Lotem 800 - Troubleshooting

Problem: Paper Disposal Problems

Problem Description:

During plate loading, the machine suddenly stops and an error message is displayed on-screen.

Note: This problem can occur during several stages of operation, and paper may or may not be jammed in the machine.

Error Message:

Either of the following error messages may be displayed:

- Paper stuck in cassette
- Goto position task timeout (4477)

Machines Affected:

Lotem™ 800 (S-speed)

Lotem™ 800 (F-speed)

Lotem™ 800 Quantum

Lotem™ 800 Spectrum

Software Products and Versions:

N/A

Operating System:

N/A

Probable Causes:

- Inappropriate values entered for specific parameters
- Poor plate storage conditions
- Excess static electricity
- Plates not properly loaded in Cassette
- Paper Disposal Rollers dirty and/or malfunctioning
- Paper Clips dirty and/or damaged
- Bar Flag or Bar Flag Detector malfunction
- Loading System out of alignment
- Paper Disposal Detector malfunction
- Paper Disposal Solenoid malfunction

Documentation Key

This document uses two graphic indicators, as follows:

- ✓ The check mark indicates items that need to be checked and/or verified.
  - ⇨ The arrow indicates an action that needs to be taken. Each action pertains to the item directly above it.

Note: If at any point in the troubleshooting procedure you feel that the problem has been resolved, you can either perform plate loading, or continue to the end of the procedure.

Before the Customer calls the Response Center

There are several troubleshooting steps that the customer should complete before calling the Response Center. These steps can prevent extensive down-time and expensive service calls by enabling the customer to solve problems independently. These steps are fully explained in the section titled, "Troubleshooting Procedure". Ideally, the customer will have completed these steps before calling the Response Center, and also, reviewed the following questions and written the answers down. Either way, it is mandatory that you review the following questions with the customer, and verify whether the troubleshooting procedure was properly performed.

1) Ask the customer the following questions (record the answers):
   - ✓ Was an error message displayed on screen? If yes, what did it say (include numbers, if any).
     - ⇨ If the "Y Motor Goto position task timeout" error message was displayed, check the value for the "Paper Y Down In Cassette" parameter. If the value for this parameter is not "6", change the default value to "6".
   - ✓ When was the last time the machine worked properly?
   - ✓ What was done since then? For example,
     - Was the machine moved?
     - Was the machine cleaned?
     - Was a new batch or type of plates used?
   - ✓ What is the software version?
     - ⇨ In the PC Controller, select **Utilities > Machine Info**. The version is displayed.
   - ✓ At what stage of operation does the problem occur?
   - ✓ What color is the paper that is between the plates? If it is white:
     - ⇨ Contact the supplier and request plates that are separated by darker paper (not white).

- ✓ Does the problem happen all the time (with all plates), or just some of the time? For example,
  - With a particular plate brand, type and/or size?
  - Only when a few plates are left in the Cassette?
  - Does the problem seem to be a random occurrence?
- ✓ What are the temperature and humidity levels in the plate storage room? For example:
  - Do they adhere to the plate manufacture's guidelines? If not, in what ways?
  - Does the temperature fluctuate radically?

Troubleshooting Procedure

1) Verify that the appropriate values have been entered for the following plate separation parameters in the Registry:

   Note: It is recommended to use the default values for these parameters. If it is necessary to change them, do not change them by much.

   - ✓ HKEY_LOCAL_MACHINE\SOFTWARE\Scitex\Projects\Lotem800V\IOOBJECTS\Loading System\Load Plate\From Cassette To Punch Entry Stage\Y Plate High Up In Cassette (Rel)(mm)+Y Plate Rel Up In Cassette (mm)
   - ✓ HKEY_LOCAL_MACHINE\SOFTWARE\Scitex\Projects\Lotem800V\IOOBJECTSY\Loading System\Load Plate\From Cassette To Punch Entry Stage\"X Rel Backward For 03 (mm)
   - ✓ HKEY_LOCAL_MACHINE\SOFTWARE\Scitex\Projects\Lotem800V\IOOBJECTSY\Loading System\Load Plate\From Cassette To Punch Entry Stage\"Y Above Air Nozzle (mm)
   - ✓ HKEY_LOCAL_MACHINE\SOFTWARE\Scitex\Projects\Lotem800V\IOOBJECTSY\Loading System\Loading System Setup "Paper Y Down In Cassette (mm)"="6" (The default value in version 3.20.01 is 35, and ***must*** be changed.)
   - ✓ HKEY_LOCAL_MACHINE\SOFTWARE\Scitex\Projects\Lotem800V\IOOBJECTSY\Loading System\Load Plate\From Cassette To Punch Entry Stage\"Number Of Plate Backward Separation"

