Lotem 800 - Troubleshooting

Problem: Plate Does not Reach Punch Position

Problem Description:

During the first stage of loading, all goes well until the plate is supposed to be inserted into the Punch entry. The machine stops and an error message is displayed.

Error Message:

Plate does not reach punch position

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:

- Damaged, deformed and/or dirty plate(s)
- Cassette positioning and/or loading problems
- Spiral Punch problems
- Short Pins malfunction
- Machine is not leveled
- XY Bar Suction Cup malfunction
- XY Bar Vacuum malfunction
- Inappropriate values entered for specific parameters
- Paper folded over leading edge of plate
- Cassette Plate Guides problem
- Loading System out of alignment

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) Have the customer keep any damaged plates.
2) Ask the customer the following questions:
   - ✓ 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?
   - ✓ Was an error message displayed on screen? If yes, what did it say (include numbers, if any).
   - ✓ 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 is the plate location when the problem occurs?
     - Did the plate slide back into the Cassette?
   - ✓ 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) Inspect the loaded and/or damaged plate(s). Look for:
   - ✓ Defective, dirty or warped plate, and/or rough edges: May indicate manufacturer's defect, or damage that was caused to the plate either during handling or due to bad storage conditions, such as extreme hot or cold.

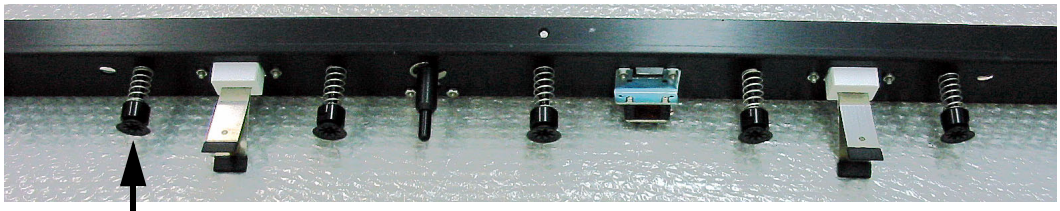
     Note: If the conditions in the plate storage room do not meet product guidelines, consult the plate supplier.

     In addition, pay special attention to the following:
     - ✓ Bowing of the plate.
       - ⇨ Place the plate on a table or other flat surface and verify whether the plate flattens. If it does not:
         - ⇨ Load new, clean, undamaged plates. If the problem persists, proceed to the next step.
     - ✓ Dents in the Leading Edge. If found, look for emulsion on the Leading Edge. If emulsion is found:
       - ⇨ Clean the Short Pins with a lint-free cloth dampened with alcohol, and instruct the customer as to the proper procedure while you are working. Then, load new, clean, undamaged plates. If the problem persists:
         - ⇨ Proceed to the next step, or refer to step 8. (This may indicate Short Pin malfunction.)

     If defects, dirt and/or damage is found:
     - ⇨ Load new, clean, undamaged plates. If the problem persists, proceed to the next step.
2) Check the Cassette. 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, and that paper is not folded over the leading edge of any of the plates. In addition, verify that only one size of plate is loaded in the Cassette, and that the Cassette Plate Guides do not hold the plates too tightly. If plates are not properly loaded:
     - ⇨ Have the customer load plates into the Cassette and provide instructions as to the proper procedure. Verify that the Cassette Plate Guides do not hold the plates too tightly.

       Note: Remove foreign objects before reloading, as required.

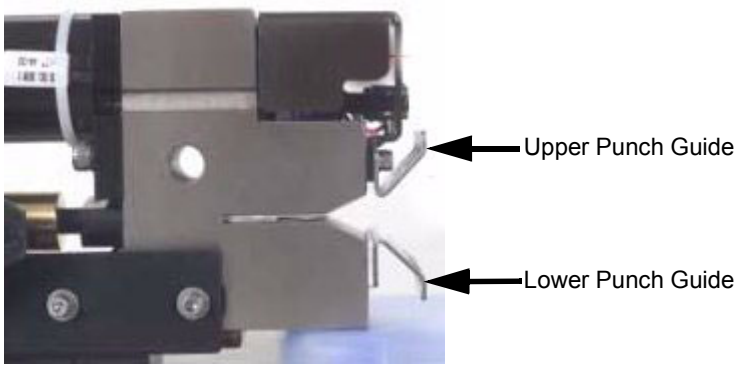
3) Use a spirit level to verify that the machine is properly leveled. If it is not:
   - ⇨ Have the customer use a spirit level to check machine leveling, and provide instructions as to the proper method, as required. If the machine is not level, perform machine leveling (TechPlanet).
4) Check the height of the machine in relationship to the height of the Cassette. If they are not properly adjusted in relationship to each other:
   - ⇨ Adjust the height of the machine according to the height of the Cassette, as required (TechPlanet).
5) Open the Front Door, manually move the Loading System toward the Cassette and raise the XY Bar to its highest position. Inspect the suction cups.



