ENTRUST

DATACARD®

Operator's Guide

Datacard Passport Issuance System

PB8500

October 2021

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Notice

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Entrust Corporation
1187 Park Place
Minneapolis, MN 55379
Phone: 952-933-1223
Fax: 952-933-7971
www.entrust.com

Revision Log

Revision	Date	Description of Changes
A	October 2021	First release of this document.

Contents

Chapter 1: Introduction

1

This chapter provides general information about the Datacard® PB8500™ Passport Issuance system.

System Overview

The PB8500 passport issuance system has a series of modules that work together to complete the personalization of elements on a passport.

Available modules are defined in the following table.

A system may contain duplicate modules or none of certain modules.

Module	Description
System Controller	The Controller contains the primary computer that controls the function of the individual modules in the system and is also the primary interface point for the operator. It includes the hardware necessary to power on and interact with the modules in the system. Each system has a dongle plugged into the Controller computer. The dongle needs to be in place for the system to work.
Passport Input	The Passport Input module—always the first module in a system—feeds booklets into the system from a stack. A system can have multiple Input modules to hold more booklets or multiple types of booklet stock.
Booklet Opening	
Page Turning	The Page Turning Module opens a booklet to a user-specified page for downstream processing by other modules. The module contains a page confirmation camera to verify that the booklet is opened to the correct page. Every system must have at least one Booklet Leafing module near the Input module. Optional Leafing modules installed throughout the system can open a booklet to other pages during processing.
Multi-Book Chip	
Laser 450G	The Laser 450G module (with a Class 1 laser) have updated electronics and cables to work with the new 50W laser interface. They engrave a plastic page in a booklet for secure, forgery-resistant personalization. The module is capable of tilt-axis engraving for an even higher level of security. Vision registration allows precise alignment between engraved elements and preprinted elements on the page. The PB8500 system can support multiple Laser module for higher throughput.
Plasma Pre-treat	Pretreatment of the booklet surface is used to increase the booklet surface energy and improve the wetting and adhesive properties of the polymer materials.

Module	Description
Single Passport Buffer	This module is used to synchronize multiple Laser Engraving modules in one system to increase throughput when using teamed (ganged) engraving. Single Passport Buffer modules must be installed in pairs except when the module is directly before a Booklet Closing module.
Drop On Demand (DoD)	The Color Inkjet Printing module uses pigment to print 1200 dpi full-color, tonal, or black and white images and text on the paper pages of a passport booklet. Vision registration allows precise alignment to preprinted elements or the edge of the page.
Secure Overlay	The Secure Overlay module applies a protective coating to the surface of the passport booklet page. The thin film overlay serves as a protective barrier for personalized data printed on the page and can have holographic or other designs for protection from tampering.
Quality Assurance	The Quality Assurance module captures digital images of the horizontal and/or vertical page of a booklet as it passes through the system. It can also verify the chip encoding in the eBook and close the booklet before transporting it to the next module.
Booklet Closing	The Booklet Closing module closes the booklet after all personalization is complete, and then passes it to the Output module. This module is not needed when the system includes the Quality Assurance module or the Contactless Chip module.
Passport Output	The Passport Output module—always the last module in the core system—stacks booklets after processing. The module contains a primary stack for completed booklets and a secondary stack for rejected booklets. The system can have multiple Output modules to hold more booklets or to group booklets in separate stacks.

Expansion Kits

The following kits are included in your shipment automatically if your configuration requires additional cooling fans or power inlets.

Additional Cooling Fans

Larger systems may require an additional cooling fan in the Output module. The cooling fan is available as an installation kit. This kit is shipped with a system or additional modules if one is required.

Auxiliary AC Power Inlet

The auxiliary AC power inlet is shipped with expansions that exceed the power limit. Refer to the kit for installation instructions.

Each power inlet and power cord requires a dedicated power drop with a 15-amp breaker (U.S.) or 16-amp breaker (non-U.S.).

Specifications and Requirements

System specifications and site requirements are as follows.

Electrical and Environmental Specifications

- Electrical, Operating, and Storage
  Refer to the PB8500 Passport Issuance System data sheet on the Datacard website (www.entrust.com).
- Power Consumption
  The power consumption of the system is the sum of the power consumption of the Controller and all of the modules in the system. To see the maximum current draw for each module, refer to the PB8500 Passport Issuance System data sheet on the Datacard website (www.entrust.com).
- Permissible Current Load
  Because the system is modular, it is possible to exceed the permissible load on the main Controller power cord. If the calculated load on the Controller power cord or an auxiliary power cord exceeds 12 amps, add more power inlets and cord(s) to the system.
- Electrostatic Discharge Susceptibility
  A system can withstand an electrostatic discharge of 15 kV, 330 pF storage, and 1.5 kW series resistance in tests simulating a human discharge to the outer surface of the machine. This does not include direct discharge on printed circuit boards.
- Audible Noise
  The audible noise level of a system is dependent on the installed modules and passport personalization data. A system with Controller, Passport Input, Leafing, Inkjet, Overlay, and Passport Output modules is measured as follows.

Front Bystander Position	65.5 dBA to 68.0 dBA
Front Operator Position	67.5 dBA to 69.5 dBA

Measurements are sound pressure measurements with a handheld sound meter at the front bystander (1.0 meter from machine, 1.5 meters high) or operator (0.25 meter from machine, 1.5 meters high) positions per ANSI S12.10-1985, Section 11. All measurements are averages over 60 seconds (60 L equiv.).

Physical Requirements

The following section contains the physical site requirements needed for a PB8500 system.

Floor Space

The floor space required to install the system is dependent on the number and type of modules included. To determine how much floor space is required, calculate the following:

1. Controller width + [*number of input and output modules* x *input/output width*] + [*number of inkjet modules* x *inkjet width*)] + (*number of standard modules* x *standard width*) = Total width of system
2. Total width x 33.8-inch (85.9-cm) depth = Floor space used by system
3. Floor space used + 36-inch (45.72-cm) clearance on all sides for service access and airflow = Total floor space

The floor must be level and flat within ± 0.1 inch per foot (1 mm per 10 cm) in any direction.

System Dimensions

The dimensions and footprint values for the overall system are the sum of those for the Controller and each module. Dimensions are as follows:

Module	**Width/Height/Depth**
Controller	24 x 37.1 x 31.7 inches (61 x 94.2 x 80.5 cm)
Standard PB8500 Module	10 x 50.3 x 26.9 inches (25.4 x 127.8 x 68.3 cm)
Input and Output Modules (The final Output module has an end panel that makes the module 11 inches wide.)	10 x 42 x 33.7 inches (25.4 x 106.7 x 85.6 cm)
Pretreat Module	10 x 50.3 x 42.8 inches (25.4 x 127.8 x 108.7 cm)
DOD Module	50 x 53.8 x 35.3 inches (127 x 136.7 x 89.7 cm)

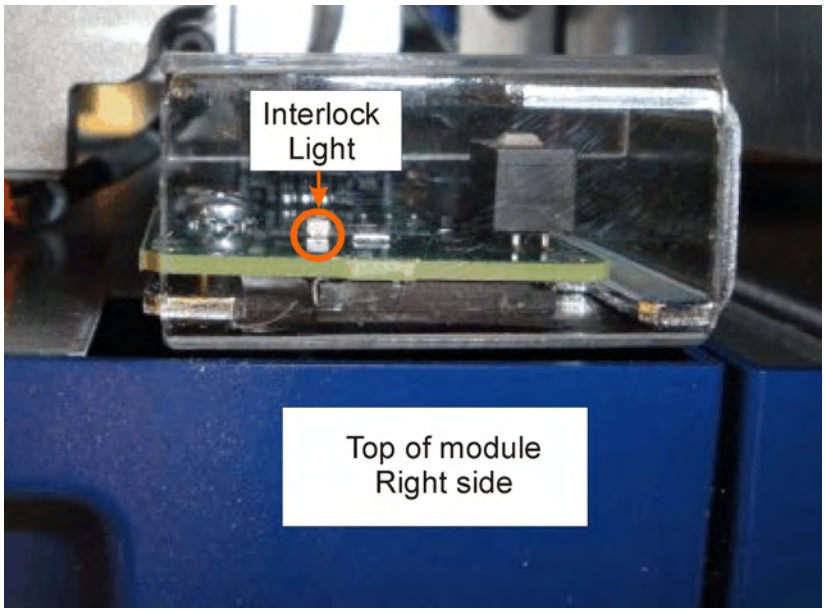
Weight

To determine the system weight, calculate the sum of the weights for each module, the Controller, and any additional casters (11 lbs/5.0 kg).

For the weight of the controller and each module, refer to the PB8500 Passport Issuance System data sheet on the Datacard website (www.entrust.com).

Module Interlocks

Module interlocks are a safety feature that prevent operator injury. Lifting a hood causes the motors to be disabled and the interlock indicator light for the module(s) to go off. Interlock lights for the adjoining modules go off, but the adjoining modules finish processing passports and then sit idle with motors enabled.



Most systems have connected hoods so that all or many modules lose power to the motors when hoods are opened. Wider modules have one interlock on the upstream side.

The Output module has its own hood and a Pause/Resume switch. When the hood is opened, motors in the upstream module are disabled. The Input module also has its own hood. When the hood is opened, it disables the motor of the module adjacent to it.

Module Status Lights

Each module (except for the Input and Output modules) has a status light located on the front panel to alert the operator when the module needs attention. When the light is either flashing or solid on, refer to the error message on the Controller screen for more information.

Flashing light—Module error or failure in normal operation; failure in module firmware.

Light on, but not flashing—Supplies are low or the module is in a paused state.

No light—Module is running normally or power is off.

When a module error occurs, the other modules process their current tasks until completed. At that point, the system enters a paused state (all module status lights are on, but not flashing).

Module Warning Labels

When working around the system, observe the following warning and caution labels affixed to various areas on the equipment.

Computer BIOS Battery

The motherboard in the Controller computer contains a battery backup for the system BIOS. If the battery is improperly connected, damage to the motherboard can result. Replace the battery with only the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Supplies

Find the current supplies information on the Entrust website (www.entrust.com):
Datacard Home > Product & Solutions > Supplies

Related Documents

The following documents provide additional information for the PB8500 system.

Description	Part No.	Available on CD
PB8500 Passport Issuance System Data Formatting Manual	539684-001	This library
PB8500 Passport Issuance System Software Administrator's Guide	527378-001	This library
Illustrated Parts Manuals for Each Module	Mulitple	This library
System Safety Rules	539614-001	This library
Preventive Maintenance Tools and Supplies List	---	This library
Datacard Certified Supplies	---	This library and TrustedCare

Chapter 2: System Power On and Power Off

2

This chapter provides procedures for starting, stopping and pausing the Datacard® PB8500™ Passport Issuance system.

Power On the System

The system has a button for starting the Controller computer and an E-Stop switch for powering on the system modules.

Perform the following procedure to start the system.

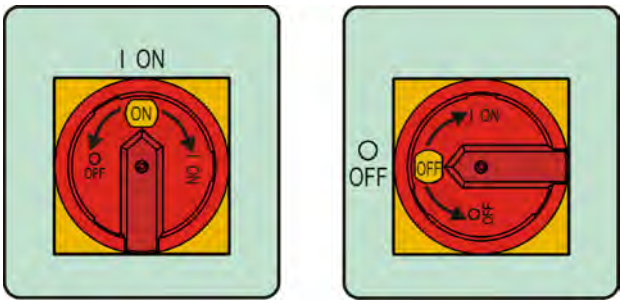
Procedure

1. Plug the system into AC power.
2. Turn on the Controller PC by pressing the power button on the front of the computer. Allow the Controller PC to boot up completely.

   Do not use the keyboard or mouse during Windows start-up.

3. Log on to Windows.
4. Start the Controller software, and go to the Production screen. It displays the progress of the system during startup and, eventually, a diagram of the system.
5. Power on the system hardware by rotating the E-stop switch on the front of the Controller module clockwise to the ON position. This switch controls all AC power to the modules, the cooling fans, and all additional power cords that are installed on the system.

   You can use the E-stop switch to stop the system in an emergency.



Power On Troubleshooting

If the system fails to start properly, use the following guidelines to isolate the most likely cause. Some of these troubleshooting scenarios may require a trained technician to isolate and correct the problem.

Controller Problems

If the Controller computer cannot be turned on:

- Verify that the main power cord is connected to the system and the facility outlet.
- Verify that the facility power is available and is of the correct voltage for the system. The system requires single-phase, grounded, 180 to 264-volt, AC power at 47 to 63HZ.
- Make sure the power cord on the back of the Controller computer is properly connected.

If the Controller computer starts, but does not properly boot up, follow the diagnostic procedures for Microsoft® Windows®.

Module Boot Problems

If none of the modules boot up:

- Verify that the red E-Stop switch on the front of the Controller is on.
- Verify that the power cable between the Controller and the first module (Input module) is connected.
- Verify that the Ethernet connection between the Controller computer and the Ethernet switch is correct. Also verify that the Ethernet switch has power.

If all modules boot up except for one, the most likely cause is a bad Ethernet connection.

If all modules downstream from a module fail to boot up, the most likely cause is a disconnected power jumper between modules, or an auxiliary power cord on that module that is not plugged in to facility power.

Power Off the System

Remove AC power from the system any time service is being performed.

