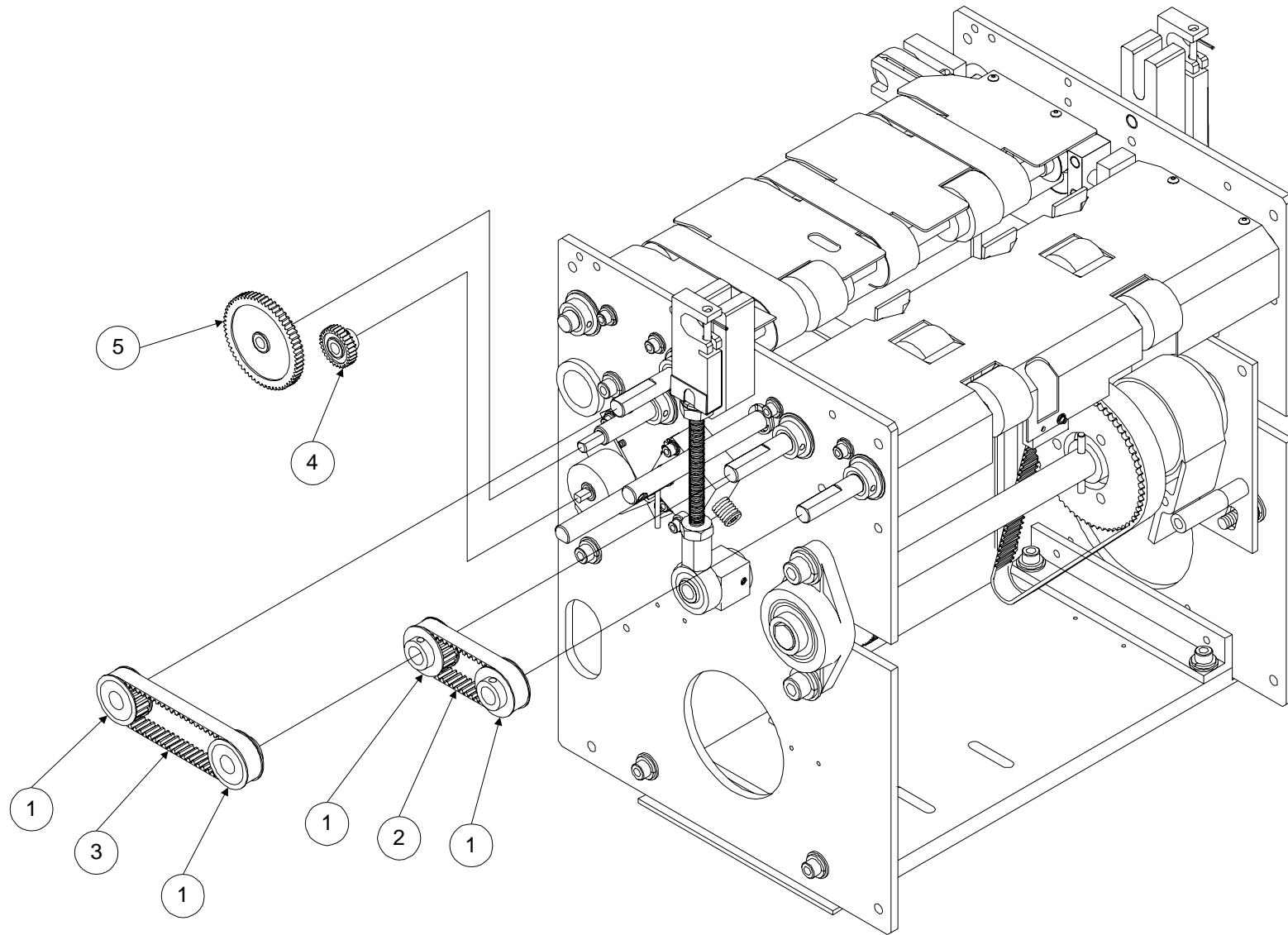
PL 4.3 D Punch Assy.



PL 4.3 D Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130025800 | Assy., Punch Crank Arm (refer to Detail A) | 2 |
| 2 | 7610322 | Deck, Punch Output..... | 1 |
| 3 | 7610424 | Sensor, Punch Exit | 1 |
| 4 | 0130031500 | Yoke, Punch Crank Arm | 2 |
| 5 | 0130032400 | Latch Keeper, Punch Crank Arm | 2 |
| 6 | 0130031900 | Link, Punch Crank Arm | 2 |
| 7 | 0130031700 | Dowel Pin, Punch Crank Arm Latch..... | 2 |
| 8 | 7610381 | Rod End, Punch Crank Arm..... | 2 |
| 9 | 7610449 | Label, Factory Set Do Not Adjust..... | 2 |
| 10 | 0480070300 | Cap, Vinyl..... | 2 |
| XD | 1900551 | SHCS 3/8-16 x 1-1/4..... | 2 |
| AHP | 1925060 | Washer, Flat #10..... | 4 |
| AHR | 1925062 | Washer, Flat #4..... | 1 |
| AHU | 1925065 | Washer, Flat 3/8 | 2 |
| AJD | 1925184 | Washer, Flat Extra Thick 3/8..... | 4 |
| ANG | 1926066 | Washer, Lock 3/8 | 6 |
| ANA | 1926060 | Washer, Lock #4 | 1 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| ANW | 1926709 | Nut, Hex 3/8-24..... | 4 |
| ARU | 1931530 | Roll Pin, 3/32 x 1..... | 2 |
| ASS | 1935212 | Spring, Comp. 7/32 x 1-3/4 x .23 | 2 |
| P | 1980014 | SHCS 4-40 x 1/2 | 1 |
| ACJJ | 1903010 | Truss Head Screw 10-32 X 3/8..... | 4 |

PL 4.3 E Punch Assy.

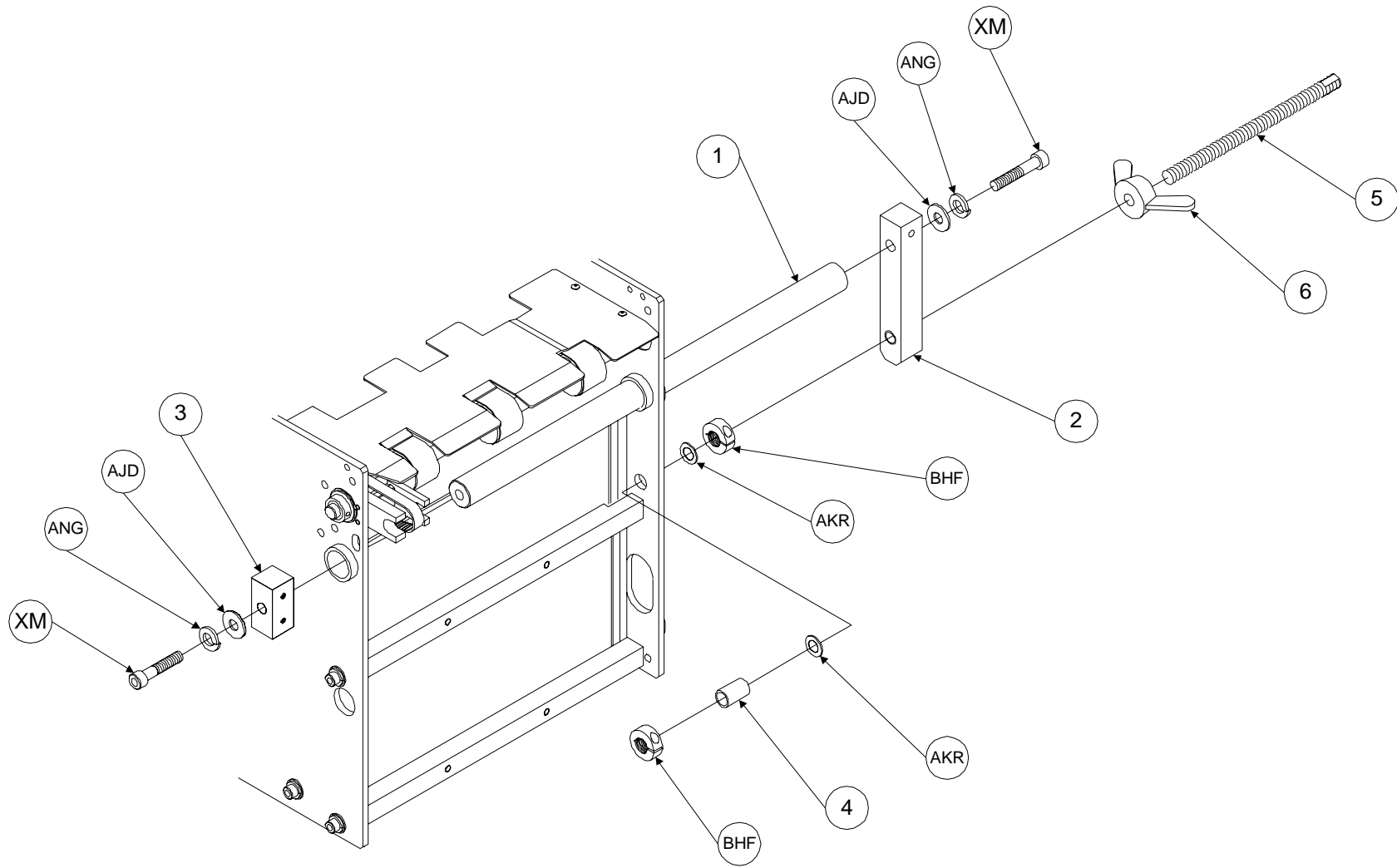


PL 4-3E 7610382 Assy Punch

PL 4.3 E Punch Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610348 | Pulley, Timing, 20 Tooth, Punch Assy. | 4 |
| 2 | 1981303 | Belt, Timing, Punch Output Idler | 1 |
| 3 | 1981306 | Belt, Timing, Punch Output Drive..... | 1 |
| 4 | 7610352 | Gear, Spur, Small, Back Gauge..... | 1 |
| 5 | 7610353 | Gear, Spur, Large, Back Gauge | 1 |

PL 4.3 F Punch Assy.

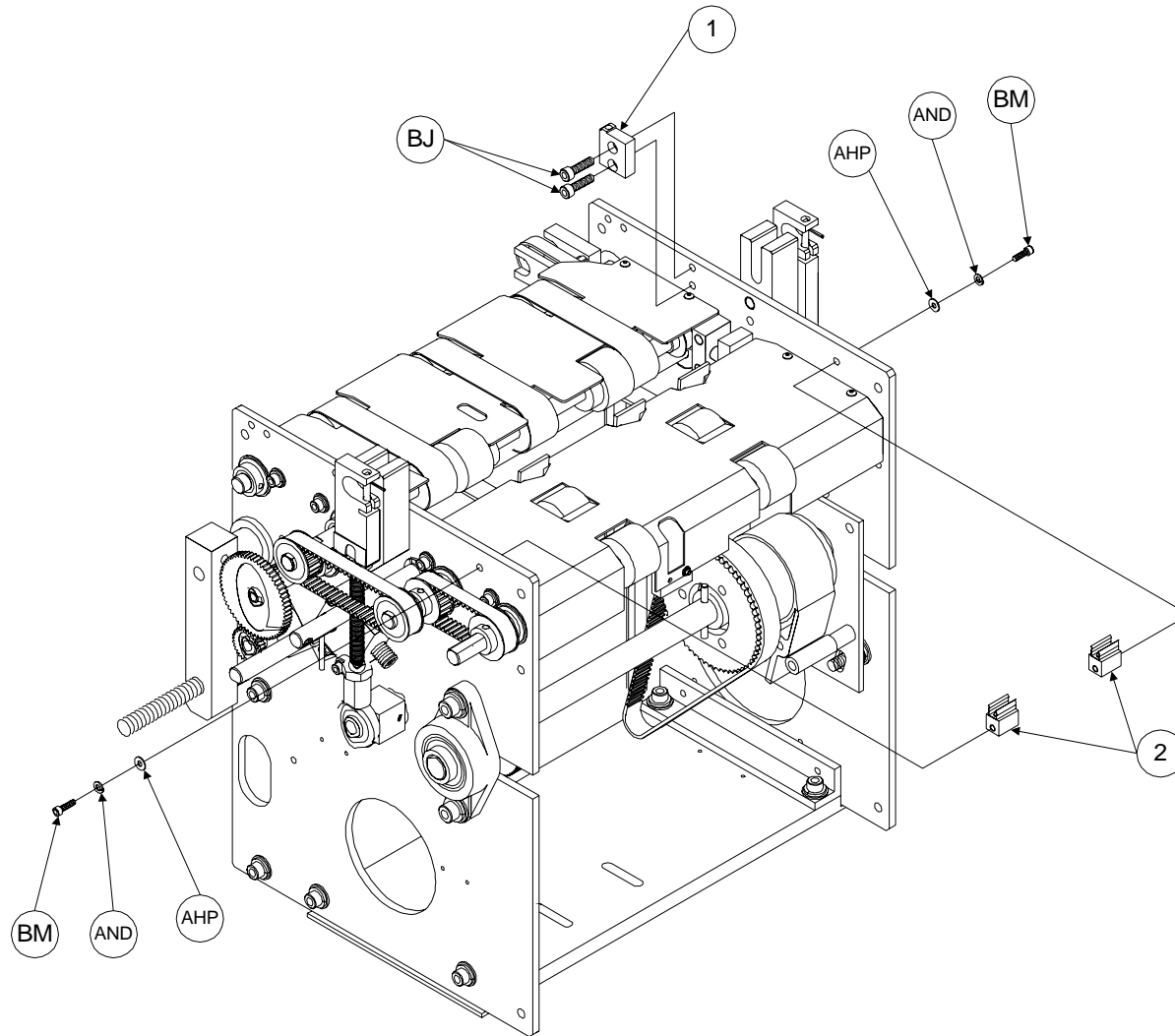


PL4-3 F 7610382 Assy Punch

PL 4.3 F Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130018800 | Shaft, Mount, Punch Slide Assy..... | 1 |
| 2 | 7610295 | Post, Mount R.H., Punch Slide Assy..... | 1 |
| 3 | 7610296 | Post, Mount L.H., Punch Slide Assy. | 1 |
| 4 | 0130035800 | Spacer, Short, Punch Slide Assy. | 1 |
| 5 | 7610257 | Lead Screw, Punch Slide Assy. | 1 |
| 6 | 1928203 | Wing Nut, Punch Slide Assy. | 1 |
| XM | 1900559 | SHCS 3/8-16 x 1-3/4..... | 2 |
| AJD | 1925184 | Washer, Flat Extra Thick 3/8..... | 2 |
| AKR | 1925230 | Washer, Flat, Non-Metallic..... | 2 |
| ANG | 1926066 | Washer, Lock 3/8..... | 2 |
| BHF | 1932706 | Clamp Collar, Punch Slide Assy. | 2 |

PL 4.3 G Punch Assy.

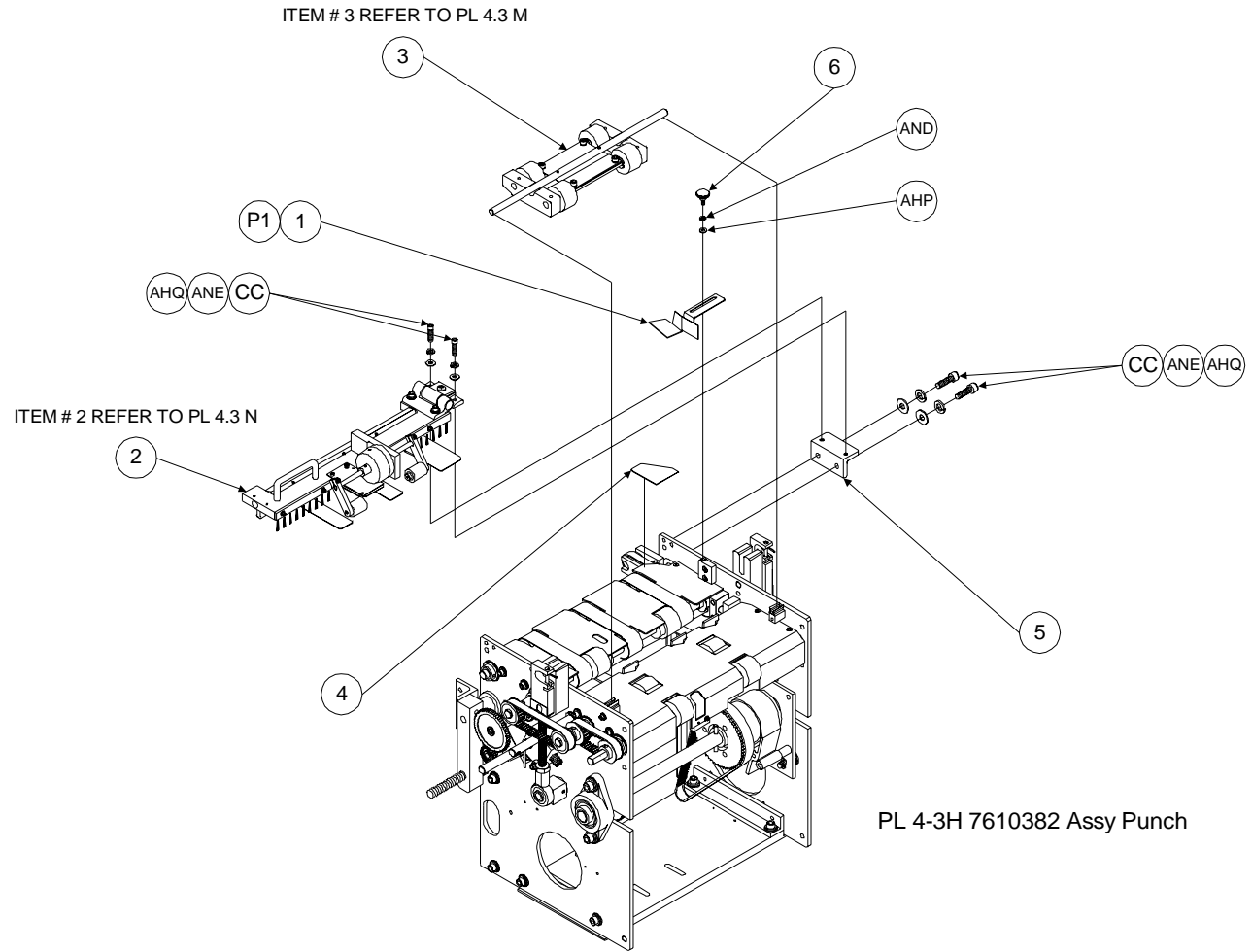


PL4-3G 7610382 Assy Punch

PL 4.3 G Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 0130035600 | Side Guide Mounting Block..... | 1 |
| 2 | 0130025100 | Assy., Clamp, Punch Output Nip Roller | 2 |
| AHP | 1925060 | Washer, Flat #10..... | 2 |
| AND | 1926063 | Washer, Lock #10..... | 2 |
| BJ | 1980072 | SHCS 10-32 x 1/2..... | 2 |
| BM | 1980075 | SHCS 10-32 x 3/4..... | 2 |

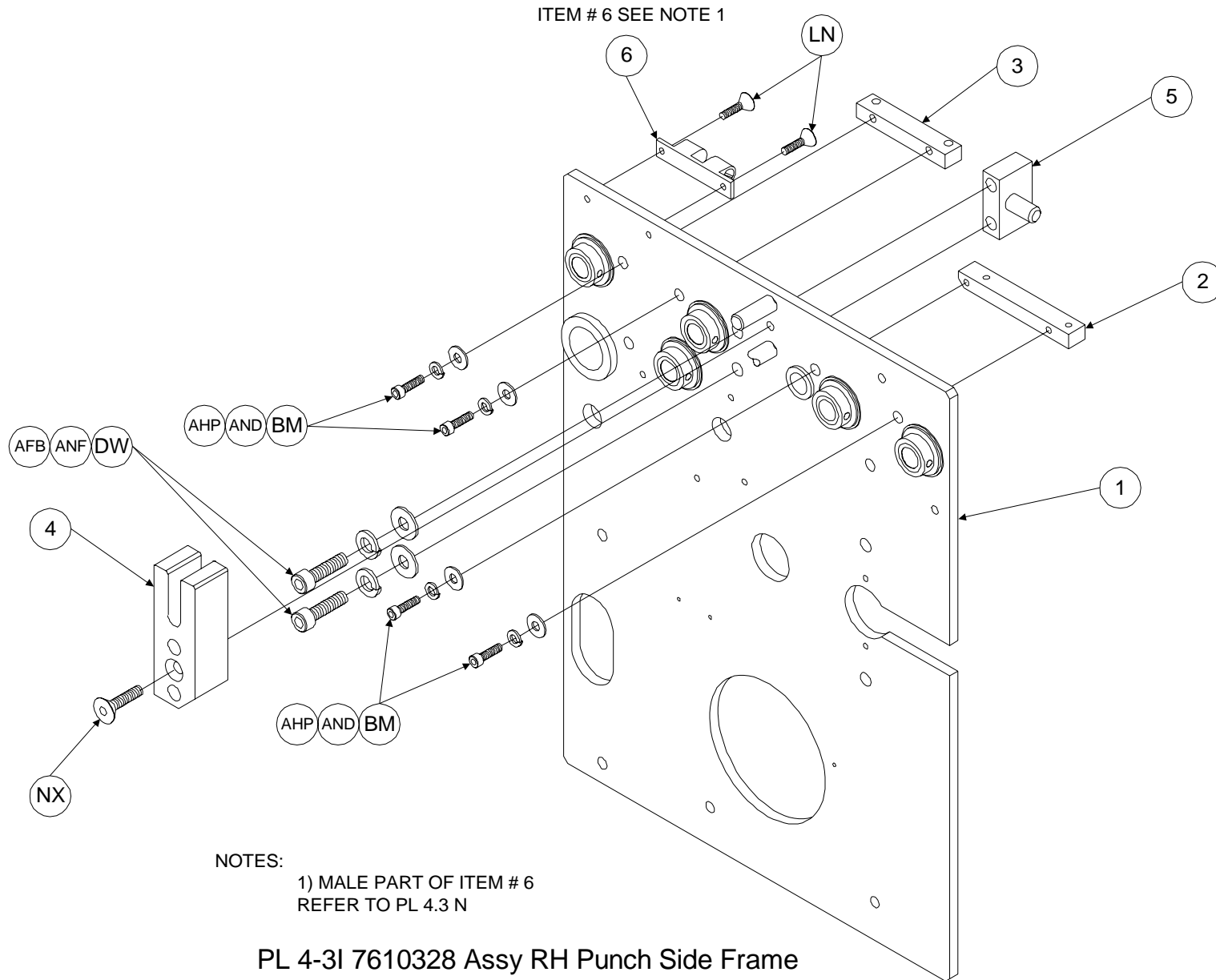
PL 4.3 H Punch Assy.



PL 4.3 H Punch Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130035700 | Side Guide, Punch Assy. (Tag # P1) | 1 |
| 2 | 7610329 | Assy., Punch Tension Strap (refer to PL 4.3 M) | 1 |
| 3 | 7610332 | Assy., Punch Output Nip Roller (refer to PL 4.3 M) | 1 |
| 4 | 7610359 | Assy., Side Guide Infeed Strip | 1 |
| 5 | 7610283 | Block, Hinge, Punch Tension Strap Assy. | 1 |
| 6 | 7610404 | Thumb Screw, Side Guide Assy. | 1 |
| AHP | 1925060 | Washer, Flat #10..... | 1 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 4 |
| AND | 1926063 | Washer, Lock #10..... | 1 |
| ANE | 1926064 | Washer, Lock 1/4..... | 4 |
| CC | 1980095 | SHCS 1/4-20 x 5/8..... | 4 |

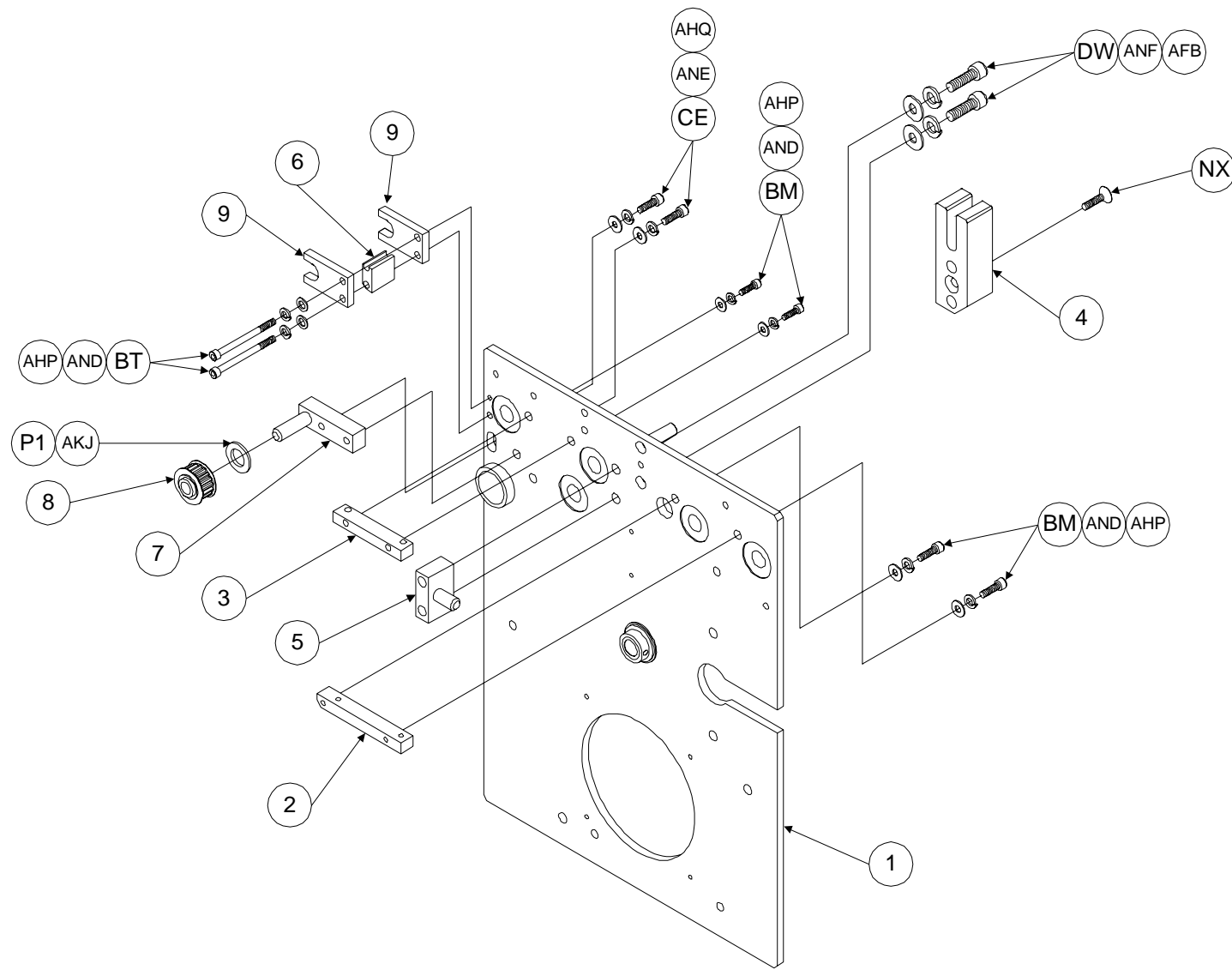
PL 4.3 I R.H. Punch Side Frame Assy.



PL 4.3 I R.H. Punch Side Frame Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 7610340 | Assy., R.H. Punch Side Frame | 1 |
| 2 | 0130035000 | Mount, Output Deck | 1 |
| 3 | 0130034900 | Mount, Input Deck | 1 |
| 4 | 0130031600 | Guide, Diver Bar | 1 |
| 5 | 0130026000 | Assy., Mount Block | 1 |
| 6 | 7610368 | Latch, Female, Punch Tension Strap Assy. | 1 |
| AFB | 1925001 | Washer, Flat 5/16 | 2 |
| AHP | 1925060 | Washer, Flat #10 | 4 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| ANF | 1926065 | Washer, Lock 5/16 | 2 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 4 |
| DW | 1980145 | SHCS 5/16-18 x 1-1/4 | 2 |
| LN | 1980432 | FHCS 6-32 x 3/8 | 2 |
| NX | 1980509 | FHCS 1/4-20 x 1-1/4 | 1 |

PL 4.3 J L.H. Punch Side Frame Assy.

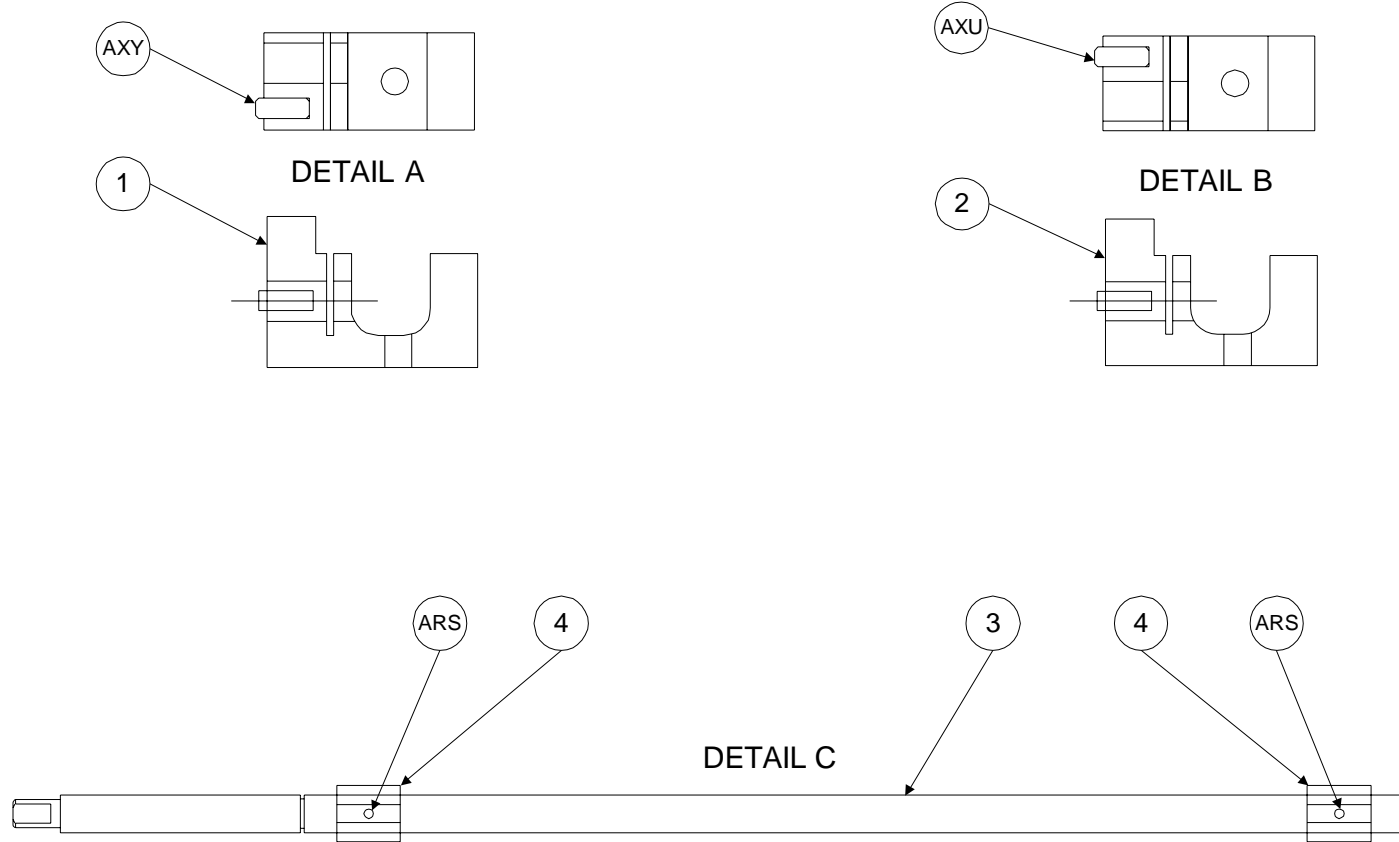


PL 4-3 J 7610327 Assy LH Punch Side Frame

PL 4.3 J L.H. Punch Side Frame Assy.

| Item | Part # | Description | Qty |
|------|------------|------------------------------------|-----|
| 1 | 7610339 | Assy., L.H. Punch Side Frame | 1 |
| 2 | 0130035000 | Mount, Output Deck | 1 |
| 3 | 0130034900 | Mount, Input Deck | 1 |
| 4 | 0130031600 | Guide, Diver Bar | 1 |
| 5 | 0130025200 | Assy., Mount Block | 1 |
| 6 | 0130002300 | Spacer | 1 |
| 7 | 0130025500 | Block, Tension Idler | 1 |
| 8 | 0130025600 | Pulley, Tension Idler | 1 |
| 9 | 0130038100 | Yoke, Tension Idler Thin | 2 |
| AFB | 1925001 | Washer, Flat 5/16 | 2 |
| AHP | 1925060 | Washer, Flat #10 | 6 |
| AHQ | 1925061 | Washer, Flat 1/4 | 2 |
| AKJ | 1925223 | Washer, Flat, Non-Metallic | 1 |
| AND | 1926063 | Washer, Lock #10 | 6 |
| ANE | 1926064 | Washer, Lock 1/4 | 2 |
| ANF | 1926065 | Washer, Lock 5/16 | 2 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 4 |
| BT | 1980081 | SHCS 10-32 x 1-3/4 | 2 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 2 |
| DW | 1980145 | SHCS 5/16-18 x 1-1/4 | 2 |
| NX | 1980509 | FHCS 1/4-20 x 1-1/4 | 1 |

PL 4.3 K Locking Cam Assy.

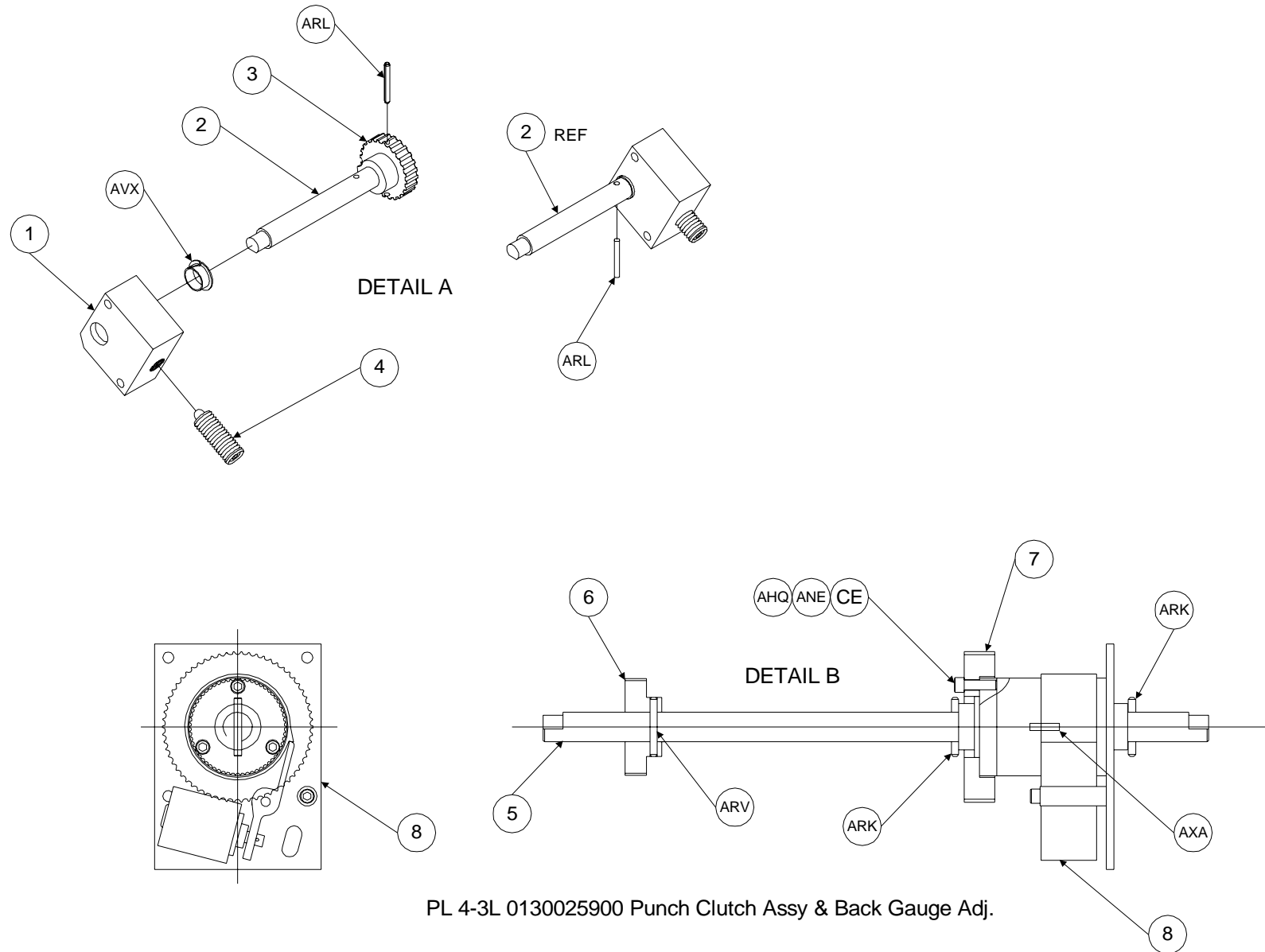


PL 4-3K Lock Cam Assemblies

PL 4.3 K Locking Cam Assy.

| Item | Part # | Description | Qty |
|------|------------|-----------------------------------|-----|
| 1 | 0130037900 | Yoke, R.H. Locking Cam Assy..... | 1 |
| 2 | 0130038000 | Yoke, L.H. Locking Cam Assy. | 1 |
| 3 | 7610252 | Shaft, Locking Cam Assy..... | 1 |
| 4 | 0130028900 | Cam, Die Locking..... | 2 |
| ARS | 1931528 | Roll Pin, 1/8 x 3/4..... | 2 |
| AXU | 1954109 | Dowel Pin, 3-16 x 1/2..... | 2 |

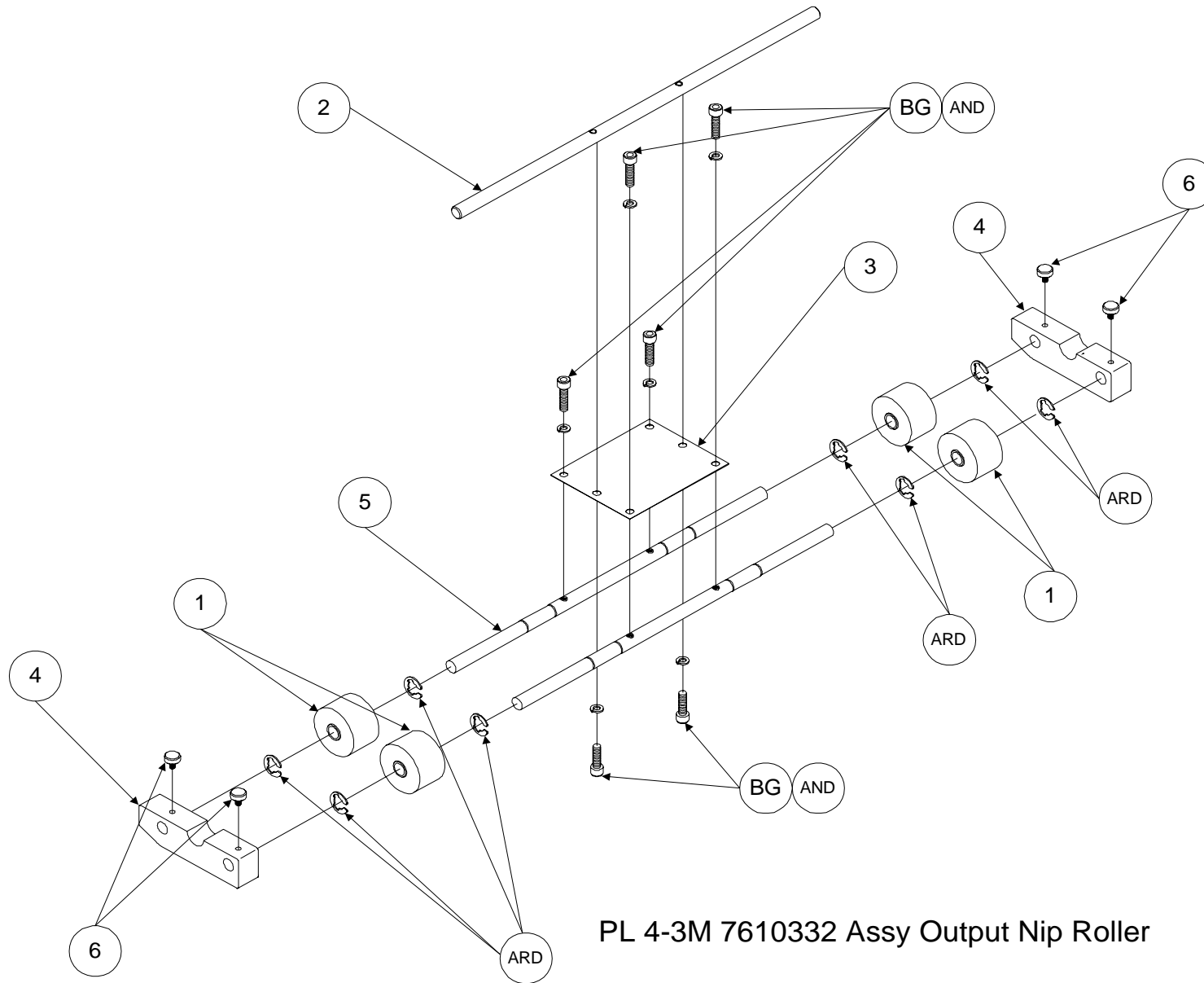
PL 4.3 L Assemblies (Punch Clutch & Back Gauge Block).



PL 4.3 L Assemblies (Punch Clutch & Back Gauge Block).

| Item | Part # | Description | Qty |
|------|------------|-----------------------------------|-----|
| 1 | 0130033400 | Block, Back Gauge Control..... | 1 |
| 2 | 0130035400 | Shaft, Back Gauge Adjustment..... | 1 |
| 3 | 0130035500 | Cam, Back Gauge Setting | 1 |
| 4 | 7610279 | Spring Plunger, Delrin Nose | 1 |
| 5 | 0130019500 | Shaft, Punch Clutch | 1 |
| 6 | 0130019900 | Pulley, Punch Clutch..... | 1 |
| 7 | 0130033800 | Pulley, Punch Clutch Output..... | 1 |
| 8 | 7610347 | Clutch, Punch Assy..... | 1 |
| AHQ | 1925061 | Washer, Flat 1/4..... | 3 |
| ANE | 1926064 | Washer, Lock 1/4 | 3 |
| ARK | 1931521 | Roll Pin, 3/16 x 1..... | 2 |
| ARL | 1931522 | Roll Pin, 1/8 x 1..... | 2 |
| ARV | 1931531 | Roll Pin, 3/16 X 1-1/2..... | 1 |
| AXA | 1952101 | Key, Woodruff #606 | 1 |
| AVX | 1953639 | Bushing, Flanged, Nylon 1/2..... | 1 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 3 |

PL 4.3 M Punch Output Nip Roller Assy.



PL 4-3M 7610332 Assy Output Nip Roller

PL 4.3 M Punch Output Nip Roller Assy.

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 0130026400 | Roller, Punch Output Idler..... | 4 |
| 2 | 0130032200 | Shaft, Punch Output Nip Assy. | 1 |
| 3 | 0130032300 | Spring, Punch Output Nip Assy. | 1 |
| 4 | 7610276 | Runner, Punch Output Nip Assy. | 2 |
| 5 | 7610277 | Shaft, Punch Output Idler..... | 2 |
| 6 | 7610388 | Thumb Screw, Punch Output Nip Assy..... | 4 |
| AND | 1926063 | Washer, Lock #10..... | 6 |
| ARD | 1930516 | E-Ring .375..... | 8 |
| BG | 1980070 | SHCS 10-32 x 3/8..... | 6 |

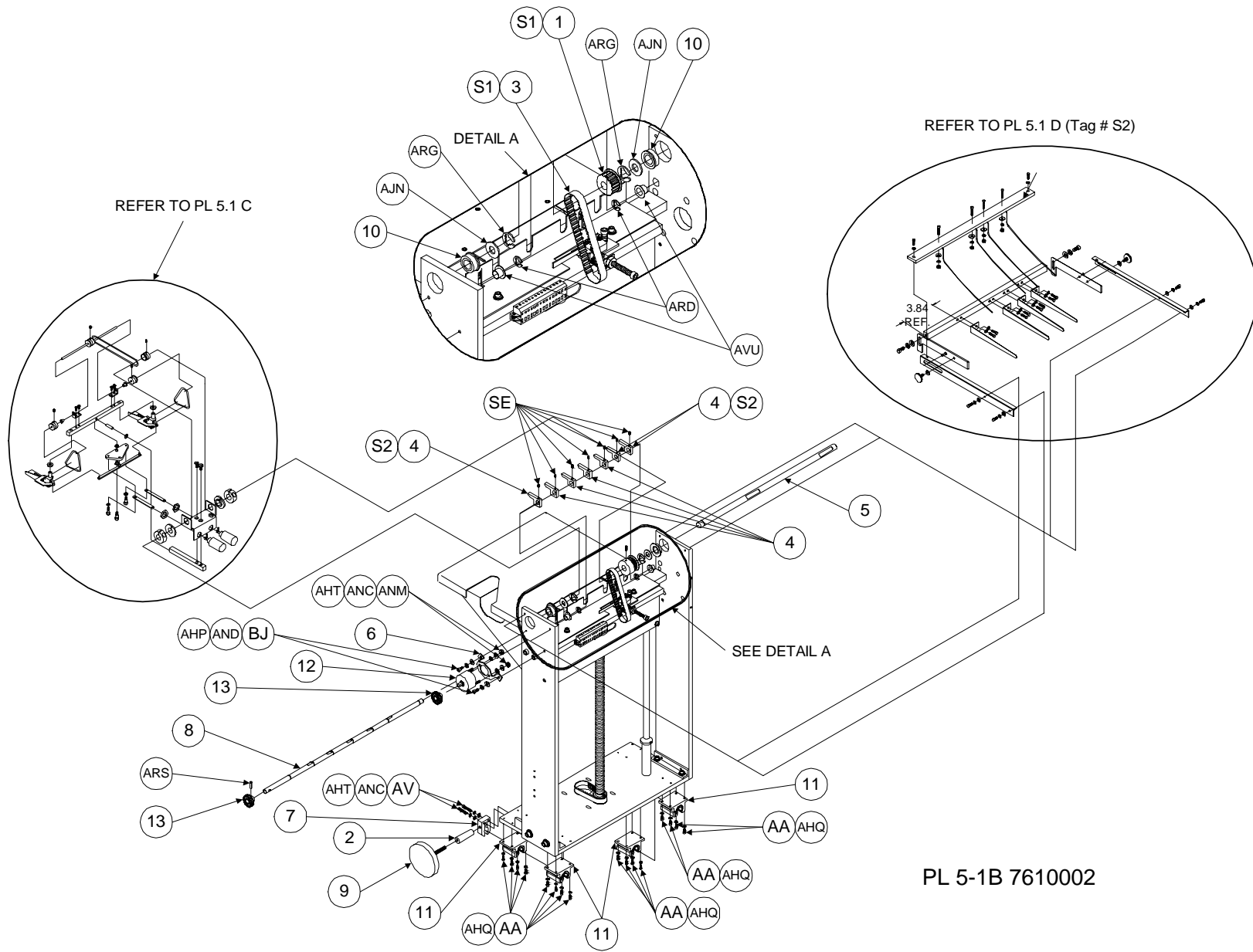
PL 4.3 N Punch Tension Strap Assy.

| Item | Part # | Description | Qty | Item | Part # | Description | Qty |
|------|---------|--|-----|------|---------|--------------------------|-----|
| 1 | 7610289 | Bar, Punch Tension Strap Assy..... | 1 | GA | 1980262 | BHCS 8-32 x 7/8..... | 2 |
| 2 | 7610304 | Bar, Paper Hold Down | 1 | GP | 1980279 | BHCS 10-32 x 3/8..... | 3 |
| 3 | 7610255 | Strap, Paper Hold Down | 3 | LN | 1980432 | FHCS 6-32 x 3/8..... | 2 |
| 4 | 7610305 | Plate, Reflector, Punch Sensor..... | 1 | CL | 1980102 | SHCS 1/4-20 x 1-3/4..... | 2 |
| 5 | 7610365 | Reflector, Punch Sensor..... | 1 | | | | |
| 6 | 7610376 | Hinge, Punch Tension Strap Assy..... | 1 | | | | |
| 7 | 7610377 | Handle, Punch Tension Strap Assy..... | 1 | | | | |
| 8 | 7610368 | Latch, Male, Punch Tension Strap Assy..... | 1 | | | | |
| 9 | 7610233 | Guide, L.H, Punch Infeed..... | 1 | | | | |
| 10 | 7610333 | Brush, Anti-Static, Small | 1 | | | | |
| 11 | 7610334 | Brush, Anti-Static, Large | 1 | | | | |
| 12 | 7610193 | Solenoid, Rotary, Sheet Eject Assy..... | 1 | | | | |
| 13 | 7610446 | Plate, Solenoid, Sheet Eject Assy..... | 1 | | | | |
| 14 | 7610445 | Shaft, Sheet Eject Assy..... | 2 | | | | |
| 15 | 7610444 | Arm, Sheet Eject Assy..... | 2 | | | | |
| 16 | 7610442 | Assy., Idler Roller, Sheet Eject Assy..... | 2 | | | | |
| 17 | 7610234 | Guide, R.H, Punch Infeed..... | 1 | | | | |
| 18 | 7610388 | Thumb Screw..... | 2 | | | | |
| 19 | 7610524 | Paper Guide, Punch SE..... | 1 | | | | |
| 20 | 7610525 | Bracket, SE Paper Guide..... | 1 | | | | |
| 21 | 1914082 | Thumb Screw..... | 3 | | | | |
| TT | 1900066 | SHSS 6-32..... | 2 | | | | |
| ZM | 1900807 | SHLDR Screw 10-24..... | 2 | | | | |
| AHP | 1925060 | Washer, Flat #10..... | 3 | | | | |
| AHQ | 1925061 | Washer, Flat 1/4 | 2 | | | | |
| AHT | 1925064 | Washer, Flat #8..... | 2 | | | | |
| ANC | 1926062 | Washer, Lock #8..... | 6 | | | | |
| AND | 1926063 | Washer, Lock #10..... | 3 | | | | |
| ANE | 1926064 | Washer, Lock 1/4 | 4 | | | | |
| AQT | 1927303 | Nut, Jam 8-32 | 2 | | | | |
| Z | 1980029 | SHCS 6-32 x 1/2..... | 2 | | | | |
| AN | 1980047 | SCHS 8-32 x 3/8..... | 2 | | | | |
| BG | 1980070 | SHCS 10-32 x 3/8..... | 2 | | | | |
| BP | 1980077 | SHCS 10-32 x 1 | 2 | | | | |
| CD | 1980095 | SHCS 1/4-20 x 5/8..... | 2 | | | | |
| FC | 1980230 | BHCS 6-32 x 1/4..... | 2 | | | | |

PL 5.1 A Stacker Assy.

| Item | Part # | Description | Qty | Item | Part # | Description | Qty |
|------|---------|---|-----|------|---------|---|-----|
| 1 | 7610059 | Plate, Bottom, Stacker Assy. | 1 | ASR | 1935211 | Spring, Comp. | 1 |
| 2 | 7610062 | R.H. Stacker Side Frame | 1 | ASS | 1935312 | Spring, Comp., Upper Switch Assy. | 1 |
| 3 | 7610063 | L.H. Stacker Side Frame. | 1 | AVU | 1953636 | Bushing, Flanged, Nylon 3/8. | 1 |
| 4 | 7610072 | Base Angle, Stacker Assy. | 2 | P | 1980014 | SHCS 4-40 x 1/2. | 2 |
| 5 | 7610067 | Cross Support, Stacker Assy. | 1 | Q | 1980015 | SHCS 4-40 x 5/8. | 6 |
| 6 | 7610058 | Back Stop, Stacker Assy. | 1 | AP | 1980048 | SCHS 8-32 x 7/16. | 4 |
| 7 | 7610075 | Bracket, Stacker Tray | 2 | BH | 1980071 | SCHS 10-32 x 7/16. | 12 |
| 8 | 7610145 | Bearing, Linear, Stacker Assy. | 2 | BJ | 1980072 | SHCS 10-32 x 1/2. | 3 |
| 9 | 7610085 | Deck, Stacker Assy. | 1 | BS | 1980080 | SHCS 10-32 x 1-1/2. | 1 |
| 10 | 7610097 | Deck, Slide, Stacker Assy. | 1 | CD | 1980095 | SHCS 1/4-20 x 5/8. | 4 |
| 11 | 7610073 | Nut, Acme, Stacker Assy. | 1 | CE | 1980096 | SHCS 1/4-20 x 3/4. | 8 |
| 12 | 7610087 | Shaft, Linear, Stacker Assy. | 2 | | | | |
| 13 | 7610083 | Bushing, Stacker Tray Stop | 2 | | | | |
| 14 | 7610092 | Bracket, Almost Full & Full Switch | 2 | | | | |
| 15 | 7610074 | Screw, Acme, Stacker Assy. | 1 | | | | |
| 16 | 7610089 | Bracket, Upper Switch | 1 | | | | |
| 17 | 7610093 | Plate, Adjustable, Upper Switch. | 1 | | | | |
| 18 | 7610146 | Collar, Stacker Tray Safety Stop. | 2 | | | | |
| 19 | 7610029 | Pulley, Timing, 20 Tooth, Stacker Assy. | 1 | | | | |
| 20 | 7610188 | Switch, Almost Full & Full | 2 | | | | |
| 21 | 7610187 | Switch, Upper. | 1 | | | | |
| 22 | 1981303 | Belt, Timing, 90xl Stacker Tray | 1 | | | | |
| 23 | 7610158 | Bearing, Flanged, 3/8. | 1 | | | | |
| AAQ | 1900834 | SHLDR Screw, 1/4 x 3/8 | 1 | | | | |
| AHP | 1925060 | Washer, Flat #10. | 3 | | | | |
| AHQ | 1925061 | Washer, Flat 1/4 | 12 | | | | |
| AHR | 1925062 | Washer, Flat #4. | 6 | | | | |
| AHT | 1925064 | Washer, Flat #8. | 4 | | | | |
| AKG | 1925221 | Washer, Flat, Non-Metallic. | 2 | | | | |
| AKW | 1925236 | Washer, Flat, Non-Metallic. | 6 | | | | |
| ANA | 1926060 | Washer, Lock #4 | 6 | | | | |
| ANC | 1926062 | Washer, Lock #8 | 4 | | | | |
| AND | 1926063 | Washer, Lock #10 | 15 | | | | |
| ANE | 1926064 | Washer, Lock 1/4 | 12 | | | | |
| ANP | 1926702 | Nut, Hex 10-32 | 1 | | | | |
| AQU | 1927304 | Nut, Jam 10-32 | 3 | | | | |

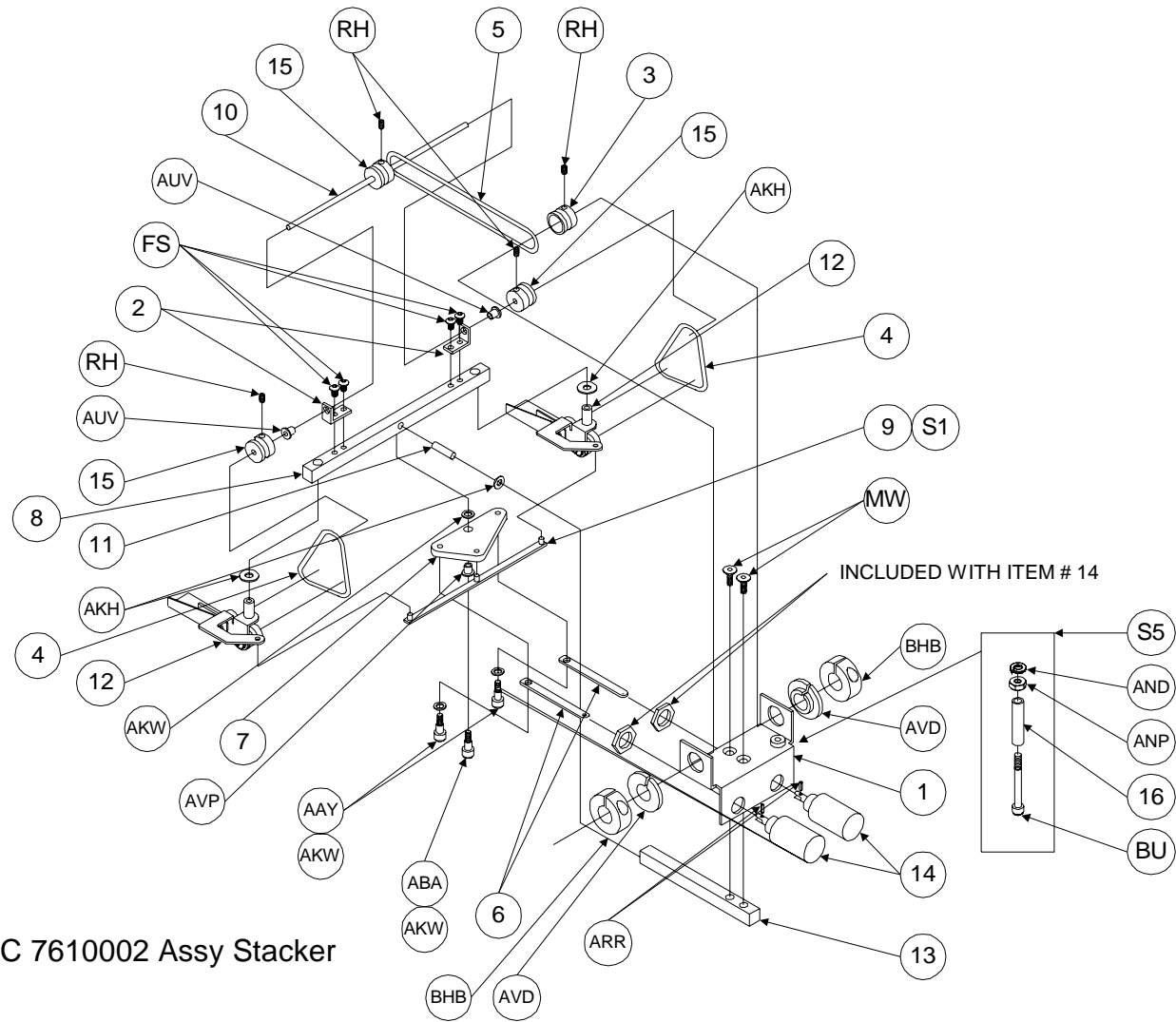
PL 5.1 B Stacker Assy.



PL 5.1 B Stacker Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130040200 | Pulley, 18 Tooth, O-ring Drive Assy. (Tag # S1)..... | 1 |
| 2 | 1924813 | Stand Off, Stacker Slide Assy..... | 1 |
| 3 | 1981305 | Belt, Timing, 110xl O-ring Drive Assy. | 1 |
| 4 | 7610046 | Tapper, Short, Inside (Tag # S2) | 7 |
| 5 | 7610047 | Shaft, Pivot, O-ring Drive Assy. | 1 |
| 6 | 7610049 | Bracket, Tapper Solenoid | 1 |
| 7 | 7610057 | Lock, Slide, Stacker Assy. | 1 |
| 8 | 7610066 | Shaft, Tapper Assy. | 1 |
| 9 | 7610152 | Knob, Stacker Slide Assy..... | 1 |
| 10 | 7610157 | Bearing, Flanged, 1/2..... | 2 |
| 11 | 7610189 | Bearing, Pillow Block, Stacker Assy. | 4 |
| 12 | 7610193 | Solenoid, Rotary, Tapper Assy. | 1 |
| 13 | 7610352 | Gear, Spur, 30 Tooth | 2 |
| SE | 1900028 | SHSS 10-32 x 3/16 | 5 |
| AHP | 1925060 | Washer, Flat #10..... | 2 |
| AHQ | 1925061 | Washer, Flat 1/4 | 16 |
| AHT | 1925064 | Washer, Flat #8..... | 4 |
| AJN | 1925203 | Washer, Flat, Non-Metallic..... | 2 |
| ANC | 1926062 | Washer, Lock #8 | 2 |
| AND | 1926063 | Washer, Lock #10 | 2 |
| ANM | 1926701 | Nut, Hex 8-32..... | 2 |
| ARD | 1930516 | E-Ring .375 | 2 |
| ARG | 1930522 | E-Ring .5..... | 2 |
| ARS | 1931528 | Roll Pin, 1/8 x 3/4..... | 1 |
| AVU | 1953636 | Bushing, Flanged, Nylon 3/8..... | 2 |
| AA | 1980030 | SHCS 6-32 x 5/8..... | 16 |
| AV | 1980054 | SHCS 8-32 x 1 | 2 |
| BJ | 1980072 | SHCS 10-32 x 1/2..... | 2 |

PL 5.1 C Stacker Assy.

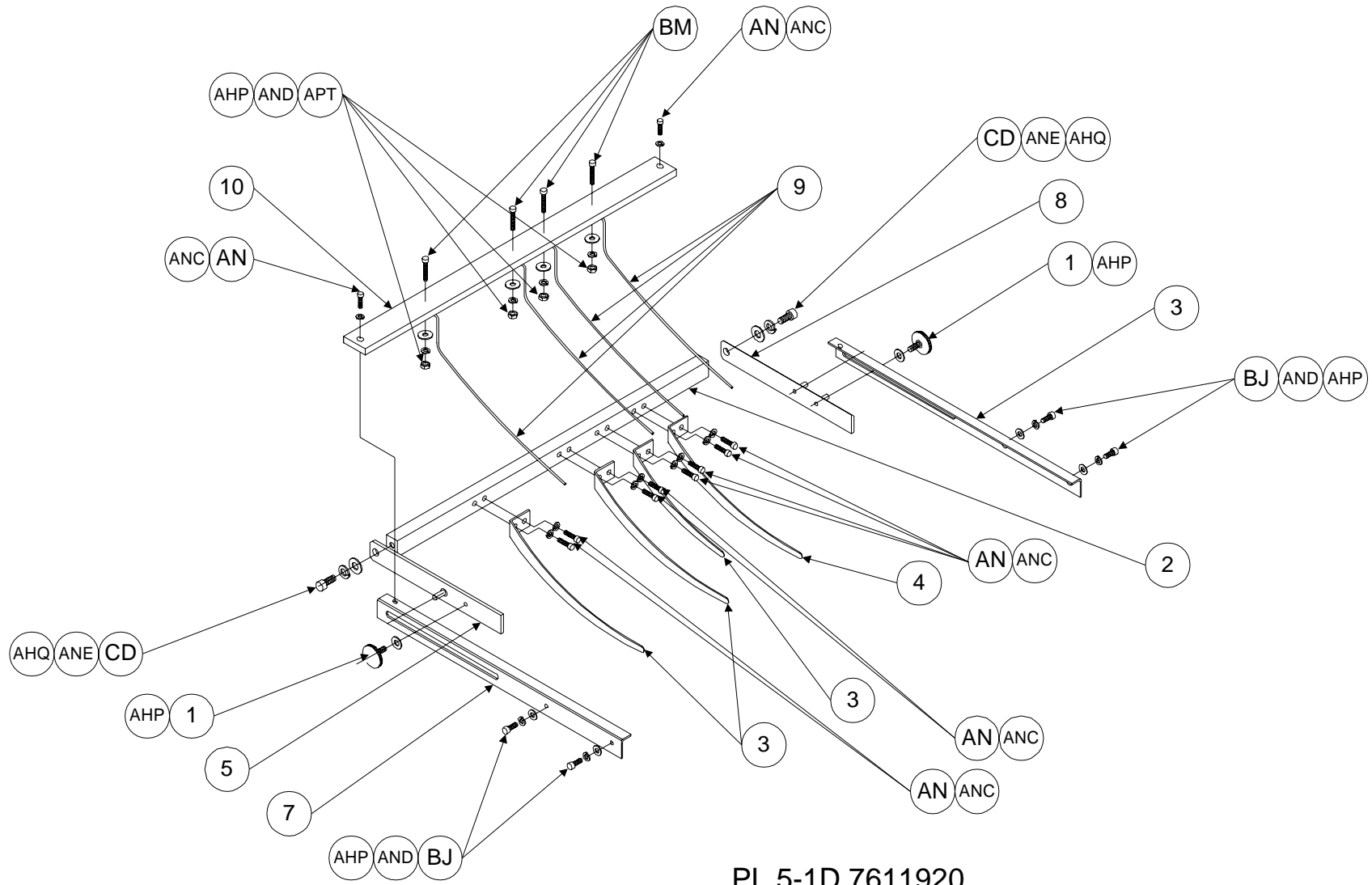


PL 5-1C 7610002 Assy Stacker

PL 5.1 C Stacker Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610043 | Bracket, Pivot O-ring Drive Assy..... | 1 |
| 2 | 7610044 | Bracket, Angle, O-ring Drive Assy. | 2 |
| 3 | 7610048 | Pulley, V, O-ring Drive Assy..... | 1 |
| 4 | 7610053 | O-ring, O-ring Roller Assy..... | 2 |
| 5 | 7610056 | O-ring, O-ring Drive Assy..... | 1 |
| 6 | 7610064 | Rod, O-ring Drive Assy. | 2 |
| 7 | 7610069 | Pivot, O-ring Drive Assy..... | 1 |
| 8 | 7610088 | Frame, O-ring Drive Assy. | 1 |
| 9 | 7610095 | Rod, Tie, O-ring Drive Assy. (Tag # S1) | 1 |
| 10 | 7610096 | Shaft, Transfer, O-ring Drive Assy..... | 1 |
| 11 | 7610098 | Pivot, O-ring Drive Assy..... | 1 |
| 12 | 7610142 | Bracket, O-ring Roller Assy. | 2 |
| 13 | 7610144 | Arm, O-ring Drive Assy. | 1 |
| 14 | 7610172 | Solenoid, Tubular, Offset | 2 |
| 15 | 7610258 | Pulley, V, O-ring Drive Assy..... | 3 |
| 16 | 7610361 | Tubbing, Polyurethane | 1 |
| RH | 1900008 | SHSS 6-32 x 1/8 | 4 |
| AAY | 1900841 | SHLDR Screw, 3/16 x 1/8..... | 2 |
| ABA | 1900843 | SHLDR Screw, 3/16 x 1/2..... | 1 |
| AKH | 1925222 | Washer, Flat, Non-Metallic..... | 3 |
| AKW | 1925236 | Washer, Flat, Non-Metallic..... | 4 |
| AND | 1926063 | Washer, Lock #10..... | 1 |
| ANP | 1926702 | Nut, Hex 10-32..... | 1 |
| ARR | 1931527 | Roll Pin, 3/32 x1/4..... | 2 |
| BHB | 1932702 | Collar, Clamp, O-ring Drive Assy..... | 2 |
| AUV | 1953613 | Bushing, Flanged, Nylon 3/16..... | 2 |
| AVD | 1953621 | Bushing, Flanged, Nylon 1/2..... | 2 |
| AVP | 1953631 | Bushing, Flanged, Nylon..... | 1 |
| BU | 1980082 | SHCS 10-32 x 2..... | 1 |
| FS | 1980254 | BHCS 8-32 x 1/4..... | 4 |
| MW | 1980479 | FHCS 10-32 x 3/8 | 2 |

PL 5.1 D Stacker Assy.

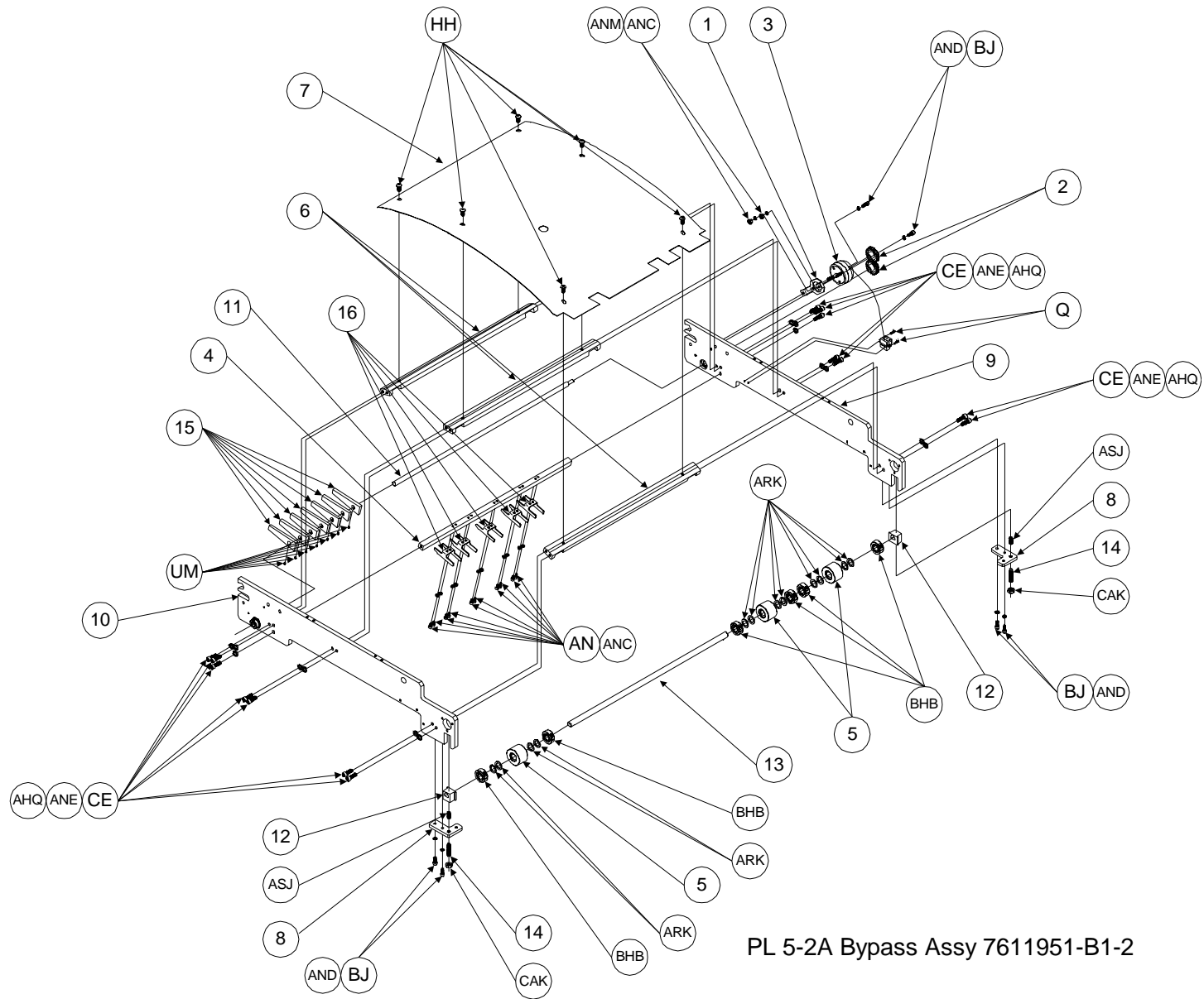


PL 5-1D 7611920

PL 5.1 D Stacker Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610025 | Thumb Screw, Stacker Infeed Assy..... | 2 |
| 2 | 7610106 | Cross Brace, Infeed Assy. | 1 |
| 3 | 7611914 | Paper Guide, Long, Stacker Infeed Assy..... | 3 |
| 4 | 7611915 | Paper Guide, Short, Stacker Infeed Assy. | 1 |
| 5 | 7611916 | Bracket, Extension R.H. Infeed Assy..... | 1 |
| 6 | 7611917 | Bracket, Extension L.H. Infeed Assy..... | 1 |
| 7 | 7611918 | Bracket, R.H. Infeed Assy..... | 1 |
| 8 | 7611919 | Bracket, L.H. Infeed Assy. | 1 |
| 9 | 7611923 | Guide, Wire Form, Long, Stacker Infeed Assy..... | 4 |
| 10 | 7611924 | Cross Bar, Long Wire Form Assy. | 1 |
| AHP | 1925060 | Washer, Flat #10..... | 10 |
| AHQ | 1925061 | Washer, Flat 1/4 | 2 |
| ANC | 1926062 | Washer, Lock #8 | 10 |
| AND | 1926063 | Washer, Lock #10 | 8 |
| ANE | 1926064 | Washer, Lock 1/4 | 2 |
| APT | 1926730 | Nut, Hex 10-32 | 4 |
| AN | 1980047 | SCHS 8-32 x 3/8 | 10 |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 4 |
| BM | 1980075 | SHCS 10-32 x 3/4 | 4 |
| CD | 1980095 | SHCS 1/4-20 x 5/8 | 2 |

PL 5.2 A Bypass Stacker Assy.