Look for:

- ✓ Damage of any type: Place a finger under each suction cup and:
  - ✓ Inspect the edges for signs of wear, tear and/or cracking.
  - ✓ Gently press upward and look for tears and/or cracks anywhere in the rubber. If found:
    - ⇨ Replace the damaged XY Bar Suction Cup(s) (TechPlanet). Verify that the correct number of washers are installed for each suction cup, as described in step 8.
- ✓ Debris or dirt: This indicates that Preventive Maintenance is not being properly and/or regularly performed. If found:
  - ⇨ Clean the XY Bar suction cups.

6) Visually inspect the Punch (shown below).



Look for:

✓ Damaged and/or missing Punch Guides. If one or more of the Punch Guides is either damaged and/or missing:

⇨ Perform Punch Reliability FCO #27707 A; B (TechPlanet) on all installed Punches.

✓ From the front of the machine, shine a flashlight on the hole under the Punch Rod and look for debris, plate slug and/or dirt in the Punch Hole. If found:

⇨ Pass the edge of a plate (preferably a used one) back and forth through the Punch to clear the slug and/or debris.

Note: Be sure to wear protective gloves when handling the plate.

✓ Further inspect the area, and verify whether the Punch Rod extends into the Punch Entry area. If it does, close the door(s) and activate the Punch, as follows:

- In the PC Controller, select **Utilities > Hardware**. The Hardware dialog box is displayed.
- In the Hardware dialog box, double-click **Punch System > Motors > Punch Motor #X** (where **X** is the number of the Punch that is stuck). The Punch Motor dialog box is displayed.

  Note: If you are not sure which Punch needs to be released, release each punch one by one, as described below.
- In the Punch Motor dialog box, select the Operation tab. The Operation tab is displayed.
- In the Operation tab, click **Start**. The punch is activated and the Punch Rod returns to the Home Position (HP).
- Optional: Select another Punch from the Motor drop-down menu, and click **Start** to release that Punch.

If it does not return to the HP:

✓ Further inspect the Punch Rod and verify whether it is damaged and/or deformed. If it is:

⇨ Replace the Punch (TechPlanet).

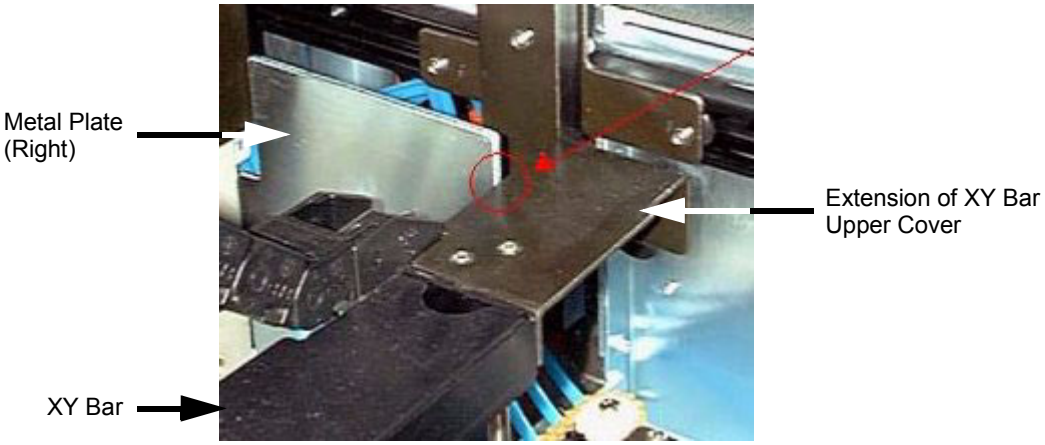
If the Punch Rod is intact:

⇨ Perform Punch Rod Home Position adjustment (TechPlanet).

7) 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:

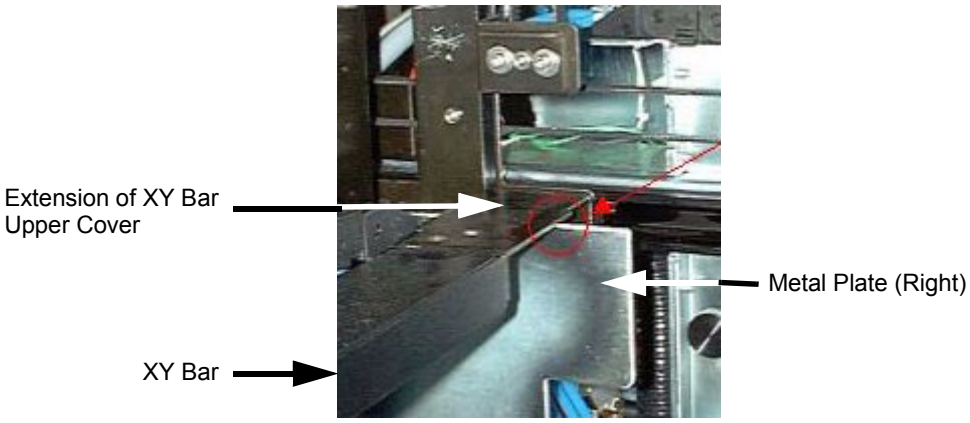
⇨ Align the Loading System (TechPlanet).