1. Wait until all production tasks are complete.
2. Select the Windows Shutdown command, and wait for the Controller PC to shut down.
3. Turn the E-Stop switch counterclockwise to OFF. The word OFF is then visible in the dial cutout. This removes power from the following:
   - All modules
   - The system fans
   - Modules that are supplied by additional power cord inlets

4. If you are performing service on the PB8500 system:
   a. Unplug the power cord(s) from the AC power source.
   b. Capture the female end of the AC cord into a certified lock-out device, such as the sample shown here, and lock it with a padlock.

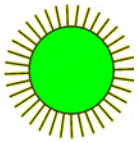
Each person servicing the system should have their own personal lock.

Caution: Never remove someone else's lock from a lockout.

Pause and Resume the System

You can pause the system with the Controller software, or by pressing the Pause/Resume button on the Output module.

The Pause/Resume button has a built-in light that shows the following system states:



Green flashing light—System is paused.

Green light on, but not flashing—System is in the normal running or idle state.

No light—System is temporarily between the pause and running state.

Chapter 3: Load Supplies

3

This chapter provides procedures for loading supplies in the Datacard® PB8500™ Passport Issuance system.

Booklets

Use the following instructions to load booklets into the Passport Input Module. If the booklets are different stock, adjust for booklet thickness as described in "Adjust for Change of Booklet Thickness" on page 18. If booklets are jammed in a module, refer to instructions on page 18.

Load Booklets

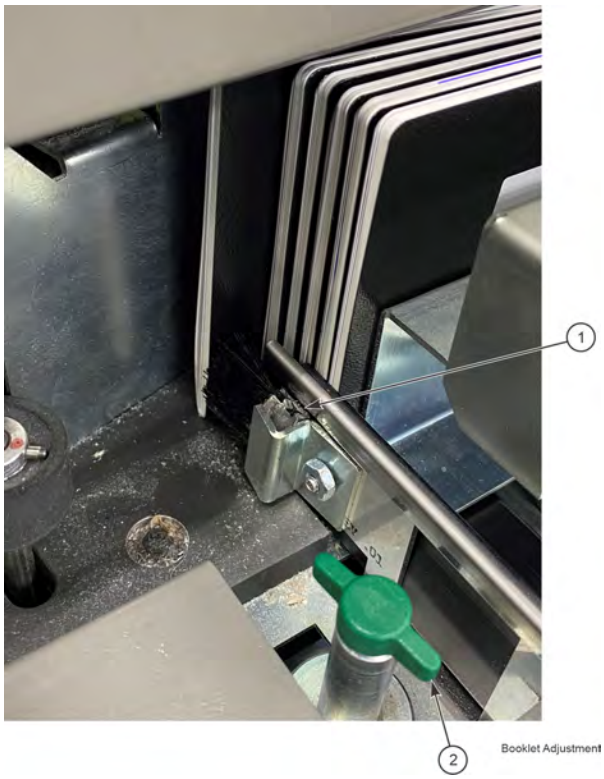
Load booklets into the Passport Input Module on their sides with the spine down and the front cover of the booklet facing the back of the module.

Adjust for Change of Booklet Thickness

When you load thicker or thinner booklet stock, you may need to adjust the Input Module so that the booklet separator picks only one booklet at a time.

Adjustment Procedure

1. Place two booklets into the stacker and move them forward until they both line up with the edge of the booklet separator.
2. Loosen the adjustment knob (2).
3. Move the booklet adjuster (1) forward or back until it is in the center of the second booklet. In this position the first booklet can pass, but the second booklet is blocked.
4. Retighten the adjustment knob (2).



Printheads for Inkjet Modules

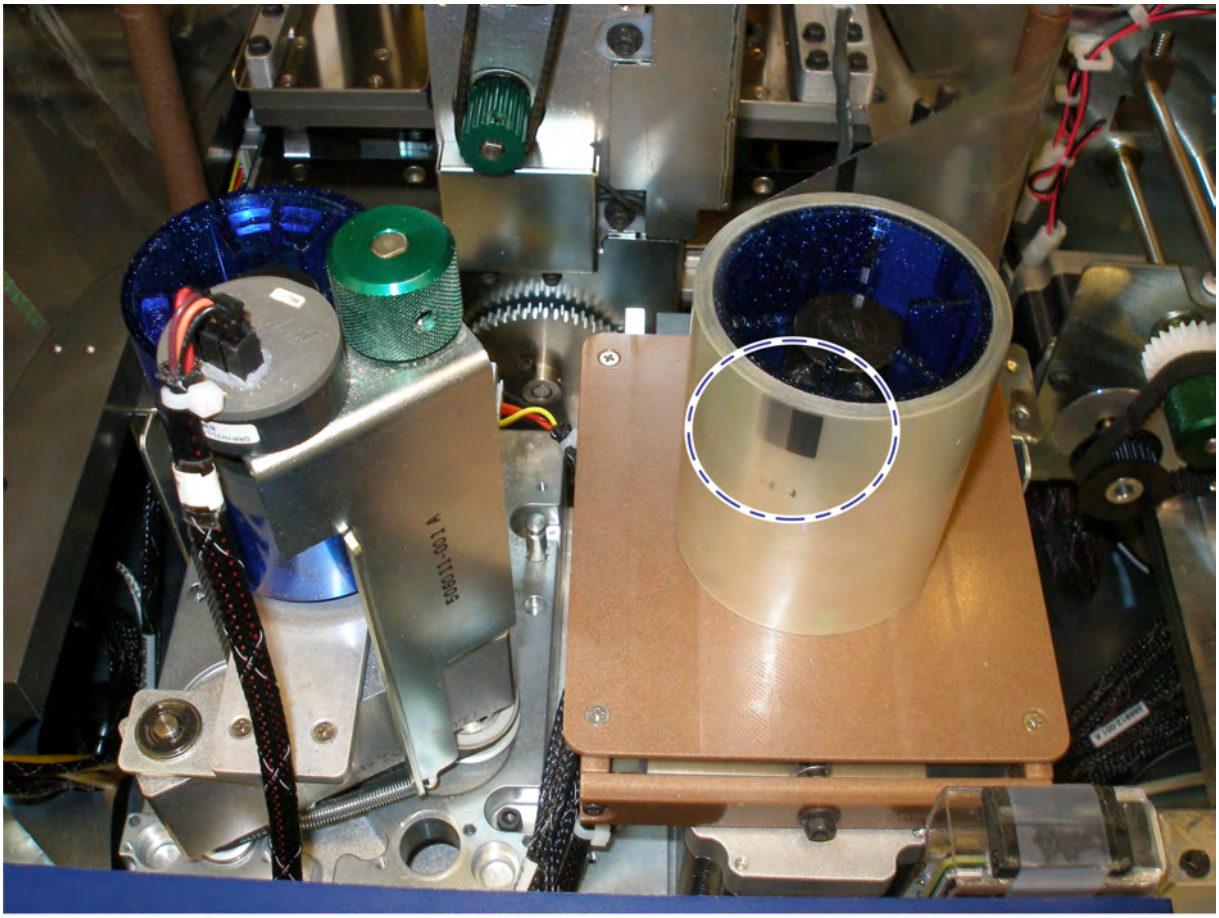
Printheads must be replaced by trained service personnel. This procedure is documented in the *Drop On Demand Module Service Manual* (Part No. 528211-001).

Overlay Material

When the supply roll is empty, replace it with a new roll, as described below.

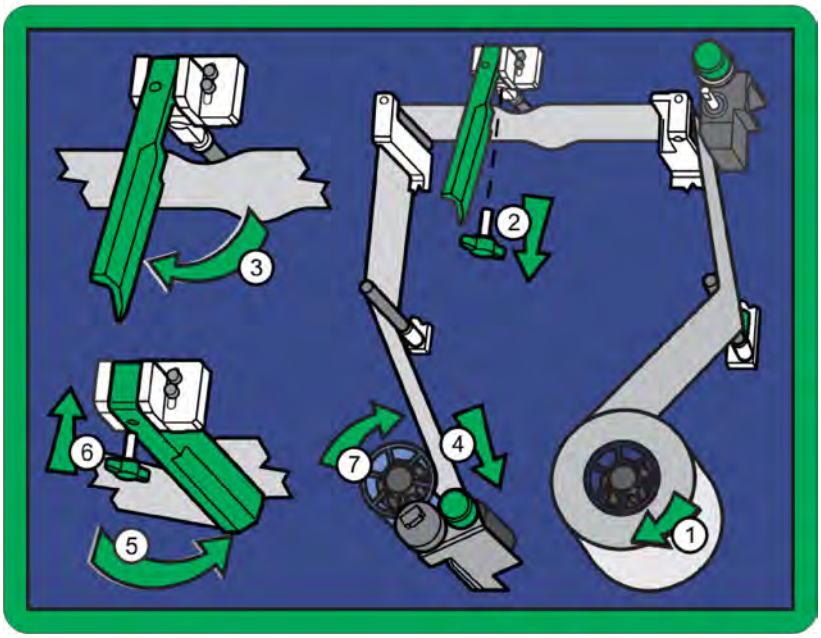
Replacement Procedure

1. Load the thin film overlay so that the registration mark is at the top of the roll.



Overlay Replacement

2. Use the following figure as a guide to thread the thin film overlay through the standard Secure Overlay Module.



Chapter 4: Production

4

This chapter informs the user how to use the Production application of the Controller software to monitor the system and process jobs.

Monitor the System

The Production application in the Controller software allows you to process and monitor jobs. You also can see the status of modules and whether supplies need to be replaced. To customize elements of the production interface, refer to "Production Preferences" on page 47.

- If security is enabled on your system, you might not have access to all of the options described in this chapter. Consult your system administrator, if needed.
- You can access the information in this chapter also in the PB8500 Controller software. Click the **Help** menu and select **Help**.
- If you upgrade your Controller software in the future, the online help will be current with the version to which you upgrade. You can download a more current version of this guide from http://www.TrustedCare.com. If you do not have access to this site, please contact your Datacard representative.

Open the Production Station

If the Production tab in the Controller software is not visible, click the **Applications** menu and select **Production**. To open the production station, click the **Production** tab. The production station provides a visual representation of the entire system.

Module Status

In the Production tab of the Production Application, each module in the system is represented in graphic form. Color coding shows the status of each module. Corresponding messages display in the lower message pane.

Your system may have different modules, but the status reporting is the same.

- Blue indicates normal operating status.
- Yellow indicates a cautionary condition (low supplies, input passport tray approaching empty, and so forth).
- Red indicates an error condition or an opened interlock. If an interlock is opened, the module, controller, and both neighboring modules on the topology turn red. When you close the interlock, the color changes to blue.
- You may right-click on a module to see a menu for resetting it.

Module Status

Supply Status

The Production screen displays the status of system supplies.

- Passport trays change color depending on their fill state (white, yellow, red). An Input tray that is running low on passports turns from white to yellow as the supply gets low, and to red when the tray is empty. Conversely, an Output tray is shown as red when full and white when empty.
- The Inkjet and Overlay modules have an icon with a gauge that displays the state of the supply quantity. When the supplies are exhausted, the icon changes and an error message displays.
- The supply type and status display when you use the mouse to roll over the supply icons. Smart supplies display correctly, but for other supplies the name is whatever name or names are associated with that RFID value or it is determined by the data given to the machine.

Job Status

You can monitor the status of individual passports within a job from the Job Details tab. The Job Details tab has information about each passport in the selected job. For more information, refer to “View Job Information” on page 29.

Other Status Reporting

Use the following for additional status information.

Status Bar

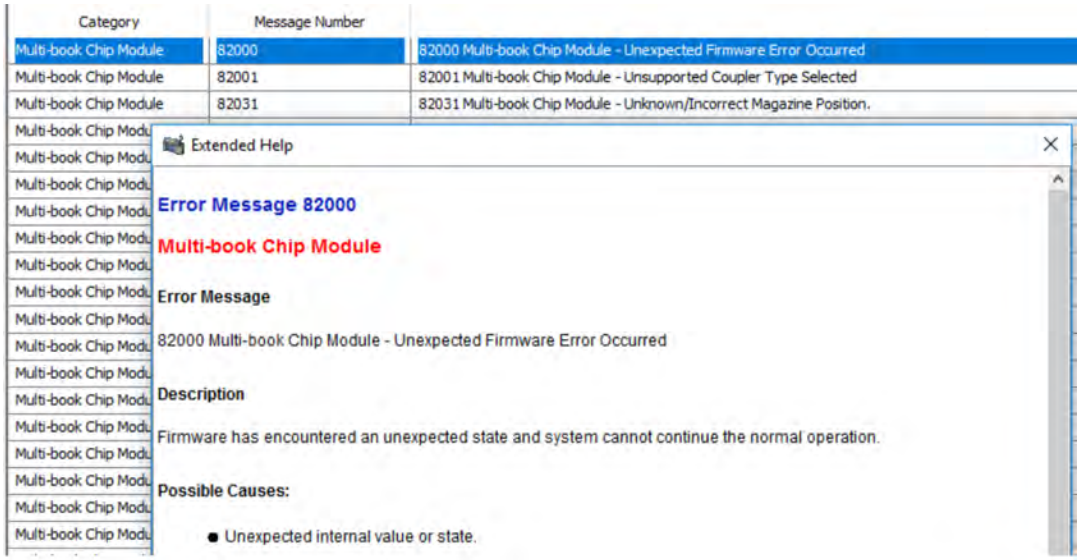
The status bar on the main interface has load status, production status, and machine monitors that give visual indicators of job and machine states. For more detailed information, refer to “Production Station Status Bar” on page 39.

