Installation Guide

English

Lotem 800 II Family

399Z3R874A

www.creo.com

Lotem 800 II Family

Installation Guide

creo™

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RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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399ZR874A

Revised September 2003

Contents

Installation and Service Safety Precautions 1

Chapter 1 Introduction 33

1.1 About the Lotem 800 II Quantum . . . 34
1.2 About the Lotem 800 II . . . 35
1.3 Lotem 800 II Features . . . 37
1.4 Specifications . . . 39
1.4.1 Main Design . . . 39
1.4.2 Digital Front End . . . 39
1.4.3 Throughput . . . 39
1.4.4 Automation . . . 39
1.4.5 Media Type . . . 39
1.4.6 Cassette Type . . . 40
1.4.7 Media Size . . . 40
1.4.8 Media Thickness . . . 40
1.4.9 Screening . . . 40
1.4.10 Resolution . . . 41
1.4.11 Image . . . 41
1.4.12 Punching . . . 41
1.5 Lotem Installation Checklist . . . 42

Chapter 2 Hardware Installation 45

2.1 Unpacking Platesetter . . . 47
2.1.1 Checking for Damage . . . 47
2.1.2 Precautions . . . 48
2.1.3 Parts Checklist . . . 48
2.1.4 Removing the Platesetter . . . 48
2.2 Unpacking Loading Cassette Trolley . . . 51
2.2.1 Unpacking Trolley . . . 51
2.3 Trolley Assembly . . . 52
2.3.1 Placing Cassette . . . 54
2.4 Height Adjustment Procedure . . . 55
2.5 Removing Shipping Safeguards . . . 57
2.5.1 Opening Doors and Removing Securing Ties . . . 57
2.5.2 Optomechanic to Chassis Locking Devices . . . 57
2.5.3 Carriage to Optomech Locking Devices . . . 58
2.6 Power Connection . . . 60
2.6.1 Connecting Main Power Cable . . . 60
2.7 UDRC (Unit Debris Removal Cabinet) Requirements . . . 63

2.7.1 Electrical & Power Requirements . . . 63
2.7.2 Cables, Hoses, Connectors and Receptacles . . . 63
2.7.3 Power Cables and Receptacles . . . 63
2.8 Air Compressor Connection . . . 65
2.9 Image Head Installation . . . 67
2.9.1 Hardware Installation . . . 67
2.10 Routing the Imaging Head . . . 71
2.10.1 Routing the Universal Debris Removal Cabinet (UDRC) . . . 72
2.10.2 Filling up Cooling Liquid . . . 74
2.11 Connecting Plate Conveyor to Plate Processor . . . 76
2.11.1 Plate Conveyor Assembly . . . 76
2.11.2 Conveyor - Processor Interface . . . 78
2.11.3 Attaching Plate Conveyor to Platesetter . . . 82
2.11.4 Attaching Plate Conveyor to Processor . . . 82
2.12 Connecting Operation Monitor . . . 87
2.13 E-Box Connections . . . 88
2.14 Punch Installation . . . 89
2.14.1 Assembling Punch on Bar . . . 89
2.15 Packing-up the Platesetter for Shipment . . . 91

Chapter 3 Data Configuration Setting 95

3.1 Data Connectivity . . . 96
3.2 Platesetter Power Up/Shutdown . . . 98
3.2.1 Parameter Settings in the Platesetter . . . 99
3.3 Connecting the Brisque to a Lotem . . . 100
3.3.1 Using TSP Data Cable Link (Data Connectivity) . . . 100
3.3.2 Setting up TCP/IP Connectivity . . . 101
3.4 Configuring the Lotem 800 II . . . 105

Chapter 4 Customer Configuration Setting 107

4.1 Punch Configuration Setting . . . 108
4.1.1 Setting from PC Controller . . . 108
4.1.2 Activating Punch Configuration System . . . 109
4.1.3 Punch Configuration from the Brisque . . . 109
4.1.4 Checking Punches . . . 112
4.2 Plate Setting Configuration Process . . . 113
4.2.1 Insert Plate Measurements . . . 113
4.2.2 Manual Setting of Pre-load Tail Gripper . . . 114
4.2.3 Verify Position of Tail Gripper Position . . . 114
4.3 Testing the Lotem 800 II . . . 115
4.3.1 Filling in Quality Field Report (QFR) . . . 115

Appendix A Software Installation / Update 117

A.1 Software Installation Procedure 118
A.1.1 Saving the Registry File 118
A.1.2 Save the DataBase Folder 119
A.1.3 Write down the IP address of the PC controller. 119
A.1.4 Saving NVS Parameters from TMCE to the Disk. 119
A.1.5 Saving Flash Parameters from TMCE to the Disk 120
A.1.6 Loading Windows 2000 Operating System 120
A.1.7 Loading Lotem 800 II Application S/W Version 3.51.02. 121
A.1.8 Installing the Lotem Remote Tools 126
A.1.9 Restore the Database Folder. 127

Appendix B Lotem 800 II Site Layout 129

Index 135

About This Manual

This manual applies to the Lotem II Family. It refers to the Lotem 800 II, Lotem 800 II Quantum, Lotem 800 II with Spectrum and the Lotem 800 II Quantum with Spectrum machines. Unless otherwise specified, Lotem 800 II refers to all machines.

All screen grabs are taken from the Lotem 800 II unless otherwise specified.

The Lotem 800 II Installation Guide contains the following chapters:

- Laser and Safety Precautions
- Chapter 1, Introduction
- Chapter 2, Hardware Installation
- Chapter 3, Data Configuration Setting
- Chapter 4, Customer Configuration Setting
- Appendix A, Software Kit and Software Loading
- Appendix B, Lotem 800 II Site Layout

In addition, the *Lotem 800 II Family Site Preparation Guidelines*, 399Z3R876A, provides guidelines for preparing the customer's site for the platesetter installation.

Document Conventions

Item	Purpose	Example
User interface elements	User interface elements, such as menu options and icons, are in bold.	Select **New** from the **File** menu. Click the **Expand** icon.
Procedures you perform	Procedures that you perform appear in a numbered list.	**1.** Connect the machine to the main power supply. **2.** Turn on your PC.
Single-step procedure	Single-step procedures appear with an arrow.	➢ Select **Remote Station** from the **File** menu.
References	Book icon precedes reference to another book or to another place in the book.	🕮 Refer to the *Safety Precautions* chapter.
Note	Note icon precedes additional information.	 If too much film sticks out, cut the excessive part.
Caution	Caution icon precedes a caution message.	 Installation must be done by authorized service personnel only.
Tip	Tip icon precedes a tip.	 If you want Half resolution, set the Half Res box.
Warning	Warning icon precedes a warning message.	 Danger of explosion if battery is incorrectly replaced!
Emphasized text	Use template style to denote importance.	As a general user, you are able to search for **Files** and **Folders.**



Installation and Service Safety Precautions

Introduction 2
General Safety Precautions 3
Installation and Service Personnel 4
Installation 4
Basic & Laser Safety Precautions 6
Drum Safety Precautions 30
Vacuum Pump 31
Fluid Cooling System 31
Lithium Battery 32

Introduction

Read the following safety chapter carefully before installing, operating, servicing or maintaining the Lotem 800 II Family platesetter.

Read the user laser and safety precautions for the Lotem 800 II platesetter, an indispensable part of the service engineer's precautions. Please see *Lotem 800 II Family Safety Precautions for User,* 399Z3P854A.

This product is a **Class 1** laser product, according to IEC825-1 and USA 21 CFR 1040. This implies that there is no hazardous laser radiation, providing that the user and service safety precautions are followed.

Lotem 800 II Family safety at a glance - how to avoid exposure hazards?



WARNING ! The laser beam and radiation are invisible to the eye.

1. Never operate or electrically connect the Laser Thermal Head unless it is properly installed inside the platesetter.
2. Keep all external doors and internal protective barriers of the platesetter complete, unharmed and intact !
3. Never defeat the Write Laser interlock switches ! Motor or focus interlock switches may be defeated following safety instructions!
4. Never leave any object between the Laser Thermal Head and the drum.
5. Do not operate the platesetter if there is any doubt regarding the above.

Extensive means were taken in the design and manufacturing of the platesetter to eliminate the hazards for user and service personnel.

Follow the instructions in this chapter to ensure your safety and the safety of others when installing and servicing the platesetter. These instructions are also required for the user's safety.

General Safety Precautions

1. Whenever servicing the platesetter, post the following sign close to the keyboard and close to the platesetter: **CAUTION**: machine in service – do not operate. This sign will caution people from operating the platesetter while it is being serviced.
2. Many service procedures can be performed when the entire platesetter or some of its assemblies are switched off. Service the platesetter when **off** whenever possible (see *Disconnection from Mains Supply* further on).
3. Never operate or electrically connect the Laser Thermal Head unless it is properly installed inside the platesetter.
4. **The service engineer is not allowed under any circumstances to defeat any Write Laser interlock** !
5. While taking appropriate precautions, the service engineer is allowed to defeat the Laser focus and Motor interlock switches. Do so **only** when no alternative service option is possible.
6. Three readily accessible yellow pushbuttons are provided for disconnecting power from the mechanical hazards existing in the platesetter. Two yellow On/Off pushbuttons are located on the external front side, on both sides of the platesetter; these disconnect power from the platesetter units, but **not** from the fans.

   Another pushbutton is centrally located below the upper front door; it activates the motor interlocks, even if the interlock is defeated. When the pushbutton is pushed, power is disconnected from the motors, including the drum motor.



WARNING ! Injury hazard! The drum will **not stop** immediately when the yellow on/off pushbutton is pressed or the main power circuit breaker is activated.

7. Prior to service, remove any piece of clothing or object that may get caught in the revolving drum or in any other moving part of the platesetter. For example, remove ties, roll up long sleeves, remove rings and bracelets, and gather long hair.
8. Remove jewelry, wristwatches and reflective objects from your hands, wrists and shirt, and use non-reflective tools. This measure reduces the chance of hazardous laser reflection if a failure occurs in the Laser interlock system or in a protective barrier.

9. If there is any doubt regarding the proper functioning of the Laser interlock system, or whenever you suspect that the platesetter protective cover or barrier is broken, cracked or otherwise damaged, you must turn the platesetter **off and not turn it on** again until it is checked and found to be **OK**.

Installation and Service Personnel

Installation or service must be performed only by authorized service personnel.

The Lotem 800 II platesetter is installed and serviced exclusively by specialized technicians. These technicians are trained, authorized and certified in the proper procedures for working with, and adjusting the laser system, and working with the mechanical, cooling, vacuum, and electrical systems of the platesetter.



WARNING ! Only certified service personnel are allowed to install or service the Lotem 800 II platesetter.

Installation

Power Line and Safety Ground

Refer to the *Lotem 800 II Family Site Preparation Guidelines,* 399Z3R876A, also located on Tech Planet.

For platesetter - line voltage 208V/120V ±10%, 3 phase (Star) 20A, 50/60 Hz ±2%; for Brisque and PC Controller - 120V ±10% or 230V ±10%; frequency - 50/60HZ ±2%.

Only for customers with line power of 230V - a step-down transformer is used, from 346/200, 380/220, 400/230 or 415/240 to 208/120V (3 phase).



NOTE: To protect the transformer, a 4 pole (3 phase and neutral) circuit breaker must be provided in the power line that feeds the step-down transformer. The circuit breaker must be rated: 10KA IEC 947.2, 230/400 VAC, 16A, tripping curve D (such as, Cat no. 24688 by Merlin Gerin).



WARNING ! Hazard of fire and electric shock if circuit breaker is missing!

NOTE: The power line connection **MUST** include 5 pins: 3 Phases, Neutral and safety Ground. Where the step down transformer is used, the 3 phases, Neutral and Safety Ground are provided through the step-down transformer.

DANGER ! Hazard of fatal electric shock if safety ground path is interrupted!

Disconnection from Mains Supply

The Distribution box at the lower front panel of platesetter has three (3) circuit breakers - main power (in the center), drum power and drum vacuum pump circuit breakers. An Additional circuit breaker is on the Electronic box inner cover. Two yellow On/Off pushbuttons are located on both sides of the front panel.

- Before dismantling any board or power supply, shut down the **Main power circuit breaker** on the Distribution box or the E-box circuit breaker (if only the E-box is opened).
- Whenever adjusting or checking an electrical board/unit, verify that you are using the correct test point. Do not touch any unit with bare hands.

WARNING ! Total disconnection from the mains supply can only be achieved by deactivating the Main power circuit breaker (set to “0”), or by unplugging the 5 pin Main power cable from the 3 phase power supply.

Non-English Warning Labels

Where a language other than English is spoken, the service engineer must stick the translated warning labels (attached to the platesetter) according to the country of installation, in the designated locations. The translated labels have the letter ‘K’ in the catalog number.

Basic & Laser Safety Precautions

The basic and laser safety precautions section includes the following topics:

- Thermal Imaging Head
- Enclosures
- Safety Interlocks
- Warning labels

CAUTION ! Use of controls or adjustments, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

DANGER ! The above **CAUTION** note must be included in this manual according to USA 21CFR regulations. However, the hazards involved include not moderate, but **SERIOUS** bodily injury - especially to the eye!

The platesetter is equipped with a **highly hazardous laser system** that exposes the media. However, the platesetter as a whole is a **Class 1 laser product**, according to IEC825-1 and the USA 21 CFR 1040. This implies that the operator and service engineer cannot access hazardous laser radiation, providing that the user and service safety precautions are followed.

WARNING ! The laser beam and radiation of the platesetter contain invisible and visible components, both are hazardous to the eye and skin. **In the presence of flammable material, the laser beam is also a fire hazard! Even brief exposure of the eyes to the laser radiation or beam, or its reflections from shiny or matte objects may cause permanent loss or permanent degradation of eyesight !**

WARNING ! Whenever in doubt, the platesetter should never be operated until it is checked and approved for operation by an authorized service engineer

WARNING ! If you **must** enter the room where the platesetter is located when the platesetter is on, and you suspect that any of the following precautions was somehow violated, then you must **disconnect** the power supply to the platesetter before entering the room !

Thermal Imaging Head & Focus Laser Alignments

The Lotem 800 II has a **highly hazardous Laser Thermal Imaging Head inside** that exposes the media. The Imaging Head uses two separate laser emitters:

- invisible write laser
- visible (red) auto focus laser

Write Laser

The **write laser** beam is invisible to the eye (class IV, approx.830 nm).



DANGER! Do not operate Thermal Imaging Head outside the platesetter or with any doors or panels open, nor bypass any of the laser safety mechanisms. The laser output can cause severe and permanent eye and skin damage and is a fire hazard in the presence of flammable materials.

The **write laser** interlocks are never to be defeated either by operator or service personnel!

Auto Focus laser

The **auto focus laser** is visible (red) (class IIIB, approx. 670 nm).



DANGER ! Do not look directly or indirectly into the auto focus laser. The laser radiation can cause permanent eye damage if reflected directly or indirectly into the eye.

The **focus laser** interlock may be defeated by authorized service personnel **only**. Defeat method and safety precautions are as follows:

1. Only authorized service engineers are allowed to defeat the platesetter interlocks. Focus laser defeat is allowed for focus alignment **only**.
2. Use both defeater 1 and 2 together to defeat the Focus laser interlock.
   - Defeater 1 defeats the mechanical interlock system. Avoid mechanical hazards.
   - Defeater 2 defeats the focus laser interlock system, provided that defeater 1 is also activated.

3. To avoid exposure to the focus laser during focus alignment, the service engineer must ensure, prior to insertion of defeater 2, that the focus laser beam originated from the laser head will not be hazardously reflected by any object. It should **only** hit the plate placed on the drum directly. To ensure this, the service engineer must:
   - Make sure that a plate is properly wrapped on the drum and held by grippers.
   - The carriage and the drum are static and oriented so that the beam hits the plate in the middle of the plate, far from the grippers and the plate edges.
4. The service engineer must stand so the beam path between the head and the drum is concealed by the head enclosure. That is, he should stay behind the laser head either watching the alignment LED's located in the head or the monitor screen.
5. Beware of mechanical hazards when the mechanic interlock is defeated.
6. The service engineer must ensure that anyone else staying in the room while the platesetter's interlocks are defeated also follows these safety instructions.



DANGER ! The service engineer must never leave the platesetter while interlocks are defeated!

Enclosures

Together with the Laser interlock system, the platesetter enclosure is designed to protect anyone in the platesetter vicinity from exposure to the laser radiation by enclosing the laser radiation within the platesetter. The enclosure includes the external doors and panels, and the internal protective barriers. The internal protective barriers prevent the laser radiation from escaping through the platesetter loading/ unloading openings and through the ventilation openings on the side doors or lower panels. This protection depends upon the completeness and correct assembly of the outer enclosure and the internal protective barriers.

CAUTION ! The opening of the two upper doors is controlled by a spring loaded mechanism. Make sure your head is **not near** the door when opening the door.

WARNING ! After performing any service activity and before switching the platesetter on, the service engineer must check and ensure that all external and internal enclosures are complete, not broken or cracked, and properly assembled to the platesetter.

DANGER ! If the platesetter is ON and the enclosure is damaged or incomplete, and even with the doors closed, then visible or invisible laser radiation of up to several watts may be present. **This radiation is hazardous to the eye and skin. Even brief exposure of the eye to this radiation or its reflection from shiny or matte objects can cause permanent degradation or permanent loss of eyesight !**

Safety Interlocks

Interlock switches are designed to disconnect power from **both** the Write and Auto Focus Laser sources and from mechanically hazardous parts when one of the doors is opened or the rear upper panel is removed.

WARNING ! The service engineer is forbidden under **any** circumstances to **defeat** any of the Write Laser interlock switches.

All doors (upper and side doors) and the upper rear panel have interlock switches that disable the laser sources and the motors.

The upper doors have 2 interlock switches each. The side doors have one interlock switch each. The upper rear panel also has only one interlock switch. In order not to rely on the reliability of a single switch, **the serviceman is required to keep one of the upper doors open if a side door or the rear panel is open**.

The service engineer is allowed to defeat the motors and auto focus laser interlock switches, only after taking appropriate safety measures.