✓ 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).

8) Leave the doors open and, using a cheater, perform plate loading using undamaged plates (inspect the plates before loading them into the Cassette). Be sure that there is no emulsion on the plate edges, and that they are not damaged or too cold to use due to poor storage conditions. Using the Ask Before Do function, visually follow the plate as it progresses through the machine, and verify that the loading sequence is smooth and correct, and that the plate does not hit, and is not hit by, any machine parts as it progresses. Check the following components:

✓ Verify that the plate is properly secured by all the XY Bar Suction Cups when being lifted from the Cassette. When the plate is lifted by the XY Bar, stop the sequence and gently tap the plate next to each suction cup. If one or more of the suction cups do not fully secure the plate, stop the machine and:

✓ Remove the XY Bar Cover and verify that the correct number of spacers (washers that are placed on the inside of the XY Bar, through which each XY Bar Suction Cup Vacuum Tube runs) are present for each suction cup, as follows:

✓ Two washers for each of the two suction cups on the right of the XY Bar.

✓ No washers for each of the three suction cups in the center of the XY Bar.

✓ Two washers for each of the two suction cups on the left of the XY Bar.

If the correct number of spacers is not present for each suction cup:

⇨ Install the washers, as required. Then:

✓ Inspect the XY Bar Suction Cup vacuum tubes for kinks or damage. If found:

⇨ Straighten kinked tubes, and/or replace damaged tubes, as required. If the problem persists:

⇨ Verify that the XY Suction Cup vacuum level is correct by using a vacuum gauge to check the vacuum level (TechPlanet).

✓ If the sequence is interrupted, verify the location of the plate, as follows:

✓ If the plate is in the Cassette, or between the Cassette and the Paper Disposal System, most likely the plate is sliding back into the Cassette during the first stage of loading.

⇨ Adjust the value for the following parameter in the Registry:

⇨ ...Loading System\"X Prepare to Catch Plate (mm)". (The value for this parameter should be 370.)

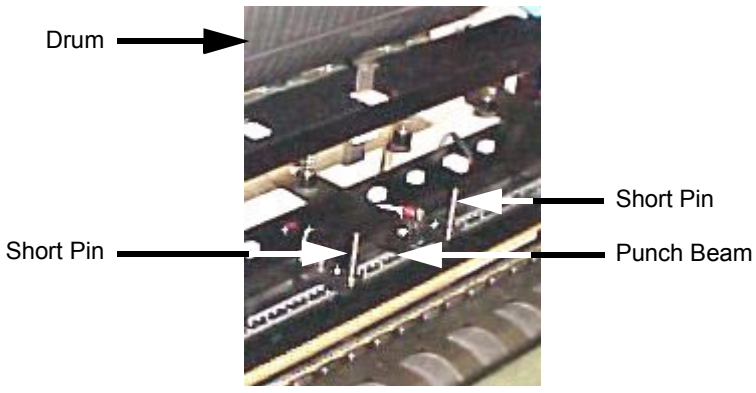
✓ If the plate is positioned just before the Punch, inspect the plate for bent corners. If found:

⇨ Open the Cassette Plate Guides and reposition them so that they do not hold the plates too tightly. If the problem persists:

⇨ Adjust and/or replace the Cassette Plate Guides, as required.

✓ If the plate is positioned at the Short Pins, look for dents in the Leading Edge of the plate. If found, inspect the plate to verify whether there is emulsion on the Leading Edge. If no emulsion is found:

⇨ Open the Front Door and visually inspect the Short Pins for dirt or debris.



If found:

⇨ Clean the Short Pins and instruct the customer as to the proper procedure. If the problem persists:

✓ Use a multimeter to check the electronic function of the Short Pins. If malfunction is found:

⇨ Run the Diagnostic Program and select **Machine > Short Pins**. If the result is **Fail**:

⇨ Replace the Short Pins related electronic board.

If the result is **Pass** and the problem persists:

⇨ Adjust the value for the "X rep Extra in Punch" parameter in the Registry, as required.

✓ If the plate hits the Punch Guide(s), adjust the value for the following parameter in the Registry, as required. (If the plate hits the upper punch guide, increase the value of this parameter. If it hits the lower guide, decrease the value.)

⇨ ...Loading System\Loading System Setup "y Enter To Punch (mm)"

Note: If the customer is using thin (0.2 mm) plates, adjust the value for the "y Enter To Punch For 02 (mm)" parameter.

Before You Leave

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

1) Have the customer expose several plates of different sizes (at least three), and verify that the problem is resolved. If the problem persists:

⇨ Contact the PSS.

Note: This is a very important cost-saving step that can prevent you from having to make repeat service calls 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 field service call, or
- Alert the service department so that they can contact the customer and schedule the service call.

Note: Inform the customer as to the action taken.

See Also

Lotem 800 Plate Loading Sequence

Suggested Keywords

Punch

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