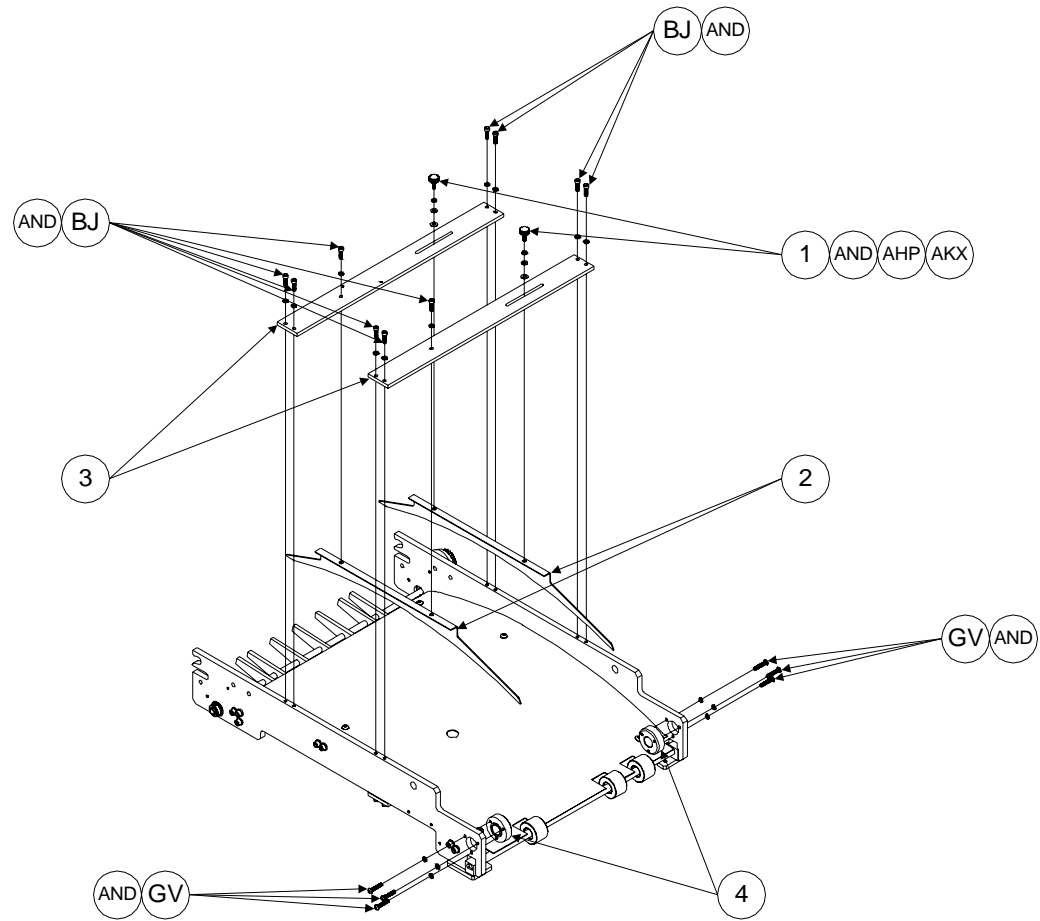


PL 5-2A Bypass Assy 7611951-B1-2

PL 5.2 A Bypass Stacker Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610049 | Bracket, Bypass Gate Solenoid | 1 |
| 2 | 7610352 | Gear, Spur, Modified | 2 |
| 3 | 7611945 | Solenoid, Rotary, Bypass Gate | 1 |
| 4 | 7611953 | Cross Bar, Bypass Input | 1 |
| 5 | 7611962 | Assy., Idler Roller, Bypass Assy. | 3 |
| 6 | 7611967 | Tie Bar, Bypass Deck Support | 3 |
| 7 | 7611972 | Deck, Bypass | 1 |
| 8 | 7611976 | Plate, Nut, Bypass Assy. | 2 |
| 9 | 7611980 | Assy., Side Plate, LH | 1 |
| 10 | 7611981 | Assy., Side Plate, RH | 1 |
| 11 | 7611984 | Shaft, Bypass Gate | 1 |
| 12 | 7611985 | Slide, Bypass Assy. | 2 |
| 13 | 7611987 | Shaft, Idler, Bypass Ouput | 1 |
| 14 | 7611995 | Screw, Spring Adjust. | 2 |
| 15 | 7611997 | Finger, Bypass Gate | 7 |
| 16 | 7611999 | Deflector, Bypass Input | 5 |
| UM | 1900084 | SHSS 8-32 x 3/16 | 7 |
| AHQ | 1925061 | Washer, Flat 1/4 | 14 |
| AKR | 1925230 | Spacer, Non Metallic .5 | 12 |
| ANC | 1926062 | Washer, Lock #8 | 12 |
| AND | 1926063 | Washer, Lock #10 | 6 |
| ANE | 1926064 | Washer, Lock 1/4 | 14 |
| CAK | 1926611 | Nut, Hex 5/16-24 | 2 |
| ANM | 1926701 | Nut, Hex 8-32 | 2 |
| BHB | 1932702 | Collar, Clamp | 6 |
| ASJ | 1935204 | Spring, Comp. | 2 |
| Q | 1980015 | SHCS 4-40 x 5/8 | 2 |
| AN | 1980047 | SHCS 8-32 x 3/8 | 10 |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 6 |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 14 |
| HH | 1980302 | BHCS 1/4-20 x 3/8 | 6 |

PL 5.2 B Bypass Stacker Assy.

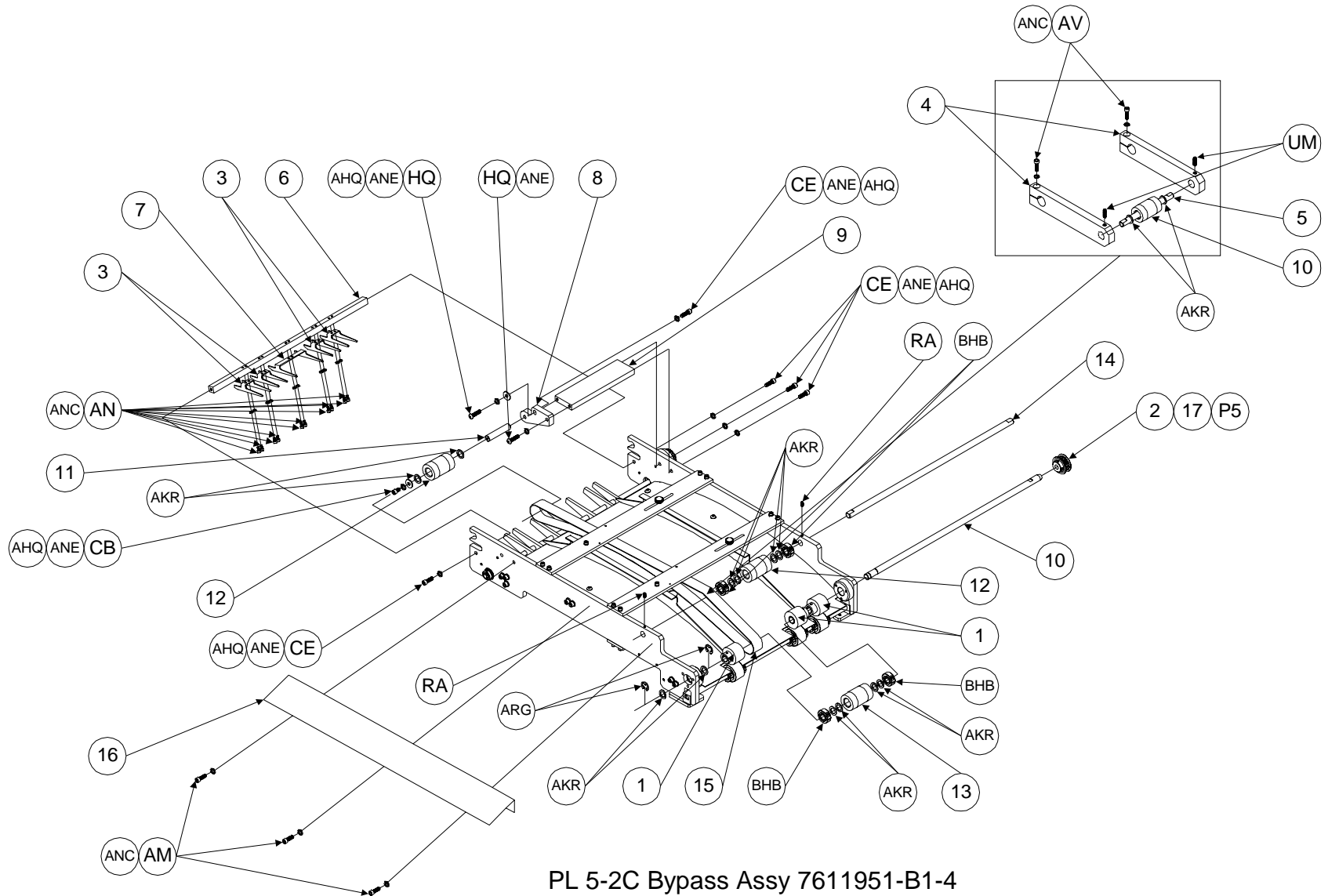


PL 5-2B Bypass Assy 7611951-B1-3

PL 5.2 B Bypass Stacker Assy.

| Item | Part # | Description | Qty |
|------|---------|---------------------------------|-----|
| 1 | 7610390 | Thumb Screw 10-32..... | 2 |
| 2 | 7611957 | Guide, Paper, Bypass Assy. | 2 |
| 3 | 7611958 | Cross Bar, Bypass Assy. | 2 |
| 4 | 7611963 | Assy., Hub, Bypass Output..... | 2 |
| AHP | 1925060 | Washer, Flat # 10..... | 2 |
| AKX | 1925236 | Spacer, Non-Metalic | 2 |
| AND | 1926063 | Washer, Lock #10..... | 18 |
| BJ | 1980072 | SHCS 10-32 x 1/2..... | 10 |
| GV | 1980286 | BHCS 10-32 x 1..... | 6 |

PL 5.2 C Bypass Stacker Assy.

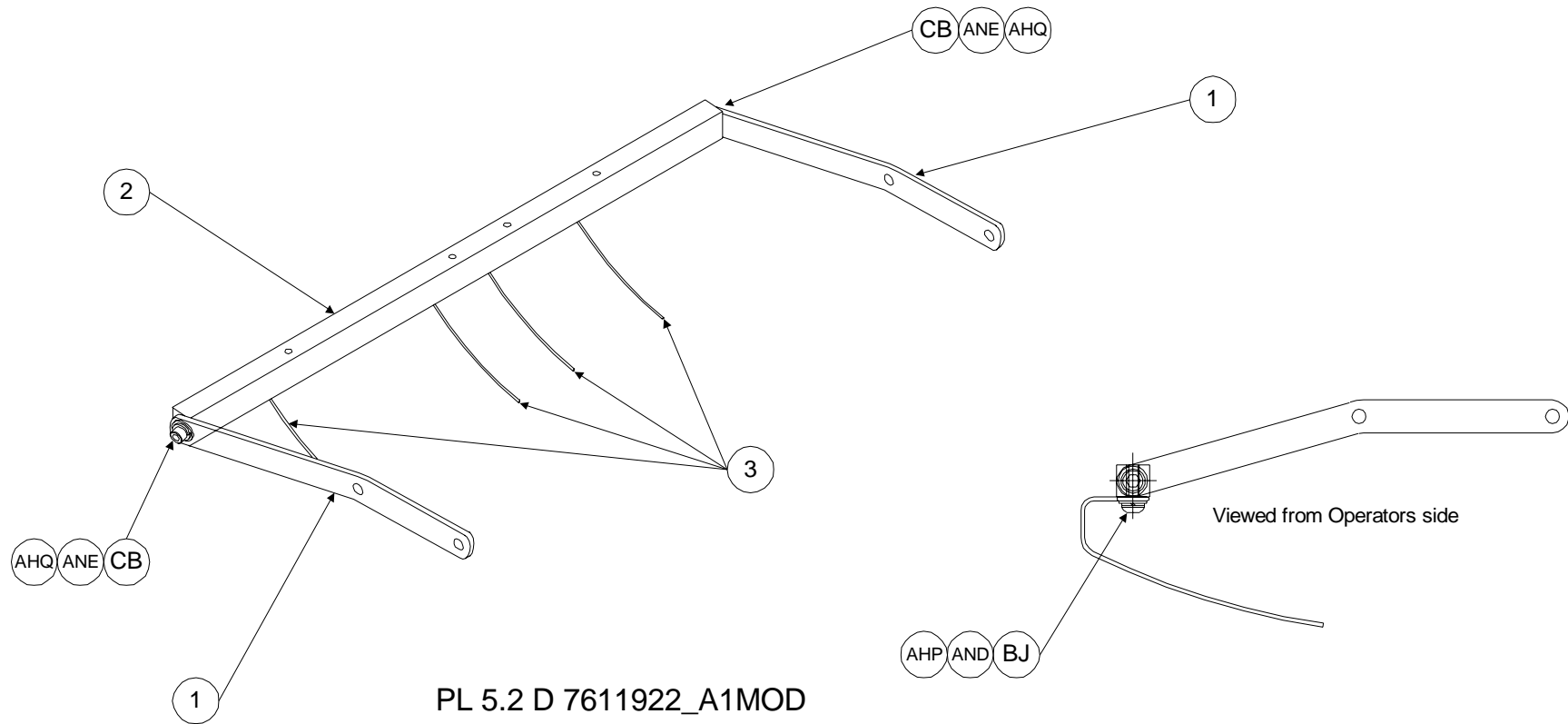


PL 5-2C Bypass Assy 7611951-B1-4

PL 5.2 C Bypass Stacker Assy.

| Item | Part # | Description | Qty |
|------|------------|--|-----|
| 1 | 0130002100 | Assy., Drive Roller | 3 |
| 2 | 7610348 | Pulley, Timing, 20 Tooth | 1 |
| 3 | 7611198 | Guide, Paper, Bypass Assy. | 4 |
| 4 | 7611930 | Side Arm, Belt Tensioner Assy. | 2 |
| 5 | 7611931 | Shaft, Belt Tensioner Assy. | 1 |
| 6 | 7611953 | Cross Bar, Bypass Input | 1 |
| 7 | 7611959 | Guide, Paper, Wide, Bypass Assy. | 1 |
| 8 | 7611965 | Support, Idler Roller | 1 |
| 9 | 7611966 | Plate, Bypass Input Idler Roller Assy. | 1 |
| 10 | 7611968 | Shaft, Drive, Bypass Assy. | 1 |
| 11 | 7611970 | Shaft, Input Idler Roller Assy. | 1 |
| 12 | 7611982 | Assy., Idler Roller | 3 |
| 13 | 7611983 | Assy., Drive Roller, Bypass Belt | 1 |
| 14 | 7611987 | Shaft, Idler, Bypass Assy. | 1 |
| 15 | 7611996 | Belt, Flat, Bypass Assy. | 1 |
| 16 | 7611947 | Shield, Bypass | 1 |
| 17 | 7610535 | Pulley, Timing, 24 Tooth, Stacker Bypass Main Drive, 6060 / iGen3 (Tag # P5) | 1 |
| RA | 1900001 | SHSS 10-32 x .38 | 2 |
| UM | 1900084 | SHSS 8-32 x 3/16 Long | 2 |
| AHQ | 1925061 | Washer, Flat 1/4 | 8 |
| AKR | 1925230 | Spacer, Non Metallic .5 | 14 |
| ANC | 1926062 | Washer, Lock #8 | 15 |
| ANE | 1926064 | Washer, Lock 1/4 | 8 |
| ARG | 1930522 | E-Ring .5 | 2 |
| BHB | 1932702 | Collar, Clamp | 4 |
| AM | 1980046 | SHCS 8-32 x 1/4 | 3 |
| AN | 1980047 | SHCS 8-32 x 3/8 | 10 |
| AV | 1980054 | SHCS 8-32 x 1 | 2 |
| CB | 1980094 | SHCS 1/4-20 x 1/2 | 1 |
| CE | 1980096 | SHCS 10-32 x 1/2 | 5 |
| HQ | 1980309 | BHCS 1/4-20 x 1-1/4 | 2 |

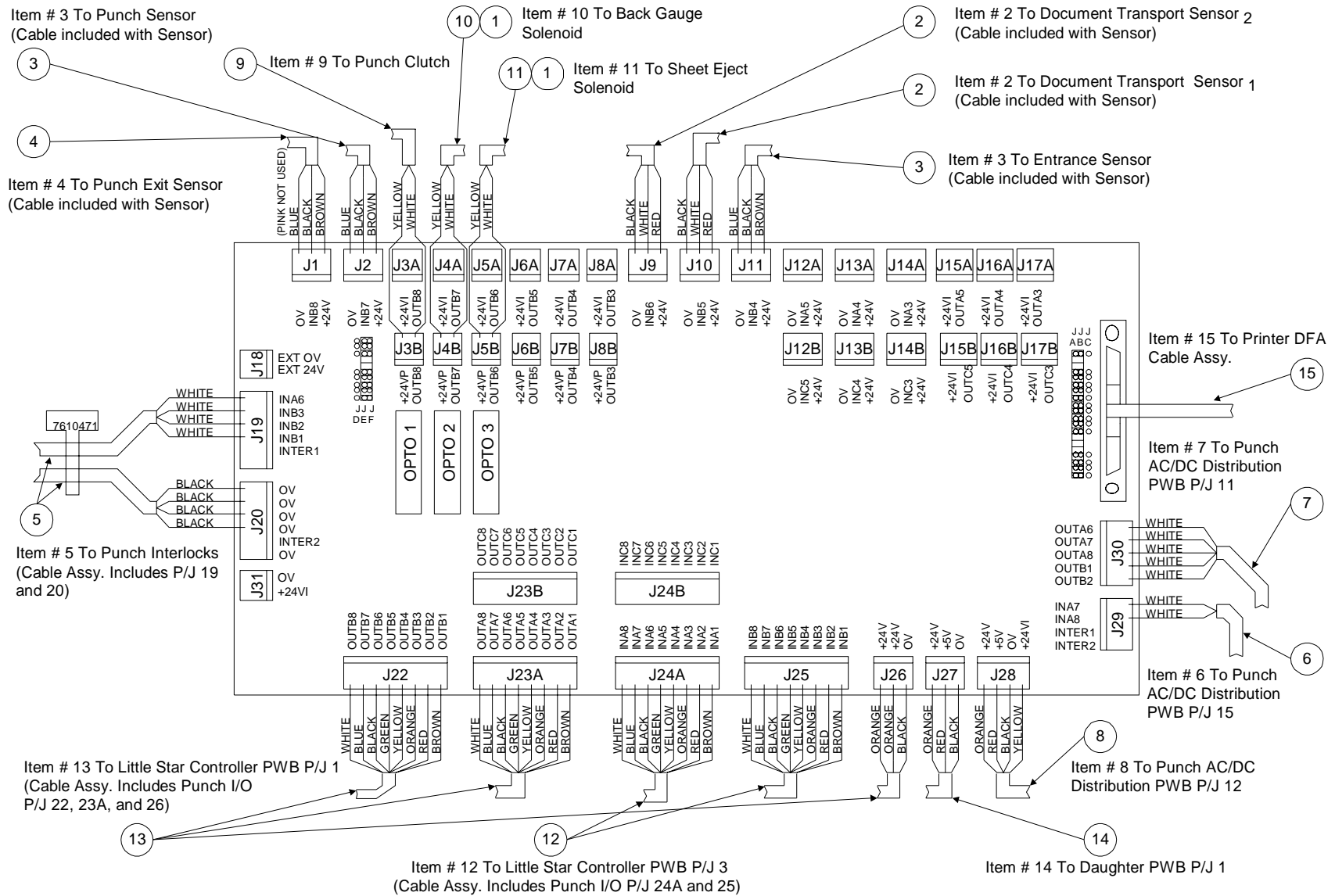
PL 5.2 D Bypass Stacker Assy.



PL 5.2 D Bypass Stacker Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7611925 | Link, Cross Bar, Short Wire Form Assy. | 2 |
| 2 | 7611926 | Cross Bar, Short Wire Form Assy. | 1 |
| 3 | 7611927 | Guide, Wire Form, Short, Bypass Stacker Assy. | 4 |
| AHP | 1925060 | Washer, Flat # 10. | 4 |
| AHQ | 1925061 | Washer, Flat 1/4. | 2 |
| AND | 1926063 | Washer, Lock #10 | 4 |
| ANE | 1926064 | Washer, Lock 1/4 | 2 |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 4 |
| CB | 1980094 | SHCS 1/4-20 x 1/2 | 2 |

PL 6.1 A Punch I/O PWB Cable Assy.

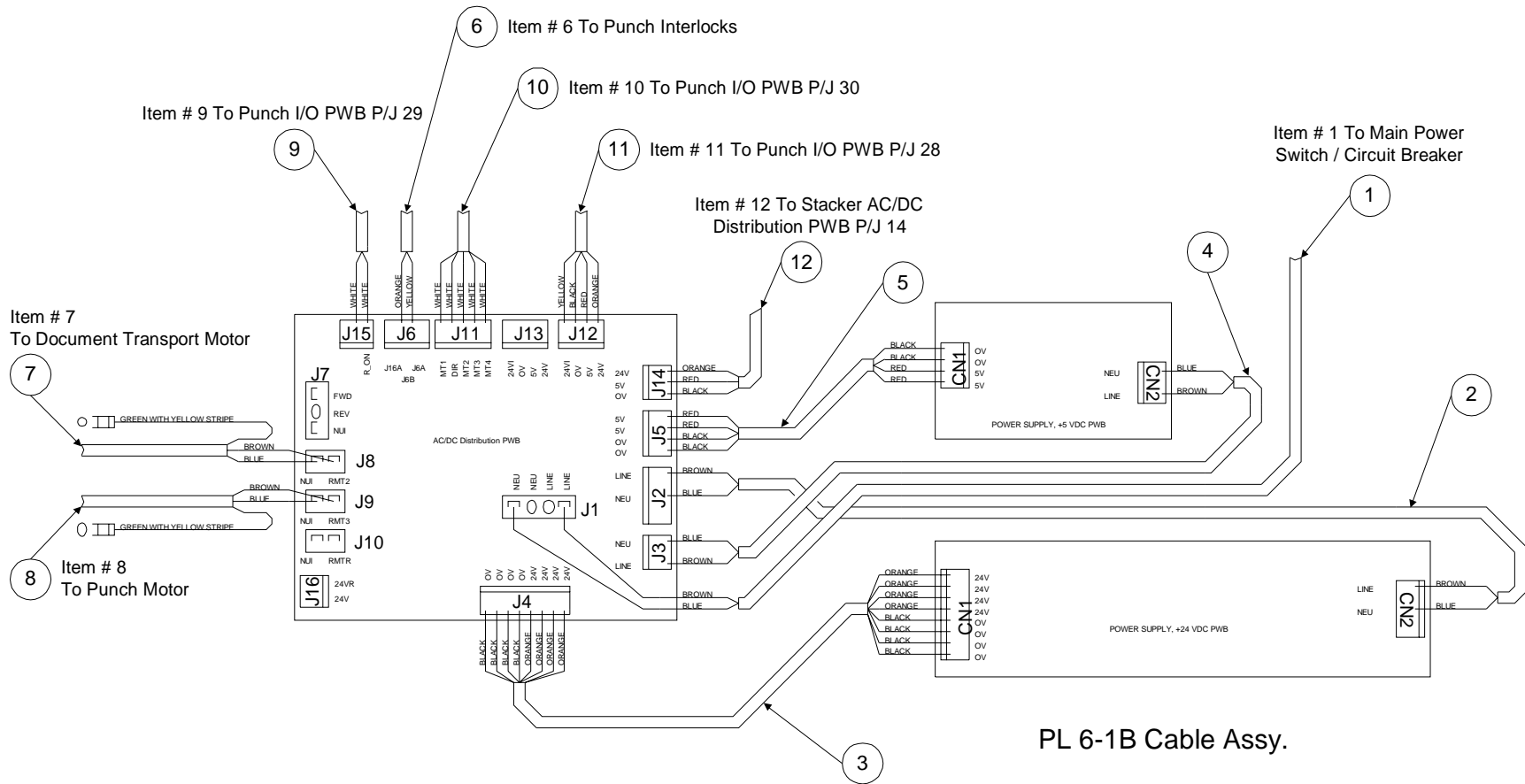


PL 6-1A Cable Assy.

PL 6.1 A Punch I/O PWB Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 1951101 | Connector | 2 |
| 2 | 7610421 | Sensor, Document Transport 1 & 2 (Cable Assy. included with Sensor)..... | 2 |
| 3 | 7610423 | Sensor, Punch & Entrance (Cable Assy. included with Sensor)..... | 2 |
| 4 | 7610424 | Sensor, Punch Exit (Cable Assy. included with Sensor)..... | 1 |
| 5 | 7610471 | Cable Assy., Punch I/O PWB P/J 19 & 20 - Punch Interlock Low | 1 |
| 6 | 7610475 | Cable Assy., Punch I/O PWB P/J 29 - Punch AC/DC Distribution PWB P/J 15 | 1 |
| 7 | 7610476 | Cable Assy., Punch I/O PWB P/J 30 - Punch AC/DC Distribution PWB P/J 11 | 1 |
| 8 | 7610477 | Cable Assy., Punch I/O PWB P/J 28 - Punch AC/DC Distribution PWB P/J 12 | 1 |
| 9 | 7610478 | Cable Assy., Punch I/O PWB P/J 3B - Punch Clutch Solenoid | 1 |
| 10 | 7610479 | Cable Assy., Punch I/O PWB P/J 4B - Back Gauge Solenoid | 1 |
| 11 | 7610480 | Cable Assy., Punch I/O PWB P/J 5B - Sheet Eject Solenoid | 1 |
| 12 | 7610481 | Cable Assy., Punch I/O PWB P/J 24A and 25 - Little Star Controller PWB P/J 3..... | 1 |
| 13 | 7610482 | Cable Assy., Punch I/O PWB P/J 22, 23A, and 26 - Little Star Controller PWB P/J 1..... | 1 |
| 14 | 7610494 | Cable Assy., Punch I/O PWB P/J 27 - Daughter PWB P/J 1 | 1 |
| 15 | 7610500 | Cable Assy., DFA, Punch I/O PWB - Punch Rear Panel | 1 |

PL 6.1 B Punch AC/DC PWB & Power Supply PWB's Cable Assy.



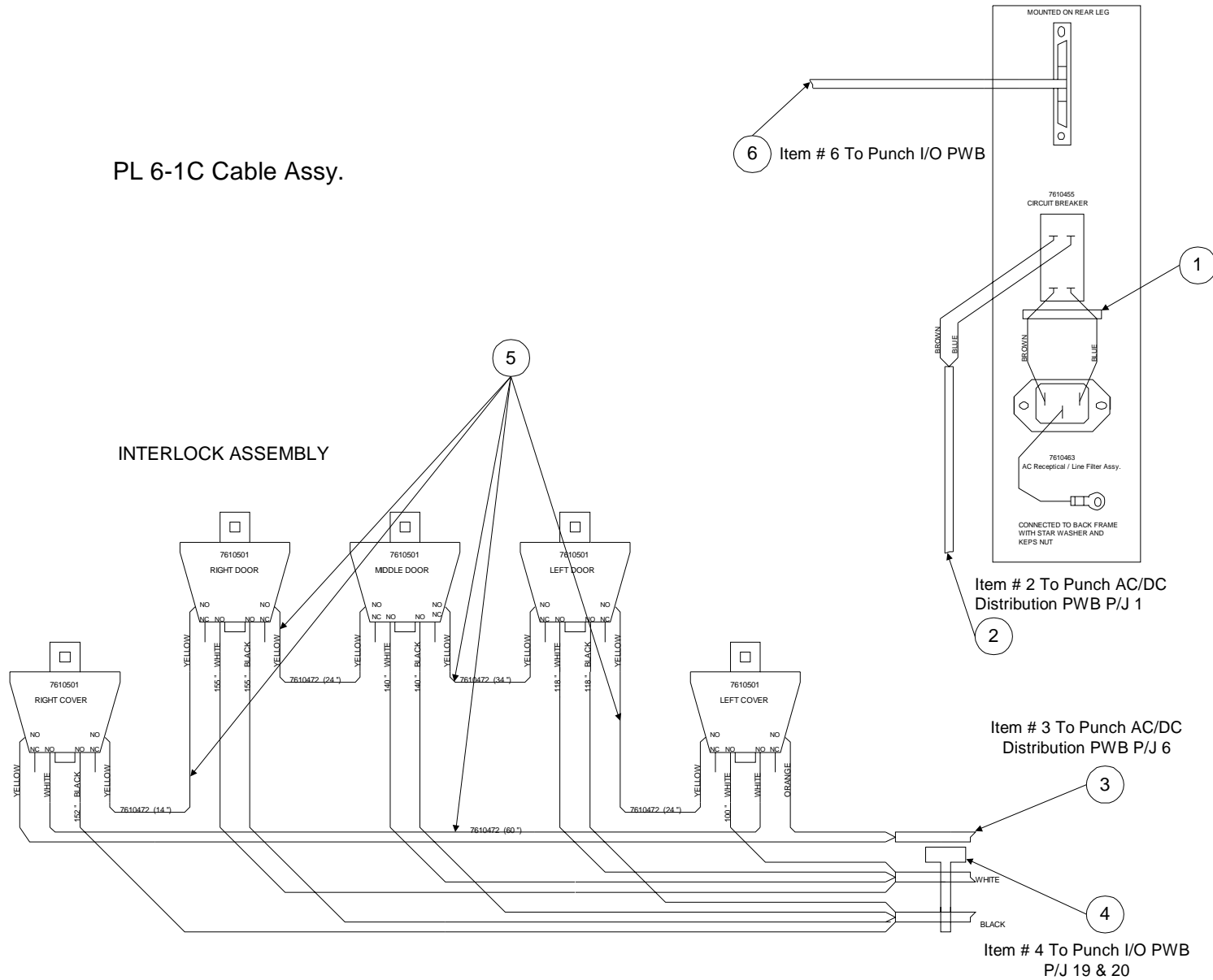
PL 6-1B Cable Assy.

PL 6.1 B Punch AC/DC PWB & Power Supply PWB's Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610465 | Cable Assy., Punch AC/DC Distribution PWB P/J 1 - Main Power Switch / Circuit Breaker | 1 |
| 2 | 7610466 | Cable Assy., Punch AC/DC Distribution PWB P/J 2 - 24 VDC Power Supply P/J CN2..... | 1 |
| 3 | 7610467 | Cable Assy., Punch AC/DC Distribution PWB P/J 4 - 24 VDC Power Supply P/J CN1..... | 1 |
| 4 | 7610468 | Cable Assy., Punch AC/DC Distribution PWB P/J 3 - 5 VDC Power Supply P/J CN2..... | 1 |
| 5 | 7610469 | Cable Assy., Punch AC/DC Distribution PWB P/J 5 - 5 VDC Power Supply P/J CN1..... | 1 |
| 6 | 7610470 | Cable Assy., Punch AC/DC Distribution PWB P/J 6 - Punch Interlock High..... | 1 |
| 7 | 7610473 | Cable Assy., Punch AC/DC Distribution PWB P/J 8 - Document Transport Motor | 1 |
| 8 | 7610474 | Cable Assy., Punch AC/DC Distribution PWB P/J 9 - Punch Motor | 1 |
| 9 | 7610475 | Cable Assy., Punch AC/DC Distribution PWB P/J 15 - Punch I/O PWB P/J 29 | 1 |
| 10 | 7610476 | Cable Assy., Punch AC/DC Distribution PWB P/J 11 - Punch I/O PWB P/J 30 | 1 |
| 11 | 7610477 | Cable Assy., Punch AC/DC Distribution PWB P/J 12 - Punch I/O PWB P/J 23 | 1 |
| 12 | 7610483 | Cable Assy., Punch AC/DC Distribution PWB P/J 14 - Stacker AC/DC Distribution PWB P/J 14 | 1 |

PL 6.1 C Punch Interlock & Rear Panel Cable Assy.

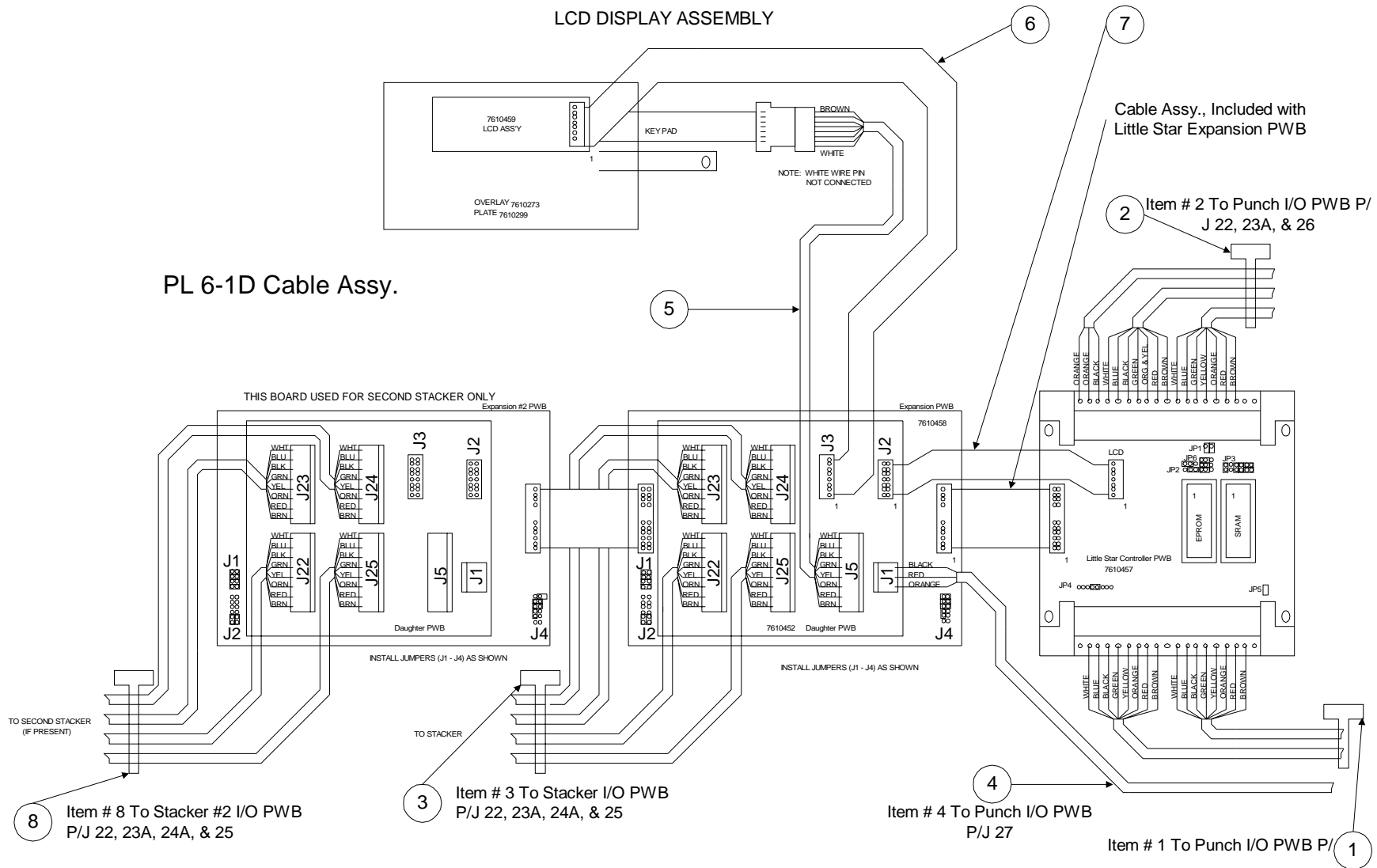
PL 6-1C Cable Assy.



PL 6.1 C Punch Interlock & Rear Panel Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610464 | Cable Assy., Punch Main Power Switch / Circuit Breaker - Punch AC Receptical / Line Filter | 1 |
| 2 | 7610465 | Cable Assy., Punch Main Power Switch / Circuit Breaker - Punch AC/DC Distribution PWB P/J 1 | 1 |
| 3 | 7610470 | Cable Assy., Punch Interlock High - Punch AC/DC Distribution PWB P/J 6..... | 1 |
| 4 | 7610471 | Cable Assy., Punch Interlock Low - Punch I/O PWB P/J 19 and 20..... | 1 |
| 5 | 7610472 | Cable Assy., Punch Interlock Jumpers | 1 |
| 6 | 7610500 | Cable Assy., DFA, Punch Rear Panel - Punch I/O PWB | 1 |

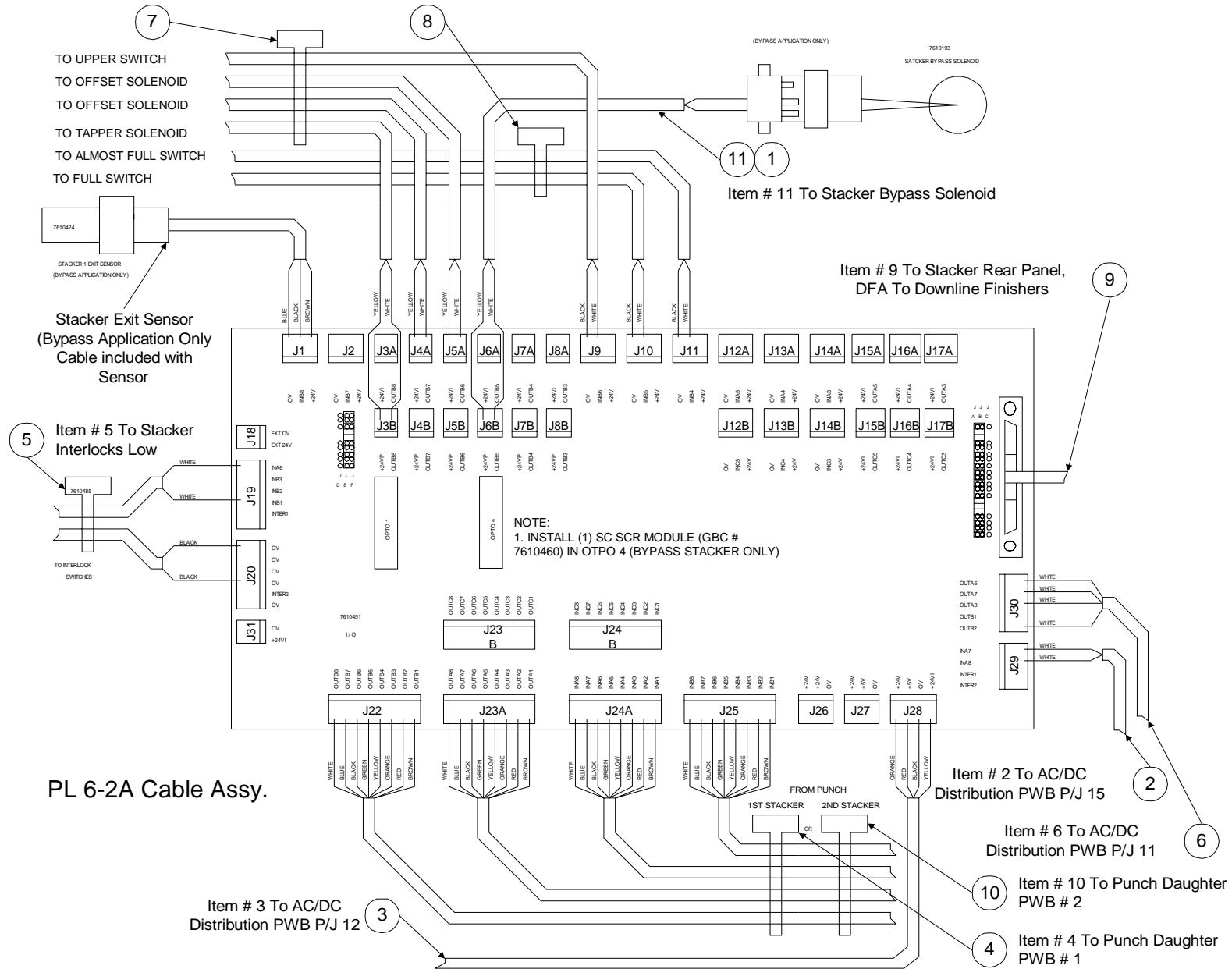
PL 6.1 D Punch LCD, Controller, Expansion, and Daughter PWB Cable Assy.



PL 6.1 D Punch LCD, Controller, Expansion, and Daughter PWB Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610481 | Cable Assy., Little Star Controller PWB P/J 3 - Punch I/O PWB P/J 24A & 25 | 1 |
| 2 | 7610482 | Cable Assy., Little Star Controller PWB P/J 1 - Punch I/O PWB P/J 22, 23A, & 26 | 1 |
| 3 | 7610484 | Cable Assy., Daughter PWB P/J 22, 23, 24, & 25 - Stacker I/O PWB P/J 22, 23A, 24A, and 25..... | 1 |
| 4 | 7610494 | Cable Assy., Daughter PWB P/J 1 - Punch I/O PWB P/J 27 | 1 |
| 5 | 7610495 | Cable Assy., Daughter PWB P/J 5 - Control Panel Key Pad | 1 |
| 6 | 7610496 | Cable Assy., Daughter PWB P/J 3 - Control Panel LCD Display..... | 1 |
| 7 | 7610497 | Cable Assy., Little Star Cotrller PWB P/J H1 - Daghter PWB P/J 2..... | 1 |
| 8 | 7610502 | Cable Assy., Daughter PWB for Second Stacker P/J 22, 23, 24, & 25 - Stacker I/O PWB # 2 P/J 22, 23A, 24A, and 25 | 1 |

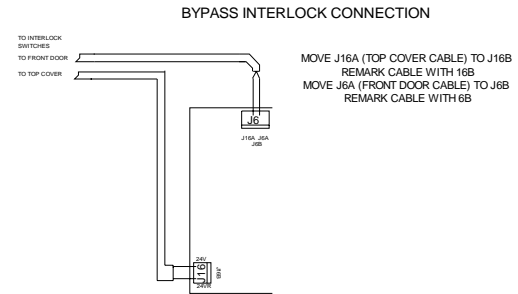
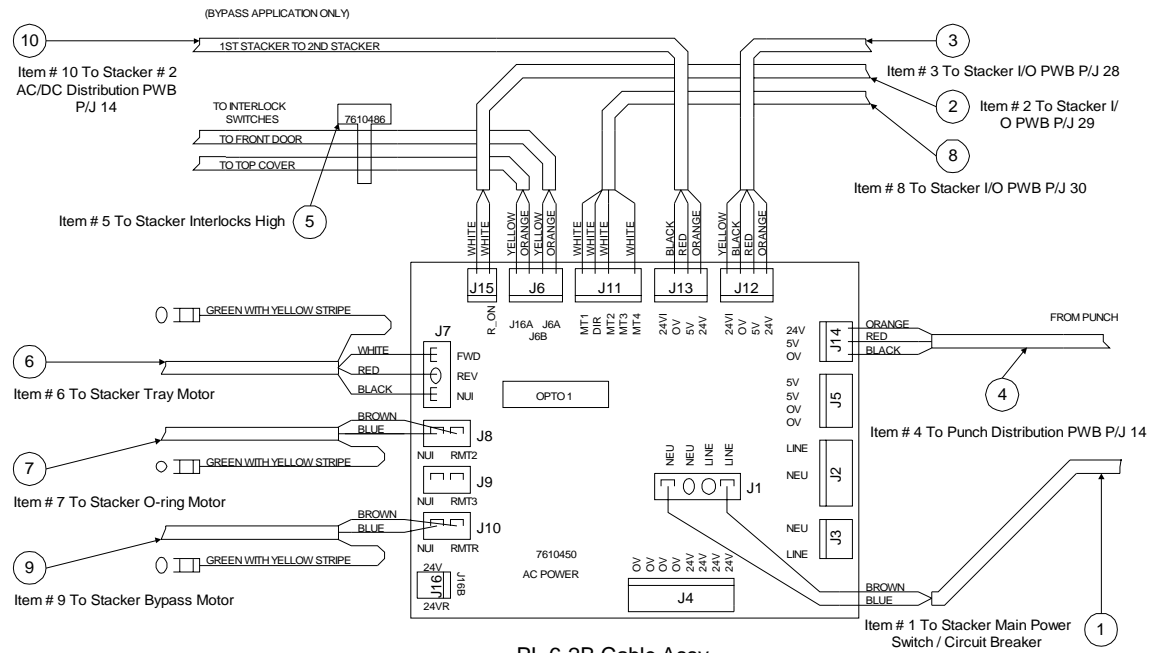
PL 6.2 A Stacker I/O PWB Cable Assy.



PL 6.2 A Stacker I/O PWB Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 1951101 | Connector | 1 |
| 2 | 7610475 | Cable Assy., Stacker I/O PWB P/J 29 - Stacker AC/DC Distribution PWB P/J 15 | 1 |
| 3 | 7610477 | Cable Assy., Stacker I/O PWB P/J 23 - Stacker AC/DC Distribution PWB P/J 12 | 1 |
| 4 | 7610484 | Cable Assy., Stacker I/O PWB P/J 22, 23A, 24A, and 25 - Daughter PWB P/J 22, 23, 24, & 25..... | 1 |
| 5 | 7610485 | Cable Assy., Stacker I/O PWB P/J 19 & 20 - Stacker Interlock Low | 1 |
| 6 | 7610490 | Cable Assy., Stacker I/O PWB P/J 30 - Stacker AC/DC Distribution PWB P/J 11 | 1 |
| 7 | 7610491 | Cable Assy., Stacker I/O PWB P/J 3B, 4A, 5A, & 9 - Stacker Tapper and Offset Solenoids and Upper Switch | 1 |
| 8 | 7610493 | Cable Assy., Stacker I/O PWB P/J - Almost Full and Full Switches | 1 |
| 9 | 7610500 | Cable Assy., DFA, Stacker I/O PWB - Stacker Rear Panel..... | 1 |
| 10 | 7610502 | Cable Assy., Stacker I/O PWB # 2 P/J 22, 23A, 24A, and 25 - Daughter PWB for Second Stacker P/J 22, 23, 24, & 25 | 1 |
| 11 | 7610504 | Cable Assy., Stacker I/O PWB P/J 6A - Stacker Bypass Solenoid..... | 1 |

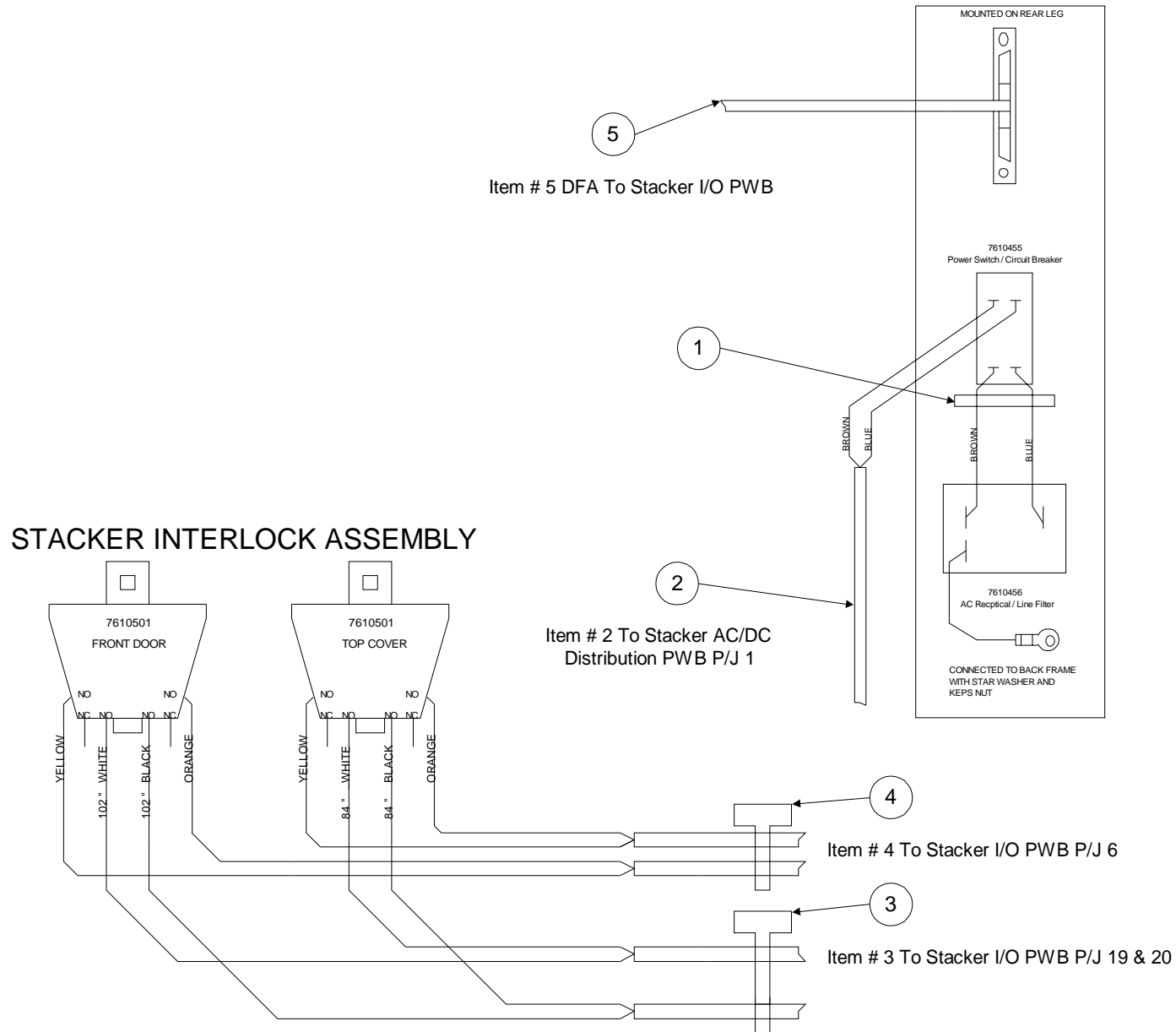
PL 6.2 B Stacker AC/DC PWB Cable Assy.



PL 6.2 B Stacker AC/DC PWB Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610465 | Cable Assy., Stacker AC/DC Distribution PWB P/J 1 - Stacker Main Power Switch / Circuit Breaker | 1 |
| 2 | 7610475 | Cable Assy., Stacker AC/DC Distribution PWB P/J 15 - Stacker I/O PWB P/J 29 | 1 |
| 3 | 7610477 | Cable Assy., Stacker AC/DC Distribution PWB P/J 12 - Stacker I/O PWB P/J 23 | 1 |
| 4 | 7610483 | Cable Assy., Stacker AC/DC Distribution PWB P/J 14 - Punch AC/DC Distribution PWB P/J 14 | 1 |
| 5 | 7610486 | Cable Assy., Stacker AC/DC Distribution PWB P/J 6 - Stacker Interlock High..... | 1 |
| 6 | 7610487 | Cable Assy., Stacker AC/DC Distribution PWB P/J 7 - Stacker Tray Motor | 1 |
| 7 | 7610488 | Cable Assy., Stacker AC/DC Distribution PWB P/J 8 - Stacker O-ring Motor | 1 |
| 8 | 7610490 | Cable Assy., Stacker AC/DC Distribution PWB P/J 11 - Stacker I/O PWB P/J 30 | 1 |
| 9 | 7610503 | Cable Assy., Stacker AC/DC Distribution PWB P/J 10 - Stacker Bypass Motor..... | 1 |
| 10 | 7610505 | Cable Assy., Stacker #1 AC/DC Distribution PWB P/J 13 - Stacker #2 AC/DC Distribution PWB P/J 14 | 1 |

PL 6.2 C Stacker Interlocks & Rear Panel Cable Assy.



PL 6.2 C Stacker Interlocks & Rear Panel Cable Assy.

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610464 | Cable Assy., Stacker Main Power Switch / Circuit Breaker - Stacker AC Receptical / Line Filter | 1 |
| 2 | 7610465 | Cable Assy., Stacker Main Power Switch / Circuit Breaker - Stacker AC/DC Distribution PWB P/J 1 | 1 |
| 3 | 7610485 | Cable Assy., Stacker Interlocks Low - Stacker I/O PWB P/J 19 & 20..... | 1 |
| 4 | 7610486 | Cable Assy., Stacker Interlocks High - Stacker AC/DC Distribution PWB P/J 6..... | 1 |
| 5 | 7610500 | Cable Assy., DFA, Stacker Rear Panel - Stacker I/O PWB | 1 |

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FusionPunch II Common Hardware List

| Item | Part # | Description | Qty |
|------|---------|---------------------------|-----|
| NA | 7610235 | FP II Common Hardware Kit | 1 |

FusionPunch II Common Hardware Kit includes the following:

| Item | Part # | Description | Qty |
|------|---------|---------------------------------|-----|
| RA | 1900001 | SHSS 10-32 x 3/8 | 10 |
| RH | 1900008 | SHSS 6-32 x 1/8 | 10 |
| SE | 1900028 | SHSS 10-32 x 3/16 | 10 |
| TT | 1900066 | SHSS 6-32 | 10 |
| UM | 1900084 | SHSS 8-32 | 10 |
| XD | 1900551 | SHCS 3/8-16 x 1-1/4 | 10 |
| XM | 1900559 | SHCS 3/8-16 x 1-3/4 | 10 |
| YU | 1900589 | SHCS 3/8-16 x 2 | 10 |
| ZM | 1900807 | SHLDR Screw 10-24 | 10 |
| AAQ | 1900834 | SHLDR Screw, 1/4 x 3/8 | 10 |
| AAY | 1900841 | SHLDR Screw, 3/16 x 1/8 | 10 |
| ABA | 1900843 | SHLDR Screw, 3/16 x 1/2 | 10 |
| ACQ | 1903026 | Truss Head Screw PH 10-32 x 1/2 | 10 |
| AEF | 1911106 | SEMS Screw 8-32 x 3/8 | 10 |
| BJW | 1914721 | Carriage Screw 5/16-18 x 1-1/4 | 10 |
| BDM | 1924818 | Spacer, 1/4 x 1/2 x 1/4 | 10 |
| AFB | 1925001 | Washer, Flat 5/16" | 10 |
| AHP | 1925060 | Washer, Flat #10 | 10 |
| AHQ | 1925061 | Washer, Flat 1/4 | 10 |
| AHR | 1925062 | Washer, Flat #4 | 10 |
| AHS | 1925063 | Washer, Flat #6 | 10 |
| AHT | 1925064 | Washer, Flat #8 | 10 |
| AHU | 1925065 | Washer, Flat 3/8 | 10 |
| AJD | 1925184 | Washer, Flat Extra Thick 3/8 | 10 |
| AJN | 1925203 | Washer, Flat, Non-Metallic | 10 |
| AKG | 1925221 | Washer, Flat, Non-Metallic | 10 |
| AKH | 1925222 | Washer, Flat, Non-Metallic | 10 |
| AKL | 1925225 | Washer, Flat, Non-Metallic | 10 |
| AKR | 1925230 | Washer, Flat, Non-Metallic | 10 |
| AKU | 1925233 | Washer, Flat, Non-Metallic | 10 |
| AKX | 1925236 | Washer, Flat, Non-Metallic | 10 |

| Item | Part # | Description | Qty |
|------|---------|-------------------------|-----|
| BFF | 1925307 | Spacer, 1/4 x 3/4 x 3/4 | 10 |
| ALQ | 1925903 | Washer, Star Lock #8 | 10 |
| ANA | 1926060 | Washer, Lock #4 | 10 |
| ANB | 1926061 | Washer, Lock #6 | 10 |
| ANC | 1926062 | Washer, Lock #8 | 10 |
| AND | 1926063 | Washer, Lock #10 | 10 |
| ANE | 1926064 | Washer, Lock 1/4 | 10 |
| ANF | 1926065 | Washer, Lock 5/16 | 10 |
| ANG | 1926066 | Washer, Lock 3/8 | 10 |
| CAK | 1926611 | Nut, Hex 5/16-24 | 10 |
| ANM | 1926701 | Nut, Hex 8-32 | 10 |
| ANP | 1926702 | Nut, Hex 10-32 | 10 |
| ANT | 1926706 | Nut, Hex 5/16 - 18 | 10 |
| ANV | 1926708 | Nut, Hex 1/4-20 | 10 |
| ANW | 1926709 | Nut, Hex 3/8-24 | 10 |
| ANY | 1926711 | Nut, Hex 4-40 | 10 |
| APS | 1926729 | Nut, Hex 1/4-20 | 10 |
| APT | 1926730 | Nut, Hex 10-32 | 10 |
| AQF | 1926802 | Nut, Kep 8-32 | 10 |
| AQQ | 1927300 | Nut, Jam 1/4-20 | 10 |
| AQS | 1927302 | Nut, Jam 6-32 | 10 |
| AQT | 1927303 | Nut, Jam 8-32 | 10 |
| AQU | 1927304 | Nut, Jam 10-32 | 10 |
| ARD | 1930516 | E-Ring .375 | 10 |
| ARG | 1930522 | E-Ring .5 | 10 |
| ARK | 1931521 | Roll Pin, 3/16 x 1 | 10 |
| ARL | 1931522 | Roll Pin, 1/8 x 1 | 10 |
| ARQ | 1931526 | Roll Pin, 3/16 x 5/8 | 10 |
| ARR | 1931527 | Roll Pin, 3/32 x 1/4 | 10 |
| ARS | 1931528 | Roll Pin, 1/8 x 3/4 | 10 |
| ARU | 1931530 | Roll Pin, 3/32 x 1 | 10 |
| ARV | 1931531 | Roll Pin, 3/16 x 1-1/2 | 10 |
| ARW | 1931532 | Roll Pin, 5/32 x 1 | 10 |
| BHB | 1932702 | Collar, Clamp | 10 |
| BHE | 1932705 | Collar, Clamp | 10 |

FusionPunch II Common Hardware List

| Item | Part # | Description | Qty | Item | Part # | Description | Qty |
|------|---------|---------------------------------------|-----|------|---------|----------------------------|-----|
| ASJ | 1935204 | Spring, Comp. | 10 | CK | 1980101 | SHCS 1/4-20 x 1-1/2 | 10 |
| ASR | 1935211 | Spring, Comp. | 10 | CL | 1980102 | SHCS 1/4-20 x 1-3/4 | 10 |
| ASS | 1935212 | Spring, Comp. 7/32 x 1-3/4 x .23..... | 10 | CT | 1980109 | SHCS 1/4-20 x 3-1/2 | 10 |
| AXA | 1952101 | Key, Woodruff #606..... | 10 | CU | 1980110 | SCHS 1/4-20 x 4.0 | 10 |
| AUV | 1953613 | Bushing, Flanged, Nylon 3/16 | 10 | DW | 1980145 | SHCS 5/16-18 x 1-1/4 | 10 |
| AVD | 1953621 | Bushing, Flanged, Nylon 1/2 | 10 | ET | 1980215 | BHCS 4-40 x 1/4 | 10 |
| AVP | 1953631 | Bushing, Flanged, Nylon | 10 | FC | 1980230 | BHCS 6-32 x 1/4 | 10 |
| AVU | 1953636 | Bushing, Flanged, Nylon 3/8 | 10 | FF | 1980233 | BHCS 6-32 x 1/2 | 10 |
| AVX | 1953639 | Bushing, Flanged, Nylon 1/2 | 10 | FS | 1980254 | BHCS 8-32 x 1/4 | 10 |
| AXU | 1954109 | Dowel Pin, 3-16 x 1/2 | 10 | FU | 1980256 | BHCS 8-32 x 3/8 | 10 |
| BAX | 1960509 | Loctite | 10 | GA | 1980262 | BHCS 8-32 x 7/8 | 10 |
| P | 1980014 | SHCS 4-40 x 1/2 | 10 | GM | 1980277 | BHCS 10-32 x 1/4 | 10 |
| Q | 1980015 | SHCS 4-40 x 5/8 | 10 | GP | 1980279 | BHCS 10-32 x 3/8 | 10 |
| T | 1980018 | SHCS 4-40 x 1 | 10 | GV | 1980286 | BHCS 10-32 x 1 | 10 |
| Y | 1980028 | SHCS 6-32 x 3/8 | 10 | HH | 1980302 | BHCS 1/4-20 x 3/8 | 10 |
| Z | 1980029 | SHCS 6-32 x 1/2 | 10 | HQ | 1980309 | BHCS 1/4-20 x 1-1/4 | 10 |
| AA | 1980030 | SHCS 6-32 x 5/8 | 10 | LL | 1980430 | FHCS 6-32 x 1/4..... | 10 |
| AM | 1980046 | SHCS 8-32 X 1/4..... | 10 | LN | 1980432 | FHCS 6-32 x 3/8..... | 10 |
| AN | 1980047 | SCHS 8-32 x 3/8 | 10 | MW | 1980479 | FHCS 10-32 x 3/8..... | 10 |
| AP | 1980048 | SCHS 8-32 x 7/16 | 10 | NT | 1980505 | FHCS 1/4-20 x 3/4..... | 10 |
| AS | 1980051 | SHCS 8-32 x 5/8 | 10 | NX | 1980509 | FHCS 1/4-20 x 1-1/4 | 10 |
| AT | 1980052 | SHCS 8-32 x 3/4 | 10 | | | | |
| AV | 1980054 | SHCS 8-32 x 1 | 10 | | | | |
| BG | 1980070 | SHCS 10-32 x 3/8 | 10 | | | | |
| BH | 1980071 | SCHS 10-32 x 7/16 | 10 | | | | |
| BJ | 1980072 | SHCS 10-32 x 1/2 | 10 | | | | |
| BM | 1980075 | SHCS 10-32 x 3/4 | 10 | | | | |
| BP | 1980077 | SHCS 10-32 x 1 | 10 | | | | |
| BS | 1980080 | SHCS 10-32 x 1-1/2 | 10 | | | | |
| BT | 1980081 | SHCS 10-32 x 1-3/4 | 10 | | | | |
| BV | 1980083 | SHCS 10-32 x 2.5 | 10 | | | | |
| CB | 1980094 | SHCS 1/4-20 x 1/2 | 10 | | | | |
| CD | 1980095 | SHCS 1/4-20 x 5/8 | 10 | | | | |
| CE | 1980096 | SHCS 1/4-20 x 3/4 | 10 | | | | |
| CF | 1980097 | SHCS 1/4-20 x 7/8 | 10 | | | | |
| CG | 1980098 | SHCS 1/4-20 x 1 | 10 | | | | |

Part Number Index

| Part # | Description | PL |
|------------|---|--------------------|
| 0130001800 | Assy., Left Yoke (refer to PL 4.3 K Detail B)..... | 4.3 A |
| 0130001900 | Assy., Right Yoke (refer to PL 4.3 K Detail A) | 4.3 A |
| 0130002100 | Assy., Roller, Punch Assy..... | 4.3 B |
| 0130002100 | Assy., Roller Interface | 4.1 B, 4.1 E, 5.2C |
| 0130002200 | Roller, Crowned, Punch Assy | 4.3 B |
| 0130002200 | Roller,Crowned, Swing Frame | 4.1 A |
| 0130002300 | Spacer..... | 4.3 J |
| 0130002500 | Mount Angle, Document Transport..... | 4.2 A |
| 0130003300 | Bracket, Mounting, Document Transport | 4.2 A |
| 0130003300 | Mounting Bracket, Interface | 4.1 B |
| 0130003400 | Cross Member, Interface | 4.1 B |
| 0130003500 | Plate, Interface - Document Transport..... | 1.1 C |
| 0130003600 | Shaft, Interface Exit..... | 4.1 B |
| 0130004600 | Side Frame, L.H., Document Transport | 4.2 A |
| 0130004800 | Cross Member Main, Document Transport..... | 4.2 A |
| 0130004900 | Nut Washer, Belt Take Up | 4.2 A |
| 0130005100 | Bracket, Seperator Document Transport Belt Assy. | 4.2 D |
| 0130005200 | Side Frame, Document Transport Belt Assy..... | 4.2 D |
| 0130005400 | Support Bearing Plate, Document Transport..... | 4.2 A |
| 0130005500 | Ball Track, Document Transport | 4.2 E |
| 0130005600 | Shaft, Document Transport Belt Assy..... | 4.2 D |
| 0130005800 | Bracket, Angle, Document Transport Belt Assy..... | 4.2 D |
| 0130005900 | Spacer, Document Transport Belt Assy..... | 4.2 D |
| 0130006200 | Deck / Rail, Document Transport Belt Assy..... | 4.2 D |
| 0130007100 | Extension, Small | 4.1 C |
| 0130012600 | Assy., Pivot Block R.H. | 4.1 D |
| 0130012700 | Assy., Pivot Block L.H. | 4.1 D |
| 0130012900 | Deck, Swing Frame, R.H. | 4.1 A |
| 0130013100 | Deck, Swing Frame, R.H.Center..... | 4.1 A |
| 0130013200 | Deck, Swing Frame, L.H.Center | 4.1 A |
| 0130013300 | Deck, Swing Frame, L.H. | 4.1 A |
| 0130013400 | Tiebar, Swing Frame Ball Track..... | 4.1 F |
| 0130013500 | Deck, Interface, R.H..... | 4.1 B |
| 0130013600 | Deck, Interface, Center | 4.1 B |
| 0130013700 | Deck, Interface, L.H. | 4.1 B |
| 0130013900 | Shaft, Detent Ball Track | 4.1 F |

Part Number Index

| Part # | Description | PL |
|------------|--|--------------|
| 0130014100 | Cover, Swing Frame Ball Track Long..... | 4.1 F |
| 0130014300 | Cover, Swing Frame Ball Track Reflector Bracket..... | 4.1 F |
| 0130014400 | Bracket, Detent..... | 4.1 A |
| 0130014700 | Tie Bar, Interface Ball Track Assy | 4.1 G |
| 0130014800 | Strap Nut, Swing Frame | 4.1 C |
| 0130014900 | Shaft, Swing Frame Entrance | 4.1 A |
| 0130015100 | Shaft, Swing Frame Exit..... | 4.1 A, 4.1 C |
| 0130015500 | Shield, Document Transport Belt Assy..... | 4.2 B |
| 0130016400 | Sensor Mounting Bracket, Entrance..... | 4.1 A |
| 0130017200 | Pulley, 32 Tooth, Interface Main Drive | 1.1 G |
| 0130017800 | Roller, Crowned, Document Transport Belt Assy..... | 4.2 D |
| 0130017800 | Roller, Crowned, Interface Exit..... | 4.1 B |
| 0130018800 | Shaft, Mount, Punch Slide Assy | 4.3 F |
| 0130019100 | Cross Member, Swing Frame..... | 4.1 A |
| 0130019300 | Block, Punch Crank Arm | 4.3 C |
| 0130019400 | Shaft, Back Gauge | 4.3 A |
| 0130019500 | Shaft, Punch Clutch..... | 4.3 L |
| 0130019600 | Shaft, Idler, Punch Assy. | 4.3 B |
| 0130019700 | Shaft, Punch Assy | 4.3 B |
| 0130019800 | Solenoid Mount, Back Gauge..... | 4.3 C |
| 0130019900 | Pulley, Punch Clutch | 4.3 L |
| 0130021200 | Assy., Document Transport Belt (refer to PL 4.2 D)..... | 4.2 B |
| 0130021300 | Side Frame, R.H., Document Transport | 4.2 A |
| 0130021500 | Assy., Belt Take Up Document Transport Timing Belt | 4.2 A |
| 0130021900 | Assy., L.H. Swing Frame | 4.1 A, 4.1 C |
| 0130022000 | Assy., R.H. Swing Frame | 4.1 A, 4.1 C |
| 0130023000 | Assy., R.H. Interface Idler Arm Short | 4.1 E |
| 0130025100 | Assy., Clamp, Punch Output Nip Roller | 4.3 G |
| 0130025200 | Assy., Mount Block..... | 4.3 J |
| 0130025500 | Block, Tension Idler..... | 4.3 J |
| 0130025600 | Pulley, Tension Idler..... | 4.3 J |
| 0130025800 | Assy., Punch Crank Arm (refer to Detail A)..... | 4.3 D |
| 0130025900 | Assy., Punch Clutch (refer to PL 4.3 L Detail B) | 4.3 C |
| 0130026000 | Assy., Mount Block..... | 4.3 I |

Part Number Index

| Part # | Description | PL |
|------------|--|--------------|
| 0130026400 | Roller, Punch Output Idler..... | 4.3 M |
| 0130026800 | Assy., Back Gauge Adjust Block (refer to PL 4.3 L Detail A)..... | 4.3 C |
| 0130026900 | Assy., Slug Plate..... | 4.3 A |
| 0130028900 | Cam, Die Locking..... | 4.3 K |
| 0130031100 | Finger, Back Gauge..... | 4.3 A |
| 0130031400 | Cross Plate, Punch Assy. | 4.3 A |
| 0130031500 | Yoke, Punch Crank Arm | 4.3 D |
| 0130031600 | Guide, Diver Bar | 4.3 I, 4.3 J |
| 0130031700 | Dowel Pin, Punch Crank Arm Latch..... | 4.3 D |
| 0130031900 | Link, Punch Crank Arm..... | 4.3 D |
| 0130032000 | Pulley, Punch Drive..... | 4.3 C |
| 0130032100 | Pulley, 14 Tooth, 115 VAC 60 HZ Punch Motor | 1.1 F |
| 0130032200 | Shaft, Punch Output Nip Assy. | 4.3 M |
| 0130032300 | Spring, Punch Output Nip Assy. | 4.3 M |
| 0130032400 | Latch Keeper, Punch Crank Arm | 4.3 D |
| 0130033400 | Block, Back Gauge Control..... | 4.3 L |
| 0130033800 | Pulley, Punch Clutch Output..... | 4.3 L |
| 0130033900 | Shaft, Punch Clutch | 4.3 C |
| 0130034600 | Input Deck, Punch Assy..... | 4.3 B |
| 0130034900 | Mount, Input Deck..... | 4.3 I, 4.3 J |
| 0130035000 | Mount, Output Deck..... | 4.3 I, 4.3 J |
| 0130035400 | Shaft, Back Gauge Adjustment..... | 4.3 L |
| 0130035500 | Cam, Back Gauge Setting | 4.3 L |
| 0130035600 | Side Guide Mounting Block..... | 4.3 G |
| 0130035700 | Side Guide, Punch Assy. | 4.3 H |
| 0130035800 | Spacer, Short, Punch Slide Assy..... | 4.3 F |
| 0130037000 | Driver Pulley, Punch Assy..... | 4.3 B |
| 0130037800 | Clamp, Back Gauge..... | 4.3 C |
| 0130037900 | Yoke, R.H. Locking Cam Assy..... | 4.3 K |
| 0130038000 | Yoke, L.H. Locking Cam Assy. | 4.3 K |
| 0130038100 | Yoke, Tension Idler Thin | 4.3 J |
| 0130039100 | Pulley, 17 Tooth, 230 VAC 50 HZ Punch Motor | 1.1 F |
| 0130040200 | Pulley, 18 Tooth, Document Transport 230 VAC 50 HZ Motor | 5.1 B, 1.1 G |

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| Part # | Description | PL |
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| 1128416 | Label, Ground Symbol | 1.1 I, 1.2 A |
| 1722658 | CD Envelope | 1.1 H, 1.3 B |
| 1722675 | SVC History Log Book | 1.1 H, 1.3 B |
| 1924813 | Stand Off, Stacker Slide Assy. | 5.1 B |
| 1928203 | Wing Nut, Punch Assy. | 1.1 E |
| 1928203 | Wing Nut, Punch Slide Assy. | 4.3 F |
| 1951101 | Connector | 6.1 A, 6.2 A |
| 1951309 | Connector, Entrance Sensor | 4.1 A |
| 1952407 | Strain Relief, Stacker Cable Assy. | 1.2 C, 1.3 A |
| 1952407 | Strain Relief | 3.2, 3.3 |
| 1953114 | Plug, Button | 1.3 A |
| 1981303 | Belt, Timing, 90xl Stacker Tray | 5.1 A |
| 1981303 | Belt, Timing, Punch Output Idler | 4.3 E |
| 1981305 | Belt, Timing, 110xl O-ring Drive Assy. | 5.1 B |
| 1981306 | Belt, Timing, Punch Output Drive | 4.3 E |
| 1981309 | Belt, Timing, Punch Drive | 4.3 B |
| 1981311 | Belt, Timing, 85T, Bypass Drive | 1.3 A |
| 1981350 | Belt, Timing, Document Transport Main Drive | 1.1 G |
| 1981400 | Belt, Timing, Punch Clutch Output | 4.3 C |
| 1981401 | Belt, Timing, Punch Clutch | 4.3 C |
| 6009160 | Label, Stacker On / Off | 1.1 I, 1.2 A |
| 6009401 | Label, Electrical Shock | 1.1 H, 1.3 B |
| 6009406 | Label, Electrical Shock Triangle | 3.1, 3.2, 3.3 |
| 6009409 | Label, Earth Ground | 3.1, 3.2, 3.3 |
| 6009410 | Label, Re-Install Screw | 1.1 H |
| 6009410 | Label, Re-install Screw | 1.2 D, 1.3 B |
| 7610025 | Thumb Screw, Stacker Infeed Assy. | 5.1 D |
| 7610029 | Pulley, Timing, 20 Tooth, Stacker Assy. | 5.1 A |
| 7610043 | Bracket, Pivot O-ring Drive Assy. | 5.1 C |
| 7610044 | Bracket, Angle, O-ring Drive Assy. | 5.1 C |
| 7610045 | Pulley, Stacker Tray Motor | 1.2 C |
| 7610046 | Tapper, Short, Inside | 5.1 B |
| 7610047 | Shaft, Pivot, O-ring Drive Assy. | 5.1 B |