WARNING ! If you must defeat the focus or motor interlocks, you are **not allowed** to use any other means except the dedicated cheaters (Creo No. 290B8L064) that are supplied for the use of the *Lotem 800 II / Lotem 800 Quantum* service. Use of any other interlock cheater is **unsafe** and **forbidden**.



CAUTION ! The service engineer is also allowed to defeat the cassette inlet opening magnetic interlock switch and the two paper door interlock switches, using an intended magnet or defeater respectively.

Interlock Functions and Locations

Interlock Location	Interlock Function	Number of interlock and defeater Switches	Serviceman only Defeat Allowances
Upper rear door	Disable Lasers and Motors	2 interlock switches 1 defeat switch	Defeat switch only - to operate motors
Upper front door	Disable Lasers and Motors	2 interlock switches	None
Upper rear panel	Disable Lasers and Motors	1 interlock switch. 1 defeat switch	Defeat switch only - to operate Focus Laser if upper door defeater is defeated too
Left door	Disable Lasers and Motors	1 interlock switch	None
Right door	Disable Lasers and Motors	1 interlock switch	None
Cassette inlet opening	Disable motors only	1 defeatable interlock magnetic switch	Interlock magnetic switch - to operate motors
Left and Right side paper doors	Disable paper disposal motor only	1 defeatable interlock switch at each paper door	Interlock switch - to operate paper disposal motor

NOTE: In the above table, front side refers to the loading side of the platesetter. Rear side refers to unloading side of the platesetter. Upper doors may also be referred to as upper covers.

NOTE: The **write laser** interlock system is equipped with a **buzzer**. If a failure is detected in the operation of the write laser interlock system, the buzzer is activated and the write laser is shut off. In any case, not every possible failure can be detected, especially failure of a single interlock switch.

DANGER ! If a door or panel is open and if interlock switch is defeated, or if the interlock system failed, then severe **mechanical hazards** and visible and/or invisible laser radiation of up to several watts may be present. **This radiation is hazardous to the eye and skin. Even brief exposure of the eye to this laser radiation or its reflection from shiny or matte objects can cause permanent degradation or permanent loss of eyesight !**

WARNING ! It may take up to two seconds for the Laser interlock system to shut off the laser sources. Therefore, when opening a door or a panel or stop defeating an interlock switch, do not rush to access inside the platesetter !

DANGER ! Never leave the platesetter while an interlock switch is defeated!

Warning Labels

The following pages show the laser and other warning labels, and their locations.

NOTE: The catalog numbers for English labels contain the letter A; all other languages contain the letter K instead. For example, cat. no. 374A8L697 is the English label; cat. no. 374K8L697 is for all other languages. The following labels show the English catalog numbers.
Some labels have the same text but the label shape or size is different. Therefore these labels have different catalog numbers.

DANGER

HAZARDOUS MOVING PARTS AND VISIBLE AND/OR INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION.

ONLY MECHANICAL AND FOCUS LASER INTERLOCKS MAY BE DEFEATED AND BY SERVICE ENGINEER ONLY.

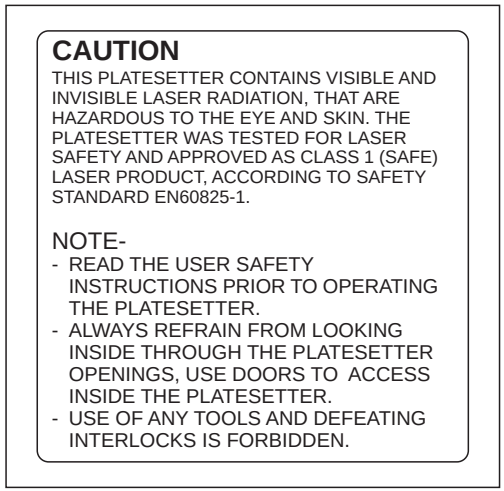
K6B001



K6B002



K6B003



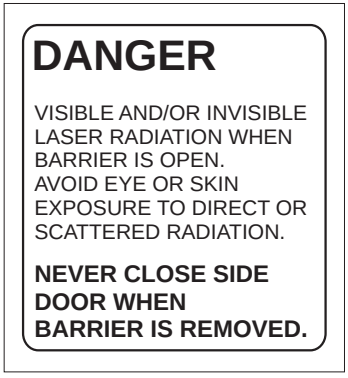
K6B006



K6B009



K6B011



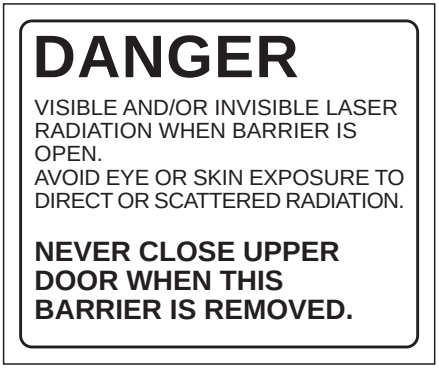
K6B012



K6B013



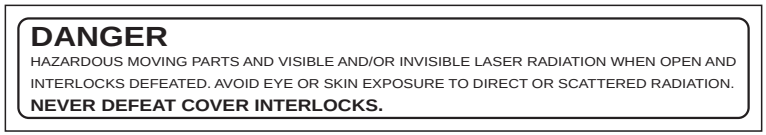
K6B014



K6B015



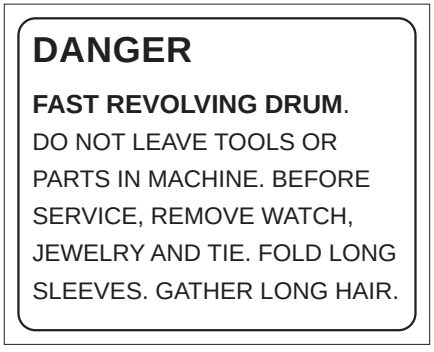
K6B016



K6B891



K7L412A



K7L413



K2G957



K8L535



374A7B951 (374A30170)



374A9C009



374A7L667

SEE INSTALLATION
INSTRUCTIONS BEFORE
CONNECTING TO THE SUPPLY

K1F658

See the following figures for locations of warning labels. Make sure that all warning labels are in good order; renew warning labels if needed.

NOTE: When a language other than English is spoken, the service engineer must stick the translated labels (attached to the platesetter), in the designated locations. Translated labels have the letter ‘K’ in their catalog numbers.

