# JetScan® MPX 8200
## Multi-pocket sorter

### User guide

## Safety information, power specifications

**⚠ WARNING**

High voltage inside. Risk of electric shock.

Do not attempt repairs. Repairs must be made by authorized Cummins Allison personnel.

Use grounded plug and properly grounded outlet.

Read and understand all instructions before use.

**⚠ WARNING**

Risk of injury.

Turn power **OFF** before cleaning machine.

Do not defeat safety interlock switches.

**NOTICE**

Improper voltage levels can cause equipment malfunction, damage electrical components, and void warranty.

Provide separate circuit serving only this device and follow listed power requirements to ensure proper operation.

Provide power conditioning/stabilizing devices if necessary.

- **Voltage operating range:** 105-130 VAC
- **Frequency:** 50/60 Hz
- **Full load amps (FLA):** 11A
- **Electrical supply circuit:** The customer must provide a single-phase, dedicated power line that meets the machine's power requirements. Use a properly grounded circuit breaker in compliance with applicable local electrical code.

## Environmental operating conditions

- **Temperature:** 60°F - 85°F (15°C - 29°C)
- **Humidity:** 30% to 70% (non-condensing)

## Compliance acknowledgments

- **Laser:** This equipment may contain Class 2 laser products and complies with FDA Radiation Performance Standards, 21 CFR Subchapter 1 and the international laser safety standard IEC-60825.1-2001-08.
- **FCC:** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- **Regulatory:** UL/CUL

# Table of contents

# About this guide

The JetScan® MPX 8200 multi-pocket sorter processes:

- U.S. dollars (USD) and Canadian dollars (CAD).

- Casino tickets (option).

The machine features:

- Three processing speed options: 1,000, 1,100 and 1,200 documents per minute.

- Advanced counterfeit detection.

- A continuous feeder with a capacity of up to 4,000 documents.

- Multiple configurable processing types and sort modes.

- Two offsort pockets and real-time, in-line facing.

- Options, such as continuous-batch processing, fitness sorting, ticket imaging, an integrated pocket module, automatic-strapping modules and corner modules. Contact a Cummins Allison representative for more information about options.

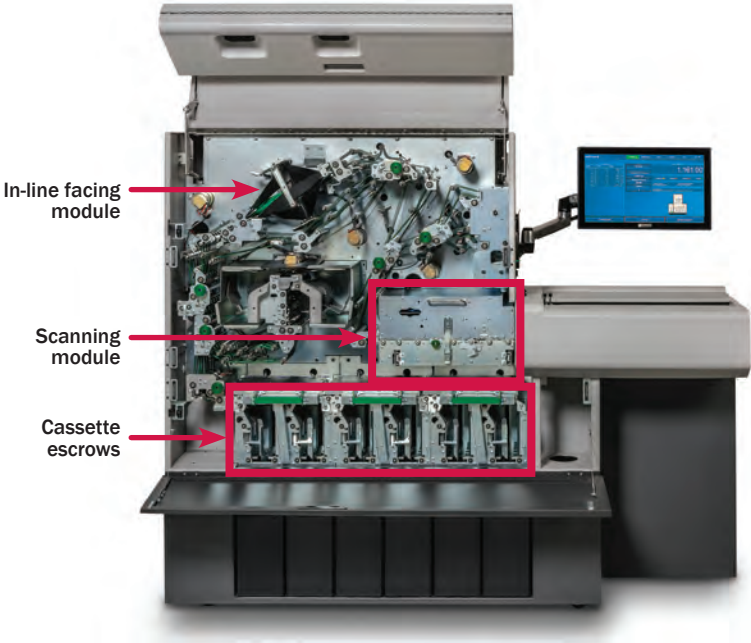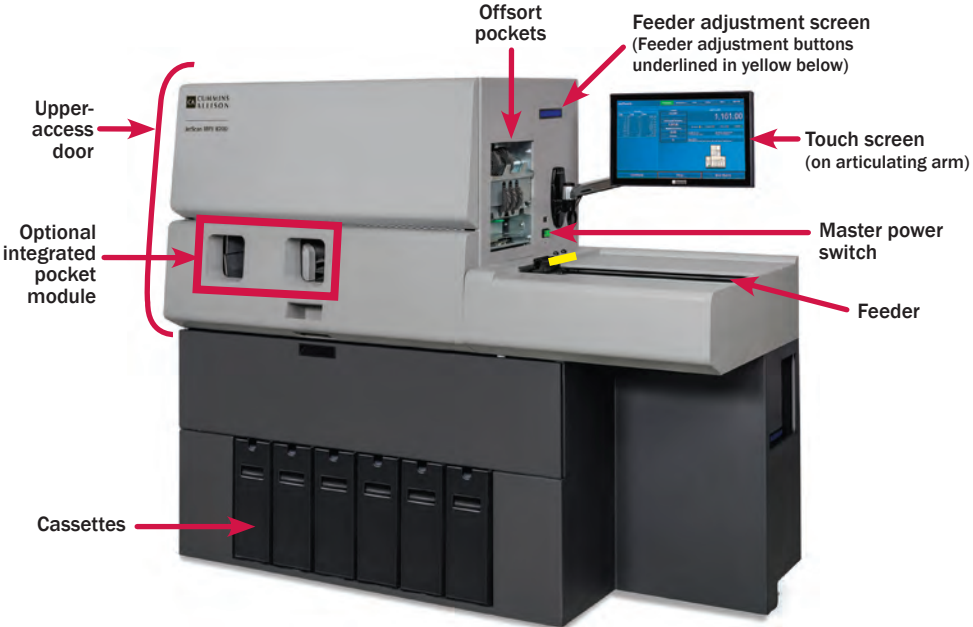**Contact a Cummins Allison representative for assistance with moving a JetScan MPX 8200 system.**

**See the JetScan MPX 8200 operating instructions (022-8100-00) for:**

- **Comprehensive machine functions.**

- **Additional stopping conditions and recovery steps.**

**See the JetScan MPX 8200 automatic-strapping module and corner module user guide (022-8272-00) for:**

- **Additional safety information and power specifications.**

- **Strapping module functions.**

- **Additional stopping conditions and recovery steps.**

- **Additional daily cleaning procedures.**

# Machine diagrams

Offsort pockets

Feeder adjustment screen
(Feeder adjustment buttons underlined in yellow below)

Upper-access door

Touch screen
(on articulating arm)

Optional integrated pocket module

Master power switch

Feeder

Cassettes

In-line facing module

Scanning module

Cassette escrows

# Upper-access door

Follow the steps below to open the upper-access door.



As the upper-access door is open and closed, please be mindful of the following:

**⚠CAUTION**    **Avoid head contact with upper-access door.**

**⚠CAUTION**    **Hinges on each side of upper-access door are pinch points (see right).**

**Keep hands clear.**



**A hinge is located on each side of the upper-access door.**

# Feeder adjustment

The small screen above and two buttons below the **master power switch** (see diagram at left) are used to regulate feeder tightness. Settings are shown on the screen (see closeup at right). The **-** /**+** line indicates the adjustment range and remains static. Press a button to move the setting indicator one position.



Current setting ──→ ●
————————|+++++

**Press left button to:**

- Move setting indicator left (-).
- Tighten feeder and decrease gap.

**Tighter setting is helpful for:**

- Processing new or crisp brick-quality notes.
- Reducing risk of doubles, chains or spacing errors.
- Decreasing gap as feed rollers wear.

**Press right button to:**

- Move setting indicator right (+).
- Loosen feeder and increase gap.

**Looser setting is helpful for:**

- Allowing documents to more easily pass through.
- Processing older or well-circulated notes.
- Reducing risk of tears or other damage.
- Widening feeder gap when settings are accidentally adjusted too tight and documents are not feeding.

# Getting started

This section outlines basic features and functions of the MPX 8200.

## Powering on the system

**To POWER ON the MPX 8200 system:**

**⚠ WARNING**

High voltage inside. Risk of electric shock.

Do not attempt repairs. Repairs must be made by authorized Cummins Allison personnel.

Use grounded plug and properly grounded outlet.

Read and understand all instructions before use.

**⚠ WARNING**

Risk of injury.

Turn power **OFF** before cleaning machine.

Do not defeat safety interlock switches.

✋ Ensure feeder is empty and free from documents or foreign objects prior to **POWERING ON** the system. Failure to follow this procedure could negatively impact system function.

1. The **master power switch** turns the machine **ON** and **OFF**.

   With the power cord firmly plugged into a grounded outlet, **POWER ON** the system by pressing the **master power switch**. When **ON**, this button is illuminated in green.

Master power switch **ON**



2. The system performs a confidence test and prompts the Select a Processing Type screen.
3. The system is ready to use.

# Preparing documents for processing

| **NOTICE** | Risk of damage to critical machine components and/or negative impact to machine performance. |
|---|---|

Remove foreign objects – such as coin, paper clips, staples, rubber bands and straps – from documents prior to loading in feeder.

✋ **Improperly loaded, severely worn or damaged documents may be sent to an offsort pocket or cause a jam to occur.**

Documents must be prepared prior to processing to maximize machine performance and reduce jams. The condition and preparation of documents impact machine performance.

Prior to loading documents in the feeder, follow these guidelines:

• Remove all rubber bands, staples, paper clips, straps and coin from stack.

• Separate and remove all excessively worn and damaged documents.

• Ensure stack edges are aligned and straight. Fix folds or "dog-ears."

• Fan new brick-quality documents.

| Properly prepped notes | Improperly prepped notes |
|---|---|

# Placing documents in feeder, starting a batch

**⚠ CAUTION**

Machine capable of continuous operation.