Status Bar

Messages

Error, Warning, and Info messages appear at the bottom of the Production screen. Click a message to see Extended Help. An example is shown below. The filters allow you to choose the types of messages that display.

A list of all error messages is available by selecting **Help > Error Messages**. Error messages are categorized by module and have unique message numbers. The Administrator’s library includes a printable list of all error messages.



Error Message

Event Log

The system administrator can use the Event Log tools to query and view system events for administration and troubleshooting. The Event Log is described in detail in the Controller software online help and the *Administrator's Guide*.

Process Jobs

The following sections describe how to use the Production application to process passports.

Load Jobs

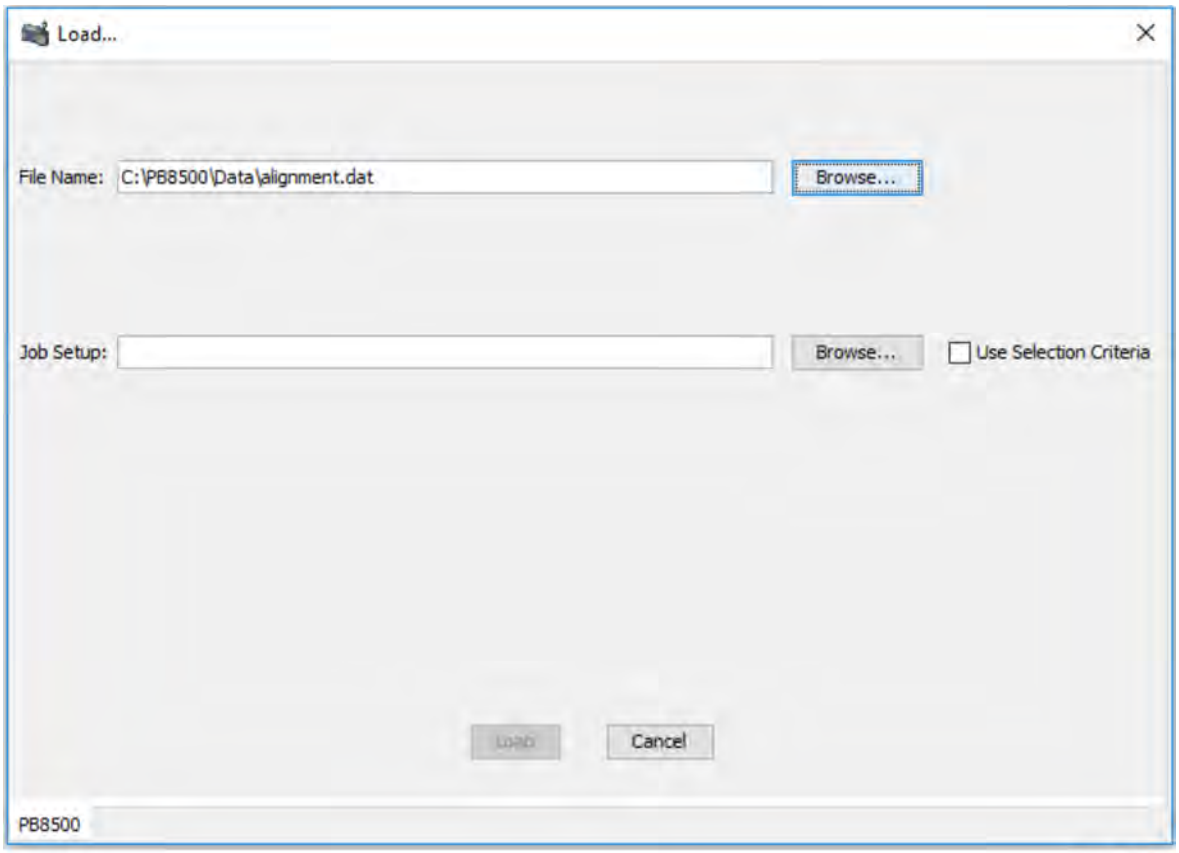
Follow the steps below to load job files into the database.

1. In the Production Station tab (**Applications > Production**), click **Load** on the status bar. The Load dialog box displays.

   You can select multiple job files to load contiguously. The load status identifies the job that is loading and its percentage complete. For example, if you load three jobs, the job load progress bar goes from 0% to 100% three times. If you want to know which job is loading, move the cursor over the progress bar to see the job name in the tool tip.

   All selected job files must be able to use the same Job Setup.



Load Jobs

2. To select the job file, click **Browse**, navigate to the file location, and click **Open**. The file path displays in the File Name text box.

3. Perform one of the following steps.

   - Select the Job Setup file (click **Browse**, navigate to the file location, and click **Open**).

     or

   - If selection criteria are set up, select the **Use Selection Criteria** check box to let the program search through existing Job Setups (which contain the selection criteria) to find a name that matches the job file.

     - Job Setups specify which Data Setups, Production Options Setups, Audit Setups, and Passport Setups the job uses.
     - Depending on your security privileges, jobs that display in the Ready Jobs and All Jobs tab have a right-click menu with options to open the setups used, view the data, and export the setups.

4. Click **Load** to load the job into the database. The job displays in the Ready Jobs and All Jobs lists. You can view the load status monitor on the status bar to see the load completion percentage.

   To run a loaded job, refer to "Run Jobs" on page 28.

Run Jobs

After loading one or more jobs, use the following procedure to run them.

1. Open the **Production** window (**Applications > Production**).
2. Click the **Ready Jobs** tab.
3. Select the job. You can select multiple files to run contiguously.
4. Click **Start**.

   - You can click and drag using your mouse and use **Alt+Click** or **Shift+Click** to select multiple jobs.
   - If a job has any rejected passports, or has passports that were previously held and are now not held, select that job and then click **Remake** to run the job again.
   - Do not attempt to remove any books until the machine is paused and a message appears notifying you that it is OK to do so.

User Input Needed Dialog

If you have the Vision Verification or Quality Assurance module, the User Input Needed dialog box displays if a quality issue is detected by one of these modules. The message prompts you to take some action to make sure that the job completes successfully. Production does not continue until you take action. You can click the **Override** check box to continue for this production run if needed.

View Job Information

When a job is running, perform the following steps to view information about that job.

1. In the **Production** Station (**Applications** > **Production**), select the **All Jobs** tab.
2. Select the running job.
3. Click the **Job Details** tab (you also can click **View Details**). The Job Details tab provides information to monitor (in real time) the status of individual passports within a job. For detailed information, refer to "Job Details Tab" on page 43.
4. To see error messages related to the job, click the **Production** tab. Messages display at the bottom of the screen. You can select the check box next to the message types (**Error, Caution, Information**) that you want to view in the message pane.
5. Double-click a status message to view details about that message.

There might be a delay between the time you select a function button and the time when the system is ready for another input.

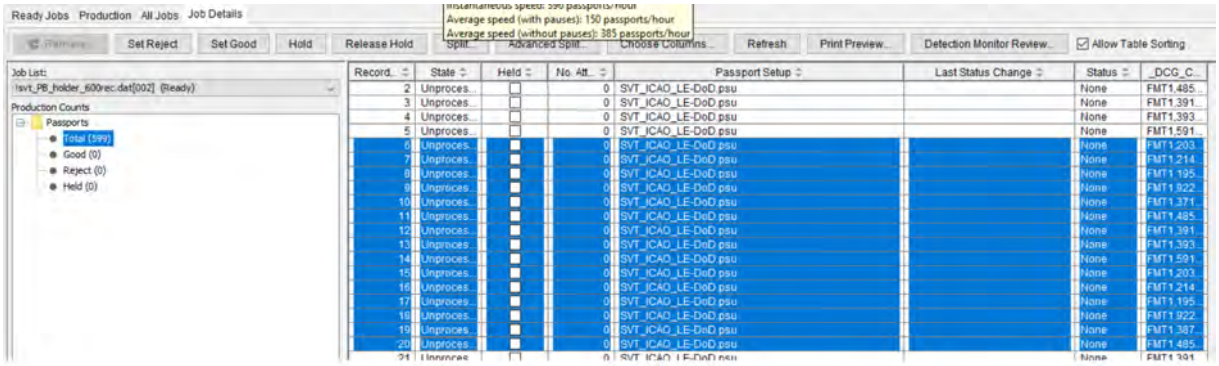
Preview Products

Print preview from the Job Details tab allows you to proof a passport before it is produced. The preview shows printable graphics information such as image, text, and bar code elements. You can view non-printable information such as chip data in the Job Details screen.

Print Preview is not available when data is encrypted.

Perform the following procedure to access Print Preview from Job Details.

1. Open the **Production** window (**Applications** > **Production**).
2. Select the job in the **All Jobs** or **Ready Jobs** tab.
3. Click the **Job Details** tab.
4. Select a single record or multiple records. If you select multiple records, the passports display in the order of their record number.

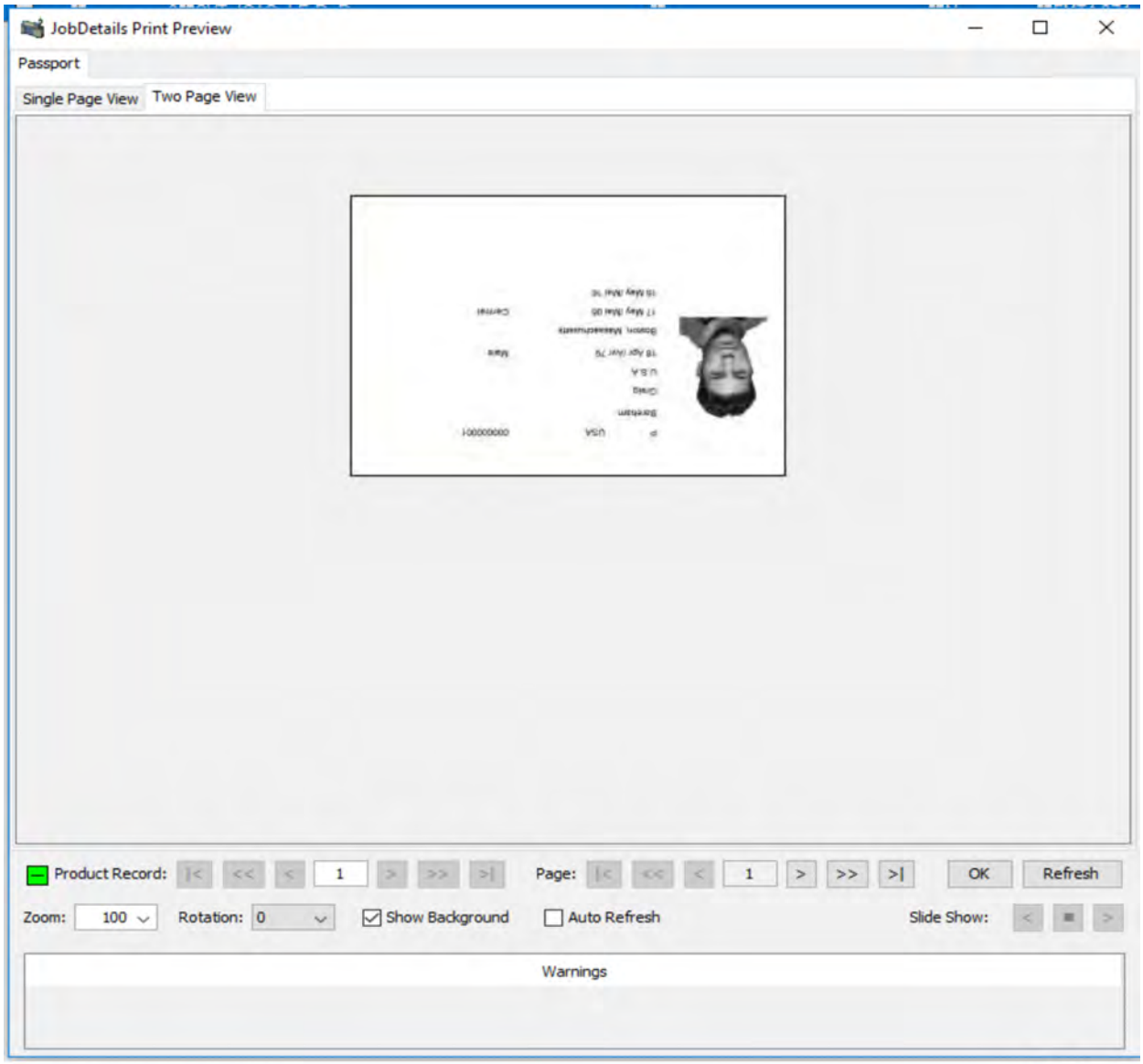


Job Details

5. Use one of the following to open the print preview window.
   - Right-click on the selected records and then select **Print Preview**.

     or

   - Click the **Print Preview** button.



Print Preview

If more than one record is selected in the table to preview, the row is highlighted in light blue to correspond with the record being previewed in the Print Preview window.

If the Passport Setup is changed after loading the job or running the job, the preview might not match the printed passport.

The following table describes the print preview properties on the Front, Back, and Both Sides tabs.