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| 7610048 | Pulley, V, O-ring Drive Assy..... | 5.1 C |
| 7610049 | Bracket, Tapper Solenoid | 5.1 B, 5.2 A |
| 7610053 | O-ring, O-ring Roller Assy..... | 5.1 C |
| 7610056 | O-ring, O-ring Drive Assy..... | 5.1 C |
| 7610057 | Lock, Slide, Stacker Assy. | 5.1 B |
| 7610058 | Back Stop, Stacker Assy..... | 5.1 A |
| 7610059 | Plate, Bottom, Stacker Assy. | 5.1 A |
| 7610062 | R.H. Stacker Side Frame | 5.1 A |
| 7610063 | L.H. Stacker Side Frame..... | 5.1 A |
| 7610064 | Rod, O-ring Drive Assy. | 5.1 C |
| 7610065 | Collar, Clamp, Stacker Slide Assy. | 1.2 B |
| 7610066 | Shaft, Tapper Assy. | 5.1 B |
| 7610067 | Cross Support, Stacker Assy. | 5.1 A |
| 7610069 | Pivot, O-ring Drive Assy..... | 5.1 C |
| 7610072 | Base Angle, Stacker Assy..... | 5.1 A |
| 7610073 | Nut, Acme, Stacker Assy. | 5.1 A |
| 7610074 | Screw, Acme, Stacker Assy..... | 5.1 A |
| 7610075 | Bracket, Stacker Tray | 5.1 A |
| 7610083 | Bushing, Stacker Tray Stop | 5.1 A |
| 7610085 | Deck, Stacker Assy..... | 5.1 A |
| 7610087 | Shaft, Linear, Stacker Assy..... | 5.1 A |
| 7610088 | Frame, O-ring Drive Assy. | 5.1 C |
| 7610089 | Bracket, Upper Switch | 5.1 A |
| 7610092 | Bracket, Almost Full & Full Switch | 5.1 A |
| 7610093 | Plate, Adjustable, Upper Switch..... | 5.1 A |
| 7610095 | Rod, Tie, O-ring Drive Assy. | 5.1 C |
| 7610096 | Shaft, Transfer, O-ring Drive Assy..... | 5.1 C |
| 7610097 | Deck, Slide, Stacker Assy..... | 5.1 A |
| 7610098 | Pivot, O-ring Drive Assy..... | 5.1 C |
| 7610105 | Assy., Enclosure, Stacker Assy. | 1.2 A |

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| Part # | Description | PL |
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| 7610106 | Cross Brace, Infeed Assy. | 5.1 D |
| 7610112 | Knob, Punch Assy. | 1.1 E |
| 7610113 | Cover, Stacker O-ring Motor..... | 1.2 C |
| 7610114 | Cover, Stacker Tray Motor | 1.2 C |
| 7610142 | Bracket, O-ring Roller Assy. | 5.1 C |
| 7610144 | Arm, O-ring Drive Assy. | 5.1 C |
| 7610145 | Bearing, Linear, Stacker Assy. | 5.1 A |
| 7610146 | Collar, Stacker Tray Safety Stop | 5.1 A |
| 7610152 | Knob, Stacker Slide Assy. | 5.1 B |
| 7610157 | Bearing, Flanged, 1/2 | 5.1 B |
| 7610158 | Bearing, Flanged, 3/8 | 5.1 A |
| 7610172 | Solenoid, Tubular, Offset..... | 5.1 C |
| 7610187 | Switch, Upper | 5.1 A |
| 7610188 | Switch, Almost Full & Full | 5.1 A |
| 7610189 | Bearing, Pillow Block, Punch Slide Assy. | 1.1 D |
| 7610189 | Bearing, Pillow Block, Stacker Assy. | 5.1 B |
| 7610190 | Rail, Linear, Stacker Assy. Support..... | 1.2 A |
| 7610191 | Motor, 115 VAC 60 HZ, Stacker Tray | 1.2 B |
| 7610192 | Motor, 115 VAC 60 HZ, Stacker O-ring | 1.2 B |
| 7610193 | Solenoid, Rotary, Back Gauge | 4.3 C |
| 7610193 | Solenoid, Rotary, Sheet Eject Assy. | 4.3 N |
| 7610193 | Solenoid, Rotary, Tapper Assy. | 5.1 B |
| 7610194 | Motor, 230 VAC 50 HZ, Stacker Tray | 1.2 B |
| 7610195 | Motor, 230 VAC 50 HZ, Stacker O-ring | 1.2 B |
| 7610222 | Pulley, 18 Tooth, Stacker O-ring Motor | 1.2 C |
| 7610223 | Assy., Paper Guide, Stacker Assy. (refer to PL 5.1 D) (Tag # S2) | 1.2 A |
| 7610227 | Guide, Paper, Input Panel | 1.1 H |
| 7610228 | Standoff, Hex 4-40..... | 1.1 I, 1.2 A |
| 7610233 | Guide, L.H, Punch Infeed | 4.3 N |
| 7610234 | Guide, R.H, Punch Infeed..... | 4.3 N |
| 7610236 | Label, Tag Matrix..... | 1.1 H, 1.3 B |
| 7610237 | Label, Punch Alignment..... | 1.1 H |
| 7610238 | Bracket, Entrance Paper Guide | 1.1 H |
| 7610239 | Guide, Paper, Document Transport Rail..... | 4.2 E |
| 7610244 | Paper Guide, Document Transport Long..... | 4.2 E |

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| Part # | Description | PL |
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| 7610245 | Swing Frame Ball Track | 4.1 F |
| 7610246 | Cover, Swing Frame Ball Track Short..... | 4.1 F |
| 7610248 | Interface Ball Track | 4.1 G |
| 7610252 | Shaft, Locking Cam Assy..... | 4.3 K |
| 7610255 | Strap, Paper Hold Down | 4.3 N |
| 7610257 | Lead Screw, Punch Slide Assy. | 4.3 F |
| 7610258 | Pulley, V, O-ring Drive Assy..... | 5.1 C |
| 7610259 | Cover, Document Transport Ball Track Exit Short | 4.2 E |
| 7610262 | Cover, Document Transport Ball Track Middle long | 4.2 E |
| 7610263 | Cover, Document Transport Ball Track Entrance Short..... | 4.2 E |
| 7610264 | Cross Member Interface Idler Arm Short | 4.1 E |
| 7610267 | Shaft, Interface Idler Arm Long | 4.1 E |
| 7610273 | Key Pad, Control Panel..... | 2.1 A |
| 7610276 | Runner, Punch Output Nip Assy. | 4.3 M |
| 7610277 | Shaft, Punch Output Idler..... | 4.3 M |
| 7610279 | Spring Plunger, Delrin Nose | 4.3 L |
| 7610282 | Paper Guide, Document Transport Short | 4.2 E |
| 7610283 | Block, Hinge, Punch Tension Strap Assy. | 4.3 H |
| 7610284 | Bracket, Hinge Support..... | 4.2 E |
| 7610285 | Paper Guide Support Plate | 4.2 E |
| 7610286 | Support, Document Transport Ball Track Assy. Front | 4.2 E |
| 7610287 | Latch Block, Document Transport..... | 4.2 A |
| 7610289 | Bar, Punch Tension Strap Assy. | 4.3 N |
| 7610292 | Base Plate, Punch Assy..... | 4.3 A |
| 7610295 | Post, Mount R.H., Punch Slide Assy..... | 4.3 F |
| 7610296 | Post, Mount L.H., Punch Slide Assy. | 4.3 F |
| 7610297 | Base Angle, Punch Assy..... | 4.3 A |
| 7610299 | Plate, Backer, Control Panel Key Pad | 2.1 A |
| 7610303 | Refeed Deck | 4.1 D |
| 7610304 | Bar, Paper Hold Down | 4.3 N |
| 7610305 | Plate, Reflector, Punch Sensor..... | 4.3 N |
| 7610318 | Brush, Anti-Static, Punch R.H. Side Panel | 1.1 H, 1.3 B |
| 7610322 | Deck, Punch Output..... | 4.3 D |
| 7610323 | Assy., Locking Cam (refer to PL 4.3 K Detail C)..... | 4.3 A |
| 7610324 | Assy., Interface Side Frame, R.H. | 4.1 B |
| 7610325 | Assy., Ball Track Interface (refer to PL 4.1 G) | 4.1 D |

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| Part # | Description | PL |
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| 7610326 | Assy., Interface Side Frame, L.H. | 4.1 B |
| 7610327 | Assy., L.H. Punch Side Frame refer to PL 4.3 J) | 4.3 A |
| 7610328 | Assy., R.H. Punch Side Frame (refer to PL 4.3 I) | 4.3 A |
| 7610329 | Assy., Punch Tension Strap (refer to PL 4.3 M)..... | 4.3 H |
| 7610332 | Assy., Punch Output Nip Roller (refer to PL 4.3 M)..... | 4.3 H |
| 7610333 | Brush, Anti-Static, Small..... | 4.3 N |
| 7610334 | Brush, Anti-Static, Large | 4.3 N |
| 7610337 | Assy., Slug Chute | 4.3 A |
| 7610339 | Assy., L.H. Punch Side Frame | 4.3 J |
| 7610340 | Assy., R.H. Punch Side Frame..... | 4.3 I |
| 7610341 | Assy., Ball Track Swing Frame (refer to PL 4.1 F) | 4.1 D |
| 7610343 | Bearing, Flanged, Punch Clutch Assy. | 4.3 C |
| 7610346 | Bearing w/Collar 1/2 | 4.2 A, 4.2 D |
| 7610347 | Clutch, Punch Assy. | 4.3 L |
| 7610348 | Pulley, Timing, 20 Tooth, Punch Assy..... | 4.3 E |
| 7610349 | Pulley, 30 Tooth, Document Transport Main Drive | 1.1 G |
| 7610352 | Gear, Spur, 30 Tooth..... | 5.1 B, 5.2 A |
| 7610352 | Gear, Spur, Small, Back Gauge | 4.3 E |
| 7610353 | Gear, Spur, Large, Back Gauge..... | 4.3 E |
| 7610357 | Coupling, Flex Beam, Document Transport Belt Assy. | 4.2 D |
| 7610358 | Assy., Document Transport Ball Track (refer to PL 4.2 E) | 4.2 C |
| 7610359 | Assy., Side Guide Infeed Strip | 4.3 H |
| 7610360 | Plunger Spring Bolt | 4.1 F |
| 7610361 | Tubbing, Polyurethane | 4.3 C |
| 7610365 | Reflector, Coner Cube, Entrance Sensor..... | 4.1 F |
| 7610365 | Reflector, Document Transport Sensor 1 and 2..... | 4.2 E |
| 7610365 | Reflector, Punch Sensor / Stacker Exit Sensor..... | 4.3 N, 1.3 A |
| 7610367 | Latch, Female Document Transport..... | 4.2 A |
| 7610367 | Latch, Male, Document Transport Assy. | 4.2 D |
| 7610368 | Latch, Female, Punch Tension Strap Assy. | 4.3 I |
| 7610368 | Latch, Male, Punch Tension Strap Assy. | 4.3 N |
| 7610370 | Belt, Flat, Punch Input .06 x 1 x 10.75 Endless..... | 4.3 B |
| 7610371 | Belt, Flat, Interface .06 x 1 x 14.4 Endless..... | 4.1 B |
| 7610372 | Belt, Flat, Swing Frame .06 x 1 x 27 Endless..... | 4.1 A |
| 7610373 | Belt, Flat, Document Transport .06 x 1 x 36.75 endless | 4.2 D |
| 7610374 | Ball, Delrin | 4.1 F, 4.2 D |

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| 7610375 | Ball, Steel..... | 4.2 E |
| 7610376 | Hinge, Plastic, Document Transport Ball Track Assy. | 5.2 E |
| 7610376 | Hinge, Punch Tension Strap Assy. | 4.3 N |
| 7610377 | Handle, Aluminum, Document Transport Ball Track Assy. | 4.2 E |
| 7610377 | Handle, Aluminum, Interface Idler Assy. | 4.1 E |
| 7610377 | Handle, Punch Tension Strap Assy. | 4.3 N |
| 7610378 | Assy., Interface (refer to PL 4.1 A-G)..... | 1.1 A |
| 7610380 | Assy., Document Transport (refer to PL 4.2 A-E) | 1.1 C |
| 7610381 | Rod End, Punch Crank Arm..... | 4.3 D |
| 7610382 | Assy., Punch (refer to PL 4.3 A-N)..... | 1.1 D |
| 7610388 | Thumb Screw, Punch Output Nip Assy. | 4.3 M |
| 7610390 | Thumb Screw, 10-32..... | 5.2 B |
| 7610393 | Strap/Bracket, Punch Sensor Assy. | 4.3 A |
| 7610402 | Brush, Anti-static, Interface..... | 4.1 E |
| 7610404 | Thumb Screw, Side Guide Assy. | 4.3 H |
| 7610407 | Handle, Interface, Adjustable 5/16-1/8 THD | 4.1 C |
| 7610414 | Plate, Rail, Punch Slide Assy..... | 1.1 D |
| 7610415 | Rail, Linear, Punch Slide Support..... | 1.1 D |
| 7610416 | Standoff, Hex 4-40 | 3.3 |
| 7610418 | Motor, 115 VAC 60 HZ, Document Transport..... | 1.1 B |
| 7610418 | Motor, 115 VAC 60 HZ, Punch | 1.1 F |
| 7610421 | Sensor, Document Transport (1 & 2)..... | 4.2 A |
| 7610421 | Sensor, Document Transport 1 & 2 (Cable Assy. included with Sensor)..... | 6.1 A |
| 7610423 | Sensor, Entrance | 4.1 A |
| 7610423 | Sensor, Punch | 4.3 A |
| 7610423 | Sensor, Punch & Entrance (Cable Assy. included with Sensor)..... | 6.1 A |
| 7610424 | Sensor, Punch Exit | 4.3 D |
| 7610424 | Sensor, Punch Exit (Cable Assy. included with Sensor)..... | 6.1 A |
| 7610425 | Motor, 230 VAC 50 HZ, Document Transport..... | 1.1 B |
| 7610425 | Motor, 230 VAC 50 HZ, Punch | 1.1 F |
| 7610427 | Bracket, Static Brush, Interface | 4.1 E |
| 7610428 | Deck, Document Transport | 4.2 B |
| 7610435 | Label, Die Lock Knob..... | 1.1 E |
| 7610436 | Label, Back Gauge Knob | 1.1 E |
| 7610437 | Label, Edge Guide Knob..... | 1.1 E |
| 7610439 | Bucket, Slug, Punch Assy..... | 1.1 E |

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| Part # | Description | PL |
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| 7610440 | Label, LOGO | 1.1 H |
| 7610442 | Assy., Idler Roller, Sheet Eject Assy. | 4.3 N |
| 7610444 | Arm, Sheet Eject Assy. | 4.3 N |
| 7610445 | Shaft, Sheet Eject Assy. | 4.3 N |
| 7610446 | Plate, Solenoid, Sheet Eject Assy. | 4.3 N |
| 7610447 | Bracket, Punch Crank Arm - Non Op Side | 4.3 A |
| 7610449 | Label, Factory Set Do not Adjust..... | 4.3 D |
| 7610450 | PWB, Punch AC/DC Distribution | 3.1 |
| 7610450 | PWB, Stacker AC/DC Power Distribution..... | 3.2, 3.3 |
| 7610452 | PWB, Daughter | 3.1 |
| 7610453 | PWB, 24 VDC Power Supply | 3.1 |
| 7610454 | PWB, 5 VDC Power Supply | 3.1 |
| 7610455 | Switch / Circuit Breaker, Punch Main Power | 1.1 I |
| 7610455 | Switch / Circuit Breaker, Stacker Main Power | 1.2 A |
| 7610456 | AC Receptical / Line Filter, Stacker Main Power..... | 1.2 A |
| 7610457 | PWB, Little Star Controller (Tag # P1, S4, P4, & P5)..... | 3.1 |
| 7610458 | PWB, Little Star Controller Expansion..... | 3.1 |
| 7610459 | LCD Display | 2.1 A |
| 7610460 | Relay, DC, Punch I/O Opto | 3.1 |
| 7610460 | Relay, DC, Stacker I/O Opto | 3.2, 3.3 |
| 7610461 | Relay, AC, Stacker AC/DC Distribution Opto | 3.2, 3.3 |
| 7610464 | Cable Assy., Line Filter - Power Switch | 1.1 I, 1.2 A |
| 7610464 | Cable Assy., Punch Main Power Switch / Circuit Breaker - Punch AC Receptical / Line Filter..... | 6.1 C |
| 7610464 | Cable Assy., Stacker Main Power Switch / Circuit Breaker - Stacker AC Receptical / Line Filter..... | 6.1 C |
| 7610465 | Cable Assy., Power Switch - AC/DC Power Distribution PWB..... | 1.1 I, 1.2 A |
| 7610465 | Cable Assy., Punch AC/DC Distribution PWB P/J 1 - Main Power Switch / Circuit Breaker..... | 6.1 B |
| 7610465 | Cable Assy., Punch Main Power Switch / Circuit Breaker - Punch AC/DC Distribution PWB P/J 1..... | 6.1 C |
| 7610465 | Cable Assy., Stacker AC/DC Distribution PWB P/J 1 - Stacker Main Power Switch / Circuit Breaker..... | 6.2 B |
| 7610465 | Cable Assy., Stacker Main Power Switch / Circuit Breaker - Stacker AC/DC Distribution PWB P/J 1..... | 6.2 C |
| 7610466 | Cable Assy., Punch AC/DC Distribution PWB P/J 2 - 24 VDC Power Supply P/J CN2 | 6.1 B |
| 7610467 | Cable Assy., Punch AC/DC Distribution PWB P/J 4 - 24 VDC Power Supply P/J CN1 | 6.1 B |
| 7610468 | Cable Assy., Punch AC/DC Distribution PWB P/J 3 - 5 VDC Power Supply P/J CN2 | 6.1 B |
| 7610469 | Cable Assy., Punch AC/DC Distribution PWB P/J 5 - 5 VDC Power Supply P/J CN1 | 6.1 B |
| 7610470 | Cable Assy., Punch AC/DC Distribution PWB P/J 6 - Punch Interlock High | 6.1 B |

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| 7610470 | Cable Assy., Punch Interlock High - Punch AC/DC Distribution PWB P/J 6..... | 6.1 C |
| 7610470 | Cable Assy., Punch Interlock High..... | 1.1 A |
| 7610471 | Cable Assy., Punch I/O PWB P/J 19 & 20 - Punch Interlock Low | 6.1 A |
| 7610471 | Cable Assy., Punch Interlock Low | 1.1 A |
| 7610471 | Cable Assy., Punch Interlock Low - Punch I/O PWB P/J 19 and 20..... | 6.1 C |
| 7610472 | Cable Assy., Punch Interlock Jumpers | 6.1 C |
| 7610472 | Cable Assy., Punch Interlock Jumpers | 1.1 A |
| 7610473 | Cable Assy., Document Transport Motor..... | 1.1 B |
| 7610473 | Cable Assy., Punch AC/DC Distribution PWB P/J 8 - Document Transport Motor..... | 6.1 B |
| 7610474 | Cable Assy., Punch AC/DC Distribution PWB P/J 9 - Punch Motor | 6.1 B |
| 7610474 | Cable Assy., Punch Motor | 1.1 F |
| 7610475 | Cable Assy., Punch AC/DC Distribution PWB P/J 15 - Punch I/O PWB P/J 29 | 6.1 B |
| 7610475 | Cable Assy., Punch I/O PWB P/J 29 - Punch AC/DC Distribution PWB P/J 15 | 6.1 A |
| 7610475 | Cable Assy., Stacker AC/DC Distribution PWB P/J 15 - Stacker I/O PWB P/J 29 | 6.2 B |
| 7610475 | Cable Assy., Stacker I/O PWB P/J 29 - Stacker AC/DC Distribution PWB P/J 15 | 6.2 A |
| 7610476 | Cable Assy., Punch AC/DC Distribution PWB P/J 11 - Punch I/O PWB P/J 30 | 6.1 B |
| 7610476 | Cable Assy., Punch I/O PWB P/J 30 - Punch AC/DC Distribution PWB P/J 11 | 6.1 A |
| 7610477 | Cable Assy., Punch AC/DC Distribution PWB P/J 12 - Punch I/O PWB P/J 23 | 6.1 B |
| 7610477 | Cable Assy., Punch I/O PWB P/J 28 - Punch AC/DC Distribution PWB P/J 12 | 6.1 A |
| 7610477 | Cable Assy., Stacker AC/DC Distribution PWB P/J 12 - Stacker I/O PWB P/J 23 | 6.2 B |
| 7610477 | Cable Assy., Stacker I/O PWB P/J 23 - Stacker AC/DC Distribution PWB P/J 12 | 6.2 A |
| 7610478 | Cable Assy., Punch I/O PWB P/J 3B - Punch Clutch Solenoid | 6.1 A |
| 7610479 | Cable Assy., Punch I/O PWB P/J 4B - Back Gauge Solenoid | 6.1 A |
| 7610480 | Cable Assy., Punch I/O PWB P/J 5B - Sheet Eject Solenoid | 6.1 A |
| 7610481 | Cable Assy., Little Star Controller PWB P/J 3 - Punch I/O PWB P/J 24A & 25 | 6.1 D |
| 7610481 | Cable Assy., Punch I/O PWB P/J 24A and 25 - Little Star Controller PWB P/J 3..... | 6.1 A |
| 7610482 | Cable Assy., Little Star Controller PWB P/J 1 - Punch I/O PWB P/J 22, 23A, & 26 | 6.1 D |
| 7610482 | Cable Assy., Punch I/O PWB P/J 22, 23A, and 26 - Little Star Controller PWB P/J 1..... | 6.1 A |
| 7610483 | Cable Assy., Punch AC/DC Distribution PWB P/J 14 - Stacker AC/DC Distribution PWB P/J 14 | 6.1 B |
| 7610483 | Cable Assy., Stacker AC/DC Distribution PWB P/J 14 - Punch AC/DC Distribution PWB P/J 14 | 6.2 B |
| 7610484 | Cable Assy., Daughter PWB P/J 22, 23, 24, & 25 - Stacker I/O PWB P/J 22, 23A, 24A, and 25..... | 6.1 D |
| 7610484 | Cable Assy., Stacker I/O PWB P/J 22, 23A, 24A, and 25 - Daughter PWB P/J 22, 23, 24, & 25..... | 6.2 A |
| 7610485 | Cable Assy., Stacker I/O PWB P/J 19 & 20 - Stacker Interlock Low | 6.2 A |
| 7610485 | Cable Assy., Stacker Interlock Low | 1.2 A |
| 7610485 | Cable Assy., Stacker Interlocks Low - Stacker I/O PWB P/J 19 & 20..... | 6.2 C |
| 7610486 | Cable Assy., Stacker AC/DC Distribution PWB P/J 6 - Stacker Interlock High..... | 6.2 B |

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| 7610486 | Cable Assy., Stacker Interlocks High - Stacker AC/DC Distribution PWB P/J 6 | 6.2 C |
| 7610486 | Cable Assy., Stacker Interlock High | 1.2 A |
| 7610487 | Cable Assy., Stacker Tray Motor..... | 1.2 C, 3.3 |
| 7610487 | Cable Assy., Stacker AC/DC Distribution PWB P/J 7 - Stacker Tray Motor..... | 6.2 B, 3.3 |
| 7610487 | Cable Assy., Stacker Tray Motor..... | 3.2, 3.3 |
| 7610488 | Cable Assy., Stacker O-ring Motor | 1.2 C, 3.3 |
| 7610488 | Cable Assy., Stacker AC/DC Distribution PWB P/J 8 - Stacker O-ring Motor..... | 6.2 B, 3.3 |
| 7610488 | Cable Assy., Stacker O-ring Motor | 3.2, 3.3 |
| 7610490 | Cable Assy., Stacker AC/DC Distribution PWB P/J 11 - Stacker I/O PWB P/J 30..... | 6.2 B |
| 7610490 | Cable Assy., Stacker I/O PWB P/J 30 - Stacker AC/DC Distribution PWB P/J 11 | 6.2 A |
| 7610491 | Cable Assy., Stacker I/O PWB P/J 3B, 4A, 5A, & 9 - Stacker Tapper and Offset Solenoids and Upper Switch..... | 6.2 A |
| 7610493 | Cable Assy., Stacker I/O PWB P/J - Almost Full and Full Switches..... | 6.2 A |
| 7610494 | Cable Assy., Daughter PWB P/J 1 - Punch I/O PWB P/J 27 | 6.1 D |
| 7610494 | Cable Assy., Punch I/O PWB P/J 27 - Daughter PWB P/J 1 | 6.1 A |
| 7610495 | Cable Assy., Daughter PWB P/J 5 - Control Panel Key Pad | 6.1 D |
| 7610495 | Cable Assy., Key Pad..... | 2.1 A |
| 7610496 | Cable Assy., Daughter PWB P/J 3 - Control Panel LCD Display | 6.1 D |
| 7610496 | Cable Assy., LCD Display | 2.1 A |
| 7610497 | Cable Assy., Little Star Cotrller PWB P/J H1 - Daghter PWB P/J 2 | 6.1 D |
| 7610500 | Cable Assy., DFA From Printer | 1.1 I |
| 7610500 | Cable Assy., DFA, Punch I/O PWB - Punch Rear Panel | 6.1 A |
| 7610500 | Cable Assy., DFA, Punch Rear Panel - Punch I/O PWB | 6.1 C |
| 7610500 | Cable Assy., DFA, Stacker I/O PWB - Stacker Rear Panel | 6.2 A |
| 7610500 | Cable Assy., DFA, Stacker Rear Panel - Stacker I/O PWB | 6.2 C |
| 7610500 | Cable Assy., Downstream DFA..... | 1.2 A |
| 7610501 | Switch, Punch Interlock (Xerox Part Number 110P2340) | 1.1 A |
| 7610501 | Switch, Stacker Interlock (Xerox Part Number 110P2340) | 1.2 A |
| 7610502 | Cable Assy., Daughter PWB for Second Stacker P/J 22, 23, 24, & 25 - Stacker I/O PWB # 2 P/J 22, 23A, 24A, and 25.. | 6.1 D |
| 7610502 | Cable Assy., Stacker I/O PWB # 2 P/J 22, 23A, 24A, and 25 - Daughter PWB for Second Stacker P/J 22, 23, 24, & 25. | 6.2 A |
| 7610503 | Cable Assy., Stacker AC/DC Distribution PWB P/J 10 - Stacker Bypass Motor | 6.2 B, 1.3 A, 3.3 |
| 7610504 | Cable Assy., Stacker I/O PWB P/J 6A - Stacker Bypass Solenoid | 6.2 A, 1.3 A |
| 7610505 | Cable Assy., Stacker #1 AC/DC Distribution PWB P/J 13 - Stacker #2 AC/DC Distribution PWB P/J 14..... | 6.2 B, 3.3 |
| 7610508 | Eprom with latest version programmed (Tag # P1, S4, P4, & P5) | 3.1 |
| 7610516 | Cable Assy., Downstream DFA (Tag # S3)..... | 1.3 A |
| 7610517 | Assy., One Way Clutch Pulley (Tag # P2)..... | 4.3 B |
| 7610518 | PWB, Punch I/O (Tag # S3) | 3.1 |
| 7610518 | PWB, Stacker I/O (Tag # S3) | 3.2, 3.3 |
| 7610521 | Shaft, Document Transport Main Drive (Tag # P2) | 1.1 G |

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| Part # | Description | PL |
|---------|--|---------------|
| 7610529 | PWB, Punch / Stacker I/O (Tag # S3 & P5) | 3.1, 3.2, 3.3 |
| 7610530 | Paper Guide, Entrance, Top, 6060 / iGen3 (Tag # P5) | 1.1 H |
| 7610531 | Paper Guide, Entrance, Bottom, 6060 / iGen3 (Tag # P5) | 1.1 H |
| 7610532 | Pulley, 48 Tooth, Document Transport Main Drive, 6060 / iGen3 (Tag # P5) | 1.1 G |
| 7610533 | Belt, Timing, Document Transport Main Drive, 6060 / iGen3 (Tag # P5) | 1.1 G |
| 7610534 | Pulley, 32 Tooth, Bypass Motor, 6060 / iGen3 (Tag# P5) | 1.3 A |
| 7610535 | Pulley, Timing, 24 Tooth, Stacker Bypass Main Drive, 6060 / iGen3 (Tag # P5) | 5.2 C |
| 7610537 | Assy., Belt Take Up Document Transport Timing Belt, 6060 / iGen3 (Tag # P5) | 4.2 A |
| 7610573 | Panel, Bypass Stacker Output | 1.3 B |
| 7610599 | Enclosure, Punch Assy. | 1.1 A |
| 7610621 | Panel, Punch Entrance, 4xxx / 6060 / iGen3 (Tag # P5) | 1.1 H |
| 7610638 | Panel, Stacker Output | 1.3 B |
| 7610678 | Pin, Docking, Top Alignment | 1.3 B |
| 7610679 | Cover, Plate, Bypass Stacker Output Panel | 1.3 B |
| 7610680 | Plate, Docking, Bypass Stacker Assy. | 1.3 B |
| 7610729 | Fuse, 3A Slow Blow | 3.2, 3.1, 3.3 |
| 7610743 | Pulley, 15 Tooth, Document Transport 115 VAC 60 HZ Motor | 1.1 G |
| 7611002 | Assy., Stacker (refer to PL 5.1 A-D) | 1.2 A |
| 7611198 | Guide, Paper, Bypass Assy. | 5.2 C |
| 7611914 | Paper Guide, Long, Stacker Infeed Assy. (Tag # S4) | 5.1 D |
| 7611915 | Paper Guide, Short, Stacker Infeed Assy. (Tag # S4) | 5.1 D |
| 7611916 | Bracket, Extension R.H. Infeed Assy.(Tag # S4) | 5.1 D |
| 7611917 | Bracket, Extension L.H. Infeed Assy. (Tag # S4) | 5.1 D |
| 7611918 | Bracket, R.H. Infeed Assy. (Tag # S4) | 5.1 D |
| 7611919 | Bracket, L.H. Infeed Assy. (Tag # S4) | 5.1 D |
| 7611922 | Assy., Paper Guide, Bypass Stacker Assy. | 1.3 A |
| 7611923 | Guide, Wire Form, Long, Stacker Infeed Assy. | 5.1 D |
| 7611924 | Cross Bar, Long Wire Form Assy. | 5.1 D |
| 7611925 | Link, Cross Bar, Short Wire Form Assy. | 5.2 D |
| 7611926 | Cross Bar, Short Wire Form Assy. | 5.2 D |
| 7611927 | Guide, Wire Form, Short, Bypass Stacker Assy. | 5.2 D |
| 7611939 | Bracket, Stacker Exit Sensor | 1.3 A |
| 7611942 | Cover, Bottom, Bypass Motor Pulley | 1.3 A |
| 7611944 | Sensor, Stacker Exit, (7610424 = Sensor without Cable Assy.) | 1.3 A |
| 7611945 | Solenoid, Rotary, Bypass Gate | 5.2 A |
| 7611946 | Cover, Top, Bypass Motor Pulley | 1.3 A |
| 7611947 | Shield, Bypass Assy. | 1.3 A |
| 7611951 | Assy., Bypass | 1.3 A |

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| Part # | Description | PL |
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| 7611952 | Pulley, Timing, 18 Tooth..... | 5.2 C |
| 7611953 | Cross Bar, Bypass Input..... | 5.2 A |
| 7611953 | Cross Bar, Bypass Input..... | 5.2 C |
| 7611956 | Pulley, Bypass Motor..... | 1.3 A |
| 7611957 | Guide, Paper, Bypass Assy..... | 5.2 B |
| 7611958 | Cross Bar, Bypass Assy..... | 5.2 B |
| 7611959 | Guide, Paper, Wide, Bypass Assy. | 5.2 C |
| 7611962 | Assy., Idler Roller, Bypass Assy..... | 5.2 A |
| 7611963 | Assy., Hub, Bypass Output | 5.2 B |
| 7611965 | Support, Idler Roller | 5.2 C |
| 7611966 | Plate, Bypass Input Idler Roller Assy. | 5.2 C |
| 7611967 | Tie Bar, Bypass Deck Support | 5.2 A |
| 7611968 | Shaft, Drive, Bypass Assy. | 5.2 C |
| 7611969 | Plate, Bypass Deck Motor | 1.3 A |
| 7611970 | Shaft, Input Idler Roller Assy..... | 5.2 C |
| 7611972 | Deck, Bypass | 5.2 A |
| 7611976 | Plate, Nut, Bypass Assy. | 5.2 A |
| 7611980 | Assy., Side Plate, LH..... | 5.2 A |
| 7611981 | Assy., Side Plate, RH | 5.2 A |
| 7611982 | Assy., Idler Roller | 5.2 C |
| 7611983 | Assy., Drive Roller, Bypass Belt..... | 5.2 C |
| 7611984 | Shaft, Bypass Gate | 5.2 A |
| 7611985 | Slide, Bypass Assy. | 5.2 A |
| 7611987 | Shaft, Idler, Bypass Ouput | 5.2 A |
| 7611987 | Shaft, Idler, Bypass Assy. | 5.2 C |
| 7611989 | Pin, Docking, Bypass Assy..... | 1.3 A |
| 7611990 | Motor, Bypass, 230V | 1.3 A |
| 7611991 | Motor, Bypass, 115V | 1.3 A |
| 7611992 | Bracket, Docking, LH, Bypass Assy. | 1.3 A |
| 7611993 | Bracket, Docking, RH, Bypass Assy. | 1.3 A |
| 7611994 | Bar, Docking, Bypass Assy. | 1.3 A |
| 7611995 | Screw, Spring Adjust | 5.2 A |
| 7611996 | Belt, Flat, Bypass Assy..... | 5.2 C |
| 7611997 | Finger, Bypass Gate..... | 5.2 A |
| 7611999 | Deflector, Bypass Input | 5.2 A |

Recommended Spare Parts List

| Part # | Description | Qty |
|---------|----------------------------------|-----|
| 1722704 | Recommended Spare Parts Kit..... | 1 |

Recommended Spare Parts Kit includes the following:

| Part # | Description | Qty |
|------------|---|-----|
| 0130002100 | Assy., Roller | 4 |
| 0130031100 | Finger, Back Gauge | 2 |
| 1981303 | Belt, Timing, | 1 |
| 1981305 | Belt, Timing, 110xl O-ring Drive Assy. | 1 |
| 1981306 | Belt, Timing, Punch Output Drive..... | 1 |
| 1981309 | Belt, Timing, Punch Drive..... | 1 |
| 1981311 | Belt, Timing, 85xl, Bypass Drive | 1 |
| 1981350 | Belt, Timing, Document Transport Main Drive | 1 |
| 1981400 | Belt, Timing, Punch Clutch Output | 1 |
| 1981401 | Belt, Timing, Punch Clutch..... | 1 |
| 7610053 | O-ring, O-ring Roller Assy. | 2 |
| 7610056 | O-ring, O-ring Drive Assy. | 1 |
| 7610157 | Bearing, Flanged, 1/2..... | 2 |
| 7610158 | Bearing, Flanged, 3/8..... | 1 |
| 7610172 | Solenoid, Tubular, Offset | 2 |
| 7610187 | Switch, Upper..... | 1 |
| 7610188 | Switch, Almost Full & Full..... | 1 |
| 7610193 | Solenoid, Rotary..... | 2 |
| 7610232 | Solenoid, Punch Clutch..... | 1 |
| 7610235 | FusionPunch II Common Hardware Kit..... | 1 |
| 7610255 | Strap, Paper Hold Down | 3 |
| 7610273 | Key Pad, Control Panel..... | 1 |
| 7610346 | Bearing w/Collar 1/2"..... | 6 |
| 7610352 | Gear, Spur, 30 Tooth | 1 |
| 7610353 | Gear, Spur, Large, Back Gauge..... | 1 |
| 7610357 | Coupling, Flex Beam, Document Transport Belt Assy. | 1 |

Recommended Spare Parts List

| Part # | Description | Qty |
|---------|--|-----|
| 7610359 | Assy., Side Guide Infeed Strip | 1 |
| 7610365 | Reflector | 1 |
| 7610370 | Belt, Flat, Punch Input .06 x 1 x 10.75 Endless..... | 3 |
| 7610371 | Belt, Flat, Interface .06 x 1 x 14.4 Endless..... | 2 |
| 7610372 | Belt, Flat, Swing Frame .06 x 1 x 27 Endless..... | 3 |
| 7610373 | Belt, Flat, Document Transport .06 x 1 x 36.75 endless | 1 |
| 7610374 | Ball, Delrin | 24 |
| 7610375 | Ball, Steel | 2 |
| 7610376 | Hinge, Plastic | 1 |
| 7610381 | Rod End, Punch Crank Arm | 2 |
| 7610421 | Sensor | 1 |
| 7610423 | Sensor | 1 |
| 7610424 | Sensor | 1 |
| 7610442 | Assy., Idler Roller, Sheet Eject Assy. | 2 |
| 7610450 | PWB, AC/DC Distribution | 1 |
| 7610452 | PWB, Daughter | 1 |
| 7610453 | PWB, 24 VDC Power Supply | 1 |
| 7610454 | PWB, 5 VDC Power Supply | 1 |
| 7610455 | Switch / Circuit Breaker, Main Power | 1 |
| 7610456 | AC Receptical / Line Filter, Main Power..... | 1 |
| 7610457 | PWB, Little Star Controller | 1 |
| 7610458 | PWB, Little Star Controller Expansion | 1 |
| 7610459 | LCD Display | 1 |
| 7610460 | Relay, DC, I/O Opto | 2 |
| 7610461 | Relay, AC, Stacker AC/DC Distribution Opto | 1 |
| 7610501 | Switch, Interlock (Xerox Part # 110P2340) | 3 |
| 7610506 | Tool, T Handle 0.100..... | 1 |
| 7610507 | Tool, T Handle 0.156..... | 1 |
| 7610533 | Belt, Timing, Document Transport Main Drive, 6060 /iGen3 (Tag # P5)..... | 1 |
| 7610729 | Fuse, 3A Slow Blow | 5 |
| 7611996 | Belt, Flat, Bypass Assy..... | 1 |

6. General Procedures/Information

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Introduction

This section contains information about specific precautions, product specifications, general procedures, modification information and special tools.

This section also contains host enablement procedures and personality profiles for host printer to specific finisher equipment.

Precautions

Follow these safety, ESD, and servicing precautions to prevent personal injury and equipment damage.

1. Check that all built-in protective devices, such as Interlock Switches and Wire Channel Covers, are in place. Restore any missing protective devices.
2. Check that there are no Cabinet or Wire Channel openings through which people might insert fingers or objects and contact dangerous voltages.
3. When re-installing assemblies, restore all protective devices and covers.
4. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this equipment, such as auxiliary connectors, etc. Such alterations and modifications will void the manufacturer's warranty.
5. Components, parts, and wiring that appear to have overheated or are otherwise damaged should be replaced with parts which meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
6. Observe the original lead dress, especially near sharp edges, AC, and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring.
7. Replacement component differs from the original. This holds true even though the replacement may be rated for higher voltage, wattage, etc.

ESD Precautions

Certain semiconductor devices easily damaged by static electricity are commonly called "Electrostatically Sensitive Devices", or ESDs. Examples of typical ESDs are: integrated circuits, some field effect transistors, and semiconductor components.

The techniques outlined below should be followed to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling a semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, employ a commercially available wrist strap device, which should be removed for personal safety reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESDs, place the assembly on a conductive surface, such as aluminum or copper foil, or conductive foam, to prevent electrostatic charge buildup in the vicinity of the assembly.
3. Do not use Freon-propelled chemicals. When sprayed, these can generate electrical charges sufficient to damage ESDs.
4. Do not remove a replacement ESD from its protective packaging until immediately before installing it. Most replacement ESDs are packaged with all leads shorted together by conductive foam, aluminum foil, or a comparable conductive material.
5. Immediately before removing the protective shorting material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
6. Maintain continuous electrical contact between the ESD and the assembly into which it will be installed, until completely plugged or soldered into the circuit.
7. Minimize bodily motions when handling unpackaged replacement ESDs. Normal motions, such as the brushing together of clothing fabric and lifting one's foot from a carpeted floor, can generate static electricity sufficient to damage an ESD.

Specifications

Table 6-1 Machine Dimensions

| Dimension | English | Metric |
|-----------------|--|----------------------------|
| Depth | 32 inches | 813 mm |
| Height | 46 inches | 1140 mm |
| Length* | 81 inches | 2058 mm |
| Weight | Punch: 620 lb Stacker: 270 lb Bypass Stacker: 320 lb | 281 kg 123 kg 145 kg |
| Shipping Weight | Punch: 920 lb Stacker: 470 lb Bypass Stacker: 520 lb | 417 kg 213 kg 236 kg |

Table 6-2 Electrical Power

| Finisher | Power Requirement |
|----------|---|
| Punch | 115V, 60 Hz, 4.7 A*/ 230V, 50 Hz, 6.8 A* |
| Stacker | 115V, 60 Hz, 1.0 A*/ 230V, 50 Hz, 0.25A* * Dedicated outlet(s) recommended |

Table 6-3 Environment

| | |
|-------------------------|---------------------------------|
| Relative Humidity | 30 - 95%, non-condensing |
| Ambient Air Temperature | 41 - 104° F (5 - 40°C) |
| Altitude Rating | 3280 ft. (1 000 meters) minimum |

Sound Emission = 64.7 db, Idling.

Sound Emission = 73.7 db, Punch/Stacker.
Measured in a near free field environment, at a height of 59.05 in. (1500 mm) over the floor, with machine punching paper.

Heat Output = 1198 btu / hour (115 V 60Hz).

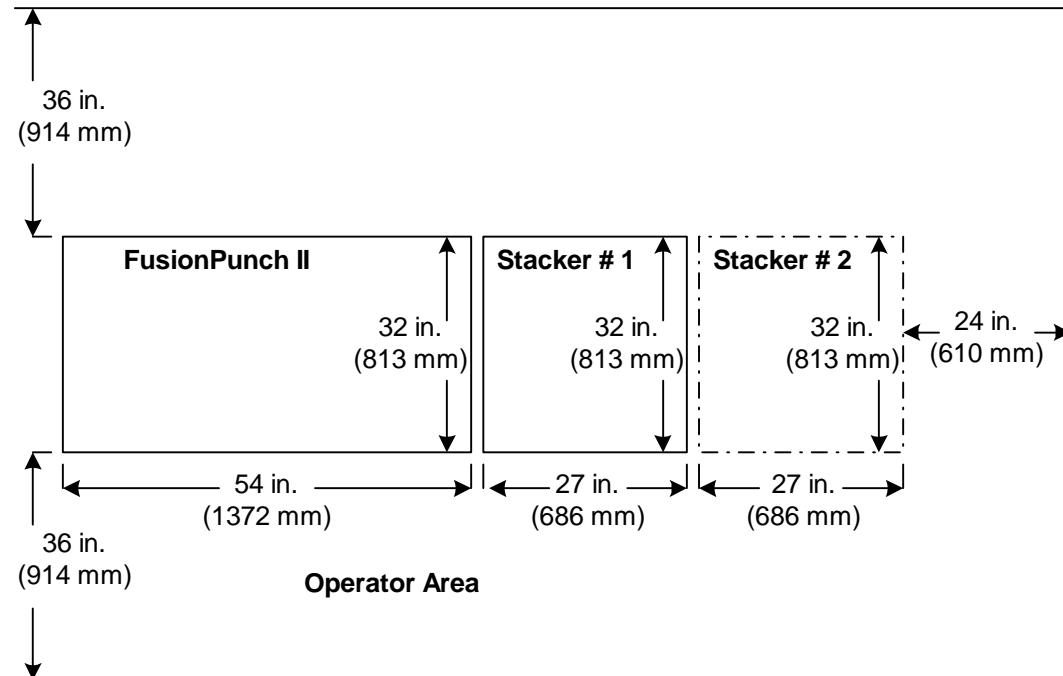
Heat Output = 2150 btu / hour (230 V 50 Hz).

This figure represents heat output for both the Punch and Stacker combined.

Table 6-4 Paper Dimension

| | |
|----------------|--|
| Productivity | Speed of the Printer |
| Paper Stock | 60 gsm Bond to 250 gsm (12 pt) 16 lb bond to 110 lb Index |
| Sheet Size | 7 x 10-in. to A4 including index tabs |
| Paper Finish | Laminated and Plastic stocks are not recommended. |
| Stacker Output | Each Stacker holds 2,500 sheets. |

Floor Plan including Operating and Overall Maintenance Area



GP-1 Enter / Exit Diagnostic Mode Procedure

In the diagnostic mode, the technician checks the machine operation and performs various tests to isolate the cause of a malfunction.

- To enter the DIAGNOSTICS mode, press the Diagnostics Button 4 times. The LCD displays the following messages after each time the Diagnostics Button has been successfully pressed down.
 - 1 time: Version Control Current: AXXX
 - 2 time: Punches Completed:
Count: XXXXXX
 - 3 time: Language English
 - 4 time: For Service Menu Enter Key Code
- The LCD should now display "**For Service Menu Enter Key Code**".

NOTE: If one of the 3 first messages above displays on the LCD, try again and this time press and hold down the key for at least one second each time.
- Enter the Key Code by pressing the Buttons in the sequence described below, starting with:
 - 1. Left Arrow
 - 2. Right Arrow
 - 3. Down Arrow
 - 4. Up Arrow
- The LCD should now display "**Offset Mode ON: Current : 1**".

NOTE: If the message on the LCD displays something else, try again and this time press and hold down the key for at least one second each time.

- Once the LCD has displayed "**Offset Mode ON: Current : 1**", the message on the LCD will change according to Table 6-5 each time you press the Diagnostics button.

NOTE: To change the values of each Diagnostics function in Table 6-5, press the Up or Down Arrow accordingly.

- To exit Diagnostics mode, turn Punch Main Power Switch / Circuit Breaker OFF and then ON.

Table 6-5

| LCD Display | Diagnostic Function |
|---------------------------------------|--|
| Offset Mode On: Current: 1 | 0 - No Offsetting <1 - Normal Offsetting 2 - Test - Offset every 4 sheets |
| Clutch On Set msec: 2 | Punch Clutch Pulse Width To: Low - May not punch every sheet To: High - May double punch |
| End of Set Beeper Value: 0 | <0 - No Beep. 1 - No Beep. 2 - Beep on receipt of End of Set Signal from Printer. 3 - Beep on Set Signal after Time Shift in Fusion. Time shift is dependent on whether the Bypass is active or not: <ul style="list-style-type: none"> 1. Without Bypass -Beep at start of Punch Cycle. 2. With Bypass - Beepas Lead Edge nears Fusion Exit. <p>The actual length of the time shift using Bypass is affected by whether the system contains 1 or 2 stackers and if the system is set up in Punch or Nopunch mode.</p> <ul style="list-style-type: none"> 4 - Beep on Set Signal reaching Stacker # 2 when used. (This is an additional time shift from Stacker # 1.) 5 - Beep on Set Signal at the Entrance of currently active Stacker IF signal transfer from time shift is successful. 6 - Beep on all pages to one offset side of active stacker. (Useful to determine if offset mechanism is working properly.) 7 - Beep on Page Signal received from Printer. 8 - Beep on Cycle Up Signal received from Printer. |

| LCD Display | Diagnostic Function |
|--|--|
| P Out | Punch Outputs |
| S1 Out | Stacker 1 Outputs |
| S2 Out | Stacker 2 Outputs |
| P In | Punch Inputs |
| S1 In | Stacker 1 Inputs |
| S2 In | Stacker 2 Inputs |
| Enable Bypass Xport Value: 0 | 0 - Not Enabled 1 - Enabled |
| Printer SignalOffset Value: 4 | 0 - Signal is offset 80 milliseconds earlier in the Fusion. 1 - Signal is offset 60 milliseconds earlier in the Fusion. 2 - Signal is offset 40 milliseconds earlier in the Fusion. 3 - Signal is offset 20 milliseconds earlier in the Fusion. 4 - Signal is offset 0 milliseconds in the Fusion. 5 - Signal is offset 20 milliseconds later in the Fusion. 6 - Signal is offset 40 milliseconds later in the Fusion. 7 - Signal is offset 60 milliseconds later in the Fusion. 8 - Signal is offset 80 milliseconds later in the Fusion. 9 - Signal is offset 100 milliseconds later in the Fusion. |

GP-1 Punch Output Test

1. Press the DIAGNOSTICS key until the LCD displays the Punch Output screen as shown in the table below.

NOTE: OUTXX corresponds to the LED on the Punch I/O PWB. Use the Left or Right Arrows to move the cursor to the desired output as shown in Table 6-6. The outputs can be turned on individually by pressing the UP Arrow when the cursor is under the selected output. In the same manner, the outputs can be turned off individually by pressing the DOWN Arrow when the cursor is under a selected output.

Table 6-6 Punch Outputs.

| | | |
|-----|-------|----------------|
| P | OUTB8 | Punch Clutch |
| 01 | 0 | 00000000000010 |
| P | OUTB7 | Backgauge |
| 02 | 0 | 00000000000010 |
| P | OUTB6 | Sheet Eject |
| 03 | 0 | 00000000000010 |
| P | OUTB5 | Not Used |
| 04 | 0 | 00000000000010 |
| P | OUTB4 | Not Used |
| 05 | 0 | 00000000000010 |
| P | | Not Used |
| 06 | 0 | 00000000000010 |
| P | OUTB1 | Punch Motor |
| 07 | 0 | 00000000000010 |
| P | OUTA8 | XportMotor |
| 08 | 0 | 00000000000010 |
| P | | Not Used |
| 09 | 0 | 00000000000010 |
| P | OUTA5 | PrintSetAck |
| 010 | 0 | 00000000000010 |
| P | OUTA4 | PrintPageAck |
| 011 | 0 | 00000000000010 |

| | | |
|-----|-------|----------------|
| P | OUTA3 | PrinterFull |
| 012 | 0 | 00000000000010 |
| P | OUTA2 | PrinterFault |
| 013 | 0 | 00000000000010 |
| P | OUTA1 | PrinterStop |
| 014 | 0 | 00000000000010 |

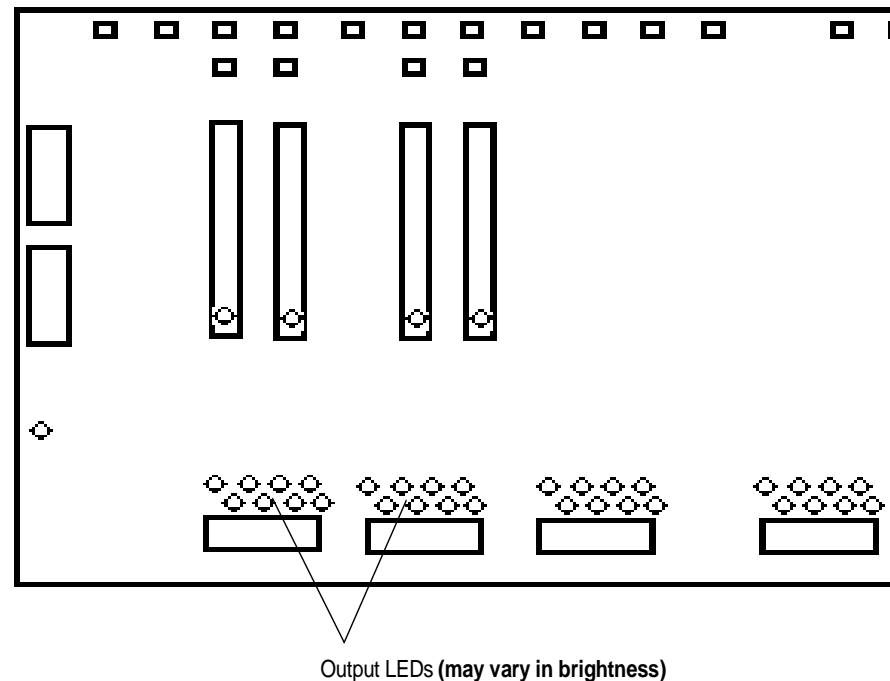


Figure 6-1 Punch I/O PWB

NOTE: The values shown in Table 6-6 may not correspond with the values displayed on the LCD.

GP-1 Stacker 1 Output Test

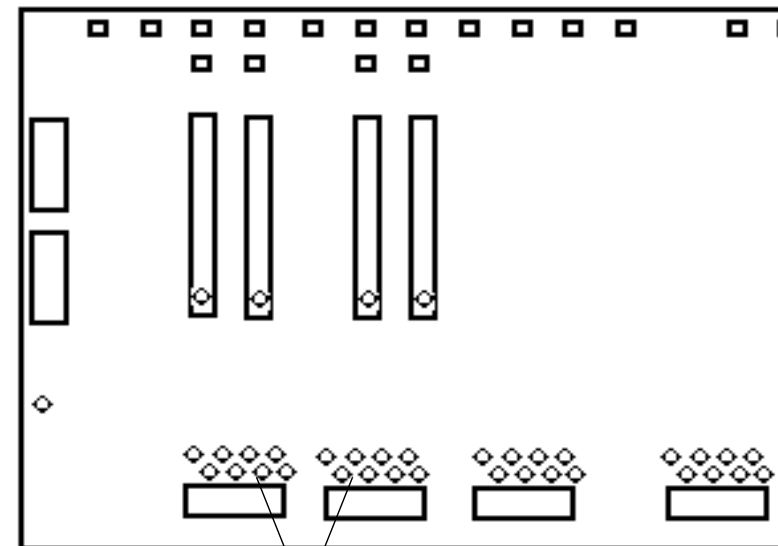
1. Press the DIAGNOSTICS key until the LCD displays the Stacker Output screen as shown in the table below.

NOTE: OUTXX corresponds to the LED on the Stacker I/O PWB. Use the Left or Right Arrows to move the cursor to the desired output as shown in Table 6-7. The outputs can be turned on individually by pressing the UP Arrow when the cursor is under the selected output. In the same manner, the outputs can be turned off individually by pressing the DOWN Arrow when the cursor is under a selected output.

Table 6-7 Stacker 1 Outputs

| | | |
|-----|------------------|-------------|
| S1 | OUTC1 | SheetExit |
| 01 | 0000000000000000 | |
| S1 | OUTC2 | EndSetExit |
| 02 | 0000000000000000 | |
| S1 | OUTC3 | Cycle Up |
| 03 | 0000000000000000 | |
| S1 | OUTC4 | Finisher 1 |
| 04 | 0000000000000000 | |
| S1 | OUTC5 | Finisher 2 |
| 04 | 0000000000000000 | |
| S1 | OUTC6 | StackerDeck |
| 06 | 0000000000000000 | |
| S1 | OUTC7 | Stacker Dir |
| 07 | 0000000000000000 | |
| S1 | OUTC8 | Stack Oring |
| 08 | 0000000000000000 | |
| S1 | | Not Used |
| 09 | 0000000000000000 | |
| S1 | OUTB2 | StackByPass |
| 010 | 0000000000000000 | |
| S1 | | Not Used |
| 011 | 0000000000000000 | |
| S1 | | Not Used |
| 012 | 0000000000000000 | |

| | | |
|-----|------------------|-------------|
| S1 | OUTB5 | StackerGate |
| 013 | 0000000000000000 | |
| S1 | OUTB6 | Offset 2 |
| 014 | 0000000000000000 | |
| S1 | OUTB7 | Offset 1 |
| 015 | 0000000000000000 | |
| S1 | OUTB8 | Stacker Tap |
| 016 | 0000000000000000 | |



Output LEDs (may vary in brightness)

Figure 6-2 Stacker I/O PWB

NOTE: The values shown in Table 6-7 may not correspond with the values displayed on the LCD.

GP-1 Stacker 2 Output Test

- Press the DIAGNOSTICS key until the LCD displays the Stacker Output screen as shown in the table below.

NOTE: OUTXX corresponds to the LED on the Stacker I/O PWB. Use the Left or Right Arrows to move the cursor to the desired output as shown in Table 6-8. The outputs can be turned on individually by pressing the UP Arrow when the cursor is under the selected output. In the same manner, the outputs can be turned off individually by pressing the DOWN Arrow when the cursor is under a selected output.

Table 6-8 Stacker 2 Outputs

| | | | | |
|----|-------|-------------|-----|------------------|
| S2 | OUTC1 | SheetExit | 01 | 0000000000000000 |
| S2 | OUTC2 | EndSetExit | 02 | 0000000000000000 |
| S2 | OUTC3 | Cycle Up | 03 | 0000000000000000 |
| S2 | OUTC4 | Finisher 1 | 04 | 0000000000000000 |
| S2 | OUTC5 | Finisher 2 | 04 | 0000000000000000 |
| S2 | OUTC6 | StackerDeck | 06 | 0000000000000000 |
| S2 | OUTC7 | Stacker Dir | 07 | 0000000000000000 |
| S2 | OUTC8 | Stack Oring | 08 | 0000000000000000 |
| S2 | | Not Used | 09 | 0000000000000000 |
| S2 | OUTB2 | StackByPass | 010 | 0000000000000000 |
| S2 | | Not Used | 011 | 0000000000000000 |
| S2 | | Not Used | 012 | 0000000000000000 |

| | | | | |
|----|-------|-------------|-----|------------------|
| S2 | OUTB5 | StackerGate | 013 | 0000000000000000 |
| S2 | OUTB6 | Offset 2 | 014 | 0000000000000000 |
| S2 | OUTB7 | Offset 1 | 015 | 0000000000000000 |
| S2 | OUTB8 | Stacker Tap | 016 | 0000000000000000 |

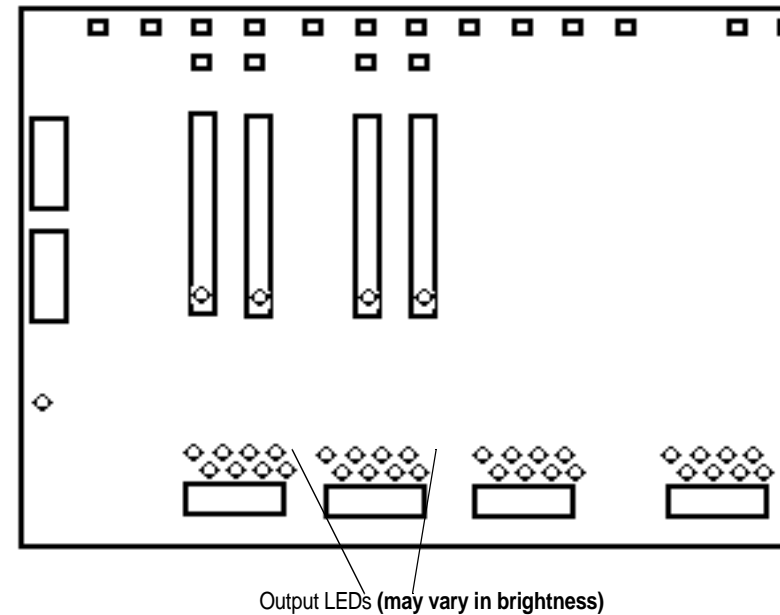


Figure 6-3 Stacker I/O PWB

NOTE: The values shown in Table 6-8 may not correspond with the values displayed on the LCD.

GP-1 Punch Input Test

1. Press the DIAGNOSTICS key until the LCD displays the Punch Input screen as shown in the table below.

NOTE: INXX corresponds to the LED on the Punch I/O PWB. Use the Left or Right Arrows to move the cursor to the desired input as shown in Table 6-9. When in the Input screen, you can see the input change states either by covering the input Sensor momentarily or by placing the cursor under an Input to select it and then actuating the switch that corresponds to that Input.

Table 6-9 Punch Inputs

| Input Sensor Status | Action to change the Status |
|---|--|
| P Not Used I1 1101111111111000 | |
| P Not Used I2 1101111111111000 | |
| P INA6 Top Covers I3 1101111111111000 | Open and close the Top Cover. |
| P INA5 Function 2 I4 1101111111111000 | |
| P INA4 Function 1 I5 1101111111111000 | |
| P INA3 Cycle Up I6 1101111111111000 | Cycle Up signal from the Printer - will change state every time the printer starts up. |
| P INA2 Set Signal I7 1101111111111000 | End of Set signal from the Printer - will change state on the last page of every book. |
| P INA1 Page Signal I8 1101111111111000 | Page signal from the Printer - will change state on every page of a book. |
| P INB8 Exit Sensor I9 1101111111111000 | Put a piece of paper between the Exit Sensor and the Reflector. |
| P INB7 Punch Sensor I10 1101111111111000 | Put a piece of paper between the Punch Sensor and the Reflector. |
| P INB6 XportSensor2 I11 1101111111111000 | Put a piece of paper between the Xport Sensor 2 and the Reflector. |

| | |
|---|--|
| P INB5 XportSensor1 I12 1101111111111000 | Put a piece of paper between the Xport Sensor 1 and the Reflector. |
| P INB4 Enter Sensor I13 1101111111111000 | Put a piece of paper between the Enter Sensor and the Reflector. |
| P INB3 Left Door I14 1101111111111000 | Open and close the Left Door. |
| P INB2 Middle Door I15 1101111111111000 | Open and close the Middle Door. |
| P INB1 Right Door I16 1101111111111000 | Open and close the Right Door. |

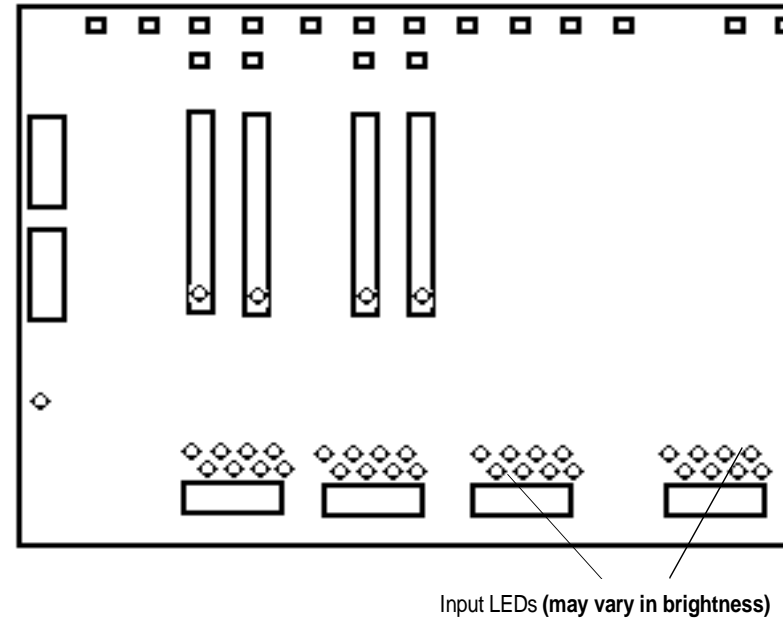


Figure 6-4 Punch I/O PWB

NOTE: The values shown in Table 6-9 may not correspond with the values displayed on the LCD.

GP-1 Stacker 1 Input Test

- Press the DIAGNOSTICS key until the LCD displays the Stacker Input screen as shown in the table below.

NOTE: INXX corresponds to the LED on the Stacker I/O PWB. Use the Left or Right Arrows to move the cursor to the desired input as shown in Table 6-10. When in the Input screen, you can see the input change states either by covering the input sensor momentarily or by placing the cursor under an Input to select it and then actuating the switch that corresponds to that Input.

Table 6-10 Stacker 1 Inputs

| Input Sensor Status | Action to change the Status |
|--|--------------------------------|
| S1 INC1 Fin. Online I1 1101101101111111 | |
| S1 INC2 Fin. NoFault I2 1101101101111111 | |
| S1 INC3 Fin. NotFull I3 1011111101011000 | |
| S1 INC4 Fin. SheetOut I4 1011111101011000 | |
| S1 INC5 Fin. SetOut I5 1011111101011000 | |
| S1 INB1 Front Door I6 1011111101011000 | Open and close the Front Door. |
| S1 INA6 Top Cover I7 1101101101111111 | Open and close the Top Cover. |
| S1 INC8 Tray Up/Down I8 1101101101111111 | |
| S1 Not Used I9 1011111101011000 | |
| S1 Not Used I10 1101101101111111 | |
| S1 Not Used I11 1101101101111111 | |
| S1 Not Used I12 1011111101011000 | |

| | | |
|-----------|---------------------------------------|--|
| S1 I13 | INB5 Full Switch 1101101101111111 | Manually Activate/Deactivate the Full Switch. |
| S1 I14 | INB6 Upper Switch 1010111001100111 | Manually Activate/Deactivate the Upper Switch. |
| S1 I15 | INB4 AlmostFullSw 1101011100110011 | Manually Activate/Deactivate the Almost Full Switch. |
| S1 I16 | INB8 BypassSensor 1101101101111111 | |

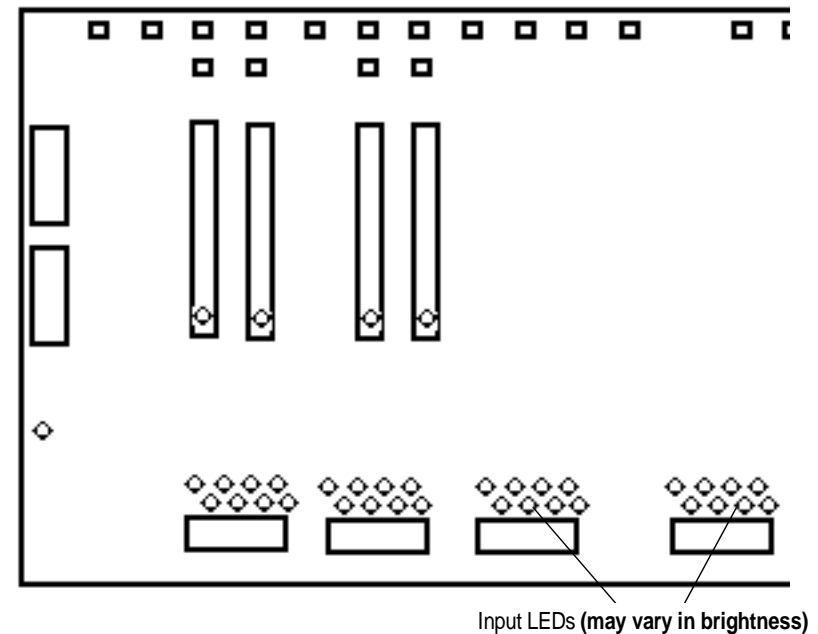


Figure 6-5 Stacker I/O PWB

NOTE: The values shown in Table 6-10 may not correspond with the values displayed on the LCD.

GP-1 Stacker 2 Input Test

1. Press the DIAGNOSTICS key until the LCD displays the Stacker Input screen as shown in the table below.

NOTE: INXX corresponds to the LED on the Stacker I/O PWB. Use the Left or Right Arrows to move the cursor to the desired input as shown in Table 6-11. When in the Input screen, you can see the input change states either by covering the input Sensor momentarily or by placing the cursor under an Input to select it and then actuating the switch that corresponds to that Input.

Table 6-11 Stacker 2 Inputs

| Input Sensor Status | Action to change the Status |
|--|--------------------------------|
| S2 INC1 Fin. Online I1 1101101101111111 | |
| S2 INC2 Fin. NoFault I2 1101101101111111 | |
| S2 INC3 Fin. NotFull I3 1011111101011000 | |
| S2 INC4 Fin. SheetOut I4 1011111101011000 | |
| S2 INC5 Fin. SetOut I5 1011111101011000 | |
| S2 INB1 Front Door I6 1011111101011000 | Open and close the Front Door. |
| S2 INA6 Top Cover I7 1101101101111111 | Open and close the Top Cover. |
| S2 INC8 Tray Up/Down I8 1101101101111111 | |
| S2 Not Used I9 1011111101011000 | |
| S2 Not Used I10 1101101101111111 | |
| S2 Not Used I11 1101101101111111 | |

| | | |
|-----|-------------------|--|
| S2 | Not Used | |
| I12 | 1011111101011000 | |
| S2 | INB5 Full Switch | Manually Activate/Deactivate the Full Switch. |
| I13 | 1101101101111111 | |
| S2 | INB6 Upper Switch | Manually Activate/Deactivate the Upper Switch. |
| I14 | 1010111001100111 | |
| S2 | INB4 AlmostFullSw | Manually Activate/Deactivate the Almost Full Switch. |
| I15 | 1101011100110011 | |
| S2 | INB8 BypassSensor | |
| I16 | 1101101101111111 | |

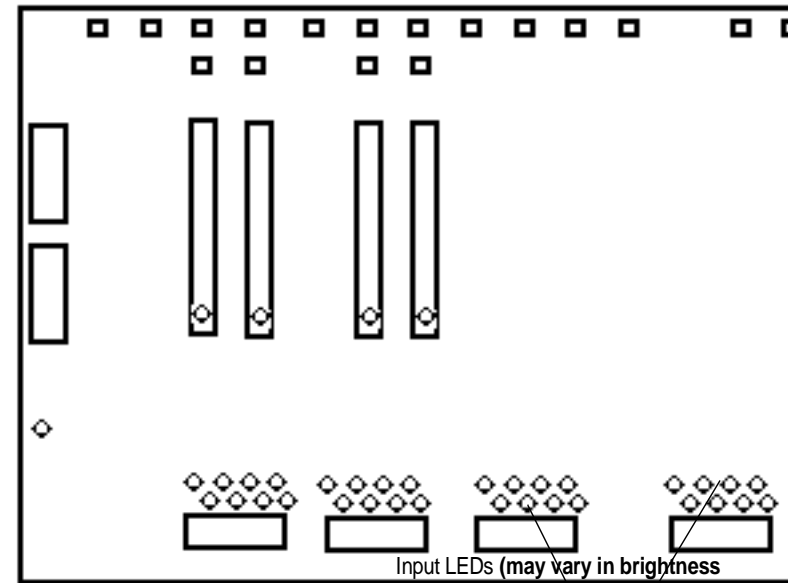


Figure 6-6 Stacker I/O PWB

NOTE: The values shown in Table 6-11 may not correspond with the values displayed on the LCD.

GP-2 Enter / Exit Test Mode Procedure

In the test mode, the technician checks the machine operation to isolate the cause of a malfunction.

1. Perform General Procedures 1 (GP 1) to enter Diagnostics.
2. To enter the test mode, press ONLINE / OFFLINE button once. The LCD will display two lines of text. The top line will flash the following messages, instructing which arrows to use to change the different configuration possibilities. The bottom line of text will display the current configuration setup in the system.
 - < Change Run Mode
 - ^ Change Punch Mode
 - > Change Destination
3. Press the left arrow "<" until the bottom line of the LCD displays "Test".
4. Press Stop/Reset to save this configuration.



WARNING

By pressing the START button, the Test mode will start and all Motors and Solenoids will turn ON. Make sure that there are no loose items lying in the paper path and keep hands and clothing out of the machine.

5. To begin testing the machine, open all Top Covers, cheat/override the Interlocks and press START. While in test mode, the machine performs all normal operations.
6. Use the 3 charts to the right to verify proper operation of each component in each module.

7. To exit the Test mode, press the STOP/RESET button and then turn Punch Main Power Switch / Circuit Breaker OFF and then back ON.

| Punch Component | Normal Operation |
|----------------------------|--|
| Transport Motor | The Document Transport Timing Belt moves smoothly without excessive noise. |
| Punch Motor | The Die Pins move up and down. |
| Back Gauge Solenoid | The Back Gauge Solenoid actuates three times each second. |
| Punch Clutch | The Punch Clutch actuates three times each second. |
| Punch Sheet Eject Solenoid | The Punch Sheet Eject Solenoid actuates three times each second. |

| Stacker Component | Normal Operation |
|--------------------|--|
| Stacker Tappers | The Stacker Tappers actuate three times each second. |
| Offset Solenoids | The Offset Solenoids actuate alternately each second. |
| Stacker Tray Motor | If the Stacker Tray is in the maximum vertical position, the Tray Motor lowers the Tray one position a second. |

| Bypass Component | Normal Operation |
|----------------------|---|
| Bypass Motor | The Bypass Motor Timing Belt moves smoothly without excessive noise. |
| Bypass Gate Solenoid | Activates when test mode is started and deactivates when the Bypass Motor comes on. |

GP-3 AC Power Source



WARNING

AC input voltages are dangerous. Use extreme care to check the voltages.

NOTE: If any of the AC voltage measurements are not within the specifications, a qualified electrician retained by the customer must make the required repairs. If you later find the condition is not corrected, inform your manager in writing of the improper wiring.

110 VAC: Voltage at the wall receptacle must be from 100 VAC to 120 VAC between AC line and AC neutral and between AC line and GND. Voltage should be less than 3 VAC between GND and neutral. If the voltage is not correct, a licensed electrician must correct the voltage.

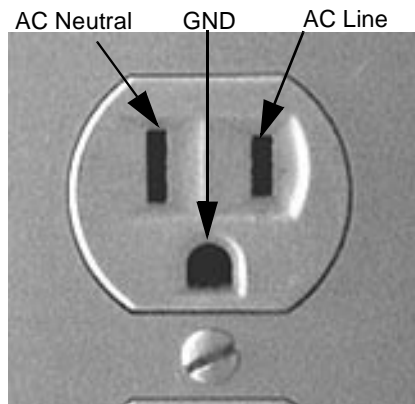


Figure 6-7 Wall Receptacle

Keypad Test



WARNING

Switch off the main power.