Rollers in feeder rotate inward. Entanglement and drawing-in hazard.

Do not operate with exposed long hair, neckties, jewelry or loose clothing.



Rollers and start sensor in feeder

**To place documents in the feeder:**

**NOTICE**

Risk of damage to critical machine components and/or negative impact to machine performance.

Remove foreign objects – such as coin, paper clips, staples, rubber bands and straps – from documents prior to loading in feeder.

✋ Improperly loaded, severely worn or damaged documents may be sent to an offsort pocket or cause a jam to occur.

1. Ensure documents are properly prepared.

   a. Follow guidelines in **Preparing documents for processing**.

   b. It is not necessary to pre-face or pre-orient documents, with two exceptions: casino tickets and control documents for the continuous-batch processing (CBP) option.

   While using CBP:

   • Bar codes on tickets must be faced toward the machine.

   • Control documents must be placed at the end of the batch with the bar code faced toward the machine.

2. Ensure the first paddle is pulled away from the feeder.

3. With feeder motors in an idle condition, place a stack of documents — 4,000 pieces or less — in the feeder.

4. Release the first paddle by pulling it toward the machine and resting it against the last document in the stack.

5. Press **Start** on the main-processing screen to initialize motors and begin feeding documents. The **Start button** changes to **Continue**.



| Start | Stop | End |
|-------|------|-----|
| Continue | Stop | End Batch |
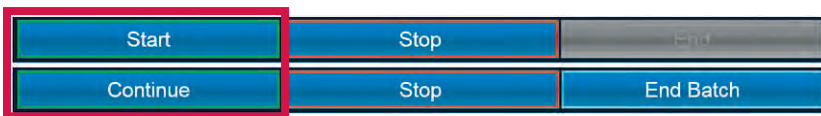
> The feeder may need to be adjusted to ensure documents are properly separated and accurately counted during processing. See Feeder adjustment for details.

6.  Documents may be added to the feeder while the machine is operating by using the second paddle.

    a.  Keep the first paddle resting against the last document in the feeder.

    b.  Pull the second paddle away from the first and load documents in front of it (see right). Then release the second paddle by tilting it up and resting it against the last document in the stack.

    c.  Lift and move the first paddle to the back of the feeder and snap it into position.

7.  If Auto Stop is **On** in **Setup**, feeder motors stop after the last document is processed.

    If Auto Stop is **Off** in **Setup**, feeder motors continue to run after the last document is processed.

# Removing documents from cassette

1. Remove full cassette from bay and place on firm and and flat surface.



2. Open access door on cassette.



**⚠ CAUTION**

**Pressure plate uses spring tension.**

**Risk of injury.**

**Ensure pressure plate is locked into place before removing documents.**



3. Slide pressure plate toward bottom of cassette and lock into place.

   Ensure pressure plate is firmly locked into position.

4. Remove documents from cassette and set aside. It may be easier to remove documents from cassette in smaller bundles.

**⚠CAUTION**   Pressure plate uses spring tension.

Risk of injury.

Always guide pressure plate to desired position. Follow instructions below.

5. To unlock pressure plate and slide it into its home (upper) position:

   a. Place both hands behind top surface of pressure plate.

   b. Use right index finger to press back on release lever.

   c. Use one hand to hold base of cassette and use other hand to slowly guide pressure plate to its up-most position.

   d. Close access door on cassette.

   e. Cassette is now ready for use.

# Select a Processing Type screen, signing on to the system

After **POWERING ON** the system, the Select a Processing Type screen appears.
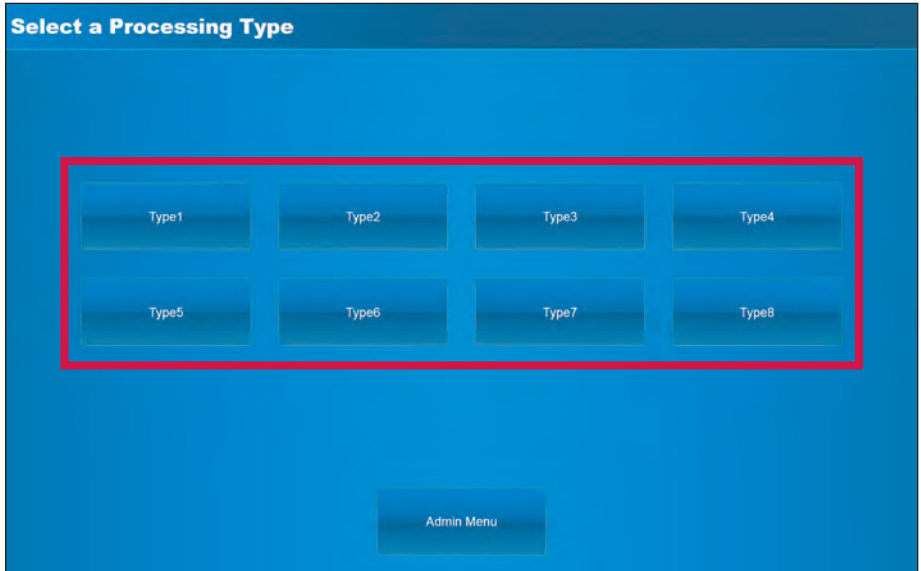


**To sign on to the system and begin processing documents:**

✋ The system must be cleared when switching from one active processing type to another to avoid co-mingled totals. See How to use Menu tab for details.

1. Select a processing type on the Select a Processing Type screen.

2. The Operator Login screen appears.

🔑 The default Admin ID and Password is 1111. Use this default ID and password until new IDs and passwords are defined.

To return to the Select a Processing Type screen **without** signing on, press **Cancel**.

3. Type the Operator ID using the keyboard and press **enter**.

4. Type the Password using the keyboard and press **enter**. The password is displayed as dots (● ● ● ●) in the Password field.

5. Once a valid Operator ID and Password are entered, the main-processing screen appears.
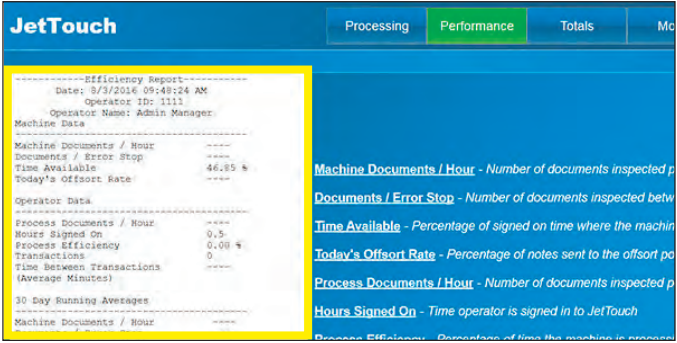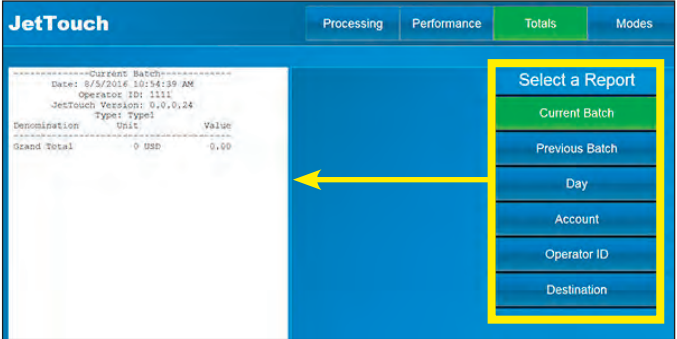
# Main-processing screen

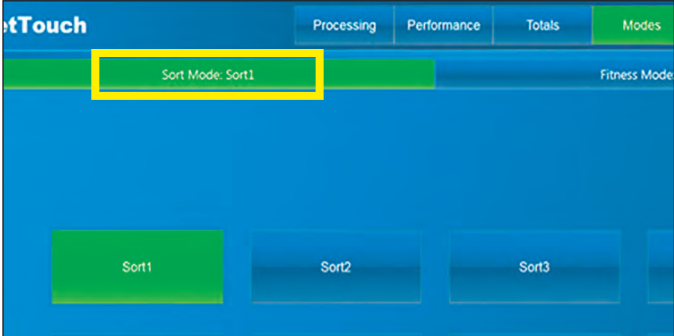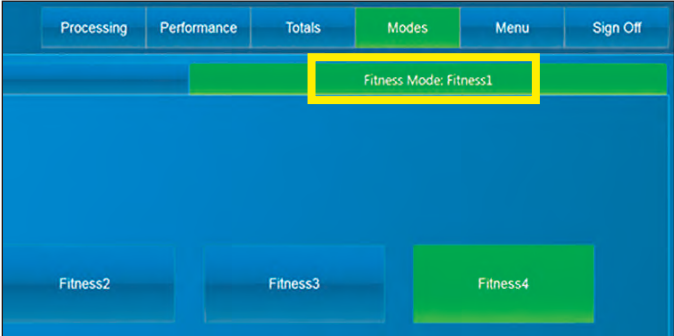Most transaction-processing functions are performed on the main-processing screen.



| Item | Description |
|------|-------------|
| 1 | Function tabs |
| 2 | Processed totals |
| 3 | Grand total of processed notes |
| 4 | Status bar |
| 5 | Current batch total |
| 6 | Offsort activity |
| 7 | Motor-control buttons |
| 8 | Sensor and communication port status bar |
| 9 | Summary data and manual entry |
| 10 | Machine configuration and sort location status |

## 1 Function tabs

| Processing | Performance | Totals | Modes | Menu | Sign Off |
|---|---|---|---|---|---|

| Tab | Description |
|---|---|
| **Processing** | Press to display the main-processing screen. |
| **Performance** | Press to view the Efficiency Report. Displayed data includes: Machine Data, Operator Data, 30 Day Running Averages and Total Documents Processed for 30 Days, 90 Days and 1 Year.<br> |
| **Totals** | Press to prompt the following screen. Buttons under Select a Report are used to view data on the left side of the monitor and print reports. Options are: **Current Batch** (totals for current batch), **Previous Batch** (totals for previous batch), **Day** (grand totals for all currency processed since the last system clear), **Account** (totals by account), **Operator ID** (totals by operator) and **Destination** (totals by sort location). Report availability is dependent on operator access level (Admin, Supervisor or Teller). Additional buttons may appear depending on feature configuration in **Setup**.<br> |

| Tab | Description |
|---|---|
| **Modes** | Press to select the **Sort Mode** and **Fitness Mode** (option) required for processing the current batch. Selections determine pocket assignments and fitness criteria. Operator must be an Admin or Supervisor to change either mode.