Front/Back/Both Sides Tabs Properties

The “Virtual Passport”	View the passport as designed in Passport Setup. Only image, text, and bar code elements display.
Zoom	Select the zoom level to view greater or less detail.
Rotation	Select Rotation to turn the passport clockwise in increments of 90 degrees.
Show Background	Select the check box to display the background image (if any). The background image is associated with the selected passport stock as defined in Stock Management.
Auto Refresh	Select the check box to refresh the preview image automatically when any change occurs to the image, text, or bar code elements. A decrease in performance might occur if many changes are being made.
Refresh	Click to refresh the preview image.
Page	Use the navigation buttons to scroll through pages in the book. The single arrow button (>) increments or decrements by one, the double arrow button (>>) increments or decrements by 10, and the final button (>|) jumps to the beginning or end of the record list.
Slide Show	Click the forward or reverse buttons to scroll through the product records. Click the stop button to stop the slide show.

Remake a Job

Use the following procedure to remake passports that were rejected.

1. In the **Production** window (**Applications** > **Production**) under the **All Jobs** tab, select the job from the list.
2. Select the **Job Details** tab. The Job Details screen contains a list of all passports in a selected job.
3. If any passports have been rejected, click **Remake** in the status bar to remake those passports.

   You can click and drag using your mouse and use **Alt+Click** or **Shift+Click** to select multiple passports.

4. Click **Refresh** to update the screen manually.

Pause/Stop/Abort Jobs

When a job is running, perform the following steps on the Production screen to stop, pause, or cancel the job.

1. In the **Production** window (**Applications** > **Production**), select the Production tab.
2. Select one of the following:

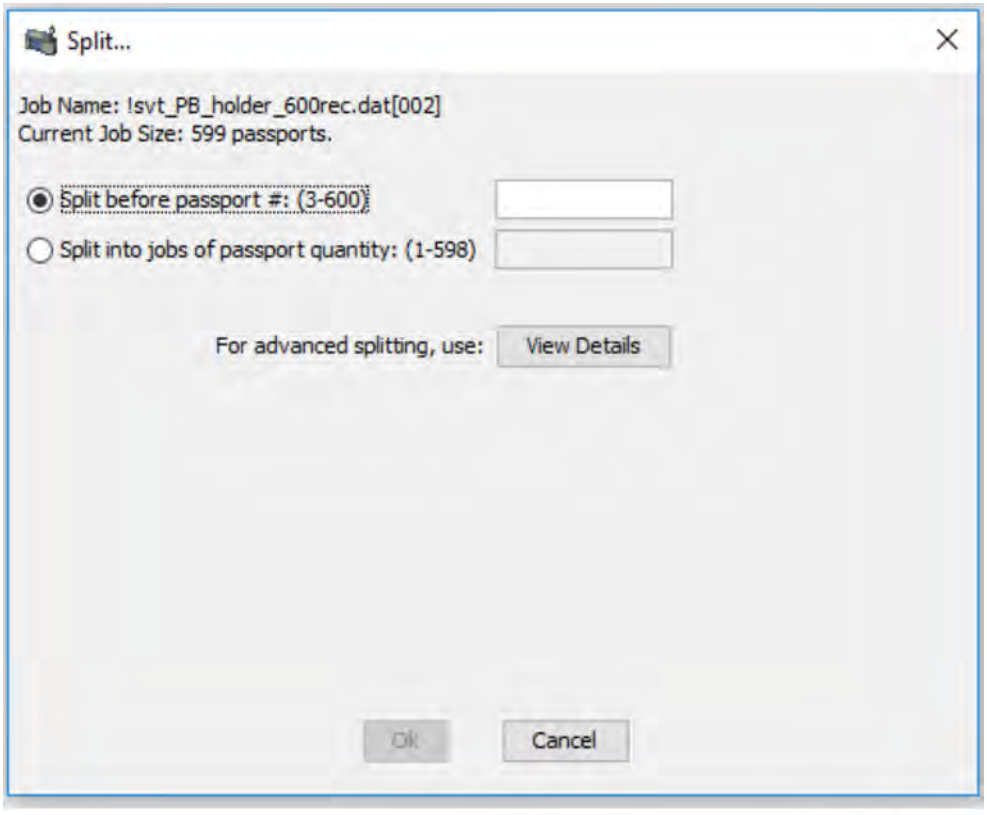
   - **Pause**
     Use Pause to stop the job temporarily. Click **Resume** to continue.
   - **Stop**
     Use Stop if you want to restart at a later date. The system finishes any passports that are already in the track. Click **Start** when you want to finish the job (make sure the correct job is selected).
     - If the auto-remake function is enabled and an error is encountered, click **Stop (No Pick)** to stop the job and prevent the system from initiating a remake on the passport that caused the error.
     - If you select **Stop (No Pick)**, you can click **Remake** in the **Job Details** tab when you are ready to remake the rejected passports from the last job.
   - **Abort**
     Use Abort to cancel the job and clear the passports out of the track. No remake or error recovery occurs.

Split Jobs

Use the following procedure to create multiple jobs from a single job. For example, if a job contains 1000 passports, you can split it into smaller jobs. You can split a job into two jobs at a specific passport or form, or you can split a job into multiple jobs of equal size.

You also can select individual passports to split into a different job. Refer to "Advanced Split" on page 35.

1. In the **Production** window (**Applications** > **Production**) under the **Ready Jobs** or **All Jobs** tab, select the job that you want to split.
2. Click **Split** on the bar above the job list. The Split dialog box displays the job name and job size.
3. To split one job into two jobs:
   a. Click **Split before passport #**.



Split Jobs

   b. Enter the passport number that you want to be the first in the new job. If the job contains 1000 passports and you enter the number 301, the job is split into two jobs—one with 300 passports and one with 700 passports.

c. Click **OK**. The new job is created and added to the job lists. The new job has the same name as the current job with "[001]" appended.

4. To split a job into multiple jobs:

   a. Click **Split into jobs of passport quantity**.

   b. Enter the number of jobs that you want. The passports are split equally between jobs.

      If the number of passports is not evenly divisible by the number of jobs, the resulting jobs contain an equal number, except for the final job, which contains the remaining passports.

   c. Click **OK**. The new jobs are created and added to the job lists. The new jobs have the same name as the current job with "[001], [002]", and so on appended.

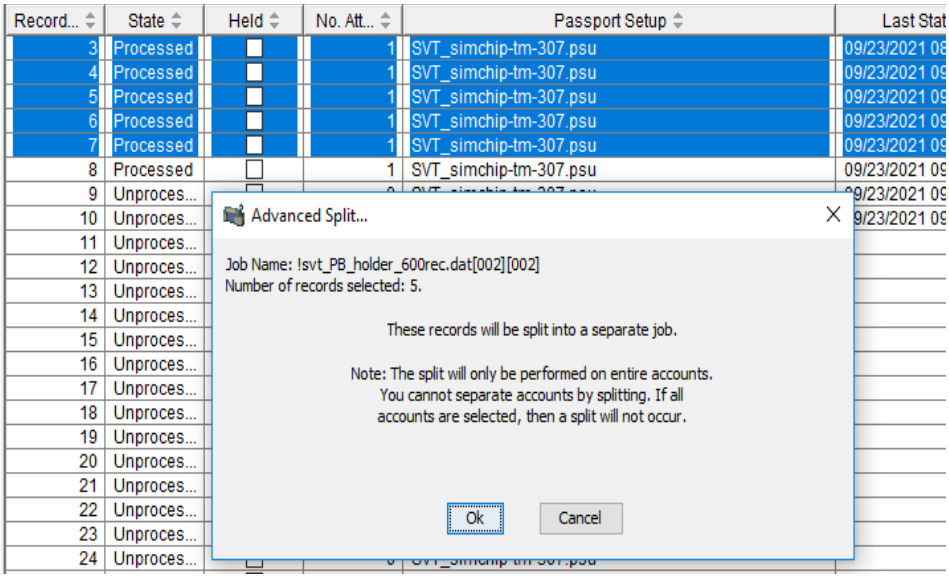
Advanced Split

An advanced split allows you to specify individual passports within a job to split into a separate job.

1. In the **Production** window (**Applications > Production**), under the **Ready Jobs** or **All Jobs** tab, select the job that you want to split.
2. Click the **View Details** button or **Job Details** tab.
3. Select the passports you want to split from the job.

   You can click and drag using your mouse or use **Alt+Click** or **Shift+Click** to select multiple passports.

4. Click **Advanced Split** on the right side of the toolbar.
5. In the confirmation dialog box, verify that you want to split the job and click **OK**. The new job is created and added to the job lists.


Record...
State
Held
No. Att...
Passport Setup
Last Stat
Processed
SVT_simchip-tm-307.psu
Unproces...
Advanced Split...
Job Name: !svt_PB_holder_600rec.dat[002][002]
Number of records selected: 5.
These records will be split into a separate job.
Note: The split will only be performed on entire accounts.
You cannot separate accounts by splitting. If all
accounts are selected, then a split will not occur.
Ok
Cancel

Search for Jobs

Perform the following steps to search for jobs within the database:

1. In the **Production** window (**Applications** > **Production**), select the **All Jobs** tab.
2. In the left pane, select the check box next to the parameters on the jobs list that you want to use in your search. The more you select, the narrower the scope of the search.
   - **Name** - Enter the name of the job in the text box.
   - **State** - Select the state from the list. The program displays only the jobs with the selected status.
   - **Total Passports** - Enter the total passports in the job. Enter a number in the text box and then select a quantitative indicator (less than, more than, equal to, and so forth) from the list. For example, to display only jobs that have 500 or more passports, enter **500** in the text box and select the greater-than-or-equal-to (>=) sign from the list.
   - **Created** - Enter a number in the text box and then select **Hours** or **Days** from the list. For example, if you enter **5** and select **Days**, only the jobs created in the past five days display.
   - **Last Worked On** - Enter a number in the text box and then select **Hours** or **Days** from the list. For example, if you enter **8** and select **Hours**, only the jobs worked on during the past eight hours display.
   - **Job Setup** - Select **Browse**, and then select a Job Setup from the dialog box. The program displays only the jobs that use the selected Job Setup.
   - **Input File** - Enter the Input File name into the text box. The program displays only the jobs that use the listed Input File.
   - **Has Rejected Products** - Select to display only the jobs that contain rejected products.
   - **Has Held Products** - Select to display only the jobs that contain held products display.
3. Click **Search** to initiate the process. The top area of the left pane changes to reflect your search.

Click **Clear** to clear all parameters and display all jobs in the list.

Hold/Reject Passports from a Job

Perform one of the following procedures to hold, reject, or remove a product from a job.

1. In the **Production** window (**Applications** > **Production**) under the **All Jobs** tab, select a job from the list.
2. Select the **Job Details** tab. The Job Details screen contains a list of all passports in the selected job.
3. To reject a passport or passports from the job:
   - Select a passport or passports from the list.
   - Click **Set Reject** on the upper bar to reject the passport manually. (The passport must first have been processed successfully in order to be rejected manually.)
4. To override the “Reject” status, select any rejected passports from the list, and then click **Set Good**.
5. To hold a passport or passports from being processed when the job runs:
   - Select a passport or passports from the list.
   - Click **Hold** on the upper bar.
   - To release the hold, select any passports with a "Hold" status from the list, and then click **Release Hold**.

Delete Jobs

Perform the following steps to delete a job permanently from the database.

1. In the Production window (**Applications** > **Production**), select the **All Jobs** tab.
2. Select a job or jobs from the list, and then click **Delete Job** on the upper bar to remove the job(s) permanently from the database.

- You cannot select non-consecutive multiple jobs.
- When a job is deleted, so is the Audit Report backup.
- Deleting a job cannot be undone.

Production Station Reference

The Production interface includes bars and tabs that display information job screens.

Production Station Status Bar

The status bar is viewable regardless of the tab displayed.

To customize elements of the Production interface, refer to “Production Preferences” on page 47. Each operator can customize fonts and font sizes for tool bars, tables, and other elements. You also can activate FIR data views and tooltips to display at the bottom of job screens.