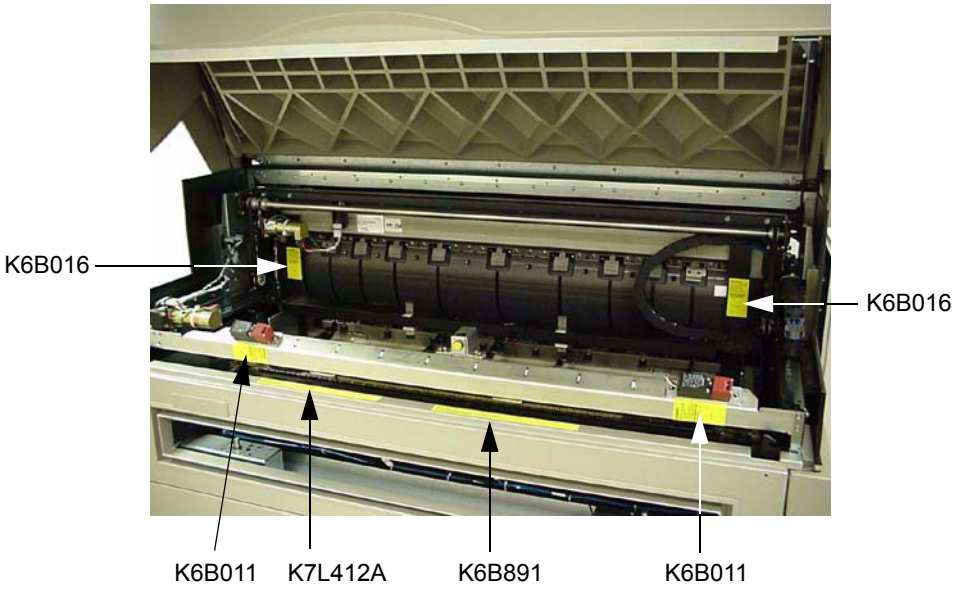


Figure 1. Front top cover open

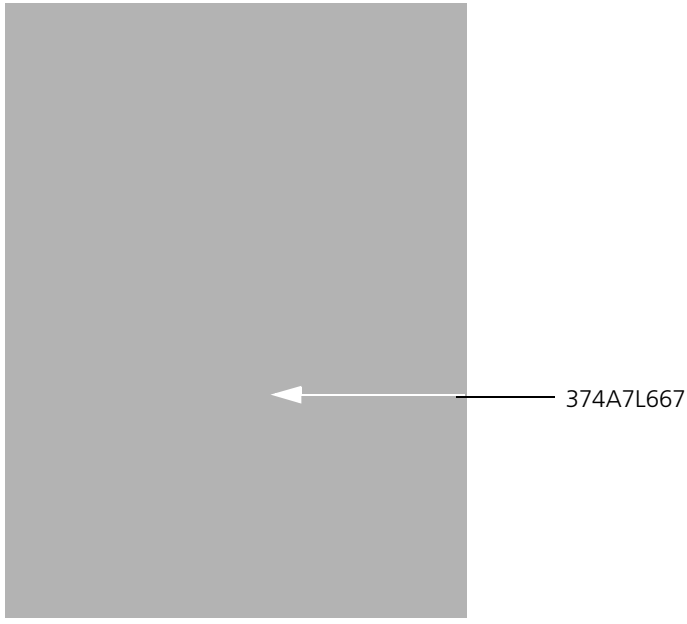


Figure 2. Drum, left side

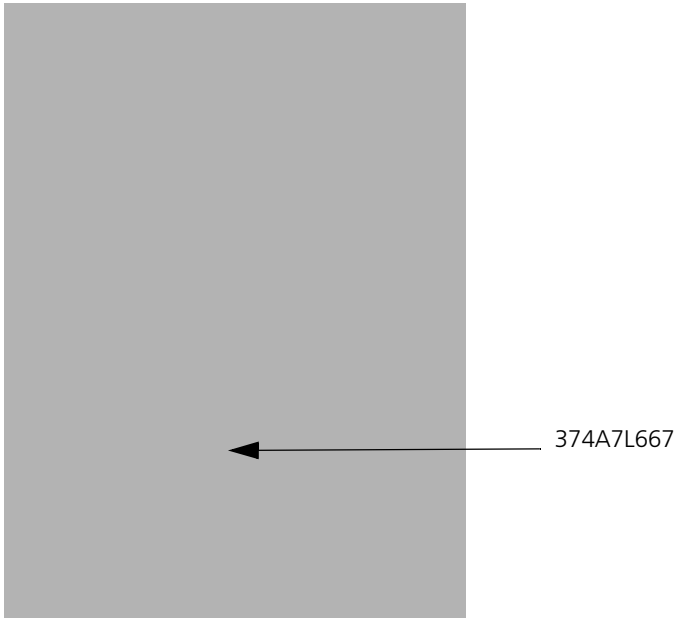


Figure 3. Drum, right side

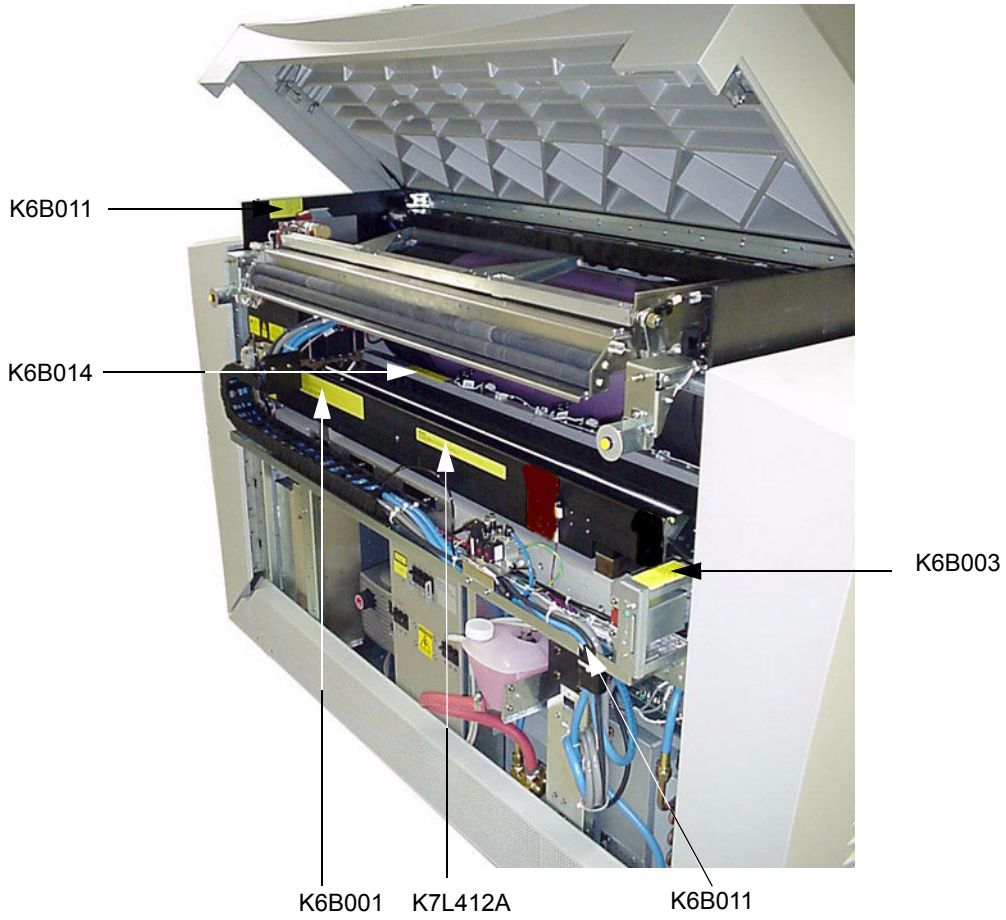


Figure 4. Rear top cover open, rear panel removed

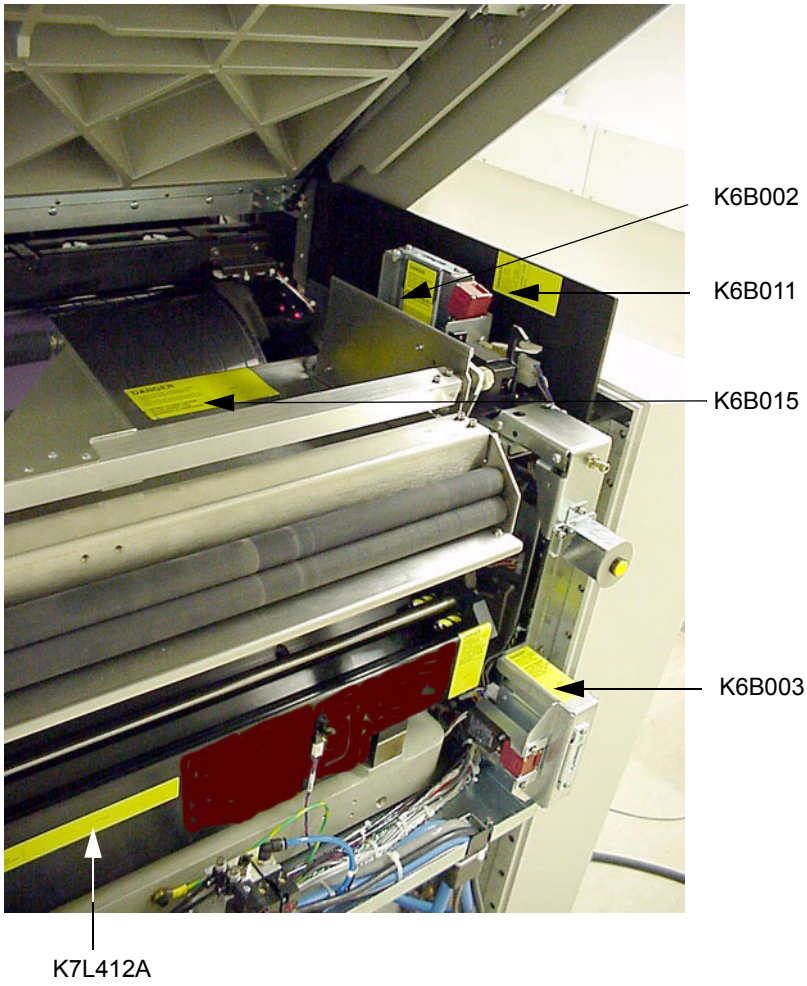


Figure 5. Rear top cover open, panel removed, right side

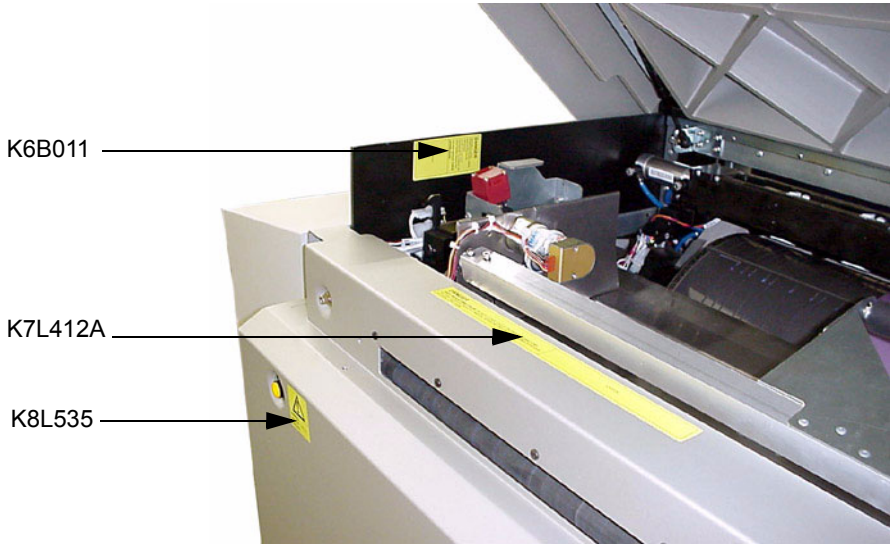


Figure 6. Rear top cover open, left side

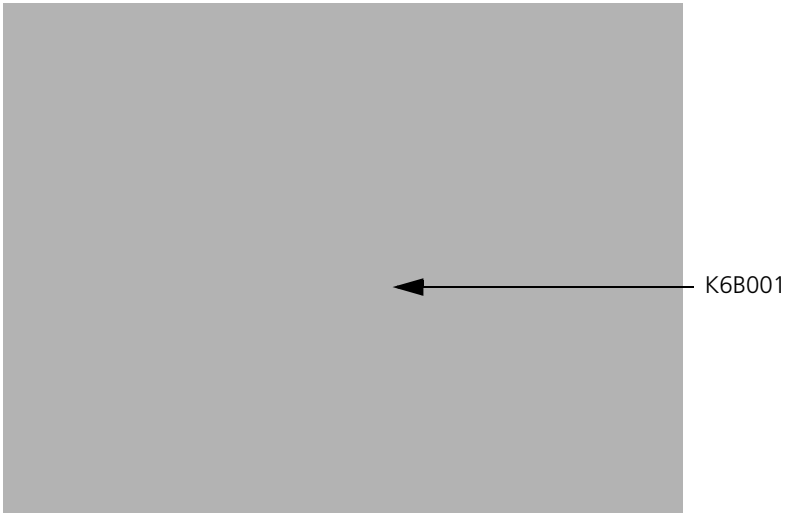


Figure 7. Rear top cover open, right side

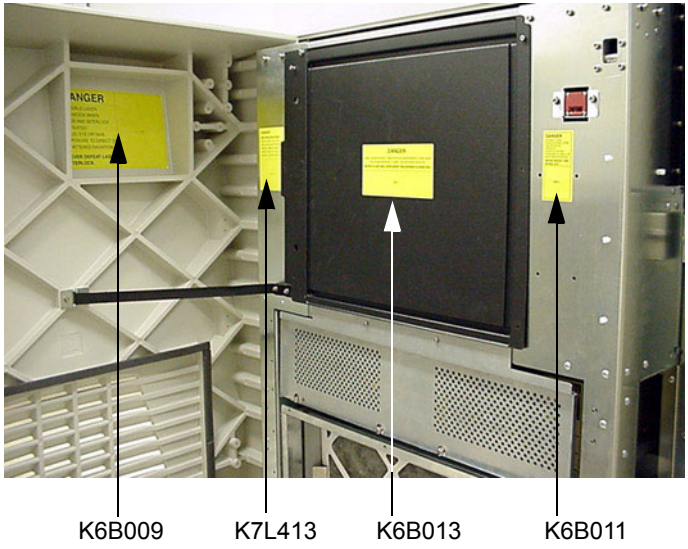


Figure 8. Left side door open

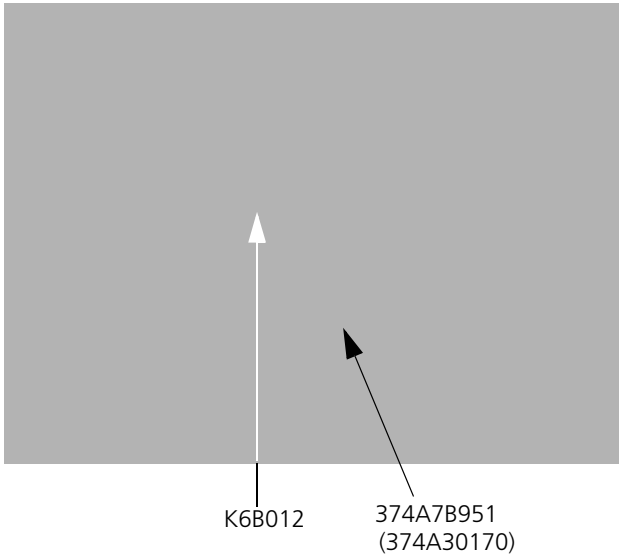


Figure 9. Left side door open, internal barrier removed



Figure 10. Right side door open



Figure 11. Right side door open, internal barrier removed

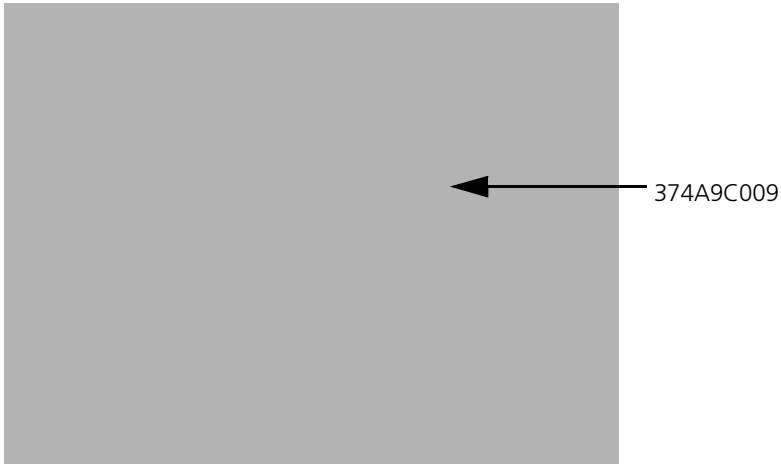


Figure 12: Paper disposal bin; right door

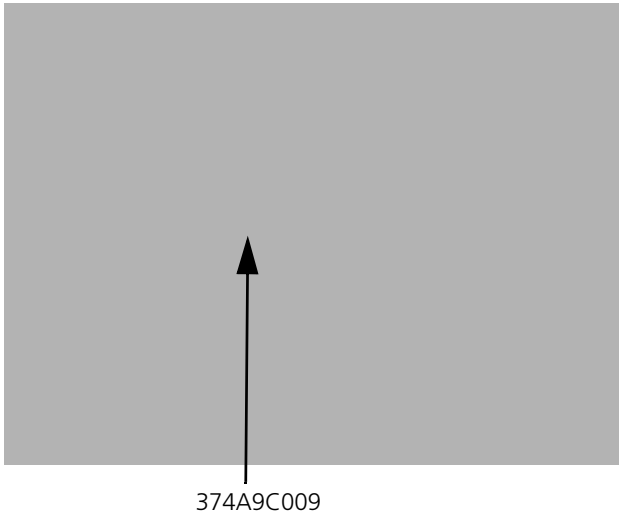


Figure 13. Paper disposal bin; left door

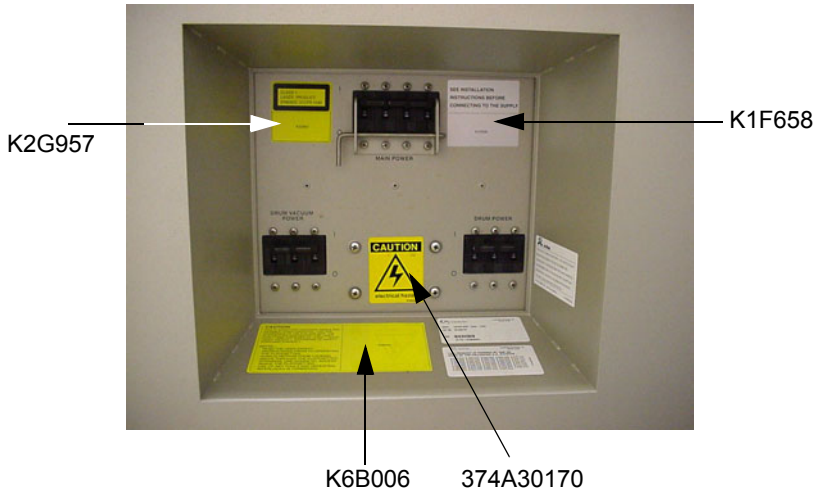


Figure 14. Distribution box

Drum Safety Precautions

The Lotem 800 II platesetter contains a drum that revolves inside the platesetter. Special safety precautions that include solenoids and interlock system are implemented in order to prevent rotation of the drum while the user opens the upper doors.

The upper doors opening is initiated from the platesetter Controller. This activates the solenoids that release the upper door locks, thus enabling the user to open the door. By this time, the drum must be almost stationary.



WARNING ! If, after the door is unlocked, it takes **more than 5 seconds** for the drum to become completely stationary, the machine must be repaired.



WARNING ! If you defeated the upper rear door defeater, all motors, including the drum motor, can rotate. Removing the defeater or pushing one of the 3 yellow pushbuttons will **NOT** stop the drum within 5 seconds!



DANGER ! The drum will rotate at high speed for a few minutes after defeat is canceled or the yellow pushbutton is pressed!

The drum revolves at approximately **350** revolutions per minute. If an object hits the rotating drum, the object may get dislodged inside the platesetter and cause damage (including damage to the safety system and laser thermal head), or force the upper doors to open, or penetrate through the doors.

Since serious personal injury to the operator, service engineer or anyone in the vicinity may occur by the revolving **drum**, the following cautions must be observed.



WARNING ! Be sure not to leave any object, tool or part inside or on the platesetter enclosure. The object may get dislodged, get caught in the revolving drum or other moving parts, penetrate through the enclosure and injure a person standing nearby.



WARNING ! Because of the potential danger of loose parts inside the platesetter, be sure to replace, reconnect or adjust any drum component according to the exact correct procedure.

WARNING ! Before servicing, remove any piece of clothing or object that may get caught in the revolving drum or other moving parts. Remove ties, roll up long sleeves, remove jewelry and gather long hair.

Vacuum Pump

The vacuum pump connected to the platesetter is part of the Lotem 800 II configuration. The vacuum pump contains a filtering device that extracts dust, fumes, contaminants and solvent vapors that appear within the platesetter during normal operation and need to be removed.

WARNING ! The filtering device has been constructed according to recognized technical safety regulations. Nevertheless, danger to life of the user or third parties or damage property can occur if the filter is not handled and disposed of properly. The service engineer must follow the instructions in the Creo Technical Information Center (Tech Planet) when replacing and disposing the filter.

Fluid Cooling System

The platesetter is equipped with a cooling system which cools the Laser Thermal Head. The system uses a water based coolant. The coolant system has no user serviceable parts. The Laser Thermal Head has hazardous and low voltages inside.The cooling system is sealed and no coolant leakage should occur. If coolant leakage inside the head does occur, it may cause electrical shock and fire hazards.

The cooling system pump has an Overpressure Safety Valve that does not allow pressure to build great than 65 psi, in order to avoid any coolant leakage. Prior to shipment, the pump valves are tested for opening (release of pressure) point between the range of 60-65 psi. After this test, the pump is labeled accordingly. If the pump is replaced, the service engineer must check for presence of the test label. The service engineer must also follow procedure WI-7254 found in the Creo Technical Information Center (Tech Planet).

DANGER ! Electrical shock hazard and fire hazard if the cooling system leaks and the platesetter is not shut off.

Paper Disposal Bin



CAUTION: Do not attempt to remove any plate that has inadvertently arrived in the paper disposal bin. Your hands may be severely cut.

Lithium Battery

The platesetter contains a Lithium battery in the CPU board. The battery should be replaced only by qualified service personnel, and must **not** be replaced by the user.



WARNING ! Hazard of explosion if battery is incorrectly replaced

- Replace only with the same or equivalent type recommended by the manufacturer.
- Follow the manufacturer’s safety instructions provided with the battery.
- Dispose the used batteries according to the manufacturer's instructions.



Chapter 1

Introduction

About the Lotem 800 II Quantum 34
About the Lotem 800 II 35
Lotem 800 II Features 37
Specifications 39
Lotem Installation Checklist 42

1.1 About the Lotem 800 II Quantum

The state-of-the-art Lotem 800 II Quantum platesetter offers superb quality and high platemaking productivity of up to 29 8-up plates per hour. Creo SQUAREspot thermal imaging predictability and consistency assures plate imaging integrity. Advanced automation, customized, inline punch assures accurate and repeatable notches for perfect register on press. Driven by a Brisque or a Prinergy workflow management system, the Lotem 800 II Quantum is for the discriminating printer who cannot compromise. This ultimate computer-to-plate (CTP) device meets and adapts to all your needs for efficient, continuous production that keeps the presses running.

Creo is a pioneer of thermal imaging, the de facto standard CTP technology today due to its outstanding performance and quality. SQUAREspot thermal imaging maintains consistent reliable plate imaging despite normal process variation such as changes in plate sensitivity or processor chemistry. This precise process control enables reliable FM screening and artifact-free images.

The fully automated platesetting sequence produces press-ready plates without your intervention. Plates are loaded automatically from a cassette, after automatic slip-sheet removal. The customized, inline punch system punches plates according to the press profile selected on the Brisque. Then plates are automatically mounted on the drum for imaging and unloaded directly into an optional inline processor.

1.2 About the Lotem 800 II

The new Lotem 800 II platesetter offers higher throughput, more speed options, and optional thermal halftone proofing.

More speed options mean that printers can match throughput to their production needs. The Lotem 800 II platesetter offers new speed options that improve throughput up to 25 plates per hour. Adding the optional thermal halftone proofing produces proofs from the same digital files, using the same screening and same halftone dot structure used to image the plates. The resulting proof is exactly what will be printed.

Lotem 800 II is fully automatic, with additional speed and throughput, support for thermal halftone proofing.

Available models:

Lotem 800 II - (S speed)

Lotem 800 II - (F speed)

Lotem 800 II - (V speed)

All in two resolutions 2400/2540 dpi

Spectrum option is available for all models

📖 For more details on the Spectrum option see the *Lotem 800 II with Spectrum Family User Guide,* 399Z3R873A.

The Lotem 800 II uses a thermal imaging head 830 nm just like any other Creo CTP device.

The Lotem 800 II does not support thermal compensation.

Lotem 800 II plate size ranges from 457 x 381 mm (18 x 15 inch) to 1130 x 905 mm (44.5 x 35.4 inch).

The Lotem 800 II is available in the following configurations:

Single, dual or multi-cassette units; all plate-loading options support automatic slip-sheet removal; optional connectivity to In-line processors:

- Single cassette unit: up to 100 plates with slip-sheets.

- Dual-loading cassette: allows for two different plate sizes; the main cassette holds up to 60 plates; the upper tray holds up to 10 plates (of a different size) or proofing media.

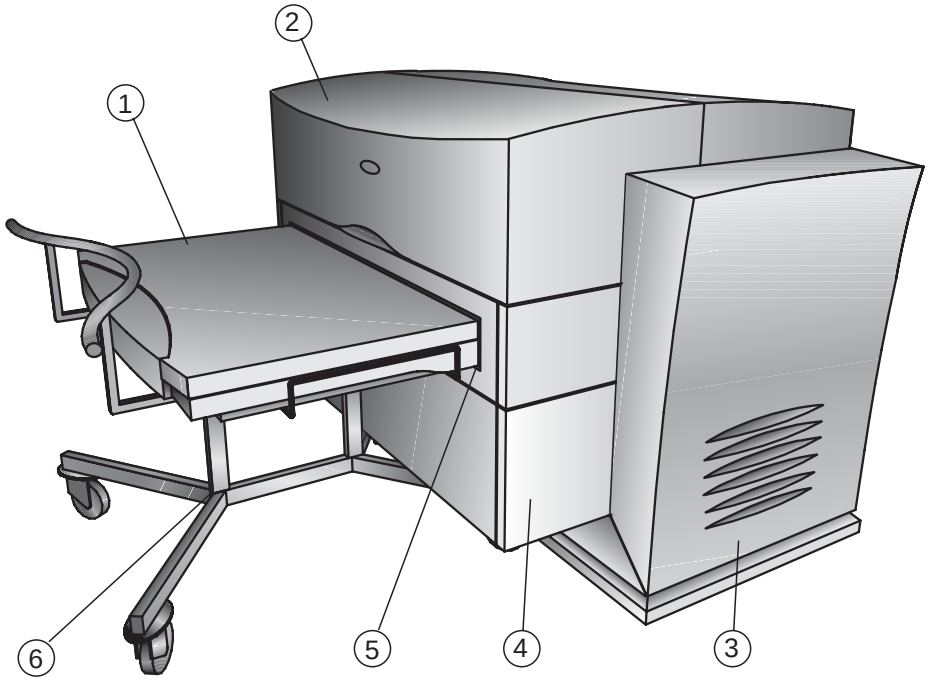
📖 See the *DLC for Lotem 800 User Guide,* 399Z1R080B.

- Multi-cassette unit: holds up to 500 plates in five cassettes, each with up to 100 plates. The required cassette is automatically selected according to the job definition. Empty cassettes can be reloaded while the platesetter is running.

📖 See the *MCU for Lotem 800 User Guide,* 399Z1R092.

1.3 Lotem 800 II Features

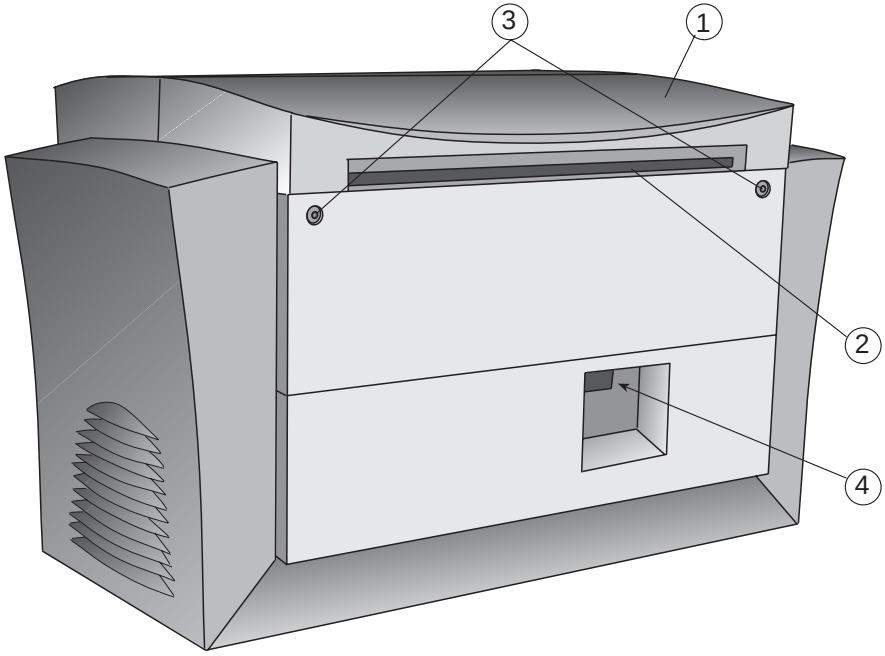
The figure below shows a front view of the Lotem 800 II.