Sort Mode screen active



Fitness Mode screen active



**To change the sort or fitness mode:**

Sort and fitness modes cannot be changed during a batch. The batch must end **prior** to changing a mode.

1. Press a sort or fitness mode button. The active button is green.
2. A screen appears with this message: **Destinations need to be cleared for a sort mode change.** |

| Tab | Description |
|---|---|
| **Modes** (Continued) | 3. Pockets must be cleared prior to changing sort or fitness modes. Do one of the following:<br><br>• Press **OK** to clear all pockets and prompt the **Modes** tab screen. Next press the **Processing** tab to prompt the main-processing screen.<br><br>• Press **Cancel** to prompt the **Modes** tab screen.<br><br>The active sort and fitness modes appear in the status bar on the main-processing screen. |
| **Menu** | Press to access additional processing functions and features. The list of features and functions that appear is dependent on whether an Admin, Supervisor or Teller is signed on to the system.<br><br>**See How to use Menu tab for more information.** |
| **Sign Off** | Press to sign off the system and return to the Select a Processing Type screen. |

## **4** Status bar

| Operator ID: 1111 | Sort Mode: sort by denom |
|---|---|
| Processing Type: Type 1 | Fitness Mode: Fitness 1 |

| Item | Description |
|---|---|
| **Operator ID** | ID associated with operator currently signed on to system. |
| **Processing Type** | Current processing type selected by operator. |
| **Sort Mode** | Current sort mode selected by operator. |
| **Fitness Mode**<br>(Option) | Current fitness sort mode selected by operator. |

## 6 Offsort-activity bar

**Upper Offsort:**
**Lower Offsort: SD-10, SD-10, SD-10, STR, STR, SD-10, SD-10, SD-10**

A code appears in the offsort-activity bar when a document is rejected to the upper or lower offsort pocket.

| Reject type | Code | Description |
|---|---|---|
| No call | NC | A document passed through the scanner that cannot be identified. The document was not counted. Return the document to the feeder for reprocessing. |
| Stranger | STR | A document passed through the scanner that was not assigned to a sorting pocket. The document was not counted. Manually enter the document. |
| Chain | CH | Two or more overlapping documents were processed. These documents were not counted. Return the documents to the feeder for reprocessing. |
| Double | DBL | Two or more documents (stacked on top of each other) were simultaneously processed. These documents were not counted. Return the documents to the feeder for reprocessing. |
| Spacing | SPC | One or more documents were processed without proper spacing. These documents were not counted. Return the documents to the feeder for reprocessing. |
| Skew | SK | One or more documents were skewed during processing. These documents were not counted. Return the documents to the feeder for reprocessing. |
| No fitness | NF | A note passed through the scanner, and fitness determination cannot be made. The document was not counted. Return the document to the feeder for reprocessing or manually enter the document. |
| Limit | LIM | One or more documents were processed and could not be sent to the sort location (cassette or optional integrated pocket module) because it is at limit. Clear the limit and return the documents to the feeder for reprocessing. |

A code appears in the offsort-activity bar when a suspect document is identified.

The suspect document is not counted.

Remove the suspect document from the offsort pocket and examine it for authenticity.

Then do one of the following:

- If the note is deemed genuine, return it to the feeder for reprocessing or enter it by pressing **Manual Currency** on the main-processing screen.

- If the note is deemed counterfeit, place it aside, and it will not be part of the count.

| Code | Possible causes | Code | Possible causes |
|------|-----------------|------|-----------------|
| S1 | • Incorrect note paper<br>• Soiled note | S9 | • Note failed advanced-counterfeit test<br>• Worn note |
| S2 | • Incorrect note paper<br>• Machine-washed note<br>• Taped note | S10 | • Incorrect ink error<br>• Worn note |
| S3 | • Incorrect note paper<br>• Soiled note | S11 | • Incorrect ink error |
| S5 | • Incorrect ink error<br>• Worn note | S12 | • Incorrect ink error |
| S7 | • Thread error | S13 | • Incorrect note paper<br>• Soiled note |
| S8 | • Note failed advanced-counterfeit test<br>• Worn note | | |

# 7 Motor-control buttons

| Start | Stop | ~~End~~ |
|---|---|---|
| Continue | Stop | End Batch |

**⚠ CAUTION**

Machine capable of continuous operation.

Rollers in feeder rotate inward. Entanglement and drawing-in hazard.

Do not operate with exposed long hair, neckties, jewelry or loose clothing.

| Button | Description |
|---|---|
| **Start** | Press to engage the feed and transport motors. Documents loaded in the feeder automatically begin to feed and are processed through the transport path. Additional documents may be added to the feeder as needed. |
| **Continue** | When **Start** is pressed, it changes to **Continue**. It may be necessary to press **Continue** after clearing an error or placing additional documents in the feeder to resume processing. |
| **Stop** | Press at any time to stop machine motors and cease operation. Motors briefly run to flush documents from the transport path and then stop. |
| **End Batch** | Press to end the current batch. Batch totals are transferred to the day total register and reset for the next transaction. |

## 8 Sensor and communication port status bar

| Sensors 🟡 | Export ⚪ | Online ⚪ | Comm 🟢 |

| Item | Green | Yellow | Red | Gray |
|---|---|---|---|---|
| **Sensors** | All expected system sensors are present and enabled. | All expected system sensors are present, but one or more are disabled. | An expected system sensor is not present. | |
| **Export** | All export locations are accessible. | | One or more export locations are not accessible. | No export locations are configured. |
| **Online** | MPX 8200 system is online with host system. | MPX 8200 system is offline with host system. | MPX 8200 system is disconnected from host system. | No serial export functions are enabled. |
| **Comm** | MPX 8200 system is ready for operation. | | MPX 8200 system is not ready for operation. | |

# ⑨ Summary data and manual entry



The Summary section displays several functions, including manual data entry fields that are **On** in **Setup**. A button does not appear in the Summary section when the function is **Off** in **Setup**.

A green vertical scroll bar appears when the number of enabled functions in **Setup** exceed available space on the screen.

An active button is blue.

Unavailable functions for a current transaction are gray. This may occur between batches or prior to entering **Account** information for the current batch.

| Summary button | Totals | Setup |
|---|---|---|
| **Manual Currency** (**Manual Fit Currency** and **Manual Unfit Currency** are options) | The total amount of currency manually entered for the current batch:<br>• Appears at the bottom of the **Manual Currency** button under Summary.<br>• Is added to the batch total and itemized on reports. | There are two options for enabling this function in **Setup**:<br>• Enter data as a single value by denomination (**Setup** selections: **On** and **Single**.)<br>• Enter data in an itemized list by unit or value. Each item is shown individually in a list. (**Setup** selection: **On**.) |

**To enter Manual Currency:**

1. Press **Account** under Summary to enter **Account** information for the current batch.
2. Press **Manual Currency** under Summary.
3. Enter currency amounts in the Manual Currency fields on the left side of the screen.

# How to use Menu tab

The **Menu** tab screen below appears when:

- **Menu** is pressed on the main-processing screen.
- **Admin Menu** is pressed on the Select a Processing Type screen and a valid Admin or Supervisor password is entered.
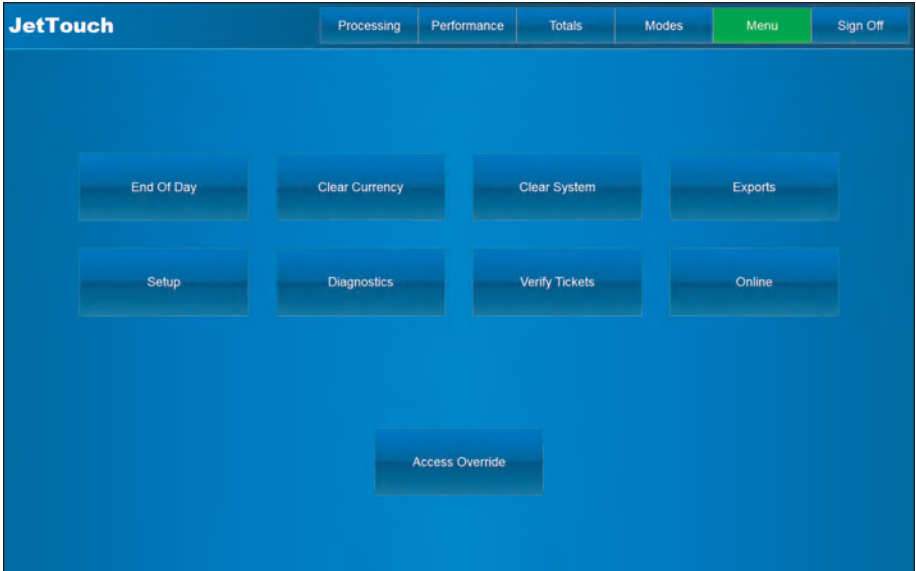