Status Bar

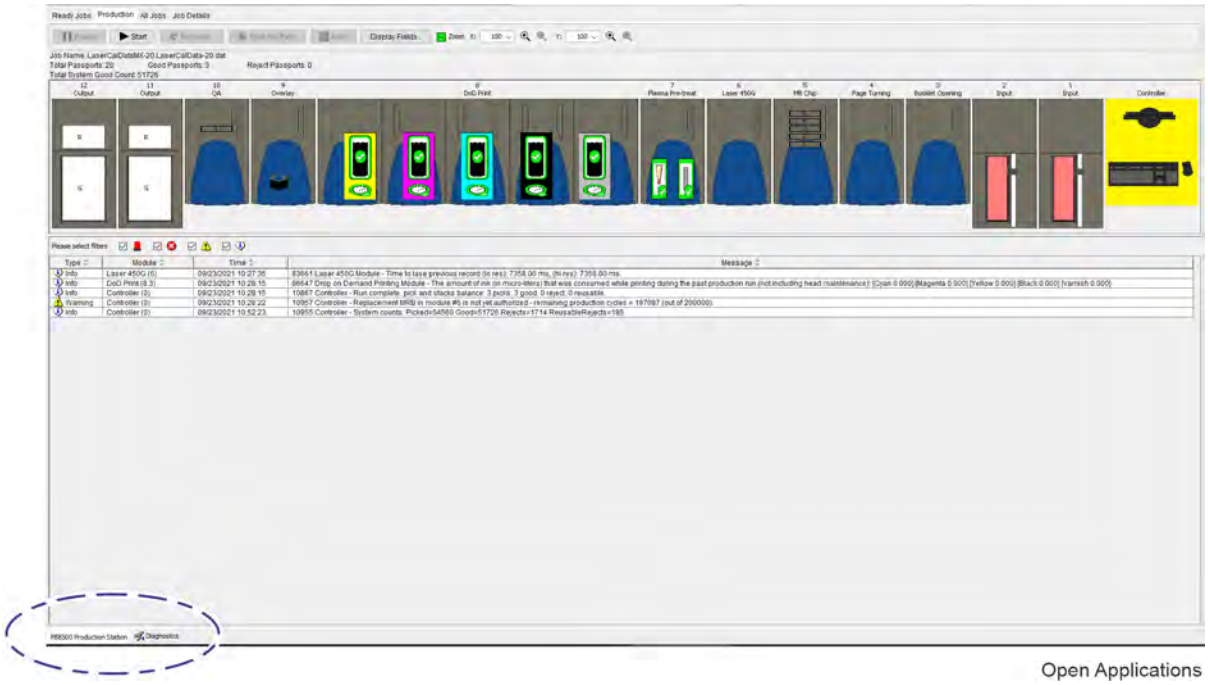
The status bar on the Production application contains the following:

Indicator	Description	
Load and Cancel Load buttons and the load status bar	The Load button loads a job into the database. One job can be loaded at a time. When a job is loading, the Load status bar gives a visual percentage of the job loaded. A Cancel Load button stops the job loading process.	
Production status bar	The Production status bar gives a visual percentage of job completion as well as the speed of the job in passports per hour.	
Machine status	The Machine status monitor provides the current state of the system. The machine states are as follows:	
	Idle	There is no activity in the system.
	Pausing	Production is in the process of pausing.
	Paused	Production has paused.
	Stopping	Production is in the process of being stopped.
	Busy	The system is in the production process.
	Offline	The system has been taken offline or production is initializing.

Indicator	Description
Hood status	The Hood status indicates whether opening the hood is allowed (OK to Open Hood or Do Not Open Hood). The hood status is red when it is NOT OK to open the hood.
Audit On or Off	Audit ON is green when audit data is being collected.

Open Applications Bar

The lower bar has program tabs on the left side that display all open applications. Click a tab to bring that application window to the top.



Open Applications

Ready Jobs Tab

The Ready Jobs tab displays a table of all loaded jobs that have not been run or that have at least one rejected passport. You can right-click a job to open a menu with options for opening the corresponding setups or the Export Setups utility, or for viewing data. For more information about displaying jobs, refer to “Group Jobs” on page 47.

The information that displays in the Ready Jobs tab depends on the fields defined in Data Setup and the columns selected. Following is an example. Refer to "Choose Columns to Be Displayed" on page 45.

Column	Description
Name	The name of the job
Split Number	The split number if the job has been split (the resulting jobs are numbered sequentially)
Total Passports	The total number of passports in the job
Good Passports	The number of good passports in the job (supplied only if the job has rejects)
Reject Passports	The number of rejected passports (supplied only if the job has been run)
Held Passports	The number of held passports (not processed)
Status	The status of the item: None, Good, or Rejected
Input FIle	The Input file used for this job

All Jobs Tab

The All Jobs tab displays a list of all loaded jobs of any status. The information that displays depends on the fields defined in Data Setup and the columns selected. Following is an example. Refer to "Choose Columns to Be Displayed" on page 45. To use the Job Grouping feature, refer to "Group Jobs" on page 47.

Column	Description
Name	The name of the job
Split Number	The split number if the job has been split (the resulting jobs are numbered sequentially)
Total Passports	The total number of passports in the job
Good Passports	The number of good passports in the job (supplied only if the job has been run and contained rejects)
Reject Passports	The number of rejected passports (supplied only if the job has been run)
Held Passports	The number of held passports (not processed)

Column	Description
Status	The job status
Input File	The Input file used for this job

Filtering Tool

The All Jobs tab includes a filtering tool for quickly locating jobs based on their parameters. Use the filtering tool to define specific criteria to speed up the search.

Follow these steps to search for jobs:

1. In the left pane, select the check box next to the parameters to use in the search. The search filter parameters are listed in the following table. The more parameters you select, the narrower the scope of the search. Enter the required information for each parameter selected.
2. Click **Search**. The top area of the left pane changes to reflect search parameters.

Click **Clear** to clear all parameters and display all jobs in the system.

Search Filter Parameter	Description
Name	Enter the name of the job in the text box.
Status	Select the status from the list. The program displays only those jobs with the selected status.
Total Passports	Enter the total number of passports in the job. Enter a number in the text box and select a quantitative indicator (less than, more than, equal to, and so forth) from the list. Example: If you enter **500** and select >= from the list, the program displays only jobs that have 500 or more passports.
Created	Enter a number in the text box and then select **Hours** or **Days** from the list. For example, if you enter **5** in the text box and select **Days** from the list, the program displays only jobs created in the past five days.

Search Filter Parameter	Description
Last Worked On	Enter a number in the text box and select **Hours** or **Days** from the list. Example: If you enter **8** in the text box and select **Hours** from the list, the program displays only jobs worked on during the past eight hours.
Job Setup	Select **Browse**, and then select a Job Setup from the dialog box. The program displays only jobs that use the selected Job Setup.
Input File	Enter the Input File name into the text box. The program displays only jobs that use the listed Input File.
Has Rejected Products	If selected, the program displays only jobs that contain rejected products.
Has Held Products	If selected, the program displays only jobs that contain held products.

Job Details Tab

The Job Details tab in the Production area provides information to monitor (in real time) the status of individual passports within a job.

The information that displays depends on the fields defined in Data Setup and the columns selected. The following is an example. To change the columns that display, refer to "Choose Columns to Be Displayed" on page 45.

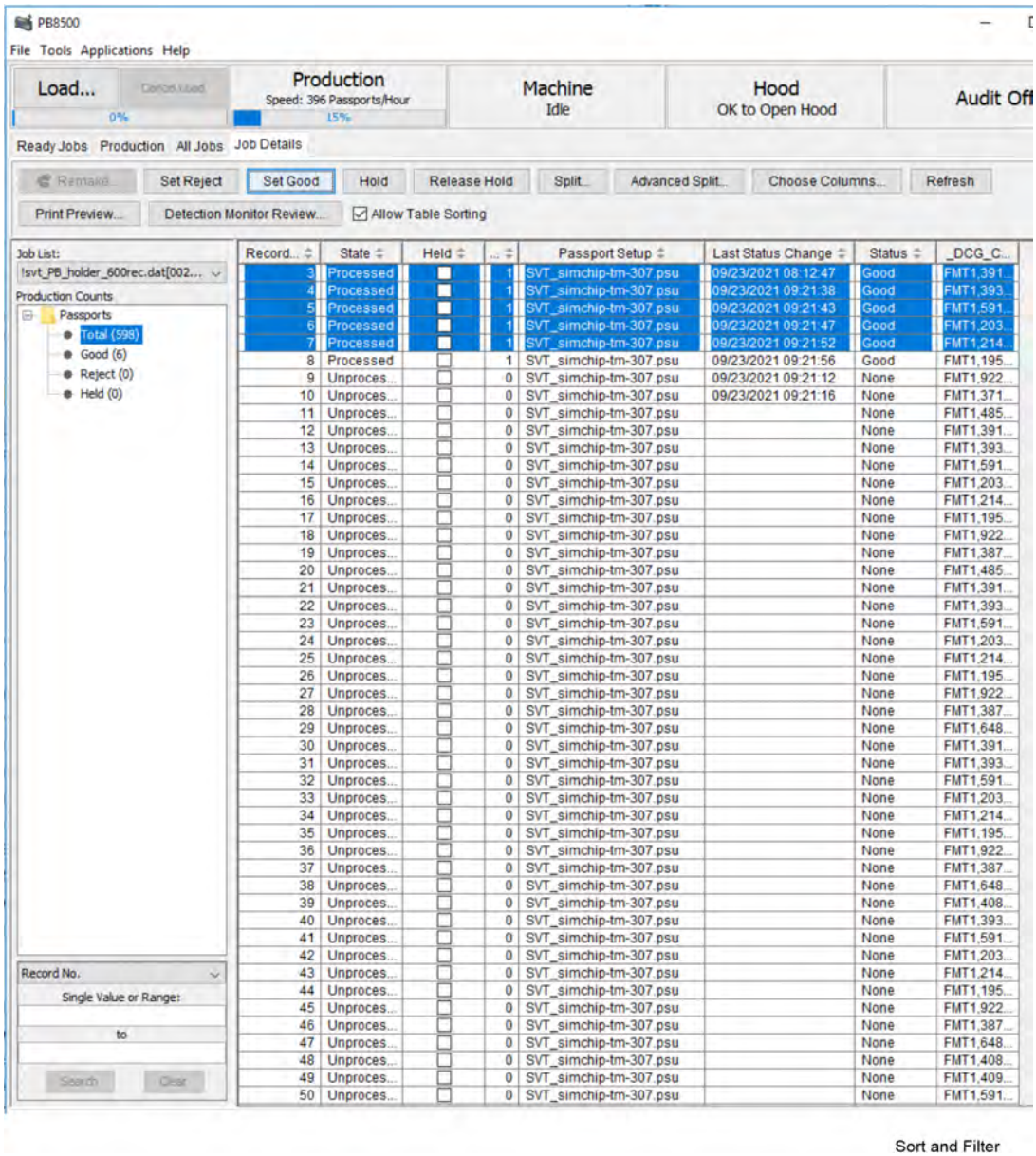
Column	Description
Record Number	The number of the record within the job
State	The current state (Unprocessed, and so forth)
Status	The job status (Ready, Completed, and so forth)
Held	The number of held passports (not processed)
Number of Attempts	The number of attempts to process the job
Passport Setup	The Passport Setup file used for this job

Print Preview

Select one or more records in the **Job Details** tab and select the **Print Preview** option to preview the selected records (print preview is also available from the right-click menu). Refer to "Preview Products" on page 30 for more information.

Sort and Filter Records in the Job Details Tab

In the Job Details tab, you can sort the records by column heading and filter the records shown in the list.



Sort and Filter

Filtering categories (record number, state, status, etc.) are defined in the Data Setup.

Sort by Table Heading

To enable records to be sorted by column head, click **Allow Table Sorting** in the Job Details tab. This setting is saved in the user preference file.

Do not sort tables during a production run with a large number of passports, as this causes delays in production times.

Filter by Production Counts

Click a Production Count folder to view only the passports in that folder. For example, to view only the rejected passports from a specific job, click the **Reject** folder. (The number in parentheses to the right of the folders is the number of passports contained in that folder.)

Filter by Record Number

If the selected job contains a large number of passports, use the filter tool to limit the number of passports displayed. The tool consists of a list of record numbers that you can filter with the range parameters at the bottom of the Job List pane.

For example, to view records 2700 to 2800 of a job that contains 10,000 passports, select **Record No**. from the list, enter the range *(***2700, 2800***)* in the **Range** box, and then click **Search**. Click **Clear** to clear the search results and display the full job details.

To search for a single record, select **Record No**. from the list and then enter the record number in the first of the two range fields and click **Search**. Click **Clear** to clear the search results and display the full job details.

Choose Columns to Be Displayed

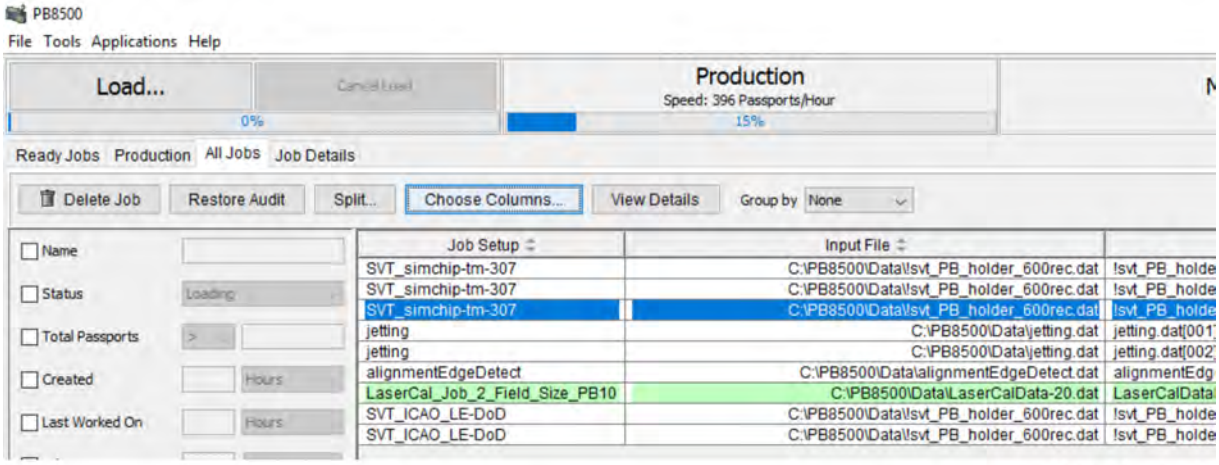
Use Choose Columns to select the columns to be displayed on the Ready Jobs, All Jobs, or Job Details tabs of the Production station.

