JetScan® MPX 8200
Automatic-strapping module and corner module

User guide

Strapping module

Corner module

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.

Press MPX 8200 master power switch **OFF** before cleaning any automatic-strapping module and any corner module.

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.

Automatic-strapping module

- **Voltage operating range:** 105-130 VAC
- **Frequency:** 50/60 Hz
- **Full load amps (FLA):** 3A
- **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.

Corner module

The corner module does not have a power cord or a power switch. It obtains power from the adjacent automatic-strapping module.

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.

Table of contents

About this guide

The automatic-strapping module and corner module are options for the JetScan® MPX 8200 multi-pocket sorter.

A strapping module:

- Separates a single denomination into stacks of 100 notes and automatically wraps a paper strap around each stack.

- Can be configured to strap any denomination.

- Uses a two-bin, strap-collection system for continuous operation. Each bin can be configured to hold 10, 20 or 30 straps.

A corner module is used to configure a JetScan MPX 8200 system with automatic-strapping modules into an L- or U-shaped layout for placement in smaller locations and improved ergonomics.

Contact a Cummins Allison representative for information on configuration options.

See the JetScan MPX 8200 user guide (022-8101-00) for:

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

- **Key machine functions.**

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

- **Additional daily cleaning procedures.**

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

- **Comprehensive machine functions.**

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

Strapping module diagram
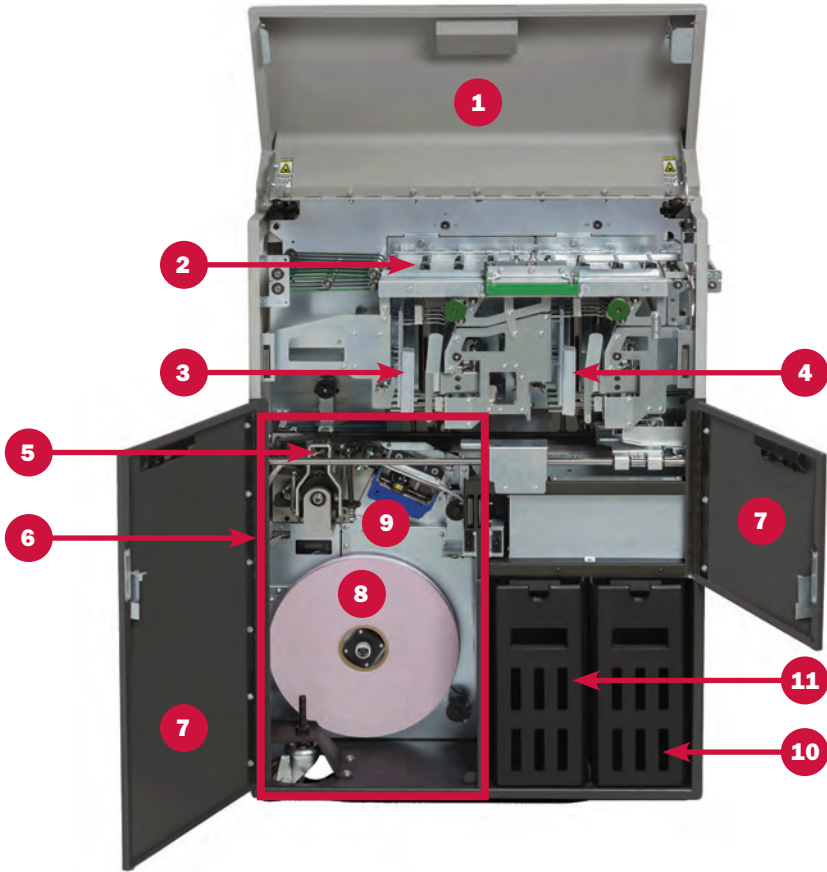
| No.	Item	No.	Item
1	Upper-front access door (transport access door)	**7**	Lower paper-roll access door
2	Transport path	**8**	Paper roll
3	Note stacker No. 2 (left)	**9**	Printer ribbon cartridge
4	Note stacker No. 1 (right)	**10**	Collection bin No. 1 (right)
5	Strap head	**11**	Collection bin No. 2 (left)
6	Strapping section		

Strap head

The surface below the strap head on a strapping module becomes hot during machine operation. Avoid contact.

⚠ CAUTION — Burn hazard. Hot surface below strap head.

Do not touch.