1 - Cassette
2 - Upper front door
3 - Right side door
4 - Paper disposal door
5 - Cassette entrance
6 - Loading cassette trolley

Figure 15. Lotem 800 II, front view

The figure below shows a rear view of the Lotem 800 II.



1 - Upper rear door
2 - Plate unloading opening
3 - Left/right on/off pushbuttons
4 - Main circuit breaker

Figure 16. Lotem 800 II, rear view

1.4 Specifications

1.4.1 Main Design

The Lotem 800 II has a fast rotating external drum that uses laser imaging head to expose thermal plates. The thermal imaging is the de facto standard CTP technology today, due to its outstanding performance in a production environment. Thermally imaged plates show superior results on press compared to conventionally exposed plates, and enable far longer run lengths.

1.4.2 Digital Front End

Both the Brisque and Prinergy can drive the Lotem 800 II.

Both Brisque and Prinergy will provide throughput of up to 25 plates per hour, depending on machine model.

1.4.3 Throughput

The Lotem 800 II is able to produce up to 29 plates per hour (depending on machine model) at a resolution of 100 dpm (2540 dpi) for plate sensitivity 130mJ/cm2, plate size (1030 x 790).

1.4.4 Automation

Fully automatic platesetters produce press-ready plates without operator intervention. Plates are loaded automatically, following last-minute slip-sheet removal to protect the plate from dust and scratches. Automation includes unloading plates directly into an inline processor for a streamlined platemaking process.
Proofing media is automatically loaded, imaged and unloaded into an unloading basket.

1.4.5 Media Type

Plates: The Lotem 800 II with Spectrum can use any 830 nm IR aluminum plate / or halftone proofing material.

1.4.6 Cassette Type

Three cassettes configurations with full plate size flexibility - Min: 457 Max: 1130 Operator adjustable.

Single cassette - Holds up to 100 plates of 0.3 mm plate. (Not available for Spectrum option).

Dual loading cassette- trays in one cassette allowed interchangeable use of two different plate sizes; up to 60 plates of one size are held in the main compartment, while a separate loading tray holds up to 10 plates of a different size.

Multi cassette unit - 5 cassettes are an option for Lotem 800 II, each cassette holds up to 100 plates of a specific size and thickness including slip-sheets.

1.4.7 Media Size

The Lotem 800 II is capable of plotting any plate size within the range of 457 x 381 mm to 1130 x 905 mm (18 x 15 inch. to 44.48 x 35.43 inches).This range supports the 4up, 8up presses, GTO, Narrow web size and half-web size.
Proofing media size:
(receiver): 8 page size 30 in.x 40 in./ 762 mm x1016 mm

(donor): 31.25 in. x 41.25 in./ 794 mm x 1048 mm

imagble are: 29 in. x 39 in. / 737 mm x 991 mm

1.4.8 Media Thickness

The Lotem 800 II supports a plate thickness within 0.2 - 0.3 mm (8 - 12 mil) range.
This range supports all sheet fed and most modern web presses
Optional: 0.15 mm / 6 mil or 0.4 mm / 16 mil
0.15 mm plate can't be supported with Spectrum option.

1.4.9 Screening

The Lotem 800 II will support Creo Turbo Screening when connecting to the Brisque and Prinergy super Cell Screen when driven by Prinergy.
The Lotem 800 II does not support class / traditional screening.

1.4.10 Resolution

The Lotem 800 II supports screen rulings of 2400 dpi (Res. 94.48), 1200 dpi (Res.47.24) or 2540 dpi (Res.100) and 1270 dpi (Res.50) depending on the customer requirements.

1.4.11 Image

Dot uniformity of +/-1% (pick to pick) all over the plate with accuracy of +/- 25 micron note that the accuracy based on a plate thickness variance of no more than 5 micron.

1.4.12 Punching

The Lotem 800 II has customized punch configuration and on-site installation with built-in punch, and up to ten punches to ensure perfect registration and multi head punch software selection. The Punch holes are located at the Leading edge of the plate (relative to press' loading direction).

1.5 Lotem Installation Checklist

Use the following checklist to plan and track the Lotem 800 II installation.

	Installation Item	Complete
1.	**SITE PREPARATION**	❒
2.	**HARDWARE INSTALLATION**	❒
3.	Check for damage	❒
4.	Unpack the cooling unit	❒
5.	Unpack and position the platesetter¨	❒
6.	Voltage setting	❒
7.	Unpack & assemble the optic head	❒
8.	Unpack & assemble cassette loading trolley & proofing trays	❒
9.	Remove shipping guards	❒
10.	Fill up cooling liquid	❒
11.	Height adjustment of platesetter	❒
12.	Unloading basket and plate conveyor assembly and connection	❒
13.	Processor positioning	❒
14.	Power and air compressor connection	❒
15.	Operation monitor connection and cable setup	❒
16.	**POWER UP**	❒
17.	Cooling unit	❒
18.	Network setup/time setting	❒
19.	Software check and start up	❒
20.	Front End unpacking & setup	❒
21.	Front End connection (TCP/IP address, fibers)	❒
22.	Front End configuration	❒
23.	**PUNCH INSTALLATION**	❒

24.	Punch configuration setup - motors/detectors	❒
25.	**CUSTOMER CONFIGURATION SETTING**	❒
26.	Set press formats	❒
27.	Set plate size	❒
28.	**LOTEM CHECK**	❒
29.	Load/unload system	❒
30.	Drum motion	❒
31.	Interlocks system	❒
32.	Laser status	❒
33.	Full load/unload cycle	❒
34.	**EXPOSURE TESTS**	❒
35.	All Lotem calibration tests	❒
36.	Processor check	❒
37.	Excurve calibration	❒
38.	ATP of customer formats	❒
39.	Perform a customer job	❒
40.	**CALIBRATION**	❒
41.	Parallelism check of image to press punches	❒
42.	Press runs	❒
43.	Tone reproduction buildup	❒
44.	**TRAINING**	❒
45.	Hardware training	❒
46.	Brisque functionality training	❒
47.	Workflow setup	❒



Chapter 2

Hardware Installation

Unpacking Platesetter 47
Unpacking Loading Cassette Trolley 51
Trolley Assembly 52
Height Adjustment Procedure 55
Removing Shipping Safeguards 57
Power Connection 60
UDRC (Unit Debris Removal Cabinet) Requirements . . 63
Air Compressor Connection 65
Image Head Installation 67
Routing the Imaging Head 71
Connecting Plate Conveyor to Plate Processor 76
Connecting Operation Monitor 87
E-Box Connections 88
Punch Installation 89
Packing-up the Platesetter for Shipment 91

This chapter describes the physical installation of the Lotem 800 II platesetter.

It details the following steps which are required to make the platesetter ready for operation:

2.1) Unpack Platesetter

2.2) Unpack Loading Cassette Trolley

2.3) Trolley Assembly

2.4) Height Adjustment Procedure

2.5) Remove Shipping Safeguards

2.6) Power Connection

2.7) Air Compressor Connection

2.8) Image Head Installation

2.9) Routing the Image Head

2.10) Plate Conveyor Assembly and Connection

2.11) Connect Operation monitor

2.12) E-box Connections

2.13) Punch Installation

2.14) Packing-Up Platesetter

2.1 Unpacking Platesetter

Handle all packing materials with care. These materials will be used again if you need to transport the platesetter in the future.

Use **only** the Fork lift to lift the shipping container and place it at the unpacking site. Make sure that the container is lifted **only** from the Front side, as indicated by the label on the packaging.

Before you begin unpacking the platesetter, ensure that the unpacking site is large enough to allow easy maneuvering of the platesetter.

For example, check the following:

- Available space for the Fork lift to lower the platesetter from the shipping pallet.
- Doorway clearance for the platesetter and Fork lift.

2.1.1 Checking for Damage

Check that the shipping container is undamaged. Do not proceed with the unpacking if it is damaged in any way and notify the shipping agent immediately.



This warning label is located on shipping carton. It is also located on top of the platesetter above the wrapping nylon.

2.1.2 Precautions

Observe the following precautions before unpacking:

- Do not unpack the platesetter in extreme heat or cold (above 30°C or below 0°C).
- If there are any signs of ice on the machine, do not touch any of the mechanical parts. Wait 24 hours (preferably 48 hours) for the platesetter to gradually reach room temperature.
- Do not unpack the platesetter in a non-conditioned room in case the weather is very humid.

2.1.3 Parts Checklist

For parts list, see the PCL and GCL forms attached to the Lotem packaging.

2.1.4 Removing the Platesetter

A minimum of two (2) people and a Fork lift are required to unpack and lower the platesetter from its shipping pallet.

Figure 17 on page 50 shows the unpacking process. Refer to this figure to identify the numbers appearing inside brackets in the following text.

1. Carefully cut the three (3) steel bands [1] surrounding the outer carton container [2].
2. Open the top flaps of the outer carton container [2].
3. Remove the staples that secure the carton [2] to the wooden shipping pallet [7] and to the wooden support struts [5].
4. Remove the entire carton container [2].
5. Remove all the parts that tied to the shipping pallet in back of the platesetter.
6. Remove the top wooden support struts [3] and the side wooden support struts [5].

7. The platesetter is secured to the shipping pallet by four (4) screws, brackets and washers [8]. Remove the screws, brackets and washers from underneath the pallet.
8. Using the fork lift, lift the platesetter from the shipping pallet so that the wheels are released from the pallet. Make sure the platesetter is lifted **only** at the designated locations, marked on the pallet chassis.
9. Lower the platesetter from the shipping pallet.
10. Remove the eight (8) protective rubber angles [4] at the machine corners and upper doors.
11. Remove the nylon wrapping from the platesetter
12. In order to move the platesetter, you need to lift its legs so that the machine can be rolled on its wheels. Close the nut of each leg by turning it counter-clockwise.
13. Roll the platesetter to its final location.
14. Lower the four legs of the platesetter by turning the nut of each leg clockwise.

To complete the installation, proceed from *Section 2.4 Height Adjustment Procedure on page 55*. Handle all packing materials with care. These materials will be used again should you need to transport the platesetter in the future. For details on how to re-pack the platesetter refer to *Section 2.15 Packing-up the Platesetter for Shipment on page 91*.

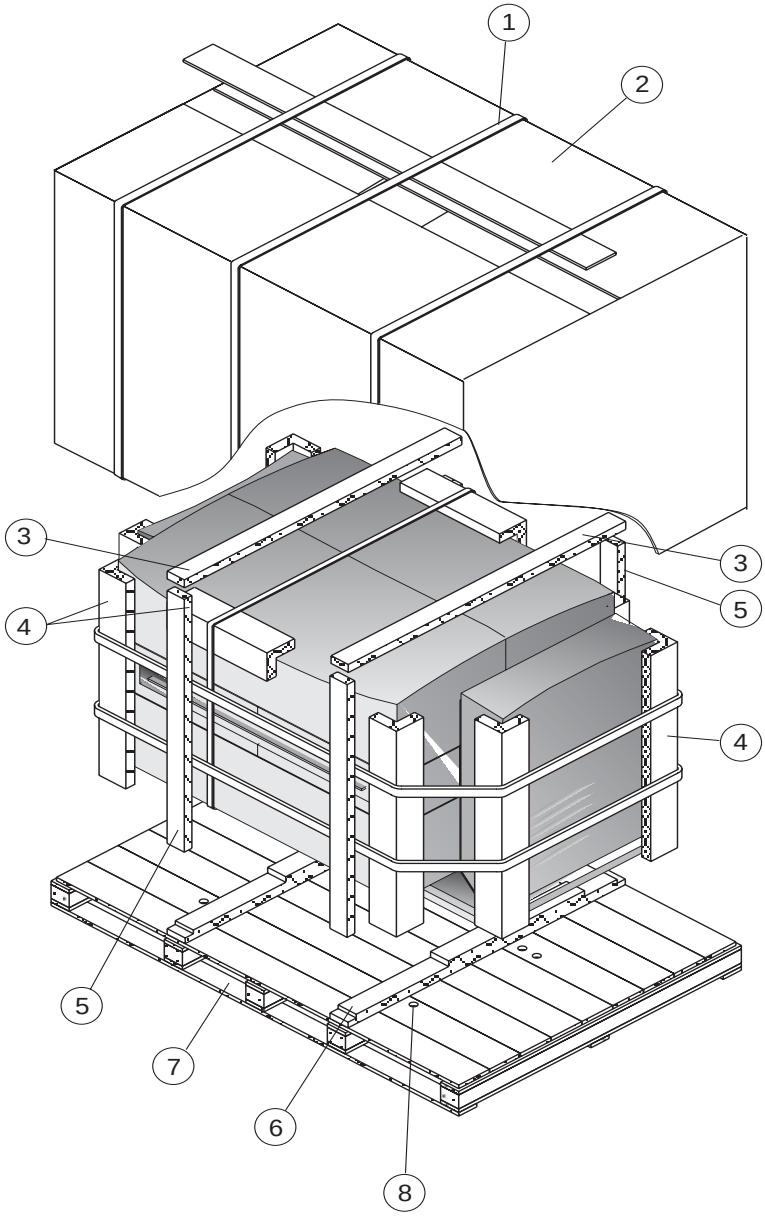


Figure 17. Unpacking the platesetter

2.2 Unpacking Loading Cassette Trolley

The loading cassette trolley packaging and the cassette packaging are supplied together. *Sections 3.2.1 & 3.3* describe the trolley unpacking and assembly, and *Section 2.3.1 on page 54* describes the cassette.

See the parts list attached to the trolley packaging.

2.2.1 Unpacking Trolley

The trolley is disassembled before packing, see *Section 2.3 on page 52* for trolley assembly instructions. One (1) technician is required to unpack the trolley.

1. Cut the bands to separate the Trolley packaging (upper packaging) from the cassette packaging (bottom packaging).
2. Open the top flaps of the trolley packaging.
3. Remove the staples that connect the top wooden strut to the packaging.
4. Lift out the top wooden strut with the parts connected to it.
5. Disconnect the top trolley assembly that is connected to the wooden strut, using an 1/2 inch open-end wrench.
6. Remove the small plastic bag containing the bolts and plugs required for the Trolley assembly.
7. Remove the staples that connect the bottom wooden strut to the packaging.
8. Lift out the wooden strut with the parts connected to it.
9. Disconnect the trolley parts connected to the wooden strut: the two side assemblies and the vertical assembly, using an 1/2 inch open-end wrench.

See *Section 2.3 on page 52,* for Trolley assembly instructions.

2.3 Trolley Assembly

The loading cassette trolley includes four assemblies. See *Figure 19. on page 54* (refer to numbers in brackets to identify the various parts):

- Top horizontal frame [1]
- Two identical side assemblies, each assembly has two wheels [2]
- Inner vertical frame [3]
- Screws and cups [4, 5, 6]

One technician is required to assemble the trolley, using a flat allen key.

Do not tighten the bolts until all bolts are inserted.

1. Attaching side assemblies to inner vertical frame:
   - Align the right side assembly with the right side of the inner vertical frame, matching the holes. Insert two bolts [4] and 2 spring washers to attach the vertical frame and the side assembly.
   - Repeat the above step to attach the left side assembly to the left side of the inner vertical frame.
2. Attaching top horizontal frame: carefully lift the top frame and place it on the side assemblies, with the handle facing upwards.
3. Align the top frame by matching the four threads of the top frame to the four holes of the side assemblies. Insert the four bolts [5] and spring washers (insert from the bottom side). Do not tighten the bolts.
4. The trolley height is pre-adjusted to 713 mm and there is no need to adjust this height. However, you need to check that the trolley stands securely on the floor, on all four wheels. Move the trolley to verify that all the wheels rotate properly. For example, if the floor is not straight, you may need to adjust the trolley leveling, by adding or removing washers to the bolts that connect the wheels.
5. When the trolley is properly leveled, first tighten the two bolts of each side assembly, and then tighten the four bolts of the top assembly (it is important to tighten the bolts in this order).

6. Insert four plugs [6] into each side assembly: two in vertical frame and two in top assembly.

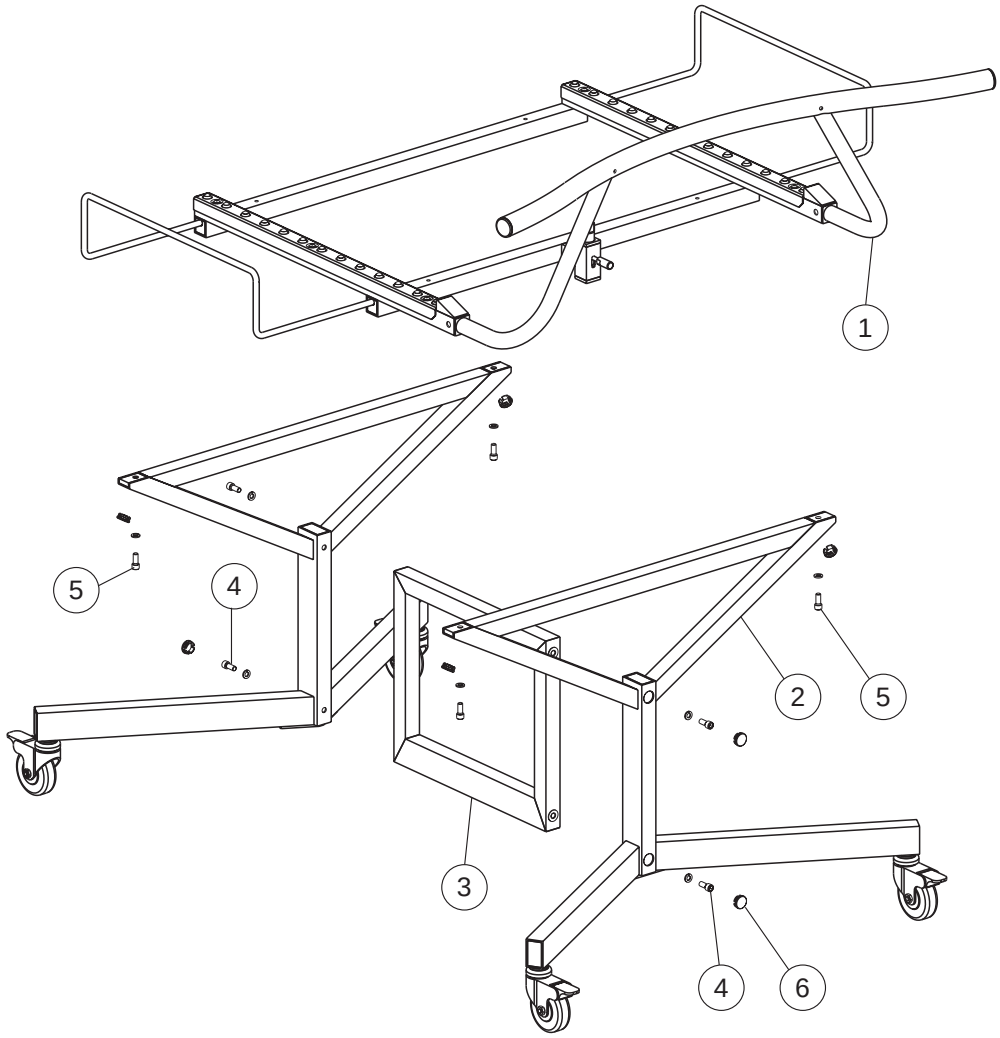


Figure 18. Loading cassette trolley assembly

Figure 19. on page 54 shows the trolley after assembly.