Authorized users of buttons on this screen are shown below.

| Button | Admin | Supervisor | Teller | Cummins Allison service personnel |
|---|:---:|:---:|:---:|:---:|
| End of Day | ✓ | ✓ | ✓ | ✓ |
| Clear Currency | ✓ | ✓ | ✓ | ✓ |
| Clear System | ✓ | ✓ | | ✓ |
| Exports | ✓ | ✓ | | ✓ |
| Setup | ✓ | | | ✓ |
| Diagnostics | ✓ | | | ✓ |
| Verify Tickets | ✓ | ✓ | | ✓ |
| Online | ✓ | ✓ | | ✓ |
| Access Override | ✓ | ✓ | | ✓ |

| Button | Description |
|--------|-------------|
| **End of Day** | Press to prompt the End of Day screen. Depending on feature activation in **Setup**, the screen may look different, including the number of available buttons. When all processing for a day or session is complete, end-of-day procedures must be performed to properly close out the day. |



**To perform end-of-day procedures and ensure system files are properly closed and internally backed up:**
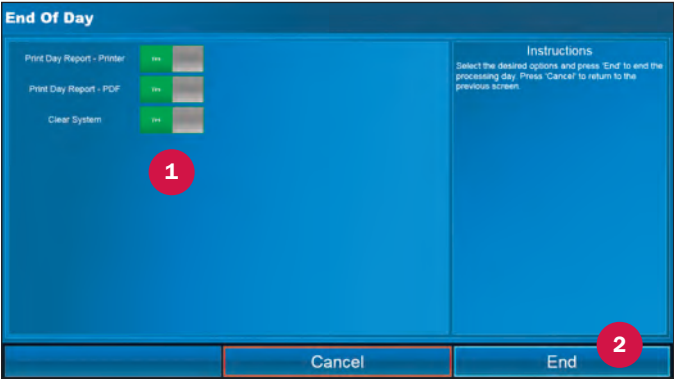
✋ **Never shut down the system from the End of Day screen.** Wait until all end-of-day procedures are complete and the System Start screen appears before shutting down the system.

**Pressing Cancel** prompts the **Menu** tab screen without executing end-of-day procedures.

1. Press **Yes** next to the desired function. The button is green.

| Function | Description |
|----------|-------------|
| **Print Day Report - Printer** | Day Totals Report is printed on an optional journal printer. |
| **Print Day Report - PDF** | Day Totals Report is generated as a PDF. |
| **Clear System** | All system activity data - except configured settings in the **Menu** tab and **Setup** - is cleared. |

2. Press **End** to automatically begin the end-of-day procedure.

When the procedure is complete, the Select a Processing Type screen appears.

| Button | Description |
|--------|-------------|
| **Clear Currency** | Press to prompt the Clear Currency screen. This screen is used to manually clear any or all available sort locations during the processing cycle and is necessary when changing sort modes or preparing the machine for another user.<br><br><br><br>**To manually clear one or more sort locations:**<br><br>🖐 Pressing **Cancel** prompts the **Menu** tab screen **without** clearing any sort location.<br><br>1. Do one of the following:<br>  • Select one or more sort locations (cassettes, optional pockets or optional strapping modules) on the system diagram. Selected locations are yellow, as shown above.<br>  • Press **Select All** to clear all sort locations.<br>2. Press **OK**. The **Clear currency from the machine?** confirmation screen appears.<br>3. Do one of the following:<br>  • Press **Yes** to proceed with the procedure. Once the procedure is complete, the **Menu** tab screen appears.<br>  • Press **No** to cancel the procedure and return to the **Menu** tab screen. |
| **Clear System** | Press to prompt the **Clear the system?** confirmation screen. This function:<br>  • Clears all totals for accounts, labels and operators. It does not clear passwords or the database.<br>  • Clears all processed totals from memory and resets data tables to zero balances.<br>  • Should be performed at the end of the processing day or shift. |

| Button | Description |
|---|---|
| **Clear System** (Continued) | **To clear the system:**<br><br>✋ **Performing this step clears all system totals.** Ensure there is intent to perform this function.<br><br>**Pressing No prompts the Menu tab screen without clearing the system.**<br><br>1. Press **Yes** to initiate the clearing procedure.<br><br>2. Follow on-screen instructions to clear all sort locations before beginning a new batch. |
| **Exports** | 🔑 **A Cummins Allison service representative must set up the file format and export location.**<br><br>Press to prompt the Export Menu screen which is used to export day total data, ticket data (option), and ticket images (option) to an alternate directory via a network connection. See the operating instructions for details. |
| **Setup** | Press to prompt the **Sort Setup** tab screen which provides access to **Configure Sort Modes**, **Configure Fitness Modes** (option) and the **Processing Type Setup** tab.<br><br>**See How to use Setup for more information.** |
| **Diagnostics** | Selection for use by Cummins Allison service personnel only. |
| **Verify Tickets** (Option) | Press to access a feature that is used to find and offsort up to 10 casino tickets at a given time from a larger stack of casino tickets. See the operating instructions for details. |
| **Online** | 🔑 **A Cummins Allison service technician must select a communication protocol during installation.**<br><br>Press to set the MPX 8200 in an online status and use the serial communication port to transmit and receive data from another device. See the operating instructions for more information. |
| **Access Override** | Press to prompt the Access Override Login screen which is used by Admin- and Supervisor-level operators to:<br><br>• Help lower-level users when necessary.<br><br>• Gain access to **Menu** tab functions not currently displayed or accessible to the current user who is logged in.<br><br>See the operating instructions for details. |

# How to use Setup

The **Sort Setup** tab screen below appears when **Setup** is pressed on the **Menu** tab.



| Tab | Description |
|---|---|
| **Sort Setup, Processing Type Setup** | Selections for use by Admin users to configure processing settings.<br><br>**See Configure Sort Modes and Configure Fitness Modes (option) for more information.** |
| **Machine Setup, Backup/Restore** | Selections primarily for use by Cummins Allison service personnel. |
| **Exit Setup** | Press to prompt the **Menu** tab screen. |

# Configure Sort Modes

For each sort mode:

- Cassettes and the optional integrated pocket module can be assigned one or more denominations or casino tickets (option).

- Strapping modules can be assigned one denomination or casino tickets (option).

- All sort locations can be assigned:

  - Note fitness level (option).

  - Note series.

  - Note orientation.

  - Limits, as outlined below.

| Sort location | Limits |
|---|---|
| **Cassette** | **Capacity:** 50 to 2,000 items |
| **Optional integrated pocket module** | **Capacity:** 25 to 300 items in each pocket |
| **Optional automatic-strapping module** | **Strap quantity:** 100 items (fixed quantity) <br> **Bin capacity:** 10, 20 or 30 straps |

**To configure a sort mode:**

1. From the main-processing screen, press **Menu** > **Setup** > **Configure Sort Modes**. Select the sort mode to configure and prompt the following screen. Up to eight unique sort modes can be configured and saved for easy retrieval.

2. Configure the cassette and optional integrated pocket module sort locations. Using the diagram shown at right, press the desired sort location, which becomes yellow. In this example, cassette No. 3 is selected and yellow.



3. Press the **Assignments** tab and select one or more denominations or casino tickets (option) to sort to the chosen location. If a denomination or ticket is not assigned to a location, it is automatically directed to the offsort pocket as a stranger.

4. Press the **Criteria** tab to select the Fitness (option), note Series and Orientation.
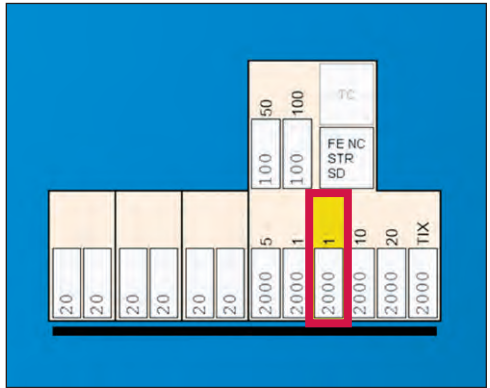


5. Press the **Limits** tab to set the number of items to send to this sort location. Optional integrated pocket modules must be set between 25 and 300. Cassettes must be set between 50 and 2,000. Limits set outside of these ranges prompt a warning screen, as shown at right.
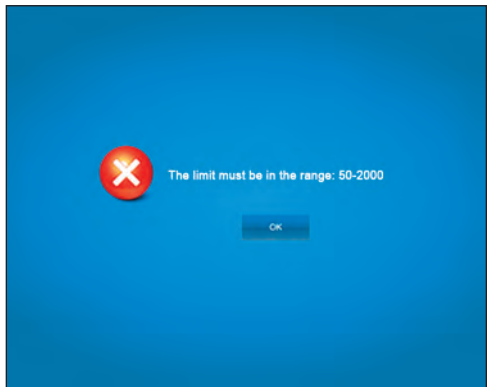