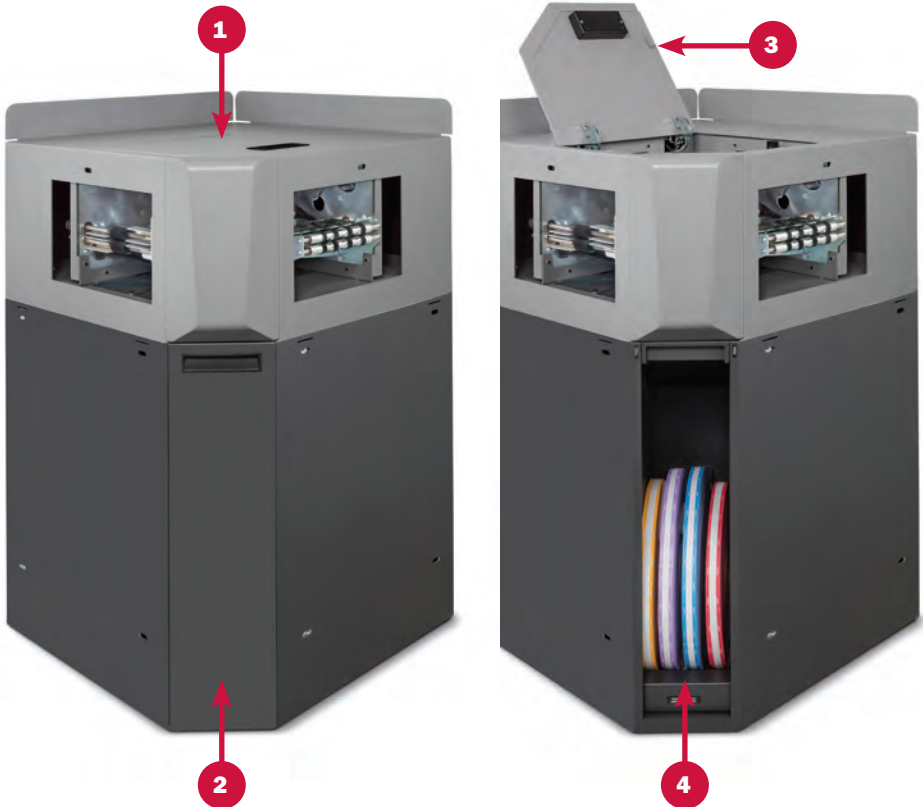| No.	Item
1	Strap head location
2	Strap head
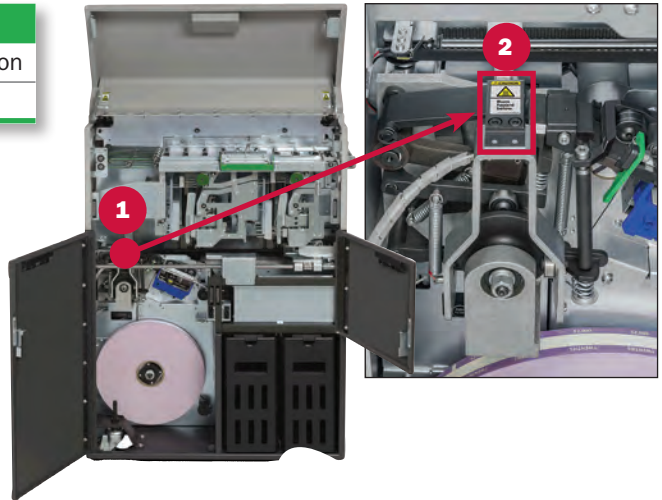
Hinges on upper-front access door

Hinges on the left and right side of the upper-front access door on the strapping module are pinch points. Keep hands away from the hinges as the door is opened and closed.

⚠ CAUTION — Hinges on each side of upper-front access door are pinch points (see above).

Keep hands clear.

Corner module diagram

| No.	Item
1	Top door closed
2	Paper-roll storage access panel on
3	Top door open
4	Paper-roll storage access panel off

Maintaining bins

Empty the strapped-note collection bin when:

- One bin is full.

- Two bins are full, and the machine stops processing. Empty both collection bins to continue operation.

To empty a full bin:

1. Locate the full bin:

   - The **Alert: Strapper bin limit reached!** screen identifies a full bin in green, as shown below.

   - A green light also illuminates on the top of the bin that is full.
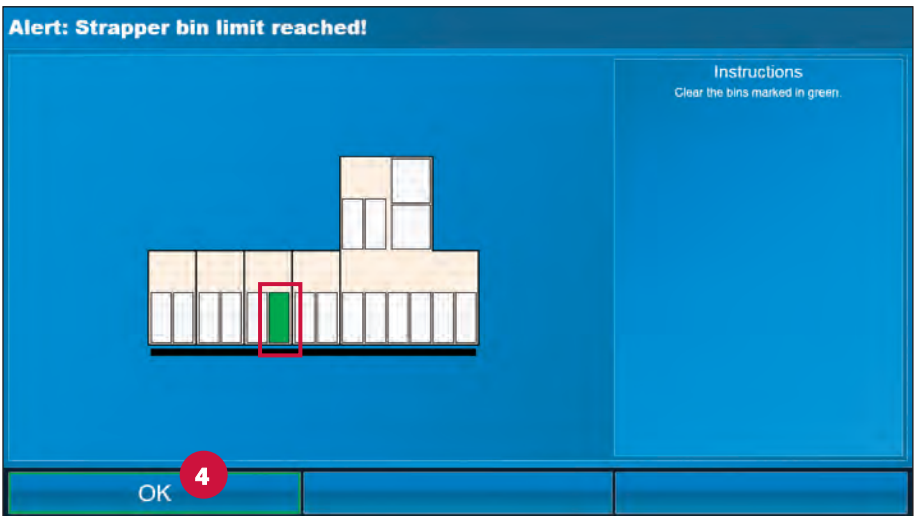
2. Remove the full bin and empty its contents. The top of any strapping module can be used as a work surface.

3. Return the empty bin to the strapping module.

🔑 **A warning message appears on the main-processing screen if the empty bin is not completely inserted into the strapping module.**

4. Press **OK** on the **Alert: Strapper bin limit reached!** screen. **OK** may be pressed before or after any full bin is removed and emptied.

Maintaining paper rolls

To remove an existing paper roll or an empty paper-roll core from a strapping module:

1. Open the upper-front access door and lower paper-roll access door.

**⚠CAUTION**   Burn hazard. Hot surface below strap head.

Do not touch.

See the **Strap head** section for more information.