Figure 19. Loading cassette trolley after assembly

2.3.1 Placing Cassette

The cassette is supplied together with the loading cassette trolley, but packaged in a separate carton (bottom carton). It is recommended that you unpack the cassette **after** the trolley is assembled, so that you can place it directly on the trolley. See *Section 2.3 on page 52*, Trolley Assembly, previously.

1. Open the top flaps of the cassette carton.
2. Lift out the cassette and place it on the Loading cassette trolley. Verify that the cassette is placed on the two rows of bearings. When the cassette is properly positioned it is automatically locked in place by the cassette lock.

2.4 Height Adjustment Procedure

Final leveling means that the platesetter is situated on a uniform horizontal plane at all four corners, and where the height of the platesetter is adjusted to enable smooth loading of the cassette into the cassette entrance of the platesetter. **The final platesetter height is set according to the height of the Loading cassette trolley with the cassette placed on it.**

1. Roll the loading cassette trolley with the cassette to the front side of the platesetter, opposite the cassette entrance (see *Figure 20. on page 55*).
2. Rotate the trolley so that it is positioned at an angle and push one corner into the cassette entrance - in this position it is easier to check the alignment. Check the alignment of the cassette with the cassette entrance. The cassette should be centered in the entrance.
3. Rotate the trolley until it is parallel to the platesetter and push the other corner into the entrance. Check the alignment. Note that the cassette should fit symmetrically in the opening, as shown in *Figure 20. on page 55*. The gap above and below the cassette should be 3 mm.

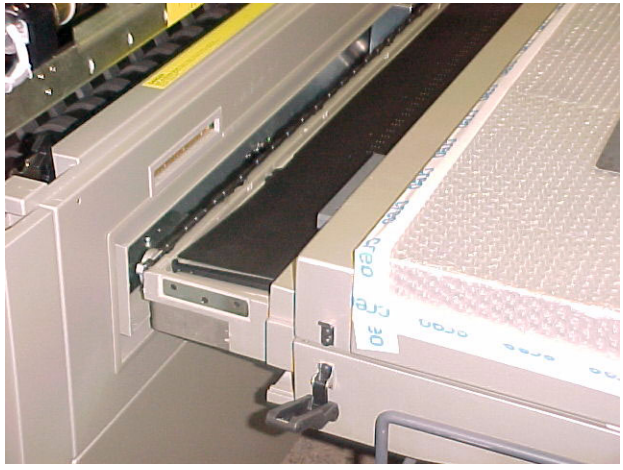
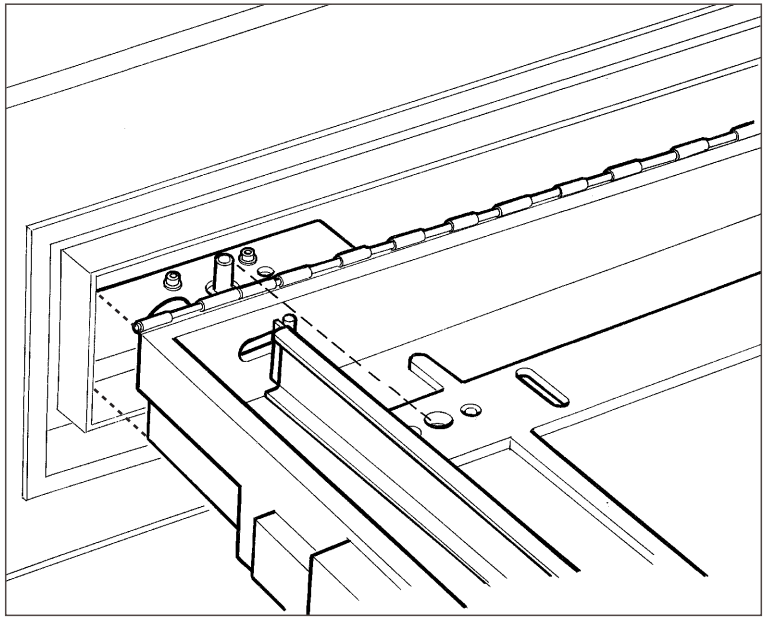


Figure 20. Aligning cassette

4. If necessary, adjust the platesetter legs. The front legs are adjusted according to the cassette, and the rear legs are adjusted so that the platesetter is parallel to the floor. Place a standard leveling instrument on the main frame side door, and verify that the front and back of the platesetter are parallel. If not, adjust the rear legs. Open or close the adjusting nut of the rear leg and turn it clockwise or counter-clockwise, and then tighten the locking nut (see *Figure 21. on page 56*).

If the customer will be working with two cassettes, you need to check that both cassettes can be properly inserted.



1 - locking nut
2 - adjusting nut
3 - platesetter wheel (make sure all 4 wheels do not touch the floor)

Figure 21. Adjusting leg height

5. After the cassette and platesetter are properly aligned, tighten the legs by closing the locking nut of all four legs of the platesetter.

2.5 Removing Shipping Safeguards

The platesetter is shipped with several safeguards that prevent excessive movement of internal parts during transport.

The following topics are discussed below:

- Removing the securing ties that lock the loading system.
- Removing optomechanic to chassis locking devices.
- Removing carriage to optomech locking devices.

2.5.1 Opening Doors and Removing Securing Ties

To access the securing ties, you need to manually open the upper front and rear doors.

1. To open the upper front door: insert a screwdriver into the two (2) holes of the upper front cover. This releases the locking mechanism pins of the upper front door.
2. Remove the wide tapes that tape the tail gripper to the drum.

2.5.2 Optomechanic to Chassis Locking Devices

The special locking devices secure the optomechanic assembly to the main frame during transport. There are four such locking devices - two on the front side of the platesetter, and two on the rear side. The locking devices are red for easy identification. *Figure 22. on page 58* and *Figure 23. on page 59* show the locking devices and their locations.

1. Each locking device is secured with two screws. Use a 5/16 inch allen key to remove the screws. Then remove the red locking device.
2. Perform the above to remove the two front locking devices and the two rear locking devices.

2.5.3 Carriage to Optomech Locking Devices

Two locking devices secure the carriage to the V block during transport. There are two such locking devices - one in front of the carriage and one behind the carriage. Both are accessed from the rear side of the platesetter. See *Figure 22. on page 58*.

1. The front locking device is secured with eight (8) screws. Use a 5/16 inch allen key to remove the screws, and then remove the locking device.
2. The rear locking device is secured with ten (10) screws. Use the allen key to remove the screws and then remove the locking device.

After removing the locking devices, visually inspect the components inside the machine to verify that they are undamaged.

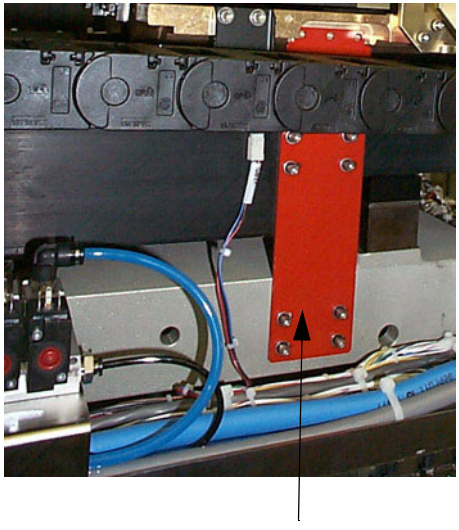
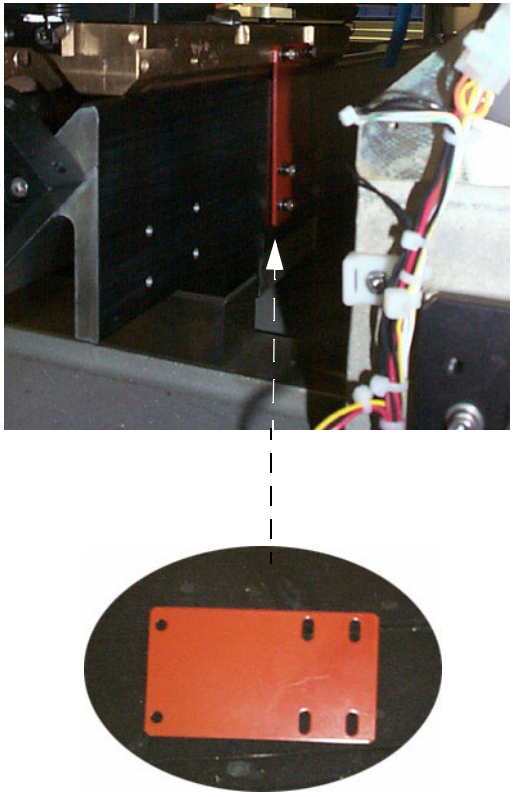


Figure 22. Carriage to optomech plates, platesetter rear view



Rear carriage to optomech locking device

Figure 23. Carriage to optomech plates, platesetter rear view

2.6 Power Connection

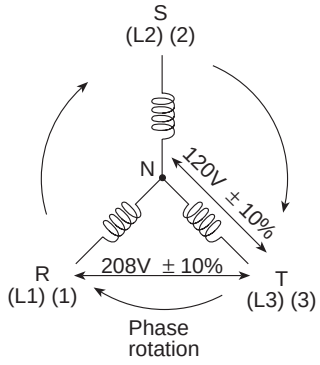
2.6.1 Connecting Main Power Cable

1. Manually open the upper front door (as described in *Section 2.5.1 on page 57*).
2. Open the right side door.
3. Locate the main power cable (black cable), and pull it out through the cable opening at the bottom of the platesetter.

For customers with 110 VAC line power:

1. Connect the connector (a 5-pin connector - 3 phase R.S.T, Neutral & GND, 30A) to the main power cable.
2. Plug the main power cable to the main line voltage outlet.

📖 See the phase rotation diagram below.



For customers with 220 VAC line power (a step-down transformer is required):

1. Using a DVM, measure the actual line voltage.
2. Transformer wiring - the 3-phase RST wires in the transformer are preset to 230 VAC. However, the correct wiring should be to a value that is higher than the actual measured line voltage. For example, if the measured line voltage is 230 VAC, you need to rewire the RST wires to 240 VAC. See *Figure 24. on page 61*.

3. Connect the connector (a 5-pin connector - 3 phase R.S.T, Neutral & GND, 16A) to the main power cable.
4. Connect main power cable connector to the transformer connector (supplied with the transformer).

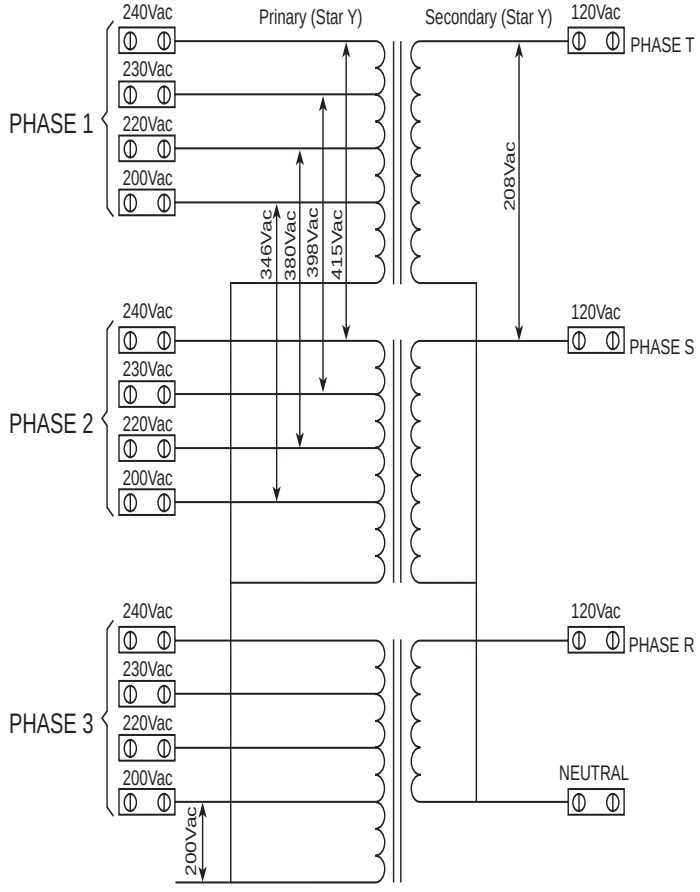


Figure 24. Transformer wiring

5. Connect the transformer cable to a connector that is suitable to your wall outlet.
6. Plug the transformer cable into the wall outlet.

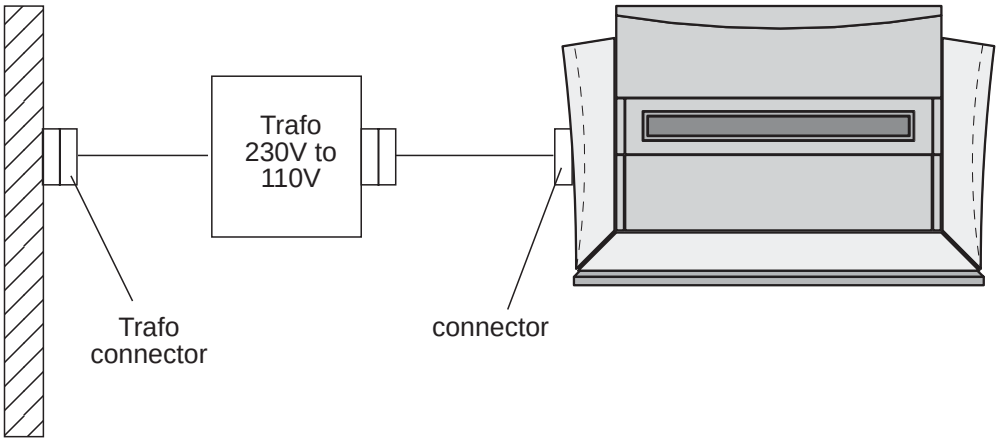


Figure 25. Platesetter - transformer connection

7. From the Lotem application, open the drum vacuum pump.
8. Operate it to check the phase order. If you did not connect the phase in the correct order, the pump will make a coughing noise.
9. Close the pump immediately and reconnect the phases.

The following figure shows a schematic of the platesetter - transformer connection.

2.7 UDRC (Unit Debris Removal Cabinet) Requirements

2.7.1 Electrical & Power Requirements

- The appliance inlet is the AC mains disconnection point for the UDRC (for servicing and in the event of fire).
- Ensure that the branch circuit breakers, power cords, and plug are in full compliance with the local Electrical Standards.

2.7.2 Cables, Hoses, Connectors and Receptacles

Hose and Data Cable

The UDRC is supplied with a 3 m flexible hose and a 3 m data cable. The UDRC must therefore be positioned within 3 m of the hose and cable attachment point on the rear of the output device.This attachment point is typically located near the lower left corner as viewed from the rear of the output device.

2.7.3 Power Cables and Receptacles

Power requirements for North America and Japan

Cables	Supplied by Creo	Required by Customer
UDRC power	IEC320, Type C20 appliance inlet. Detachable 4.5m (15 ft) power cord[1] with IEC320 Type C19 connector at the device end and a L6-15P plug at the other end.	Dedicated 15A, 200-240V branch circuit and L6-15R receptacle.

Power requirements for Europe, Australia and SE Asia

Cables	Supplied by Creo	Required by Customer
UDRC power	IEC320, Type C20 appliance inlet Detachable 4.5m (15 ft) power cord2 with IEC320 Type C19 connector at the device end and no plug3 at the other end.	Dedicated 16A, 200-240V branch circuit with standard receptacle and mating plug for power cord.

The above specified input voltages require balanced power inputs (Line1 to Gnd = Line2 to Gnd or Line1 to Gnd = Line1 to N) with tolerances of +6% to -10%. The specification for frequency is 50/60 Hz ± 1.5%.