6. Repeat steps 3-5 for each cassette and each integrated pocket module.

7. Configure the optional automatic-strapping module sort locations. Using the diagram shown at right, press the desired strapping module, which becomes yellow. In this example, strapping module No. 2 is selected and yellow. Next, repeat steps 3-4.
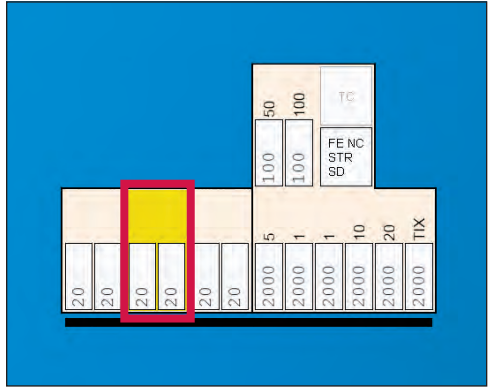


8. Press the **Limits** tab to adjust Strap Length (tighten or loosen, depending on note condition), set Bin Limit (10, 20 or 30 straps), and select Strap Face (**Up**/portrait side up in strapper or **Down**/portrait side down in strapper).
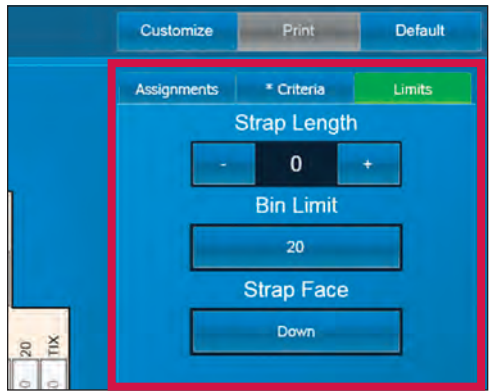


9. For all sort locations, name the new sort mode. Press **Customize** to prompt a keyboard. Type the name. Next do one of the following:

   • Press **OK** to save the new name and prompt the Configure Sort Mode screen. The name appears when using the **Modes** tab or **Configure Sort Modes** in the **Sort Setup** tab.

   • Press **Cancel** to reject changes and prompt the Configure Sort Mode screen.

10. When configuration is complete, press **Save** to save all changes. A successful save confirmation appears.

11. To return to the main-processing screen:

    a. Press **OK** to prompt the Configure Sort Mode screen.

    b. Press **OK** to prompt the Select Sort Mode to Configure screen.

    c. Press **OK** to prompt the **Sort Setup** tab screen.

    d. Press the **Exit Setup** tab to prompt the **Menu** tab screen.

    e. Press the **Processing** tab to prompt the main-processing screen.

If changes are made in the Configure Sort Mode screen and **OK** or **Cancel** is pressed instead of **Save**, a warning screen appears, as shown at right.

Do one of the following:

- Press **Yes** to exit and return to the Select Sort Mode to Configure screen.

- Press **No** to remain on the Configure Sort Mode screen.
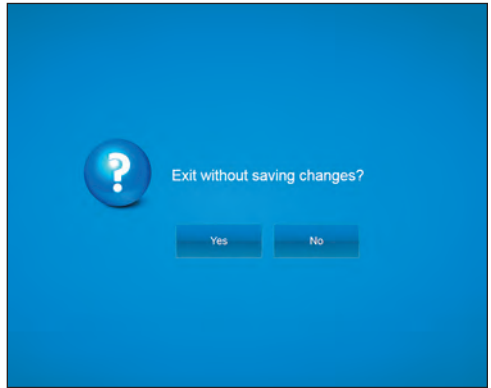


If no changes are made in the Configure Sort Mode screen and **OK** or **Cancel** is pressed, the Select Sort Mode to Configure screen appears.

# Configure Fitness Modes (option)

Use the fitness option to sort fit from unfit notes in a single pass. Up to eight unique fitness modes can be configured and saved for use with any processing type or sort mode. Fitness criteria can be assigned to each denomination within each fitness mode.

### To configure a fitness mode:

1. From the main-processing screen, press **Menu** > **Setup** > **Configure Fitness Modes**. Select the fitness mode to configure and prompt the following screen.



**3** Press here to enable or disable a fitness setting.
Number is confirmation of selected level at right.

**4** Press here to select fitness level

**4** Press on yellow indicator and slide to desired fitness level at right
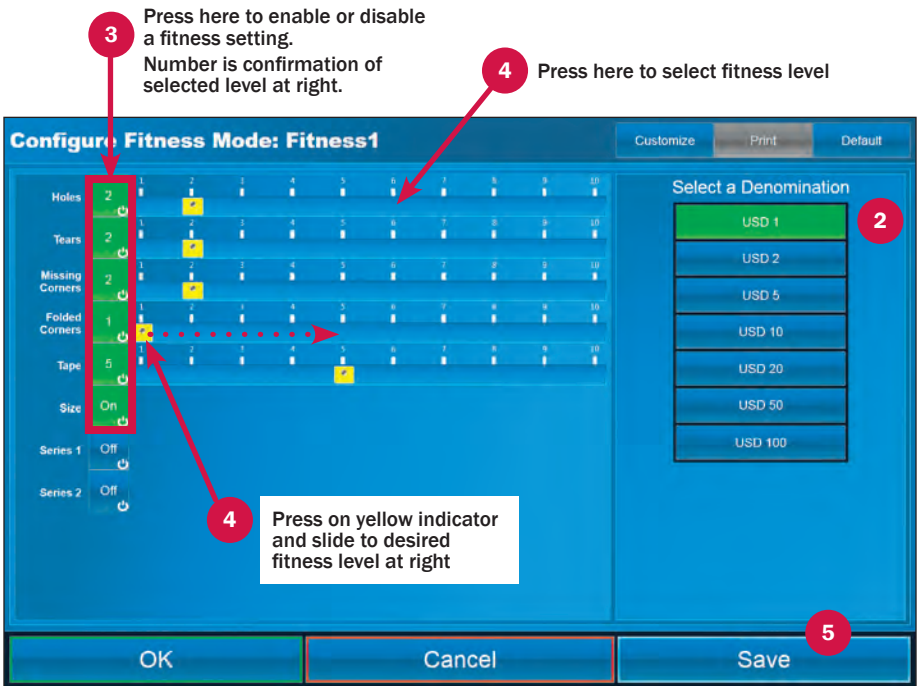
2. Select the denomination to configure. The selection is highlighted in green. In the example above, **USD 1** is highlighted.

3. Press the button to the right of each setting to enable or disable it. Enabled settings are highlighted in green.

4. To adjust the fitness level for each criterion, do one of the following:

    • Press below the desired setting. The yellow indicator moves to this position.

    • Press on a yellow indicator and slide it to the desired level at right.

   USD fitness settings range from 1 (low level of fitness) to 10 (high level of fitness or brick quality). Turning **On** Series 1 and/or Series 2 automatically sorts the selected denomination and series as unfit, regardless of actual fitness condition.

5. Press **Save** to save all changes.

6. Repeat steps 2-5 for each denomination.

7.  Name the new fitness mode. Press **Customize** to prompt a keyboard. Type the name. Next do one of the following:

    • Press **OK** to save the new name and prompt the Configure Fitness Mode screen. The name appears when using the **Modes** tab or **Configure Fitness Modes** in the **Sort Setup** tab.

    • Press **Cancel** to reject changes and prompt the Configure Fitness Mode screen.

8.  When configuration is complete for all denominations, press **Save** to save all changes. A successful save confirmation appears.

9.  To return to the main-processing screen:

    a. Press **OK** to prompt the Configure Fitness Mode screen.

    b. Press **OK** to prompt the Select Fitness Mode to Configure screen.

    c. Press **OK** to prompt the **Sort Setup** tab screen.

    d. Press the **Exit Setup** tab to prompt the **Menu** tab screen.

    e. Press the **Processing** tab to prompt the main-processing screen.

If changes are made in the Configure Fitness Mode screen and **OK** or **Cancel** is pressed instead of **Save**, the warning screen at right appears.

Do one of the following:

    • Press **Yes** to exit and return to the Select Fitness Mode to Configure screen.

    • Press **No** to remain on the Configure Fitness Mode screen.
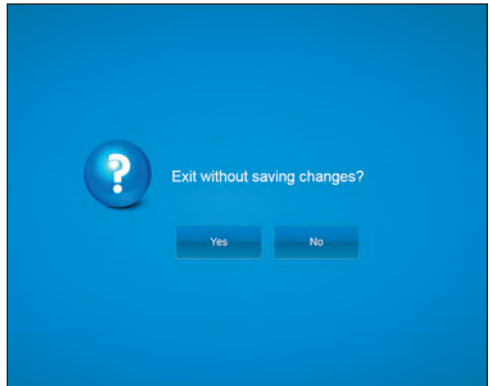


If no changes are made in the Configure Fitness Mode screen and **OK** or **Cancel** is pressed, the Select Fitness Mode to Configure screen appears.

**To return the active fitness sort mode to original factory settings:**

1.  Press **Default**  at the top of the screen.

> Original factory settings are intended to meet published local standards for fitness. Actual fitness standards may vary slightly from one location to another. Work closely with the appropriate authorities to ensure that fit and unfit notes are meeting their standards.

# Stopping conditions and recovery steps

The MPX 8200 can stop for a variety of reasons, all of which require action by the user. When an error, warning, alert or jam screen appears, follow instructions on the screen to recover from the error. This section includes error screens in which additional steps may be required.

**Condition** ▶ An attempt is made to change from one sort mode to another while there is an open batch.

**Action** ▶
1. Press **OK** to clear the warning and return to the prior active screen.

2. End the batch before taking further action.

**End batch before proceeding**



Please end the batch before proceeding.