2. Disengage the loose end of the strapping paper from the strap head by doing one of the following:

   a. Turning the top, small feed roller counter-clockwise.

   b. Turning the bottom, large feed roller clockwise.
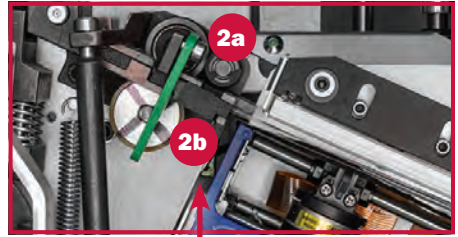
3. Gently pull the vertical section of strapping paper along the inside, right wall of the cabinet so it is completely free of all guides.
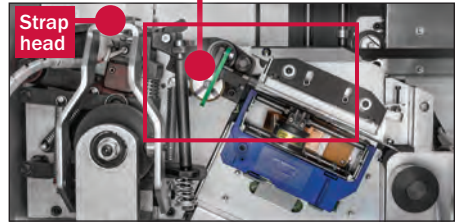
4. Wind the paper roll in a counter-clockwise direction, until the paper is free from the paper path and completely wound around the paper roll, as shown at right.
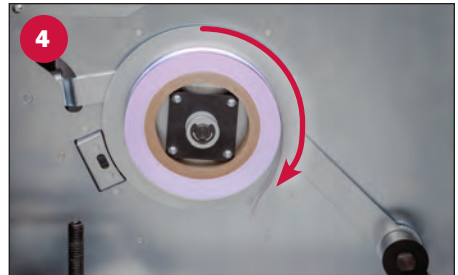
5. Pull the paper roll or empty core off the paper-roll shaft.

6. Set the paper roll aside or discard the empty core.

To load a new paper roll on a strapping module:

1. Open the upper-front access door and lower paper-roll access door.

2. Firmly push the paper-roll core onto the paper-roll shaft until it stops, making sure it is inserted so the paper unwinds in the clockwise direction.

3. Unwind approximately 18 inches (46 cm) of paper.

   Make sure the end of the paper has a clean, straight edge. It is recommended to cut a new edge with scissors each time paper is loaded.


Acceptable edge

Unacceptable edge

4. To finish threading the paper:

   a. Thread the paper through the identified opening.

   b. Thread the paper over the black guide roller.

   c. Push the end of the paper into the upper paper feed, as identified at right, until it stops at the rollers. Ensure the back edge of the paper is flush against the back of the paper path as it is guided through and into the upper paper feed.

   d. Rotate the top, small roller clockwise or the bottom, large roller counter-clockwise until the green LED illuminates, which indicates the paper's leading edge is in the correct position.
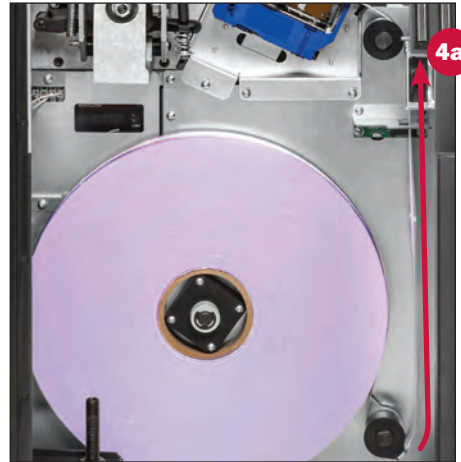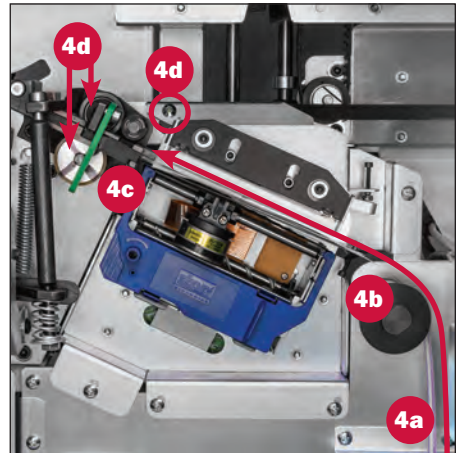

5. Close the upper-front access door and lower paper-roll access door. The paper jogs forward and then backward into position. If the paper does not jog, repeat steps 1, 4 and 5.

> Beware of paper wrinkling or a paper-crunching sound. If the paper wrinkles or produces a jam:
>
>   • **Clear the jam.**
>
>   • **Cut a new paper edge with scissors.**
>
>   • **Repeat steps 4 and 5.**

6. The strapping module is now ready to operate.

Maintaining printer ribbon cartridge

**To change the printer ribbon cartridge on a strapping module:**

1. Open the upper-front access door and lower paper-roll access door.

2. Firmly grasp the top and bottom of the printer ribbon cartridge and pull outward to remove the cartridge from its holder. Discard the used cartridge.

3. Firmly grasp the left and right sides of the new printer ribbon cartridge and push it into the cartridge holder until it snaps into place.

4. Close the upper-front access door and lower paper-roll access door on the strapping module.

After closing all access doors, ensure the upper paper-feed mechanism jogs the paper forward and then backward into its home position.

If the paper does not jog, review how to load a paper roll in the **Maintaining paper rolls** section.

5. The strapping module now is ready to operate.
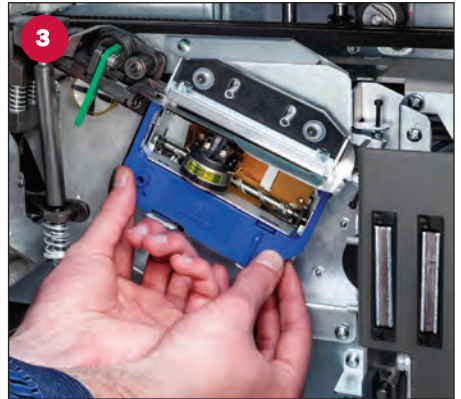
Configuring strap length and printing

See the JetScan MPX 8200 operating instructions for complete information on system setup.