Power cord plug wiring installation guide

Wire Insulation Color	Branch Circuit/Plug terminal
Brown	Line 1
Blue	Neutral or Line 2
Green/Yellow	Protective earth (ground)

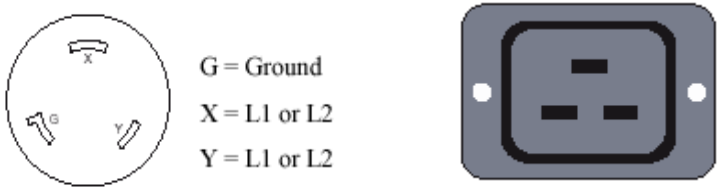
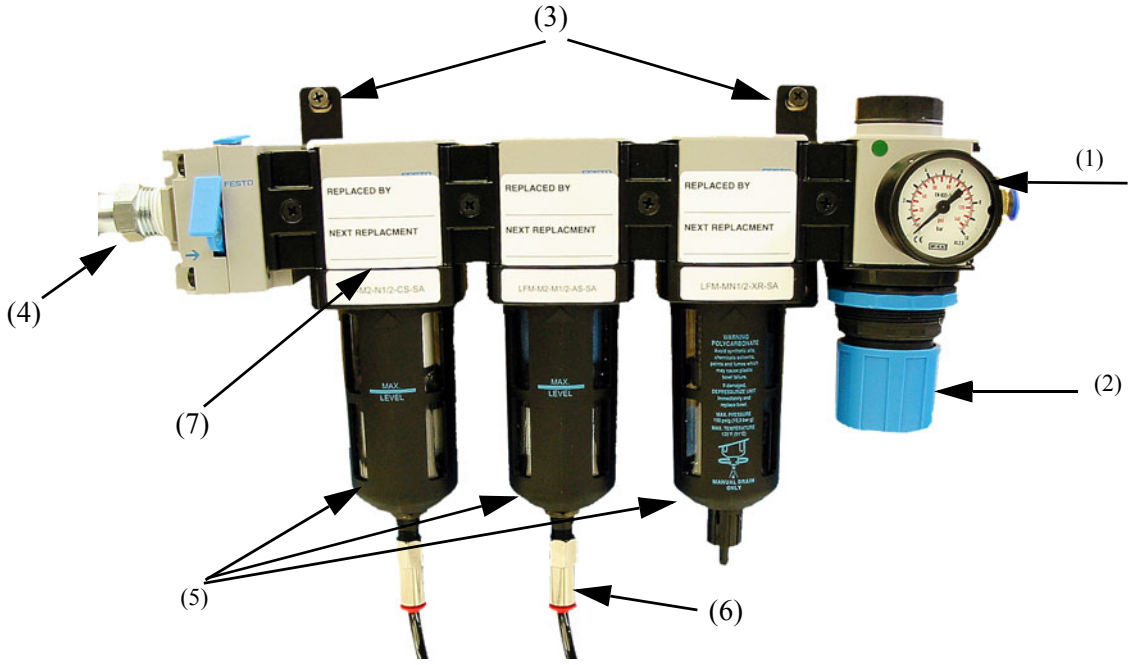


Figure 26. L6-15P plug / IEC320 Type C20 appliance inlet

2.8 Air Compressor Connection

1. Pull out the air pressure tube (a 5 meter long, orange tube that is supplied with the platesetter) through the cable opening at the bottom of the platesetter (same opening as main power cable - see *Section 2.6 on page 60*, Power Connection).
2. Connect the air pressure regulator, which includes the air pressure filters and gauge, to the air pressure tube (the regulator with the filter are supplied with the platesetter).
3. Connect the air pressure regulator to the air pressure outlet in the wall. See the air compressor specifications on page 8 of the *Lotem 800 II Family Site Preparation Guidelines,* 399Z3R876A.
4. Set the gauge to 6 ATM (90 psi).



1 - Air pressure gauge

2 - Air pressure control (counter-clockwise to open)

3 - 2 screws attached to wall

4 - Customer air outlet

5 - 3 air filters

6 -Water drainage

7 - Filter replacement label

Figure 27. Air compressor connection

2.9 Image Head Installation

2.9.1 Hardware Installation

Wear a static bracelet before installation.

1. Open the rear upper door and rear door in order to install the head.
2. Manually move the carriage from the end position to the middle as to allow easy access for head installation.
3. Check that the optic window is clean. If it is not clean, then carefully clean it with alcohol and rice paper.

   Make sure the alcohol does not come into contact with the red seal.

4. Put grease on the following places before placing the head
   a. head rod
   b. carriage groove

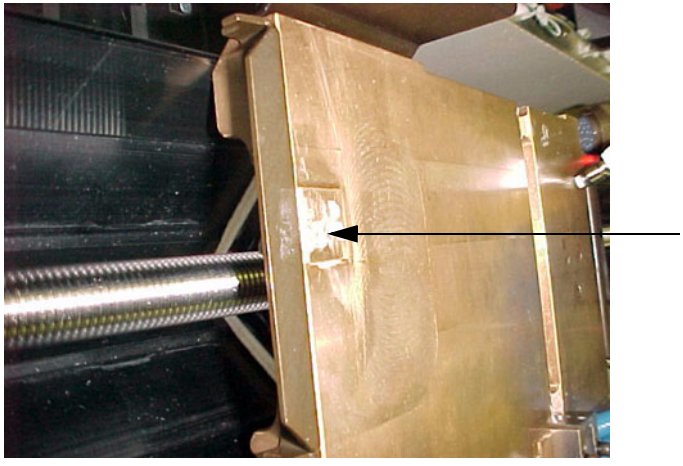


Figure 28. Carriage fifth point

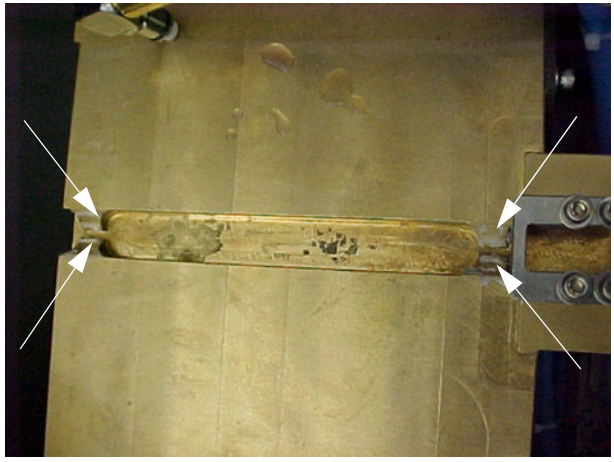


Figure 29. Carriage groove

5. Assemble the optic head on the carriage. Be careful not to damage the head.
6. Attach the two springs to the optic head on the left and right sides. See *Figure 30. on page 68* and *Figure 31. on page 69*.
7. Spin the drum slowly to make sure the head does not punch the drum.

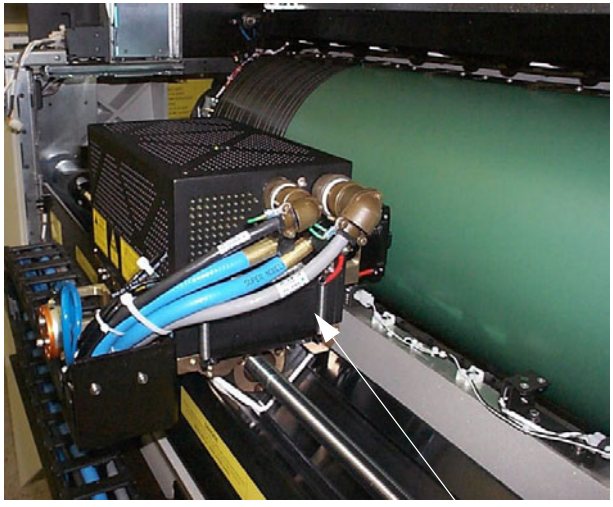


Figure 30. Right side tightening springs

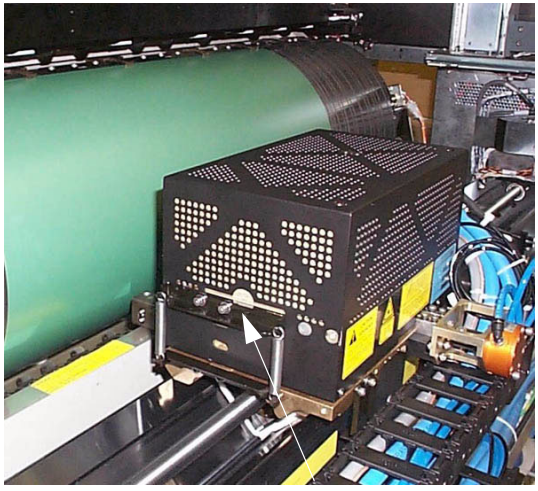
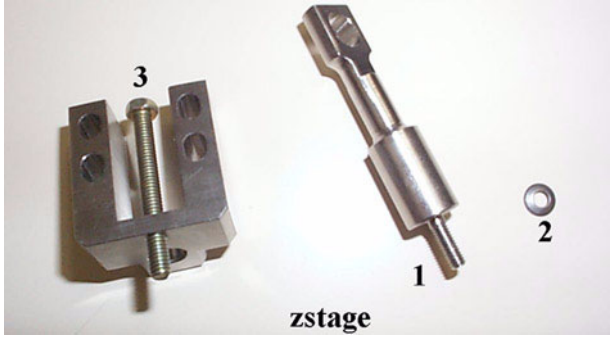


Figure 31. Left side tightening springs

8. Assemble the Z-Stage unit on the optic head and the carriage. Make sure there is distance between the drum and the head. See *Figure 32. on page 70*.

When adjusting the head (not as an installation process) loosen the 4 allen screws, holding the Z slider bracket (number 3 in the figure below) up against the carriage.



- Screw the z-stage arm into the optic head.

Remember to use the fix spacer (number 2 in the above figure).

- Connect the pneumatic unit to the carriage with two (2) allen screws 8:32:5/8.
- Assemble the pin into the arm. Tighten it with the e-ring.

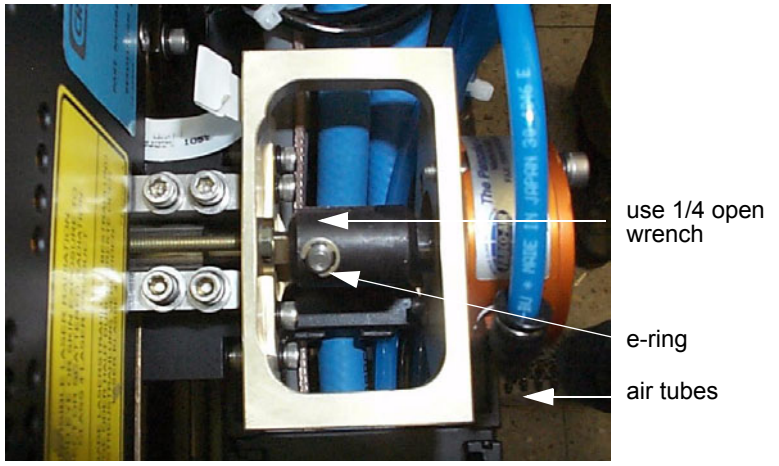


Figure 32. Adjustment jig

- Connect the two (2) air tubes, according to the labels, from the main chain to the z-stage.
- Check that it works correctly by pushing the z stage valve.

For machine calibration, see *Lotem 800 II Family Calibration,* 399Z3R875A.

2.10 Routing the Imaging Head

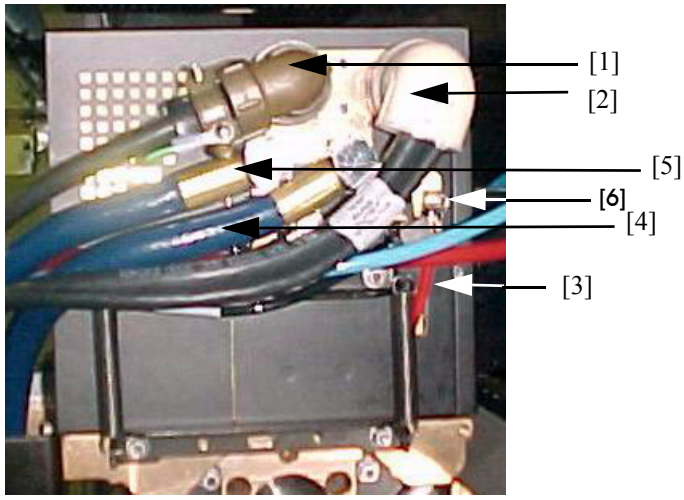


Figure 33. Cables in Imaging head.

1. Route cable 1 from the optic head to the TMCE to J-2.
   - Attach the ground cable to the connector lingula.
2. Route cable 2 from the optic head to the power supply.
   - Attach the ground cable to the connector lingula.
3. Route cable 3 from the optic head to the Air Valve.
4. Route cable 4 from the optic head to the Cooling system at the outlet.
5. Route cable 5 from the optic head to the Cooling system the inlet.
6. Route cable 6 from the optic head to the TMCE board to J-1.

In case the machine is using internal cooling unit rout cable 4 to inlet and cable 5 to the outlet.

2.10.1 Routing the Universal Debris Removal Cabinet (UDRC)

1. Remove the lower rear upper cover.
2. Remove the rear lower cover.
3. Connect the UDRC air hose to the output device outlet. See *Figure 34. on page 72*.



Figure 34. Air hose

Make sure the connecting hose lies in an area where it will not be disturbed.

4. Connect the data cable connector to the UDRC (found in the Accessories Kit). The data cable is used to transfer data between the UDRC and the platesetter. See the figure below.



Figure 35. UDRC

The data cable is 3 m (9.8 ft.) long. It is used to transfer data between the UDRC and the platesetter.

5. Connect the other side of the cable (molex connector) to the ABL (ablation) unit hidden on the outside of the E-box wiring. See *Figure 36. on page 74*.

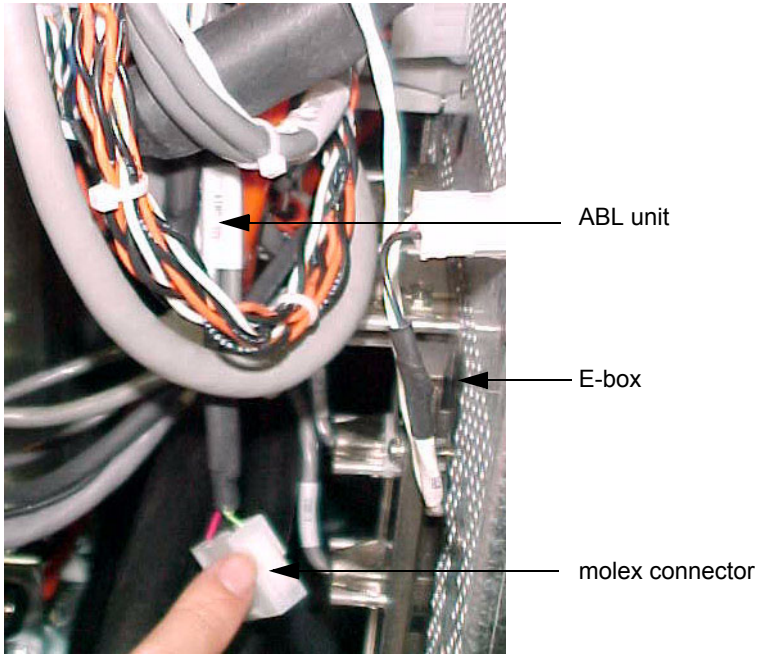


Figure 36. ABL unit

The Debris removal unit should be located within 3 meters from the machine.

6. Connect the UDRC power cable. See *Figure 36. on page 74*.

2.10.2 Filling up Cooling Liquid

Do **not** operate the platesetter until it is filled with cooling liquid.

- You must fill at least a gallon of cooling liquid into the container.The filling is performed in two stages:
  - Start filling the container when the unit is still OFF, but the TH2 is already connected (as the head will fill up with some liquid too). Fill the container as much as possible.
  - Leave the cap open and turn on the Lotem so that the pump begins to work. Continue to fill the container until you reach the Max level line.

- Make sure to completely close the cap.
- If the cooling liquid does not arrive, you can use distilled water to begin the installation. You **cannot** continue the installation until you replace it with cooling liquid.

2.11 Connecting Plate Conveyor to Plate Processor

2.11.1 Plate Conveyor Assembly

The Plate conveyor is supplied in a separate package. It is recommended that two (2) people unpack and assemble the conveyor. Refer to the following figures; the numbers in brackets, in the instructions below, identify the various parts.

1. Open the packaging. The packaging includes the following parts (*Figure 37. on page 79*):
   - Upper assembly [4]; has two parts, front and back, where the back part can fold toward the front part.
   - Two identical leg assemblies [3].
   - Leg adjuster assembly [8].
   - Small bag with screws and washers.
2. Remove the two leg assemblies, the leg adjuster and the bag of screws and other accessories (the upper assembly should remain in the packaging).
3. Open the inner protection cover of the upper assembly so that the side facing you is exposed (the other parts are assembled to the upper assembly while it is in the packaging).
4. Refer to *Figure 38. on page 80* - connect the two leg assemblies to the Upper assembly: each leg assembly is connected with two shoulder screws [1]. The leg assembly orientation should be so that the slots in the leg assembly horizontal bar will enable inserting the leg adjuster screws [9]. Do not tighten the screws.



If the leg assembly does not fit into the upper assembly (item [15] in *Figure 37. on page 79*), open the four screws that attach the leg assembly, make the necessary adjustment and tighten the screws.

5. Connect the leg adjuster [8] to the two leg assemblies:
   - Refer to *Figure 37. on page 79* - disconnect the two parts of the leg adjuster by releasing the set screws [2]. Note that one part has a ruler printed on it.

- Refer to *Figure 38. on page 80* - connect the leg adjuster part with the ruler to the top bar of the front leg assembly. Use screw [9], spring washer [10] and adjuster washer [13]. Do not tighten the screw.
- Refer to *Figure 38. on page 80* - connect the other part of the leg adjuster to the bottom bar of the rear leg assembly. Use screw [9], spring washer [10] and adjuster screw [13]. Do not tighten the screw.
- Refer to *Section 2.11.2 on page 78 Conveyor - Processor Interface*. Locate the name of the processor to be used in the customer's site, and the required leg adjuster height (value **A** in Conveyor - Processor Interface) for that processor.
- Refer to *Figure 39. on page 81* - using the ruler printed on the leg adjuster, adjust the length according to the required height (above).
- Tighten the two set screws [2] shown in *Figure 37. on page 79*.

6. Adjust the leg assemblies angle [3] to the upper assembly [4] (*Figure 37. on page 79* and *Figure 39. on page 81*):
   - There are sets of holes in the leg assembly and in the upper assembly. Rotating the leg assembly will engage holes in the fixed and mobile parts.

     It is important to adjust the front leg assembly first.