OK
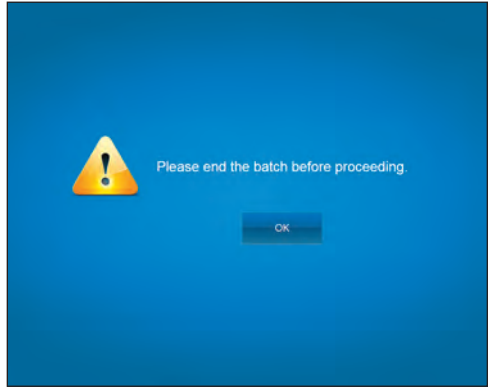
**Condition** ▶ A day total data file, ticket data file (option), or ticket image file (option) was not exported prior to pressing **End of Day** or **Clear System**.

**Action** ▶ Press **OK** to return to the **Menu** tab screen. First press **Exports**, then press **Export Day Totals**, **Export Tickets** or **Export Images**, whichever applies.

**Export day totals error**



Day Totals have not been exported.

OK
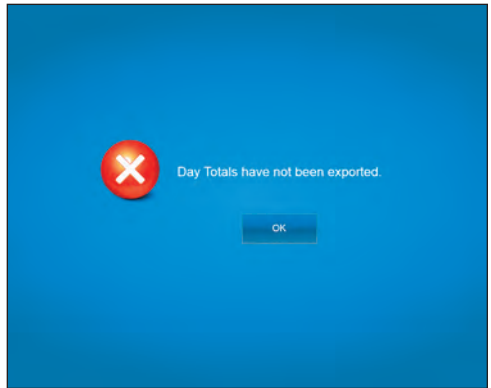
## Jam recovery (without continuous-batch processing option)

**Condition** ▸ When a jam condition occurs, the machine's motors immediately stop and a jam screen appears, describing the problem and how to recover from it.

**Action** ▸ Follow the steps below to recover from a jam condition:

| NOTICE | Risk of damage to critical machine components. |
|---|---|

**Risk of damage to critical machine components.**

**Read and follow all instructions shown on main-processing screen.**

**Carefully remove jammed documents.**

**Visually inspect areas surrounding jammed documents prior to re-starting motors.**

**Re-align any displaced transport belts.**

**Remove any partial documents and foreign objects from transport path.**

1. Use the jam screen to locate the jam. A sample jam screen is shown below. The red highlighted area indicates a location that should be thoroughly examined for a jammed document or foreign object
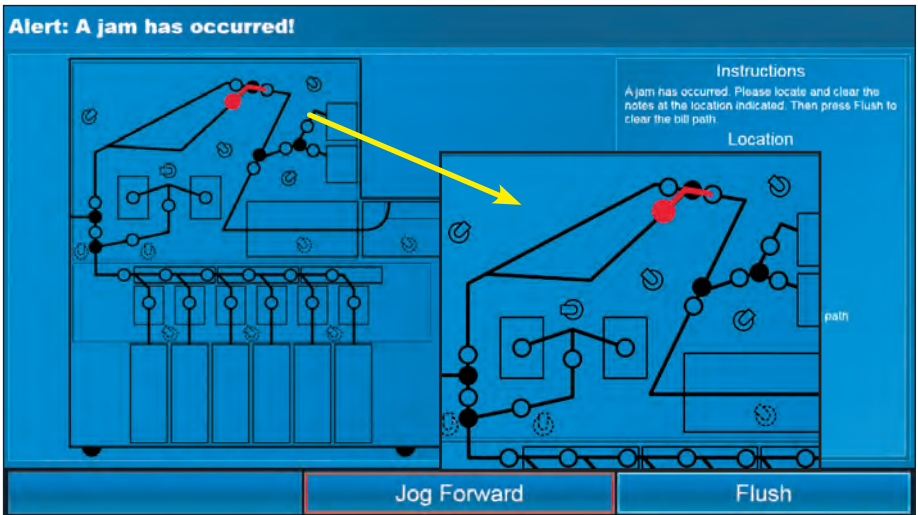


2. Remove the jammed document or foreign object.

   To reach the document or object:

   • Open the appropriate access door.

   • Open a diverter by pulling the green knob (identified at right) to unlock and lift the plate to the service position.
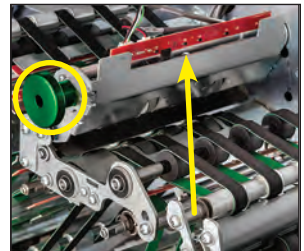


Open diverter

**⚠CAUTION** Laser light present if bar-code equipment is installed inside scanning module.

Avoid direct eye contact.

• Open the scanning module. Use care when removing items.

3. Once the jammed document or foreign object is removed, close diverters, the scanning module and access doors.

✋ Once **Flush** is pressed, the screen identifying the jam location disappears, and it cannot be recalled.

4. Press **Flush** to ensure the transport path is clear. Motors briefly run and then stop, sending all remaining documents in the transport path to one of the available sort locations.

5. On-screen flashing red indicators inform the user which documents must be removed and reprocessed.
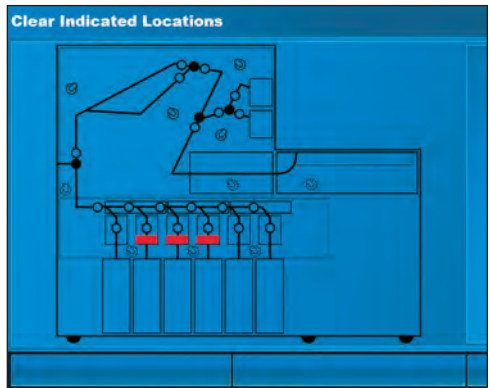


6. Return documents to the feeder.

7. Continue processing the transaction.

📝 If there is no success in removing jammed documents or clearing a jam screen, contact a Cummins Allison representative.

## Jam recovery (with continuous-batch processing option)

**Condition** ▶ There are error screens specific to the continuous-batch processing (CBP) option. When a jam occurs while using CBP, screens appear to instruct the operator on how to:

- Maintain batch integrity.
- Clear the jam condition.

**Action** ▶ Follow the steps below to recover from a jam condition while using CBP:

**NOTICE**

Risk of damage to critical machine components.

Read and follow all instructions shown on main-processing screen.

Carefully remove jammed documents.

Visually inspect areas surrounding jammed documents prior to re-starting motors.

Re-align any displaced transport belts.

Remove any partial documents and foreign objects from transport path.

1. Remove all items in the upper offsort pocket and set them aside.

Only remove items in the upper offsort pocket.

Leave items that are in the lower offsort pocket in place.
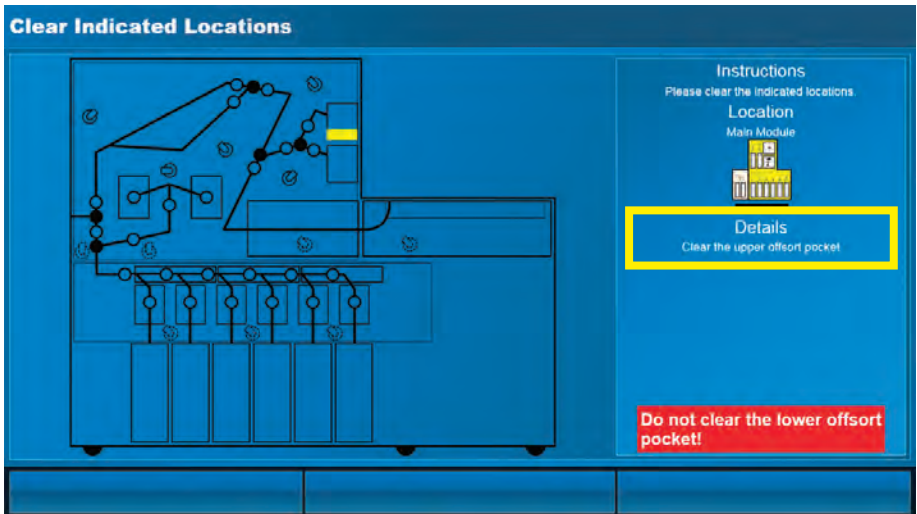
2. Pull items that are in the feeder away from the feed opening.

3. Manually turn the feed rollers upward to remove any item that may have already started to feed into the machine.

4. Items removed from the feed rollers should immediately be placed in front of the items that were pulled away from the feed opening in Step 2.

5. Place the second paddle in front of these items, making it the lead paddle.

   When complete, there should be nothing between the feed opening and lead paddle. This ensures that new batches are not accidentally run through the MPX 8200 during jam reconciliation.
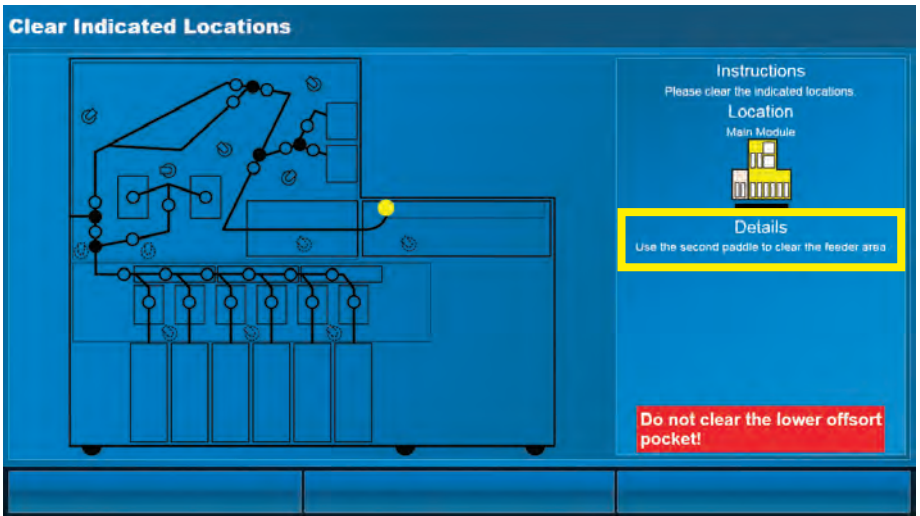


**Clear Indicated Locations**

Instructions
Please clear the indicated locations.
Location
Main Module

Details
Use the second paddle to clear the feeder area

**Do not clear the lower offsort pocket!**

**Once Flush is pressed, the screen identifying the jam location disappears, and it cannot be recalled.**

6. A screen appears to show the jam location with instructions on how to clear it. Remove the jam, and then press **Flush** to ensure the transport path is clear. Motors briefly run and then stop, sending all remaining documents in the transport path to one of the available sort locations.