     Note: Increasing the value for this parameter increases the number of times the plate is bent toward the Cassette in order to release the paper and plate below it. It should be increased only by one, and then plate loading should be performed (using ask before do) to determine whether it needs to be further increased. In addition, the following must be taken into consideration:

     - Some brands of plates, such as Fuji, are very sensitive. Bending these plates repeatedly causes damage to the emulsion which shows up as an unexposed horizontal line after processing. If you increase the value for this parameter, be sure to fully process several plates (including all the sizes the customer uses) before leaving the site, and verify that there are no unexposed lines.
     - Increasing the value for this parameter decreases the number of plates exposed per hour. Please verify with the customer that the slowdown is acceptable.

2) Inspect the plates in the Cassette. Look for:
   - ✓ Condensation. If found:
     - ⇨ Move each plate batch into the workroom at least four hours before loading, and allow them to acclimate until dry. Then, perform plate loading using dry plates. If the problem persists, proceed to the next step.

       Note: Condensation usually is formed on plates when they are moved from a cold environment (such as the plate storage room) to a warmer one (such as the workroom).
3) Open the Front Door and visually inspect the Paper Disposal Rollers (shown below).



If paper is not found jammed on or in the rollers, proceed to step 4. If it is, remove it and:

- ✓ Visually inspect the Paper Disposal Rollers for dirt and/or debris. If found:
  - ⇨ Have the customer clean the Paper Disposal Rollers with a lint-free cloth and then perform plate loading. Provide instructions as to the proper procedure. If the problem persists:
  - ⇨ Adjust the values for the following parameters in the Registry, as required, and perform plate loading.
    - Loading System\Loading System Setup "X paper in motor (mm)
    - Loading System\Loading System Setup "Y Paper Out Cassette (mm)

  If the problem persists:
- ✓ Verify that the Paper Disposal Roller solenoid is functioning properly, as follows:
  - In the PC Controller, select **Utilities > Hardware**. The Hardware dialog box is displayed.
  - In the Hardware tree, double-click **Loading System > Disposal System > Paper Disposal Solenoid**. The Paper Disposal Solenoid dialog box is displayed.
  - In the Paper Disposal Solenoid dialog box, select the Operation tab, as required.

- In the Operation tab, click the **Start** button to activate the Disposal Rollers (click again to deactivate the rollers). If the Paper Disposal Rollers do not function:

✓ Open the Small Left Door (just above the Left Paper Disposal Door), remove the metal cover and locate the Paper Disposal Roller solenoid. Check the wiring and verify that it is properly connected, and not worn or torn. If not connected, or if worn and/or torn:

⇨ Reconnect, repair or replace the wiring, as required. If the problem persists:

⇨ Replace the Paper Disposal Roller solenoid.

4) Remove the Cassette from the machine and open the Cassette cover. Verify whether paper is jammed and/or stuck in the Cassette.

✓ If paper ***is not*** jammed and/or stuck in the Cassette:

⇨ Proceed to step 11.

If paper ***is*** jammed and/or stuck in the Cassette:

✓ Use a spirit level to verify that the machine is properly leveled. If it is not:

⇨ Perform machine leveling (TechPlanet).

✓ Verify that plates are properly loaded and positioned in the Cassette and that there are no foreign objects between the plates such as cardboard or other packing material. Also, verify that paper edges are not caught between the plates. If plates are not properly loaded, or if foreign objects and/or paper edges are found between the plates:

Note: Remove foreign objects before reloading, as required.