   - Locate the correct hole for the front leg - see value **C** in Conveyor - Processor Interface for your processor. Match it with the corresponding hole in the upper assembly, by rotating the leg.
   - Insert a screw [5], washer [7] and spring washer [6] into the two holes of the front leg. Tighten the screws.
   - Locate the correct hole for the rear leg - see value **B** in Conveyor - Processor Interface for your processor. Match it with the corresponding hole in the upper assembly, by rotating the leg.
   - Insert a screw [5], washer [7] and spring washer [6] into the two holes of the rear leg. Tighten the screws.

7. Tighten the shoulder screws [1] that connect the upper assembly with the leg assembly (a total of 4 screws, 2 for each leg).
8. Adjust the height of each leg assembly:
   - Refer to conveyor - Processor Interface for the required leg assembly height for your processor. For the rear leg - value **D**; for the front leg - value **E**.
   - Release both set screws [14] of each leg in the front leg assembly, and in the back leg assembly.
   - Using the ruler printed on the leg, adjust the length of the narrow part of each leg according to the above height.
   - Tighten the two set screws of the two legs of the front leg assembly, and the back leg assembly.
9. At both ends of the leg adjuster, tighten screw [9] that connects the leg adjuster to the leg assemblies.
10. Turn the conveyor over, face up, so that it stands on its legs (the back part should be folded on top of the front part).
11. Attach the conveyor to the platesetter, as described in *Section 2.11.3 on page 82*.

2.11.2 Conveyor - Processor Interface

Processor Type	A	B	C	D	E	Remarks
Horsell	5.8 cm	3	2	39.5 cm	40.5 cm	Remove front tray of processor and connect the plate sensor to upper part of the conveyor.

A - length of leg adjuster ruler part D - length of rear leg ruler part

B - rear leg angle position E - length of front leg ruler part

C - front leg angle position

This processor is only an example. Creo does not recommend any specific company's product.

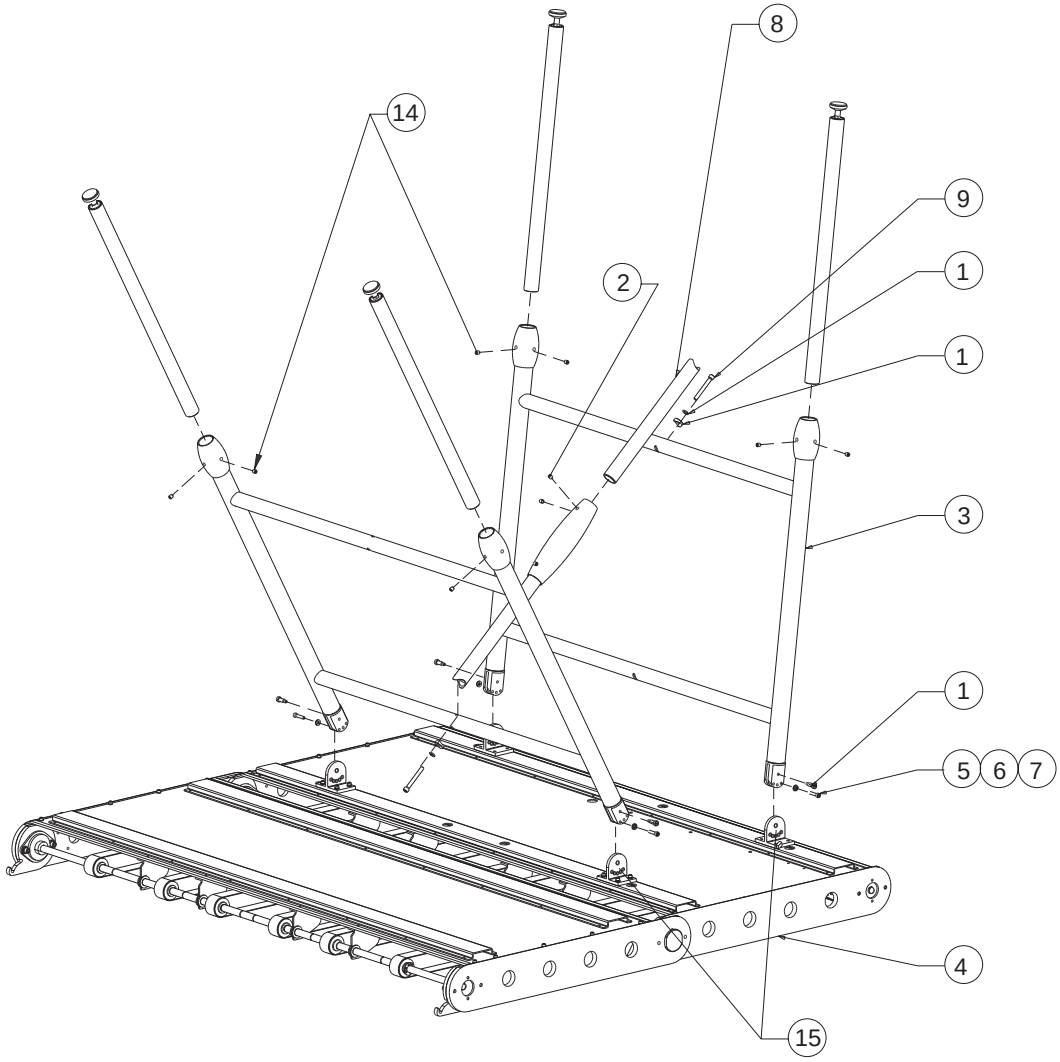


Figure 37. Plate conveyor assembly (1)

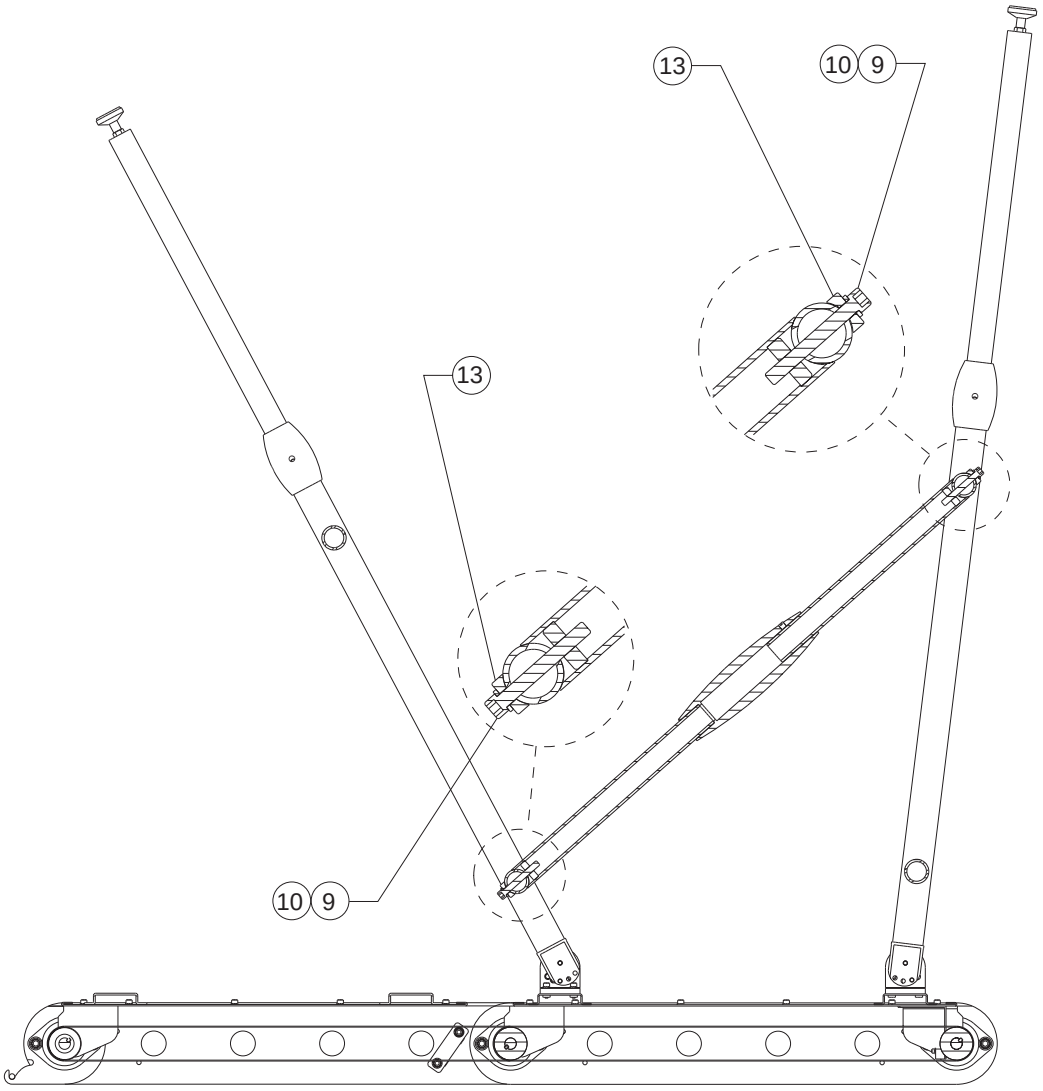


Figure 38. Plate conveyor assembly (2)

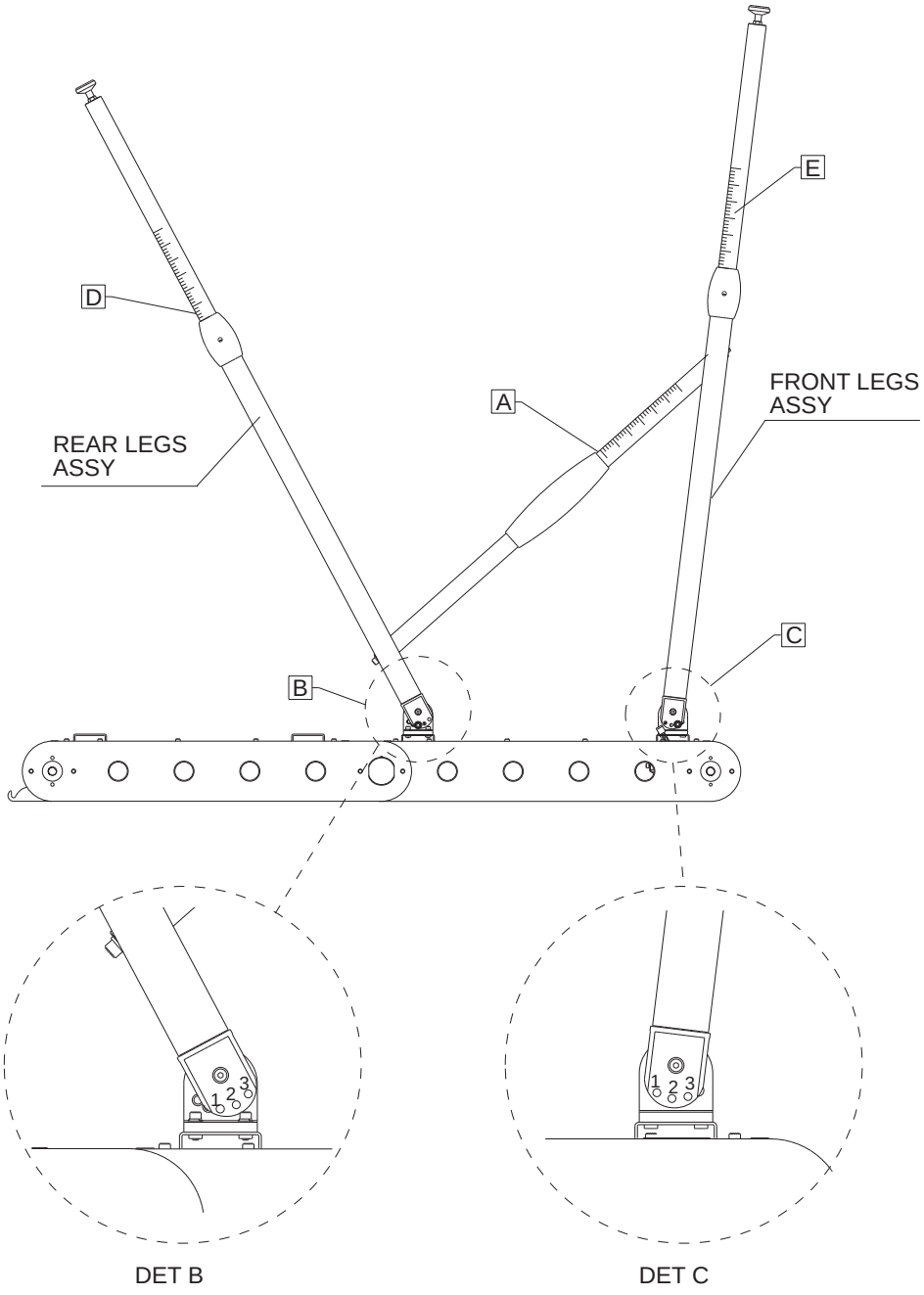


Figure 39. Plate conveyor assembly (3)

2.11.3 Attaching Plate Conveyor to Platesetter

The conveyor connects to the upper back panel of the platesetter.

If you are upgrading from a Lotem FH without Omron interlocks, to a Lotem Quantum or Quantum Spectrum, you will need to order two new brackets (part numbers: 290A5A172, 290A5A173) BEFORE attaching the plate conveyor to the platesetter.

1. Refer to *Figure 40. on page 83* and *Figure 41. on page 84* - attach the conveyor hooks [11, 12] to the upper back panel of the platesetter, using the two screws [16] and two spring washers [17]. Note that there is a left and right hook (in the figure, items [11] and [12] respectively).
2. Refer to *Figure 42. on page 85* - hang the front part of the upper assembly on the two hooks on the back panel of the platesetter.
3. Verify that the conveyor is stable in its place. If needed, fine-tune the height of the leg assemblies by adjusting the length of the ruler part of the leg.
4. Pull out the conveyor power cable from inside the platesetter (through the cable opening at the bottom).
5. Plug the conveyor power cable into the wiring plug adapter attached to the upper assembly.

2.11.4 Attaching Plate Conveyor to Processor

1. Place the processor near the conveyor, so that the plate entrance at the front side of the processor is close to the conveyor (several mm distance).
2. Adjust the processor height to the conveyor height: the plate entrance of the processor should be at the same level as the upper strip of the conveyor belts.
3. Some processors have plate sensors that can be connected to the conveyor. For these processors, connect the plate sensor to the appropriate opening in the front side of the upper assembly (see *Figure 43. on page 86*).

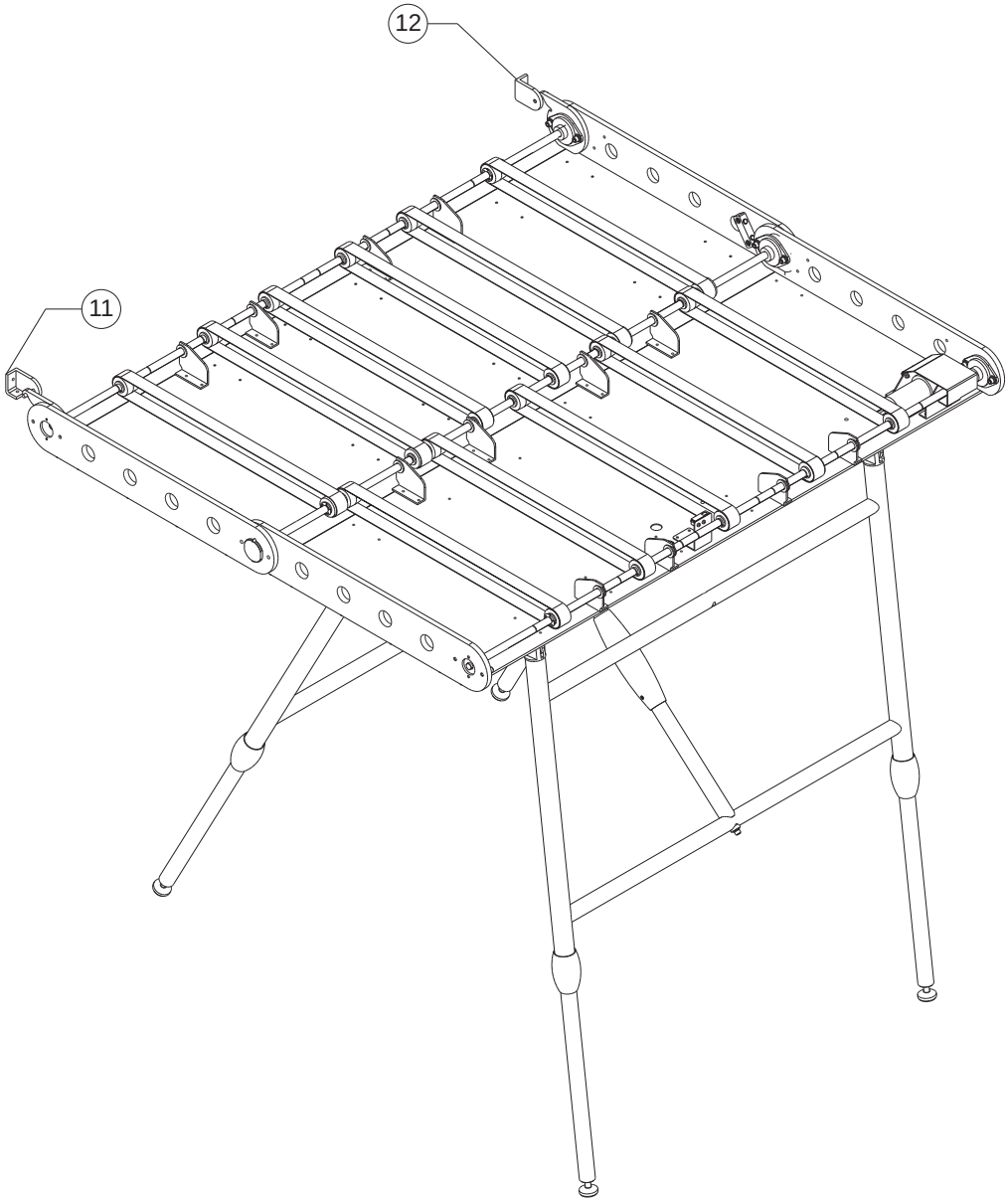


Figure 40. Attaching Plate conveyor to platesetter (1)