7. The Clear Indicated Locations screen appears to identify sort locations that need to be emptied. Remove contents from the identified locations, in addition to items in the upper offsort pocket, which may include flushed notes, tickets and control documents.
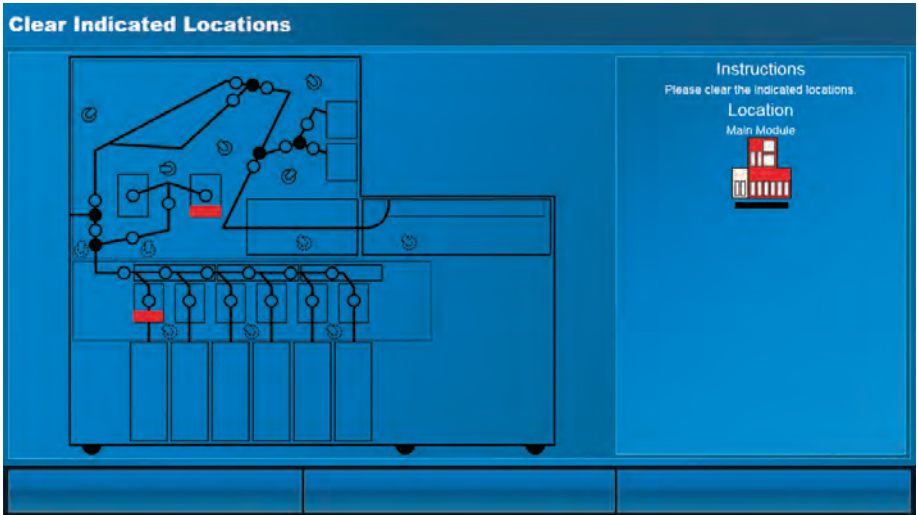
8. The following screen appears.



Read and follow the instructions shown in the right panel of the screen.

Reprocess or manually enter flushed items by doing one of the following:

a. Place all items that were removed from the sort locations in front of the lead paddle in the feeder for reprocessing.

   i   Once all items are returned to the feeder, press **Start** to begin processing.

   ii  If items are sent to the upper offsort pocket, reprocess them as part of the jam reconciliation.

   iii If items are sent to the lower offsort pocket, leave them in the lower offsort pocket and reprocess them as part of the normal reject process.

   iv  Once all flushed items are processed, press **Done** to return to the main-processing screen.

b. Use the screen above to enter **Manual Currency** and **Tickets**.

   When all flushed items are reprocessed or manually entered, press **Done**.

9. A warning screen indicating a control document was detected while reprocessing can appear during jam reconciliation. This indicates that either:

   a. A control document was mixed in with flushed documents.

      If this occurs, press **OK** and ignore this screen.

   b. The operator did not follow instructions in Step 5 above and is now running the next batch.

      If this occurs, two batches have potentially been combined into a single batch. Use the second paddle, as described in Step 5 above, and complete the jam reconciliation.

---

**Condition ▸** An attempt is made to set a cassette limit that is not within the acceptable range on the Configure Sort Mode screen.

**Action ▸**

1. Note the acceptable range for a cassette limit, which is shown on the error screen.

2. Press **OK** to clear the error and return to the Configure Sort Mode screen.

3. Set the cassette limit within the acceptable range.

**Limit out of range**



The limit must be in the range: 50-2000

OK
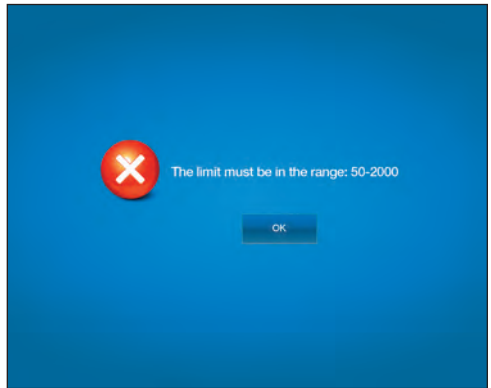
**Condition** ▸ A sensor is blocked, dirty or not functioning properly.

**Action** ▸ Use the screen to guide recovery.

In the right panel:

1. Review the Instructions section which describes the problem.

2. Review the Details section which identifies the area of the machine that needs attention.

3. Review the machine diagram to locate the issue:

   a. A yellow indicator (dot) highlights a sensor that is dirty.

   b. A red indicator (asterisk) highlights a sensor that is blocked or not functioning properly.

4. Carefully clean sensors.

5. Press **OK** to continue.

**Sensor error**



Alert: A sensor error has occurred!

---
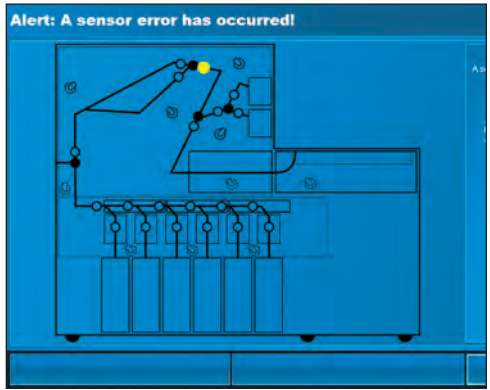
**Condition** ▸ The machine cannot start because of a hardware problem.

**Action** ▸ Use the screen to guide recovery.

In the right panel:

1. Review the Instructions section which describes the problem.

2. Review the Details section which identifies the area of the machine that needs attention.

In this example, the operator would ensure the upper door is fully closed.

**Start error**



t start!

Instructions
Resolve the indicated problems that are preventing the motors from starting
Code
9
Details
Upper door is open

If an error screen cannot be resolved and continues to appear, contact a Cummins Allison representative.
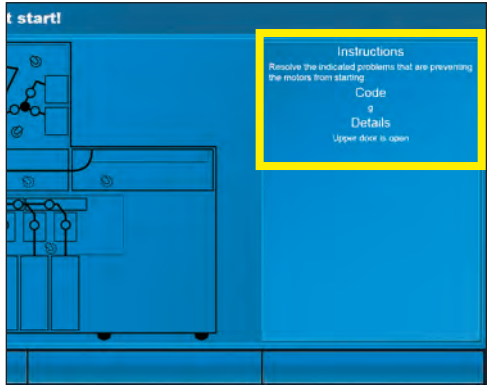
# Daily cleaning procedures

Daily cleaning is required to ensure maximum productivity and reliability. In some instances, it may be necessary to perform these procedures more than once a day.

## Recommended cleaning materials

The following cleaning materials are recommended:

**⚠CAUTION** Simple Green, the recommended cleaning agent, can be an eye irritant. Avoid eye contact.

If eye contact occurs, flush eye(s) with cool water for 5 minutes - remove contact lenses if present - continue flushing eye(s) with cool water for 15 more minutes. If irritation persists, consult physician.

Individuals with sensitive skin should rinse hands after using.

- **Simple Green Safety Towels.** (Part number: 022-2118-00.) A pre-moistened microfiber towel also may be used. If using Simple Green concentrate, dilute to 1 ounce (30 ml) of Simple Green per 8 ounces (240 ml) of water. See simplegreen.com for safety data sheets.
- **Microfiber towels.** (Part number: 022-2223-00.)
- **Non-chemically treated mini dusters.** (Part number: 022-2224-00.)
- **Vacuum.** (Standard vacuum part number 022-1959-00; heavy-duty vacuum part number 022-1308-00.)

## Daily cleaning

**⚠WARNING** Risk of injury.

Turn power **OFF** before cleaning machine.

Do not defeat safety interlock switches.

**NOTICE** To avoid machine/component damage and potential voiding of existing warranty, follow these procedures:

Only use specified tools for cleaning machine. Never use metal tools.

If using Simple Green concentrate, dilute to 1 ounce (30 ml) of Simple Green per 8 ounces (240 ml) of water.

Never use cleaners containing ammonia.

Never spray cleaners directly on machine components.

## Turn OFF machine

1. Press **master power switch** to turn power **OFF**.

   Switch is not illuminated.
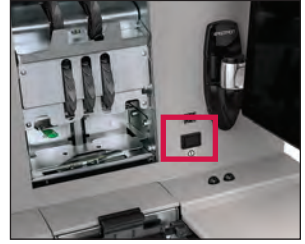


## Feeder module

1. Open upper-access door to service position.



2. Pull out feeder to service position.



3. Pull out handle and push bottom transport plate down to service position.



4. Wipe upper and lower feeder plates with a dry microfiber towel.

5. Wipe feed and drum rollers with a Simple Green Safety Towel.
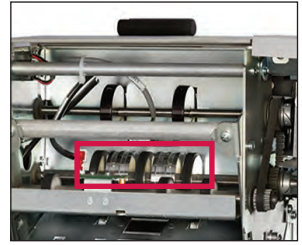
6. Lift bottom transport plate and return it to operating position.