Your system administrator sets privileges for this option.

Follow the steps below to view or hide columns:

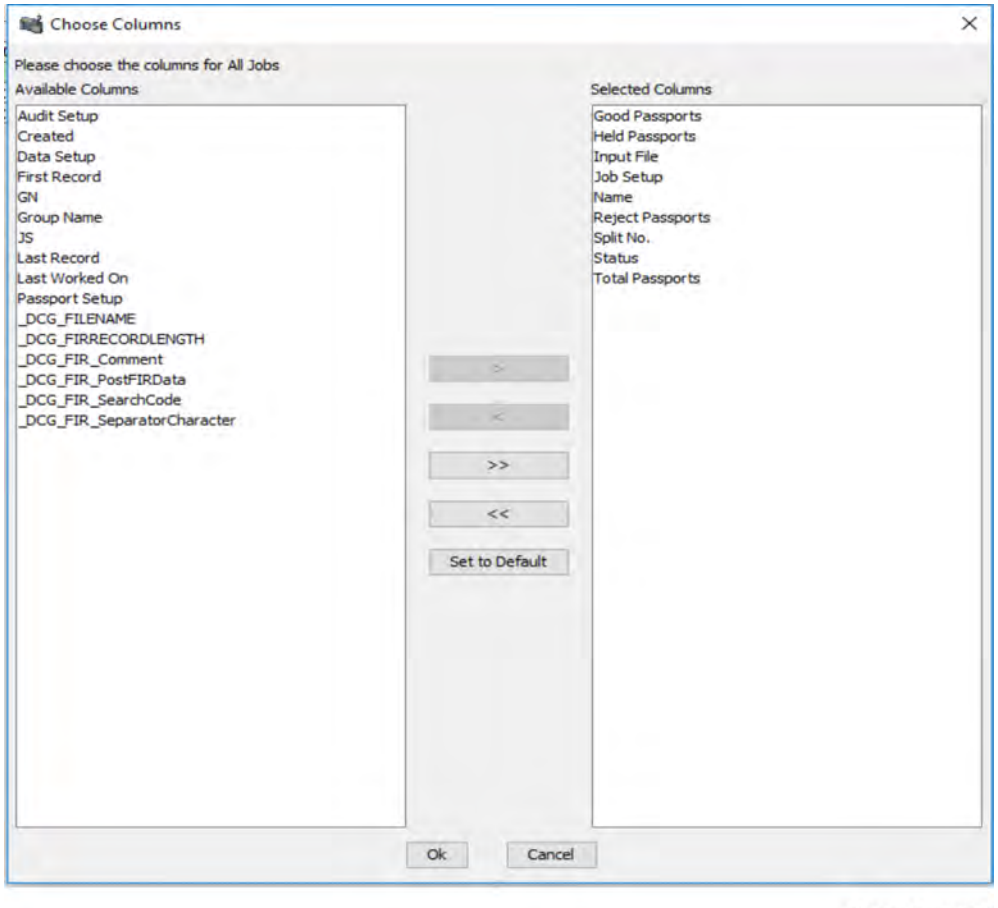
1. Select the **Ready Jobs**, **All Jobs**, or **Job Details** tab.

2. Click **Choose Columns**.



Choose Columns 1

3. Add or remove column types from the Selected Columns box by using the arrow buttons.



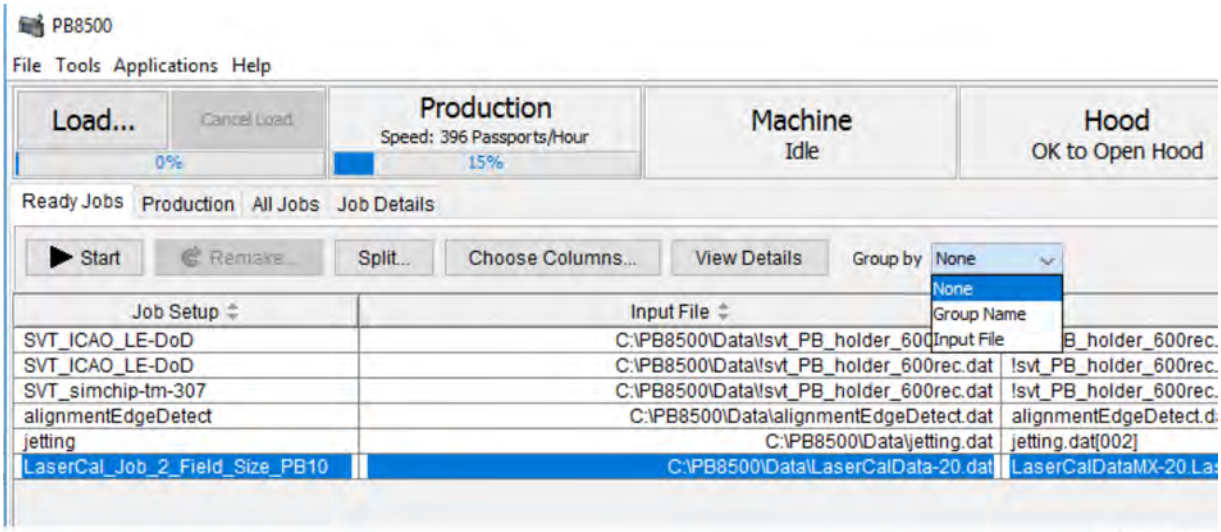
Choose Columns 2

To select multiple column types, use **Shift+Click** or **Alt+Click**.

4. Click **Set to Default** to return to the default setting.
5. Click **OK** when finished, or **Cancel** to exit without making changes.

Group Jobs

The Ready Jobs and All Jobs tabs can group jobs by group name or input file (jobs that have been loaded from the same input file) into a single display item. Select an option from the **Group by** list. The job group becomes a separate row in the table. You can expand and collapse the job group to show or hide the jobs contained in the group.



Group Jobs

If an input file is loaded multiple times, all jobs that use this file are grouped together, whether they are related or not.

Job groups display in sorted order (alphabetical by input file name). You can use the sort indicator control in the Input File column to reverse the order of the groups. Within each job group, the jobs are initially sorted by create time, but can also be sorted by other fields.

Production Preferences

Production preferences are set and stored for each operator. To use the Production Preferences Tool, select **Tools** > **Preferences** from the menu bar.

Customization can include the text in tables, tabs, buttons, tool bars, and extended help. There is also a tool tip option and a setting for viewing FIR record data in the interface.

Each tab in the tool has options for customizing Production interface elements (font, font size, FIR data, and tool tip views). Each tab has the following buttons:

OK - Applies changes, Saves, and closes the dialog.

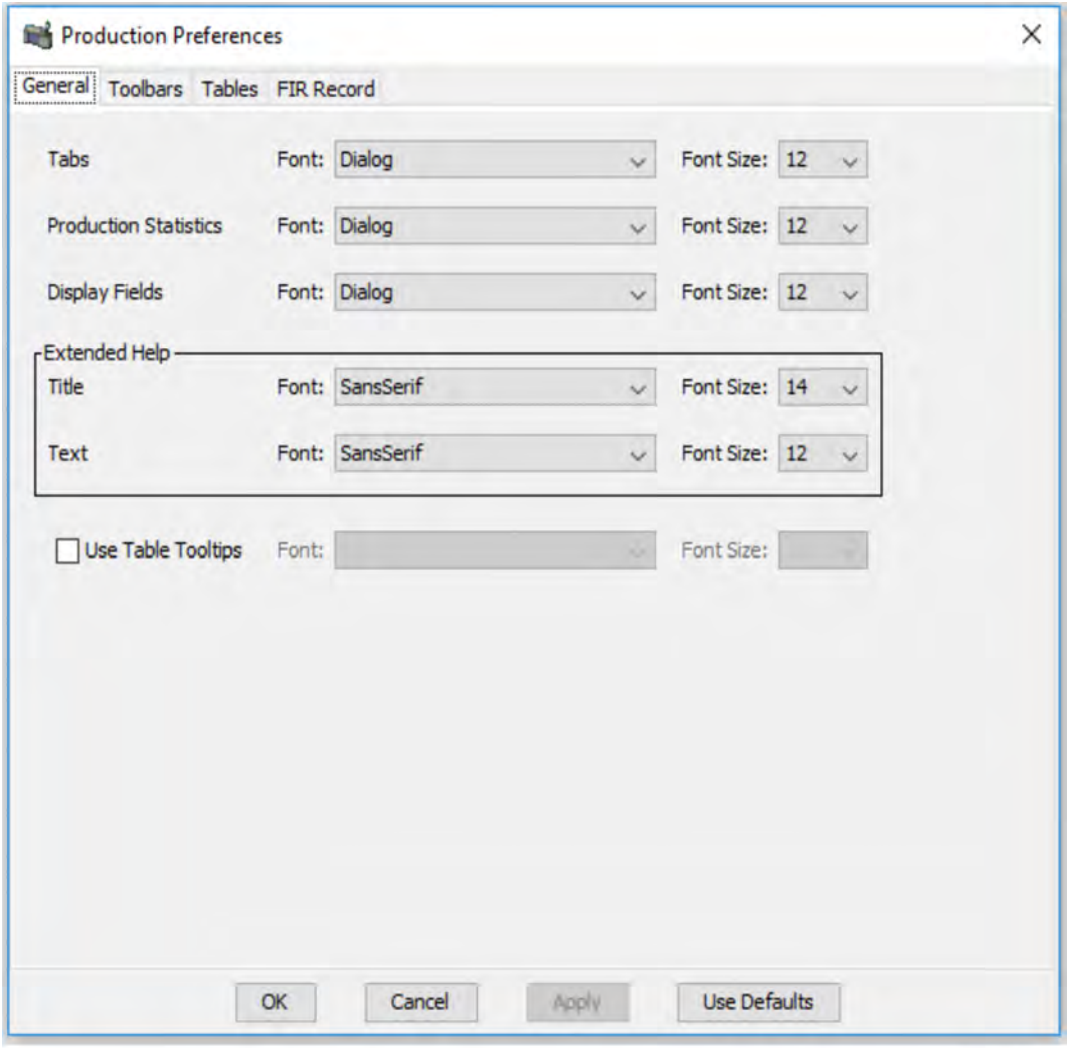
Cancel - Closes the dialog, no changes are applied.

Apply - Applies changes, Saves, and the dialog box continues to display.

Use Defaults - Resets all settings to the default.

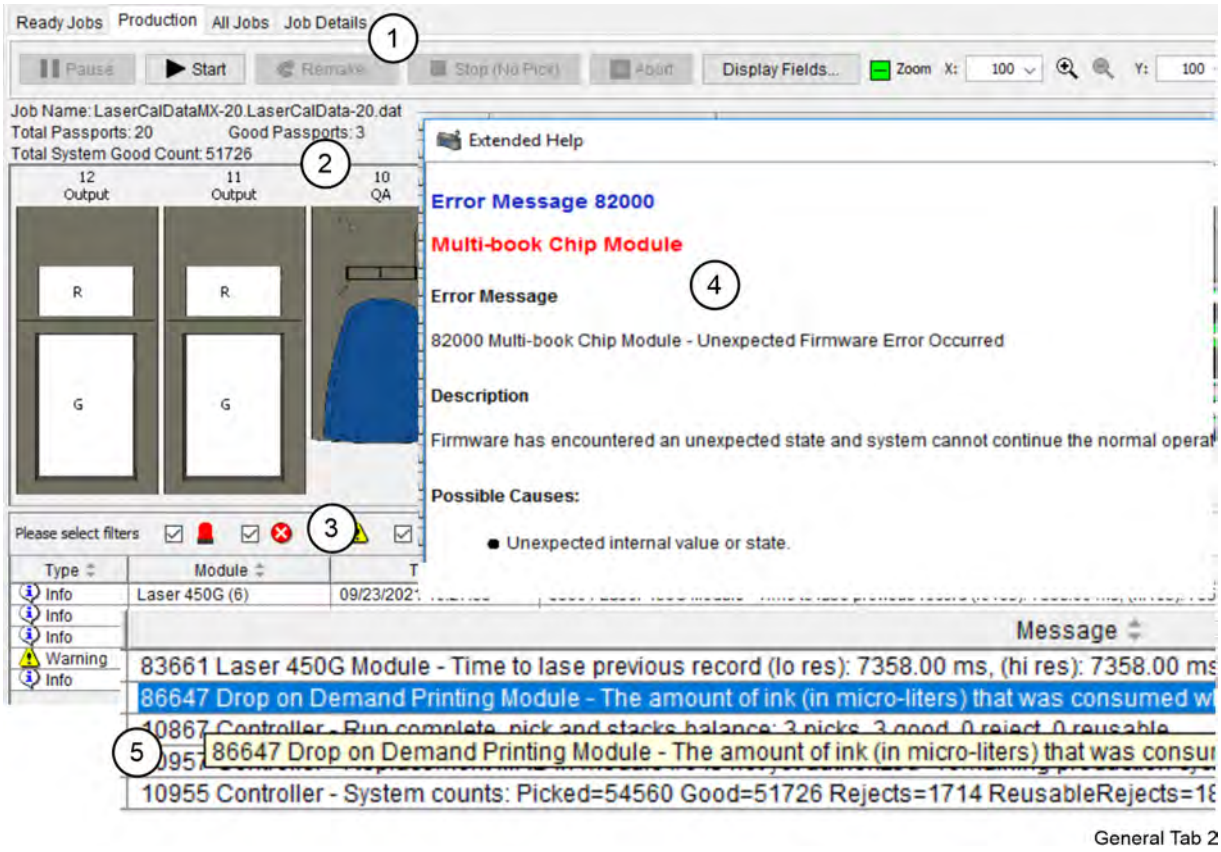
General Tab

Use the General tab to select the appearance of the elements in the Production tab of the Production Station interface.