1. Disconnect the DFA Pin Connector from the Punch.
2. Install an insulated jumper wire between DFA Jack Connector sockets 12 and 30.
3. Switch on the main power.
4. Press each key on the Key Pad and observe the values displayed on the LCD.

| Key | Value |
|---------------------------|--------------|
| Left Arrow | 100000000000 |
| Down Arrow | 010000000000 |
| Right Arrow | 001000000000 |
| Up Arrow | 000100000000 |
| PAUSE/ INTERRUPT | 000001000000 |
| RAISE/LOWER STACKER #2 | 000000100000 |
| RAISE/LOWER STACKER #1 | 000000010000 |
| STOP/RESET | 000000001000 |
| ONLINE OFFLINE | 000000000100 |
| DIAGNOSTICS | 000000000010 |
| START | 000000000001 |

5. Switch off the main power.
6. Remove the jumper wire.
7. Reconnect the DFA Cable.

8. Switch on the main power to return to normal operation.

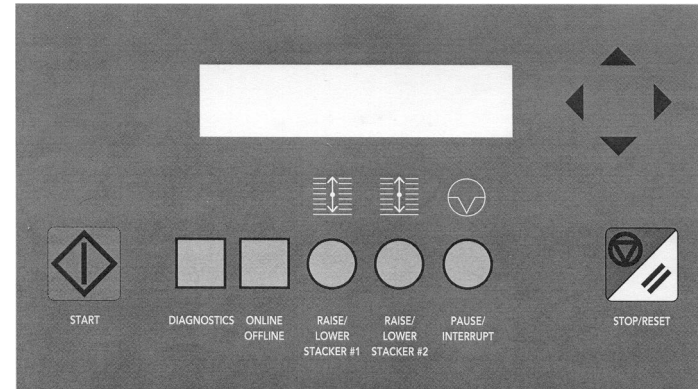


Figure 6-8 Key

Pad

Host Machine Enablement (DocuSP)

Creating DocuSP (DocuTech 61xx & DocuColor iGen3) Profiles and Print Queues

What is a Profile?

A profile is a set of values, or system configuration parameters, that are entered into the printer's operating system from the keyboard. A profile allows the printer to communicate effectively with the FusionPunch II and its stacker (or multiple stackers). Each model of printer has its own unique profile. For example, the profile for a DocuTech 135 is different than the profile for a DocuTech 6100.

What is a Print Queue?

A Print Queue is also a set of values, or system configuration parameters, that communicates input and output information from the printer to a finishing device. The FusionPunch II is a finishing device.

System Access for Setup

Profile and Print Queue configuration is performed at the same time and is normally the responsibility of the System Administrator. The following information is provided for use by the System Administrator for the purpose of creating profiles and print queues for the system.

DocuSP 1.4.xxx to 2.xxx Log On.

1. Check the logon level in the DocuSP Print Services Screen, as shown below. If you are already logged in as System Administrator, go to Step 2. If not, log on as System Administrator, as described below.

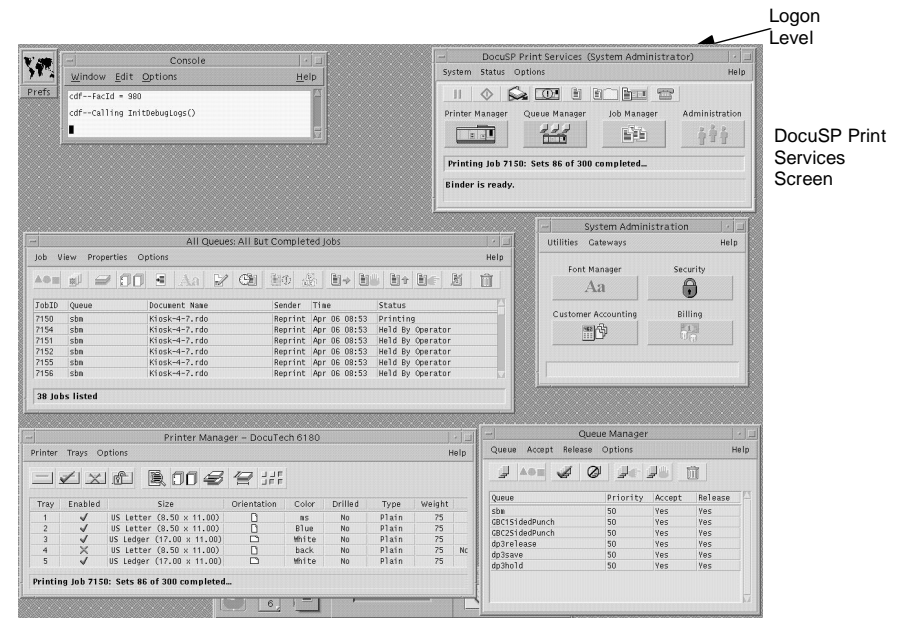


Figure 6-9 DocuSP Monitor Screen

- a) Go to the DocuSP Print Services screen, as shown in Figure 6-9.

- b) Pull down the System menu and select **Logon**, as shown in Figure 6-10.

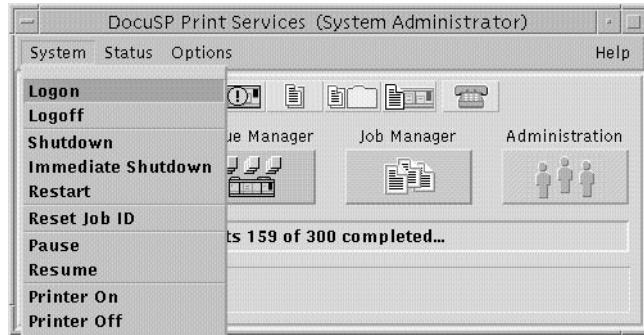


Figure 6-10 The System Option Menu

The Logon window will display, as shown in Figure 6-11.



Figure 6-11 The Logon Window

- c) Click on **Trusted User** and then select **System Administrator**.
 d) Type **Administ** in the password field and then click on **OK**.

DocuSP 1.4.xxx to 2.xxx Profile Setup

1. From the DocuSP Monitor, go to the **Printer Manager** window, as shown already open in Figure 6-12. If it is not open, go to the DocuSP Print Services window and click the Printer Manager button.

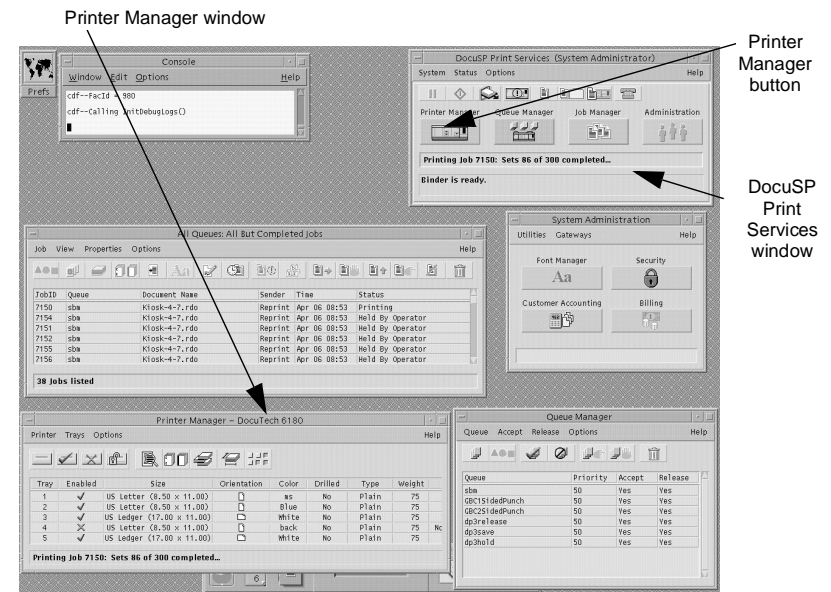


Figure 6-12 DocuSP Monitor and Printer Manager window

2. Click the **Finishing Icon** in the Printer Manager Window, as shown in Figure 6-13.

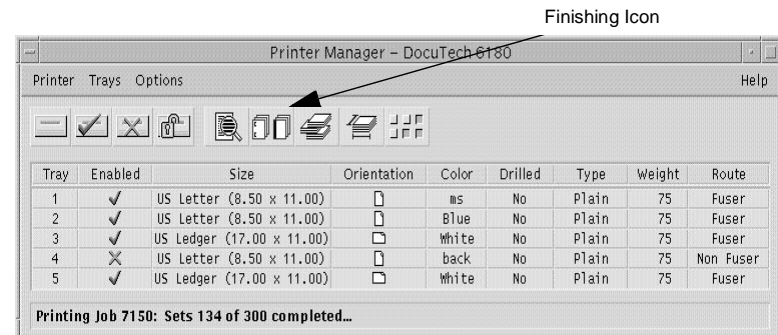


Figure 6-13 The Finishing Icon in Printer Manager

The Finishing Window will display, as shown in Figure 6-14.

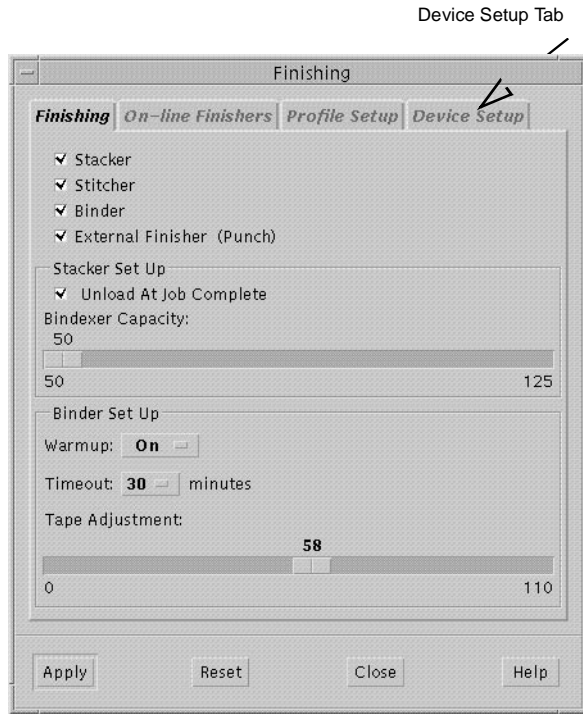


Figure 6-14 The Device Setup Tab in the Finishing Window

3. Click on the **Device Setup Tab**, as shown in Figure 6-14.

The Device Setup Tab screen will display, as shown in Figure 6-15.

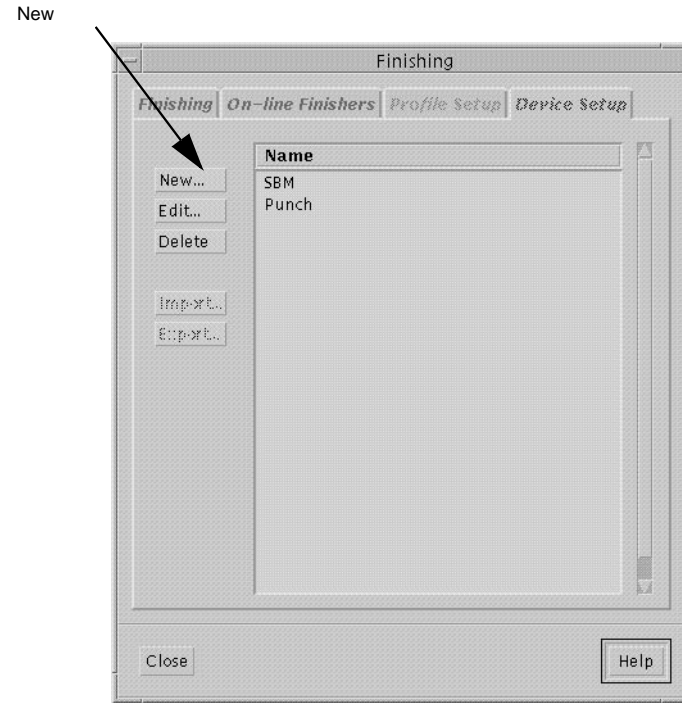


Figure 6-15 The Device Setup Tab screen

4. Click on the **NEW** button, as shown in Figure 6-15.

The Device Profile Window will display, with the **Properties and Default Limits** tab screen showing, as shown in Figure 6-16.

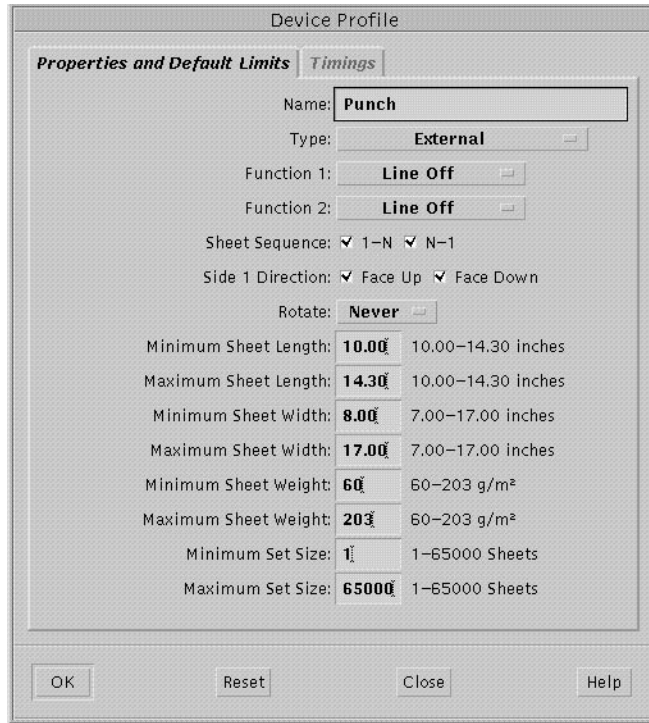


Figure 6-16 The Properties and Default Limits screen

6. Click on the **Timings** tab in the Device Profile Window.

The Device Profile Window will display the **Timings** screen, as shown in Figure 6-17.

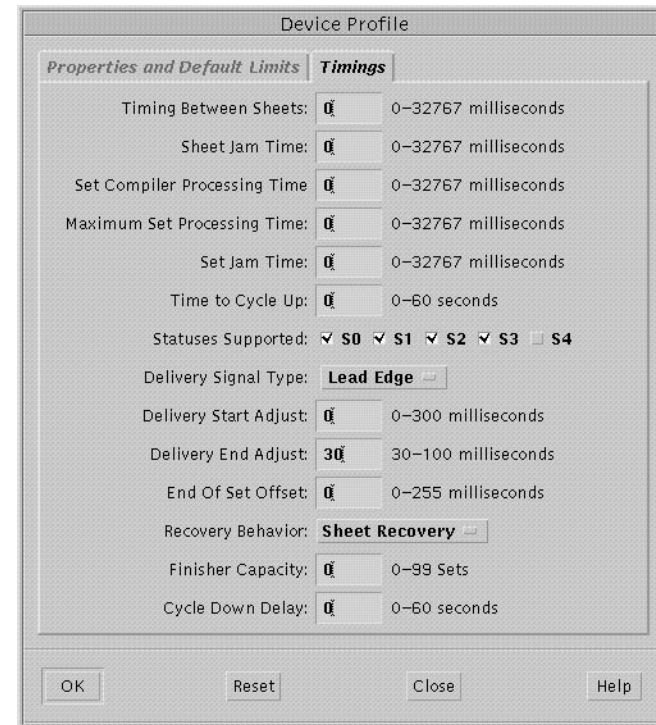



Figure 6-17 The Timings screen

5. With the Device Profile Window and the Properties and Default Limits screen open, you are ready to begin entering Personality Profile values for the FusionPunch II and the printer you are using.

Perform the following s:

- Go to page 6-27 and locate the page with the profile sheets for the devices you will be setting up.
- Begin with the sheet for the Properties and Default Limits values.
- Enter the name and type of the finishing device, for example, **Punch** for *name* and **External** for *type*.
- Verify that all of the entered values conform to those in the profile sheet. If they do not, enter the values from the profile sheet.

NOTE: Do not click OK at this point. Go on to Step 6.

7. Perform the following steps:
 - a) Go to page 6-27 and locate the page with the profile sheets for the same device as in Step 5, this time, with the sheet for the **Timings** values.
 - b) Verify that all of the entered values conform to those in the profile sheet and click **OK**.

This will bring you back to the Finishing Window, with the Device Setup Tab screen displayed.

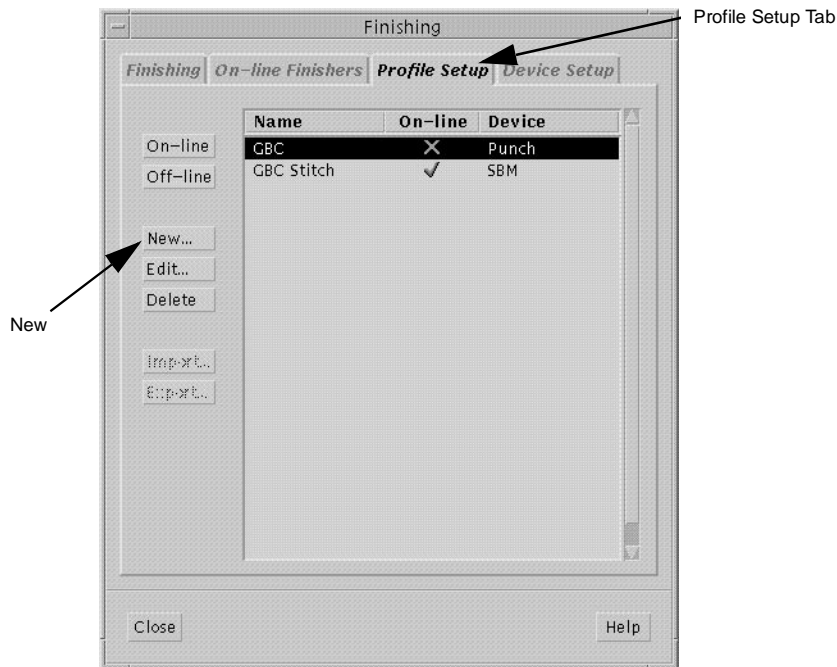


Figure 6-18 The Profile Setup Tab Screen

8. Click on the Profile Setup tab, as shown in Figure 6-18, then click on the NEW button.

The **Finisher Profile** Window, **Properties and Limits** screen will display, as shown in Figure 6-19.

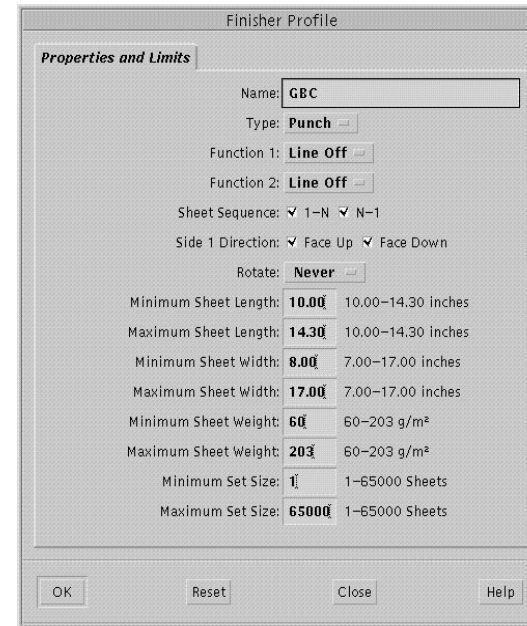


Figure 6-19 The Properties and Limits Screen

5. Perform the following steps:
 - a) Go to page 6-27 and locate the page with the profile sheets for the same device as in Step 5, this time, with the sheet for the **Finisher Profile - Properties and Limits** values.
 - b) Verify that all of the entered values conform to those in the profile sheet and click **OK**.

The **Finishing Window** with the **Profile Setup** screen displays again, as shown in Figure 6-20.

NOTE: After entering and/or checking the default values for the FusionPunch II, you will need to repeat Steps 5 through 9 for each additional finishing device installed in the system.

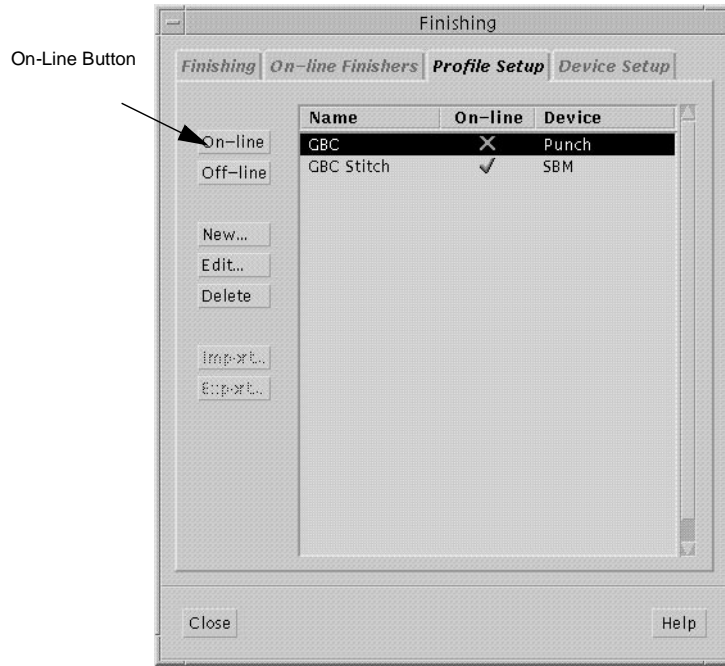


Figure 6-20 The Finishing Window and Profile Setup screen

6. Highlight **GBC** and click **On-Line**.
7. Select the **On-Line Finishers** tab in the Finishing Window.

The **On-Line Finishers** screen displays, as shown in Figure 6-21.

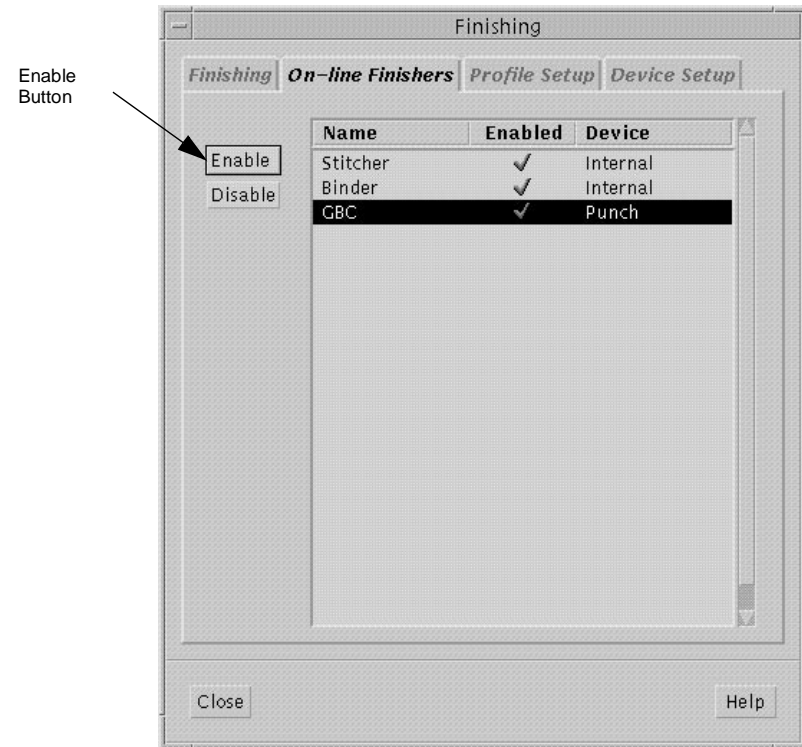


Figure 6-21 Finishing Window and On-Line Finishers screen

8. Highlight **GBC** again and then click the **Enable** button.
9. Select the **Finishing** tab in the Finishing Window.

The **Finishing** screen displays, as shown in Figure 6-22.

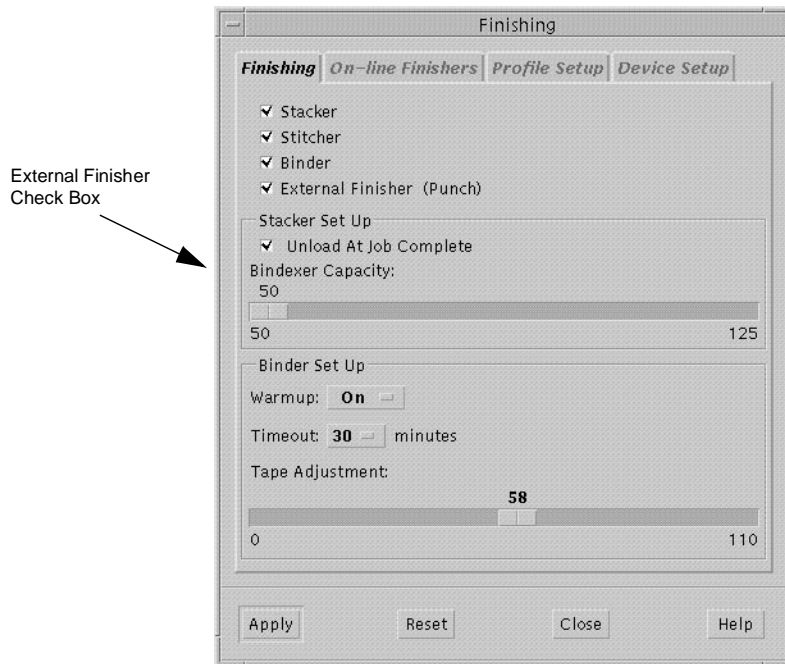


Figure 6-22 Finishing screen in the Finishing Window

10. Ensure that the External Finisher Checkbox is checked and the name of the device appears in parentheses to the right of External Finisher, as shown in Figure 6-22.

This completes the Profile setup. Go now to the Print Queue setup procedure that follows.

NOTE: If you have more than one finishing device inline with the printer, you must set up a profile for each. To do so, repeat this profile setup procedure for each finishing device.

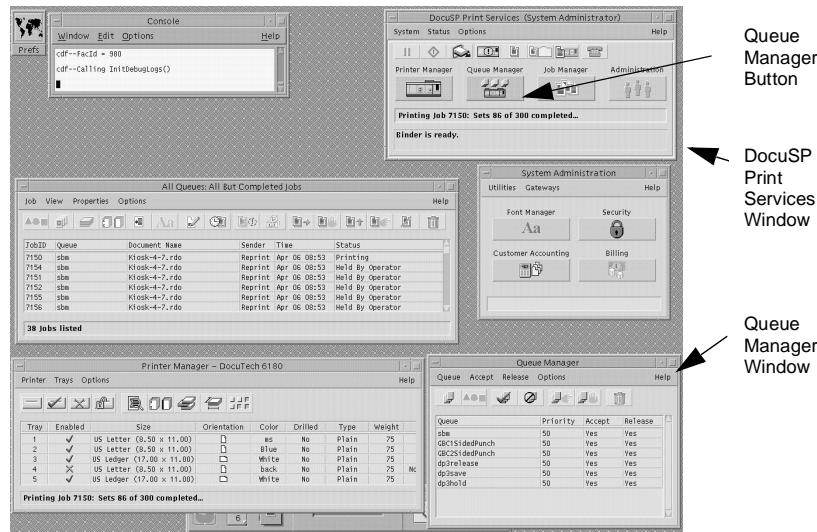
DocuSP 1.4.xxx to 2.xxx Print Queue Setup

The following procedure is to help the System Administrator set up print queues for the FusionPunch II and other finishing devices that are inline to the printer.

NOTE: A print queue is required for the FusionPunch II and one for each additional finishing device down the line, such as a Signature Booklet Maker (SBM).

1. From the DocuSP Monitor, go to the **Queue Manager** window, as shown already open in Figure 6-23. If it is not open, go to the DocuSP Print Services window and click the Queue Manager button.

Figure 6-23 DocuSP Monitor and Queue Manager Window



If the Queue Manager screen is not open, click on the Queue Manager icon, as shown in Figure 6-24.

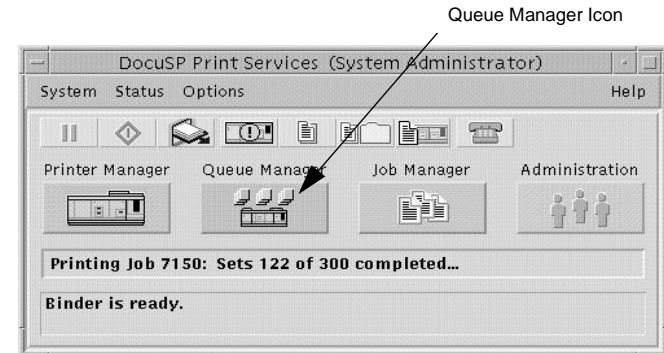


Figure 6-24 Queue Manager Icon

2. Pull down the **Queue** menu from the toolbar and select **New**, as shown in Figure 6-25.

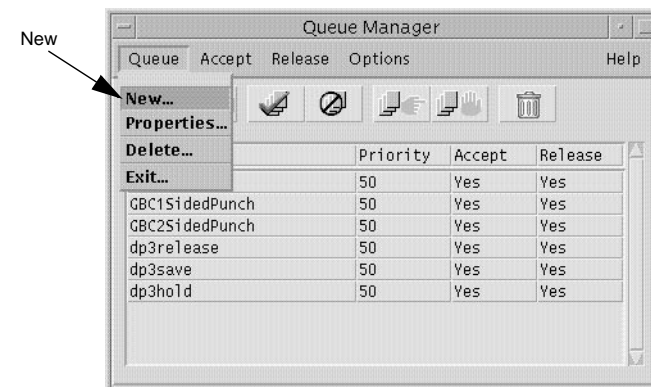


Figure 6-25 The Queue Menu in Queue Manager

The New Queue Setup Window will display, as shown in Figure 6-26.

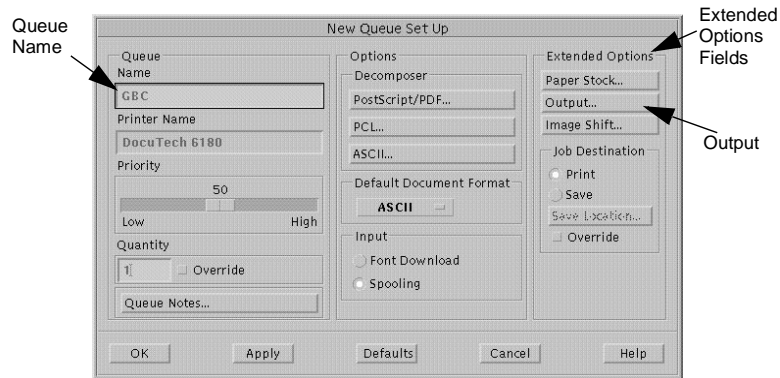


Figure 6-26 The New Queue Setup Window

3. Go to the Queue Name field and enter the name of the queue to be set up, as follows:
 - GBC Punch
 - For any other finishing device, enter the name as it appears in its Finisher Profile sheet.
4. Go to the **Extended Options** field and select **Output**, as shown in Figure 6-26.

The Output Window will display, as shown in the information that follows. This information consists of Print Queue Setup procedures for the following finishing devices:

- GBC Punch Queue Output (for the FusionPunch II)
- GBC Punch Short Edge Queue Output (for the FusionPunch II)
- SBM1/SBM2 Queue Output (for the Signature Booklet Maker)

GBC Punch Queue Output

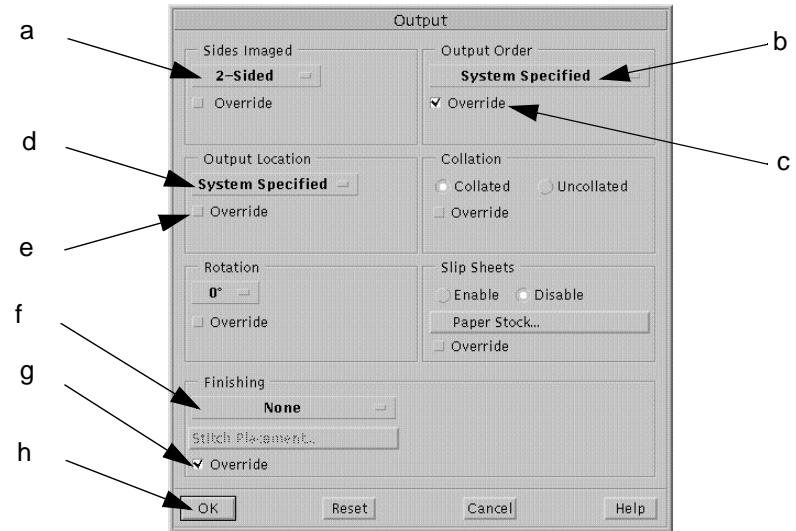


Figure 6-27 The Print Queue Output Window

5. Refer to Figure 6 - 27 above and fill in or choose the fields, as specified in the table below, for a GBC Punch Queue output.

| Item | Entry |
|------|---|
| a | 2-Sided (<i>Do not check the override option</i>) |
| b | System Specified |
| c | Check the Override option |
| d | System Specified |
| e | Check the Override option |
| f | GBC |
| g | Check the Override option |
| h | Click OK, then OK again in new Queue Setup window |

GBC Punch Short Edge Queue Output

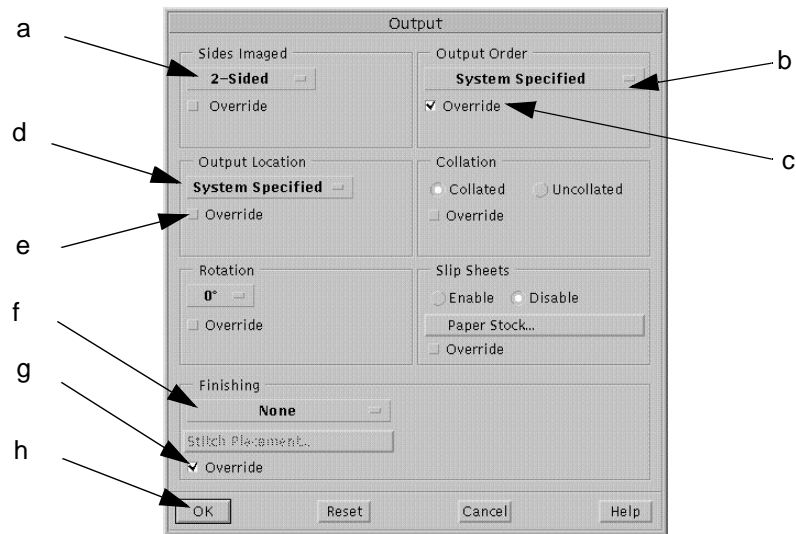


Figure 6-28 The Print Queue Output Window

6. Refer to Figure 6 - 28 above and fill in or choose the fields, as specified in the table below, for a GBC Punch SE Queue output.

| Item | Entry |
|------|---|
| a | 2-Sided (Do not check the override option) |
| b | System Specified |
| c | Check the Override option |
| d | System Specified |
| e | Check the Override option |
| f | GBC SE |
| g | Check the Override option |
| h | Click OK, then OK again in new Queue Setup window |

SBM1/SBM2 Queue Output

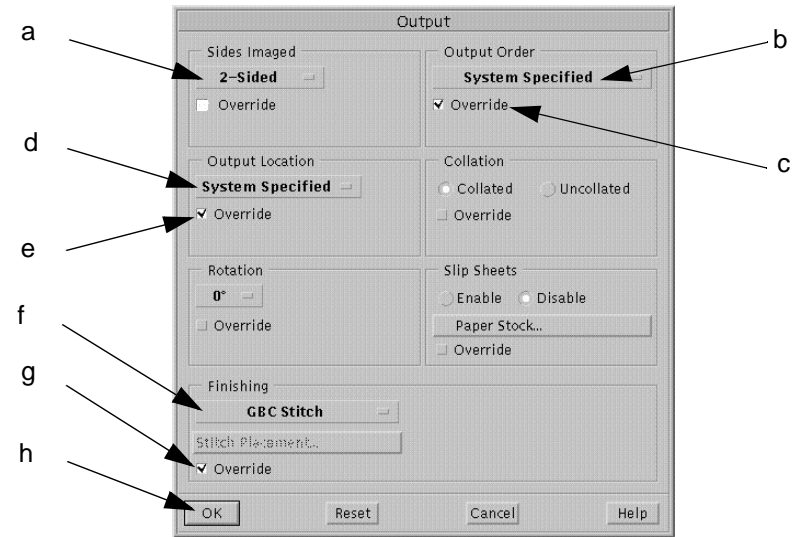


Figure 6-29 The Print Queue Output Window (SBM Setup)

7. Refer to Figure 6-29 above and fill in or choose the fields, as specified below, for an SBM 2-sided Punch Queue output.

| Item | Entry |
|------|--|
| a | 2-Sided (Do not check the override option) |
| b | System Specified |
| c | Check the Override option |
| d | System Specified |
| e | Check the Override option |
| f | Same as the name of the Finisher Profile for the SBM1/SBM2 |
| g | Check the Override option |
| h | Click OK, then OK again in new Queue Setup window |

This completes the Print Queue setup.

DocuSP 3.xxx Log On

1. Check the **Logon** level at the top of the **DocuSP Main Window**, as shown in the Figure 6-30. If you are already logged on as **System Administrator**, go to the **Profile Setup Procedure**. If not, Log on as **System Administrator**, as described below.

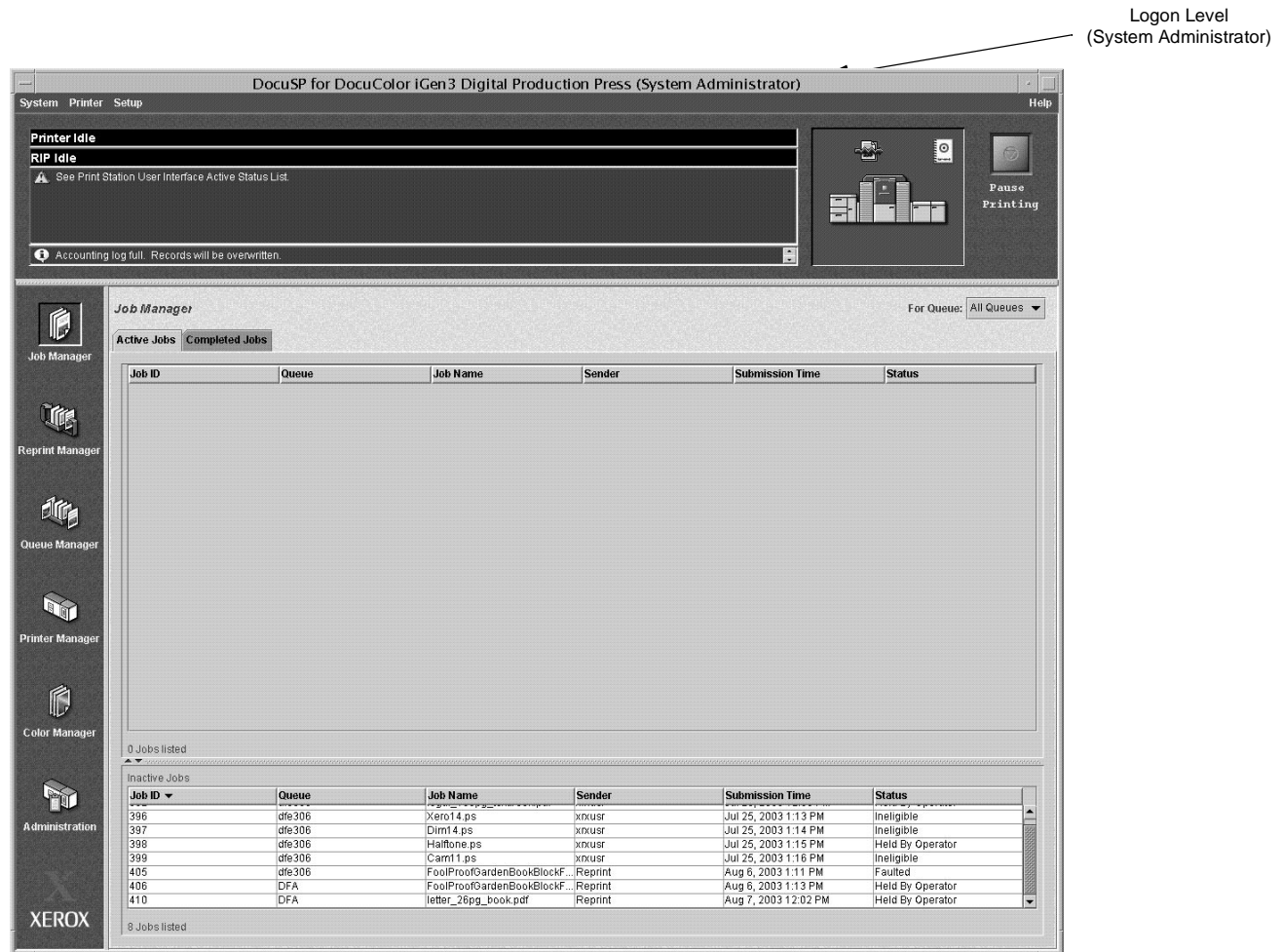


Figure 6-30 DocuSP Main Window Logon Level

- Go to the **DocuSP Main Window** and click **System**, as shown in Figure 6-30. This will bring up a drop down list, as shown in Figure 6-31.

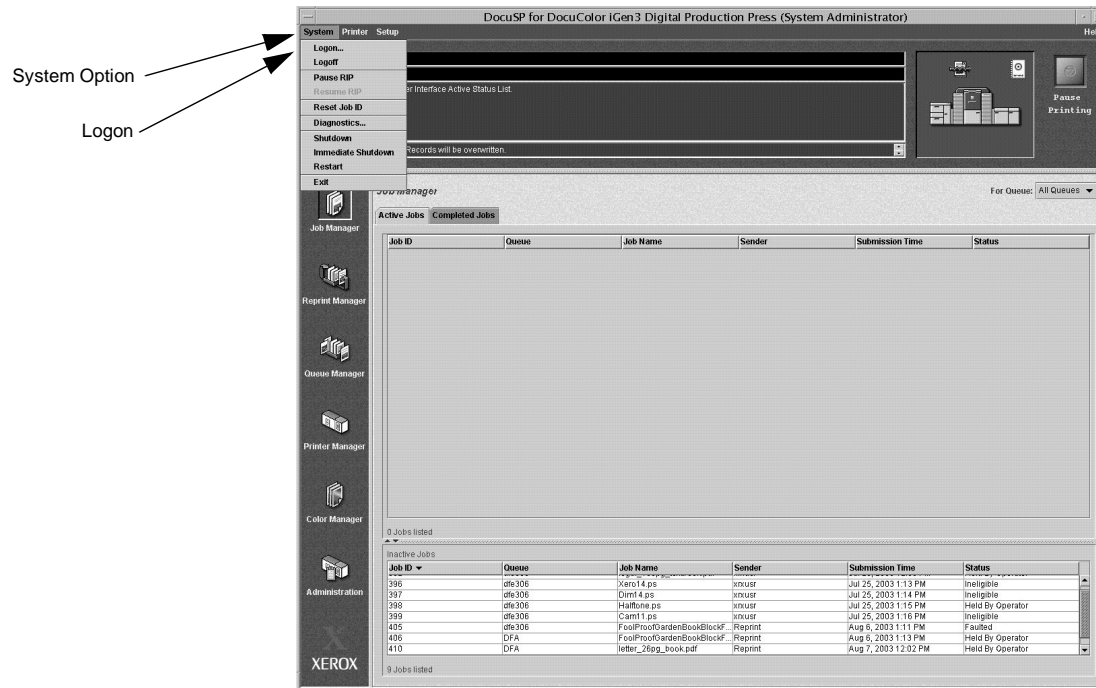


Figure 6-31 The System Option Menu

- Click **Logon**, the Logon Window will display, as shown in Figure 6-32.
- Click **Trusted User**, from the User options and then select **System Administrator**.
- Type the **System Administrator** password in the password field and then click on **OK**.



Figure 6-32 The Logon Window

DocuSP 3.xxx Profile Setup

1. Once you are logged on as the **System Administrator**, click the **Printer Manager Icon** from the **DocuSP Main Window**, as shown in Figure 6-33.

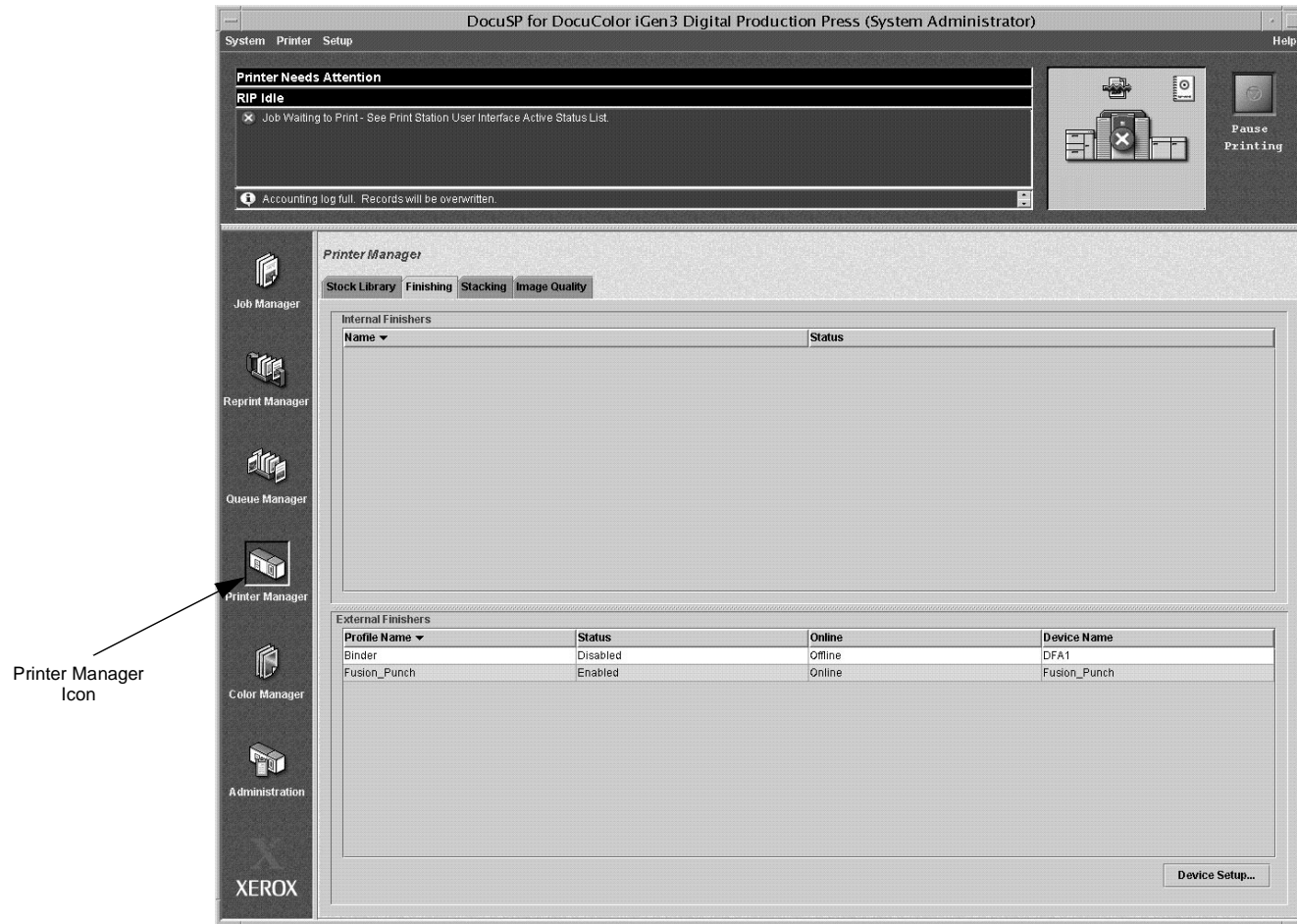


Figure 6-33 DocuSP Main Window

This will display the **Printer Manager** Window, as shown in Figure 6-34.

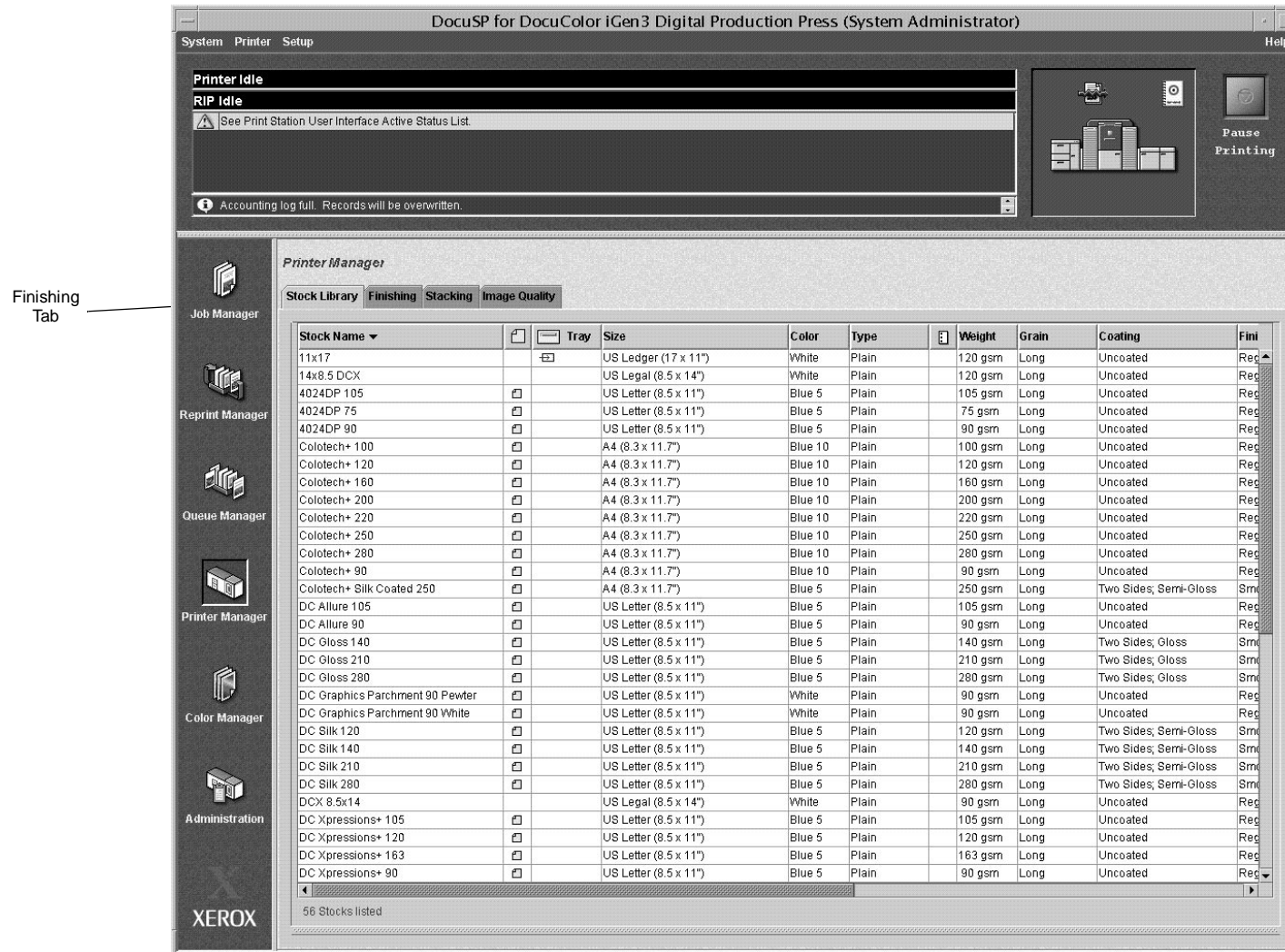


Figure 6-34 The Printer Manager Window

2. Select the **Finishing** Tab, as shown in Figure 6-34.

The **Finishing Tab Screen** will display, as shown in Figure 6-35.

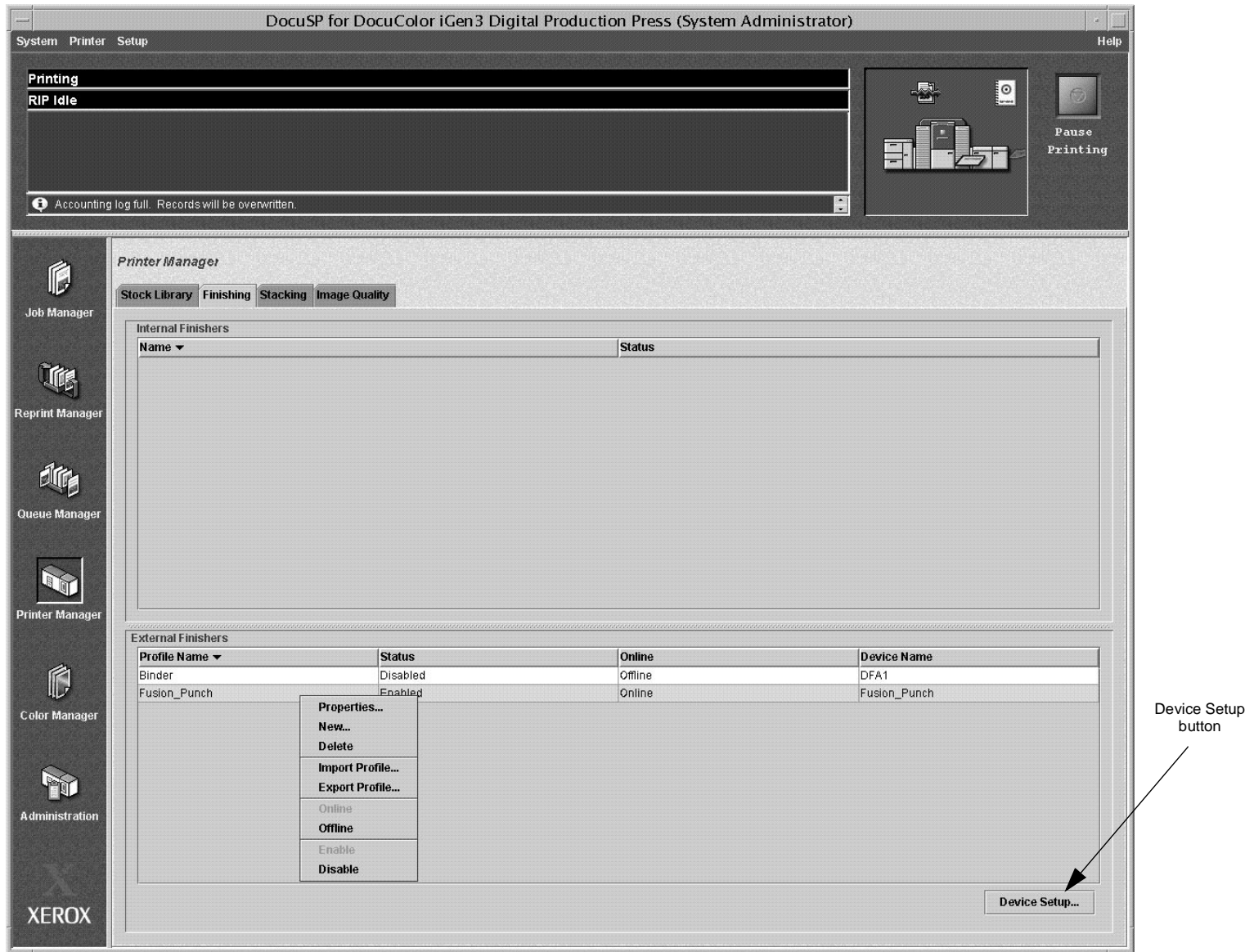


Figure 6-35 The Finishing Tab Screen

3. Click the **Device Setup** button at the bottom right corner of this screen, as shown in Figure 6-35.

The **Device Setup** Window will display, as shown in Figure 6-36.

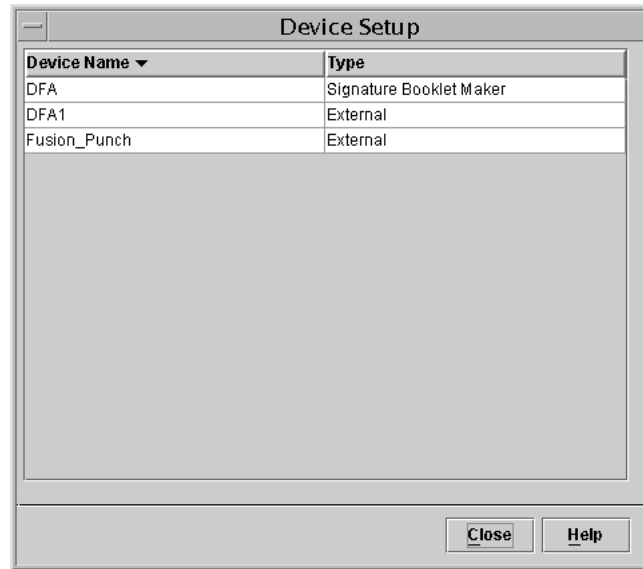


Figure 6-36 The Device Setup Window

4. Right click in a blank portion of the **Device Setup** Window, this will bring up a drop down list, select **NEW**, as shown in Figure 6-37.

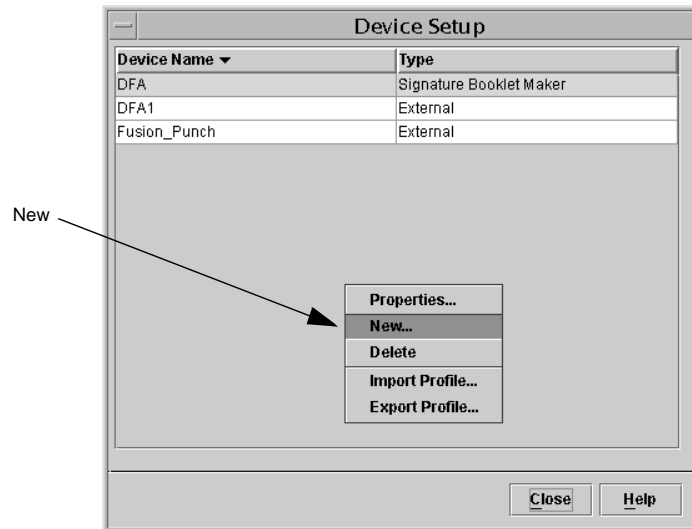


Figure 6-37 The Device Setup Drop Down List

The **Device Profile** Window will display, with the **Properties and Default Limits** Tab Screen showing, as shown in Figure 6-38.

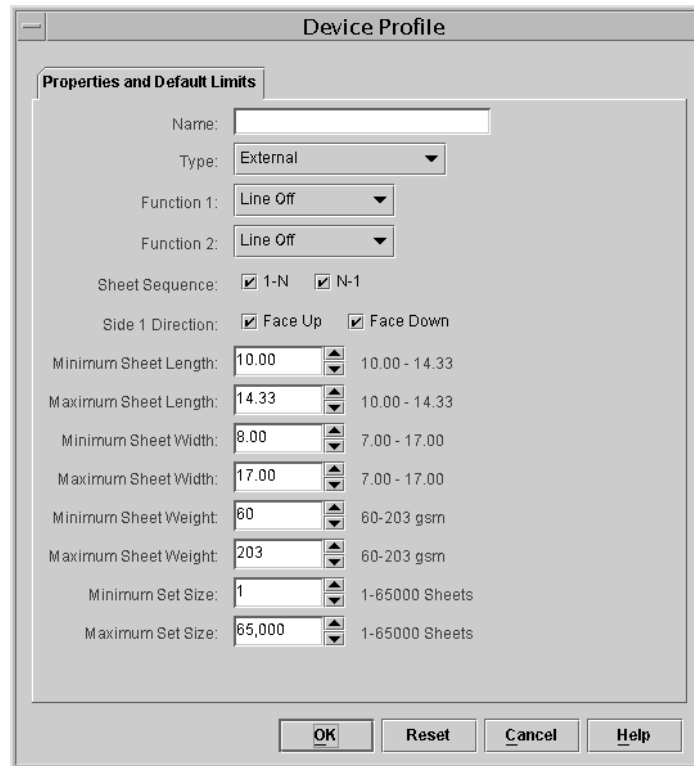


Figure 6-38 The Properties and Default Limits Screen

5. With the **Device Setup** Window and the **Properties and Default Limits** Screen open, you are ready to begin entering **Personality Profile** values for the **FusionPunch II** and the printer you are using.
 - a. Go to Personality Profiles and use the profile sheets labeled for the DocuTech 61xx to set up the iGen3 or the Docutech 61xx.
 - b. Enter the values for the **Properties and Default Limits**.
 - c. Enter the name and type of the finishing device, for example, **FusionPunch II** for the name and **External** for the type.
 - d. Verify that all of the entered values conform to those in the profile sheet. If they do not, enter the values from the profile sheet.

Note: *If you are setting up the profiles for the Docutech 61xx, continue with Step e.
If you are setting up the profiles for the DocuColor iGen3, click OK, and then close the Device Setup Window and go on to Step 6.*

e. Click on the **Timings** Tab in the **Device Profile** Window. The **Device Profile** Window will display the **Timings** Screen, as shown in Figure 6-39.

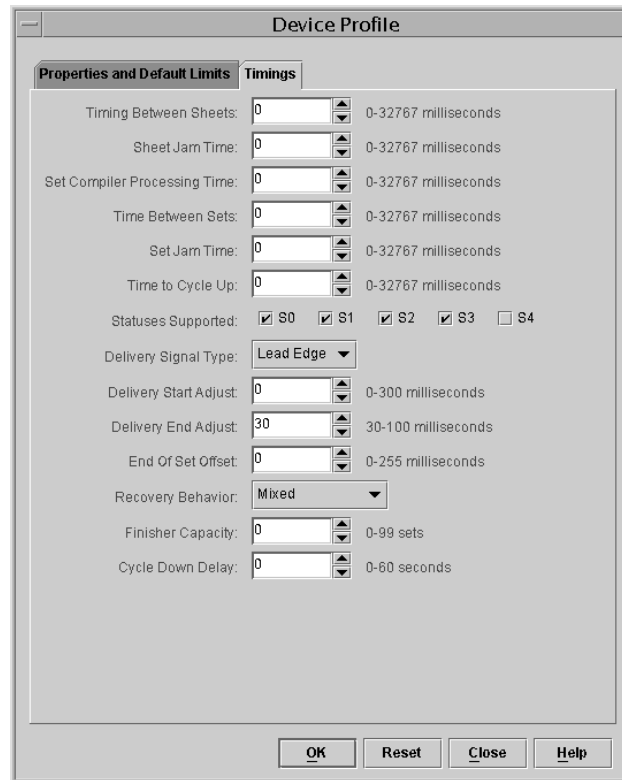


Figure 6-39 The Timings Screen

- f. Go back to Personality Profiles and locate the profile sheets for the same device, as you did in the previous steps, this time using the sheet for the Timings values.
- g. Verify that all of the entered values conform to those in the profile sheet and click **OK**. This will bring you back to the Device Setup Window with the new profile showing in that window. Click **Close** to close the Device Setup Window.

- Right click in a blank part of the **External Finishers** box at the bottom of the **Finishing** Tab Screen. Then, select **New** from the drop down list, as shown in Figure 6-40.

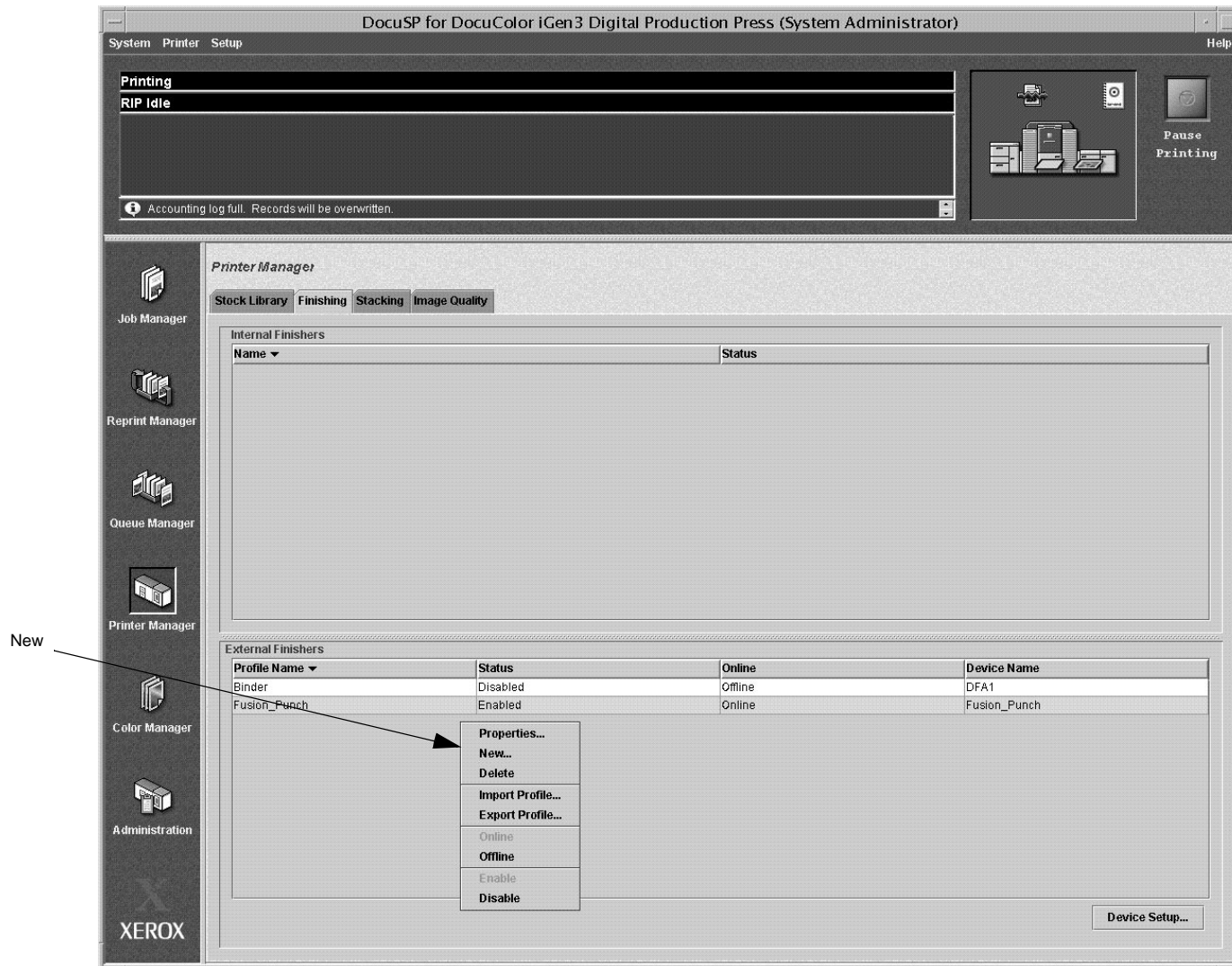


Figure 6-40 The External Finisher Drop Down List

The **Finisher Profile** Window, **Properties and Limits** Screen will display, as shown in Figure 6-41.

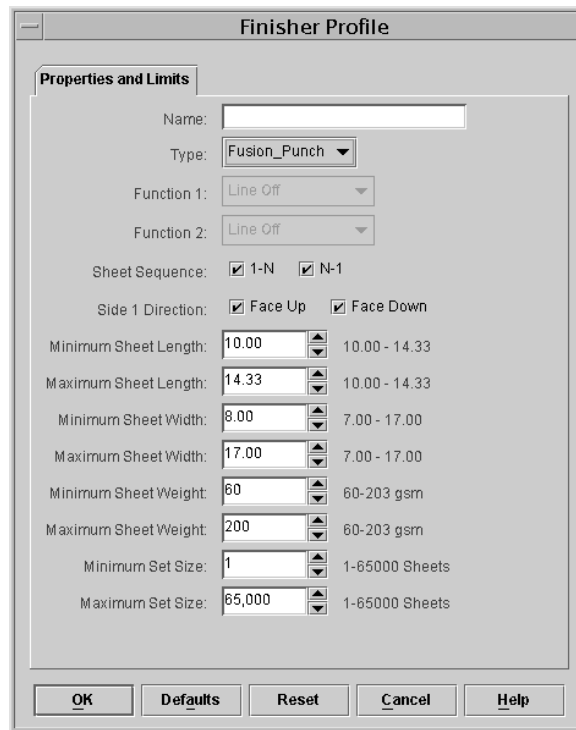


Figure 6-41 The Finisher Profile Window, Properties and Limits Screen

7. Perform the following steps:
 - a. Go to Appendix A in this Users Guide and locate the profile sheets for the same device as in the previous steps, but this time, with the sheet for the **Finisher Profile - Properties and Limits** values.
 - b. Ensure that all of the entered values conform to those in the profile sheet, and then click **OK**.

The **Finisher Profile** Window will close and then you will be back at the Finishing tab screen. The new profile you setup will be displayed under the **External Finishers** box at the bottom of the **Finishing Tab Screen**, with the **Status** set to **Disabled** and **Online** set to **Offline**, as shown in Figure 6-42.

Note: After setting up the profile for the FusionPunch II, you need to repeat steps 1 through 10 for each additional finishing device installed in the system.

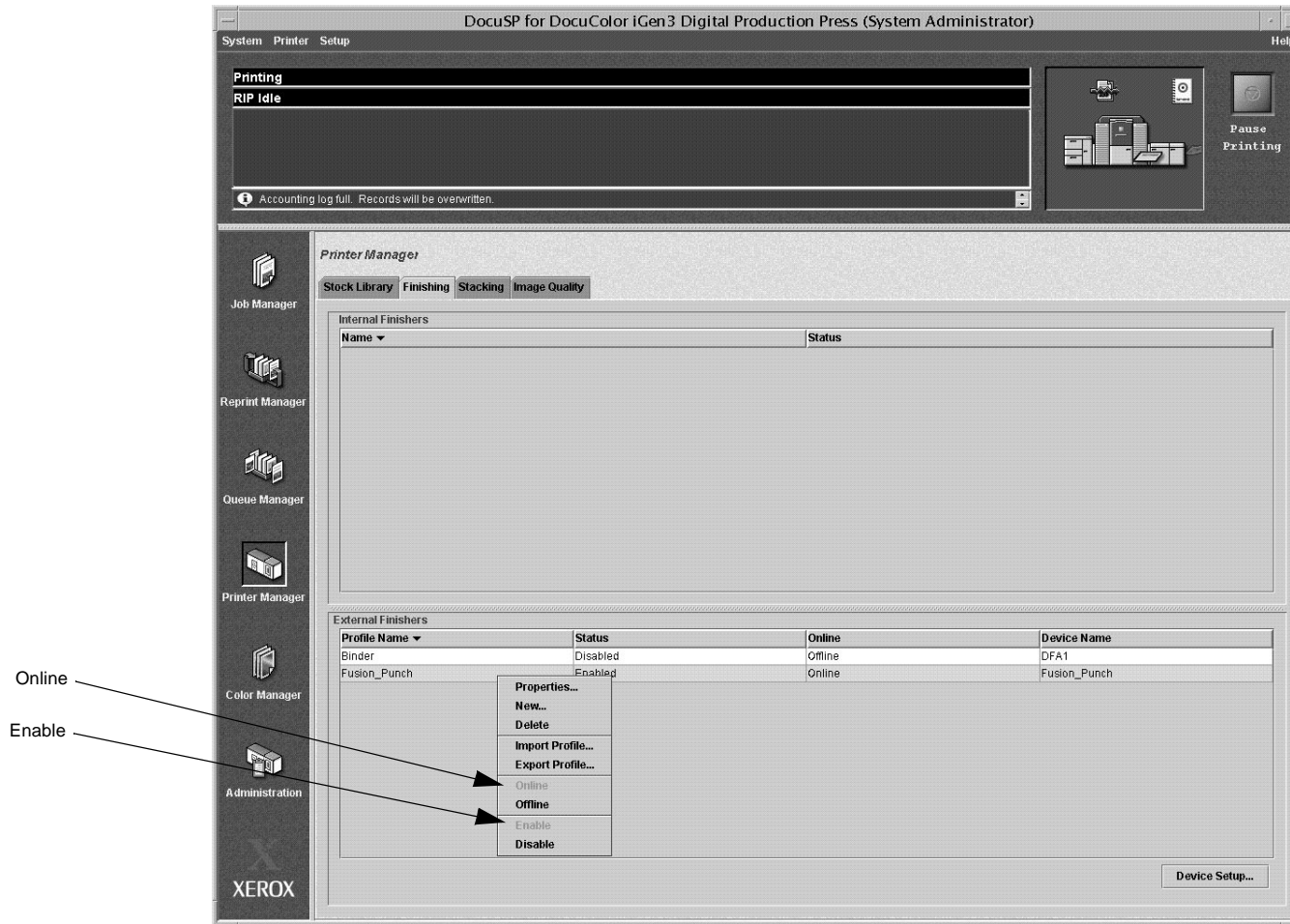


Figure 6-42 The Finishing Tab Screen

8. Right click the profile you setup and the select **Online** from the drop down list, as shown in Figure 6-42.
9. Right click the profile again, but this time select **Enable** from the drop down list, as shown in Figure 6-42.