⇨ Have the customer load plates into the Cassette and provide instructions as to the proper procedure. If the problem persists:

✓ In the Cassette, remove the uppermost plate to expose a sheet of paper, as required, gently peel the paper off of the upper plate and look for signs of excess static electricity. If found:

✓ Check the humidity level in the plate storage/workroom. If it does not meet specifications:

⇨ Instruct the customer as to ways in which humidity levels can be increased to meet specifications (for example, using extra humidifiers).

⇨ Install FCO Anti-static Kit (TechPlanet).

⇨ Show the customer how to "fan" the plates before loading them into the Cassette. Then:

✓ Open the Front Door and visually inspect the XY Bar Paper Clips (shown in step 6) for dirt and/or signs of wear (manually raise the XY Bar, as required). Use your finger to push them downward and upward in the XY Bar to verify that they are not stuck, that they open fully and do not move too freely. If the Paper Clips are stuck and/or do not open fully due to a build-up of dirt:

⇨ Have the customer clean the Paper Clips, and provide instructions as to the proper procedure.

If the Paper Clips are bent and/or worn out:

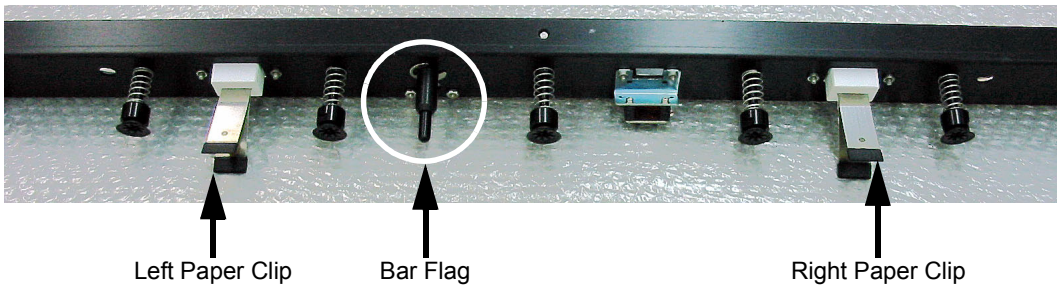
⇨ Replace the Paper Clips. Do not attempt to bend or otherwise adapt the Paper Clips.

5) Check the service records.

✓ Verify whether the old type of Bar Flag and Bar Flag Housing is installed in the machine. If it is:

⇨ Install the new Bar Flag and Housing (FCO 25252).

6) Inspect the Bar Flag (located in the XY Bar, as shown below). Look for:



✓ Debris or dirt.

✓ Free Movement. Gently tap the tip of the Bar Flag upward with your finger. If it does not move freely:

⇨ Remove the XY Bar cover and inspect the Bar Flag and Bar Flag Detector:

✓ Look for debris, dirt and/or other obstruction. If found:

⇨ Clean the Bar Flag and the inside of the Bar Flag Housing, and remove any debris or obstruction, as required.

⇨ Clean the Bar Flag Detector. Use a Q-Tip to thoroughly clean the detector. Make sure that no pieces of cotton are left on the lens after cleaning. If the problem persists:

⇨ Install New Bar Flag and Housing FCO (TechPlanet).

7) Verify that the Bar Flag Detector is functioning properly by performing the following:

• In the PC Controller, select **Utilities > Hardware**.

- In the Hardware tree, double-click **Loading System > Loading Plate to Drum > Detectors > Bar Flag 1 Detector**. The Bar Flag 1 dialog box is displayed.
- Press the Bar Flag upward with your finger and verify that:

✓ In the Bar Flag 1 dialog box, the status toggles to **On**. If it does not:

✓ Run the Lotem 800 Diagnostic Software and select **Machine > Bar Flag Detector**. If it fails:

✓ Remove the XY Bar Upper Cover, visually inspect the Bar Flag Detector wiring, and verify that it is properly attached. If it is not:

⇨ Attach, repair and/or replace the wiring, as required, and repeat step 7. If the problem persists:

⇨ Replace the Bar Flag Detector according to the New Bar Flag and Housing FCO (TechPlanet).