To tighten or loosen strap length, set bin limits and set facing:

1. Press the **Menu** tab on the main-processing screen.

2. Press **Setup** on the **Menu** tab screen.

3. Press **Configure Sort Modes** and then press the **desired sort mode button** to prompt a **Configure Sort Mode** screen, as shown below.
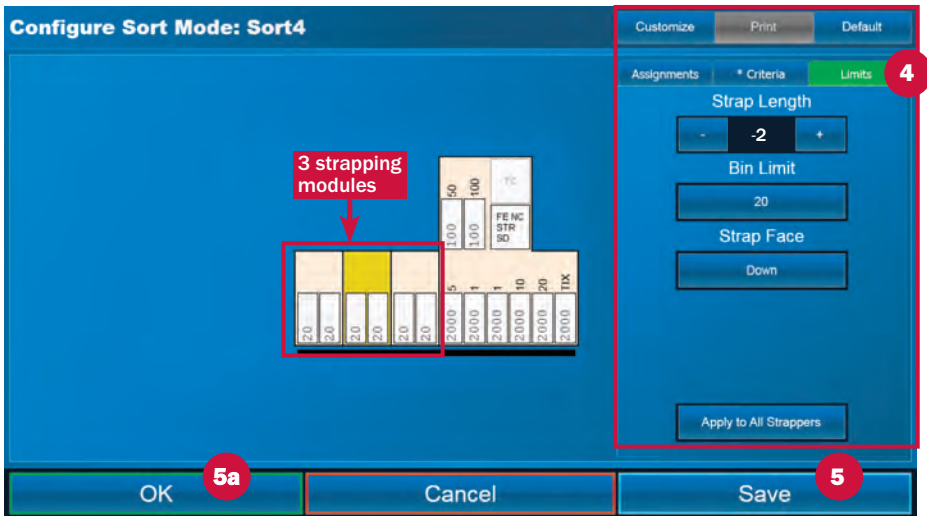

4. Press the **Limits** tab to:

   a. Tighten or loosen strap length, depending on note condition. This is helpful when sorting notes of different ages and quality (new brick vs. older/highly used). Press **+** to increase strap length; press **–** to decrease strap length. Strap length can be different for each strapping module. To return all strap lengths to factory settings, press **Default**.

Adjusting the strap length is a trial-and-error process. Straps that are too tight may break. When straps are too loose, documents may slip out when the strap falls into or is removed from the collection bin.
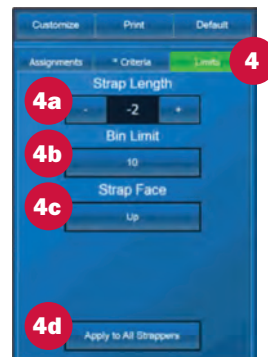
b. Set the Bin Limit to **10**, **20** or **30** straps. Press the button to select the limit. The limit can be different for each strapping module.

c. Set the Strap Face to **Up** (portrait side up in strapper) or **Down** (portrait side down in strapper). Repeatedly press the button and stop on the desired facing.

d. If desired, press **Apply to All Strappers** to use the selected settings on all configured strapping modules.

5. Press **Save** to save all changes. A successful save confirmation screen appears. To return to the main-processing screen, do the following:

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.

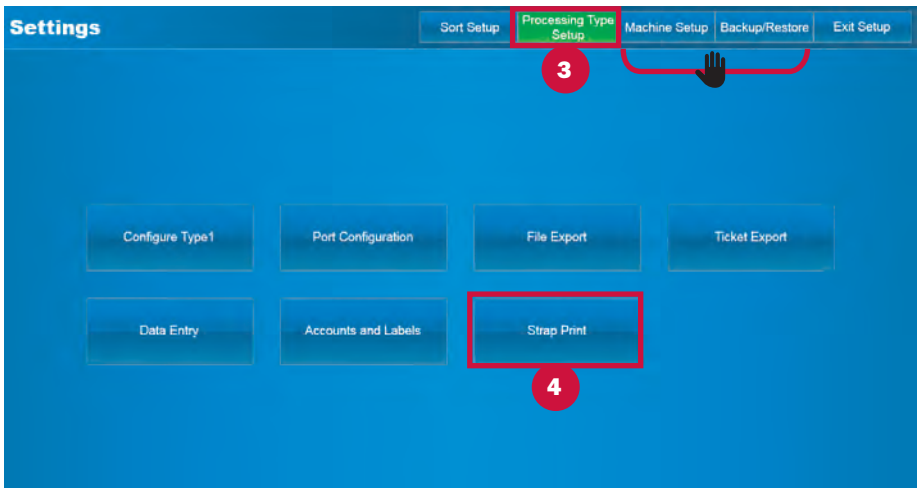e. Press the **Processing** tab to prompt the main-processing screen.