That completes the Profile Setup. ***Please note: if you have more than one Finisher inline with the host printer, then you must setup a Profile for each finisher and train your customer how to switch back and forth between each Profile.***

Now you can setup the **Print Queues** to work with the Profile/s that you just setup. This will allow your customer to send all **Finishing** jobs to the **Print Queues** with the correct profiles attached to each Queue.

DocuSP 3.xxx Print Queue Setup

The following procedure is to help the **System Administrator** set up Print Queues for the **FusionPunch II** and other finishing devices that are inline to the printer.

Note: *One print queue is required for the FusionPunch II and one for each additional finishing device down the line, such as a Signature Booklet Maker (SBM).*

1. Click the **Queue Manager** Icon from the **DocuSP Main Window**, as shown in Figure 6-43.

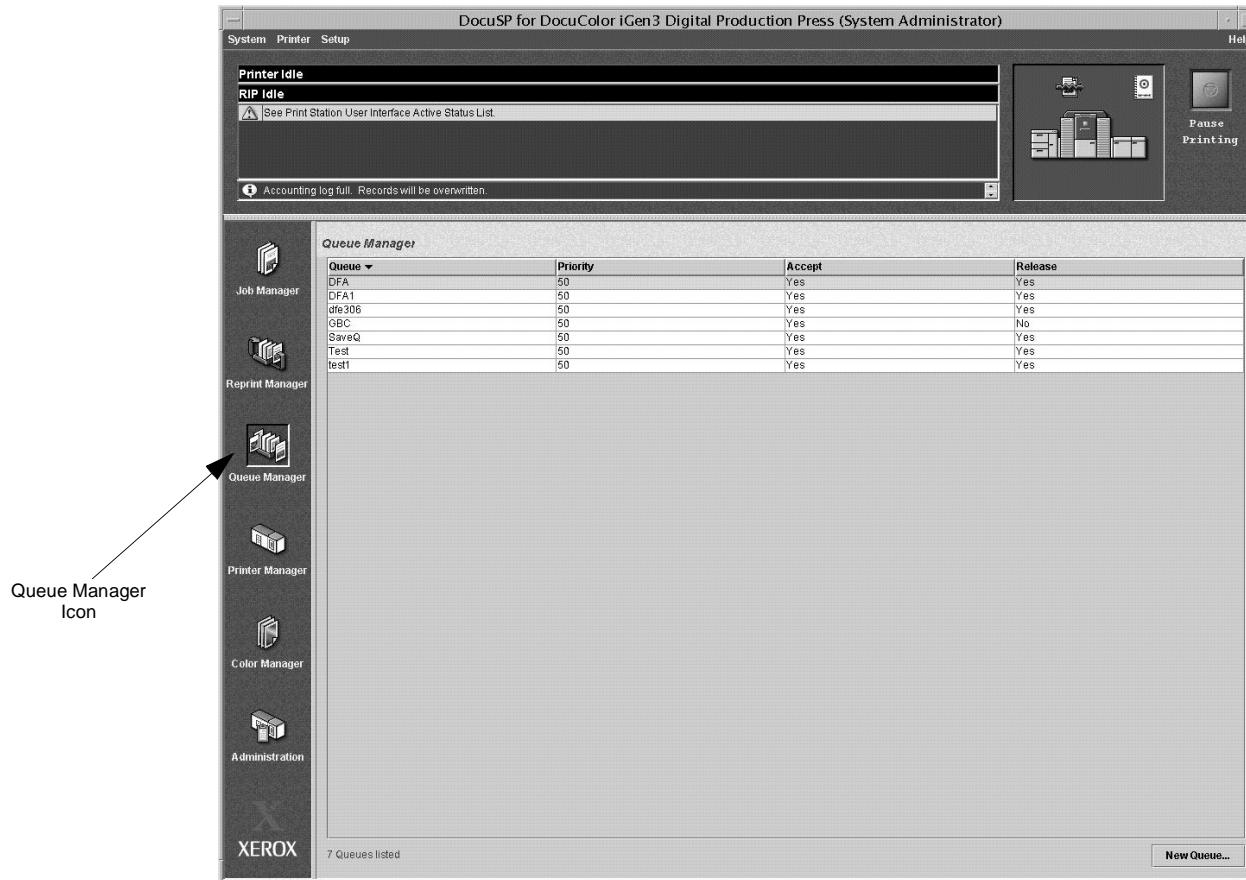


Figure 6-43 The DocuSP Main Window

The **Queue Manager** Screen will be displayed, as shown in Figure 6-44.

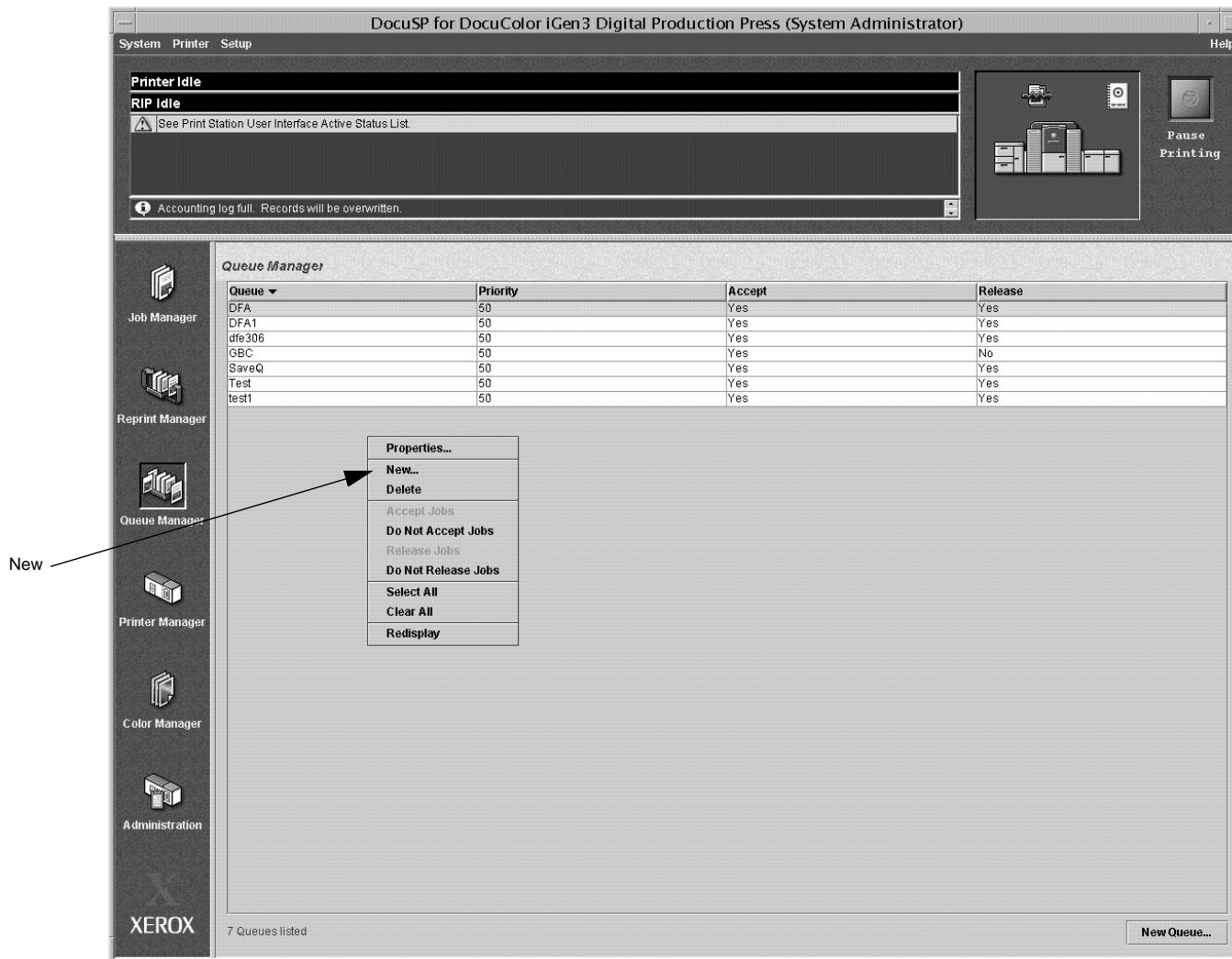


Figure 6-44 The Queue Manager

- Right click in a blank part of the **Queue Manager** Screen and select **New** from the drop down list, as shown in Figure 6-44.

The **New Queue** Window will display, as shown in Figure 6-45.

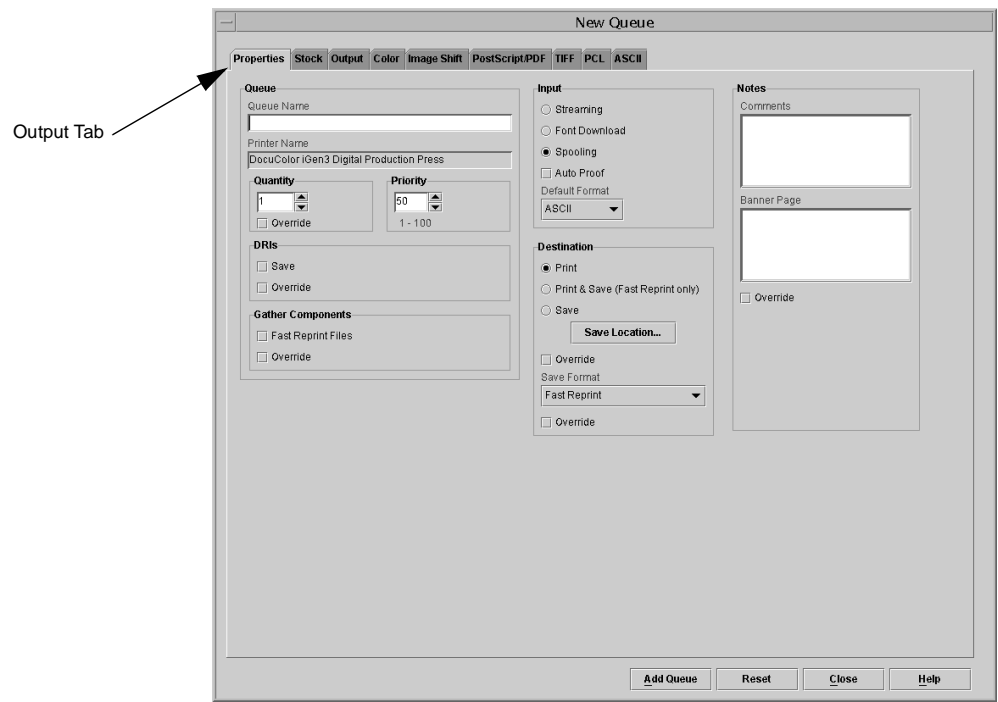


Figure 6-45 The New Queue Window

3. Go to the **Queue Name** field and enter the name of the queue to be setup, as follows:
 - GBC Punch
 - GBCSE
 - For any other finishing device, enter the name as it appears in its Finisher Profile sheet.

4. Click the **OutputTab**, as shown in Figure 6-45. The **Output** Tab Screen will display, as shown in the information that follows. This information consists of **Print Queue Setup** values for the following finishing devices:
 - GBC Punch Queue Output (for the FusionPunch II)
 - GBC Short Edge Punch Queue Output (for the FusionPunch II and a Xerox high Capacity Stacker)
 - SBM1/SBM2 Queue Output (for the Signature Booklet Maker)

GBC Punch Queue Output

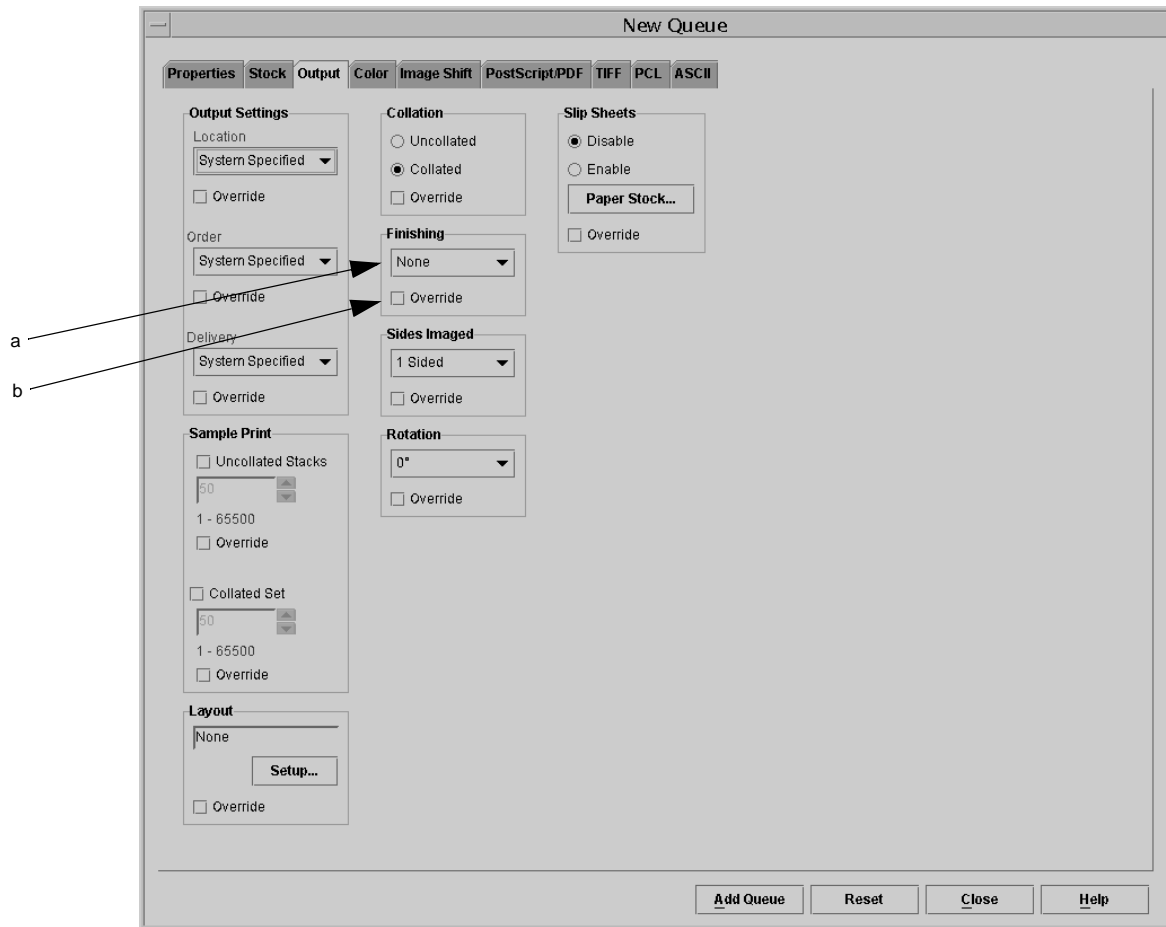


Figure 6-46 The Print Queue Output Window

Refer to Figure 6-46 above and fill in or choose the fields, as specified in the table below, for a GBC Punch Queue Output.

| Item | Entry |
|------|---------------------------|
| a | GBC |
| b | Check the Override Option |

GBC Short Edge Queue Output

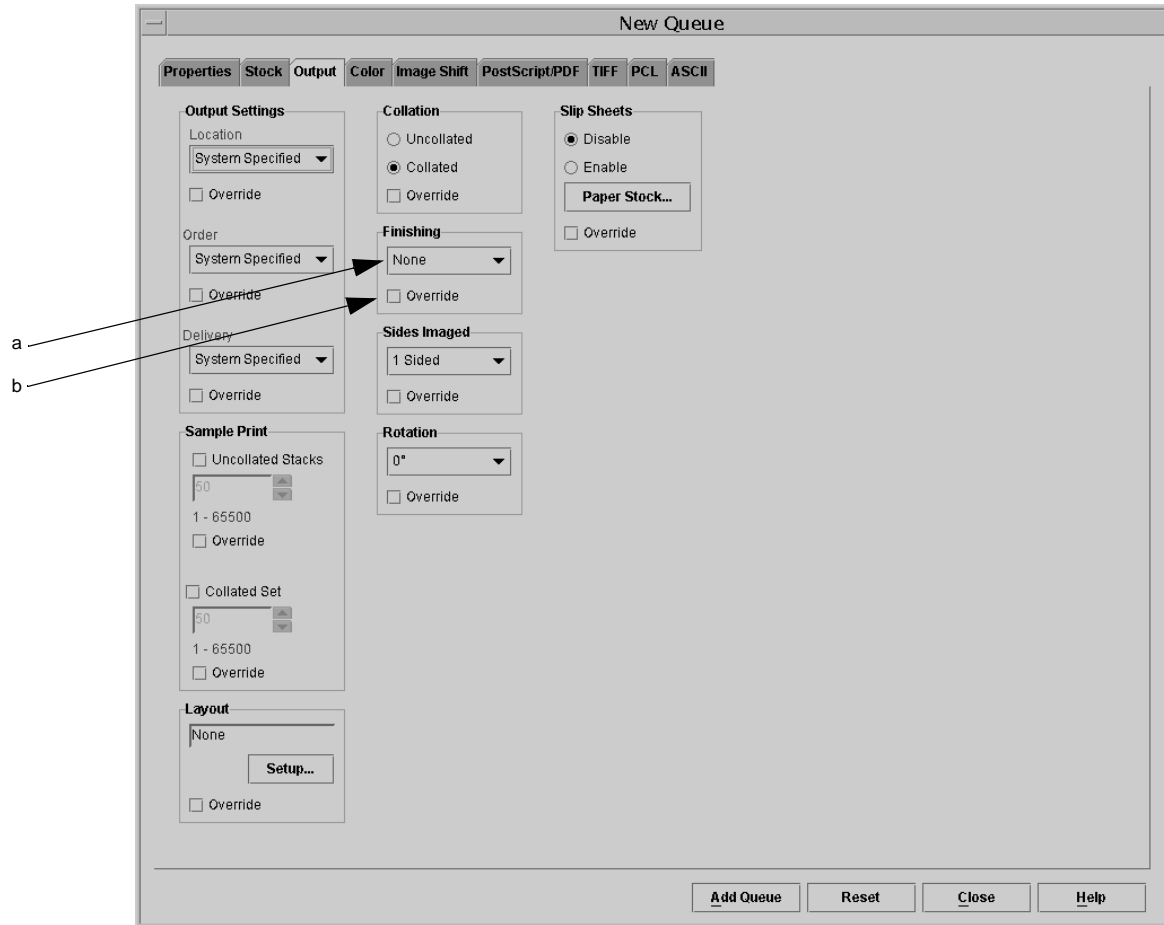


Figure 6-47 The Print Queue Ouput Window

Refer to Figure 6-47 above and fill in or choose the fields, as specified in the table below, for a GBC Short Edge Queue Output.

| Item | Entry |
|------|---------------------------|
| a | GBCSE |
| b | Check the Override Option |

SBM1/SBM2 Queue Output

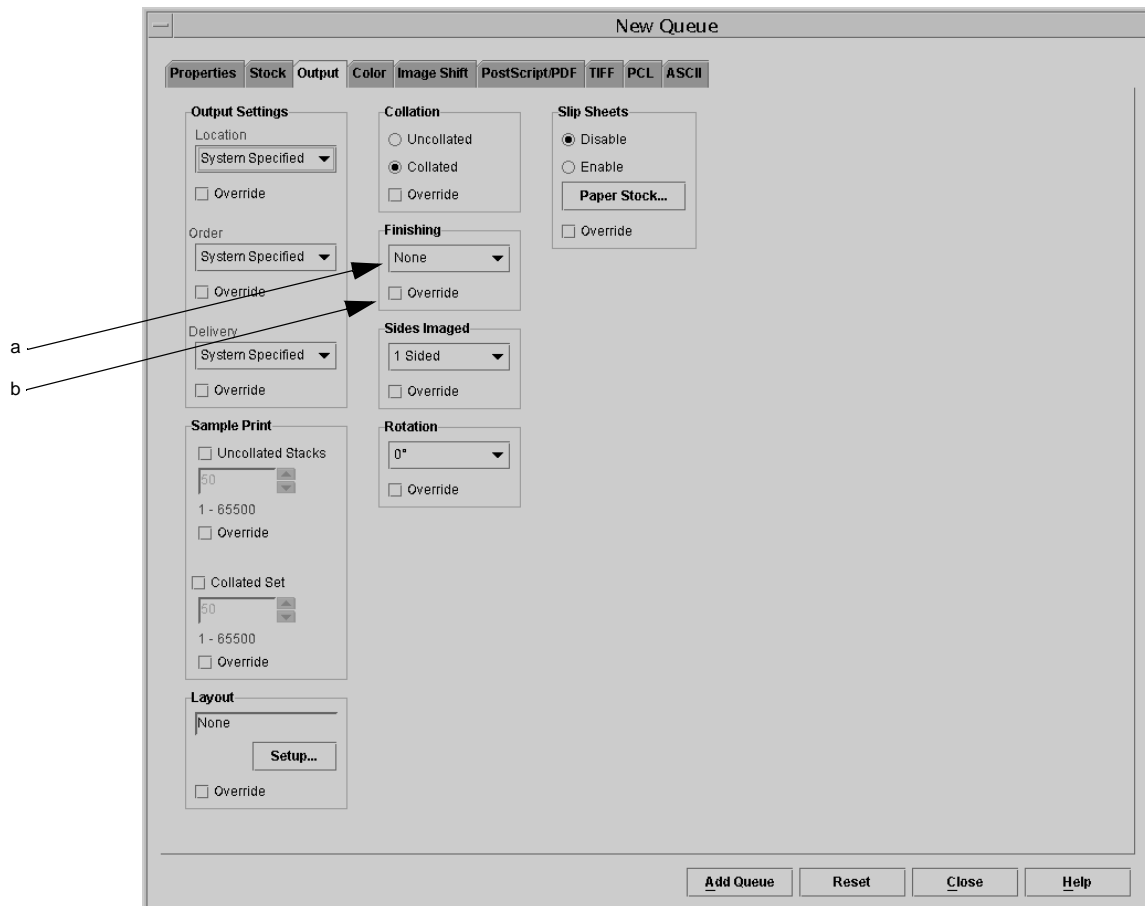


Figure 6-48 The Print Queue Output Window (SBM Setup)

Refer to Figure 6-48 above and fill in or choose the fields, as specified in the table below, for a SBM Queue Output.

| Item | Entry |
|------|---------------------------|
| a | SBM1/SBM2 |
| b | Check the Override Option |

Host Machine Enablement (DT135 / 4XXX)

Xerox 4xxx NPS Host Machine Enablement

The procedure that follows describes how to configure a GBC profile for Xerox 4000 Family NPS printing systems. This profile allows you to send a job through a network and then change the output destination at the Sun NPS Workstation. Once you have set up the GBC profile, you will be required to configure a GBC Print Queue. You will then have to set up a new printer on all of the computers used to send jobs through the network and ensure that they are all using the production print software to send jobs.

This setup, once completed, will allow the customer to send a job to a GBC Print Queue. The GBC Print Queue ensures that jobs print to the Bypass and the Fusion Punch with the correct profile settings.

Configuring the GBC Personality Profile

1. Switch on the GBC Fusion Punch and ensure that it is Online.
2. At the Sun NPS Workstation, point the cursor to a blank part of the screen, right-click the mouse and select **Restart**.
The system will reboot.
3. Type **Priv admin** (space) and press **Enter**.
The system will prompt you for a password.
4. Type **administrator** as your password.
The prompt, **Ps Admin** displays. You are now at the System Administrator logon level.
5. Type **Create Output Profile** and press **Enter**.
The system prompts you to enter a name.
6. Type **GBCPunch** and press **Enter**.
The prompt, **P1** displays. This is the first profile parameter.
7. Answer the parameter prompts as follows:
P1 = 0, P2 = 0, P3 = 0, P4 = 0, P5 = 0, P6 = 0, P7 = 7, P8 = 0, P9 = 0, P10 = 0, P11 = 0
8. Repeat Step 2 to reboot the Workstation. After the system has rebooted, go to Step 9.
9. Type **Set Output Profile** and press **Enter**.
The system will prompt you for the name of the profile.
10. Type **GBCPunch** and press **Enter**.
The system will display a message indicating that the profile is set. You have completed creating and setting the GBC Profile.
11. To view the profile, type **List Output Profile** (or **Show Output Profile**) and press **Enter**.

Xerox 4xxx Output Profile

1. Type **Set Output Profile** and press **Enter**.
The system will prompt you for the name of the profile.
2. Type the name of the profile exactly as it was originally entered and press **Enter**.
The system will display a message indicating that the profile is set.

Configuring a GBC Print Queue

1. Type **Priv admin** (space) and press **Enter**.
The system will prompt you for a password.
2. Type **administrator** as your password.
The prompt, **Ps Admin** displays. You are now at the System Administrator logon level.
3. Type **Create Virtual Printer** and press **Enter**.
The system prompts you to enter a name.
4. Type **GBCPunch** and press **Enter**.
5. Type **Change Virtual Printer** and press **Enter**.
6. Type **Output Bin** and press **Enter**.
The system will prompt you for an attribute value.
7. Type **258** and press **Enter**.
This value tells the system to run the output to the Bypass Transport.

Host Machine Enablement (DocuColor 6060)

How to review or change DocuColor 6060 Profiles.

1. Select the **Features** button from the Control Panel.

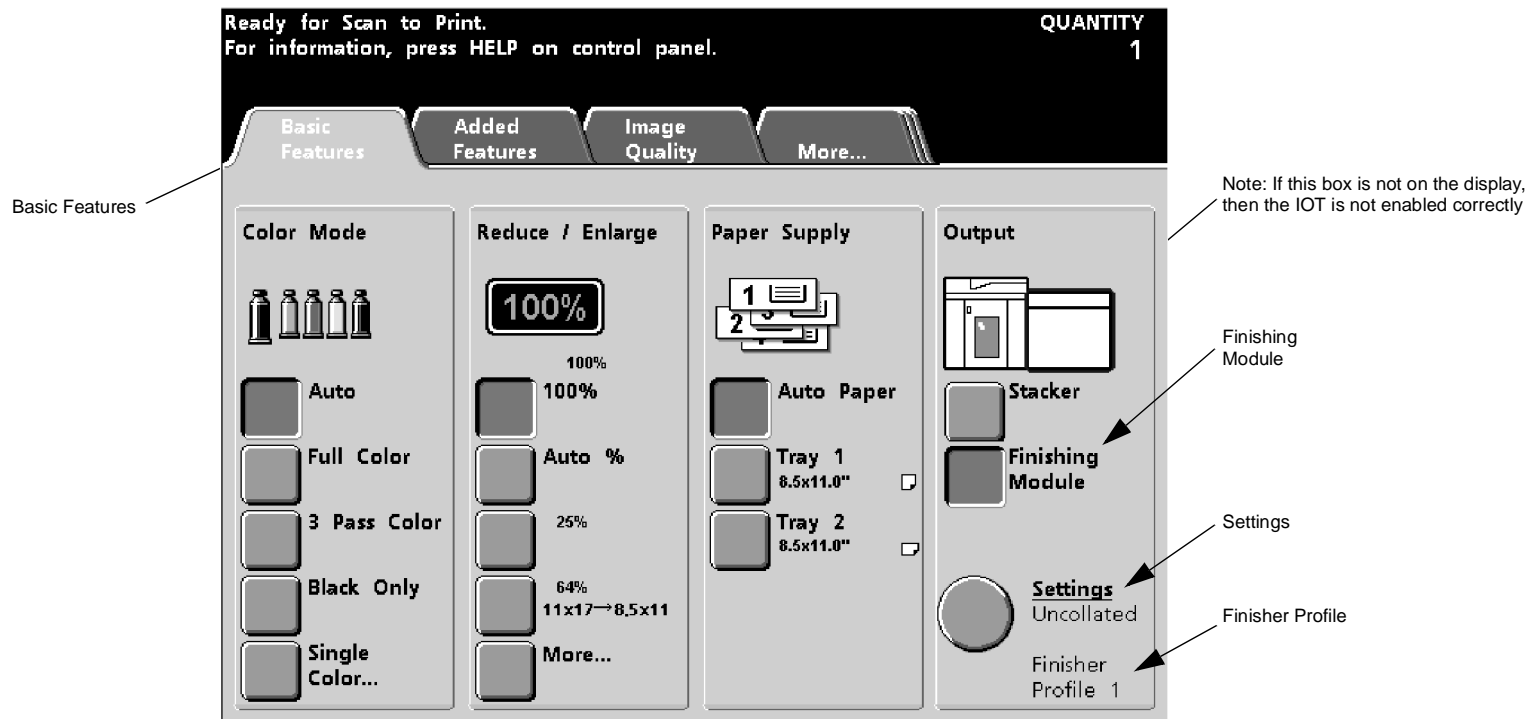


Figure 6-49 The Basic Features Tab

2. Select the **Basic Features Tab**, as shown in Figure 6-49.
3. Click the **Finishing Module** button and the selected **Finisher Profile** will be displayed in the bottom right corner of the screen, as shown in Figure 6-49.
4. To Review or change the **Finisher Profile** or other **Finishing Features** press the **Settings** button, as shown in Figure 6-49.

The **Setting** Screen will be displayed, as shown in Figure 6-50.

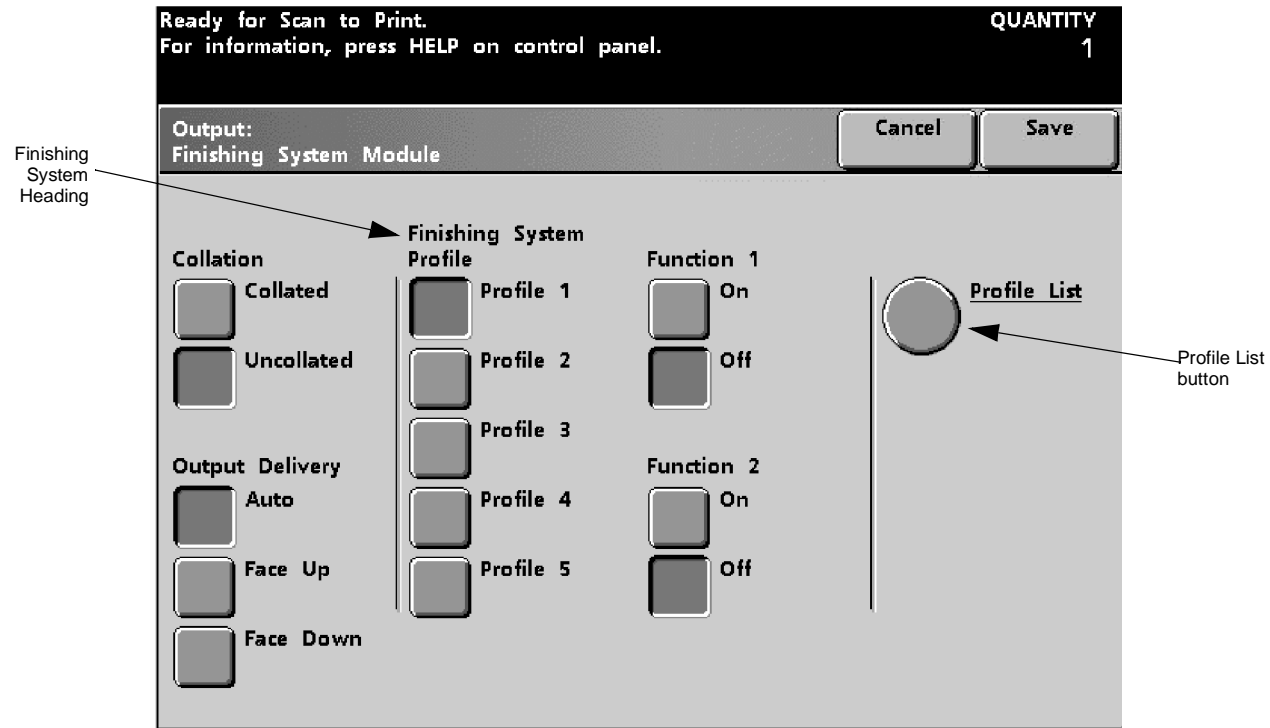


Figure 6-50 The Settings Screen

5. To change the profile to be used, click one of the profile options under the **Finishing System Profile Heading**, as shown in Figure 6-50.
6. To view the profiles, click the **Profile List** button, as shown in Figure 6-50.

The **Profile List** Screen will be displayed, as shown in Figure 6-51.

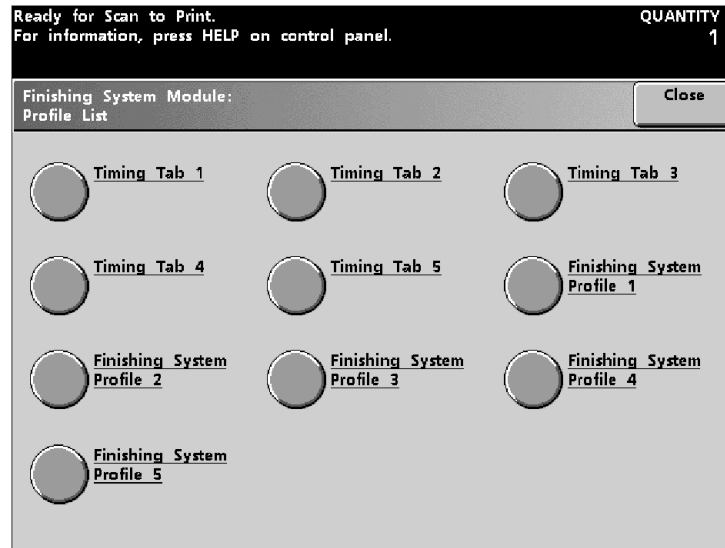


Figure 6-51 The Profile List Screen

7. Select any of the profile buttons to display the information for each Profile listed.

The **Finisher Profile** values or the **Timing** values will be displayed, as shown in Figure 6-52.

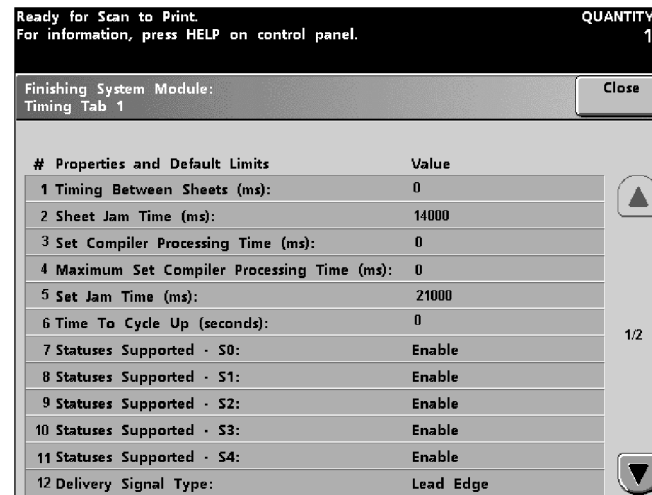


Figure 6-52 The Timings Values Screen

NOTE: You will only be able to view the current profile loaded in to the system or change which one is active.

8. Select the **Close** button all previous screens when you have finished reviewing the profiles, if you changed which profile is active, please ensure to select the **Save** option when directed.

DocuColor 6060 Profile Setup and Profiles

NOTE: Profile values can be set through the IOT UI by a trained operator at any time after the CSE has installed the DFA Device. The value and usage of the profiles and functions are the responsibility of the DFD.

1. Use the **Access** button to activate the pathway options. After entering the password correctly the **Tools Pathway** window will display, as shown in Figure 6-53.
2. Click the **Tools Pathway** option, as shown in Figure 6-53.

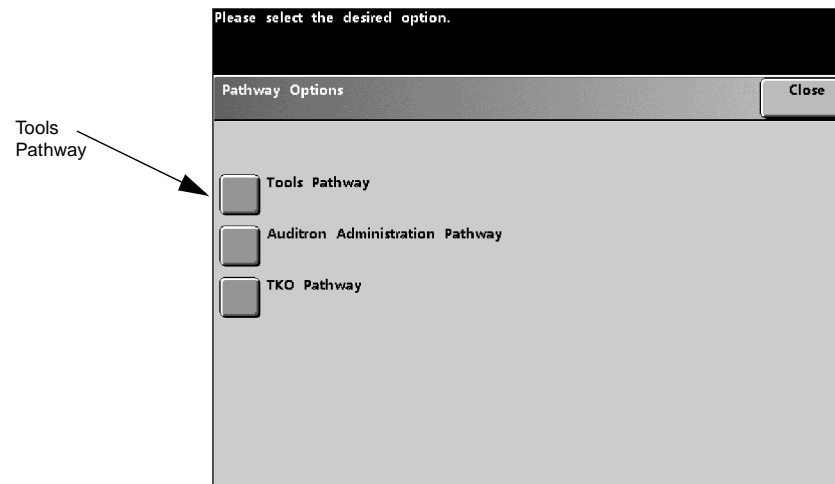


Figure 6-53 The Pathway Options

The **Tools Mode** Window will display, as shown in Figure 6-54.

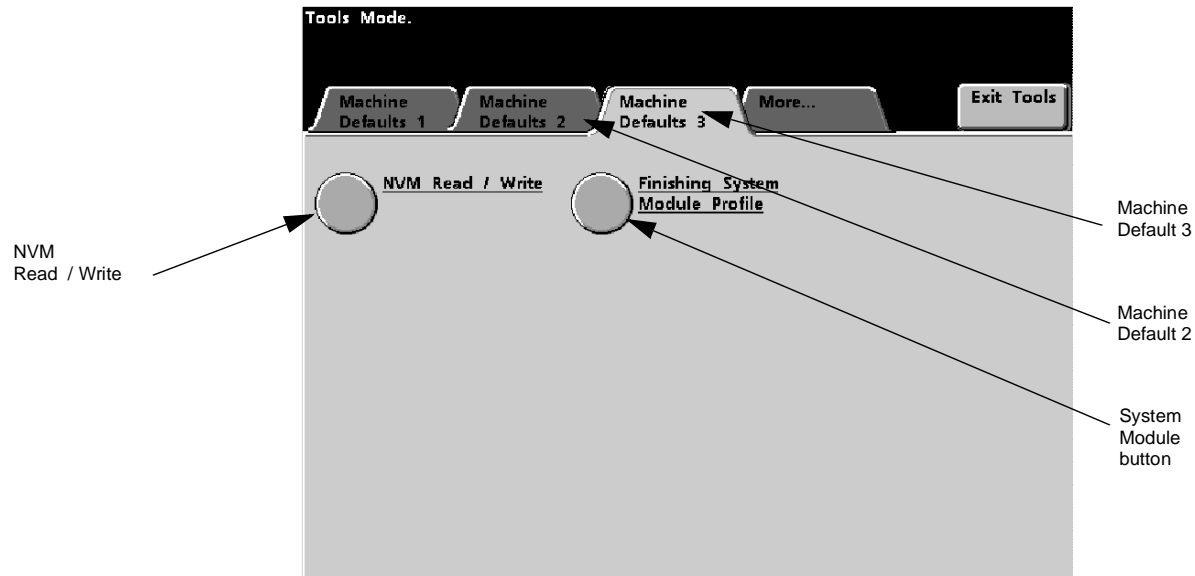


Figure 6-54 The Tools Mode Window

3. Select **Machine Defaults 3** tab if your DocuColor 6060 has a scanner.
Select **Machine Defaults 2** tab if your DocuColor 6060 does not have a scanner, as shown in Figure 6-54.
4. If you would like to review the currently loaded profiles, click the **Finishing System Module Profile** button, as shown in Figure 6-54.
5. Click the **NVM Read / Write option**, as shown in Figure 6-54.

This will display the **Tools Mode** window, as shown in Figure 6-55.

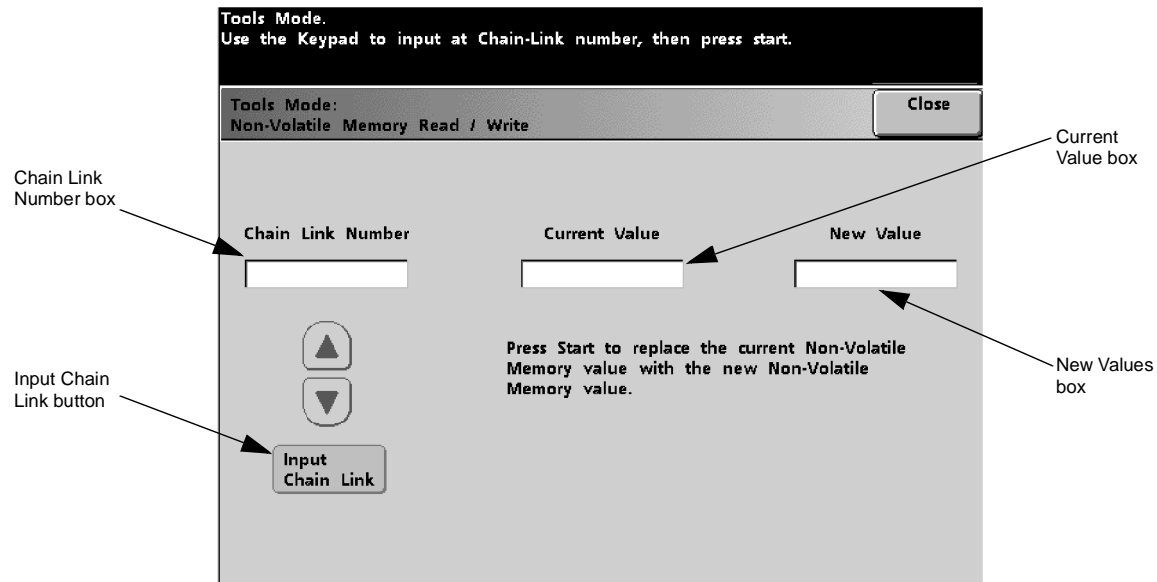


Figure 6-55 The Tools Mode Window

6. Locate the DocuColor 6060 Profiles at the end of this procedure, then enter the NVM # into the **Chain Link Number** box, please ensure to type in the full location number. (ie 700072)
7. Press **Start** and the Current Value will be displayed. To change value, type in the new value and press enter. The New Value will become the Current Value, after pressing **Start**.
8. Press the **Input Chain Link** button to select a different NVM number or use the up/down arrows to move to next number.
9. When finished, press the **Close** button.

DocuColor 6060 to GBC FusionPunch II Profiles

| Description | Profile 1 (Offset Stacker) | | Profile 2 (Bypass Stacker) | | Profile 3 (Bypass to DFA Device) | |
|----------------------------------|-------------------------------|-------|-------------------------------|-------|-------------------------------------|-------|
| | NVM Loc | Value | NVM Loc | Value | NVM Loc | Value |
| Profile Selectable | 700 072 | 1 | 700 432 | 1 | 700 467 | 1 |
| Function 1 | 700 073 | 0 | 700 433 | 0 | 700 468 | * |
| Function 2 | 700 078 | 0 | 700 434 | 0 | 700 469 | * |
| Sheet Sequence 1 -N | 700 079 | 1 | 700 435 | 1 | 700 470 | * |
| Sheet Sequence N -1 | 700 080 | 1 | 700 436 | 1 | 700 471 | * |
| Side 1 Direction Face-Up | 700 081 | 1 | 700 437 | 1 | 700 472 | * |
| Side 1 Direction Face-down | 700 083 | 1 | 700 438 | 1 | 700 473 | * |
| Min Cross-Process Sheet Width | 700 095 | 215 | 700 439 | 203 | 700 474 | * |
| Max Cross-Process Sheet Width | 700 096 | 298 | 700 440 | 298 | 700 475 | * |
| Min In-Process Sheet Length | 700 122 | 182 | 700 441 | 182 | 700 476 | * |
| Max In-Process Sheet Length | 700 129 | 433 | 700 442 | 229 | 700 477 | * |
| Min Sheet Weight | 700 217 | 0 | 700 443 | 0 | 700 478 | * |
| Max Sheet Weight | 700 218 | 5 | 700 444 | 5 | 700 479 | * |
| Min Set Size | 700 219 | 1 | 700 445 | 1 | 700 480 | * |
| Max Set Size | 700 238 | 65000 | 700 446 | 65000 | 700 481 | * |
| DFA Finisher Timing | | | | | | |
| Timing Between Sheets | 700 239 | 0 | 700 447 | 0 | 700 482 | ☆ |
| Sheet Jam Time | 700 332 | 5500 | 700 448 | 14000 | 700 483 | ☆ |
| Set Compiler Processing Time | 700 334 | 0 | 700 449 | 0 | 700 484 | ☆ |
| Max Set Compiler Processing time | 700 335 | 0 | 700 450 | 0 | 700 485 | ☆ |
| Set Jam Time | 700 336 | 13000 | 700 451 | 21000 | 700 486 | ☆ |
| Time to Cycle Up | 700 337 | 0 | 700 452 | 0 | 700 487 | ☆ |
| Status Supported S0 | 700 338 | 1 | 700 453 | 1 | 700 488 | 1 |
| Status Supported S1 | 700 339 | 1 | 700 454 | 1 | 700 489 | 1 |
| Status Supported S2 | 700 420 | 1 | 700 455 | 1 | 700 490 | 1 |
| Status Supported S3 | 700 421 | 1 | 700 456 | 1 | 700 491 | 1 |
| Status Supported S4 | 700 422 | 0 | 700 457 | 0 | 700 492 | 0 |
| Delivery Signal Type | 700 423 | 0 | 700 458 | 0 | 700 493 | * |
| Delivery Start Adjust | 700 424 | 0 | 700 459 | 0 | 700 494 | * |
| Delivery End Adjust | 700 425 | 60 | 700 460 | 30 | 700 495 | * |
| Recovery Behavior | 700 426 | 0 | 700 461 | 0 | 700 496 | * |
| Finisher Capacity | 700 427 | 15 | 700 462 | 15 | 700 397 | * |
| Cycle Down Delay | 700 428 | 0 | 700 463 | 0 | 700 498 | * |
| End of set offset | 700 429 | 0 | 700 464 | 0 | 700 499 | * |
| DFA Single Registration Point | 700 430 | 1 | 700 465 | 1 | 700 532 | 1 |

* Use attached DFA Device values

☆ Add 2000 to attached DFA Device value

Host Machine Enablement (DocuColor iGen3)

DocuColor iGen3 Profile Setup and Profiles

This procedure was written to coordinate with DocuSP Version C1.1.5.0.0 (AKA DocuColor iGen3 Version C1.1.5.0.0).

NOTE: In order to setup the Finishing Profiles the DFA module must installed and recognized by the host printer upon boot up.

NOTE: You must first logon as "custact" or higher in order to set up the finishing profiles. The following information is for the System Administrator or the System Analyst.

1. Go to the **Press Status** Window, click **System**, as shown in Figure 6-56. Select **Logon** from the drop down menu. This will bring up the **Logon** Window, as shown in Figure 6-57.

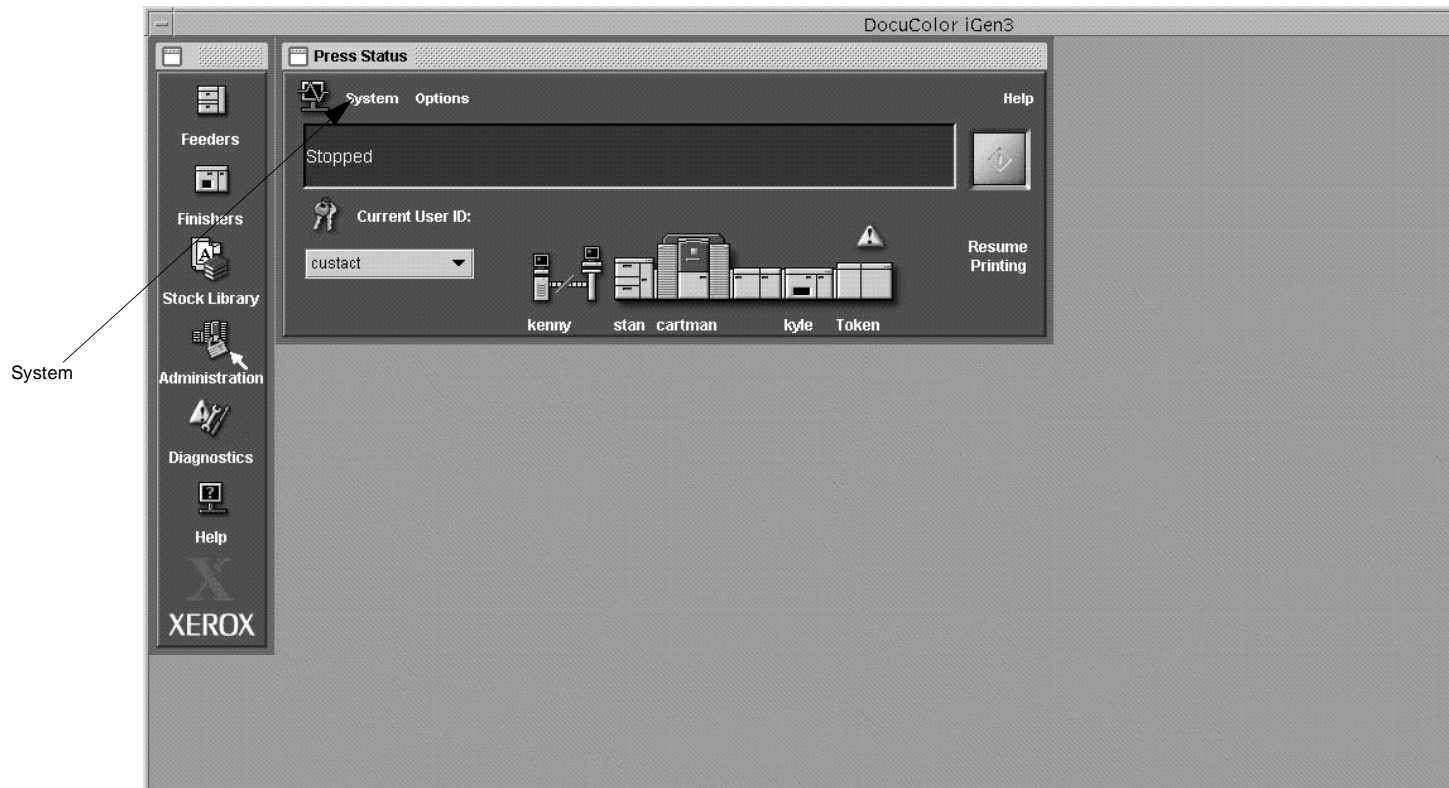


Figure 6-56 The Press Status Window

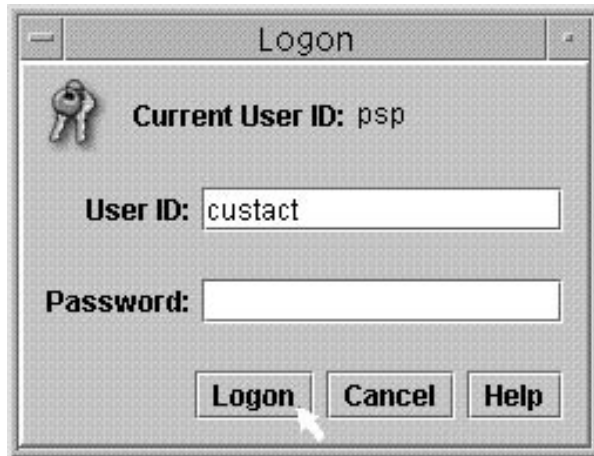


Figure 6-57 The Logon Window

2. Enter custact for the **User ID**, and the custact password, and then click **Logon**. "Please Note, you must logon at a minimum of custact level in order to setup the profiles."

3. Select the **Administration** icon. This will open the **Administration** window, as shown in Figure 6-58.

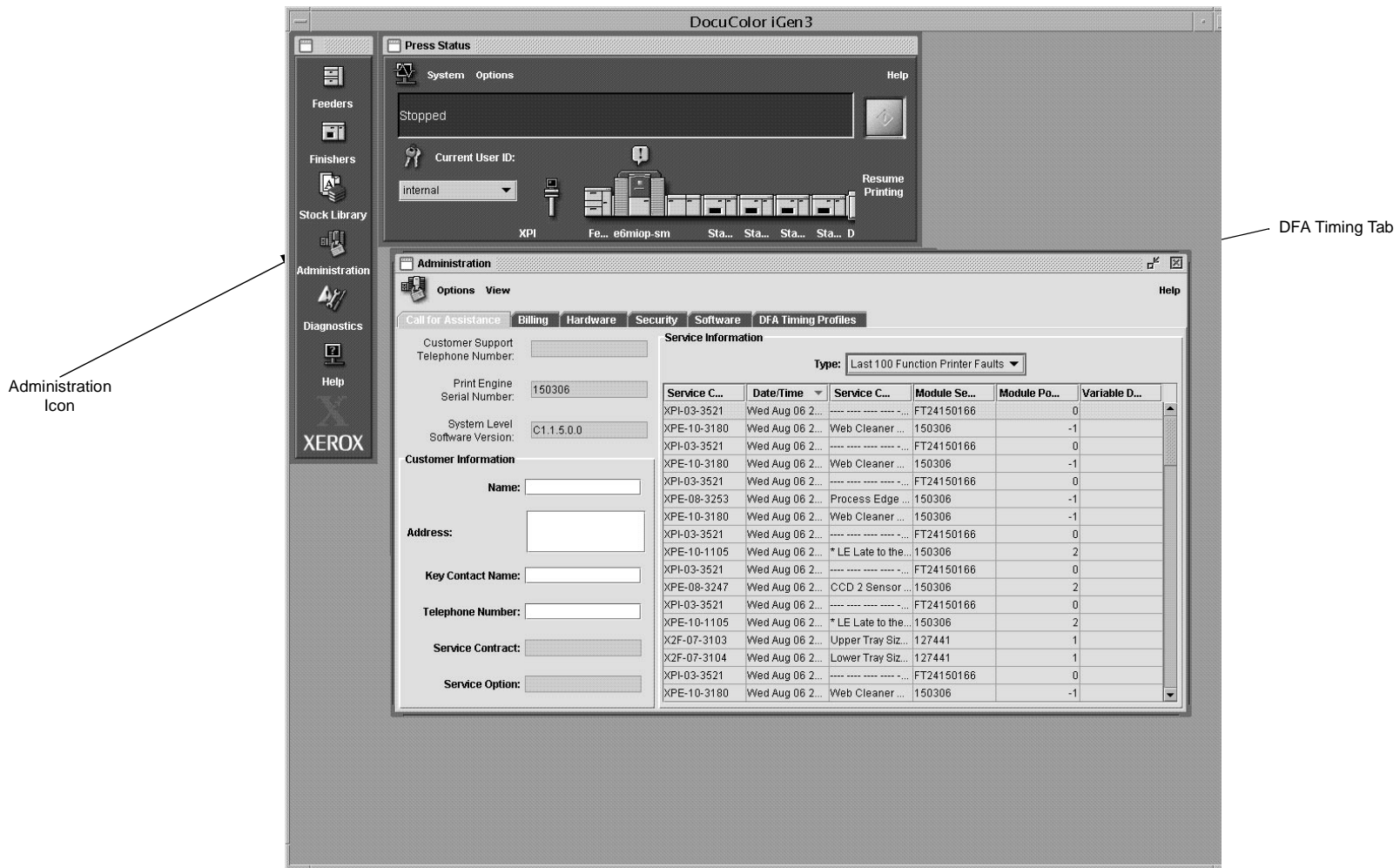


Figure 6-58 The Administration Window

4. In the Administration window, select the DFA Timing Profiles tab, as shown in Figure 6-58. The DFA Timings Profiles tab will be displayed, as shown in Figure 6-59.

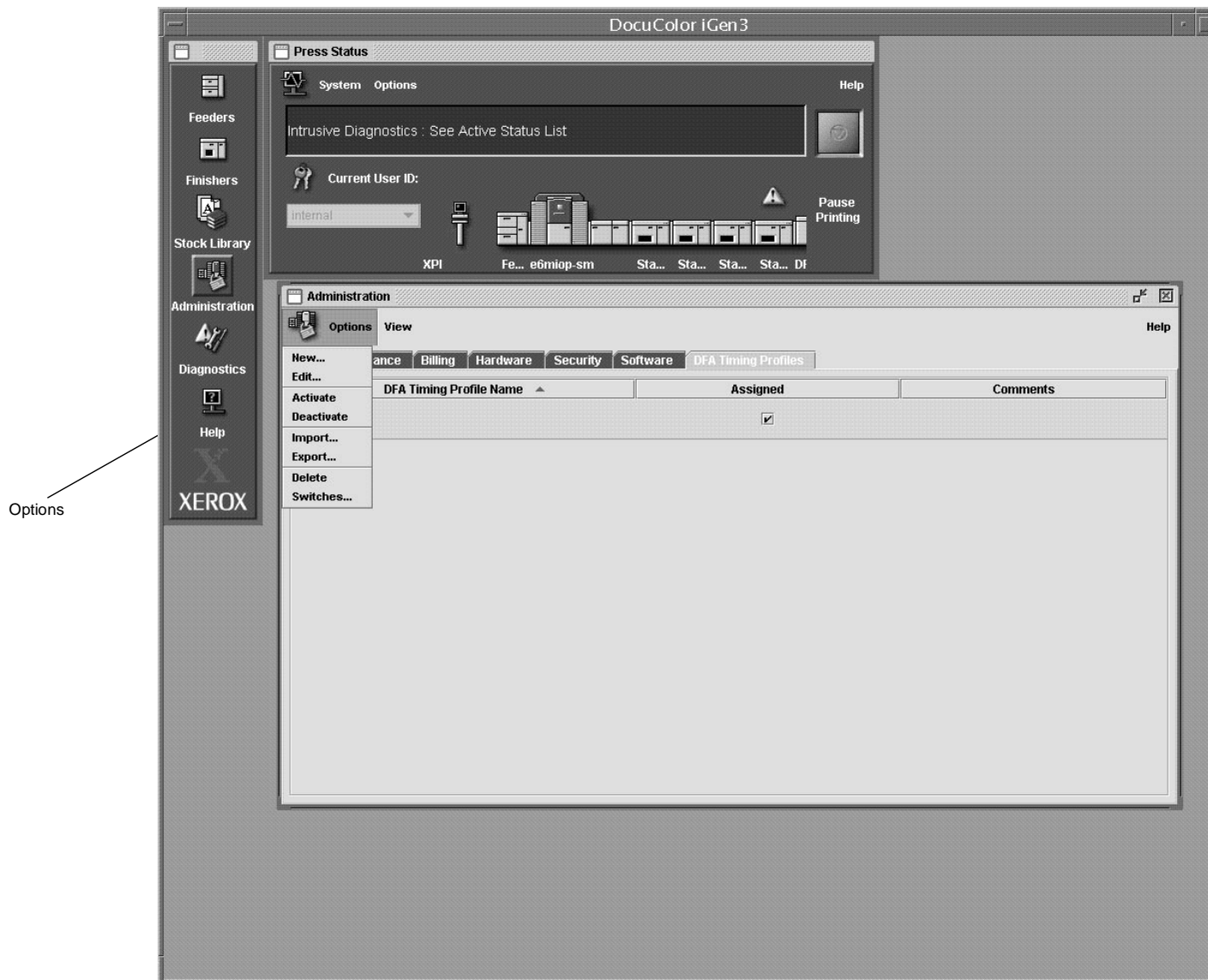


Figure 6-59 The Dfa Timings Profile Tab

5. Click **Options**, and select **New** from the drop down list to create a new **DFA Finishing Profile**.

The DFA Timing Profile Settings window will be displayed, as shown in Figure 6-60.

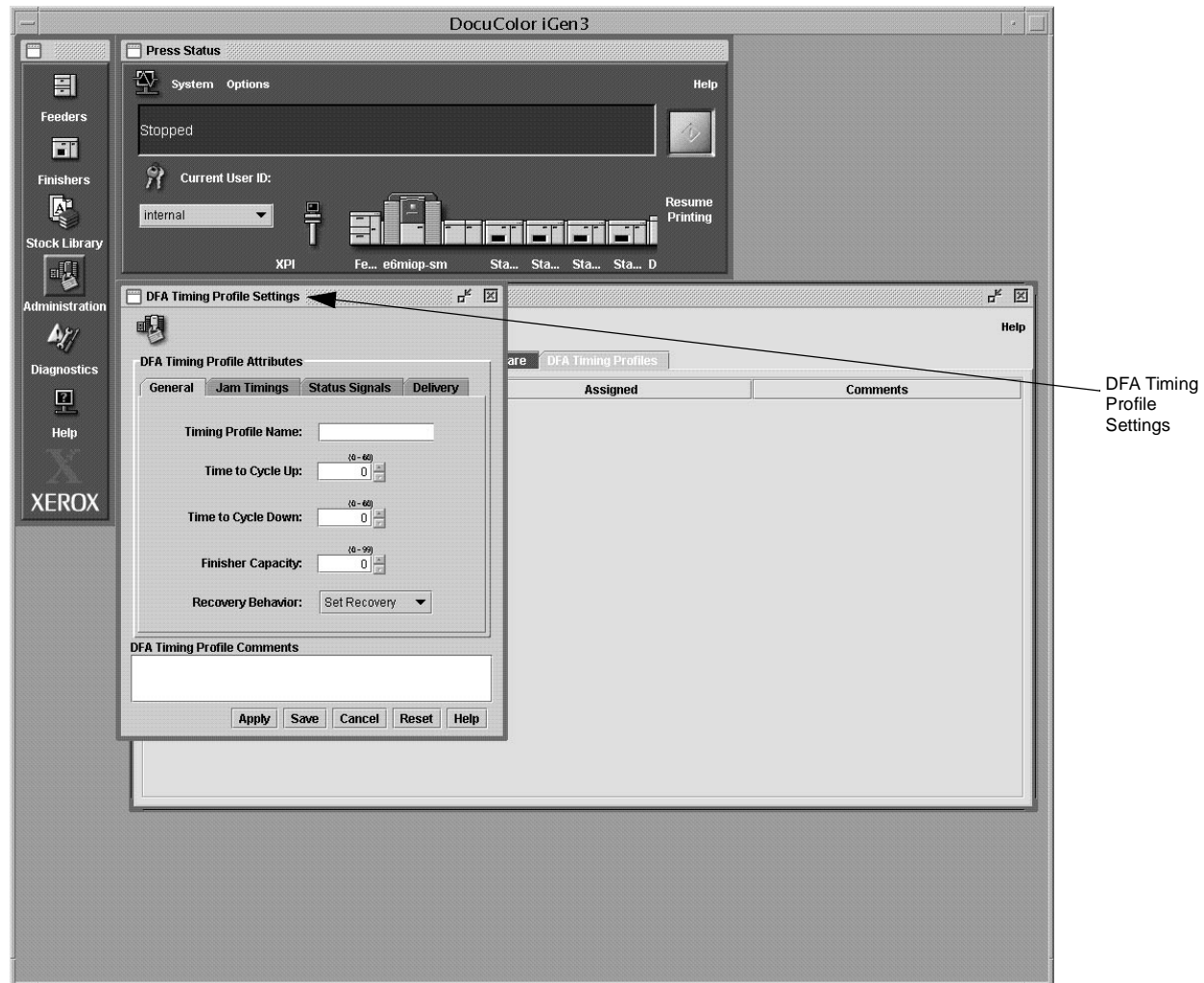


Figure 6-60 The DFA Timing Profile Settings Window

6. Enter the values for all DFA Timing Profile Attributes from the Finishing Profiles sheets at the end of this procedure.
7. Click **Apply**, and then click **Save** to close the window.

8. Hi-light the Profile that you setup by clicking on it, and then select **Options**, this will bring up a drop down list, now select **Activate**. If this is completed correctly, you will see a check mark in the assigned box, as shown in Figure 6-61.

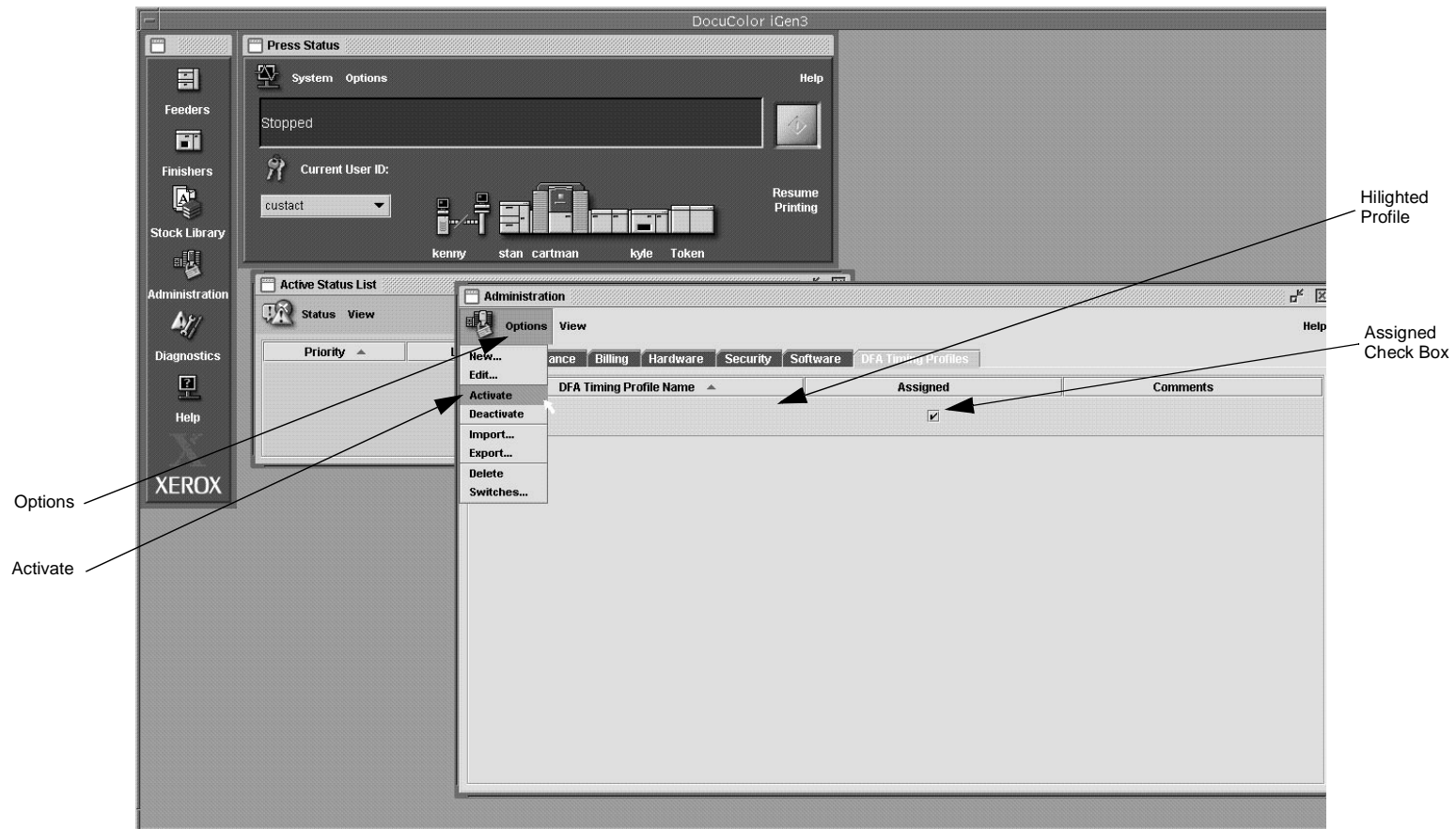


Figure 6-61 DFA Profile Activation

This completes the Profile Setup; you are now ready to send your jobs to the FusionPunch II.

General Tab

| | |
|--------------------|----------------|
| Profile Name | FusionPunch II |
| Time to Cycle Up | 0 |
| Time to Cycle Down | 0 |
| Finisher Capacity | 0 |
| Recovery Behavior | Sheet |

Delivery Tab

| | |
|-----------------------|-----------|
| Delivery Signal Type | Lead Edge |
| Delivery Start Adjust | 0 |
| Delivery End Adjust | 100 |
| End of Set Offset (#) | 0 |

Jam Timings Tab

| | |
|---------------------|------|
| Time Between Sheets | 0 |
| Sheet Jam Time (*) | 2200 |
| Time Between Sets | 0 |
| Set Jam Time (*) | 2600 |
| Set Processing Time | 0 |

Status Signals Tab Tab

| | |
|----------------------|----------|
| Offline (S0) | Enabled |
| Faulted (S1) | Enabled |
| Full (S2) | Enabled |
| Sheet Delivered (S3) | Enabled |
| Set Delivered (S4) | Disabled |
| Empty (S5) | Disabled |
| Not Ready (S6) | Disabled |
| Sheet Fed (S7) | Disabled |

Notes

Personality Profiles

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NOTE: All downstream devices must be set to 6180 speed and use 6180 profiles regardless of the speed of the Host Printer.

Add 2200 to the Sheet Jam time and 2600 to the Set Jam time of the downstream device's profile, even if you have more than one GBC Bypass Stacker installed. Besure to add any extra times specified by their profiles.

NOTE: N.B.:(C.P. Bourg)

1. *If one or more Hi Cap Stackers is used, do not forget ot add 656ms to the Sheet and Set Jam times for each stacker. When connected on a 6180 upstream or downstream. Add 861ms, when connected on a 6135 upstream only.*
2. *Hi Cap Stacker software must be 3.5.2 (DFA+Input+Driver) to support Cycle up and T.E. Signals from printer.*
3. *BPRF+BBF2005: control of milling motor by BPRF requires:*
 - *Cycle up from printer + BPRF ready in perf. mode, if connected on a 61xx printer (PLC input X17 <ON>).*
 - *BPRF ready in perf. mode, if connected (BBF2005 PLC inputs X17/18/19 <OFF>).*
4. *Delivery End Adjust: to allow the BPRF to determine if C0/C1 are triggered <Lead < or <Trail> edge, the maximum C0 pulse duration in <Trail> edge must be limited at 60 ms. In <Lead> edge mode, the C0 pulse duration is a function of the sheet size (process direction at pronter output) and is always longer than 100ms.*
5. *BCFX: Maximum cover width (cross process direction): 310mm; minimum cover lenght (process direction): 250mm; maximum document width (bypass through BCFX): 310mm.*

DocuTech 61XX to Fusion Punch II

Device Profile - Properties and Default Limits Tab

| DocuTech Models | 61XX | 61XX | 61XX |
|-------------------------|--------------------------------|------------------------------|---------------------------------------|
| Finishers Configuration | Fusion Punch II Single Stacker | Fusion Punch II Dual Stacker | Fusion Punch II Single / Dual Stacker |
| Device Name | Fusion Punch II | Fusion Punch II | Punch SE |
| Type | External | External | External |
| Function 1 | Line Off | Line Off | Line Off |
| Function 2 | Line Off | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down |
| Rotate | Never | Never | Always |
| Minimum Sheet Length | 254 | 254 | 254 |
| Maximum Sheet Length | 364 | 364 | 364 |
| Minimum Sheet Width | 203 | 203 | 203 |
| Maximum Sheet Width | 432 | 432 | 432 |
| Minimum Sheet Weight | 60 | 60 | 60 |
| Maximum Sheet Weight | 203 | 203 | 203 |
| Minimum Set Size | 1 | 1 | 1 |
| Maximum Set Size | 65000 | 65000 | 65000 |

DocuTech 61XX to Fusion Punch II

Device Profile-Properties and Default Limits-Timings Tab

(*) = For Each Hi Cap Stacker in front the FP II on a 6155 / 6180, Add 656ms To Sheet and Set Jam Times.

(*) = For Each Hi Cap Stacker in front the FP II on a 6100 / 6115 / 6135, Add 861ms To Sheet and Set Jam Times.

