Lotem 800 - Troubleshooting

Problem: Illegal Plate Size

Problem Description:

During loading, the plate progresses through the machine and just before the Leading Edge is inserted into the Punch Guide(s), the machine stops and an error message is displayed.

Note: The Lotem Spectrum Loading System includes a metal bar that covers the XY Bar Suction Cups. When loading 750 mm (or smaller) plates, the Centering Pins may contact the metal bar before they contact the plate, causing a false short.

Error Message:

One or more of the following error messages may be displayed:

- Illegal plate size
- Centering plate did not end

Machines Affected:

Lotem™ 800 (S-speed)

Lotem™ 800 (F-speed)

Lotem™ 800 Quantum

Lotem™ 800 Spectrum

Component:

Cassette (alignment to the Lotem Centering System)

Centering System

Software Products and Versions:

N/A

Operating System:

N/A

Probable Causes:

- Poor plate quality
- Incorrect plate definition
- Problematic plate size
- Metal debris on or near the Disposal Rollers
- Centering System malfunction
- 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.

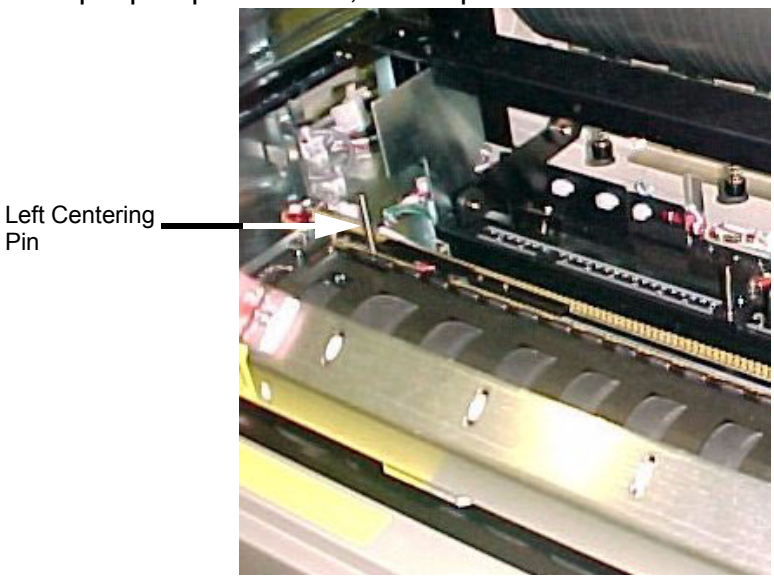
1) Keep any damaged plates.
2) Ask the customer the following questions (record the answers):
   - ✓ When was the last time Preventive Maintenance was performed, and by whom?
   - ✓ When was the last time the machine worked properly?
   - ✓ What was done since then? For example,
     - Were any parts replaced on the machine?
     - 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?
   - ✓ Do you use custom-sized plates, or cut plates to a custom size yourself?

- ✓ 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? (If yes, you can place additional plates in the Cassette, or raise the level of the last few plates by placing several used plates covered by a piece of cardboard under them.)
  - 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 whether, at the beginning of the loading sequence, the plate slides back into the Cassette when being lifted out. If it does:
   - ✓ Verify plate size (GTO and extra large plates tend to slide back into the Cassette during the first stages of loading) and:
     - ✓ Ask if the customer tried raising the level of the plates in the Cassette by placing several used plates covered by a piece of cardboard in the bottom of the Cassette, and then placing the plates on top of the cardboard. If not, have the customer do so, and provide instructions as to the proper procedure. Then, perform plate loading. If the problem persists, or if this is good only as a temporary solution:
     - ✓ Check the value for the "X prepare to Catch Plate" parameter in the Registry. If it is not 370:
       - ⇨ Change the value to 370. If the problem persists:
   - ✓ 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).
2) 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 verify whether it is being done correctly. If the machine is not level, perform machine leveling (TechPlanet).
3) Inspect the damaged plate(s), if any, and/or the plates in the Cassette. Look for:
   - ✓ Emulsion on the plate edges. If found:
     - ⇨ Load new, clean, undamaged plates, and then perform plate loading. If the problem persists, proceed to the next step.