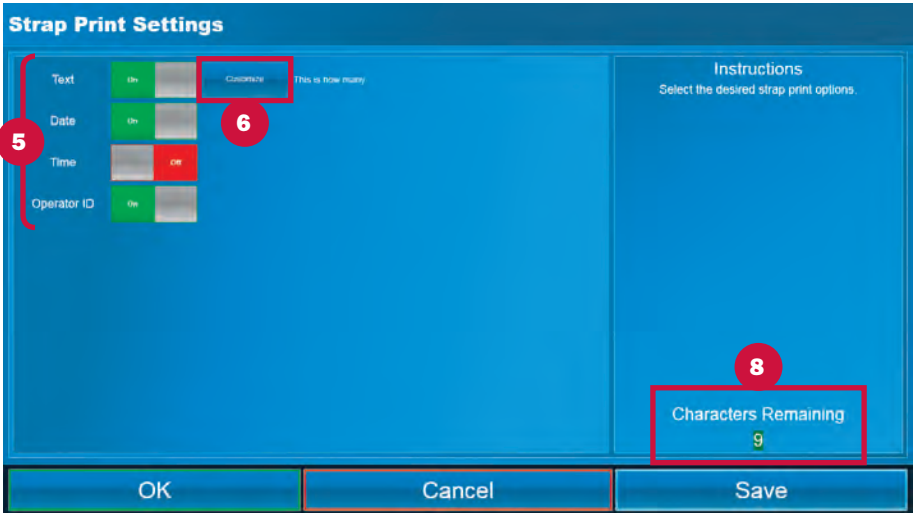**To print a custom message, date, time and operator ID on strapping paper:**

1. Press the **Menu** tab on the main-processing screen.

2. Press **Setup** on the **Menu** tab screen.

3. Press **Processing Type Setup** to prompt the **Settings** screen below.

The Machine Setup and Backup/Restore tabs are for use only by trained Cummins Allison service technicians.

4. Press **Strap Print** to prompt the **Strap Print Settings** screen.

Strap Print Settings

Text	On	Customize	This is how many
Date	On	**6**	
Time		Off	
Operator ID	On		

5

Instructions
Select the desired strap print options.

8

Characters Remaining
9

OK	Cancel	Save

5. Press **On** or **Off** to enable or disable printing of the following information on strapping paper: Text (custom message), Date, Time and Operator ID. Operator ID refers to the user who is signed onto the system during the strapping operation.

6. Press **Customize** to prompt a keyboard screen and type a custom alpha-numeric message.

    When complete, do one of the following:

    · Press **OK** to save the custom message.

    · Press **Cancel** to delete and eliminate the custom message.

    The **Strap Print Settings** screen appears.

7. The maximum length for all fields combined – Text (custom message), Date, Time and Operator ID – is 40 characters.

    When the 40-character limit is exceeded, the screen at right appears.

There are too many characters!

OK
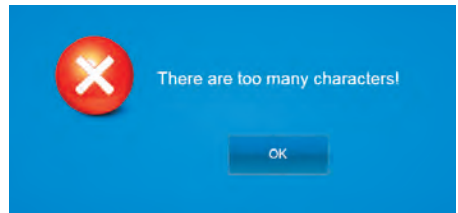
8. The value under Characters Remaining on the bottom right side of the screen indicates character-limit status.

   If the number is positive and highlighted in green, additional characters can be used.

   If the number is negative and highlighted in red, the 40-character limit is exceeded. If the combined settings are not reduced to 40 characters or less, the Text (custom message) is cut off after the 40th character.

   To bring the combined number of characters below the 40-character limit, do one or both of the following:

   · Reduce the length of the Text (custom message). Press **Customize** and use the **backspace key** to change the message.

   · Disable the Date, Time or Operator ID.

9. When configuration is complete:

   a. Press **Save**, followed by **OK** to prompt the **Processing Type Setup** tab / **Settings** screen.
   b. Press the **Exit Setup** tab to prompt the **Menu** tab screen.
   c. Press the **Processing** tab to prompt the main-processing screen.

Stopping conditions and recovery steps

🔑 See the JetScan MPX 8200 user guide and operating instructions for additional stopping conditions and recovery steps.

The JetScan MPX 8200 system can stop for a variety of reasons, all of which require action by the user. When an error screen appears, follow instructions on the screen to recover from the error. These instructions indicate which strapping module is involved, where the error is located, and the proper recovery procedures. This section includes error screens in which additional steps may be required.
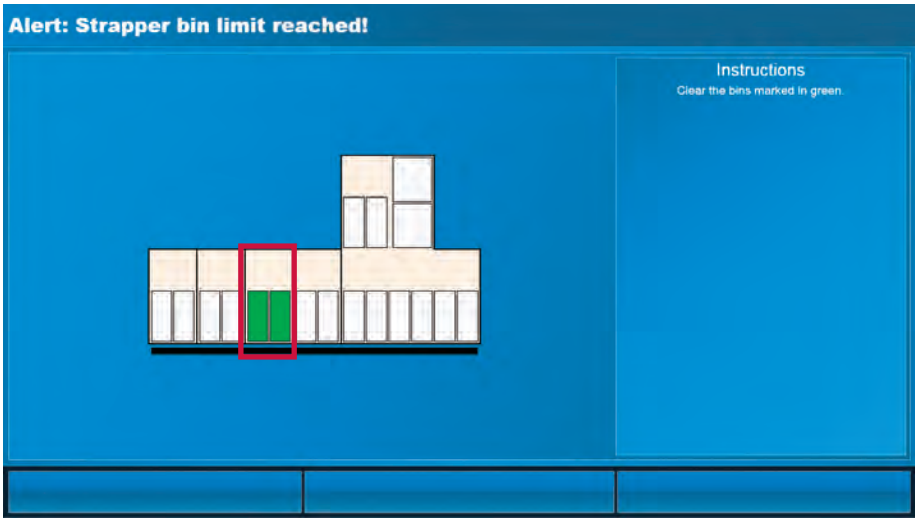
Bin alert - one reaches limit
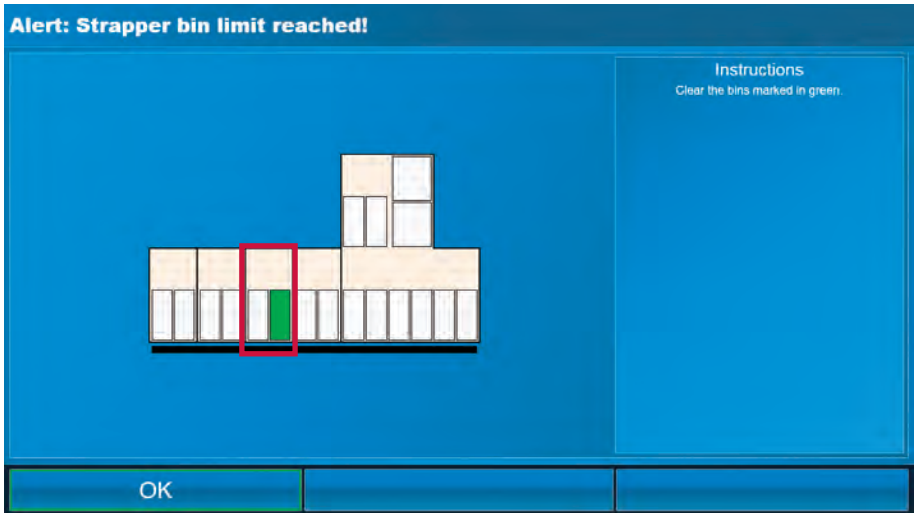
Condition ▸ This screen appears when the configured bin limit is reached on one strapping module. The screen shows:

- The bin at limit, which is highlighted in green.
- The associated strapping module.

Action ▸ Follow the steps below:

1. Remove the full bin from the strapping module.

2. Do one of the following:

   a. Empty the full bin and return it to the strapping module.
   b. Remove the full bin and replace it with an empty bin.

3. Press **OK** to clear the warning.

Bin alert - two reach limit

Alert: Strapper bin limit reached!

Instructions
Clear the bins marked in green.

Condition ▶ This screen appears when the configured bin limit is reached on both bins in one strapping module. The MPX 8200 stops processing until this error is corrected. The screen shows:

- The bins at limit, which are highlighted in green.

- The associated strapping module.

Action ▶ Follow the steps below:

1. Remove both full bins from the strapping module.

2. Do one of the following:

   a. Empty the full bins and return them to the strapping module.

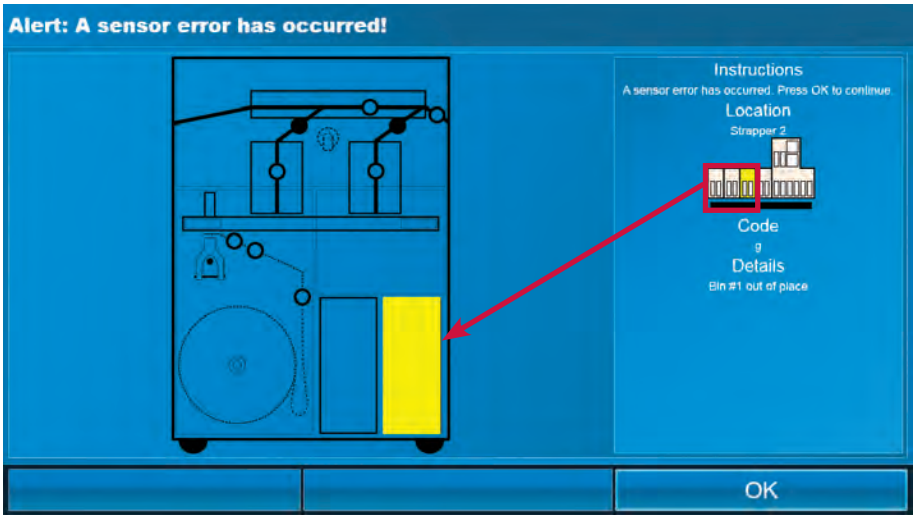   b. Remove the full bins and replace them with empty bins.

> The alert screen clears once both full bins are removed from the strapping module.

3. Press **Continue** on the main-processing screen to continue operation.

Bin alert - out of place

Condition ▶ This screen appears when a bin is not fully inserted into a strapping module and a sensor error occurs. The screen shows:

· The bin that is out of place, which is highlighted in yellow.

· The associated strapping module.

Action ▶ Follow the steps below:

1. Push the bin fully into the strapping module.

2. As indicated on the screen, **do not** remove any documents from the strapping module for reprocessing.

3. Press **OK** to clear the warning.

Jam recovery

When a jam condition occurs in the strapping module, the MPX 8200 motors immediately stop and a **jam** screen appears, describing the problem and how to recover from it. Each jam type has a unique screen.
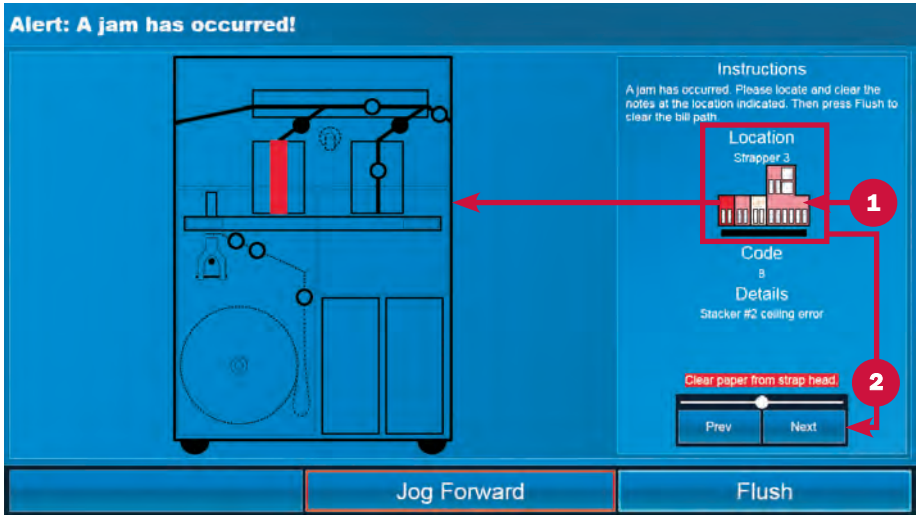
To recover from all jam conditions:

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. Review the system diagram under Location on the right side of the screen. The red component is shown in detail on the left side of the screen. Other jam locations are marked in pink.

2. Begin by clearing a jam in a strapping module. Press **Prev** (previous) or **Next** in the bottom right corner of the screen to select a strapping module jam in the system diagram under Location. The selected location is red.

3. Open the upper-front access door and the lower paper-roll access door.

4. Remove the jammed document and any document that is nearby and at risk of causing an additional jam. Use care when removing documents in the strap head area.

**⚠CAUTION** Burn hazard. Hot surface below strap head.

Do not touch.

See the Strap head section for more information.

5. Press **Jog Forward** if the button is shown on the screen to move (jog) the transport path forward to free a document. Inspect the surrounding area for obstructions or foreign objects and remove them.

6. Press **Prev** (previous) or **Next** in the bottom right corner of the screen to select the next jam and repeat steps 4-5. Continue this process until all jams are cleared.

7. Close the upper-front access door and the lower paper-roll access door.

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

8. Press **Flush** to ensure the transport path is clear. Motors momentarily run and then automatically time out and stop.

9. A **Strapper Reset** screen appears if a reset procedure is required. Press **Reset**. The screen refreshes when the procedure is complete. Press **OK** to continue.
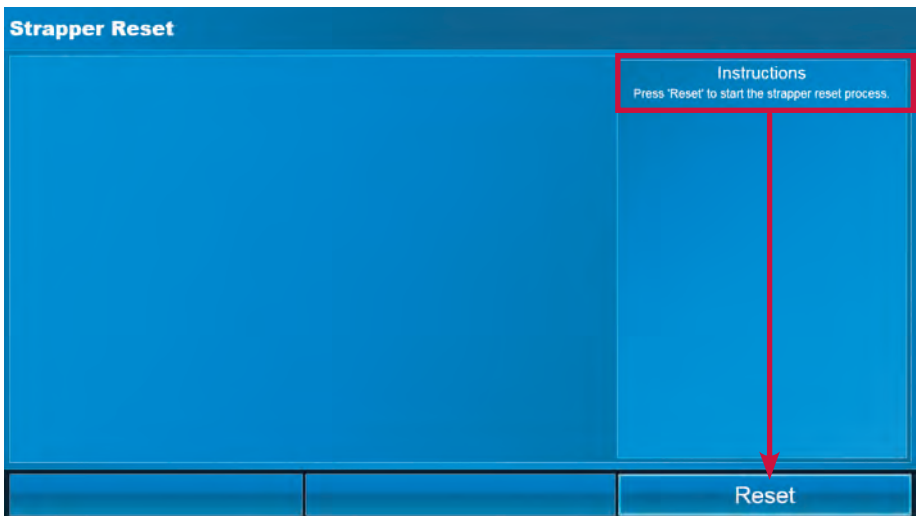
10. The **Clear Indicated Locations** screen appears when steps 8 and 9 are complete. The screen indicates locations where documents must be removed.
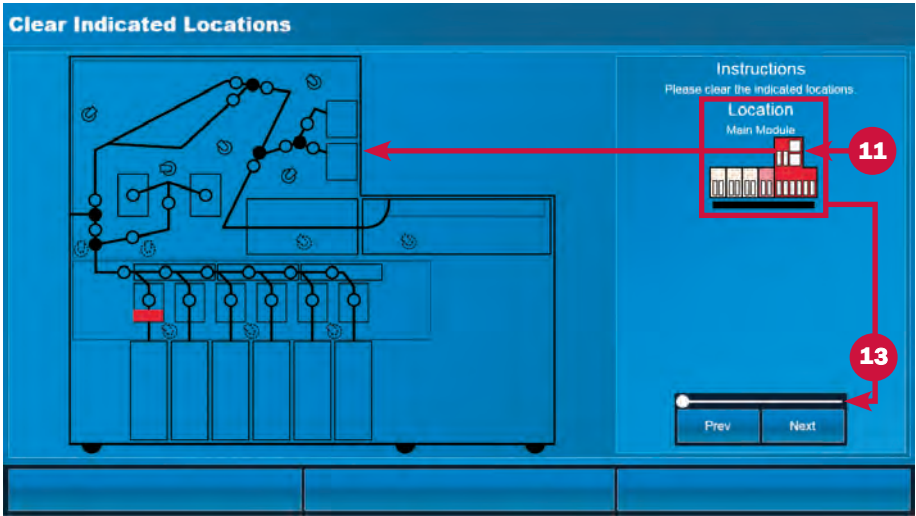
11. Review the system diagram under Location on the right side of the screen. The red component is shown in detail on the left side of the screen. Other locations where documents must be removed are marked in pink.