(#) = For Each Hi Cap Stacker in front the FP II Add 50ms To End of Set Offset.

| DocuTech Models | 61XX | 61XX | 6100 / 15 / 35 | 6155 / 80 |
|------------------------------|--------------------------------|------------------------------|---------------------------------------|---------------------------------------|
| Finishers Configuration | Fusion Punch II Single Stacker | Fusion Punch II Dual Stacker | Fusion Punch II Single / Dual Stacker | Fusion Punch II Single / Dual Stacker |
| Device Name | Fusion Punch II | Fusion Punch II | Punch SE | Punch SE |
| Timing Between Sheets | 0 | 0 | 0 | 175 |
| Sheet Jam Time (*) | 2200 (*) | 2200 (*) | 3250 (*) | 3029 (*) |
| Set Compiler Processing Time | 0 | 0 | 0 | 175 |
| Time Between Sets | 0 | 0 | 0 | 175 |
| Set Jam Time (*) | 2600 (*) | 2600 (*) | 3750 (*) | 3529 (*) |
| Time to Cycle Up | 0 | 0 | 0 | 0 |
| S0 | Enabled | Enabled | Enabled | Enabled |
| S1 | Enabled | Enabled | Enabled | Enabled |
| S2 | Enabled | Enabled | Enabled | Enabled |
| S3 | Enabled | Enabled | Enabled | Enabled |
| S4 | Disabled | Disabled | Disabled | Disabled |
| Delivery Signal Type | Lead Edge | Lead Edge | Lead Edge | Lead Edge |
| Delivery Start Adjust | 0 | 0 | 120 | 120 |
| Delivery End Adjust | 100 | 100 | 50 | 50 |
| End of Set Offset (#) | 0 (#) | 0 (#) | 30 (#) | 30 (#) |
| Recovery Behavior | Sheet | Sheet | Sheet | Sheet |
| Finisher Capacity | 0 | 0 | 0 | 0 |
| Cycle Down Delay | 0 | 0 | 0 | 0 |

DocuTech 61XX to Fusion Punch II

Finisher Profile - Properties and Limits

| DocuTech Models | 61XX | 61XX | 61XX |
|------------------------|-----------------------------|-----------------------------|------------------------------|
| Finishers | Fusion Punch | Fusion Punch | Fusion Punch |
| Configuration | Single Stacker | Dual Stacker | Single / Dual Stacker |
| Profile Name | GBC | GBC | GBC SE |
| Type | FusionPunch II | FusionPunch II | Punch SE |
| Function 1 | Line Off | Line Off | Line Off |
| Function 2 | Line Off | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down |
| Rotate | Never | Never | Always |
| Minimum Sheet Length | 254 | 254 | 254 |
| Maximum Sheet Length | 364 | 364 | 364 |
| Minimum Sheet Width | 203 | 203 | 203 |
| Maximum Sheet Width | 432 | 432 | 432 |
| Minimum Sheet Weight | 60 | 60 | 60 |
| Maximum Sheet Weight | 203 | 203 | 203 |
| Minimum Set Size | 1 | 1 | 1 |
| Maximum Set Size | 65000 | 65000 | 65000 |

**DocuTech 61XX to FusionPunch II
to Bourg Products**
Device Profile - Properties and Default Limits Tab

| DocuTech Models Finishers CIM / No CIM | 61XX SBM1 CIM / No CIM | 61XX BBF2005 No CIM | 61XX BBF2005 Bypass No CIM | 61XX BPRF + BBF2005 No CIM | 61XX BPRF + BBF2005 Bypass No CIM | 61XX BDF No CIM |
|---|-------------------------------------|---|---|---|---|--------------------------------------|
| Device Name | SBM1 | BBF2005 | BBF2005 Bypass | BPRF + BBF2005 | BPRF + BBF2005 Bypass | BDF |
| Type | Signature Booklet Maker | External | External | External | External | External |
| Function 1 | Line Off | Line Off | Line Off | Line Off | Line Off | Line Off |
| Function 2 | Line Off | Line Off | Line Off | Line Off | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down |
| Rotate | System Specified | Never NB: Rotation needed if glue must be applied on short edge. | Never NB: Rotation needed if glue must be applied on short edge. | Never NB: Rotation needed if glue must be applied on short edge. | Never NB: Rotation needed if glue must be applied on short edge. | Never or Always depending on job. |
| Minimum Sheet Length | 254 | 254 | 254 | 254 | 254 | 254 |
| Maximum Sheet Length | 364 | 364 | 364 | 364 | 364 | 364 |
| Minimum Sheet Width | 203 | 203 | 203 | 203 | 203 | 203 |
| Maximum Sheet Width | 432 | 432 | 432 | 432 | 432 | 432 |
| Maximum Sheet Weight | 200 | 200 | 200 | 200 | 200 | 200 |
| Minimum Sheet Weight | 60 | 60 | 60 | 60 | 60 | 60 |
| Minimum Set Size | 1 | 15 | 15 | 15 | 15 | 1 |
| Maximum Set Size | 22 | 350 | 350 | 350 NB: Max 125 sheet if Perf./Rot and fold is used | 350 NB: Max 125 sheet if Perf./Rot and fold is used | 55 |

**DocuTech 61XX to FusionPunch II
to Bourg Products**
Device Profile - Properties and Default Limits - Timings Tab

| DocuTec Models | DT 61XX | DT 61XX | DT 61XX | DT 61XX | DT 61XX | DT 61XX |
|------------------------------|----------------|-----------------------|------------------------|-----------------------|-------------------------------|----------------|
| Finishers | FP II / | FP II / | FP II / | FP II / | FP II / | FP II / |
| Device Name | SBM1 | BBF2005 | BBF2005 with Bypass | BPRF + BBF2005 | BPRF + BBF2005 with Bypass | BDF |
| CIM / No CIM | CIM / No CIM | NA | NA | NA | NA | NA |
| Timing Between Sheets | 250 | 0 | 0 | 0 | 0 | 0 |
| Sheet Jam Time | 1000 (1) | 1000 (1) | 1000 (1) | 1000 (1) | 1000 (1) | 1000 (1) |
| Set Compiler Processing Time | 1300 | 2000 | 2000 | 2000 | 2000 | 600 |
| Maximum Set Processing Time | 1300 | 15000 | 15000 | 15000 | 15000 | 600 |
| Set Jam Time | 8000 | 32760 | 32760 | 32760 | 32760 | 7168 |
| Time to Cycle Up | 0 | 0 | 0 | 0 | 0 | 0 |
| S0 | Enabled | Enabled | Enabled | Enabled | Enabled | Enabled |
| S1 | Enabled | Enabled | Enabled | Enabled | Enabled | Enabled |
| S2 | Enabled | Enabled | Enabled | Enabled | Enabled | Enabled |
| S3 | Disabled | Disabled (on request) | Disabled (on request) | Disabled (on request) | Disabled (on request) | Enabled |
| S4 | Disabled | Disabled (on request) | Disabled (on request) | Disabled (on request) | Disabled (on request) | Enabled |
| Delivery Signal Type | Lead Edge | Trial Edge (2) | Trial Edge (2) | Trial Edge (2) | Trial Edge (2) | Lead Edge |
| Delivery Start Adjust | 0 | 60 | 200 | 60 | 60 | 120 |
| Delivery End Adjust | 30 | 60 | 60 | 60 | 60 | 50 |
| End of Set Offset | 175 | 30 | 30 | 30 | 30 | 30 |
| Recovery Behavior | Set | Set | Set | Set | Set | Set |
| Finisher Capacity | 28 | 0 | 0 | 0 | 0 | 10 |
| Cycle Down Delay | 0 | 0 | 0 | 0 | 0 | 0 |

**DocuTech 61XX to FusionPunch II
to Bourg Products
Finisher Profile - Properties and Limits**

| DocuTech Models Finishers CIM / No CIM | 61XX SBM1 CIM / No CIM | 61XX BBF2005 No CIM | 61XX BBF2005 Bypass No CIM | 61XX BPRF + BBF2005 No CIM | 61XX BPRF + BBF2005 Bypass No CIM | 61XX BDF No CIM |
|---|-------------------------------------|---|---|---|---|--------------------------------------|
| Profile Name | SBM | BBF2005 | BBF2005 Bypass | BPRF + BBF2005 | BPRF + BBF2005 Bypass | BDF |
| Type | SBM1 | BBF2005 | BBF2005 Bypass | BPRF + BBF2005 | BPRF + BBF2005 Bypass | BDF |
| Function 1 | Line Off | Line Off | Line Off | Line Off | Line Off | Line Off |
| Function 2 | Line Off | Line Off | Line Off | Line Off | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down |
| Rotate | System Specified | Never NB: Rotation needed if glue must be applied on short edge. | Never NB: Rotation needed if glue must be applied on short edge. | Never NB: Rotation needed if glue must be applied on short edge. | Never NB: Rotation needed if glue must be applied on short edge. | Never or Always depending on job. |
| Minimum Sheet Length | 254 | 254 | 254 | 254 | 254 | 254 |
| Maximum Sheet Length | 364 | 364 | 364 | 364 | 364 | 364 |
| Minimum Sheet Width | 203 | 203 | 203 | 203 | 203 | 203 |
| Maximum Sheet Width | 432 | 432 | 432 | 432 | 432 | 432 |
| Maximum Sheet Weight | 200 | 200 | 200 | 200 | 200 | 200 |
| Minimum Sheet Weight | 60 | 60 | 60 | 60 | 60 | 60 |
| Minimum Set Size | 1 | 15 | 15 | 15 | 15 | 1 |
| Maximum Set Size | 22 | 350 | 350 | 350 NB: Max 125 sheet if Perf./Rot and fold is used | 350 NB: Max 125 sheet if Perf./Rot and fold is used | 55 |

DocuTech 61XX to Fusion Punch II to SBM2 – without CIM

Device Profile - Properties and Default Limits Tab

| | | | | | |
|----------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------------|
| Paper Sizes | 8.5x11/8.5x14/A4 | 8.5x11/8.5x14/A4 | 8.5x11/8.5x14/A4 | 8.5x11/8.5x14/A4 | 11x17/A3 |
| Set Sizes | 1 to 22 Sheet Set | 1 to 22 Sheet Set | 23 to 27 Sheet Set | 23 to 27 Sheet Set | 1 to 27 Sheet Set |
| Non-Stream Feed / Stream Feed | Non-Stream Feed | Stream Feed | Non-Stream Feed | Stream Feed | Non-Stream Feed / Stream Feed |
| Device Name | SBM2Bk1to22 | SBM2Bk1to22S | SBM2Bk23to27 | SBM2Bk23to27S | SBM2Ldgr1to27 |
| Type | External | External | External | External | External |
| Function 1 | Line Off | Line Off | Line Off | Line Off | Line Off |
| Function 2 | Line Off | Line Off | Line Off | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down |
| Rotate | Always | Always | Always | Always | Never |
| Minimum Sheet Length | 254 | 254 | 254 | 254 | 254 |
| Maximum Sheet Length | 364 | 364 | 364 | 364 | 364 |
| Minimum Sheet Width | 203 | 203 | 203 | 203 | 203 |
| Maximum Sheet Width | 432 | 432 | 432 | 432 | 432 |
| Minimum Sheet Weight | 60 | 60 | 60 | 60 | 60 |
| Maximum Sheet Weight | 200 | 200 | 200 | 200 | 200 |
| Minimum Set Size | 1 | 1 | 23 | 23 | 1 |
| Maximum Set Size | 22 | 22 | 27 | 27 | 27 |

**DocuTech 6155/6180 to FusionPunch II to SBM2 –
without CIM**
Device Profile - Properties and Default Limits - Timings Tab

(*) = For Each Hi Cap Stacker on a DT6155 / 6180, Add 656ms To Sheet and Set Jam Times.
(#) = For Each Hi Cap Stacker Add 50ms To End of Set Offset.

| | | | | | |
|------------------------------------|-------------------|-------------------|--------------------|--------------------|----------------------------------|
| Paper Sizes | 8.5x11/8.5x14/A4 | 8.5x11/8.5x14/A4 | 8.5x11/8.5x14/A4 | 8.5x11/8.5x14/A4 | 11x17/A3 |
| Set Sizes | 1 to 22 Sheet Set | 1 to 22 Sheet Set | 23 to 27 Sheet Set | 23 to 27 Sheet Set | 1 to 27 Sheet Set |
| Non-Stream Feed / Stream Feed | Non-Stream Feed | Stream Feed | Non-Stream Feed | Stream Feed | Non-Stream Feed / Stream Feed |
| Timing Between Sheets | 120 | 120 | 120 | 120 | 120 |
| Sheet Jam Time (*) | 800 (*) | 800 (*) | 800 (*) | 800 (*) | 800 (*) |
| Set Compiler Processing Time | 150 | 150 | 400 | 600 | 150 |
| Maximum Set Processing Time | 1200 | 1800 | 0 | 0 | 2400 |
| Set Jam Time (*) | 7168 (*) | 7168 (*) | 7168 (*) | 7168 (*) | 7168 (*) |
| Time to Cycle Up | 0 | 0 | 0 | 0 | 0 |
| S0 | Enabled | Enabled | Enabled | Enabled | Enabled |
| S1 | Enabled | Enabled | Enabled | Enabled | Enabled |
| S2 | Enabled | Enabled | Enabled | Enabled | Enabled |
| S3 | Disabled | Disabled | Disabled | Disabled | Disabled |
| S4 | Disabled | Disabled | Disabled | Disabled | Disabled |
| Delivery Signal Type | Lead Edge | Lead Edge | Lead Edge | Lead Edge | Lead Edge |
| Delivery Start Adjust | 0 | 0 | 0 | 0 | 0 |
| Delivery End Adjust | 50 | 50 | 50 | 50 | 50 |
| End of Set Offset (#) | 20 | 20 | 20 | 20 | 20 |
| Recovery Behavior | SET | SET | SET | SET | SET |
| Finisher Capacity | 7 | 7 | 7 | 7 | 7 |
| Cycle Down Delay | 0 | 0 | 0 | 0 | 0 |

DocuTech 61XX to FusionPunch II to SBM2 – without CIM

Finisher Profile - Properties and Limits

| | | | | | |
|--|--|--|---|---|---|
| Paper Sizes Set Sizes Non-Stream Feed / Stream Feed | 8.5x11/8.5x14/A4 1 to 22 Sheet Set Non-Stream Feed | 8.5x11/8.5x14/A4 1 to 22 Sheet Set Stream Feed | 8.5x11/8.5x14/A4 23 to 27 Sheet Set Non-Stream Feed | 8.5x11/8.5x14/A4 23 to 27 Sheet Set Stream Feed | 11x17/A3 1 to 27 Sheet Set Non-Stream Feed / Stream Feed |
| Profile Name | SBM2Bk1to22 | SBM2Bk1to22S | SBM2Bk23to27 | SBM2Bk23to27S | SBM2Ldgr1to27 |
| Type | SBM2Bk1to22 | SBM2Bk1to22S | SBM2Bk23to27 | SBM2Bk23to27S | SBM2Ldgr1to27 |
| Function 1 | Line Off | Line Off | Line Off | Line Off | Line Off |
| Function 2 | Line Off | Line Off | Line Off | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down | Face Up and Face Down |
| Rotate | Always | Always | Always | Always | Never |
| Minimum Sheet Length | 254 | 254 | 254 | 254 | 254 |
| Maximum Sheet Length | 364 | 364 | 364 | 364 | 364 |
| Minimum Sheet Width | 203 | 203 | 203 | 203 | 203 |
| Maximum Sheet Width | 432 | 432 | 432 | 432 | 432 |
| Minimum Sheet Weight | 60 | 60 | 60 | 60 | 60 |
| Maximum Sheet Weight | 200 | 200 | 200 | 200 | 200 |
| Minimum Set Size | 1 | 1 | 23 | 23 | 1 |
| Maximum Set Size | 22 | 22 | 27 | 27 | 27 |

DocuTech 61XX to FusionPunch II to SBM2 – with CIM

Device Profile - Properties and Default Limits Tab

| DocuTech Model | DT 6155 / 6180 | DT 6155 / 6180 |
|----------------------------------|-----------------------------|----------------------------------|
| Paper Sizes | 8.5x11/8.5x14/A4 | 11x17/A3 |
| Set Sizes | 1 to 27 Sheet Set | 1 to 27 Sheet Set |
| Non-Stream Feed / Stream Feed | Stream Feed | Non-Stream Feed / Stream Feed |
| Device Name | SBM2Bk1to27C | SBM2Ldgr1to27C |
| Type | External | External |
| Function 1 | Line Off | Line Off |
| Function 2 | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down |
| Rotate | Always | Never |
| Minimum Sheet Length | 254 | 254 |
| Maximum Sheet Length | 364 | 364 |
| Minimum Sheet Width | 203 | 203 |
| Maximum Sheet Width | 432 | 432 |
| Minimum Sheet Weight | 60 | 60 |
| Maximum Sheet Weight | 200 | 200 |
| Minimum Set Size | 1 | 1 |
| Maximum Set Size | 27 | 27 |

DocuTech 61XX to FusionPunch II to SBM2 - with CIM

Device Profile - Properties and Default Limits - Timings Tab

(*) = For Each Hi Cap Stacker on a DT 6155 / 6180, Add 656ms To Sheet and Set Jam Times.

(*) = For Each Hi Cap Stacker on a DT6100 /6115 / DT6135, Add 861ms To Sheet and Set Jam Times.

(#) = For Each Hi Cap Stacker Add 50ms To End of Set Offset.

| DocuTech Model | DT 6155 / 6180 | DT 6155 / 6180 |
|----------------------------------|-------------------|----------------------------------|
| Paper Sizes | 8.5x11/8.5x14/A4 | 11x17/A3 |
| Set Sizes | 1 to 27 Sheet Set | 1 to 27 Sheet Set |
| Non-Stream Feed / Stream Feed | Stream Feed | Non-Stream Feed / Stream Feed |
| Timing Between Sheets | 120 | 120 |
| Sheet Jam Time (*) | 800 (*) | 800 (*) |
| Set Compiler Processing Time | 400 | 600 |
| Maximum Set Processing Time | 1200 | 2400 |
| Set Jam Time (*) | 7168 (*) | 7168 (*) |
| Time to Cycle Up | 0 | 0 |
| S0 | Enabled | Enabled |
| S1 | Enabled | Enabled |
| S2 | Enabled | Enabled |
| S3 | Disabled | Disabled |
| S4 | Disabled | Disabled |
| Delivery Signal Type | Lead Edge | Lead Edge |
| Delivery Start Adjust | 0 | 0 |
| Delivery End Adjust | 50 | 50 |
| End of Set Offset (#) | 250 (#) | 90 (#) |
| Recovery Behavior | SET | SET |
| Finisher Capacity | 7 | 7 |
| Cycle Down Delay | 0 | 0 |

DocuTech 61XX to FusionPunch II to SBM2 – with CIM

Finisher Profile - Properties and Limits

| DocuTech Model | DT 6155 / 6180 | DT 6155 / 6180 |
|----------------------------------|-----------------------------|----------------------------------|
| Paper Sizes | 8.5x11/8.5x14/A4 | 11x17/A3 |
| Set Sizes | 1 to 27 Sheet Set | 1 to 27 Sheet Set |
| Non-Stream Feed / Stream Feed | Stream Feed | Non-Stream Feed / Stream Feed |
| Profile Name | SBM2Bk1to27C | SBM2Ldgr1to27C |
| Type | SBM2Bk1to27C | SBM2Ldgr1to27C |
| Function 1 | Line Off | Line Off |
| Function 2 | Line Off | Line Off |
| Sheet Sequence | 1-N and N-1 | 1-N and N-1 |
| Side 1 Direction | Face Up and Face Down | Face Up and Face Down |
| Rotate | Always | Never |
| Minimum Sheet Length | 254 | 254 |
| Maximum Sheet Length | 364 | 364 |
| Minimum Sheet Width | 203 | 203 |
| Maximum Sheet Width | 432 | 432 |
| Maximum Sheet Weight | 200 | 200 |
| Minimum Sheet Weight | 60 | 60 |
| Minimum Set Size | 1 | 1 |
| Maximum Set Size | 27 | 27 |

Special Tools

Ball End Allen Wrench Set L Shape .050" through 3/8"

6" Adjustable Wrench

2 Phillips Head Screw Driver

1 Phillips Head Screw Driver

6" Diagonal Wire Cutter

6" Needle Nose Pliers

Standard Slotted Screw Driver

Miniature Combination Wrench Set 5/32" through 7/16"

Principles of Operation

Introduction

This Principles of Operation document has been written to reflect the characteristics of the FusionPunch II running in Cycle Up Mode. The main difference between Cycle Up Mode and Online Mode is as follows:

- Cycle Up Mode uses the C2 Signal (Cycle Up Signal) and the S3 Signal (Sheet Delivered Signal), which all printers except for the DT135 can support.
- The Online Mode was originally designed to support only the Status Signals and Command Signals that the DT 135 currently uses. When running in the Online Mode the operation of the punch stays the same except for the following signals:
 - The S3, S4, C2, C6, and C7 will not have an effect on the operation. This will cause the FusionPunch II not to be able to support Sheet Recovery as the DT 135 only allows its own version of Set Recovery.

Note: If you are running the FusionPunch II inline with a DT135, then you must run the FusionPunch II in *Online Mode* and *NOT the Cycle Up Mode*.

Personality Profiles

The full benefit of the Personality Profiles is that they profile arrays of information related to the External Finishing Devices. Each profile contains data on an external finishing device's timing and operation so that the printer can most closely match its performance to that of the finisher. There must be one or more profiles for each finisher that will be used in-line with the printer. **Note** that a finisher may have multiple profiles if there are multiple operating modes, as there are instances where there are timing or signal differences between modes of operation.

Personality Profiles are a function of the 4xxx Family and the DT61xx Family. The DT 135 does not refer to these settings as Personality Profiles. The DT 135 has NVM and FBN values, used to change the different Statuses and Commands for the External Finisher's characteristics.

Principles of Operation

Document Finishing Architecture

Document Finishing Architecture (DFA) is the term for the communications between the printer and an External Finishing Device. FusionPunch II currently supports most DFA signals. In the following tables is a list of the printer families, Statuses and supported Command Signals. The most commonly used signals with the FusionPunch II as an end device (last External Finishing Device in the line) are as follows:

Note: The DT 61xx Family is not listed as it supports all DFA signals.

Note: All Sx Signals are known as Status Signals and All Cx are known as Command Signals.

Table 2 – Command Signal Product Chart

| Command Signal | 4135 | 4635 & 4635MX | 4800 Family | 4050 Family | DT135 (min compliance) |
|----------------|------|---------------|-------------|-------------|------------------------|
| C0 | Yes | Yes | Yes | Yes | Yes |
| C1 | Yes | Yes | Yes | Yes | Yes |
| C2 | Yes | Yes | Yes | Yes | |
| C3 | Yes | Yes | Yes | | |
| C4 | Yes | Yes | | | |
| C5 | Yes | Yes | | | |
| C6 | Yes | Yes | Yes | | |
| C7 | | Yes | Yes | | |

Table 1 – Status Signal Product Chart

| Status Signal | 4135 | 4635 & 4635MX | 4800 Family | 4050 Family | DT135 (min compliance) |
|---------------|------|---------------|-------------|-------------|------------------------|
| S0 | Yes | Yes | Yes | Yes | Yes |
| S1 | Yes | Yes | Yes | Yes | Yes |
| S2 | Yes | Yes | Yes | Yes | Yes |
| S3 | Yes | Yes | Yes | Yes | |
| S4 | Yes | Yes | Yes | Yes | |
| S5 | Yes | Yes | | | |
| S6 | Yes | Yes | | | |
| S7 | Yes | Yes | | | |

DFA (continued)

S0 Online/Offline Signal

The Online/Offline signal is a 5 VDC signal that is sent to the printer to notify the printer that the finishing device is ready to accept paper. When the FusionPunch II turns this signal ON (High), the printer then knows the FusionPunch II is ready to accept paper. When the finishing device turns this signal OFF (Low), the printer then understands that the finishing device is NOT ready to accept paper. The printer then waits for this signal to come back ON (High) before it will start printing to a finisher, as long as the other two signals (Faulted & Full) are ON (High). If this signal is turned OFF (Low) while the printer is running, the printer performs a Hard Shut Down where it stops printing instantly and usually purges remaining sheets in the paper path out to the Top Tray of the printer. The printer also displays a message stating “Clear External Finisher to run jobs to the Bypass Transport”, or “External Finisher Not Ready”.

S1 Faulted Signal

This is a 5 VDC signal that is sent to the printer to notify the printer that the FusionPunch II is NOT faulted or jammed. When the FusionPunch II turns this signal ON (High), the printer then knows the device is NOT faulted or jammed. When the FusionPunch II turns this signal OFF (Low), the printer understands that the finishing device is faulted or jammed and cannot accept paper. The printer then waits for this signal to come back ON (High) before it will start printing to the finisher, as long as the other two signals (Offline & Full) are ON (High). If this signal is turned OFF (Low) while the printer is running, the printer performs a Hard Shut Down (stops printing instantly and usually purges remaining sheet in the paper path out to the Top Tray of the Printer). The printer also displays a message stating *External Finisher Jam or Jam in Area 20*.

S2 Full Signal

This is a 5 VDC signal that is sent to the printer to notify the printer that the finishing device is NOT full. When the FusionPunch II turns this signal ON (High), the printer then knows the device is NOT full. If the printer is running when the punch turns this signal OFF (Low), the printer then understands that the finishing device is full and can only accept a certain amount of paper, as specified in the Personality Profile. The printer then does a Soft Shut Down (does not stop instantly, continues to print a specified number of sheets to the finisher, then shuts down). The printer also displays a message stating “External Finisher Full”. When this signal comes back ON (High), the printer will start printing to the finisher automatically as long as the other two signals (Offline & Faulted) are ON (High).

C0 Sheet Exit Signal

This is a 5 VDC signal that is sent from the printer to the FusionPunch II on every sheet of paper, as the lead edge (specified in the Personality Profile) covers the last sensor in the printer. This signal is normally High (Off) and active Low (ON). The FusionPunch II uses the C0 signal to recognize that a sheet of paper is coming and also to track every sheet through the finisher for Error Recovery.

C1 Set Exit Signal (End Of Set Signal)

This is a 5 VDC signal that is sent from the printer to the finisher on the last sheet of every set, as the lead edge (Specified in the Personality Profile) covers the last sensor in the printer. This signal is normally High (Off) and active Low (ON). The FusionPunch II uses the C1 signal to recognize that the last sheet of paper in a set is coming. It will then know when the Set is complete and will be able to offset the stack correctly.

DFA (continued)

S3 Sheet Acknowledge Signal (Sheet Delivered Signal)

This is a 5 VDC signal that is sent to the printer from the finisher. This signal is normally Low (Off) and active High (ON). When the finisher receives the C0 signal (Sheet Exit Signal explained above) from the printer, the finisher has a specified amount of time to return the signal to the printer. The time allotted for this signal to be returned is specified by the finishing device's personality profile. The signal returned to the printer is known as the S3 signal (Sheet Acknowledge Signal). This signal is used to track the sheets through a finishing device for Error Recovery. The printer will send the C0 signal to a finishing device on every sheet of paper as the lead edge covers the last sensor in the printer. When the finisher receives the C0 signal, it will then know that a sheet of paper is about to enter the finishing device. Then the finisher will track the signal and the sheet of paper associated with it through the entire finisher. Once the C0 signal and the sheet of paper associated with it have been processed, the finisher will then send the S3 signal back to the printer. When the printer receives the S3 signal from the finisher, it then knows that the finisher has completely processed that sheet of paper. It will therefore not reprint that sheet of paper if the printer or the finisher detects a jam.

S4 Set Acknowledge Signal (Set Delivered Signal)

This is a 5 VDC signal that is sent from a finishing device to the printer. This signal is normally Low (Off) and active High (ON). It works much like the S3 signal (Sheet Acknowledge Signal explained above), except that it only applies to the last sheet of paper in every set. Currently the FusionPunch II does not use the S4 signal (Set Acknowledge Signal) as an end Device. The FusionPunch II can support the S4 signal by routing it to down-line finishers.

Note: The C0 and S3 signals are also sent back and forth on the last sheet of every set. Therefore, the FusionPunch II does not need to use the S4 signal for Error Recovery, as it is redundant. Also, the FusionPunch II Personality Profile calls for Sheet Recovery. If the Profile called for Set Recovery, then it would become necessary to use the S4 signal.

C2 Cycle Up Signal

This is a 5 VDC signal that is sent from the printer to the finisher. This signal is normally High (Off) and active Low (ON). This signal is used by the FusionPunch II to know when to turn ON components required for Online Operation. It is also used to know when to turn OFF components in a stopped condition. The C2 signal (Cycle Up Signal) is sent a specified (specified by the Personality Profile) amount of time before the printer sends a sheet of paper to the finisher. The C2 signal remains ON (Low) until the Job is completed or until the printer or the finisher detects a jam.

Principles of Operation

C6 Finisher Function 1 Signal

This is a 5 VDC signal that is sent from the printer to the finisher. This signal is normally High (Off) and active Low (ON). C6 signals the finisher to begin specific operation for Function 1 and continue until the signal is removed. Finishers can use the C6 signal to perform specific operations such as paper size changes and other operations. Currently the FusionPunch II does not use this signal as an end Device, but can support it to down-line finishers.

C7 Finisher Function 2 Signal

This is a 5 VDC signal that is sent from the printer to the finisher. This signal is normally High (Off) and active Low (ON). C7 signals the finisher to begin specific operation for Function 2 and continue until the signal is removed. Finishers can use the C7 signal to perform specific operations such as paper size changes and other operations. Currently the FusionPunch II does not use this signal as an end Device, but can support it by routing it to down-line finishers.

Paper Path (Sequence of Operation)

Job Released

Once a job has been released, the printer must have the following Statuses from the FusionPunch II (these Statuses are specified by the FusionPunch II Personality Profile) in order to start printing to the finisher.

S0, S1, & S2 must be ON (High)

When all of these signals are ON (High), the printer will start up and send the C2 signal to the FusionPunch II. When the FusionPunch II receives the C2 signal, it will start the Document Transport Motor, the Punch Motor, and be ready to accept paper.

Printer Exit Sensor / FusionPunch II Entrance Sensor

As the lead edge of a sheet of paper covers the last sensor in the printer, the printer sends the C0 signal to the finisher. When the FusionPunch II receives the C0 signal from the printer, the Entrance Sensor has 330ms to see the lead edge of that sheet of paper and send a signal back to the Little Star Controller PWB. If the Little Star Controller does not see a signal from the Entrance Sensor within 330ms after the C0 signal has been received, the FusionPunch II will turn OFF (Low) the S1 signal (Faulted Signal) and display *Jam at Entrance Sensor* on the Punch Control Panel LCD. If the Entrance Sensor does send a signal back to the Little Star Controller within the 330ms, the sheet of paper has 200ms from lead edge to trail edge to clear the Entrance Sensor. If the sheet of paper blocks the Entrance Sensor longer than 200ms, the FusionPunch II will turn OFF (Low) the S1 signal and then display *Jam at Entrance Sensor*, on the LCD.

When all requirements are met as specified above, the sheet of paper will begin to make its way to the Document Transport Sensor 1 (explained below).

Note: The Little Star Controller is tracking the C0 signal (Sheet Exit) and the sheet of paper associated with it. This will ensure that the sheet is completely processed and the S3 signal is sent back to the printer at the right time and on the correct sheet of paper.

If the sheet of paper is the last sheet of paper in a set, the printer will send the C0 and the C1 signals. If the Little Star Controller receives a C1 signal it will track that sheet of paper to ensure that the next set (Complete Book) is offset stacked correctly.

Paper Path (Sequence of Operation) Continued

Entrance Sensor / Document Transport Sensor 1

The sheet paper now has 330ms from the time that the lead edge arrived at the Entrance Sensor to the time that the lead edge arrives at DT1 (Document Transport Sensor 1). If the lead edge of the sheet does not make its way to DT1 within the 330ms, the FusionPunch II will turn OFF (Low) the S1 signal (Faulted Signal) and then display *Jam at Document Transport Sensor 1* on the LCD. If the sheet of paper does make it to DT1 within the 330ms, the sheet of paper has 200ms from lead edge to trail edge to clear DT1. If the sheet blocks DT1 longer than 200ms, the FusionPunch II will turn OFF (Low) the S1 signal and display *Jam at Document Transport Sensor 1* on the LCD.

Once all requirements are met as specified above, the sheet of paper will begin to make its way to the Document Transport Sensor 2.

Document Transport Sensor 1 / Document Transport Sensor 2

The sheet of paper has no specified time in which it must arrive at DT2 (Document Transport Sensor 2). When the lead edge of the sheet of paper arrives at DT2, the Little Star Controller PWB will turn ON the Back Gauge Solenoid. This will bring the Back Gauge Fingers up to stop the sheet in the Die, in order to be punched. Once the lead edge of that sheet of paper passes DT2, it has 200ms to clear the sensor. If the sheet blocks DT2 longer than 200ms, the FusionPunch II will turn OFF (Low) the S1 signal and then display *Jam at Document Transport Sensor 2* on the LCD.

When all requirements are met as specified above, the sheet will begin to make its way to the Punch Sensor (explained below).

Document Transport Sensor 2 / Punch Sensor

The sheet of paper will now proceed to the Punch Sensor. The Back Gauge Fingers should already be up and ready to stop the paper under the Die.

Note: There is no check for the sheet of paper to make it from DT2 to the Punch Sensor within a specified time.

Paper Path (Sequence of Operation) Continued

Punch Sensor / Exit Sensor

When the lead edge of the sheet of paper is under the Punch Sensor, a number of things happen as follows:

1. 60ms after the lead edge of the sheet of paper is under the Punch Sensor, the Little Star Controller will turn ON the Punch Clutch Solenoid. It will then hold the Punch Clutch Solenoid ON for 50ms.

Note: The Punch Clutch on Set is defaulted to 50ms; it can be changed in the Diagnostics function of the Clutch on Set in intervals of 5ms. The Punch Clutch on Set is directly related to steps 2-6. If the value of the Clutch on Set is changed, the time at which events occur in steps 2-6 will change according to the amount that the Clutch on Set value has changed.

2. At the time the Punch Clutch Solenoid is turned OFF, the Little Star Controller will turn ON the Stacker Tapper Solenoid and hold it ON for 60ms.
 - If a Second Stacker is active, then the Stacker 2 Tapper Solenoid is activated 20ms after the lead edge of that sheet of paper reaches the Bypass Sensor. It will remain active for 60ms.
3. 30ms after the Punch Clutch Solenoid is turned OFF, the Little Star Controller will turn OFF the Back Gauge Solenoid and the Back Gauge Finger will drop allowing the sheet of paper to start moving to the Exit Sensor and to the Stacker.

4. At the same time the Back Gauge Solenoid is turned OFF, the Little Star Controller will turn ON the Stacker O-ring Motor and hold it on for 325ms.
 - If a Second Stacker is active, then the Stacker 2 O-ring Motor is activated 20ms after the lead edge of that sheet of paper reaches the Bypass Sensor. It will remain active for 325ms.
5. If the sheet of paper was the last sheet in a Set, the Little Star Controller would have received the C1 signal when the sheet of was exiting the printer. If the sheet has a C1 signal associated with it, then on the next sheet of paper, after the time delay, the Little Star Controller will turn the ON the opposite Offset Solenoid and hold it on for 150ms.

NOTE: If a Second Stacker is active, the time shift will have longer time delay.
6. 30ms after the Back Gauge Solenoid is turned OFF, the Little Star Controller will turn ON the Sheet Eject Solenoid and hold it ON for 30ms.

Punch Sensor / Exit Sensor (Continued)

Once all of the steps above have occurred correctly, the trail edge of the sheet of paper has 250ms to clear the Punch Sensor. If the trail edge of the sheet does not clear the Punch Sensor in the 250ms, the Fusion-Punch II will turn OFF the S1 signal and display *Jam at Punch Sensor*, on the Punch Control Panel LCD.

After the trail edge of that sheet of paper clears the Punch Sensor, the Little Star Controller will turn ON the Back Gauge Solenoid to prepare to stop the next sheet of paper to be punched.

The sheet has 330ms from the time the lead edge gets to the Punch Sensor to the time the lead edge gets to the Exit Sensor. If the sheet of paper does not make it within the 330ms, the FusionPunch II will turn OFF the S1 signal and then display *Jam at Exit Sensor* on the LCD.

Paper Path (Sequence of Operation) Continued

Exit Sensor

The trail edge of the sheet now has 200ms to clear the Exit Sensor. If the sheet blocks the Exit Sensor longer than 200ms, the FusionPunch II will turn OFF the S1 signal and then display *Jam at Exit Sensor* on the LCD.

As the lead edge of the sheet reaches the Exit Sensor, the Little Star Controller looks at the state of the Stacker Upper Switch and performs the following:

1. If the Upper Switch is in the Open State (Upper Switch is NO), the Little Star Controller will turn ON the Stacker Tray Motor for 20ms.
 - If a Second Stacker is active, the principles for the Stacker Tray Motor is the same except that it will be triggered as the lead edge reaches the Stacker Bypass Sensor.
2. If the Upper Switch is in the Closed State, the Little Star Controller will NOT turn ON the Stacker Tray Motor.
 - If a Second Stacker is active, the principles for the Stacker Tray Motor is the same except that it will be triggered as the lead edge reaches the Stacker Bypass Sensor.

Once the trail edge of the sheet of paper has cleared the Exit Sensor, the Little Star Controller knows that the sheet has been completely processed and then sends the S3 signal back to the printer.

- If a Second Stacker is active, the S3 will be sent as the trail edge clears the Stacker Bypass Sensor.

When all requirements are met as specified above, the sheet will begin to make its way to the Stacker Bypass Sensor (explained below).

Exit Sensor / Stacker Bypass Sensor

Note: There is no check for the sheet of paper to make it from Exit sensor to the Stacker Bypass Sensor within a specified time.

The trail edge of the sheet of paper now has 200ms to clear the Stacker Bypass Sensor. If the sheet blocks the Stacker Bypass Sensor longer than 200ms, the FusionPunch II will turn OFF the S1 signal and then display *Jam at Stacker Bypass Sensor* on the LCD.

- If a down stream device is active, then the Little Star Controller will recreate the timings specified by their profile and then send the Command signals to the down stream device.

Opto Relays

The Back Gauge Solenoid, the Sheet Eject Solenoid, the Punch Clutch Solenoid, and the Stacker Tapper Solenoid are controlled by Optical Isolation (Opto) Relays on the Stacker and Punch I/O PWB's.

The operation of the Opto relays is as follows:

They work exactly like a Solid State Relay, except there is no physical electrical connection between the input and output of the Opto Relay. They are optically connected. Therefore, when you supply 24 VDC across the input of these relays, the input sends an optical signal to the output creating a direct short across the output connections.

Serial Numbers and Tag Matrix Information

INTRODUCTION

This section describes the tags issued for the FusionPunch II and the Stacker modules, as well as multinational applicability, classification codes, and permanent or temporary modification status information.

All important machine modifications are identified by a tag number on a matrix card that is attached to the rear door of each module.

Accessory Devices

Unless otherwise noted, tag information for most accessory devices will be documented in this service manual. Accessory tag numbers will be assigned according to the module in which the accessory is installed.

Module Identifiers for Tag Referencing

The individual modules are identified in tag references and various text by the use of a letter which denotes a specific module, for example:

- P = Punch Module
- S = Stacker Module
- B = Bypass Module

Tag Identification for Configuration Differences

Schematic diagrams will contain specific symbols that denote a "with" (Figure 6-30) or "without" (Figure 6-31) tag configuration for parts and wiring .

A tag symbol representing a configuration that includes a modification or retrofit.

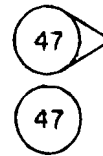


Figure 6-62 With Modification

A tag symbol representing a configuration that does not have a modification or retrofit.

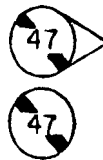


Figure 6-63 Without Modification

CLASSIFICATION CODES

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures. A tag number may also be required to identify the presence of optional hardware, special non-volatile memory programming, or whether mandatory modifications have been installed. Each tag number is given a classification code to identify the type of change that the tag has made.

- M = Mandatory
- N = Not installed in the field
- O = Optional
- R = Repair
- P = Part Number Change

| | | |
|-----|------|-----|
| O | I802 | A |
| BFE | S00 | M O |

Figure 6-64 Tag Identifiers for Configuration Differences

A tag will contain the following information:

TAG:1
 CLASS:
 USE:
 MFG SERIAL NUMBERS:
 NAME:
 PURPOSE:
 KIT NUMBER:
 REFERENCE:

NOTE: Tag F 99 IOT Kit has to be installed in all DT 61XX that will be installed together with the Fusion Punch II. (Xerox Kit # 600K67500) This kit enables proper Set and Page Ack (S3 and S4). C6 and C7 are not supported from the Fusion Punch II at this time.

Tag Matrix Card location

Shown below, in Figure 6-33, is an example of a Tag Matrix Card that would be attached to the Punch middle door and the Stacker door of the Fusion Punch II.

| MODEL | BLK | TAG CONFIGURATION | | | | | | | | | | | | | | SERIAL NO. 8VE-050017 | | | | | | | | | | | | | | | | | | | |
|-------|-----|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A | P | 0 | 286 | 301 | 316 | 331 | 346 | 361 | 376 | 391 | 406 | 421 | 436 | 451 | 466 | 481 | 496 | 287 | 302 | 317 | 332 | 347 | 362 | 377 | 392 | 407 | 422 | 437 | 452 | 467 | 482 | 497 | | | |
| B | Q | 1 | 288 | 303 | 318 | 333 | 348 | 363 | 378 | 393 | 408 | 423 | 438 | 453 | 468 | 483 | 498 | 289 | 304 | 319 | 334 | 349 | 364 | 379 | 394 | 409 | 424 | 439 | 454 | 469 | 484 | 499 | | | |
| C | R | 2 | 260 | 275 | 290 | 305 | 320 | 335 | 350 | 365 | 380 | 395 | 410 | 425 | 440 | 455 | 470 | 485 | 500 | 276 | 291 | 306 | 321 | 336 | 351 | 366 | 381 | 396 | 411 | 426 | 441 | 456 | 471 | 486 | 501 |
| D | S | 3 | 262 | 277 | 292 | 307 | 322 | 337 | 352 | 367 | 382 | 397 | 412 | 427 | 442 | 457 | 472 | 487 | 502 | 278 | 293 | 308 | 323 | 338 | 353 | 368 | 383 | 398 | 413 | 428 | 443 | 458 | 473 | 488 | 503 |
| E | T | 4 | 267 | 282 | 297 | 312 | 327 | 342 | 357 | 372 | 387 | 402 | 417 | 432 | 447 | 462 | 477 | 492 | 507 | 279 | 294 | 309 | 324 | 339 | 354 | 369 | 384 | 399 | 414 | 429 | 444 | 459 | 474 | 489 | 504 |
| F | U | 5 | 268 | 283 | 298 | 313 | 328 | 343 | 358 | 373 | 388 | 403 | 418 | 433 | 448 | 463 | 478 | 493 | 508 | 280 | 295 | 310 | 325 | 340 | 355 | 370 | 385 | 400 | 415 | 430 | 445 | 460 | 475 | 490 | |
| G | V | 6 | 269 | 284 | 299 | 314 | 329 | 344 | 359 | 374 | 389 | 404 | 419 | 434 | 449 | 464 | 479 | 494 | 509 | 291 | 296 | 311 | 326 | 341 | 356 | 371 | 386 | 401 | 416 | 431 | 446 | 461 | 476 | 491 | 506 |
| H | W | 7 | 284 | 299 | 314 | 329 | 344 | 359 | 374 | 389 | 404 | 419 | 434 | 449 | 464 | 479 | 494 | 509 | 267 | 282 | 297 | 312 | 327 | 342 | 357 | 372 | 387 | 402 | 417 | 432 | 447 | 462 | 477 | 492 | 507 |
| I | X | 8 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 268 | 283 | 298 | 313 | 328 | 343 | 358 | 373 | 388 | 403 | 418 | 433 | 448 | 463 | 478 | 493 | 508 |
| J | Y | 9 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 284 | 299 | 314 | 329 | 344 | 359 | 374 | 389 | 404 | 419 | 434 | 449 | 464 | 479 | 494 | 509 | |
| K | Z | 10 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 284 | 299 | 314 | 329 | 344 | 359 | 374 | 389 | 404 | 419 | 434 | 449 | 464 | 479 | 494 | 509 | |
| L | | 11 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | |
| M | | 12 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | |
| N | | 13 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | |
| O | | 14 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | 285 | 300 | 315 | 330 | 345 | 360 | 375 | 390 | 405 | 420 | 435 | 450 | 465 | 480 | 495 | 510 | |

Figure 6-65 Tag Matrix Card

Serial number location

The Fusion Punch II has two different serial numbers, one for the Punch module and one for the Stacker module, as well as a Xerox serial number listed below the GBC serial number. Please note, the Xerox serial number begins with the letter product code (KEW).

They are located next to the Main Power Switch / Circuit Breaker on each module.

Service History Log Book location

The Service History Log Book is located next to the Matrix Card in the Punch.

Part numbers

| | |
|--------------------------|----------|
| Tag Matrix Card | #7610236 |
| Service History Log Book | #1722675 |
| Pocket Folder | #1722658 |

Tag Numbers

Tag #: P1 **Date:** 10/01/01

Class: M (Mandatory)

MFG Serial Numbers: NH06764

Name: Multiple Stacker and Bypass Stacker Configuration Kit.

Purpose: Allows addition of Bypass Stacker (S). Also improves punching quality, stacking quality, and signal timing.

Retrofit Kit #: 7610509

Reference: Parts included in kit.

Description of change:

| Part Number | Description | Qty | Part Number | Description of change |
|-------------|--|-----|----------------------|---|
| 7610508 | E-prom with version A516 or higher | 1 | 7610508 | Currently A173 only supports a Single Stacker Configuration. |
| 0130017200 | Pulley, 32 Tooth, Document Transport Main Drive..... | 1 | 0130017200 | Was 30 Tooth Pulley, Changed to 32 Tooth Pulley for consistent speeds. |
| 7610517 | Assy., One Way Clutch Pulley, 16 Tooth..... | 1 | 0130021000 / 7610517 | Was 18 Tooth Pulley, Changed to 16 Tooth Pulley with One Way Clutch Bearing. |
| 7610458 | PWB, Little Star Controller Expansion | 1 | 7610458 | Addition of second Little Star Controller Expansion PWB to support all configurations. |
| 7610452 | PWB, Daughter..... | 1 | 7610452 | Addition of second Daughter PWB to support all configurations. |
| 1980015 | SHCS 4-40 x 5/8..... | 4 | 1980015 | SHCS 4-40 x 5/8 - Addition of hardware to mount PWB's above. |
| 1925062 | Washer, Flat #4..... | 4 | 1925062 | Washer, Flat #4 - Addition of hardware to mount PWB's above. |
| 1926060 | Washer, Lock #4 | 4 | 1926060 | Washer, Lock #4 - Addition of hardware to mount PWB's above. |
| 7610224 | Guide, Paper, Interface Left..... | 1 | 7610224 | Upgraded Paper handling of one sided and Up curled paper. |
| 7610225 | Guide, Paper, Interface Right | 1 | 7610225 | Upgraded Paper handling of one sided and Up curled paper |
| 0130014700 | Tie Bar, Interface Ball Track Assy..... | 1 | 0130014700 | Modified to mount Paper Guides above. |
| 1980052 | SHCS 8-32 x 3/4..... | 4 | 1980052 | SHCS 8-32 x 3/4 - Addition of hardware to mount Paper Guides above. |
| 1925064 | Washer, Flat #8..... | 4 | 1925064 | Washer, Flat #8 - Addition of hardware to mount Paper Guides above. |
| 1926062 | Washer, Lock #8 | 4 | 1926062 | Washer, Lock #8 - Addition of hardware to mount Paper Guides above. |
| 7610244 | Paper Guide, Document Transport Long..... | 3 | 7610244 | Paper Guide, Document Transport Long - Shorten in height by 1/8 inch. |
| 0130035700 | Side Guide, Punch..... | 1 | 0130035700 | Side Guide, Punch - Cut notch to resolve interference with Punch Tension Strap Assy. |
| 1925230 | Washer, Flat, Non-Metallic..... | 1 | 7610374 & 7610375 | Remove last Delrin Ball from right, exchange 2nd from right Steel Ball with 2nd from left Delrin Ball |
| | | | 0130035700 | Side Guide, Punch - Cut notch to resolve interference with Punch Tension Strap Assy. |
| | | | 1925230 | Added washer between Pulley and mounting block of the Punch Infeed Idler Pulley. |

Tag Numbers

Tag #: P2 **Date:** 03/26/02
Class: P (Part number change)
MFG Serial Numbers: NA
Name: Part number change
Purpose: Changed part numbers as FP 1 parts are not interchangeable with the FP II. Old Part numbers to be revised back to FP 1 revision level.
Retrofit Kit #: NA
Reference: Parts effected

| Part Number | Description | Qty |
|-------------|--|-----|
| 7610521 | Shaft, Document Transport Main Drive | 1 |
| 7610517 | Assy., One Way Clutch Pulley, 16 Tooth | 1 |

Description of change:

| Part Number | Description of change |
|----------------------|---|
| 0130017400 / 7610521 | Part number change only, reflected in the FP II Service Manual revision 3.0. Part was originally 0130017400. It has been changed to 7610521 because the old and new parts are not interchangeable between the FP 1 and the FP II. 0130017400 was revised back to the FP 1 revision level. |
| 0130021000 / 7610517 | Part number change only, reflected in the FP II Service Manual revision 3.0. Part was originally 0130021000. It has been changed to 7610517 because the old and new parts are not interchangeable between the FP 1 and the FP II. 0130021000 was revised back to the FP 1 revision level. |

Tag #: P3 **Date:** 03/26/02
Class: O (Optional)
MFG Serial Numbers: NA
Name: Caster Tag Retrofit P3.
Purpose: Replaces and repairs Casters with broken welds.
Retrofit Kit #: NA
Reference: Parts Needed

| Part Number | Description | Qty |
|-------------|-------------------------------------|-----|
| 7610514 | Bushing, Stud, Caster Assy..... | 1 |
| 7610515 | Collar, Threaded, Caster Assy. | 1 |

Description of change:

| Part Number | Description of change |
|-------------|---|
| 7610514 | Added new part to replace and repair broken welds on Caster assemblies. |
| 7610515 | Added new part to replace and repair broken welds on Caster assemblies. |

Tag Numbers

Tag #: P4 **Date:** 02/26/03
Class: O (Optional)
MFG Serial Numbers: NA
Name: Short Edge Punching Kit
Purpose: This kit enables Short Edge punching of 8 ½ x 11, A4, 8 ½ x 14, and 11 x 14 paper.
Retrofit Kit #: 7610522
Reference: Parts included in Kit

| Part Number | Description | Qty |
|--------------------|--------------------------------------|------------|
| 7610525 | Bracket, SE, Paper Guide..... | 1 |
| 7610524 | Paper Guide Weldment, SE..... | 1 |
| 7610289 | Spring Bar Holder | 1 |
| 7610334 | Static Brush..... | 1 |
| 1914082 | Thumb Screw..... | 3 |
| 7610508 | Eprom (Version A531 or higher) | 1 |

Description of change:

| Part Number | Description of change |
|--------------------|---|
| 7610525 | Added Short edge Side Guide Bracket. |
| 7610524 | Added Short edge Side Guide. |
| 7610289 | Changed Spring Bar Holder to allow the mounting of the Short edge Side Guide. |
| 7610334 | Changed Static Brush to allow the mounting of the Short edge Side Guide. |
| 1914082 | Added Thumb Screws to mount and adjust new Short edge Side Guide. |
| 7610508 | New Eprom (Version A531 or higher) allows selection of new Run Modes. |

Tag Numbers

Tag #: P5 **Date:** 12/17/03
Class: O (Optional)
MFG Serial Numbers: NA
Name: DocuColor 6060 / iGen3 Upgrade Kit
Purpose: This kit enables the Fusion Punch II to be installed on Xerox's newest Digital Color Presses, the DocuColor 6060 and the DocuColor iGen3.
Retrofit Kit #: 7610528 **Price**\$1188.15
Reference: Parts included in Kit

Description of change:

| Part Number | Description | Qty | Description of change |
|-------------|---|-----|---|
| 7610508 | Eprom (Version C147 or higher) | 1 | Eprom (Version C147 or higher) |
| 7610529 | PWB, Punch I/O | 1 | PWB, Punch I/O |
| 7610530 | Paper Guide, Entrance, Top, 6060 / iGen3 | 1 | Paper Guide, Entrance, Top, 6060 / iGen3 |
| 7610531 | Paper Guide, Entrance, Bottom, 6060 / iGen3... | 1 | Paper Guide, Entrance, Bottom, 6060 / iGen3 |
| 7610532 | Pulley, 48 Tooth, Document Transport Main Drive, 6060 / iGen3 | 2 | Pulley, 48 Tooth, Document Transport Main Drive, 6060 / iGen3 |
| 7610533 | Belt, Timing, Document Transport Main Drive, 6060 / iGen3..... | 1 | Belt, Timing, Document Transport Main Drive, 6060 / iGen3 |
| 7610534 | Pulley, 32 Tooth, Stacker Bypass Motor, 6060 / iGen3..... | 1 | Pulley, 32 Tooth, Stacker Bypass Motor, 6060 / iGen3 |
| 7610535 | Pulley, 24 Tooth, Stacker Bypass Main Drive, 6060 / iGen3..... | 1 | Pulley, Timing, 24 Tooth, Stacker Bypass Main Drive, 6060 / iGen3 |
| 7610537 | Assy., Belt Take Up, Document Transport Timing Belt, 6060 / iGen3 | 1 | Assy., Belt Take Up, Document Transport Timing Belt, 6060 / iGen3 |
| 7610621 | Panel, Punch Entrance, 4xxx / 6060 / iGen3 | 1 | Panel, Punch Entrance, 4xxx / 6060 / iGen3 |

Tag Numbers

Tag #: S1 **Date:** 10/01/01
Class: M (Mandatory)
MFG Serial Numbers: NG01644
Name: Stacking Quality Kit
Purpose: Improves Stacking Quality
Retrofit Kit #: 7610510
Reference: Parts included in kit.

Tag #: S2 **Date:** 10/01/01
Class: M (Mandatory)
MFG Serial Numbers: NG01644
Name: Curl Up Stacking Quality Kit
Purpose: Improves Curl Up Stacking Quality
Retrofit Kit #: 7610512
Reference: Parts included in kit.

| Part Number | Description | Qty |
|-------------|--|-----|
| 1981305 | Belt, Timing, 110xl O-ring Drive Assy..... | 1 |
| 0130040200 | Pulley, Timing, 18 Tooth..... | 1 |
| 7610222 | Pulley, 18 Tooth, Stacker O-ring Motor | 1 |
| 7610095 | Rod, Tie, O-ring Drive Assy. | 1 |

| Part Number | Description | Qty |
|-------------|--|-----|
| 7610223 | Assy., Paper guide, Stacker In-feed / Wire Form Assy. | 1 |
| 7610046 | Tapper, Short, Stacker Assy..... | 3 |

Description of change:

| Part Number | Description of change |
|-------------|---|
| 1981305 | Changed from 120xl to 110xl timing belt to accommodate pulley change below. |
| 0130040200 | Changed from 32 Tooth Pulley to 18 Tooth Pulley |
| 7610222 | Changed from 16 Tooth Pulley to 18 Tooth Pulley |
| 7610095 | Lengthened Tie Bar 1/8 of an inch to decrease buckling of stack. |
| 7610680 | Plate, Docking, Female - moved Pim nuts ¼ inch to the right when viewing from front the machine (Operators side). Allows proper docking of down stream devices. |

Description of change:

| Part Number | Description of change |
|-------------|---|
| 7610223 | Remove old Stacker In-feed Paper Guide Assy., and replace with new Assy., which includes Wire Form Assy. for handling curl up. |
| 7610046 | Added 3 short Tappers (7610046) to replace the 3 Long Tappers (7610076). Do not need Long Tappers once the Stacker Wire Form Assy. is installed. Long Tappers created too much weight on the Tapper Solenoid and this update should improve the life of the Stacker Tapper Solenoids as well. |

Tag Numbers

Tag #: S3 **Date:** 03/26/02
Class: M (Mandatory) (Only when connecting a Bypass Stacker to a downstream Finisher)
MFG Serial Numbers: NA
Name: DFA Kit
Purpose: Enables DFA signals to downstream Finishers for a Bypass Stacker or a Bypass Kit.
Retrofit Kit #: 7610519

Reference: Parts included in kit.

| Part Number | Description | Qty |
|-------------|----------------------------------|-----|
| 7610518 | Stacker I/O PWB (Rev. A)..... | 1 |
| 7610516 | Cable Assy., Downstream DFA..... | 1 |

Description of change:

| Part Number | Description of change |
|-------------|--|
| 7610518 | Revision A - Changed polarity of the Opto Relay output terminals to support downstream DFA signals. This Kit is required whenever connecting a downstream finisher to the FP II. |
| 7610516 | Added new DFA Cable for downstream Finishers to the BOM for the Bypass Stacker and Bypass Kit. Also reflected in the FP II Service Manual Rev. 3.0. |

Tag #: S4 **Date:** 03/26/02
Class: M (Mandatory for Manufacturing) / O (Optional for the field)
MFG Serial Numbers: NA
Name: 11x17 / A3 punching and stacking Kit
Purpose: This Kit enables a Standard Stacker (Stacker without a Bypass kit installed) to accept 11x17 and A3 running the Short edge punch or no punch. Includes the software upgrade to enable the punching or Non-punching of 11x17 and A3 on the short edge.

Retrofit Kit #: 7610520
Reference: Parts included in kit.

| Part Number | Description | Qty |
|-------------|--|-----|
| 7611920 | Stacker In-feed Paper Guide Assy..... | 1 |
| 7610508 | E-prom with version A524 or higher | 1 |

Description of change:

| Part Number | Description of change |
|-------------|--|
| 7611920 | This upgrade requires removing the current Stacker In-feed Paper Guide Assy. and replacing it with the new paper guide assembly. The Kit adds a new paper guide assembly to allow the operator to set up a Non-Bypass Stacker to run 11x17 and A3 paper punch or no punch on the short edge. |
| 7610508 | E-prom with version A524 or higher changes the timeouts of the sensors when running in the newly released operating modes. It also adds more forgiveness when connecting the FP II to the slower printers for signal variance. |

Tag Numbers

Tag #: S5 **Date:** 04/15/02
Class: O (Optional)
MFG Serial Numbers: NA
Name: Stacker Upper Switch Actuator Tubing
Purpose: To improve consistency in Upper switch actuation and eliminate the actuator from falling of the screw. Also changed the length of the actuating screw to allow easier adjustment.
Retrofit Kit #: NA
Reference: Parts included in kit.

| Part Number | Description | Qty |
|--------------------|--|------------|
| 1980082 | SHCS 10-32 x 2. | 1 |
| 1926063 | Washer, Lock #10..... | 1 |
| 1926702 | Nut, Hex, 10-32 | 1 |
| 7610361 | Tubing, Stacker Upper Switch Actuating Screw | 1 |

Description of change:

| Part Number | Description of change |
|--------------------|---|
| 1980082 | Changed from 1980080 SHCS 10-32 x 1/12, Changed to 1980082 SCHS 10-32 x 2, Added longer screw for easier adjustment. Also added to the Service Manual Parts List. |
| 1926063 | Added part to the Service Manual and the Engineering print. |
| 1926702 | Added part to the Service Manual and the Engineering print. |
| 7610361 | Added Tubing to resolve the Upper switch actuator from falling off the Actuation Screw. |

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| Chain 1.2 DC Power Distribution BSD - - - | 3 |
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| Chain 1.4 Stacker Interlock Switches BSD - | 5 |
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| Chain 3.1 Punch/Printer Communications BSD - - - - - | 7 |
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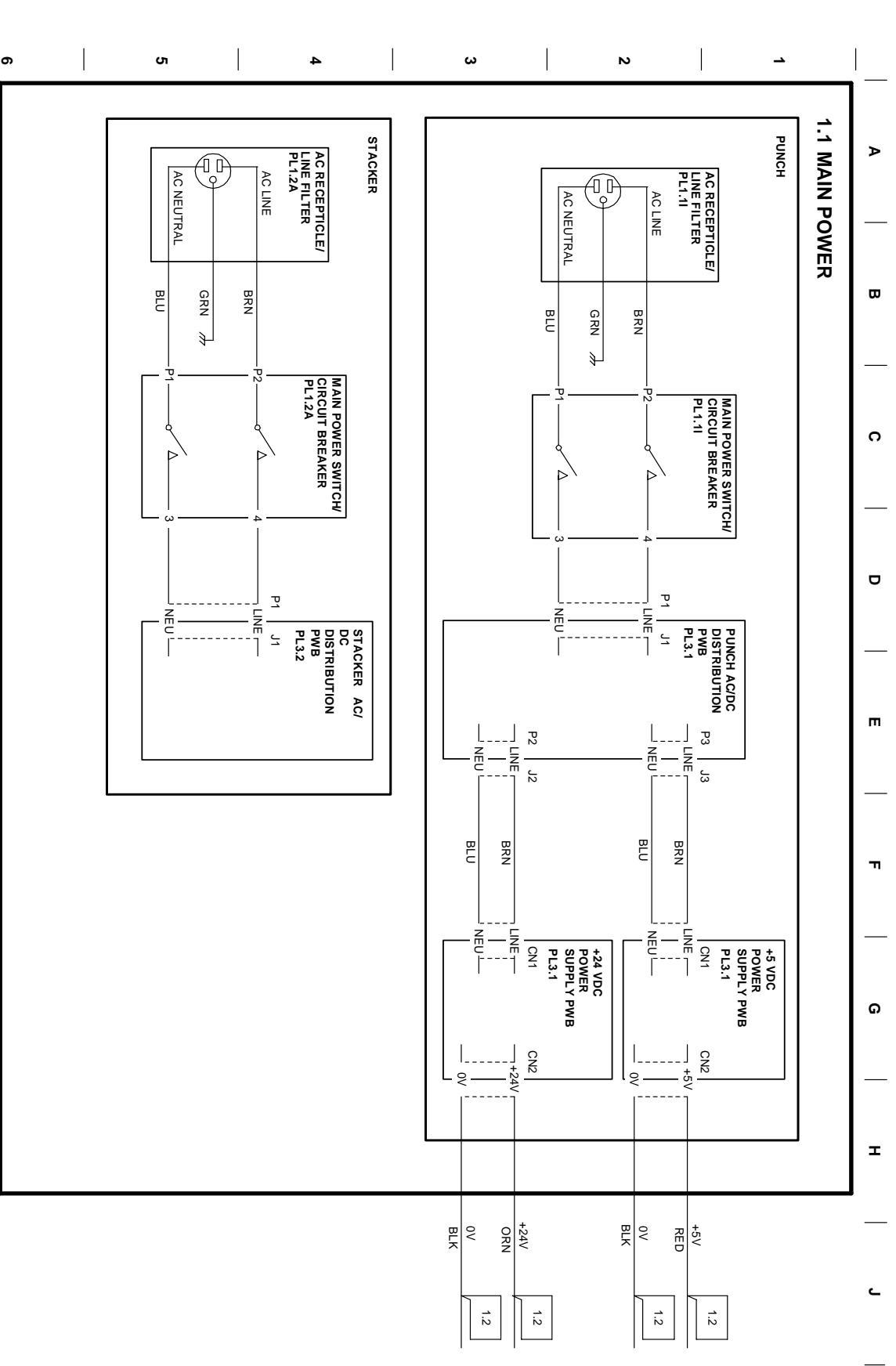
Introduction

This section contains connector and PWB location drawings and pin assignment information.

This information is not specific to individual procedures, but is provided for general reference.

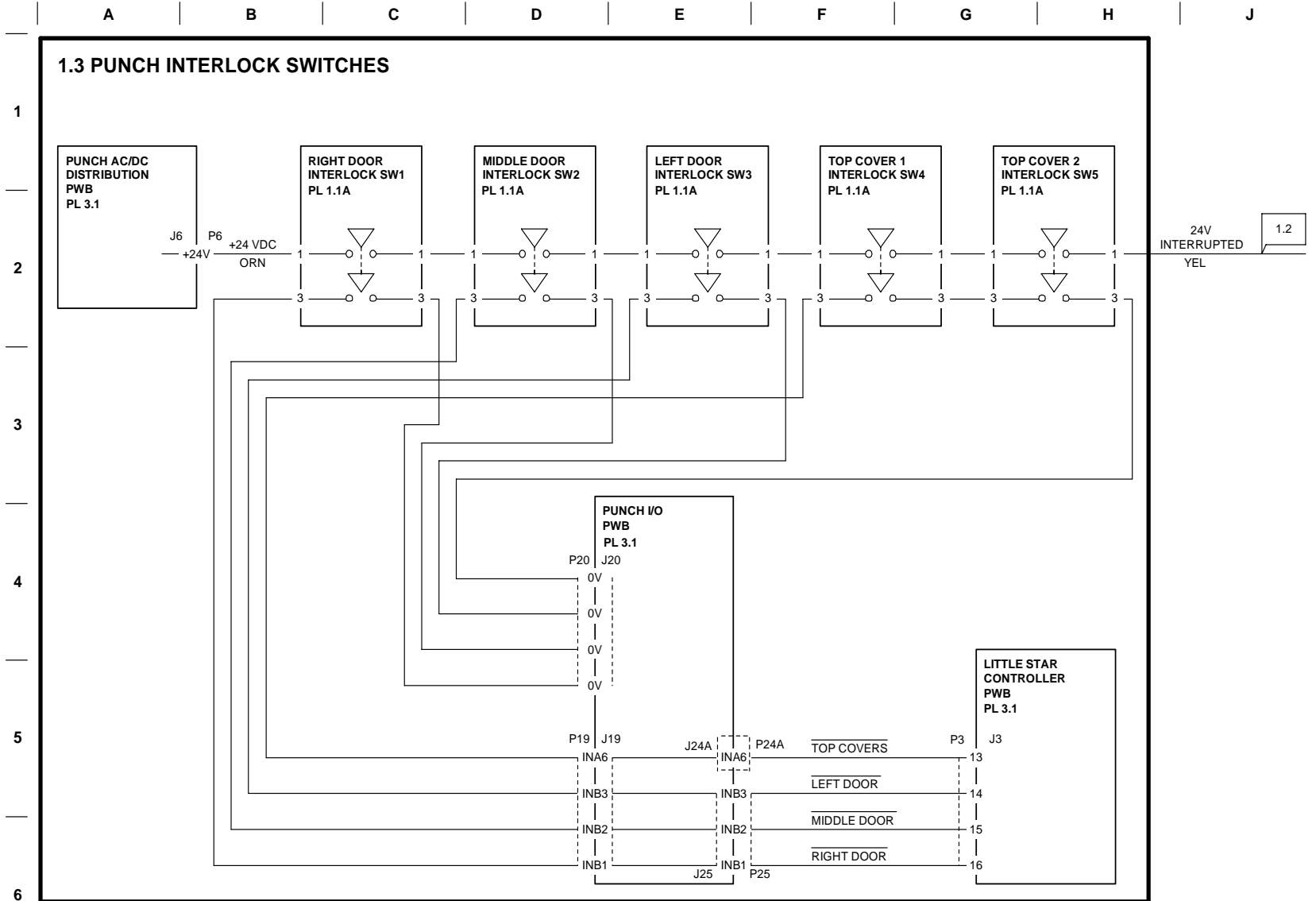
Connector numbers are repeated on more than one component.