4) Measure the plates in the Cassette using a ruler or tape measure, and make note of the measurements.
   - ✓ Compare the measurements to those marked on the plate packaging and/or shipping order.
   - ✓ Ask the customer if the organization purchases custom cut plates, or if they custom cut them themselves.
5) Verify that the plates have been correctly defined during Cassette loading, as follows:
   - ✓ In the PC Controller, select **Settings > Plate Definitions**, and in the **Media Definition** dialog box, verify that the plates currently being loaded are correctly defined (the measured plate size must be within +/-1 mm of standard specifications). If they are not correctly defined:
     - ⇨ Have the customer modify the plate definition or create a new plate definition, as described in the user manual, and provide instructions as to the proper procedure. Perform plate loading. If the problem persists:
6) Open the Front Door and visually inspect the Centering Pins. Look for:
   - ✓ Dirt and/or emulsion. If found:
     - ⇨ Have the customer clean the Centering Pins with a lint-free cloth dampened with alcohol, and provide instructions as to the proper procedure, as required.



- ✓ Leave the door open and, using a cheater, perform plate loading using undamaged plates (inspect the plates before loading them into the Cassette). Watch the plate as it progresses through the Lotem and check the following:Verify whether the Centering Pins have come into contact with the plate edges.
  - ✓ If the Centering Pins come into contact with the plate edges on both sides, check the PC Controller to verify that the pins detect the plate, as follows:
    - In the PC Controller, select **Utilities > Hardware**. The Hardware window is displayed.
    - In the Hardware tree, double-click **Loading System > Loading Plate to Drum > Centering System > Centering Motor Plate Short Detector**. The Centering Motor Plate Short Detector dialog box is displayed. The detector status should be **ON**.
  - ✓ If the status is **OFF** (indicating that the pins do not detect the plate):
    - ⇨ Look for emulsion and/or debris on or between the pins and the plate edges. Remove any debris, clean the pins as described in step 6, and reload clean plates, as required.
    - ⇨ Check the short function between the Centering Pins using a multimeter. If there is no short:
      - ⇨ Identify the board that governs the electronic function of the Centering Pins and run the diagnostic program, as follows:
    - In the Hardware tree, right-click on **Centering Motor Plate Short Detector**. The Registry is displayed.
    - Identify the Local Card that is listed in the **Value** column. This is the board that governs the electronic function of the Centering Pins.
    - Close the Registry and run the diagnostic program (select the relevant board, as identified in the previous step).

    If the result is **Fail**:

    - ⇨ Replace the relevant board.
  - ✓ If the Centering Pins do not come into contact with the sides of the plate:
    - ⇨ Remove the plate, visually inspect the Centering System for dirt and/or debris, and clean and/or remove debris, as required.
    - ⇨ Visually inspect the Disposal Rollers for foreign object(s), such as protruding screws. If found:
      - ⇨ Remove the foreign object(s).
    - ✓ Inspect the Centering Motor Assembly. Verify that the new FCO #27343 has been installed. If it has not been installed:
      - ⇨ Perform the new FCO #27343.

- ✓ Inspect the Centering Pins Driving Chain. Verify that it is intact and properly assembled on the Centering System. If it is not:
  - ⇨ Adjust and/or replace the Centering Pins Driving Chain, as required (TechPlanet)

✓ Watch the plate as it is centered by the Centering Pins. Verify that the plate is not moved too far to either the left or right by the Centering System during centering. If it is:

⇨ Rearrange the Spacers on the right and left of the Cassette Entrance on the front of the machine, as follows:

- Remove the Cassette from the Lotem.
- Remove one of the Spacers from the left or right of the Cassette Entrance on the front of the Lotem and install it on the opposite side, according to the position of the plate after centering. (If you remove the right Spacer, install it on the left side. If you remove the left Spacer, install it on the right side.)
- Reinsert the Cassette and perform plate loading.

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 calls to take care of 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

X-Y System Adjustments

Suggested Keywords

Centering Plate
Lotem Spectrum + 750 mm Plates

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