12. Open access doors if needed. Remove documents from the red location.

To prevent counting errors, only remove documents that the screen identifies.

13. Press **Prev** (previous) or **Next** in the bottom right corner of the screen to select the next component closest to the MPX 8200 main unit and remove documents from this location. Continue this process until all documents are removed and the system diagram under Location is white.

14. The following screen appears when document removal is complete and all access doors are closed. Press **OK** to return to the main-processing screen.

15. Return all removed documents to the feeder.

> To prevent counting errors, only reprocess documents that were removed as instructed.

16. Continue processing the transaction.

> Contact a Cummins Allison representative if jam recovery is not successful or a screen cannot be cleared.

Daily cleaning procedures

See the JetScan MPX 8200 user guide for additional 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 procedures

⚠WARNING

Risk of injury.

Press MPX 8200 master power switch **OFF** before cleaning any automatic-strapping module and any corner module.

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.

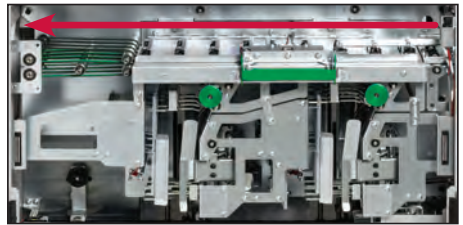Never spray cleaners directly on machine components.

Turn OFF MPX 8200

1. Press MPX 8200 **master power switch** to turn power **OFF**. Switch is not illuminated when power is **OFF**.
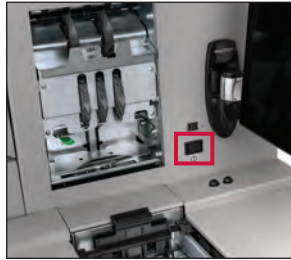
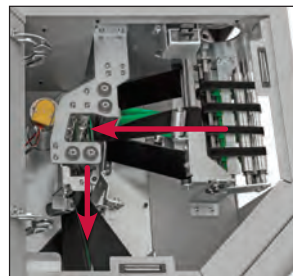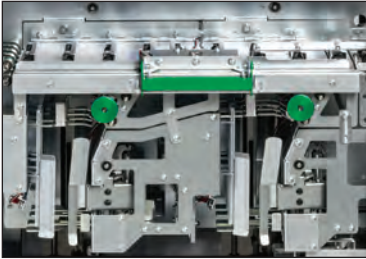

Transport assembly on strapping, corner modules

1. Open all doors to service position on strapping modules. Vacuum main transport-belt path following normal document flow.

2. Open top doors on corner modules to service position. Vacuum main transport-belt path following normal document flow.

3. Clean upper transport section on strapping module as follows:

   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.

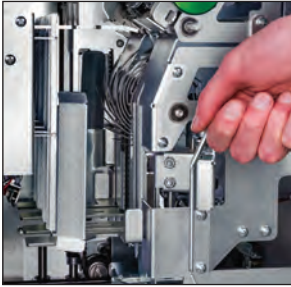   c. Lower upper transport plate to operating position.

4. Verify all transport belts are in place.

5. Keep all doors on strapping modules in service position. Close top doors on corner modules.
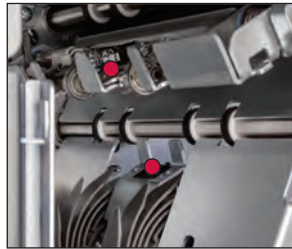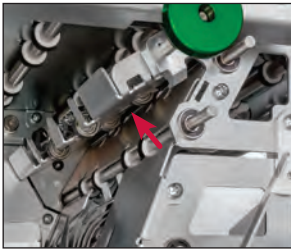
Escrow pockets on strapping module

1. Repeat steps below for both escrow pockets:

   a. Hold tamper open.

   b. Vacuum interior of escrow pocket.

   c. Close tamper.

2. Repeat steps below for both escrow pockets:

   a. Pull green knob and raise plate to service position.

   b. Wipe stacker-count sensors and emitters between stacker wheels with a dry, non-chemically treated mini duster.

   c. Lock plate in operating position. Pull green knob and lower plate.
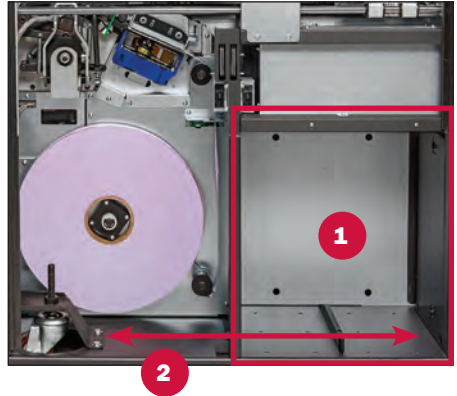

3. In both escrow pockets, wipe pocket sensors and emitters with a dry, non-chemically treated mini duster.

Collection bin, paper roll bays on strapping module

1. Remove both collection bins from bay.

2. Vacuum base of paper roll bay and interior of collection bin bay.

3. Inspect bins for wear.

4. Return bins to bay.

5. Close all doors on strapping module.

Exterior surfaces

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 all access doors are closed on the MPX 8200, all strapping modules and all corner modules, otherwise the machines will not function.

1. Press MPX 8200 **master power switch** to turn power **ON**. Switch is illuminated in green when power is **ON**.

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

Notes

CA CUMMINS
ALLISON

852 Feehanville Drive Mt. Prospect, IL 60056 **T** 800 786 5528 cumminsallison.com

022-8272-00 Rev. A