Chain 1.1 Main Power BSD



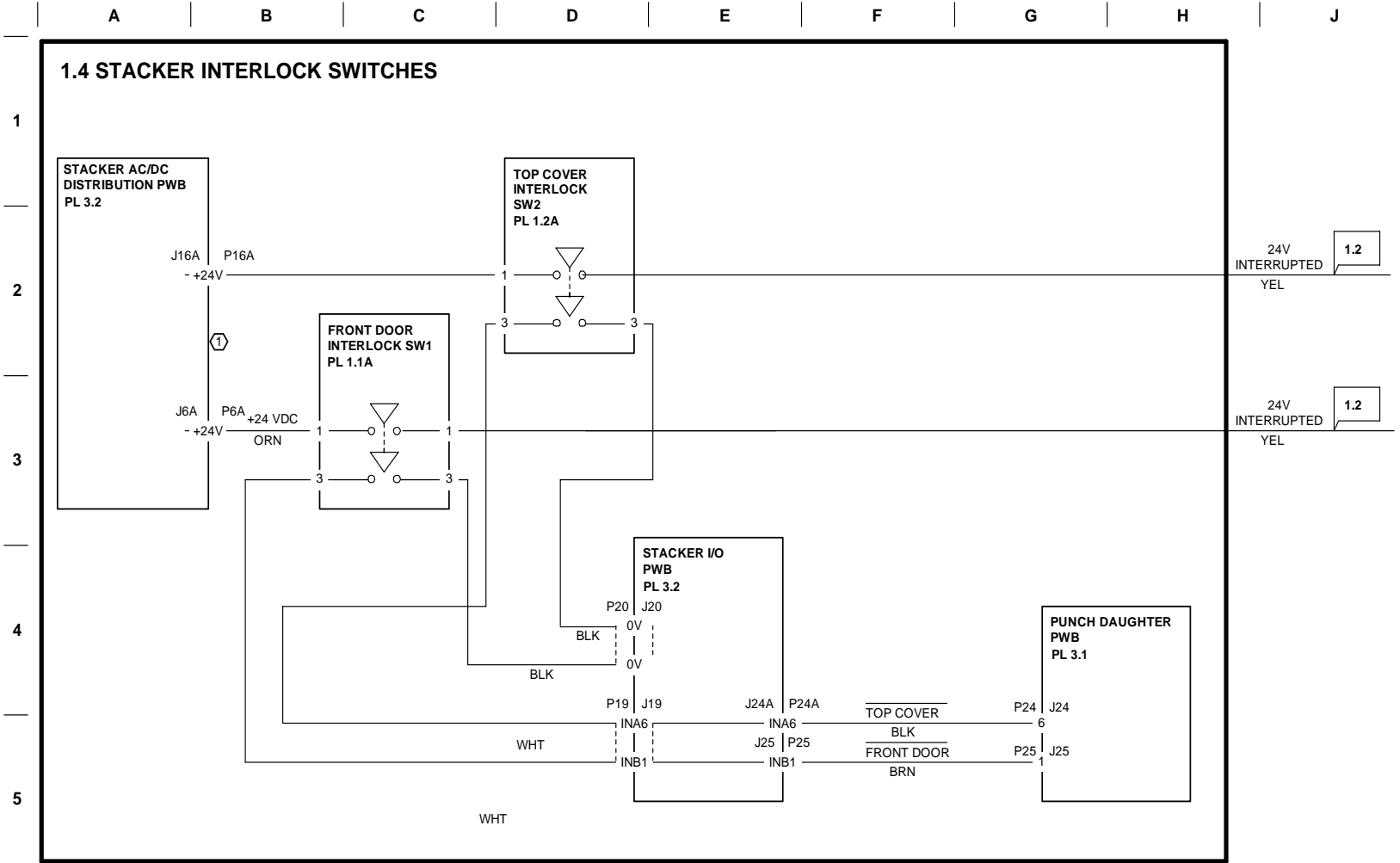
TT12001-A-GBC

Chain 1.3 Punch Interlock Switches BSD



T712003-A-GBC

Chain 1.4 Stacker Interlock Switches BSD



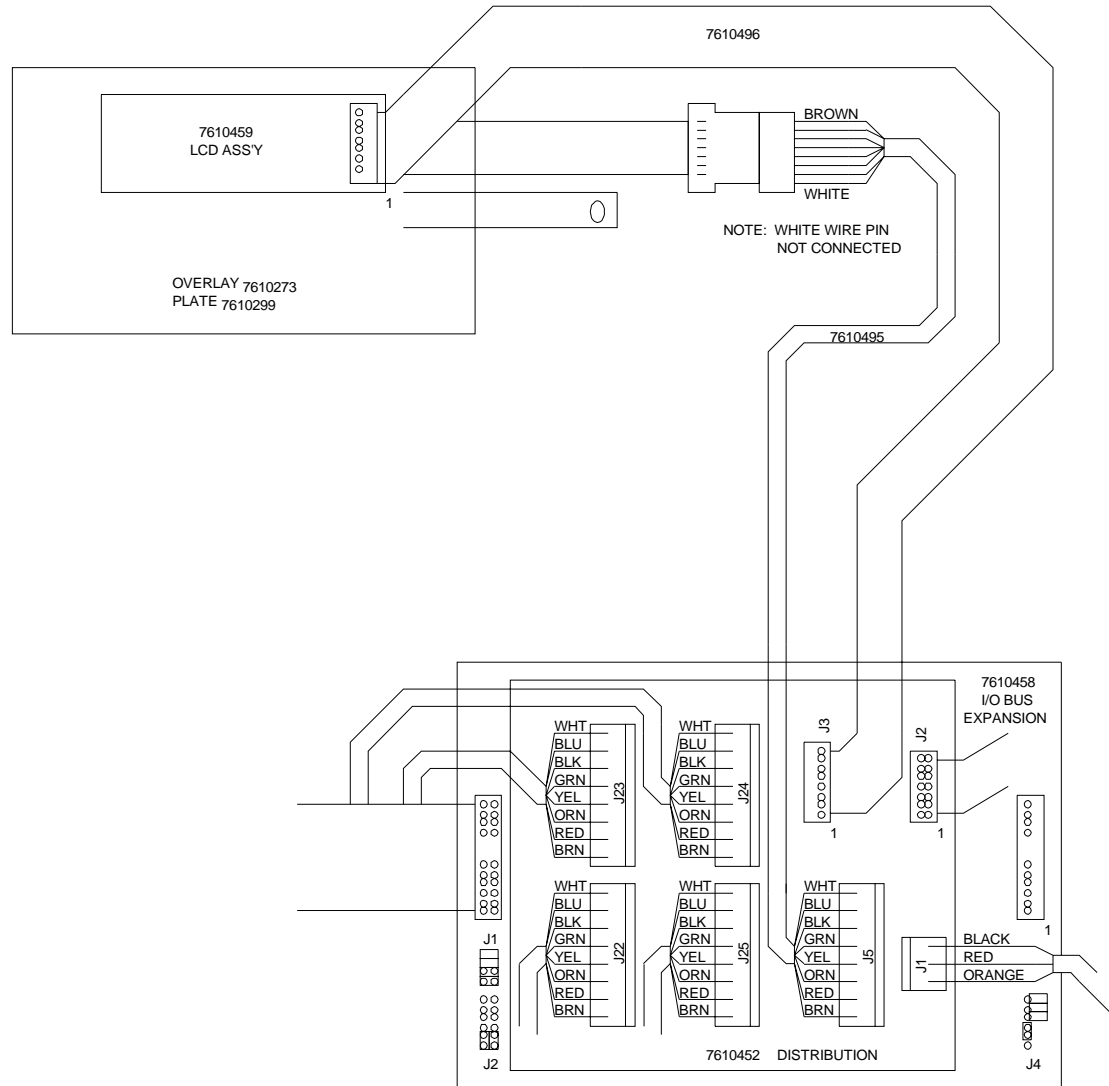
① BYPASS INSTALLED ONLY

NOTE:
 IF BYPASS STACKER IS INSTALLED:
 P6A WILL BE CONNECTED J6B (FRONT DOOR)
 AND
 P16A WILL BE CONNECTED J16B (TOP COVER)

T712004-A-GBC

Chain 2.1 Control Panel BSD

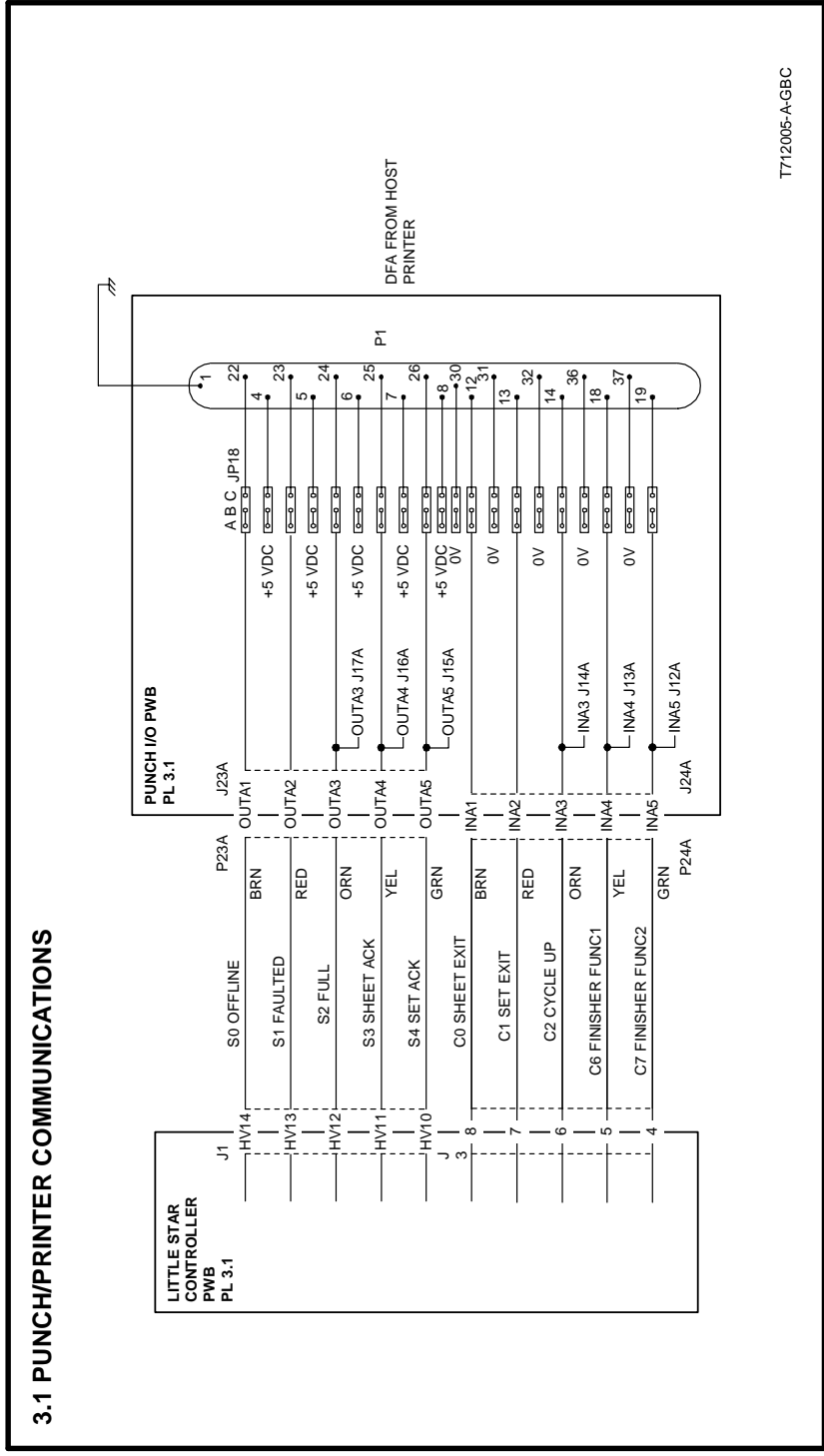
LCD DISPLAY ASSEMBLY



INSTALL JUMPERS (J1 - J4) AS SHOWN

Chain 3.1 Punch/Printer Communications BSD

A | B | C | D | E | F | G | H | J



1

2

3

4

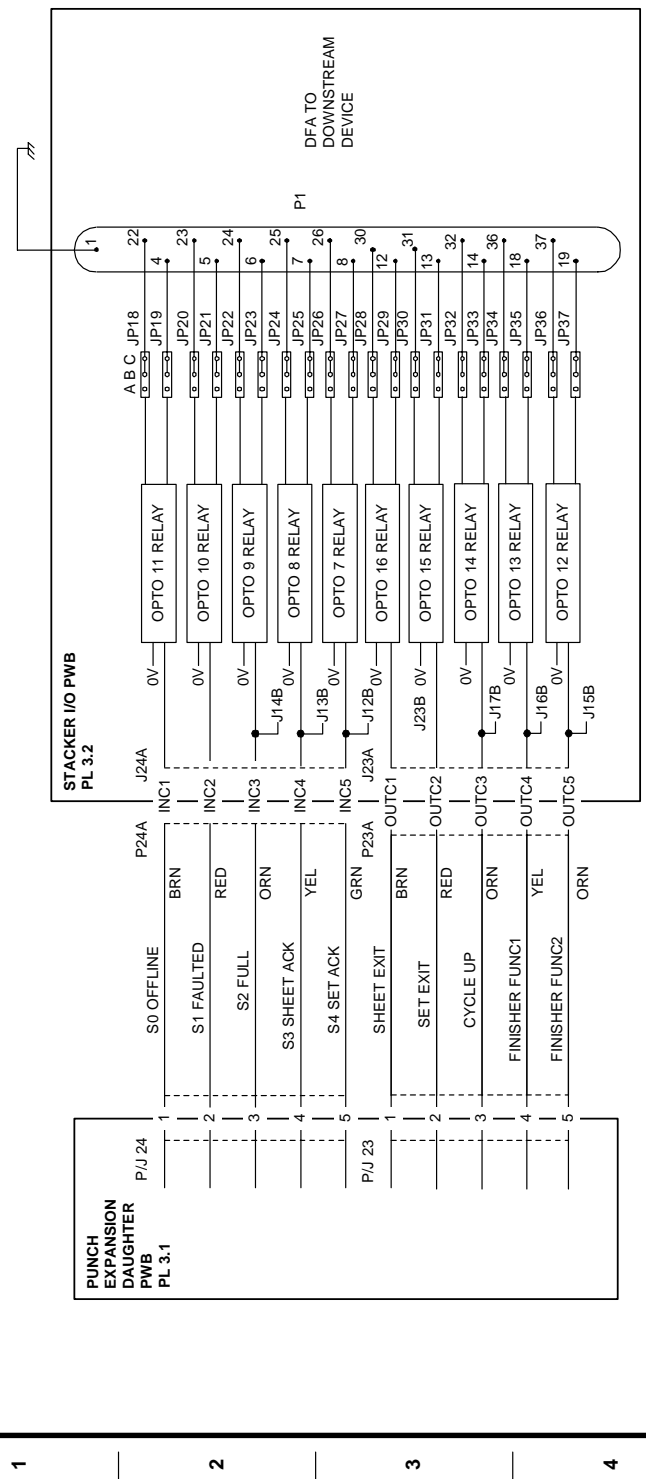
5

6

Chain 3.2 Stacker/Third Party Communications BSD

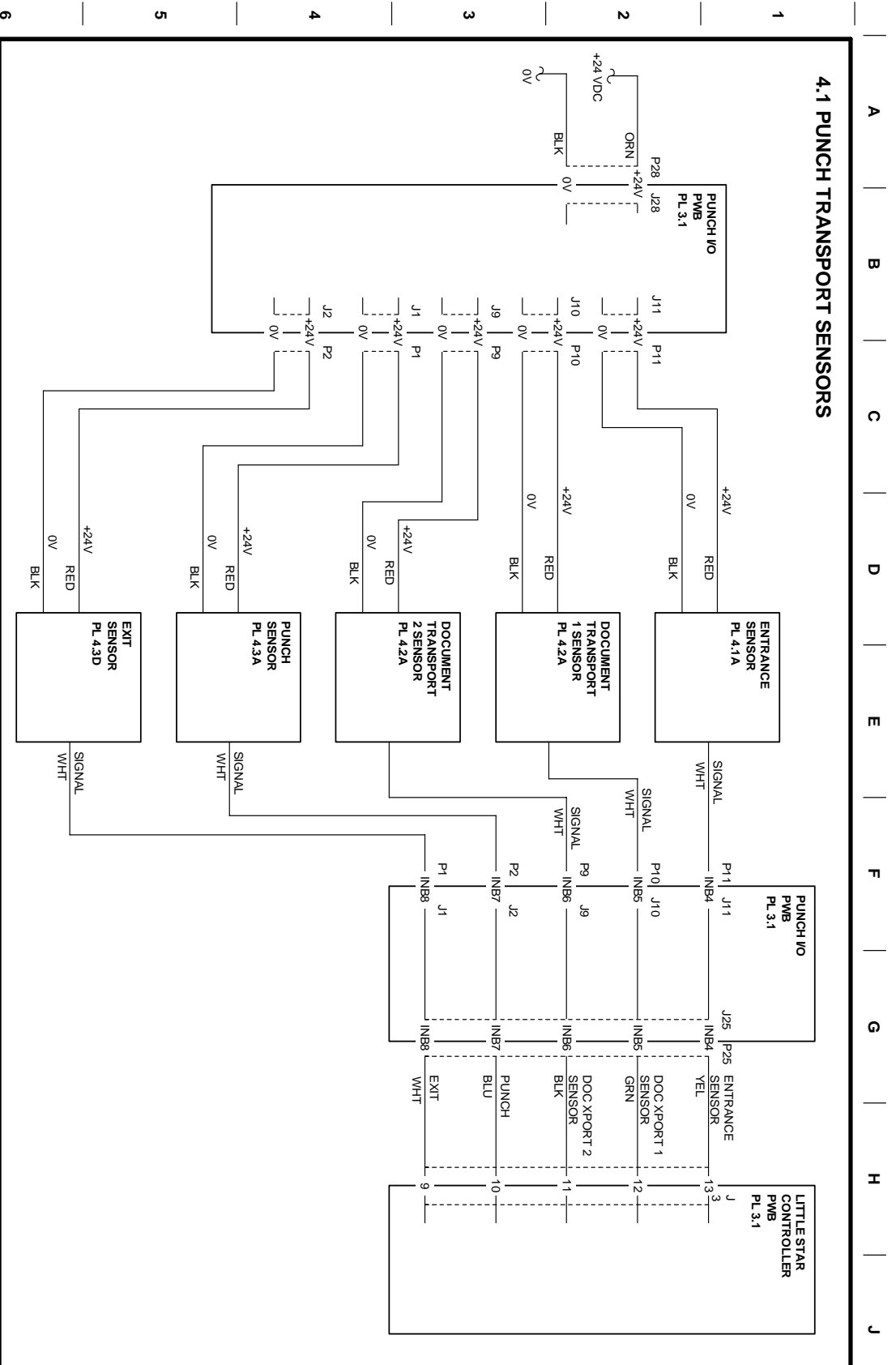
A | B | C | D | E | F | G | H | J

3.2 STACKER THIRD PARTY COMMUNICATIONS



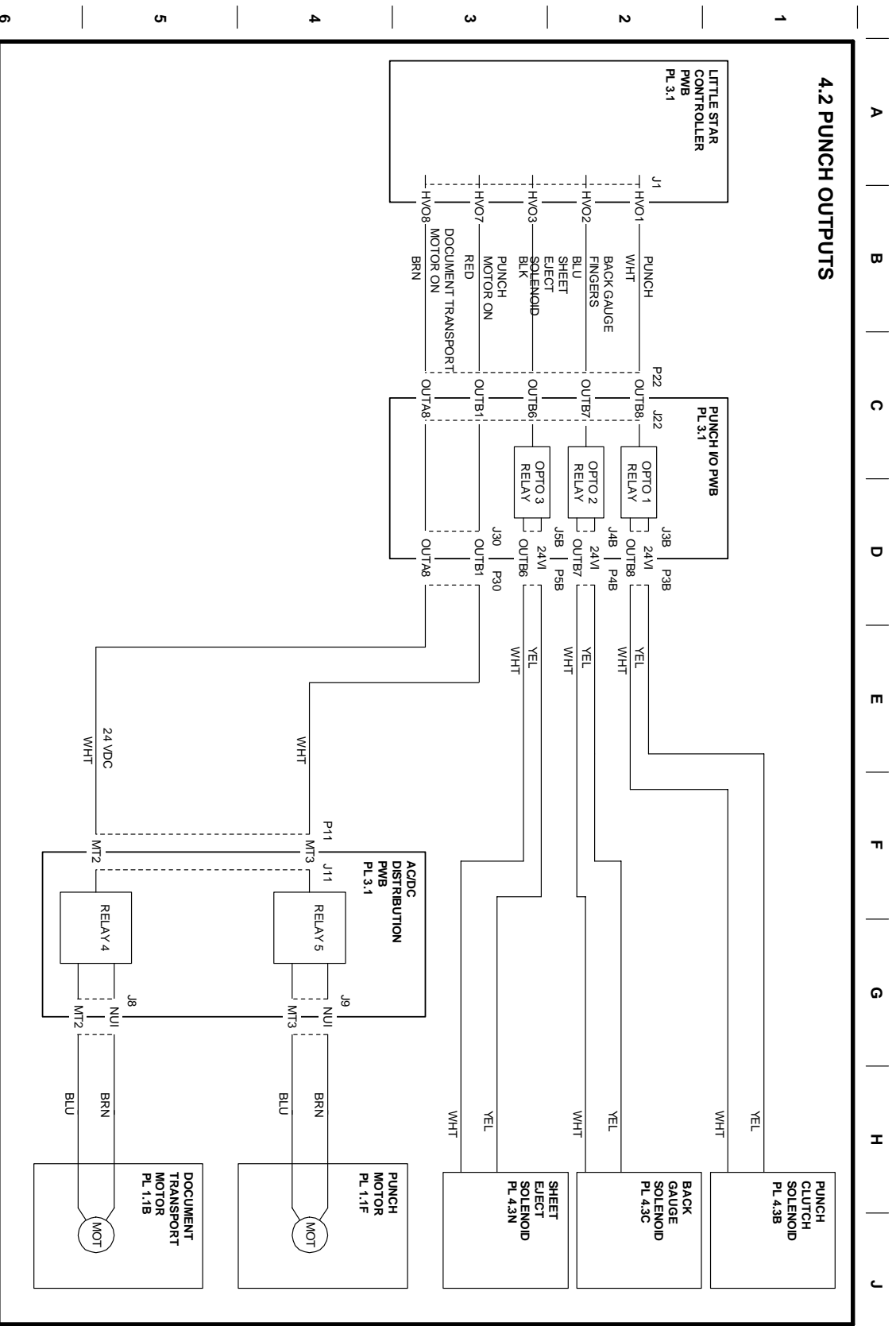
T712006-A-GBC

Chain 4.1 Punch Transport Sensors BSD



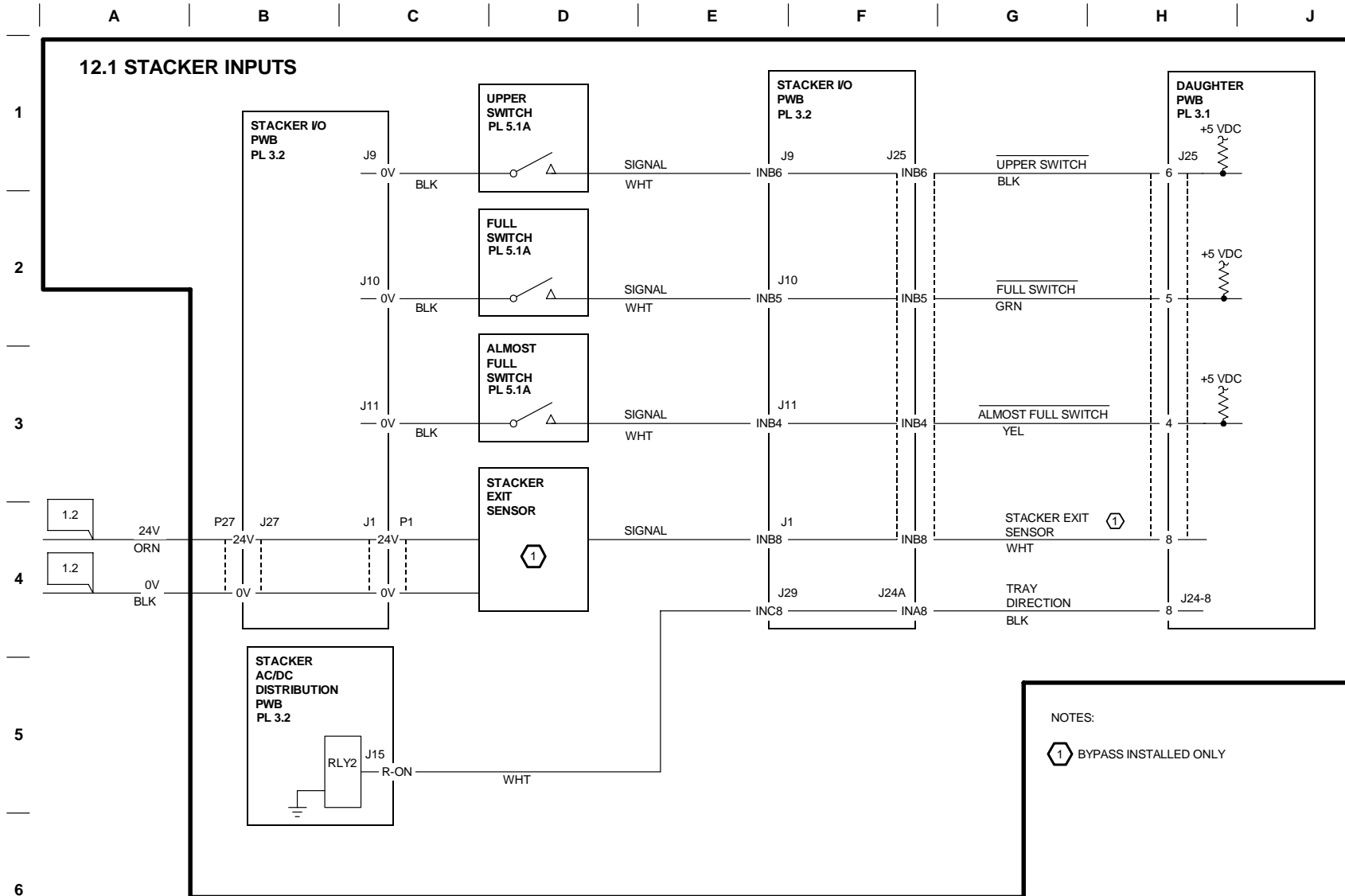
TT12007-A:GBC

Chain 4.2 Punch Outputs BSD



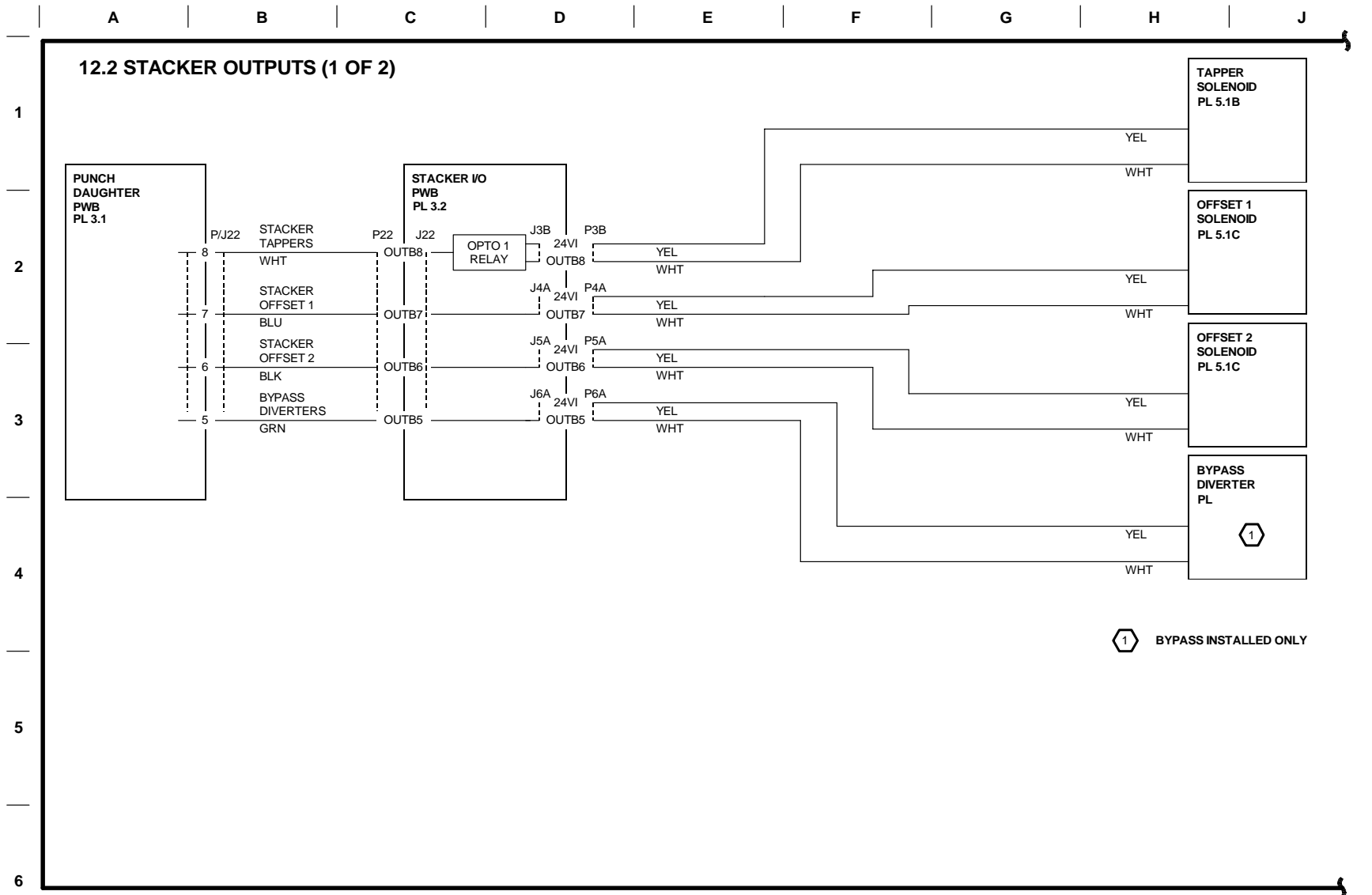
T712008-A-GBC

Chain 12.1 Stacker Inputs BSD



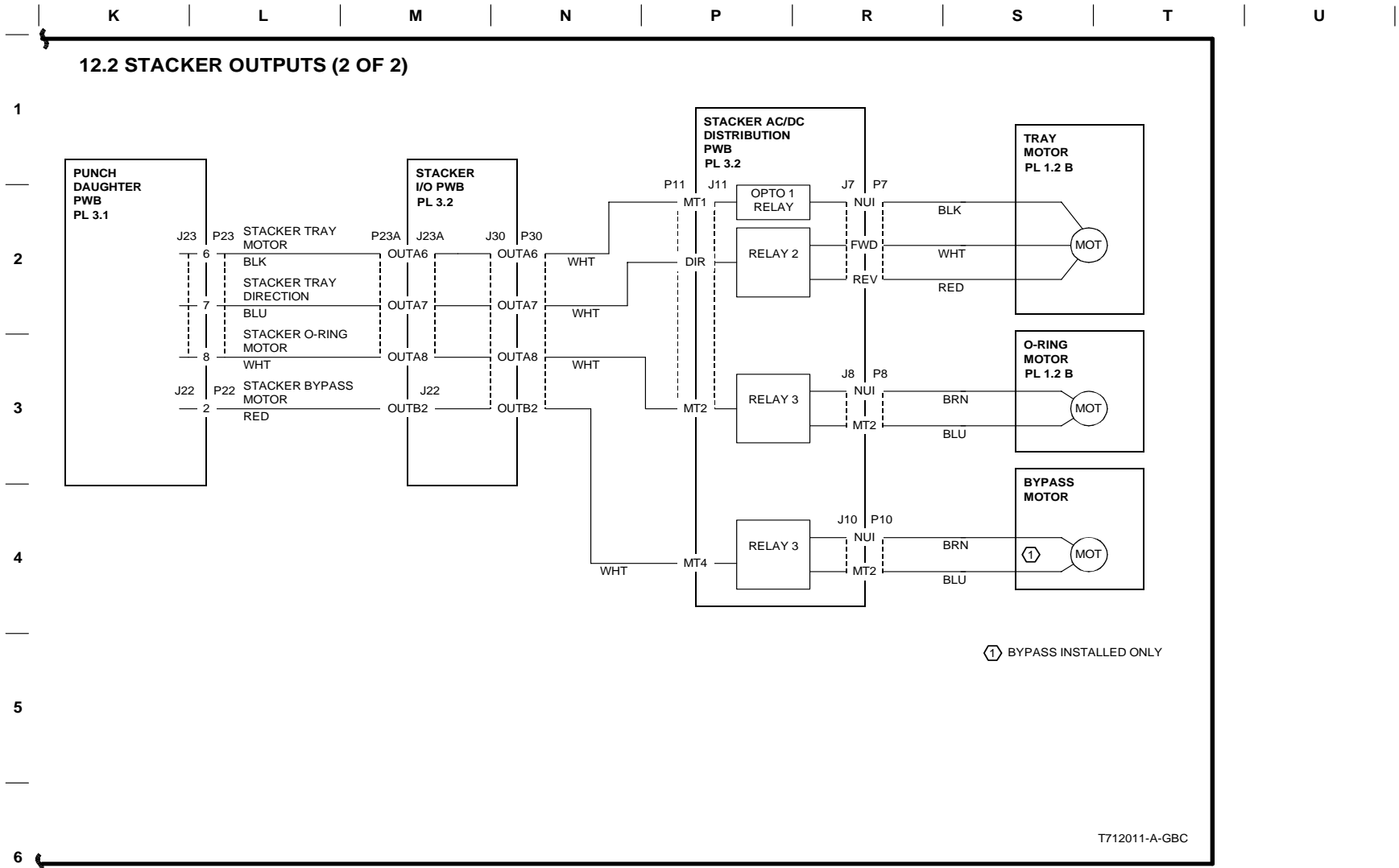
T712009-A-GBC

Chain 12.2 Stacker Outputs BSD



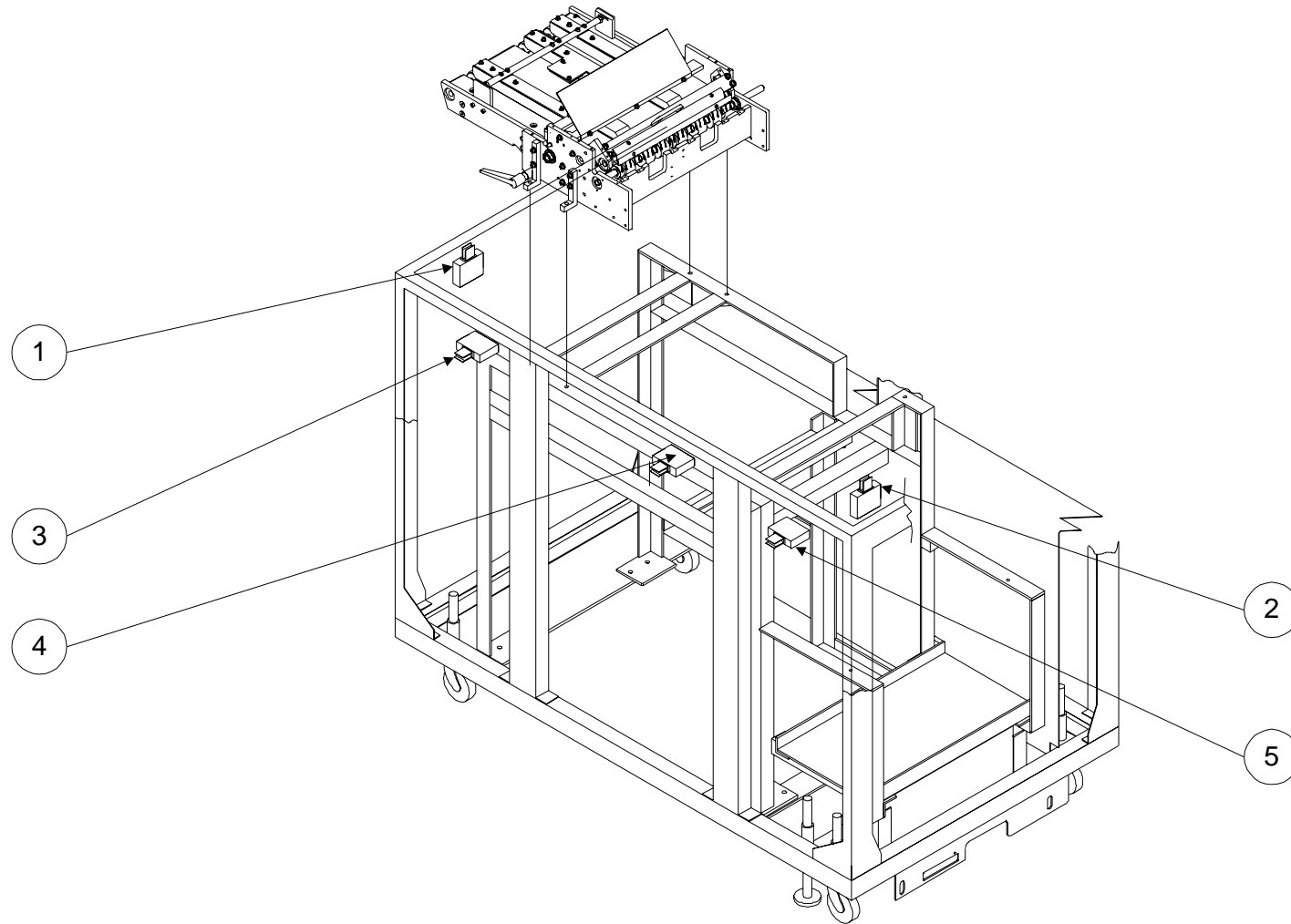
T712010-A-GBC

Chain 12.2 Stacker Outputs BSD



Component Locators

Punch Interlocks



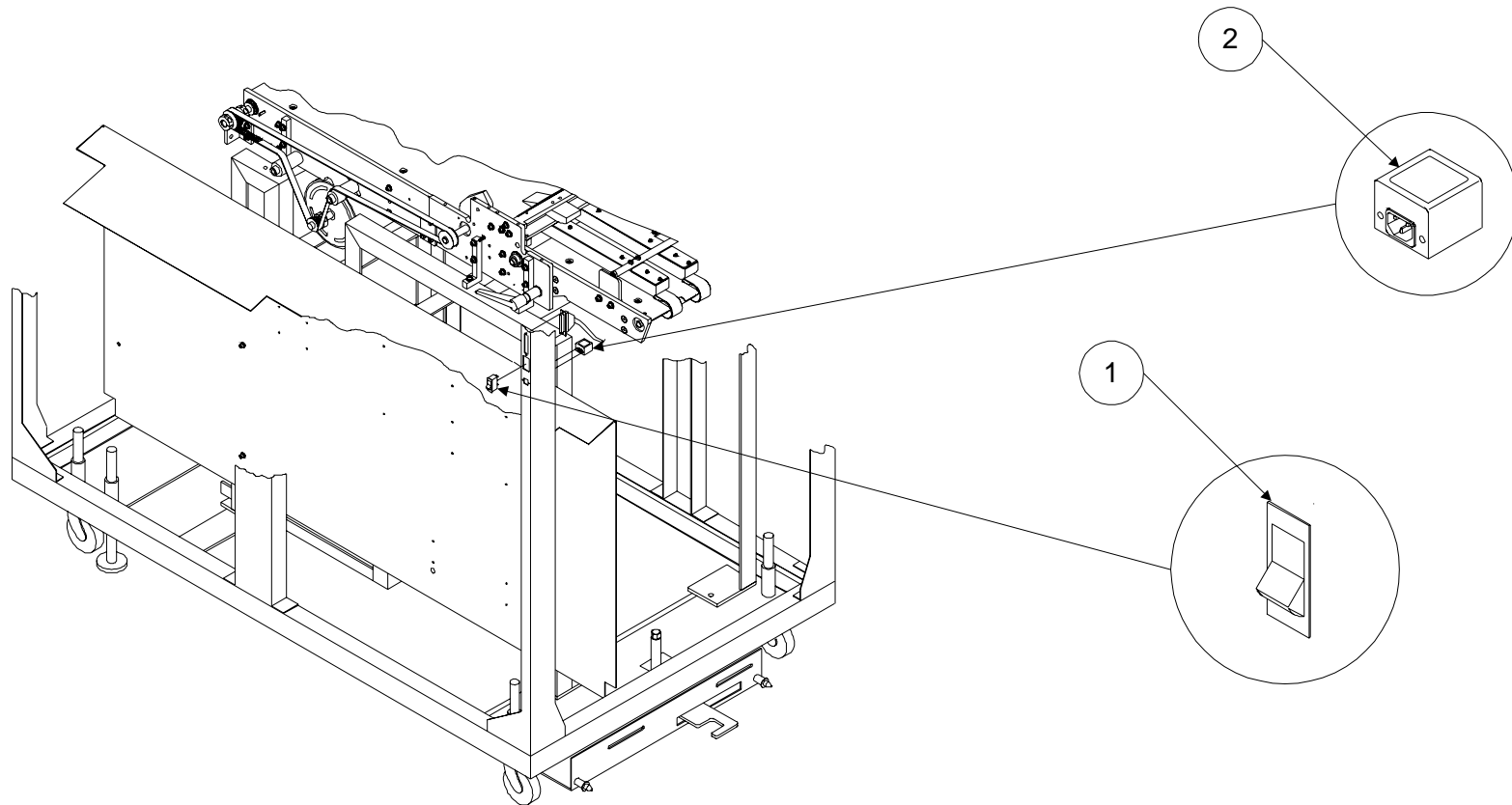
Component Locators

Punch Interlocks

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610501 | Switch, Punch Interlock, Top Cover 1 | 1 |
| 2 | 7610501 | Switch, Punch Interlock, Top Cover 2 | 1 |
| 3 | 7610501 | Switch, Punch Interlock, Left Door | 1 |
| 4 | 7610501 | Switch, Punch Interlock, Mid Door | 1 |
| 5 | 7610501 | Switch, Punch Interlock, Right Door | 1 |

Component Locators

Punch Power Switch and Line Filter



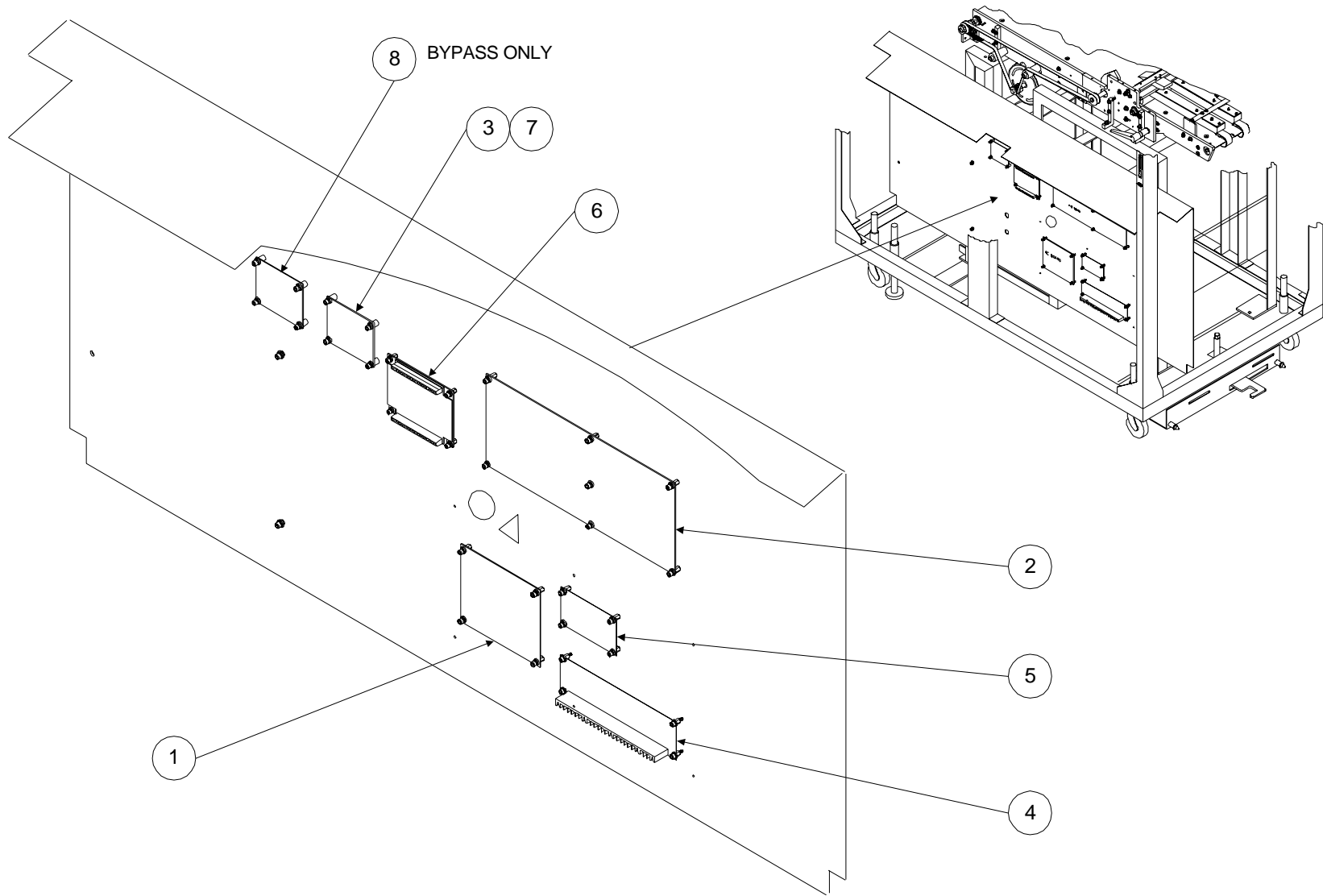
Component Locators

Punch Power Switch and Line Filter

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610455 | Punch Main Power Switch / Circuit Breaker..... | 1 |
| 2 | 7610456 | Punch AC Receptical / Line Filter | 1 |

Component Locators

Punch PWBs



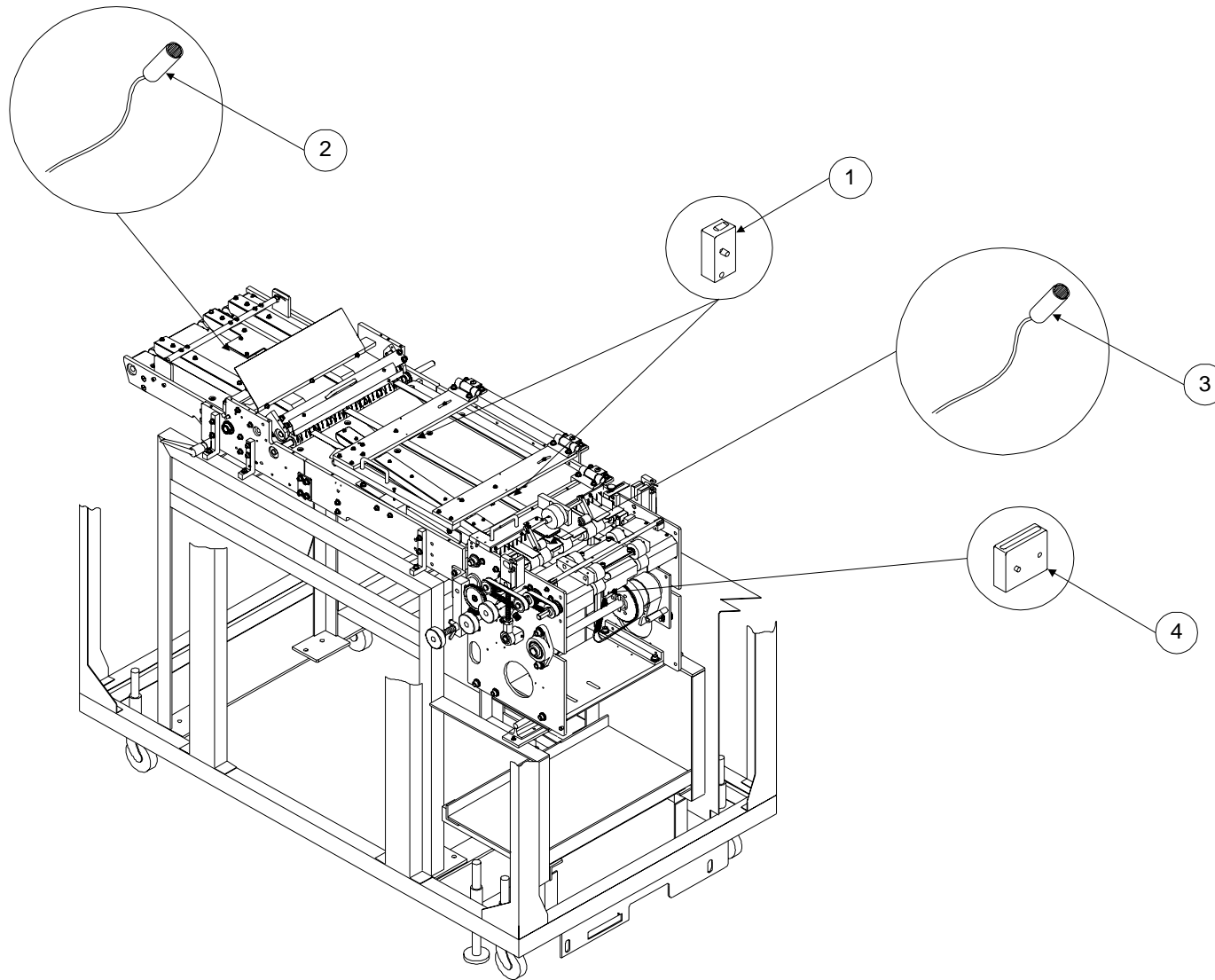
Component Locators

Punch PWBs

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610450 | PWB, Punch AC/DC Distribution | 1 |
| 2 | 7610451 | PWB, Punch I/O | 1 |
| 3 | 7610452 | PWB, Daughter | 1 |
| 4 | 7610453 | PWB, 24 VDC Power Supply | 1 |
| 5 | 7610454 | PWB, 5 VDC Power Supply | 1 |
| 6 | 7610457 | PWB, Little Star Controller | 1 |
| 7 | 7610458 | PWB, Little Star Controller Expansion | 1 |
| 8 | 7611943 | PWB, Little Star Controller Expansion / Daughter, Bypass Only | 1 |

Component Locators

Punch Sensors



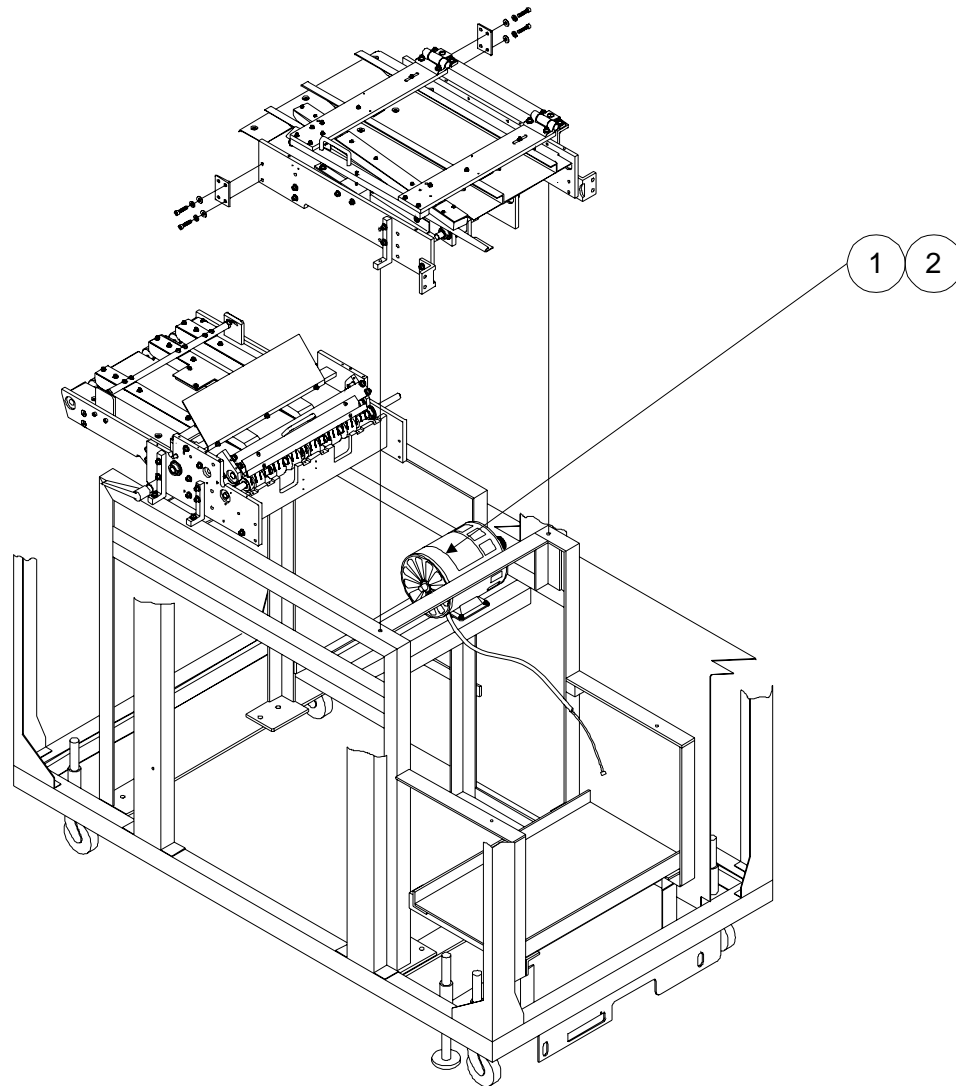
Component Locators

Punch Sensors

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610421 | Sensor, Document Transport (1 & 2) | 2 |
| 2 | 7610423 | Sensor, Entrance | 1 |
| 3 | 7610423 | Sensor, Punch | 1 |
| 4 | 7610424 | Sensor, Exit..... | 1 |

Component Locators

Punch Motors A



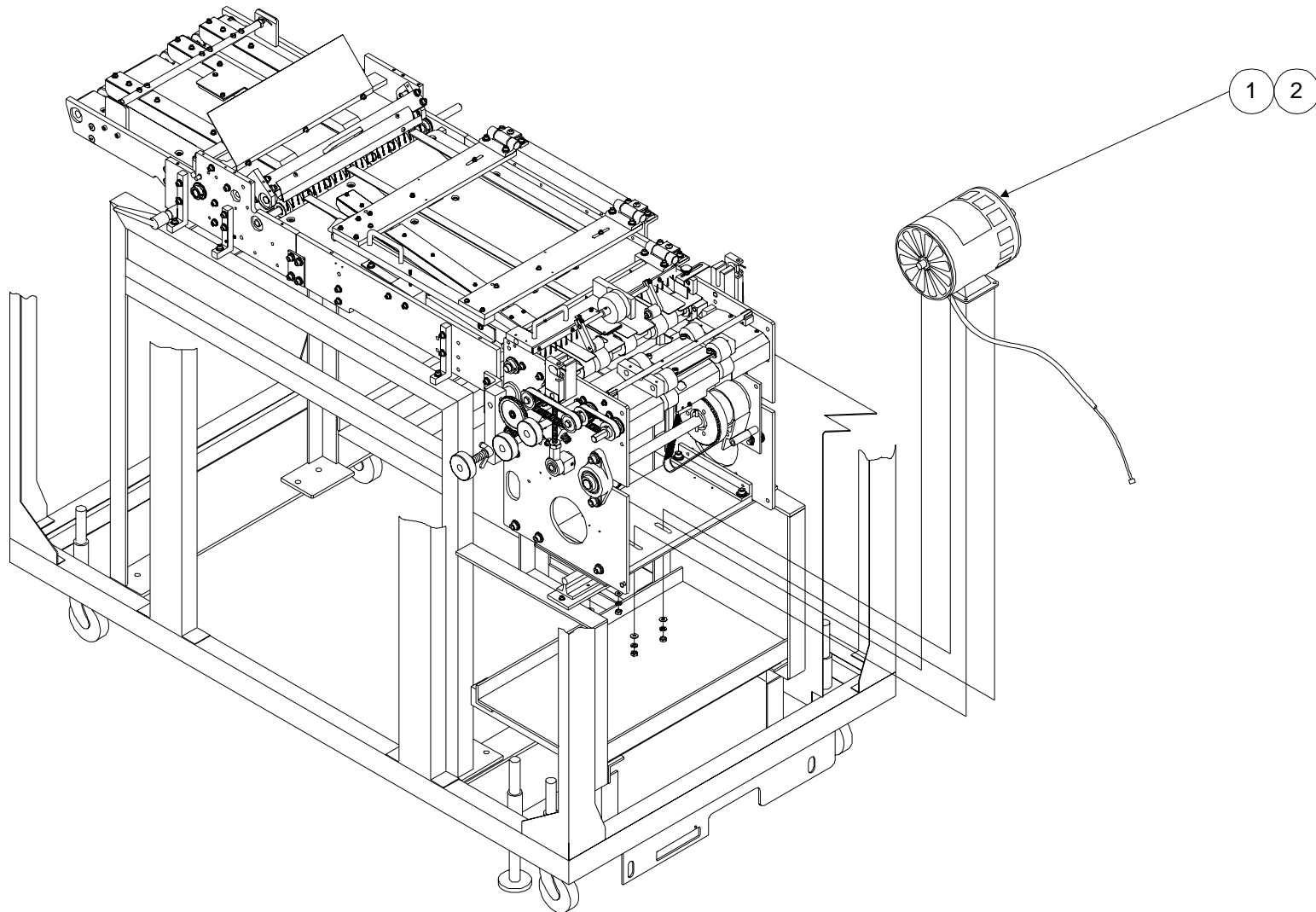
Component Locators

Punch Motors A

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610418 | Motor, 115 VAC 60 HZ, Document Transport | 1 |
| 2 | 7610425 | Motor, 230 VAC 50 HZ, Document Transport | 1 |

Component Locators

Punch Motors B



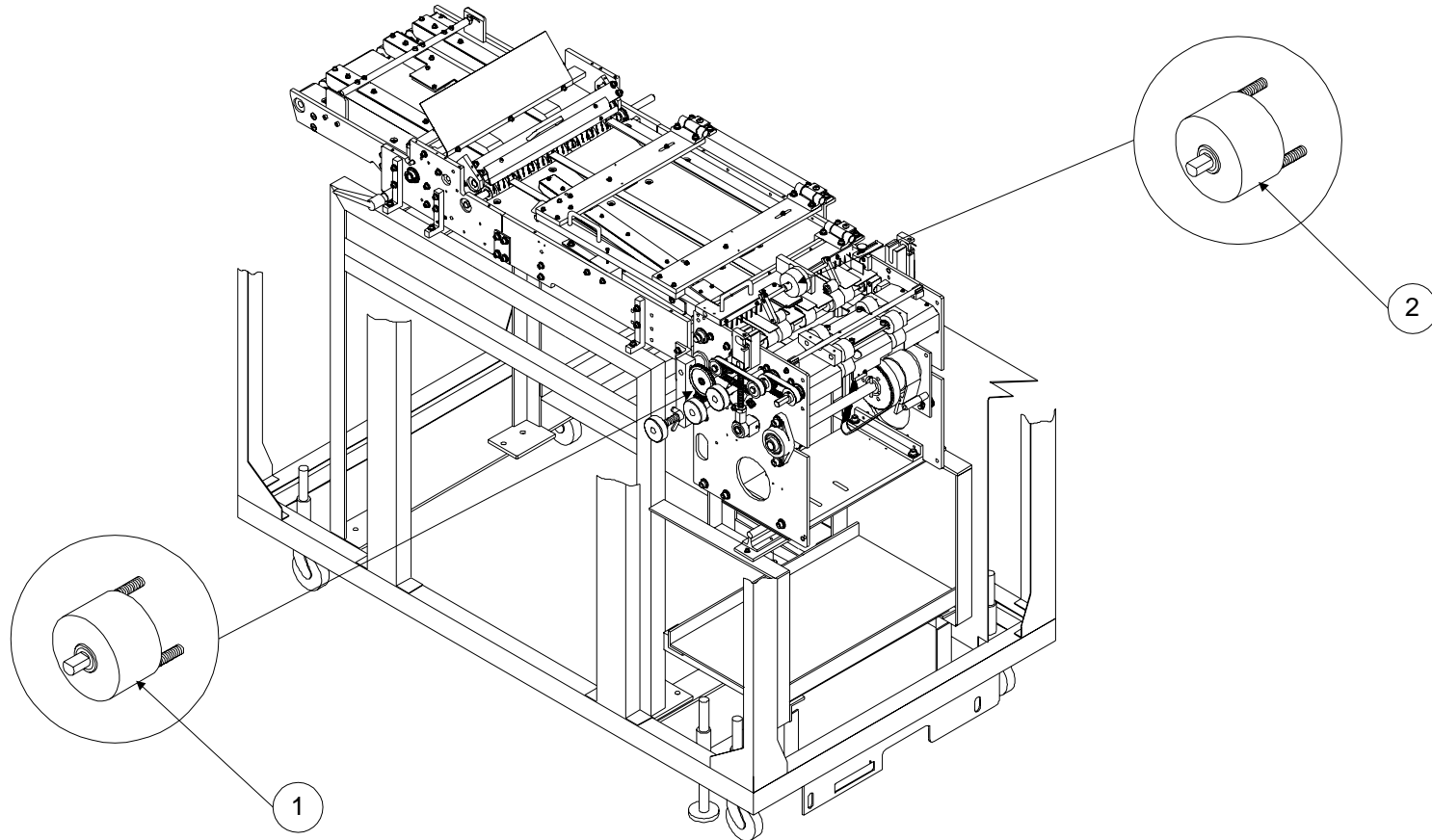
Component Locators

Punch Motors B

| Item | Part # | Description | Qty |
|------|------------|---|-----|
| 1 | 0130032100 | Pulley, 14 Tooth, 115 VAC 60 HZ Punch Motor | 1 |
| 2 | 0130039100 | Pulley, 17 Tooth, 230 VAC 50 HZ Punch Motor | 1 |

Component Locators

Punch Solenoids



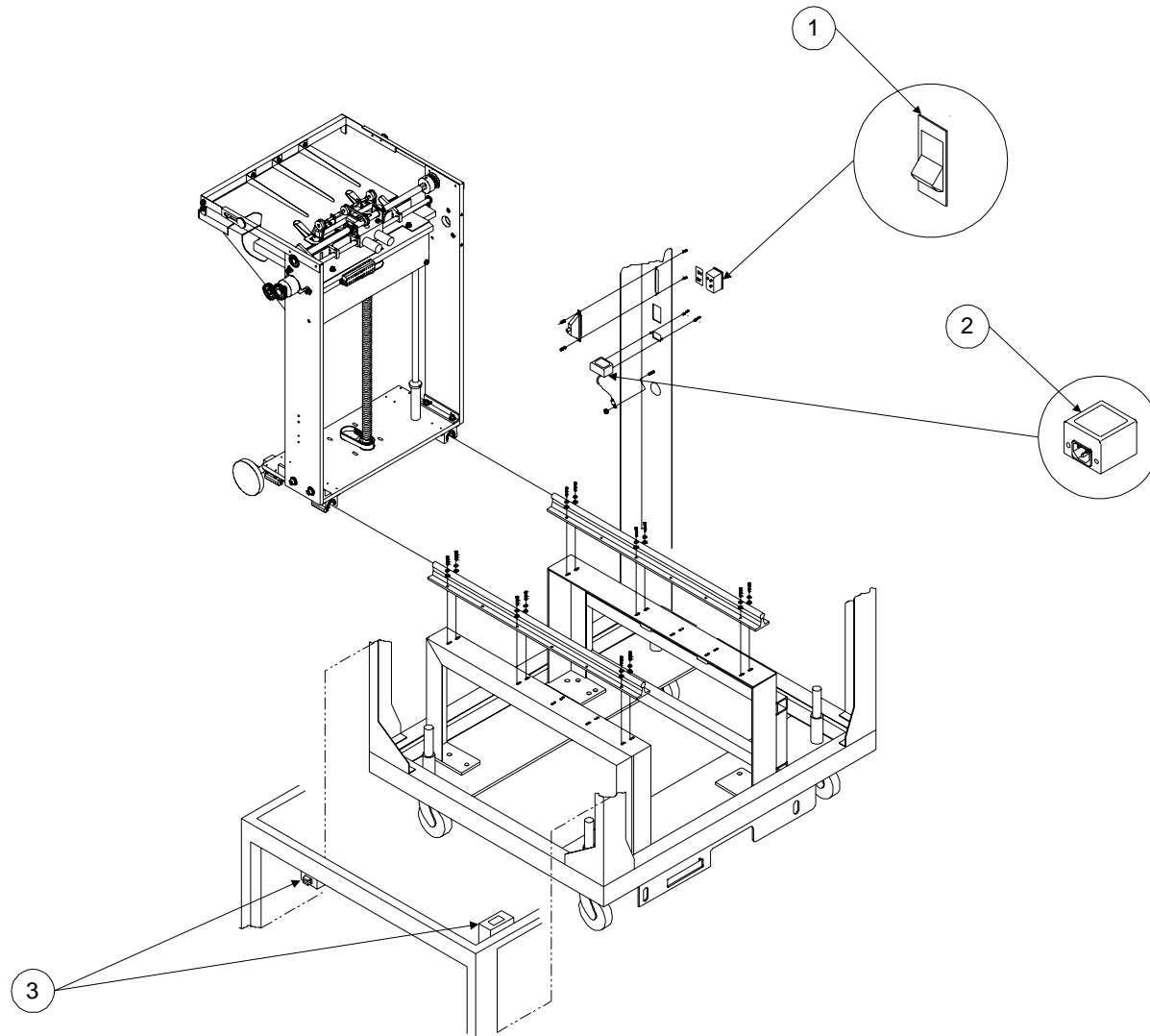
Component Locators

Punch Solenoids

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610193 | Solenoid, Rotary, Back Gauge | 1 |
| 2 | 7610193 | Solenoid, Rotary, Sheet Exit Assy. | 1 |

Component Locators

Stacker Switches A



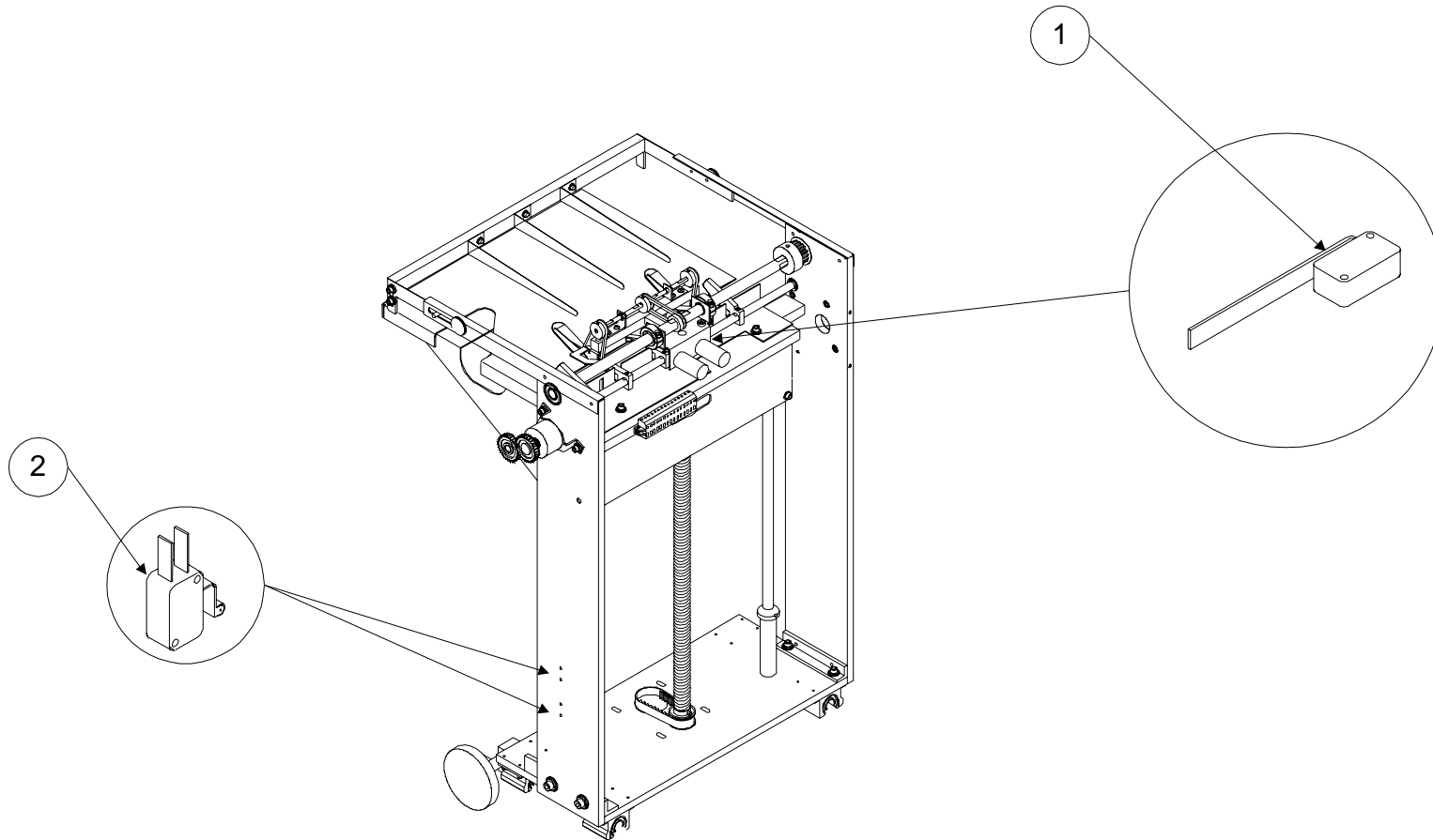
Component Locators

Stacker Switches A

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610455 | Switch / Circuit Breaker, Stacker Main Power..... | 1 |
| 2 | 7610456 | AC Receptical / Line Filter, Stacker Main Power | 1 |
| 3 | 7610501 | Switch, Stacker Interlock..... | 2 |

Component Locators

Stacker Switches B



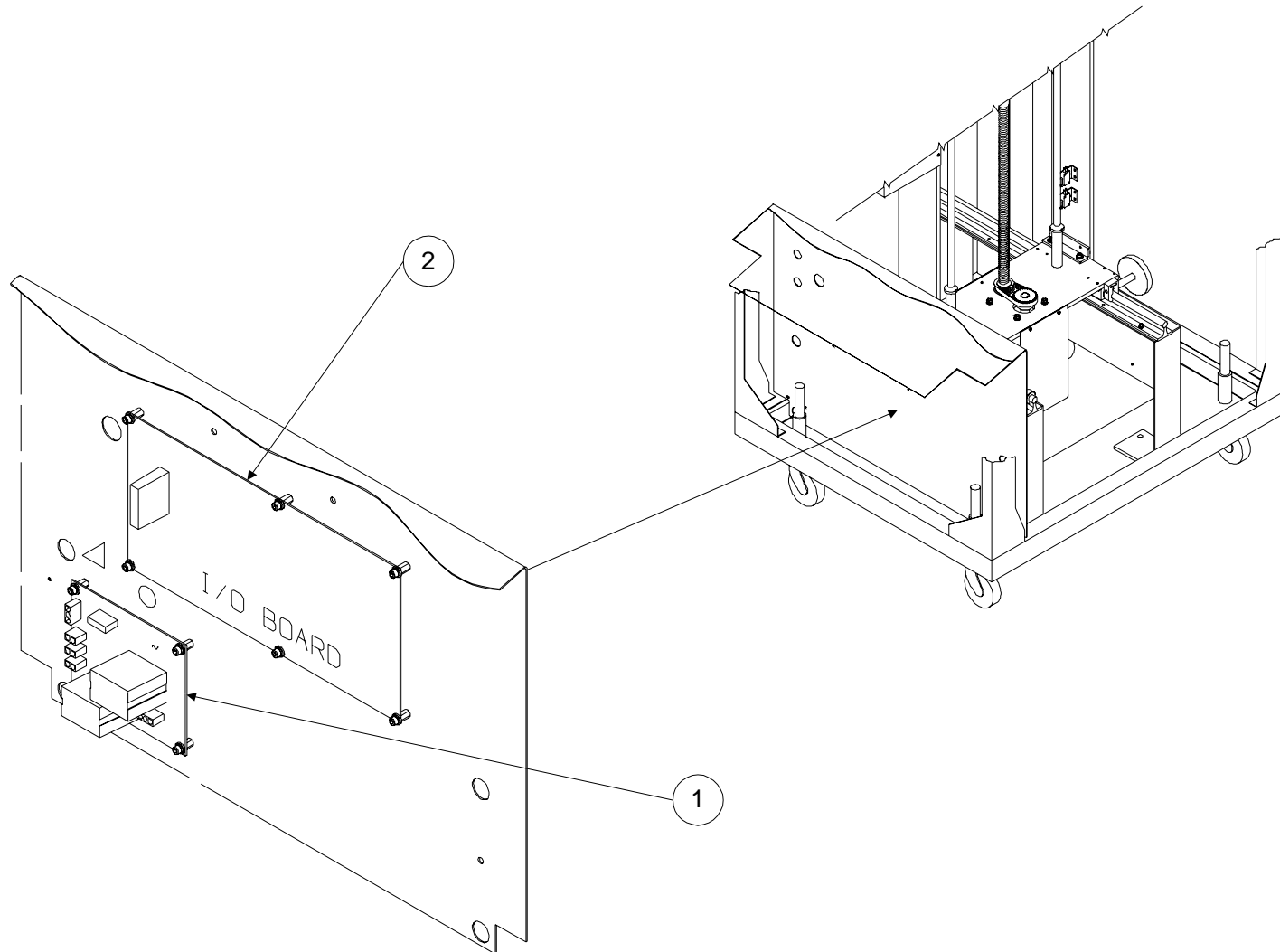
Component Locators

Stacker Switches B

| Item | Part # | Description | Qty |
|------|---------|---------------------------------|-----|
| 1 | 7610089 | Bracket, Upper Switch..... | 1 |
| 2 | 7610188 | Switch, Almost Full & Full..... | 2 |

Component Locators

Stacker PWBs



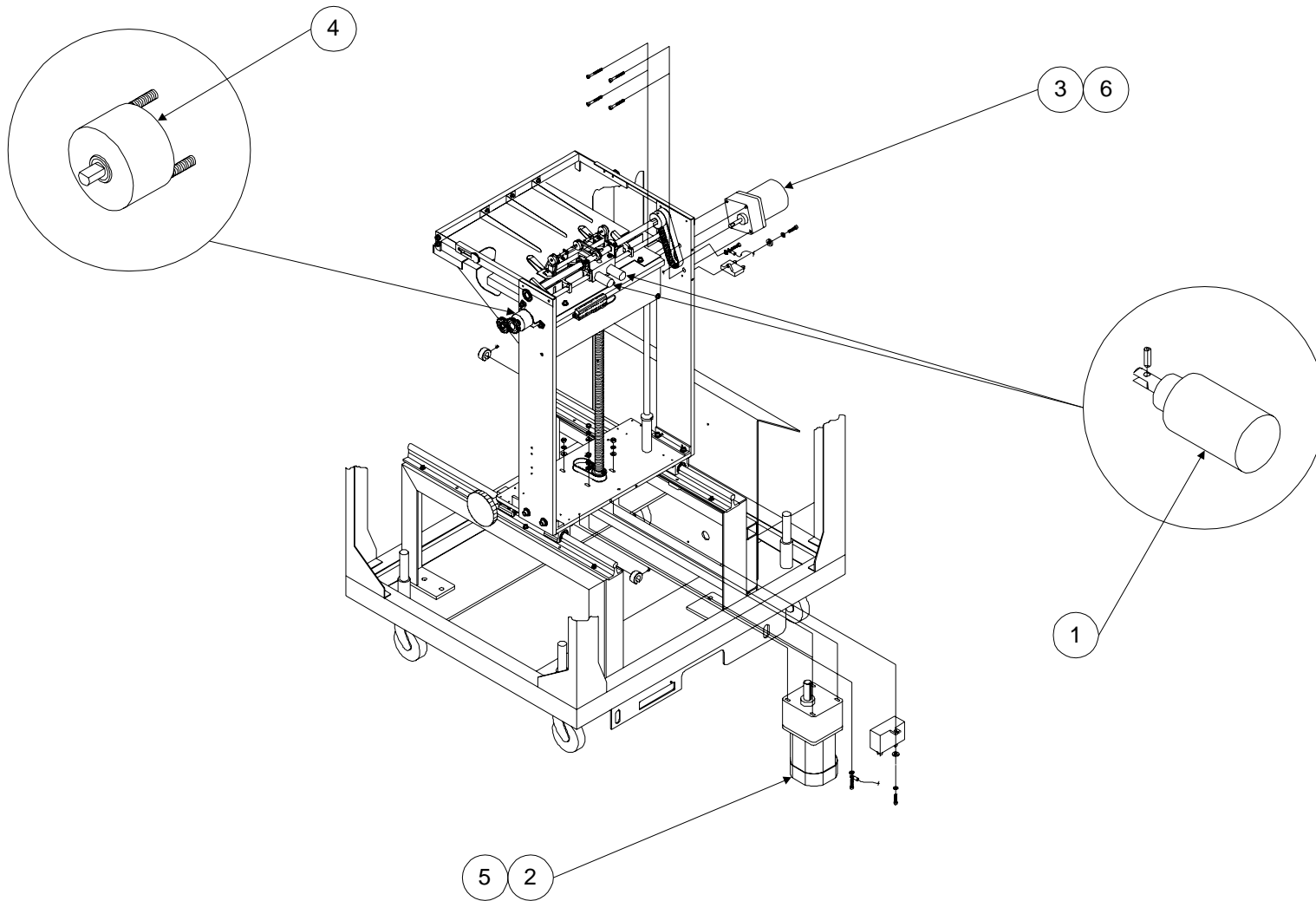
Component Locators

Stacker PWBs

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7610450 | PWB, Stacker AC/DC Power Distribution | 1 |
| 2 | 7610451 | PWB, Stacker I/O | 1 |

Component Locators

Stacker Motors and Solenoids



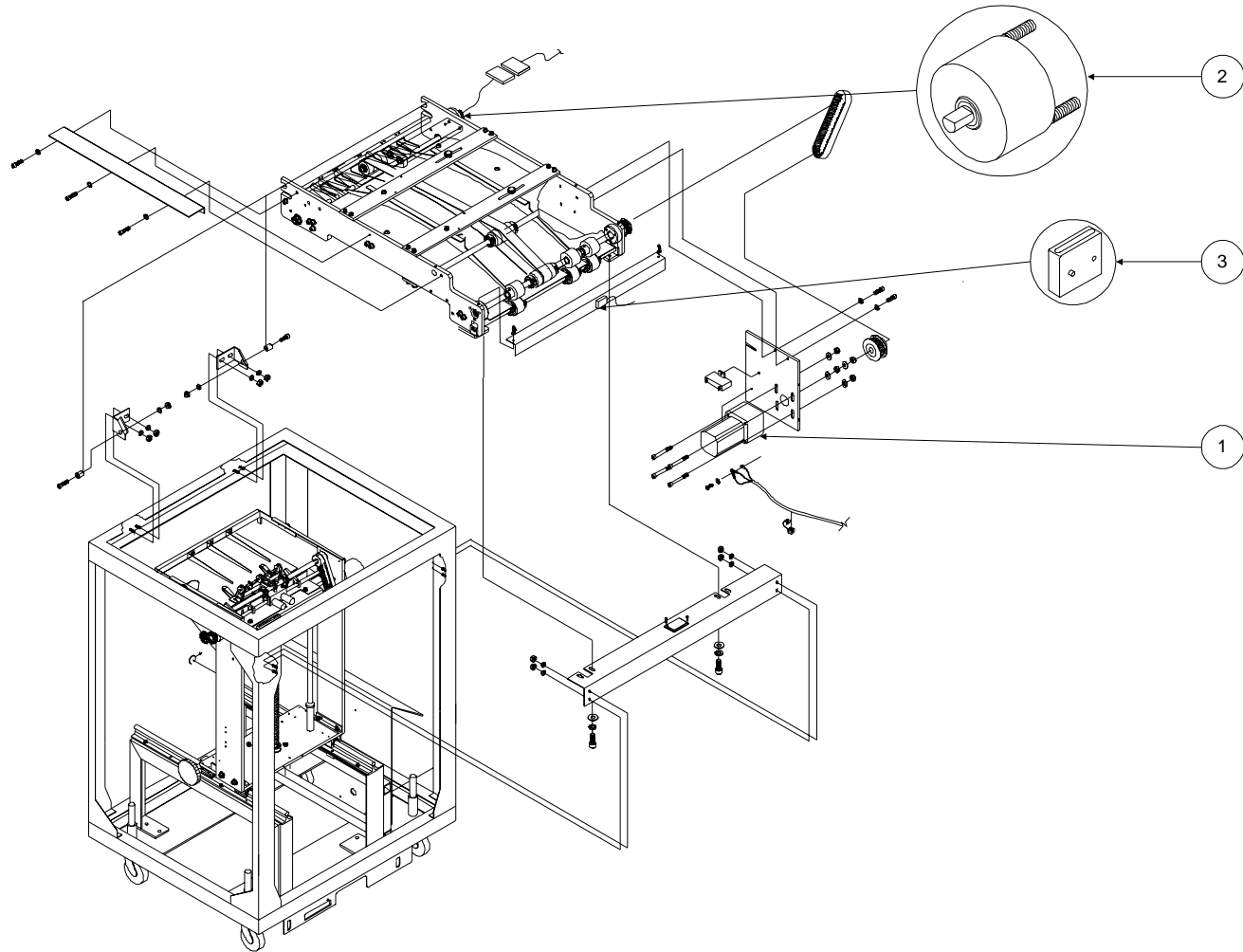
Component Locators

Stacker Motors and Solenoids

| Item | Part # | Description | Qty |
|------|---------|--|-----|
| 1 | 7610172 | Solenoid, Tubular, Offset 1 and 2 | 2 |
| 2 | 7610191 | Motor, 115 VAC 60 HZ, Stacker Tray | 1 |
| 3 | 7610192 | Motor, 115 VAC 60 HZ, Stacker O-ring | 1 |
| 4 | 7610193 | Solenoid, Rotary, Tapper Assy. | 1 |
| 5 | 7610194 | Motor, 230 VAC 50 HZ, Stacker Tray | 1 |
| 6 | 7610195 | Motor, 230 VAC 50 HZ, Stacker O-ring | 1 |

Component Locators

Bypass Stacker Motors, Solenoids, and Sensors



Component Locators

Bypass Stacker Motors, Solenoids, and Sensors

| Item | Part # | Description | Qty |
|------|---------|---|-----|
| 1 | 7611990 | Motor, Bypass, 230V..... | 1 |
| 1 | 7611991 | Motor, Bypass, 115V..... | 1 |
| 2 | 7611945 | Solenoid, Rotary, Bypass Gate..... | 1 |
| 3 | 7611944 | Sensor, Stacker Exit, (7610424 = Sensor without Cable Assy.)..... | 1 |

Notes

Installation

Note: Tag F99 IOT Kit **MUST** be installed in all DT61XX machines that will be installed together with the FusionPunch II. (Xerox Kit #600K67500). This kit enables proper Set and Page Ack (S3 and S4) C6 and C7 are not supported by the Fusion Punch II at this time.