General Tab

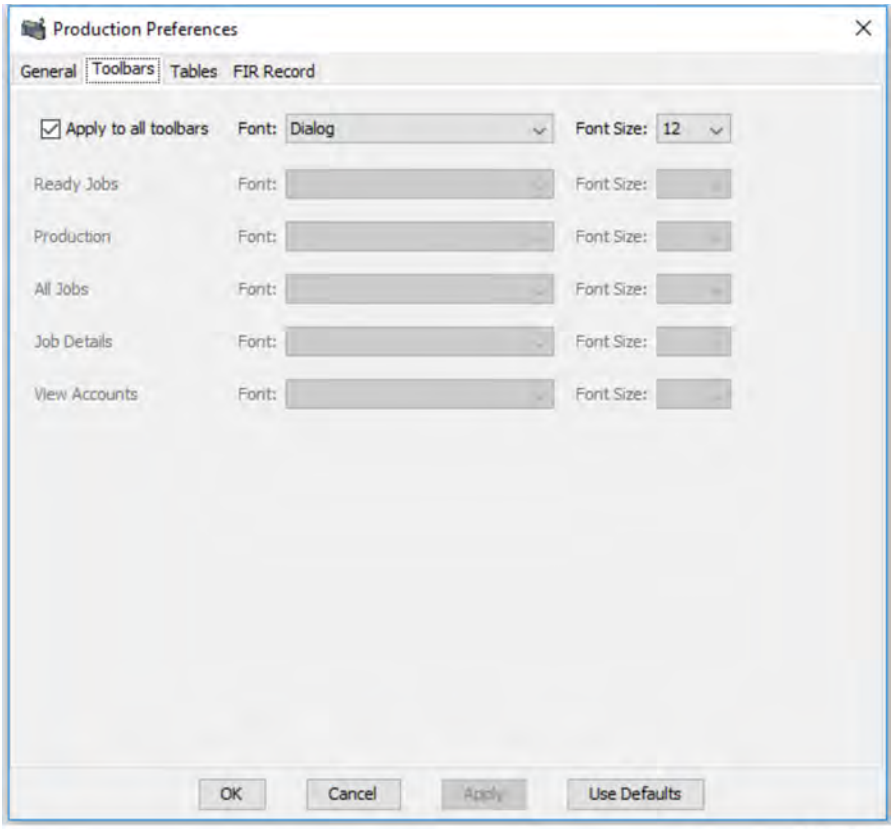
Use the General tab to set the font and font size for interface elements including: the text of the Production tabs (1 in the following figure), Production Statistics (2), Display Fields (3), and Extended help titles and text (4). You also can enable and customize Table Tool Tips (5) that display when the pointer hovers over a cell in a table.



General Tab 2

Toolbars Tab

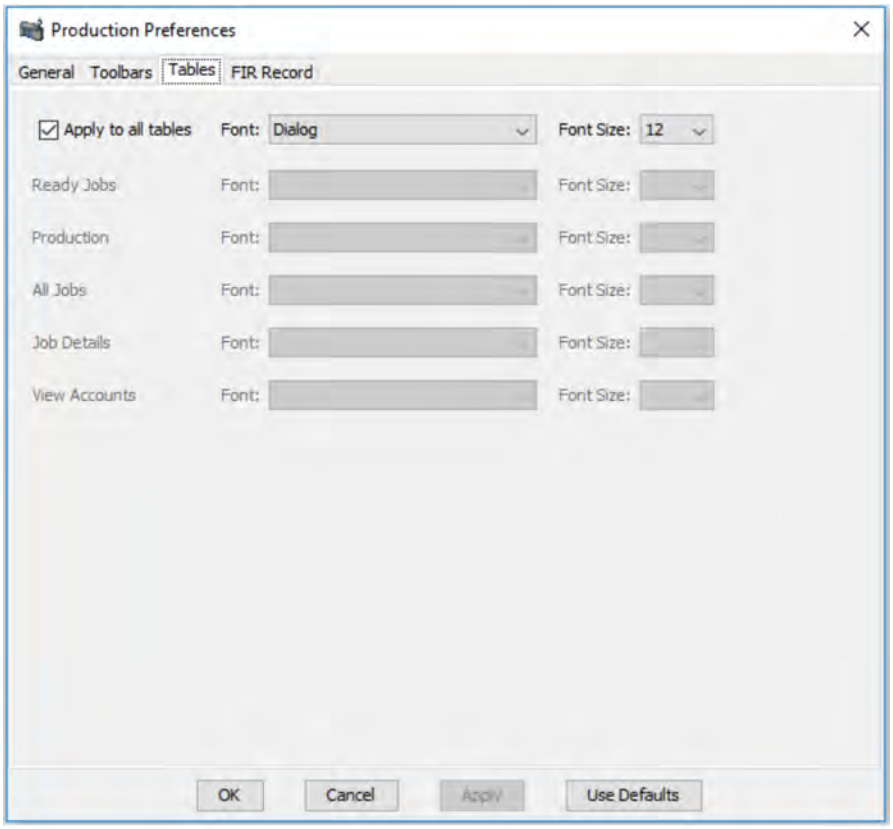
Use the toolbar tab to select the font and font size for the toolbar buttons on the Production interface tabs and View Accounts dialog. You can use common settings for all toolbars or set the toolbars individually.



Toolbars Tab

Tables Tab

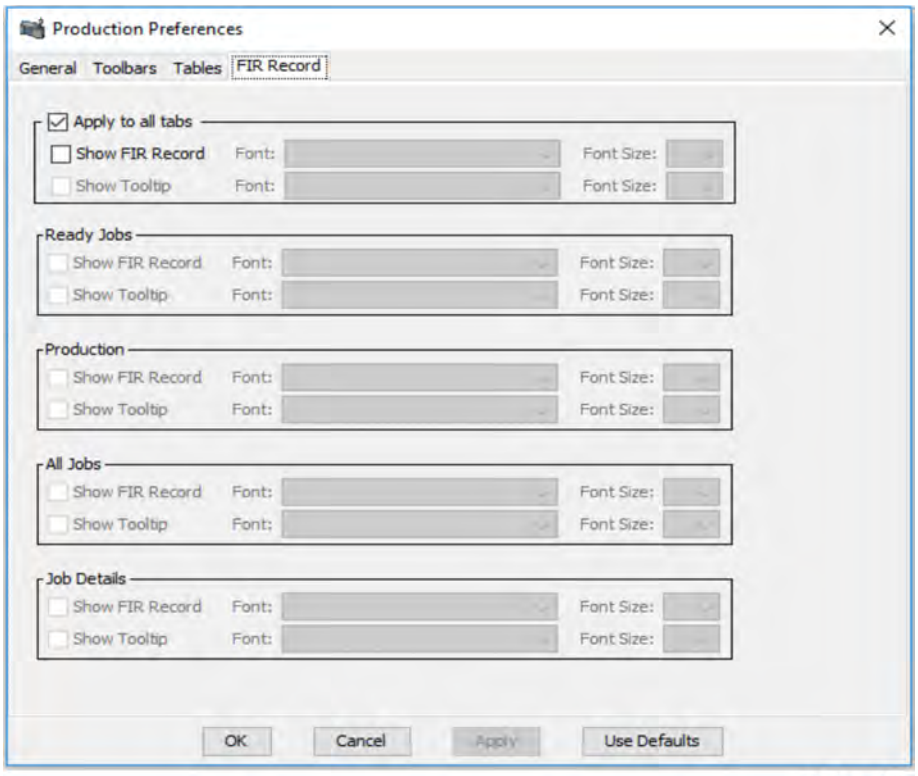
Use the Tables tab to set the font and font size for the tables on the Production interface tabs and View Accounts dialog.



Tables Tab

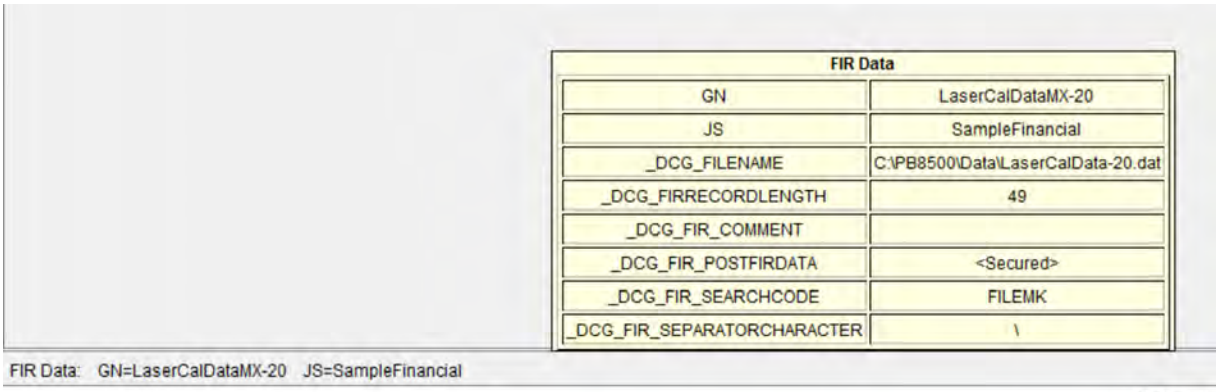
The font and font size changes apply to the table column headings and table values. You can use common settings for all tables or set the tables individually.

FIR Record Tab



FIR Record Tab

Use the FIR Record tab to enable FIR data to display at the bottom of the Production interface tabs with customized sizing and the tool tip option. You can set the font and font size for the FIR data view as well as the tool tip. You can set common preferences for all tabs, or set the tabs individually.



FIR Data

Chapter 5: Preventive Maintenance

5

This chapter provides routine preventive maintenance schedules and procedures for periodic cleaning and inspection of the Datacard® PB8500™ Passport Issuance system.

Overview

PB8500 systems require routine preventive maintenance to optimize performance and minimize downtime. Perform preventive maintenance procedures either at specified time intervals or machine-cycle intervals, depending on the module. In addition, perform preventive maintenance after any of the following activities:

- Replacing any module, assembly, sub-assembly, or adjustable part
- Performing any unscheduled maintenance

The preventive maintenance procedures in this manual are to be performed by operators or other properly trained on-site personnel. Tasks intended for service personnel are documented in the individual PB8500 module service manuals.

Cleaners, Tools, and Supplies

The cleaners, tools, and supplies required to meet the PB8500 system preventive maintenance requirements are listed the *Preventive Maintenance Tools and Supplies* List on the CD library menu.

System Preventive Maintenance Tasks

Site personnel need to perform the following preventive maintenance tasks.

Warning: Before performing maintenance, power off the Controller and remove the AC power cords. Refer to "Power Off the System" on page 14.

Procedure	Frequency	Comments
Vacuum all booklet tracks	Once per week or every 25,000 books	• Check for debris in both upper and lower guides. • Vacuum the area to remove dust and debris as necessary.
Clean track sensors	Once per week or every 25,000 books	Vacuum or wipe the sensors with a dry, soft cloth or cotton swab. • This *includes* all entry and exit sensors. • This *excludes* all tabbed belt sensors and fiber optic sensors.  Caution: Do not use alcohol to clean the sensors.
Vacuum the upper half of the system	Once per week or every 25,000 books	Vacuum dust and debris from the module platform area (above the frame only).  Caution: Never vacuum near circuit boards or electronic devices.
Clean transport rollers	Once per week or every 25,000 books	Wipe the roller surfaces with a soft cloth dampened with isopropyl alcohol.
Clean the camera lenses and mirrors	Weekly or as needed	1. Use compressed canned air to remove dust and debris. 2. Use optical cleaning fluid and optical cleaning tissue if necessary.

Procedure	Frequency	Comments
Clean the exterior components of the Controller	As needed	1. Clean the monitor with a soft cloth dampened with water. Immediately wipe the monitor dry with a clean cloth. Refer to the monitor's manual for more specific instructions. 2. Vacuum the keyboard. If necessary, wipe the keys with a cloth dampened with water. Never let liquids spill on the keyboard. 3. Remove the track ball from the mouse and wipe with a lint-free cloth. 4. Wipe the outside of the whole system with a clean cloth dampened in a mild detergent.
Clean the Controller module filter (also the air filter on the Output module, if present)	Monthly	Clean the filter over the fans on the side of the Controller whenever it gets dirty, and at least once per month. Pull the flexible filter away from the Controller and vacuum it on both sides.  Controller Filter

Chapter 6: Troubleshooting

This chapter provides troubleshooting procedures that the operator can perform.

Reset the Controller or a Module

To reset only the Controller or a specific module, use the following procedure.

1. Make sure that there are no jobs are running and that the system is idle.
2. In the **Production** tab of the Controller software, right-click the Controller or module and select **Reset**.