7. Push feeder toward main unit to operating position.

8. Vacuum bottom of feeder tray.
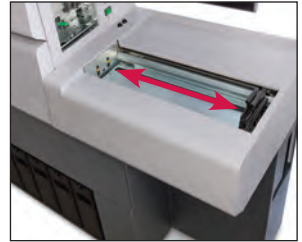
## Scanning module

1. Pull out scanning module to service position.

   Follow steps below to raise upper transport plate to the service position:

   a. Open latch.

   b. Grab handle and lift transport plate while pulling out kickstand.

2. Wipe rollers and imaging sensors (identified with arrows) on the upper and lower transport plates with a dry microfiber towel.

3. Follow steps below to lower upper transport plate to operating position:

   a. Grab handle and guide transport plate down while pushing in kickstand toward main unit.

   b. Close latch.

   Push in scanning module toward main unit to operating position.

# Transport assembly

1. Keep upper-access door open in service position.

2. Wipe sensors and reflectors in offsort pockets with a dry microfiber towel.
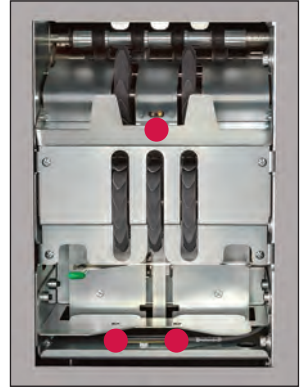


3. Following normal document flow, wipe U-shaped and diverter flow-control sensors in the transport assembly and transport-belt path with a dry, non-chemically treated mini duster.



🔴 U-shaped flow-control sensors

🔵 Diverter flow-control sensor
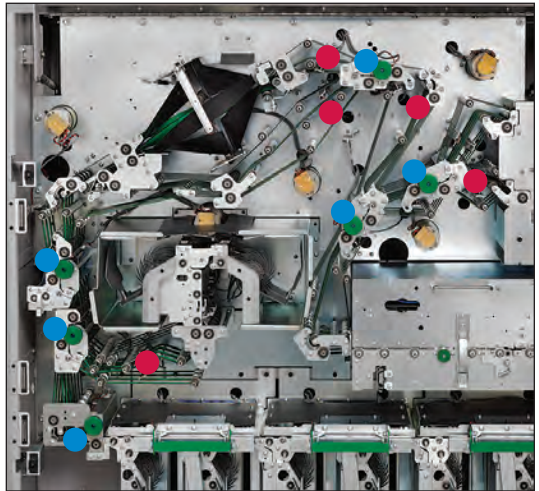
**U-shaped flow-control sensors**



To clean:

1. Wipe between flow-control sensors (red bars).

**Diverter flow-control sensor**
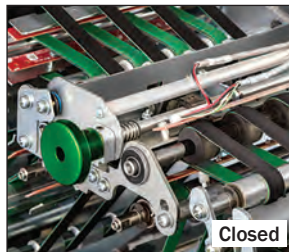

Closed
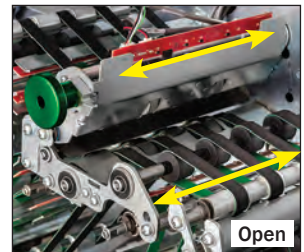

Open

To clean:
1. Pull green knob and lift plate.
2. Wipe below top red bar.
3. Wipe above lower red bar.
4. Pull green knob and close plate.

4. In optional integrated pocket module, wipe stacker sensors and reflectors with a dry microfiber towel.
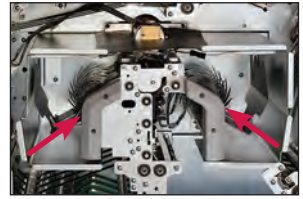


5. In optional integrated pocket module, wipe pocket count sensors with a dry microfiber towel.
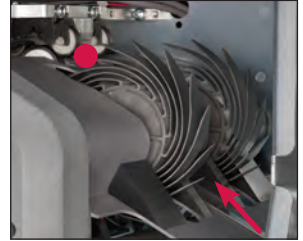


6. In optional integrated pocket module:

   • Lift green lever and raise right transport plate to service position.

   • Wipe left (vertical) and right (raised) transport plates with a dry microfiber towel.

   • Lock right transport plate in operating position. Lower plate and hold it in place while pressing down on green lever.
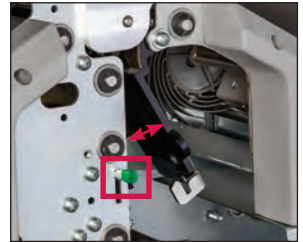


7. Following normal document flow, vacuum offsort pockets and transport-belt path.

**Offsort pockets**



**Transport-belt path**
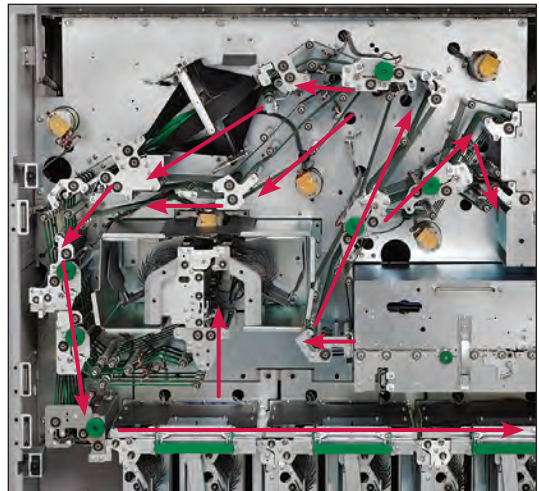


8. Verify all transport belts are in place.

## Lower transport path

1. Open lower-access door to service position.

   Locate the three green latches.
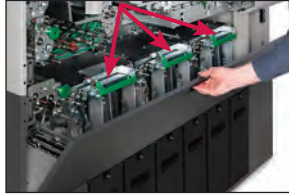
2. Repeat steps below for all three green latches:

   a. Lift green latch, raise upper transport plate and hold it in service position.

   b. Wipe upper and lower transport plates with a dry microfiber towel.
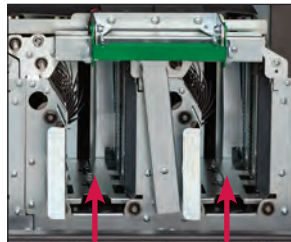
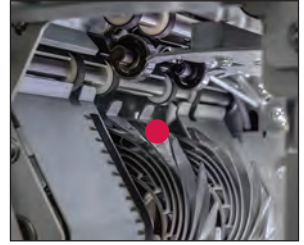   c. Lower upper transport plate to operating position.
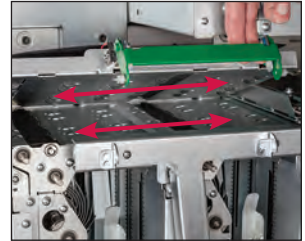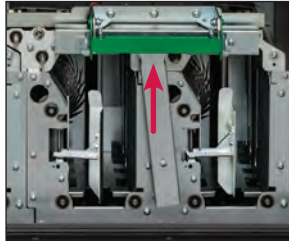
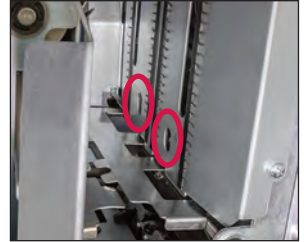## Escrow pocket area

1. Open tampers on all escrow pockets.
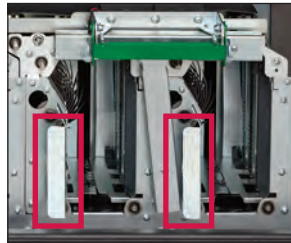
2. Vacuum inside all escrow pockets.

3. Wipe pocket count sensor in all escrow pockets with a dry microfiber towel.



4. Wipe empty pocket sensors in all escrow pockets with a dry microfiber towel.



5. Close tampers on all escrow pockets.

6. Close lower-access door.
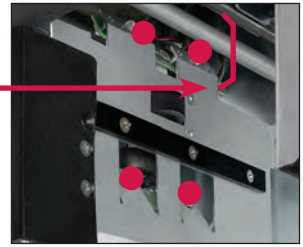
7. Close upper-access door.

## Cassette bays

1. Remove all cassettes from bays.

2. Vacuum bay area, as shown at right.

3. Wipe sensors on left and right sides of all cassette bays with a dry microfiber towel.



**Also wipe top 2 sensors on right side**

**4 sensors on left side**

4. Inspect cassettes for wear.

5. Return cassettes to bays.

## Machine exterior

1. Use a Simple Green Safety Towel to clean exterior machine surfaces as needed.

## Resuming operation

**Prior to POWERING ON the MPX 8200, make sure the feeder and scanning modules are in the operating position and all access doors are closed, otherwise the machine will not function.**

1. Press **master power switch** to turn power **ON**. Switch illuminates in green.
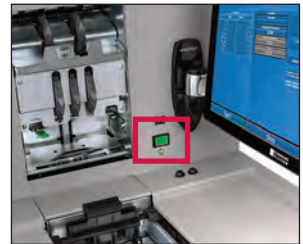


2. Process a small number of notes to verify machine operation.

# Notes

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