8) Verify that the XY Bar does not hit the Cassette Plate Guides during loading by performing the following:

- Manually move the Loading System toward the Cassette until it is positioned at the front frame of the machine.
- Manually lower the XY Bar until it clears the front frame.
- Manually move the Loading System toward the Cassette until it is over the plate.
- Manually move the XY Bar down into the Cassette as far as it will go. Verify that

✓ The XY Bar does not touch the Cassette Plate Guides. If it does:

Note: You can raise the level of the plates by placing several used plates covered by a piece of cardboard underneath the plates in the Cassette.

⇨ Ask the customer if they tried raising the level of the plates, as described in the note above. If they did not, ask if they usually processes full Cassettes. If they do not, explain how raising the level of the plates in the Cassette can solve this problem, and walk the customer through the process. If this method is unacceptable to the customer for any reason:

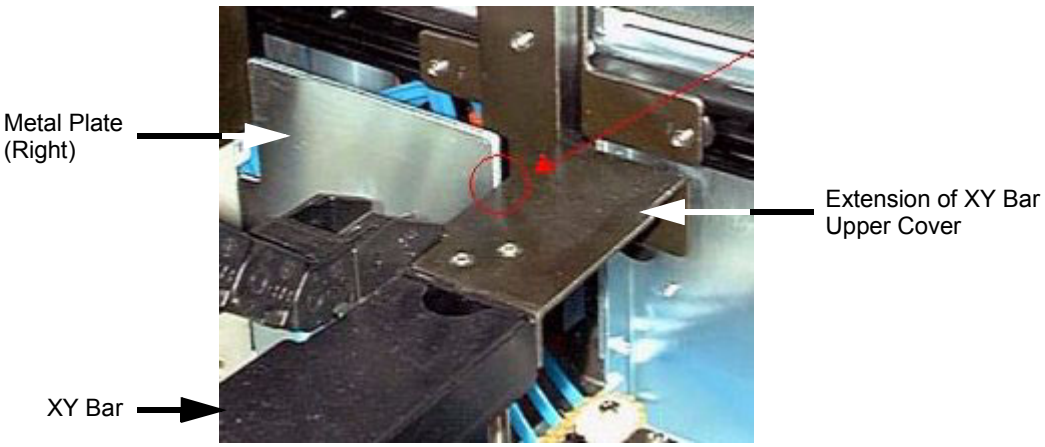
⇨ Install GTO Plate Guides in one of the Cassettes and instruct the customer regarding when and how to use them (TechPlanet).

9) Check XY Parallelism by performing the following:

- Manually lower the XY Bar to its lowest position.
- Manually move the Loading System toward the Drum as far as it will go. Verify that:

✓ The extension of the XY Bar Upper Cover touches the metal plates on both the right and left of the machine simultaneously.

The picture below shows the extension of the XY Bar Upper Cover touching the metal plate on the right side of the machine.

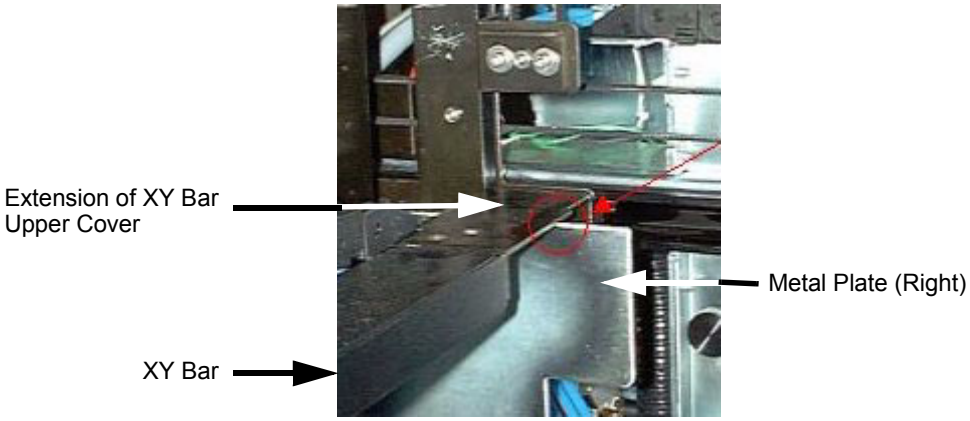


If it does not:

✓ Verify that the XY Bar is level by performing the following:

- Manually raise the XY Bar until the bottom clears the metal plates on the right and left.
- Push the XY Bar toward the Drum.
- Then, lower the XY Bar until it rests on the metal plates. Verify that:

✓ The extension of the XY Bar Upper Cover touches the metal plates on both the right and left of the machine simultaneously. The picture below shows the extension of the XY Bar Upper Cover resting on the plate on the right side of the machine.



If it does not:

⇨ Align the Loading System (TechPlanet).

10) Perform plate loading using undamaged plates (inspect the plates before loading them into the Cassette). Verify that:

✓ The plates are not too cold to use due to poor storage conditions. Contact the plate supplier for storage specifications, as required.

- ✓ The loading sequence is smooth and correct. If the problem persists:
  - ✓ Verify that the XY Bar moves downward along the Y-Axis far enough to fully close the Paper Clips. If it does not, adjust the value for the following parameter in the Registry, as required:
    - ⇨ Loading System\Loading System Setup "Paper Y Down In Cassette (mm)"="6" (The default value in version 3.20.01 is 35, and ***must*** be changed.)
  - ✓ Verify that the Paper/Metal Detector is functioning properly. If it is not:
    - ⇨ Adjust the Paper/Metal Detector, as required (New TechPlanet procedure).

11) If no paper is jammed and/or stuck in the machine or the Cassette, but the error message is still displayed:

- ✓ Verify that the Paper Bin Empty detector is functioning properly by performing the following:
  - Empty the Bin. The counter resets to "0".
  - Remove the uppermost plate from the Cassette, as required, so that a piece of paper is on top.
  - Perform plate loading. Watch the counter and verify that:
- ✓ The counter registers the disposal of a sheet of paper. If it does not:
  - ⇨ Verify that the correct value is entered for the "Num Of Papars In Bin" parameter by performing the following:
    - Empty the Bin. The counter resets to "0".
    - In the PC Controller, select **Utilities > Hardware**.
    - In the Hardware tree, double-click **Loading System**, and then right-click **Loading System**. The Properties: Loading System window (the Registry) is displayed.
    - In the Properties: Loading System window, locate the "Num Of Papars In Bin" parameter. Verify that:
    - ✓ The value is "0". If it is not:
      - ⇨ Change the value for the "Num Of Papars In Bin" parameter to "0". If the problem persists:
      - ⇨ Open the Paper Disposal Door and visually inspect the Paper Bin Empty Detector wiring. Verify that it is properly attached, and not worn and/or damaged. If it is not properly attached, or if it is worn or damaged:
      - ⇨ Attach, repair and/or replace the wiring, as required. If the problem persists:
      - ⇨ Replace the Paper Disposal Bin Detector.
      - ⇨ Calibrate the Paper Bin Empty Detector (TechPlanet-Tip #42).

Before You Leave

Before leaving the customer's site, complete the following:

1) Expose several plates of different sizes (at least three), and verify that the problem is resolved.

   Note: This is a very important cost-saving step that can prevent you from having to make additional service visits for the same problem.

2) Verify whether the customer is responsible for performing Preventive Maintenance procedures on the machine, or Creo is responsible.

   ✓ If the customer is responsible:

   ⇨ Verify that Preventive Maintenance is being performed properly and regularly. Remind the customer of the importance of performing the Preventive Maintenance procedures properly and regularly, and provide instructions, as required.

   ✓ If Creo is responsible:

   ⇨ Verify the service record, and either:

   - Perform Preventive Maintenance procedures, as required, or
   - Schedule a service visit, or
   - Alert the service department so that they can contact the customer and schedule the service visit.

   Note: Inform the customer as to the action taken.

See Also

Lotem 800 Plate Loading Sequence

Suggested Keywords

Paper

Paper Jam

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