WARNING

Do not connect the Power Cord to the Punch and Stacker until you are instructed.

The combined shipping weight of the Punch and Stacker is approximately 800 pounds (363 Kg). To avoid accidents, do not lift the equipment into place before installing.



Electrostatic Discharge

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

Preparing for installation

1. Prepare for installation
 - a. Inspect all shipments for damage. If significant damage exists, contact the shipper before proceeding.
 - b. Compare the contents of the shipping crates and the packing list.
2. Before Installing the system, ensure that Tag # P1 and S1 have been installed in the Punch and each Stacker. Refer to the Service Manual Section 6 for the Tag Matrix information.

Domestic

| Product Code | Description | Qty. |
|--------------|--------------------------|------|
| 013600000 | FP II Dom Punch | 1 |
| 7610462 | FP II Punch Power Cord | 1 |
| 7610205 | FP II User Guide | 1 |
| 013610000 | FP II Dom Stacker | 1 |
| 7610462 | FP II Stacker Power Cord | 1 |
| 0136100100 | FP II Dom Bypass Stacker | 1 |
| 0136100400 | FP II Dom Bypass Kit | 1 |

International

| Product Code | Description | Qty. |
|--------------|--|------|
| 0136000200 | FP II Intl Punch | 1 |
| 6200060 | FP II Punch Power Cord (UK) | 1 |
| 6200002 | FP II Punch Power Cord (Europe) | 1 |
| 6200016 | FP II Punch Power Cord (Australia) | 1 |
| 6200015 | FP II Punch Power Cord (Switzerland) | 1 |
| 7610205 | FP II User Guide | 1 |
| 0136100200 | FP II Intl Stacker | 1 |
| 6200060 | FP II Stacker Power Cord (UK) | 1 |
| 6200002 | FP II Stacker Power Cord (Europe) | 1 |
| 6200016 | FP II Stacker Power Cord (Australia) | 1 |
| 6200015 | FP II Stacker Power Cord (Switzerland) | 1 |
| 0136100300 | FP II Intl Bypass Stacker | 1 |
| 0136100500 | FP II Intl Bypass Kit | 1 |

3. Uncrate the Punch and Stacker(s):
 - a. Remove threaded fasteners (using ½” box wrench or socket wrench) holding the cover to the main portion of the box.
 - b. Lift off cover and set aside.
 - c. Remove threaded fasteners holding the front (ramped) portion of the crate.
 - d. Lift out front (ramped) section from the crate.



Warning:

Ensure that there is adequate space in front of the ramp. Stay behind the machine when rolling it down the ramp.

Note: Bottom of ramped section has “Male” Hinge, which will connect with the “Female” portion of the hinge attached to the bottom of the front of the crate.

- e. When the Hinges are connected, drop the front of the ramped section to the floor.
- f. Slide out the Fusion Punch down the ramp.

Note: Fusion Punch or Stacker is **NOT** mechanically connected to the inside of the crate, they are only held firmly by styrofoam blocks and will slide out between them once the top and ramp section are removed.

- g. Repeat steps a - f for the Stacker.

4. Remove the Back Panels from the Punch and Stacker.

Installing the Punch

1. To begin the process of installing the punch, first open the cover of the printer output and place a single piece of card stock into the paper path, as shown in Figure 8-1. The paper will be used to align the punch to the printer for docking.

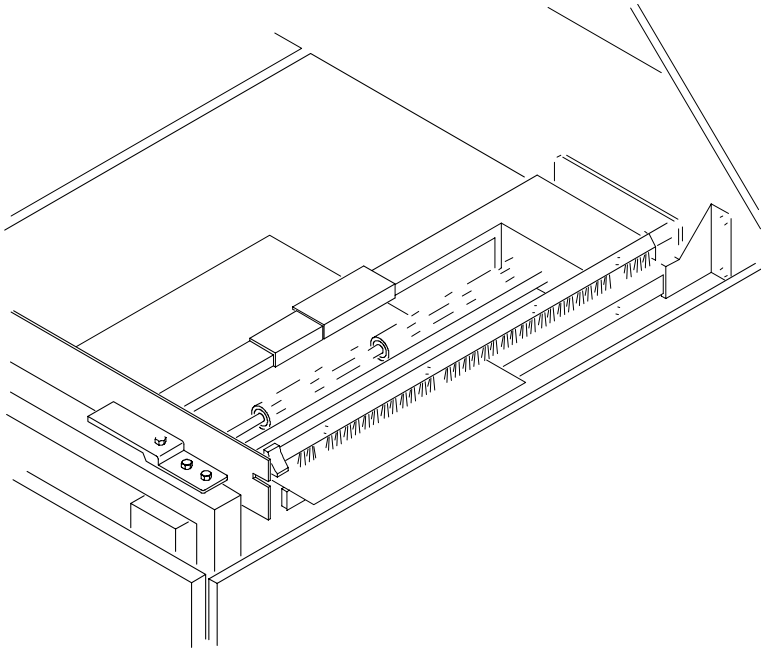


Figure 1-66 Card Stock in Printer Output.

2. Adjust the punch swing frame assembly such that it is in position to receive paper through the opening in the punch side cover. For some printers, this will be the up position. For some, the swing frame assembly will be angled down to receive input from an opening lower in the left side cover.
3. The punch is attached to the printer by aligning the male pins on the punch docking assembly with the female docking assembly on the printer (Figure 8-2). Without docking it, move the punch into a position close enough to the printer to allow the card stock to be aligned with the input to the punch.

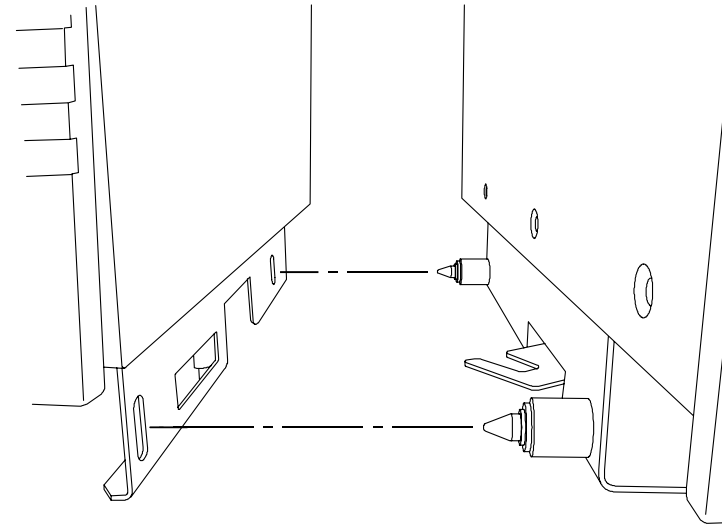


Figure 1-67 Punch and Printer Docking Assemblies.

4. Remove the rear covers from the punch to access the left and right rear caster adjustment bolts.
5. Using a 1/2 inch wrench, adjust the left front and left rear caster bolts to align the card stock protruding from the printer with the center (top-to-bottom) of the input slot on the punch.
6. Maintaining the position of the card stock, perform a rough visual leveling of the punch by using a 1/2 inch wrench to adjust the front and rear casters on the left and right side of the punch.
7. Move the punch to adjust the front-to-rear alignment of the card stock to within the tolerance shown on the Edge Guide Reference Decal on the left side of the punch.

- Open the front left door of the punch and loosen, but do not remove, the four 3/16 inch Allen head cap screws that hold the docking assembly (Figure 8-3).

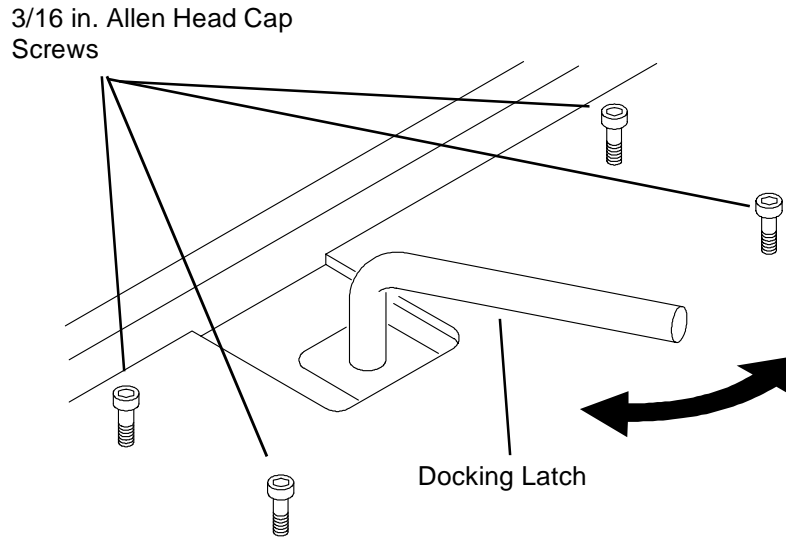


Figure 1-68 Docking Latch.

- On the left side of the punch (outside), loosen but do not remove two 3/16 inch Allen head cap screws that also hold the docking assembly.
- Adjust the front-to-rear alignment of the punch docking assembly with the printer docking assembly and tighten the two 3/16 inch Allen head cap screws on the left side of the punch.
- Move the punch to the docking position. Try the docking latch. When correctly positioned, the docking latch should provide a noticeable resistance to being latched.
- If the docking latch tension is correct, tighten the remaining four 3/16 inch Allen head cap screws that hold the docking assembly. If the docking latch tension is not correct, adjust the docking assembly by moving it to the left or right, before tightening the remaining four Allen head cap screws.

- On the right side of the punch, lower the front and rear leveling pads until they are touching the floor. Screw the right front and right rear casters up so that the weight of the punch is resting on the leveling pads.
- Check the left-to-right and front-to-back leveling of the punch with a level. Make any fine adjustment to the leveling of the punch by adjusting the leveling pads.
- Connect the DFA Cable from the Host Printer to the FusionPunch II (Figure 8-4).

Note: If the DFA Cable is not visible, open the back panel of the bypass transport and the door to locate the DFA Cable

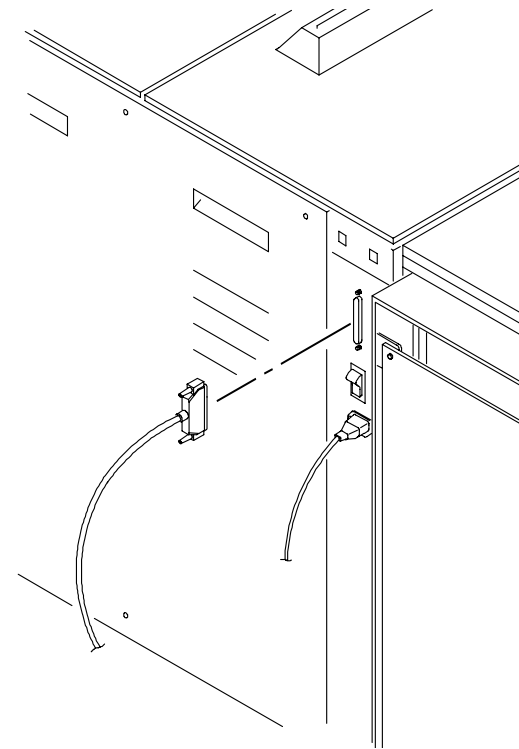


Figure 1-69 DFA Cable from the Host Printer to the FusionPunch II

- Complete the installation of the Stacker before connecting the punch power cable.

Installing a Single Offset Stacker

1. Complete the installation and alignment of the Punch before attempting this procedure.
2. Like attaching the punch to the printer, the stacker is attached to the punch by aligning the male docking pins on the stacker docking assembly with the female docking assembly on the punch. The punch also has two locating pins on the top right of the assembly, which are also used to align the stacker with the punch. Move the Stacker into position, close enough to the punch to adjust the position of the locating pins on the punch with the holes in the stacker frame (Figure 8-5).

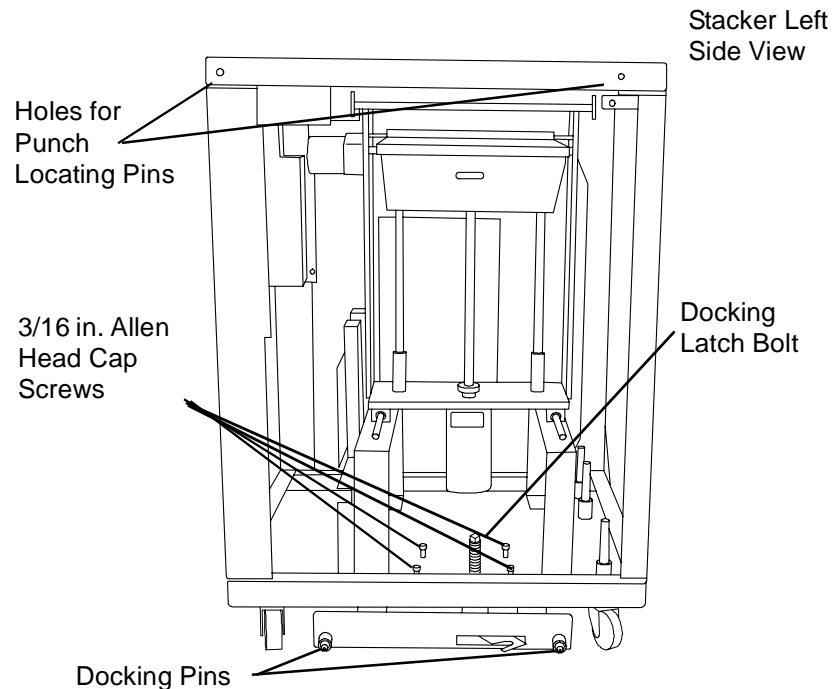


Figure 1-70 Stacker Docking Pins and Holes.

3. Open the front door of the stacker and loosen, but do not remove, the four 3/16 inch Allen head cap screws that hold the docking assembly.

4. If it appears that the stacker is not already aligned with the punch in the front-to-rear direction, on the left side of the stacker (outside), loosen two 3/16 inch Allen head cap screws that also hold the docking assembly.
5. Remove the rear cover from the stacker to access the left rear and right rear caster adjustment bolts.
6. Using a 1/2 inch wrench, adjust the left front and left rear caster bolts to align the top front and top rear locating pins on the punch with the holes in the stacker frame.
7. Perform a rough visual leveling of the stacker by using a 1/2 inch wrench to adjust the front and rear casters on the right side of the stacker.
8. Move the stacker to adjust the front to rear alignment of the locating pins on the punch and the holes in the stacker frame.
9. Adjust the front to rear alignment of the docking assembly and tighten the two 3/16 inch Allen head cap screws on the left side of the stacker.
10. Move the stacker to the docking position. Using a 1/2 wrench, try the docking latch. When correctly positioned, the docking latch should provide a noticeable resistance to being latched.
11. If the docking latch tension is correct, tighten the remaining four 3/16 inch Allen head cap screws that hold the docking assembly. If the docking latch tension is not correct, move the docking assembly to the left or right before tightening the remaining four screws.
12. On the right side of the stacker, lower the front and rear leveling pads until they are touching the floor. Using the 1/2 inch wrench, screw the right front and right rear casters up so that the weight of the stacker is resting on the leveling pads.
13. Check the left-to-right and front-to-back leveling of the stacker with a level. Make any fine adjustment to the leveling of the stacker by adjusting the leveling pads.
14. Locate the I/O cables and the stacker power cable on the rear floor of the punch. Pass these cables through the knockouts between the stacker and the punch so that the cables can be connected to the appropriate Stacker PWBs.

15. Connect the I/O cables to the Stacker I/O PWB as follows:

- P22 to J22A
- P23 to J23A (connect to J23B if the Stacker has a Bypass installed)
- P24 to J24A (connect to J24B if the Stacker has a Bypass installed)
- P25 to J25A

16. Perform this step ONLY if a third party device is to be installed after the stacker:

- a. Check / move all Jumpers next to the DFA connector on the Stacker I/O PWB so that they are connected JB to JC.

17. Connect the AC Power Cable from P14 on the to J14 on the Stacker AC/DC Distribution PWB.

18. Connect the Punch Main AC Power Cable to the Punch.

19. Connect the Stacker Main AC Power Cable to the Stacker.

20. Plug each of the power cables into a wall receptacle.

21. Replace all covers on the Punch and Stacker.

22. Power up the Punch and check that the Bypass is Enabled (GP-1 Enter / Exit Diagnostics Mode Procedure).

23. Enter the Offline Mode.

24. Insert some paper into the Manual Paper Feed Tray to ensure correct alignment and operation.

25. Ensure the correct host and personality profiles are enabled. Refer to Section 6 General Procedures for more information.

Note: All down-stream devices must be set up for 6180 speed and must use 6180 profiles regardless of what kind of Host Printer the devices are connected to.

Installing a Second Offset Stacker

Prerequisite

Ensure that Stacker # 1 is equipped with a Bypass Assy. If the installed stacker DOES NOT have a Bypass Assy installed, it has to be either;

- a. upgraded with a Bypass Assy (0136100400 - Fusion Punch II Domestic Bypass Kit, or 0136100500 - Fusion Punch II International Bypass Kit) or;
- b. un-installed and used as Stacker # 2 if the new stacker is equipped with a Bypass Assy.

If neither of the these options are applicable, contact the sales representative before continuing with the installation of Stacker # 2.

Installation

1. Complete the installation and alignment of stacker # 1 before attempting this procedure.
2. Like attaching stacker # 1 to the punch, stacker # 2 is attached to stacker # 1 by aligning the male docking pins on stacker # 2 docking assembly with the female docking assembly on stacker # 1.
3. Mount the 2 locating pins on the top right side of stacker # 1. Move stacker # 2 into position, close enough to stacker # 1 to adjust the position of the locating pins on stacker # 1 with the holes in the frame of stacker # 2 (Figure 8-6).

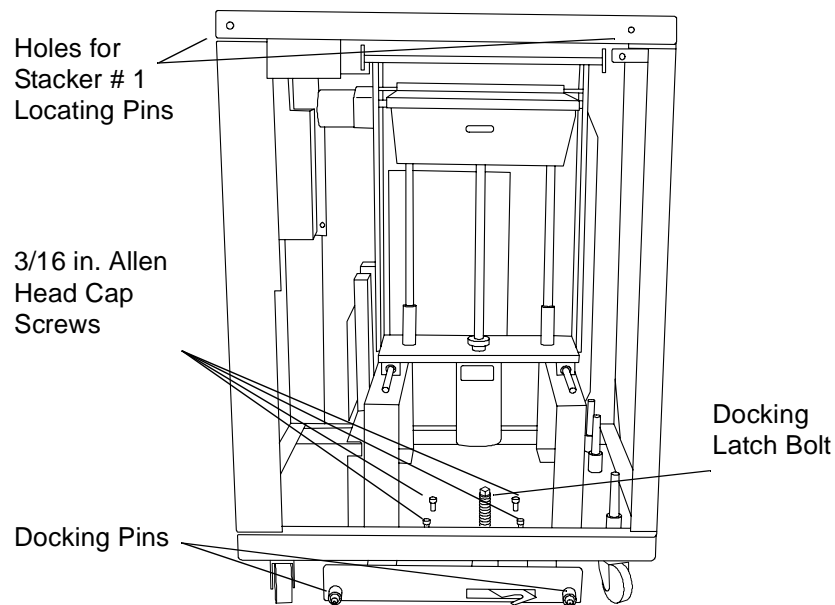


Figure 1-71 Stacker Docking Pins and Holes.

4. Open the front door of stacker # 2 and loosen, but do not remove, the four 3/16 inch Allen head cap screws that hold the docking assembly.
5. If it appears that stacker # 2 is not already aligned with the stacker # 1 in the front-to-rear direction, on the left side of the stacker # 2 (outside), loosen two 3/16 inch Allen head cap screws that also hold the docking assembly.
6. Remove the rear cover from stacker # 2 to access the left rear and right rear caster adjustment bolts.
7. Using a 1/2 inch wrench, adjust the left front and left rear caster bolts to align the top front and top rear locating pins on stacker # 1 with the holes in the frame of stacker # 2.
8. Perform a rough visual leveling of stacker # 2 by using a 1/2 inch wrench to adjust the front and rear casters on the right side of stacker # 2.
9. Move stacker # 2 to adjust the front to rear alignment of the locating pins on stacker # 1 and the holes in the frame of stacker # 2.

10. Adjust the front to rear alignment of the docking assembly and tighten the two 3/16 inch Allen head cap screws on the left side of stacker # 2.
11. Move stacker # 2 to the docking position. Using a 1/2 wrench, try the docking latch. When correctly positioned, the docking latch should provide a noticeable resistance to being latched.
12. If the docking latch tension is correct, tighten the remaining four 3/16 inch Allen head cap screws that hold the docking assembly. If the docking latch tension is not correct, move the docking assembly to the left or right before tightening the remaining four screws.
13. On the right side of stacker # 2, lower the front and rear leveling pads until they are touching the floor. Using the 1/2 inch wrench, screw the right front and right rear casters up so that the weight of the punch is resting on the leveling pads.
14. Check the left-to-right and front-to-back leveling of the stacker with a level. Make any fine adjustment to the leveling of the stacker by adjusting the leveling pads.
15. Locate the I/O cables and the stacker power cable on the rear floor of the punch and stacker # 1. Pass these cables through the knockouts between the punch, stacker # 1 and stacker # 2 so that the cables can be connected to the appropriate Stacker PWBs.
16. Connect the I/O cables to the Stacker # 2 I/O PWB as follows:
 - P22 to J22A
 - P23 to J23A
 - P24 to J24A
 - P25 to J25A
17. Connect the AC Power Cable P13 to J13 on the Stacker AC/DC Distribution PWB.
18. Perform this step ONLY if a third party device is to be installed after the stackers:
 - Check that all Jumpers next to the DFA connector on the Stacker # 1 I/O PWB are connected JB to JC.
19. Check that J23 and J24 on the Stacker # 1 I/O PWB are connected to P23B and P24B.
20. Connect the Punch Main AC Power Cable to the Punch.
21. Connect the Stacker Main AC Power Cable to the Stacker.
22. Plug each of the power cables into a wall receptacle.

23. Replace all covers on the Punch and Stackers.
24. Power up the Punch and check that the Bypass is Enabled (GP-1 Enter / Exit Diagnostics Mode Procedure).
25. Enter the Offline mode.
26. Insert some paper into the Manual Paper Feed Tray to ensure correct alignment and operation.
27. Ensure the correct host and personality profiles are enabled. Refer to Section 6 General Procedures for more information.

Note: All down-stream devices must be set up for 6180 speed and must use 6180 profiles regardless of what kind of Host Printer the devices are connected to.

Preparing to Install a Bypass Kit



WARNING

Do not connect the Power Cord to the Punch and Stacker until you are instructed.



Electrostatic Discharge

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

Preparing for installation

1. Prepare for installation
 - a. Inspect all shipments for damage. If significant damage exists, contact the shipper before proceeding.
 - b. Compare the contents of the packages and the packing list.
2. Before installing the Bypass kit, ensure that Tag # P1 and S1 have been installed in the Punch and each Stacker. Refer to the Service Manual Section 6 for the Tag Matrix information.

Domestic Bypass Kit (0136100400)

| Product Code | Description | Qty. |
|--------------|------------------------------------|------|
| 7611951 | Bypass Assy. | 1 |
| 7611935 | Bypass Motor Assy. (Domestic) | 1 |
| 1980077 | Screw Socket Cap SS#1 | 2 |
| 1980098 | Screw Socket Cap SS#1 | 2 |
| 7611937 | Bracket, Docking Assy. | 1 |
| 7611936 | Bracket Assy., Docking | 1 |
| 7611933 | Bar, Docking Assy. | 1 |
| 7610460 | SCR Module, DC | 7 |
| 7610502 | Cable Assy., Second Stacker I/O | 1 |
| 7610503 | Cable Assy., Bypass Motor | 1 |
| 7610504 | Cable Assy., Bypass Gate Solenoid | 1 |
| 7610505 | Cable Assy., Bypass DC | 1 |
| 1952407 | Strain Relief Bushing | 2 |
| 7611938 | Sensor Bracket Assy. | 1 |
| 7611934 | Exit Panel Assy. | 1 |
| 7611946 | Cover, Bypass Motor Pulley | 1 |
| 7611942 | Cover, Bypass Motor Pulley | 1 |
| 7610678 | Pin, Docking, Top Alignment | 2 |
| 1981311 | Belt, Timing, Bypass Motor | 1 |
| 1980094 | SHCS 1/4-20 x 1/2 | 2 |
| 7610680 | Bracket Assy., Docking | 1 |
| 7611922 | Assy., Paper Guide, Bypass Stacker | 1 |

International Bypass Kit (0136100500)

| Product Code | Description | Qty. |
|--------------|------------------------------------|------|
| 7611951 | Bypass Assy. | 1 |
| 7611932 | Bypass Motor Assy. (International) | 1 |
| 1980077 | Screw Socket Cap SS#1 | 2 |
| 1980098 | Screw Socket Cap SS#1 | 2 |
| 7611937 | Bracket, Docking Assy. | 1 |
| 7611936 | Bracket Assy., Docking | 1 |
| 7611933 | Bar, Docking Assy. | 1 |
| 7610460 | SCR Module, DC | 7 |
| 7610502 | Cable Assy., Second Stacker I/O | 1 |
| 7610503 | Cable Assy., Bypass Motor | 1 |
| 7610504 | Cable Assy., Bypass Gate Solenoid | 1 |
| 7610505 | Cable Assy., Bypass DC | 1 |
| 1952407 | Strain Relief Bushing | 2 |
| 7611938 | Sensor Bracket Assy. | 1 |
| 7611934 | Exit Panel Assy. | 1 |
| 7611946 | Cover, Bypass Motor Pulley | 1 |
| 7611942 | Cover, Bypass Motor Pulley | 1 |
| 7610678 | Pin, Docking, Top Alignment | 2 |
| 1981311 | Belt, Timing, Bypass Motor | 1 |
| 1980094 | SHCS 1/4-20 x 1/2 | 2 |
| 7610680 | Bracket Assy., Docking | 1 |
| 7611922 | Assy., Paper Guide, Bypass Stacker | 1 |

Notes

Bypass Kit Installation procedure



WARNING

Switch off the Main Power.
Disconnect the power cord.

1. Remove the Stacker Rear Panel and open the Stacker Top Cover.
2. Remove and replace the Stacker Infeed Assy. with the Bypass Stacker Wire Form Assy. (Figure 8-7)
 - 2.1 Remove the 4 Allen Head Cap screws, 4 Flat Washers, 4 Lock Washers and the Stacker Infeed Assy (Figure 8-7).
 - 2.2 Install the Bypass Stacker Wire Form Assy., ensure to align the Wire Form Guides to the side of the each associated tapper.(You may have to move the tappers over so that they do not interfere with the Wire Form Guides.)..

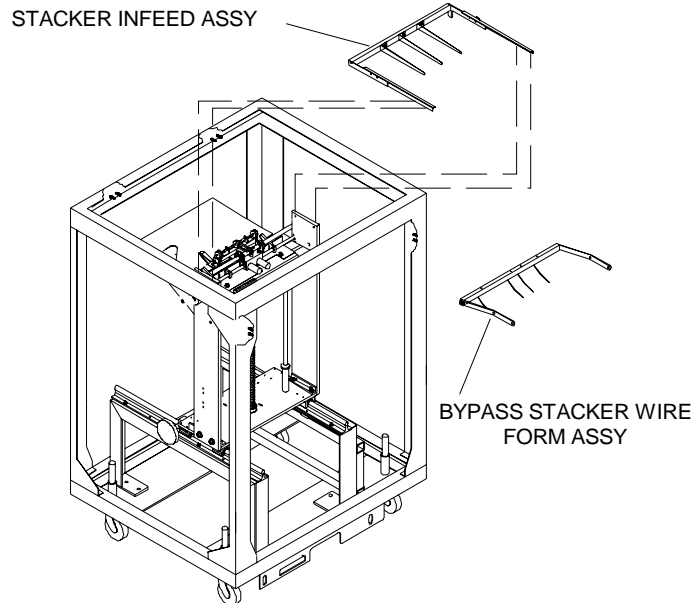


Figure 1-72 Stacker Infeed Assy removal

3. Mount the RH and LH Docking Brackets and the Docking Bar (Figure 8-8).
 - 3.1 Mount the RH and LH Docking Brackets using 2 Lock Washers and 2 Hex Nuts on each Bracket; fingertighten the Hex Nuts.
 - 3.2 Mount the Docking Bar using 4 Lock Washers and 4 Hex Nuts tighten the Hex Nuts firmly.

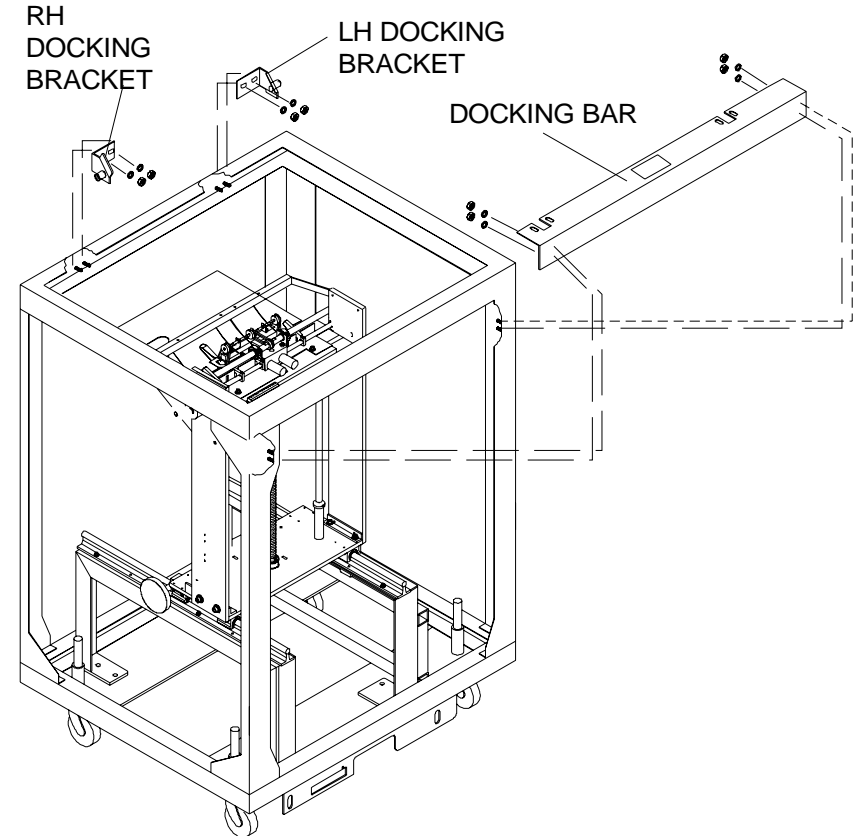


Figure 1-73 Mounting the Docking Brackets

4. Push the RH and LH Docking Brackets towards each other (Figure 8-9).

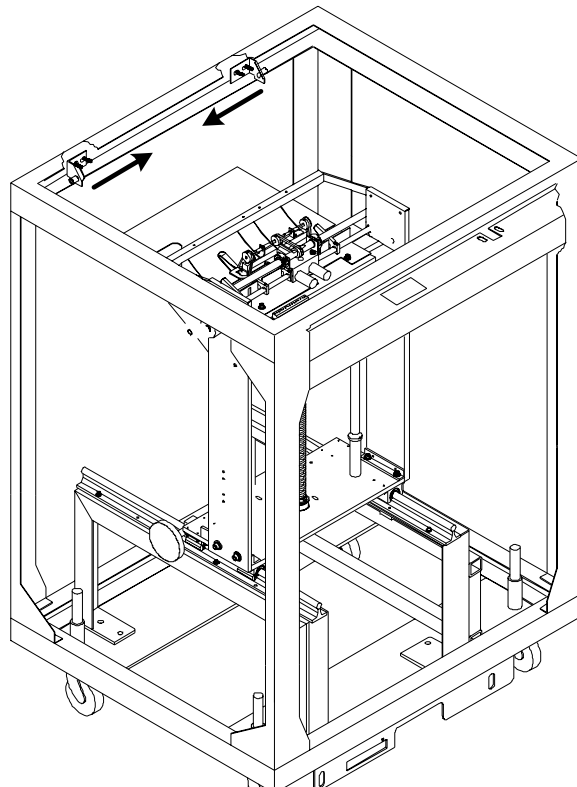


Figure 1-74 RH and LH Docking Brackets

5. Mount the Bypass Assy in the Stacker (Figure 8-10).
 - 5.1 Loosen the Stacker Slide Lock and slide the Stacker Assy. to the middle of the Stacker Slide Rail, then tighten the Stacker Slide Lock.
 - 5.2 Gently swing down the Infeed side of the Bypass Assy and fit the LH and RH Locating Pins into the LH and RH cutouts in the Bypass Assy.
 - 5.3 Gently swing down the Exit side of the Bypass Assy until it rests on the Docking Bar.

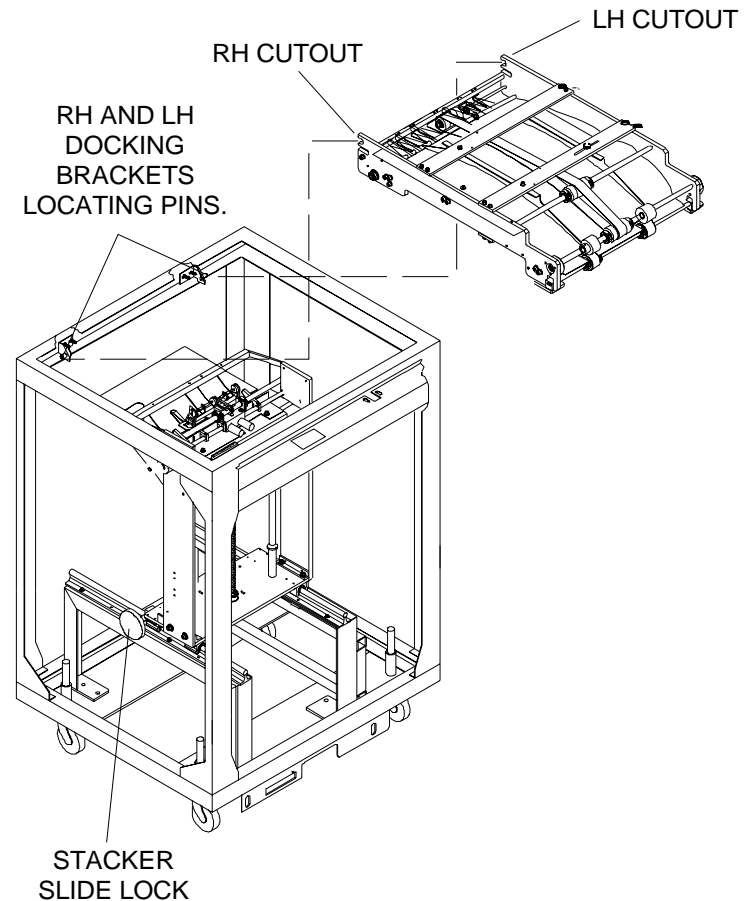


Figure 1-75 Mounting the Bypass Assy in the Stacker

- Secure the Bypass Assy to the Docking Bar, 2 Allen Head Cap screws, 2 Lock Washers and 2 Flat Washers (Figure 8-11).

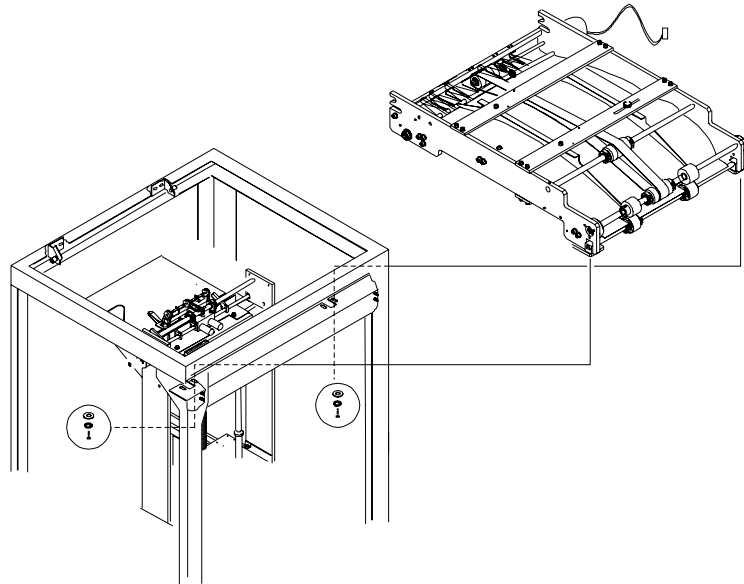


Figure 1-76 Securing the Bypass Assy to the Docking Bar

- Mount the Bypass Diverter Cable Assy (2 Allen Head Cap screws) and connect the Bypass Gate Solenoid connector (Figure 8-12).

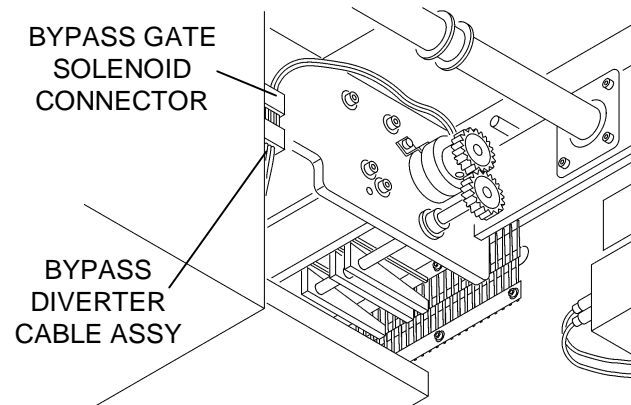


Figure 1-77 Connecting the Bypass Gate Solenoid

- Route the Bypass Diverter Cable Assy through the hole in the Stacker I/O PWB mounting plate and connect it to the Stacker I/O PWB connector J6B.
- Remove the Bypass Motor Cover (4 Allen Head cap screws and 4 Lock Washers).

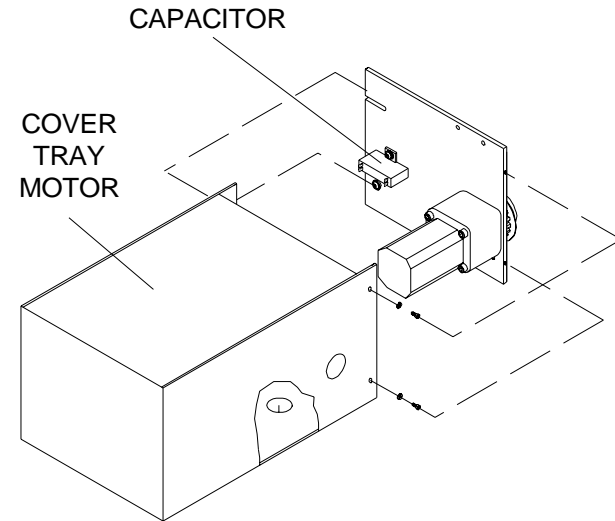


Figure 1-78 Removing the Bypass Motor Cover

- Mount the Bypass Motor to the Bypass Frame (2 Allen Head Cap screws and 2 Lock Washers).

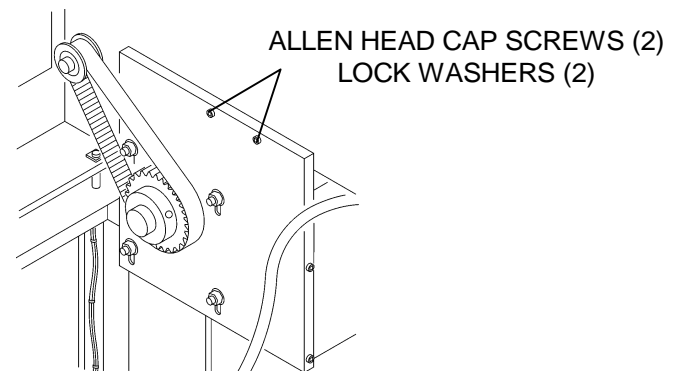


Figure 1-79 Mounting the Bypass Motor

- Connect the Bypass Motor Harness to J10 of the Stacker AC/DC Distribution PWB, then route it through the Stacker Electrical Panel, then through the hole in the side of the Bypass Motor Cover. Connect the Bypass Motor Harness to the capacitor and ground as shown in Figure 8-15.

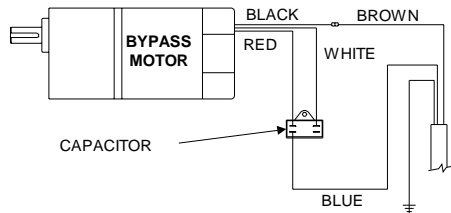


Figure 1-80 Connecting the Bypass Motor Harness

- Reinstall the Bypass Motor Cover to the Bypass Motor Mounting Bracket.
- Loosen the 4 Hex Nuts securing the Bypass Motor and install the Bypass Motor Timing Belt.

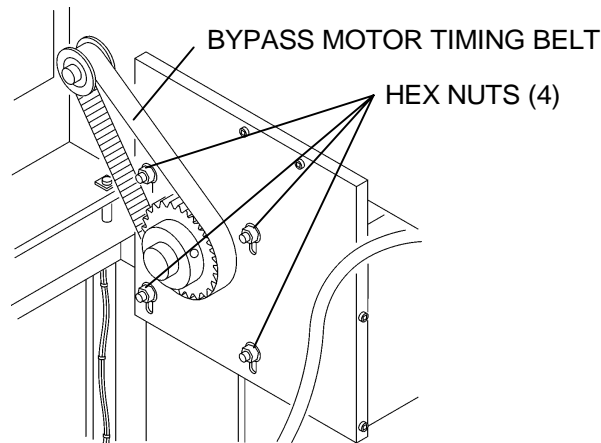


Figure 1-81 Installing and adjusting the Bypass Motor Timing Belt

- Slide the Bypass Motor up or down until the Bypass Timing Belt deflects 0.10 in. (2 - 3 mm).
- Tighten the 4 Hex Nuts.
- Mount the Top Bypass Motor Pulley Cover (4 Allen Head Cap screws and 4 Lock Washers) and Bottom Bypass Motor Pulley Cover (2 Allen Head Cap screws and 2 Lock Washers).

- Mount the Bypass Exit Sensor Bracket Assembly (2 Allen Head Cap screws and 2 Lock Washers).

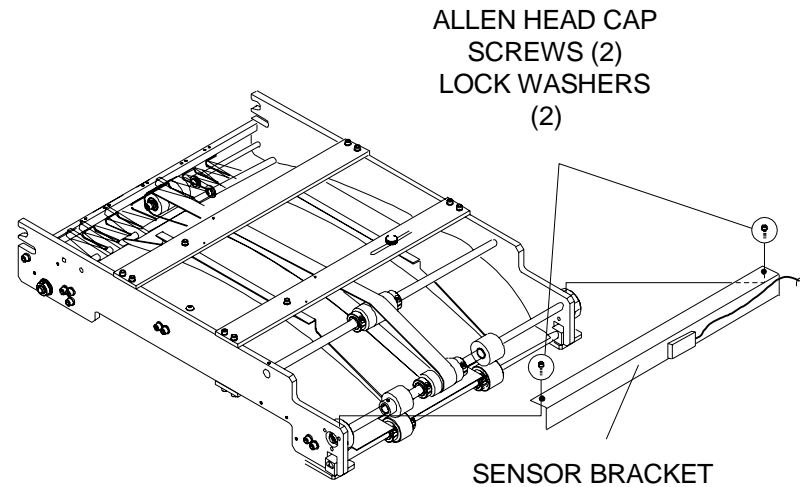


Figure 1-82 Mounting the Bypass Exit Sensor Bracket Assembly

- Route the Bypass Exit Sensor Harness together with the Stacker Interlock Harness on the frame and connect it to the Stacker I/O PWB connector J1.

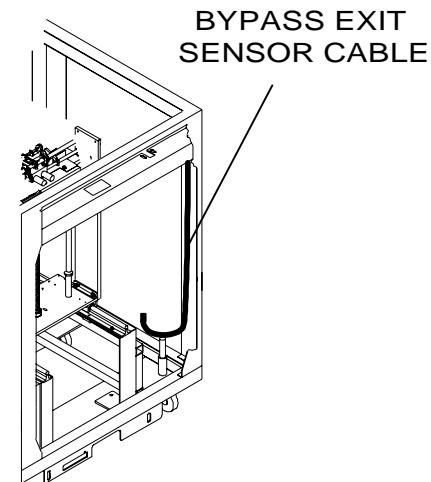


Figure 1-83 Routing the Bypass Sensor Harness

19. Install the 7 Opto Relays into Stacker 1 I/O PWB in the following locations:

- Opto4
- Opto9
- Opto10
- Opto11
- Opto14
- Opto15
- Opto16

20. Use the information below to connect the Cable Assemblies for the specific configuration you are installing:

Note: Refer to the Installation Procedure in the Service Manual for aligning and attaching the appropriate configuration that you are installing.

Single Stacker with Bypass

1. Move the Interlock connection for the Top Cover from P/J 6A to P/J 6B on the Stacker AC/DC Distribution PWB.
2. Move the Interlock connection for the Front Door from P/J 16A to P/J 16B on the Stacker AC/DC Distribution PWB.
3. Move the Stacker I/O PWB cables from P/J 23A and P/J 24A to P/J 23B and P/J 24B.

Note: You will receive an extra set of I/O cables and a DC power cable in the Bypass Kit. These cable assemblies are only used when you are connecting a second stacker in the system. Please leave the extra cable assemblies in the bottom of the Punch for future use.

Dual Stacker with Bypass in Stacker 1

1. Move the Interlock connection for the Top Cover of Stacker 1 from P/J 6A to P/J 6B on the Stacker AC/DC Distribution PWB.
2. Move the Interlock connection for the Front Door of Stacker 1 from P/J 16A to P/J 16B on the Stacker AC/DC Distribution PWB.
3. Move the Stacker I/O PWB cables of Stacker 1 from P/J 23A and P/J 24A to P/J 23B and P/J 24B.

4. Connect the I/O Cables that you received in the Bypass Kit to the Second Punch Daughter PWB at P/J 22, 23, 24, and 25.
5. Connect the other end of the I/O Cables to the Second Stacker I/O PWB at P/J 22A, 23A, 24A, and 25A.
6. Connect the DC Power Cable that you received in the Bypass Kit to P/J 13 on the Stacker 1 AC/DC Distribution PWB and to P/J 13 of Stacker 2 AC/DC Distribution PWB.

Dual Stacker with Bypass in Stacker 1 and Stacker 2

1. Move the Interlock connection for the Top Cover of Stacker 1 from P/J 6A to P/J 6B on Stacker 1 AC/DC Distribution PWB.
2. Move the Interlock connection for the Front Door of Stacker 1 from P/J 16A to P/J 16B on Stacker 1 AC/DC Distribution PWB.
3. Ensure the Interlock connection for the Top Cover of Stacker 2 is connected to P/J 6B on Stacker 2 AC/DC Distribution PWB.
4. Ensure the Interlock connection for the Front Door of Stacker 2 is connected to P/J 16B on Stacker 2 AC/DC Distribution PWB.
5. Connect the Stacker I/O PWB cables of Stacker 1 to P/J 22A, 23B, 24B, and 25A on the Stacker 1 I/O PWB. The other end of these cables should already be connected to the first Punch Daughter PWB.
6. Connect the I/O Cables that you received in the Bypass Kit to the Second Punch Daughter PWB at P/J 22, 23, 24, and 25. Connect the other end of these cables to the Second Stacker I/O PWB at P/J 22A, 23B, 24B, and 25A.
7. Connect the DC Power Cable that you received in the Bypass Kit to P/J 13 on the Stacker 1 AC/DC Distribution PWB and to P/J 13 of Stacker 2 AC/DC Distribution PWB.

Checking the Operation in Offline and Online Mode

Go to Chapter 1 of the User Guide for details on setting up and operating the FusionPunch II.

1. Start the Punch in offline mode.
2. Feed sample sheets into the machine to ensure proper operation and alignment.
3. Enable the Host Printer. Refer to Section 6 for enablement procedures.
4. Start the Punch in online mode and have the customer send a job from the Host Printer.

Preparing for installation



WARNING

Do not connect the Power Cord to the Punch and Stacker until you are instructed.



Electrostatic Discharge

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

Preparing for installation

1. Prepare for installation
 - a. Inspect all shipments for damage. If significant damage exists, contact the shipper before proceeding.
 - b. Compare the contents of the packages and the packing list.
2. Before installing the DocuColor 6060 / iGen3 Upgrade kit, ensure that Tag # P1 and S1 have been installed in the Punch and each Stacker. Refer to the Service Manual Section 6 for the Tag Matrix information.

DocuColor 6060 / iGen3 Upgrade Kit (7610528)

| Product Code | Description | Qty. |
|--------------|---|------|
| 7610508 | Eprom (Version C142 or higher) | 1 |
| 7610529 | PWB, Punch I/O | 1 |
| 7610530 | Paper Guide, Entrance, Top, 6060 / iGen3 | 1 |
| 7610531 | Paper Guide, entrance, Bottom, 6060 / iGen3 | 1 |
| 7610532 | Pulley, 48 Tooth, Document Transport Main Drive, 6060 / iGen3 | 2 |
| 7610533 | Belt, Timing, Document Transport Main Drive, 6060 / iGen3 | 1 |
| 7610534 | Pulley, 32 Tooth, Stacker Bypass Motor, 6060 / iGen3 | 1 |
| 7610535 | Pulley, 24 Tooth, Stacker Bypass Main Drive, 6060 / iGen3 | 1 |
| 7610537 | Assy., Belt Take Up, Document Transport Timing Belt, 6060 / iGen3 | 1 |
| 7610621 | Panel, Punch Entrance, 4xxx / 6060 / iGen3 | 1 |

Installation Procedure

WARNING

**Switch off the Main Power.
Disconnect the power cord.**

Note: If the FP II is already connected to a host printer, then disconnect it from the host printer and each of FP II's Stackers, prior to installing the DocuColor 6060 / iGen3 Upgrade Kit.

1. Remove the Entrance Panel and both of Rear Panels on the FP II Punch unit. (Figure 8-19)

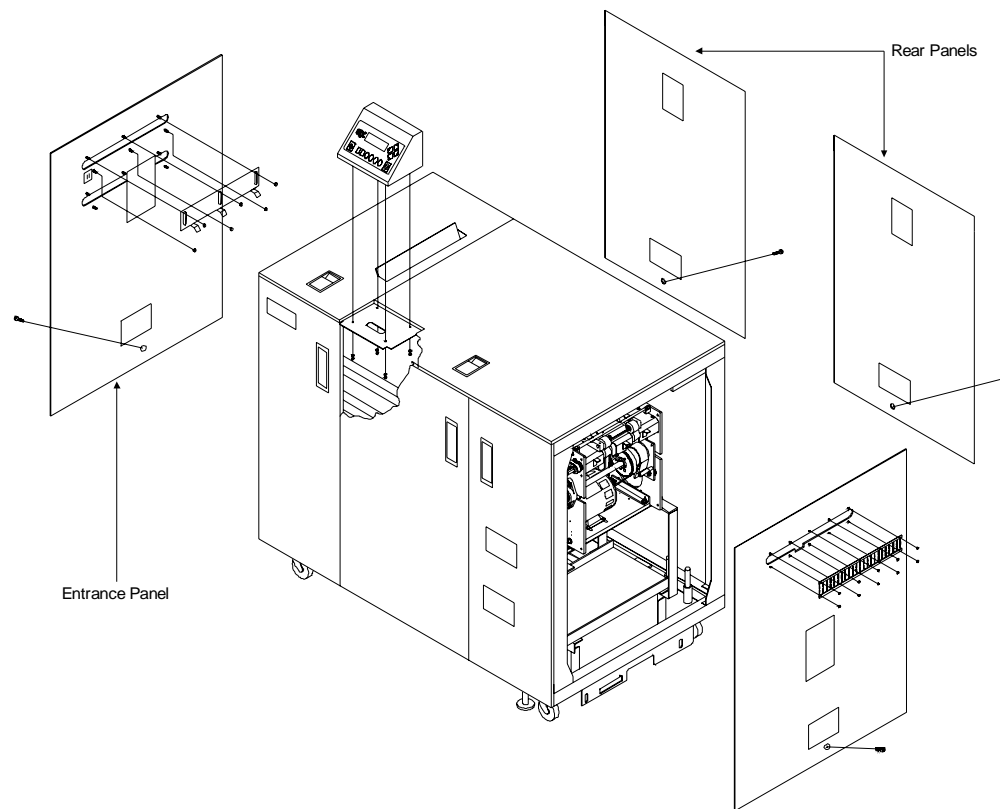


Figure 1-84 Removing the Panels

2. Setting up and the Entrance Panel. (Figure 8-20)

2.1 Remove the 6 Hex Nuts, the 2 Input Baffles, and the Top Entrance Paper Guide from the old Punch Entrance Panel.

2.2 Take the new Entrance Panel (7610621) from the kit and place the Top and Bottom Input Baffles on the mounting studs of the lower Input cutout.

2.3 Then, place the new Top (7610530) and Bottom (7610531) Entrance Paper Guides from the kit on top of the Input Baffles.

2.4 Mount the Input Baffles and the Entrance Paper Guides using the 6 Hex Nuts you removed from the Original Panel.

2.5 Store the old Entrance Top Paper Guide inside the FP II, this will ensure that the unit can be connected to Docutech in the future, if needed.

2.6 The old Entrance Panel is of no use anymore, it may be thrown out.

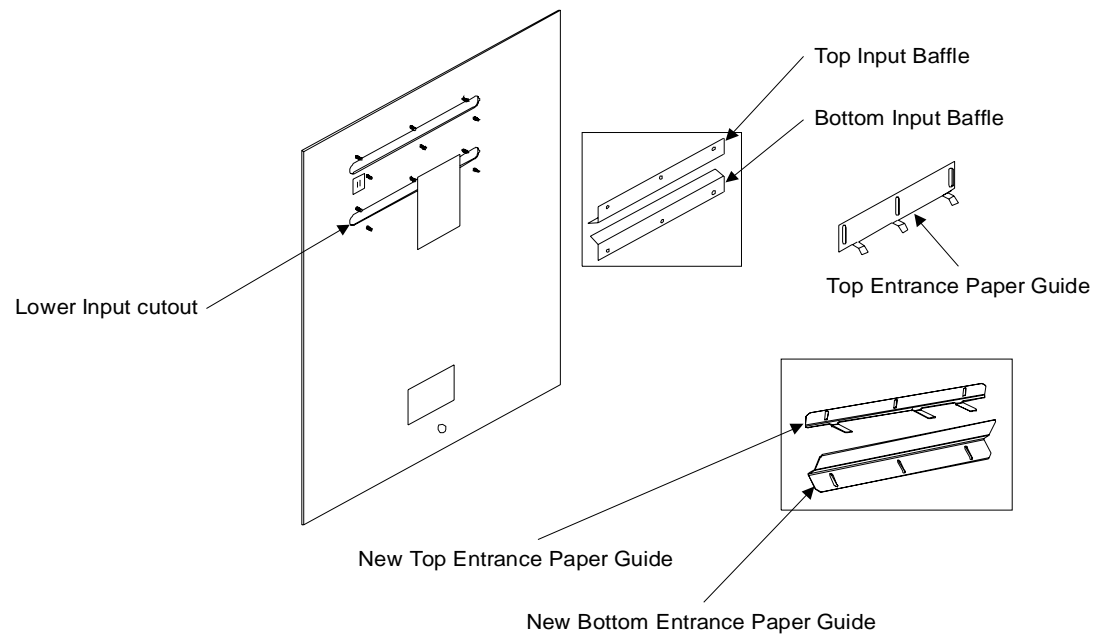


Figure 1-85 Setting up the New Entrance Panel

3. Lower the Swing Frame all the way to the bottom of its tolerance and the reinstall the New Entrance Panel.

4. Remove and replace the Document Transport Timing Belt, the Take Up Assembly, and the 2 Main Drive Pulleys. (Figure 8-21)
 - 4.1 Remove the Take Up Assy. to loosen the Document Transport Timing Belt and remove both the Belt and the Take Up Assy.
 - 4.2 Remove the 2 Main Drive Pulleys, by loosening both Set Screws on each Pulley.
 - 4.3 Install the 2 new Drive Pulleys (7610532) from the Kit.
 - 4.4 Install the new Document Transport Timing Belt (7610533) and mount the new Take Up Assy. (7610537) using the hardware from the original Take Up Assy. Refer to section 4 of the FP II Service Manual for Belt Tension adjustments, if needed.

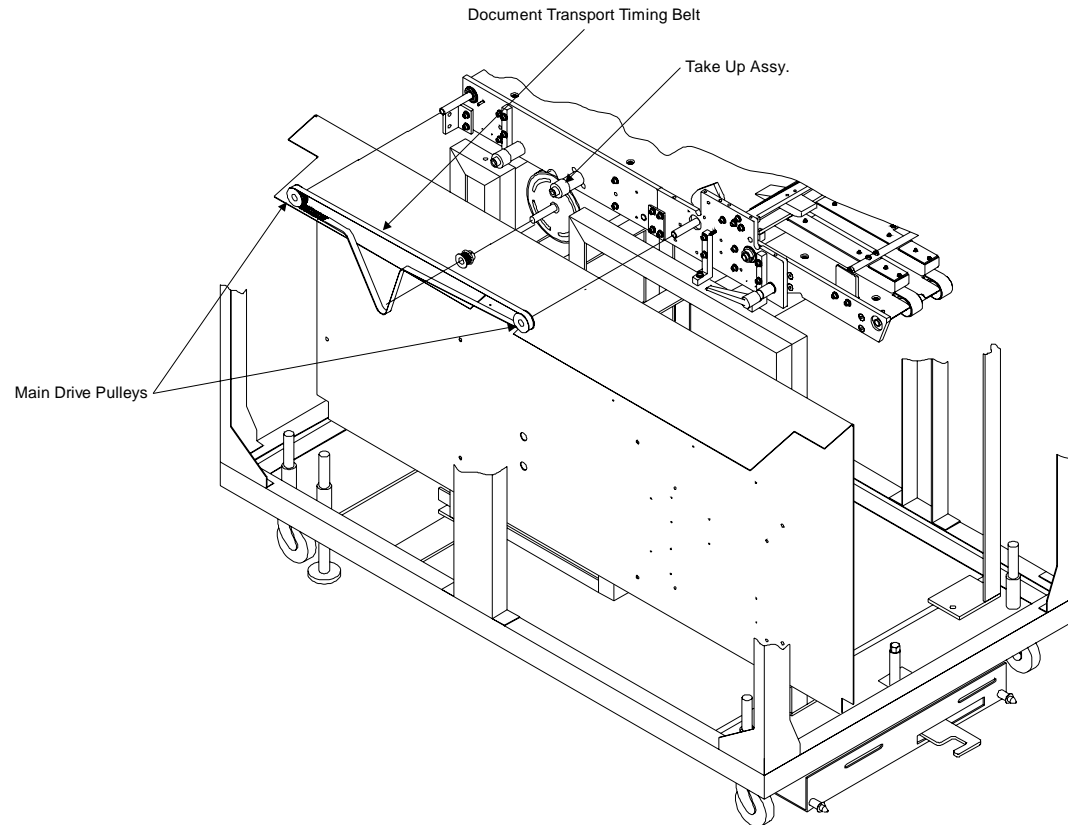


Figure 1-86 Replacing the Document Transport Main Drive Assy.

5. Replacing the Punch I/O PWB. (Figure 8-22)

5.1 Remove all of the P/J connectors and the DFA cable from the Punch I/O PWB.

5.2 Remove the 7 Allen Head Cap Screws from the Punch I/O PWB.

5.3 Install the new Punch I/O PWB (7610529) from the Kit, using the 7 Allen Head Cap Screws from the original Punch I/O PWB.

5.4 Connect the DFA cable and all of the P/J connectors in their appropriate location.

5.5 Ensure the jumpers in the top right corner of the Punch I/O PWB set across the A and B pins.

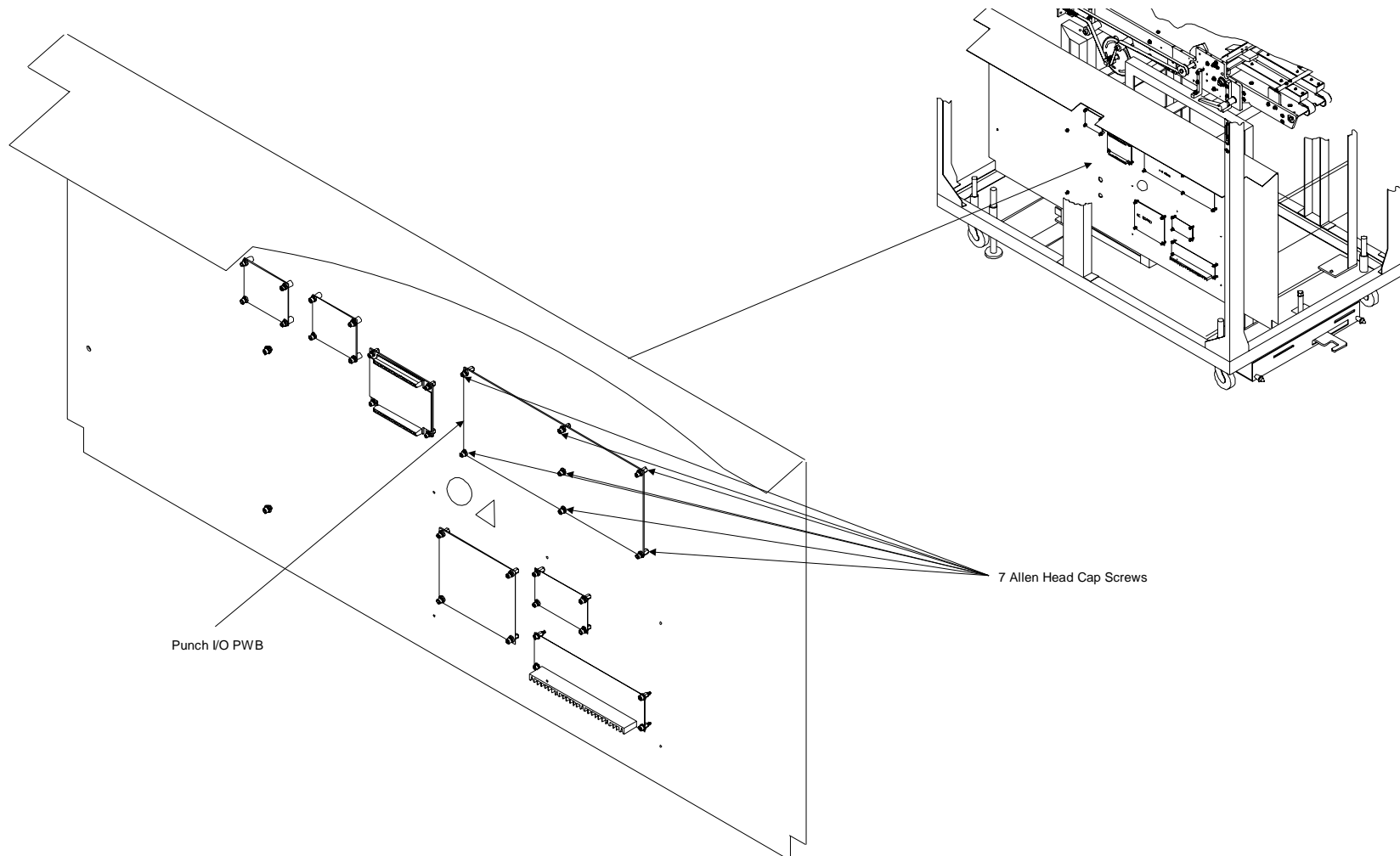


Figure 1-87 Replace the Punch I/O PWB.

6. Replacing the Eprom. (Figure 8-23)

- 6.1 Remove the existing Eprom and Install the new Eprom (7610508) from the Kit. Be sure to install it with the notch on the Eprom facing up and lined up with the notch on the socket.

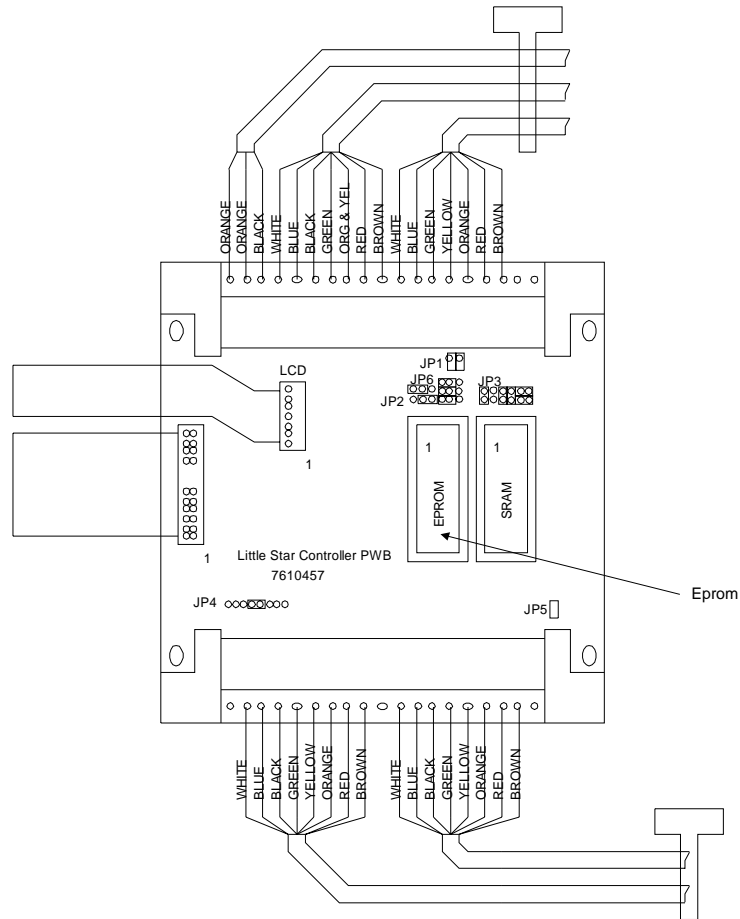


Figure 1-88 Replacing the Eprom

7. *If your system has a GBC FP II Bypass Stacker unit configured in it, then go to Step 8 of this installation procedure.
If your system only has a GBC FP II Stacker unit configured without a Bypass, then go to Step 12 of this installation procedure.*

8. Replace the Stacker Bypass Motor Pulley. (Figure 8-24)

8.1 Remove the Stacker Rear Panel.

8.2 Remove the Bypass Pulley Top Cover (4 Allen Head Cap screws and 4 Lock Washers) and the Bypass Pulley Bottom Cover (2 Allen Head Cap Screws and 2 Lock Washers) (Figure 8-24).

8.3 Loosen the 4 Hex Nuts holding the Bypass Motor (Figure 8-24).

8.4 Remove the Bypass Motor Timing Belt (Figure 8-24).

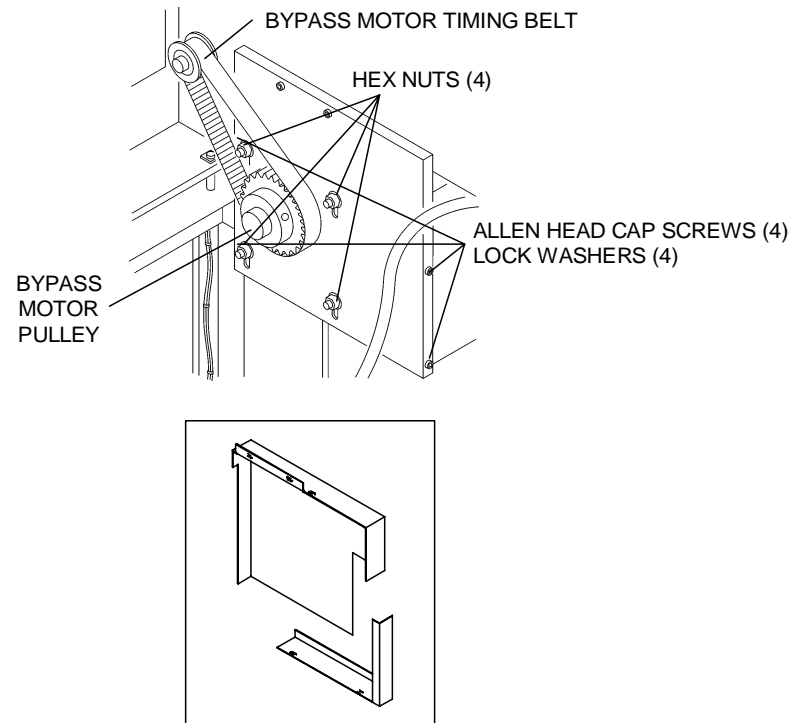


Figure 1-89 Replacing the Stacker Bypass Motor Pulley

8.5 Install the new Stacker Bypass Motor Pulley (7610534) and leave the Stacker Bypass Motor Timing Belt for now, go to Step 9.

9. Remove the Stacker Bypass Assy. perform REP 5.2 (Bypass Assy. Removal) in the GBC FP II Service Manual.
10. Remove and replace the Bypass Stacker Main Drive Pulley with the new Pulley (7610535) from the Kit.
11. Replace the Stacker Bypass Assy., the Stacker Bypass Timing Belt, tighten the Stacker Bypass Motor, and install the Stacker Bypass Pulley Covers.
12. Connect the main Power Cord to the Punch Unit and Power the Punch ON.
13. Go to the Control Panel and enter the Service Diagnostics.
14. Keep pressing the Diagnostics button until you get the Printer Select Function and the use the arrows to scroll to desired printer to be connected to.
15. Exit the Service Diagnostics.
16. Follow the normal installation procedure to complete the installation and training.

Notes