Reset the System

If you need to reset the system by powering off the Controller PC, use the following procedure.

1. Make sure that there are no jobs are running and that the system is idle.
2. Remove power from the modules by shutting off the red E-Stop power switch.
3. Shut down the PB8500 Controller software.
   a. From the Main window, open the **File** menu and select **Exit**.
4. Shut down the Windows operating system.
   a. Wait 2 to 5 minutes and then power up only the Windows operating system.

If the PB8500 software does not automatically open, click on the PB8500 icon.

5. Go to the **Production** tab.
6. When the machine has reached at least 11% of startup, use the red E-Stop power switch to power up the modules.

Remove Jammed Booklets

The PB8500 system is designed to recover automatically from booklet jams. However, if automatic recovery is unsuccessful, use the following procedures to remove the booklets.

You can remove a jammed booklet directly from a module without affecting other modules.

Be careful to avoid damaging the belt's tab when you move the booklet back into a module. Move the belt by rotating the pulley. Do not push back against the tab itself.

Do not touch the camera lens or the laser lens—fingerprints and scratches on the lenses can lead to faulty vision or laser results (including total or regional density variation, reflections, etc.). Only trained personnel should clean the lenses. Improper cleaning (improper cloths or tissues, improper cleaning fluid, etc.) irreversibly damages the lens and/or lens coating.

Do not tamper with the camera position. The camera alignment is very sensitive. Do not lean on the metal shield over the camera.

Page Turning Module

If the booklet is still closed when it gets jammed in the Paging module, use the following procedure to remove it.

1. Lift the module hood.
2. Push the back plate down and remove the booklet from the rear.

Caution: Be careful not to wrinkle or rip the booklet when removing.

3. Rehome the back plate.

Booklet Opener Module

1. Lift the module hood.
2. Use your hand to pull back the horizontal guide and pull the booklet out towards you.
3. If necessary, turn the pulleys on the entry assembly to advance the booklet into the middle of the module so it can be pulled out.

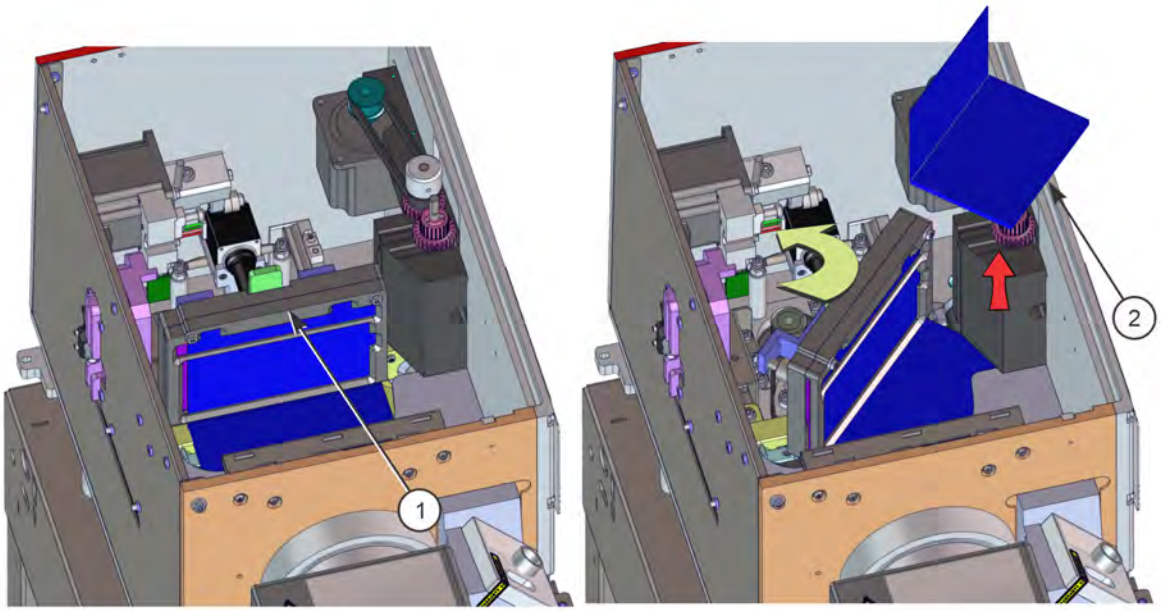
Multi-Book Chip Module

1. Lift the module hood.
2. Turn leadscrew to gain access to jammed booklet.
3. Remove jammed booklet from right side of coupler assembly.
4. Using leadscrew, return the coupler assembly to the home position.

Laser 450G Module

Use the following procedure to extract a jammed booklet from the Laser module.

1. Lift the module hood.
2. Lift the laser chamber cover.
3. Rotate the upper booklet guide assembly (1) for clearance to remove the booklet.
4. Remove the booklet (2) from the frame and remove the booklet from the module



Pblsr030

Secure Overlay

Use the following procedure to extract a jammed booklet from the Secure Overlay module.

1. Lift the module hood.
2. If necessary, manually push the platen carriage away from the booklet jam.

   Warning: Always allow the platen assembly to cool or wear protective gloves before handling the platen shoe or internal components. Press on the sides of the perforated guard shield when moving the platen carriage.

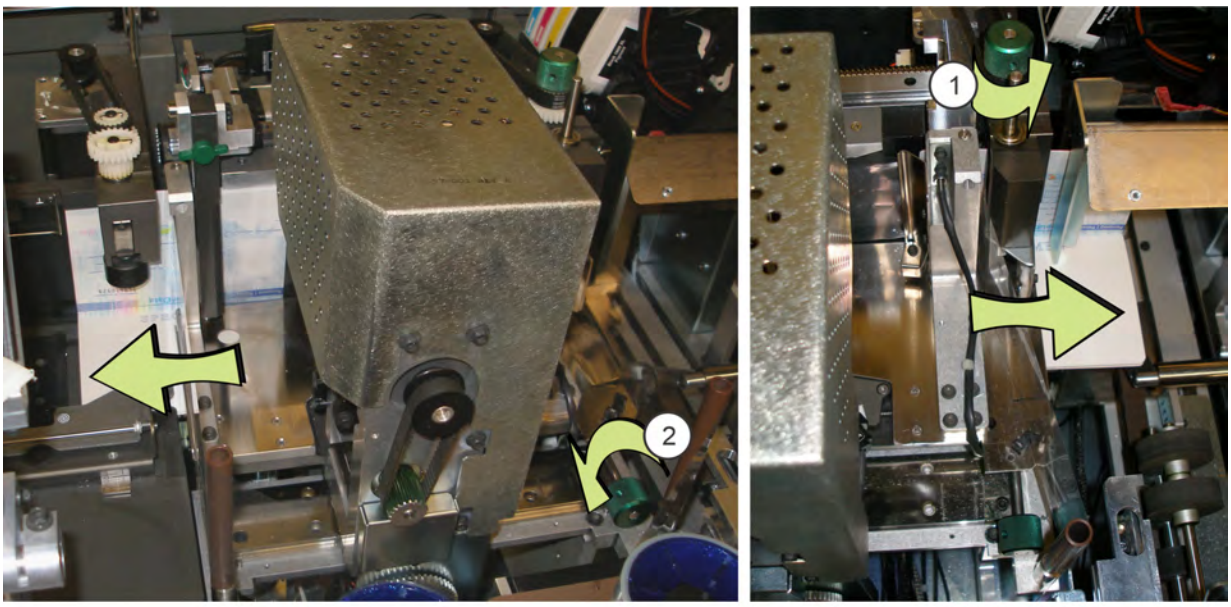
3. Use your hand to dislodge the jammed booklet.

   Caution: Be careful not to wrinkle or rip the supply material. If necessary, add some slack to the supply material with the take-up capstan knob.

4. Use the green booklet advance knobs to move the booklet out of the Secure Lamination module.

   - If the booklet is near the entry-side of the module, turn the input roller knob counterclockwise to push the booklet into the upstream module. Refer to (1) in the figure below.
   - If the booklet is near the exit-side of the module, turn the tabbed belt knob (2) counterclockwise to push the booklet into the downstream module.

5. Remove the booklet from the system.

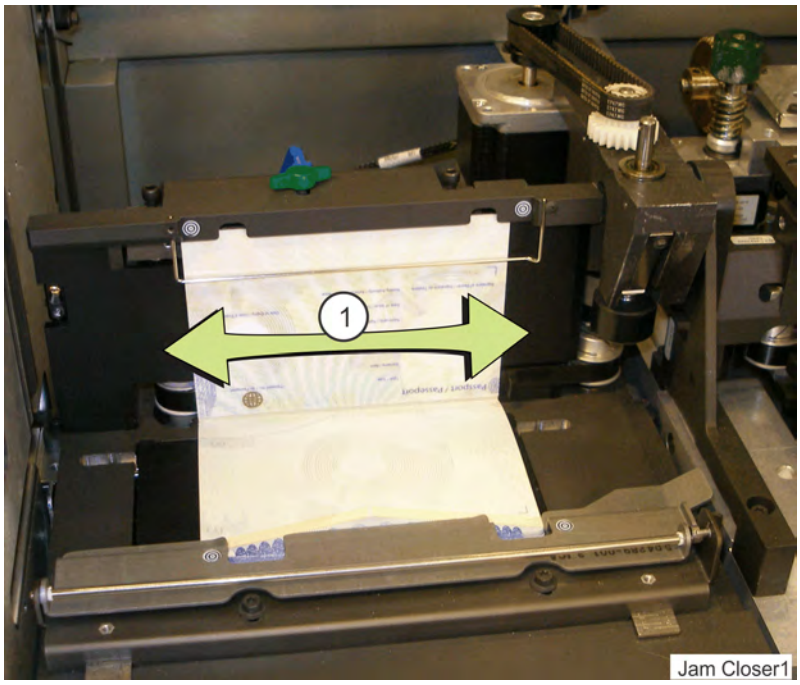


Secure Overlay

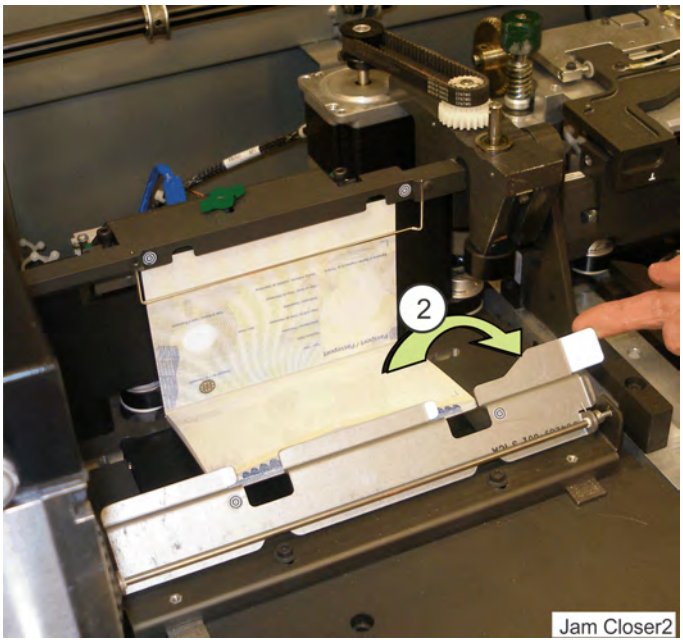
Buffer/Closer/QA Module

Use the following procedure to extract a jammed booklet from the Closer or Verification module.

1. Lift the module hood.
2. Use your hand to dislodge the jammed booklet. Move the booklet near the closing area of the booklet track. Refer to (1) in the figure below.

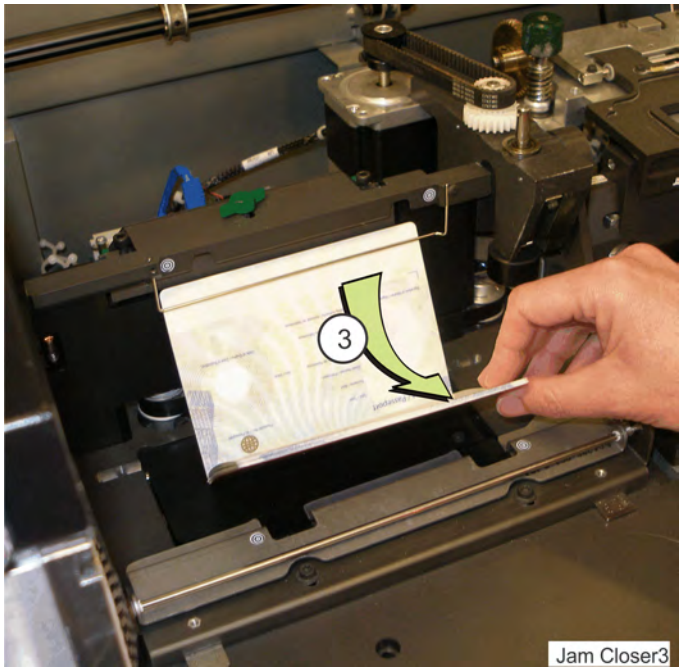


3. Lift the hinged track guide to release the horizontal opened cover of the booklet (2).



4. Pull the horizontal cover of the booklet down and toward the front of the module (3). Slide the vertical cover out of the upper retaining clip.

Caution: Always remove booklets from the bottom, or binding edge. Pulling the booklet from the top can damage the booklet retaining clip.



5. Remove the jammed booklet from the module.