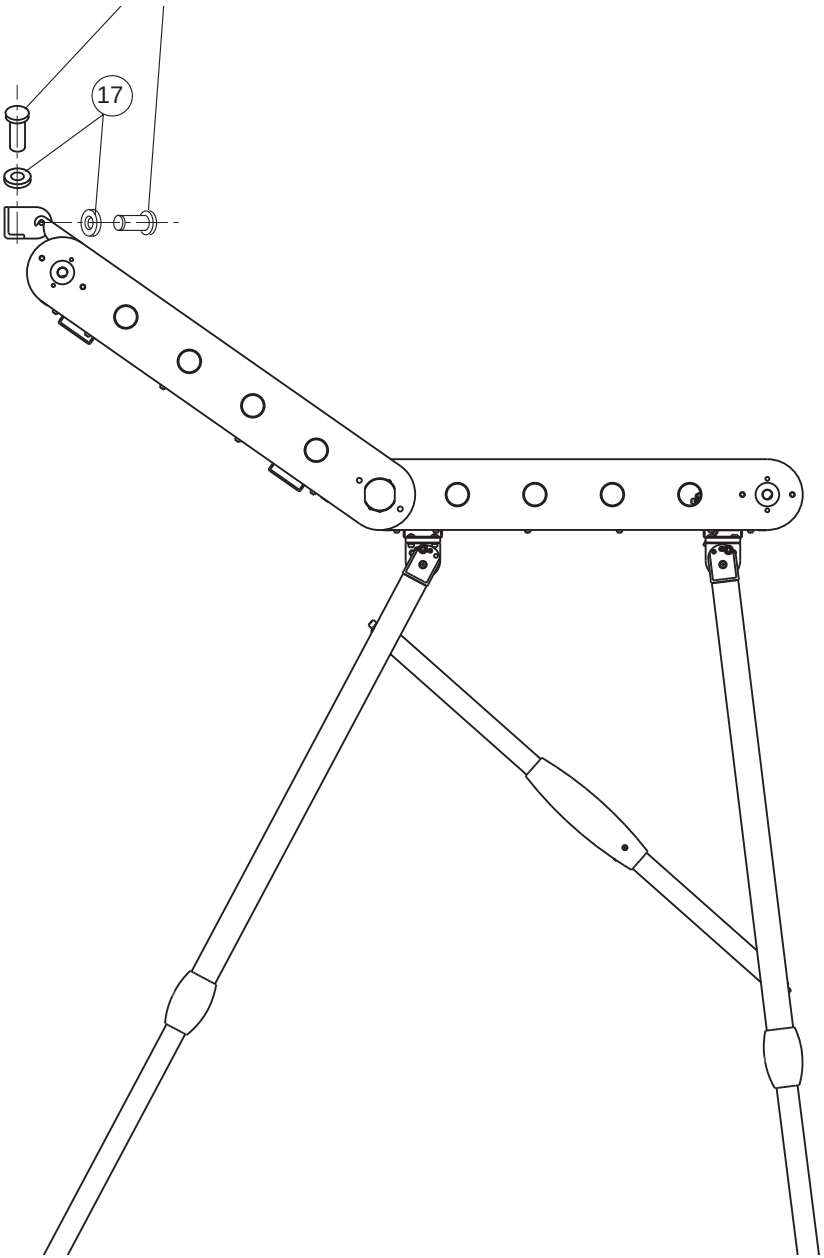


Figure 41. Attaching Plate conveyor to platesetter (2)

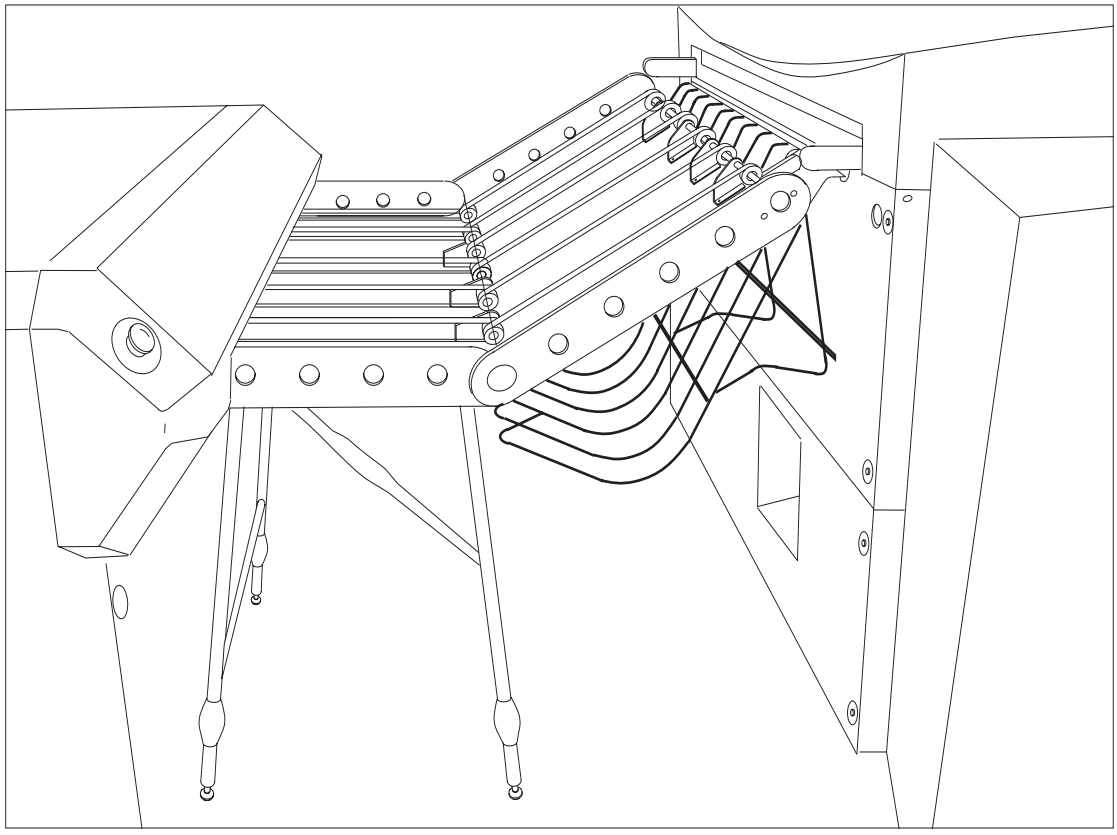


Figure 42. Attaching plate conveyor and Unloading basket to platesetter (3)

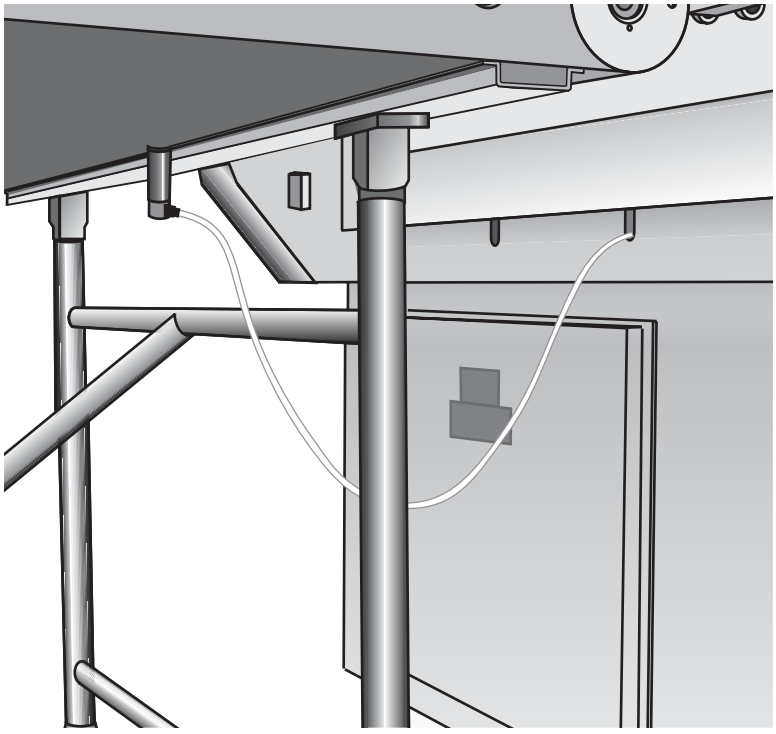


Figure 43. Attaching plate sensor from the processor to plate conveyor

2.12 Connecting Operation Monitor

1. Place the operation monitor, its keyboard and mouse on the designated monitor table.
2. Connect the cables from the operation monitor, keyboard and mouse to the E-box, as shown in the *Figure 44 on page 88*.
3. Connect the main power cable of the operation monitor to the wall line voltage.

2.13 E-Box Connections

The following figure shows the E-box connections.

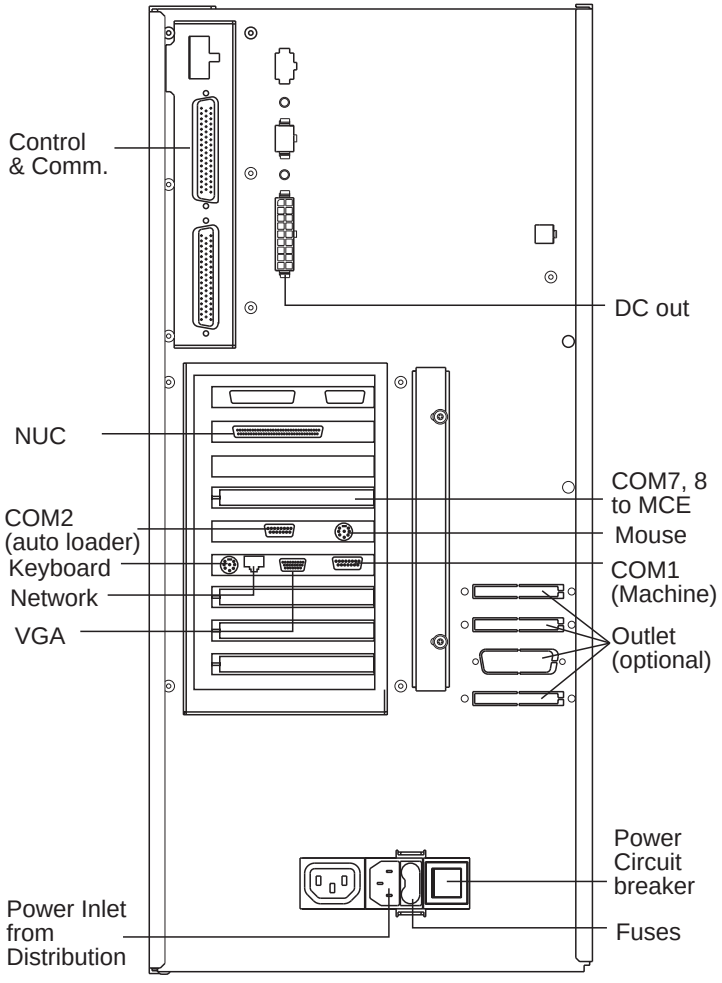


Figure 44. E-Box connections

2.14 Punch Installation

The installation of punches covers the procedure for installing or repositioning customer punches. The 2 Stop pins ensure that the plate is positioned parallel to the drum before punching.The 4 Plate supports with guide wheels guide the plate onto the drum after it has been punched.

2.14.1 Assembling Punch on Bar

Ten (10) customer punches can be installed on the machine. The pitch between punches is determined by the press system, such as a Heidelberg press or a custom punch configuration system.

1. Position punch on bar and place diamond nut into the T-slot on the punch bar.
2. Tighten the screw connecting the punch to the diamond nut. The diamond nut also turns until it comes into contact with the wall of the T-slot. Continue tightening the screw until the punch is secured firmly in place on the bar.
3. For example, in the punch installation for Heidelberg, where punch pitch is 780 mm (between centers), the following calculation is used: 780/2=390 mm.
4. Take all measurements from the ruler on the punch bar.
5. Locate 0 on the ruler (this is also the center of the drum). This measures to the outer side of the punch. The center of the punch housing is in fact 14 mm less - the inner side of the punch must be on the 376 mm ruler line (390 - 14 = 376).
6. Similarly, position the second punch on the other side of the 0 mark.
7. The inner of edge of each punch housing must be 376 mm from the 0 mark.
8. If a Stop pin or a Plate support interfere with the positioning of a punch, they can be moved by simply opening the retaining screw and moving them to the left or the right of the punch.

9. Connect the electrical cable and the earth cable from each punch to the cable attached to the punch bar. The plate support can move ±30 mm.



See *Chapter 4, Customer Configuration Setting, on page 107, Punch configuration setting*.

2.15 Packing-up the Platesetter for Shipment

A minimum of two (2) people and a Fork lift are required to pack-up and place the platesetter on its shipping pallet.

Figure 45. on page 93 shows the packing process. Refer to this figure to identify the numbers appearing inside brackets in the following text.

1. Disconnect all the electrical cables from the platesetter and remove the skirting boards from the sides, front and rear of the platesetter.
2. If the Fork lift cannot be moved to the platesetter location, you need to roll the platesetter to the shipping pallet. To do so, lower the wheels: close the nut of each leg by turning it counter-clockwise to maximum position. When the platesetter rests on its wheels, roll it to the shipping pallet.
3. Place the two (2) lower shipping beams [6] on the shipping pallet [7] above the main shock absorbing beams. Make sure to place the shipping beams in the correct orientation; the end of the beam with the shorter extension should face the front of the pallet (the front bracket securing hole is closer to the edge).
4. Using the fork lift, lift the machine and place it on the shipping beams of the shipping pallet, aligned according to the bracket securing holes.
5. Secure the machine to the shipping pallet using the four brackets, screws and washers [8].
6. After performing a final check to assure that the platesetter is positioned and secured properly, cover the platesetter with nylon wrapping.
7. Pack the skirting boards in bubbled nylon and place behind the platesetter. Secure with plastic tape [1].
8. Place six protective rubber angles [4] at each corner of the platesetter, and tape each angle with two plastic tapes [1].
9. Place two protective rubber angles [4] on the two upper doors. Tape the doors to the shipping pallet using two plastic tapes [1].
10. Staple the side wooden struts [5] to the shipping beams [6].
11. Staple the top wooden struts [3] to the side wooden struts [5].

12. Place an outer carton container [2] on the platesetter on the shipping pallet [7]. Insert staples to secure the outer carton to the shipping pallet and side wooden struts.
13. Close the top flaps of the outer carton.
14. Close the outer carton with plastic tape and with the two steel bands.

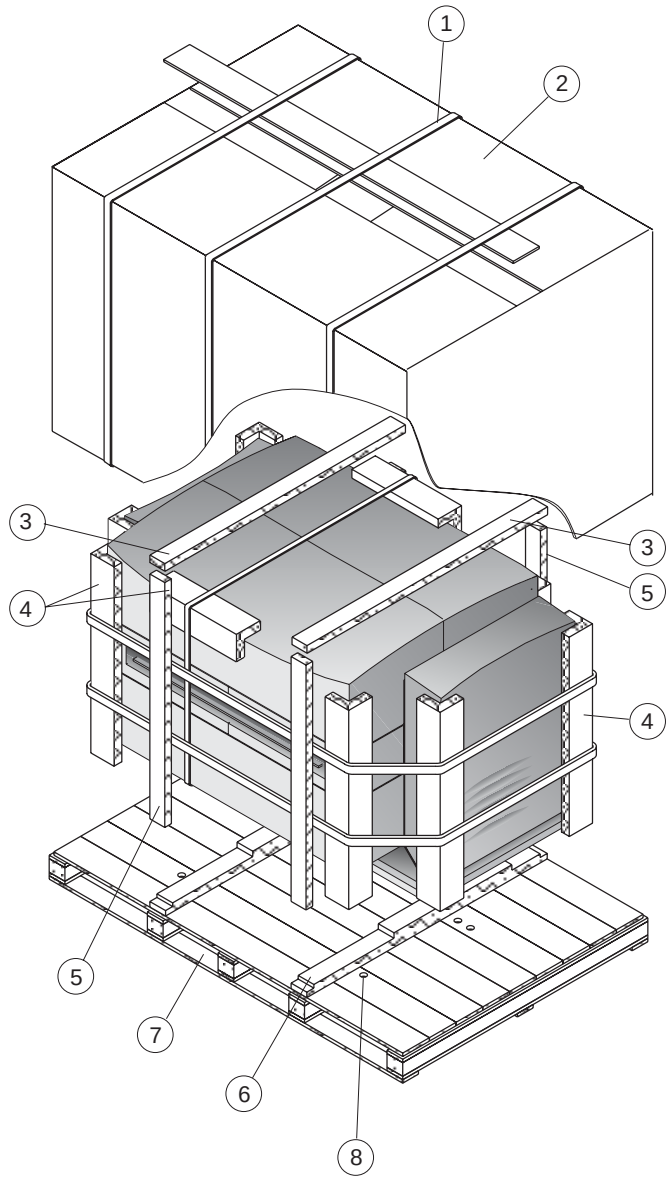


Figure 45. Packing-up the platesetter



Chapter 3

Data Configuration Setting

Data Connectivity 96
Connecting the Brisque to a Lotem. 100
Configuring the Lotem 800 II. 105

3.1 Data Connectivity



Install the Lotem 800 II application on the PC controller **before** installing the Lotem on the Brisque. Verify that both the Brisque and the Lotem 800 II are powered off.

The Lotem to Brisque connectivity consists of a cable connection for data transfer and a TCP/IP Link for communication between the Lotem and the Brisque.

Following are the locations of the TSP boards:

	Slots	Isdev	TSP Cable
F50	# 5	nsp0	TSP1
	# 6	nsp1	TSP2
6F1	# 7	nsp0	TSP1
	# 11	nsp1	TSP2
44P-170	# 4	nsp0	TSP1
	# 5	nsp1	TSP2

- To check the right slot configuration on the Brisque run scismit and choose:
  - Information >> Platform Information
  - Scroll down to see the results
  - In case of nsp0 and nsp1 are swapped please type:
  - # rmdev -l tsp0 -d (Enter)
  - # rmdev -l tsp0 -d (Enter)
  - # cfgmgr (Enter)
  - Check scismi again
- To connect the Brisque to a Lotem 800 II, run the two TSP cables from the TSP boards on the Brisque to the Lotem 800 II at the TMCE board.

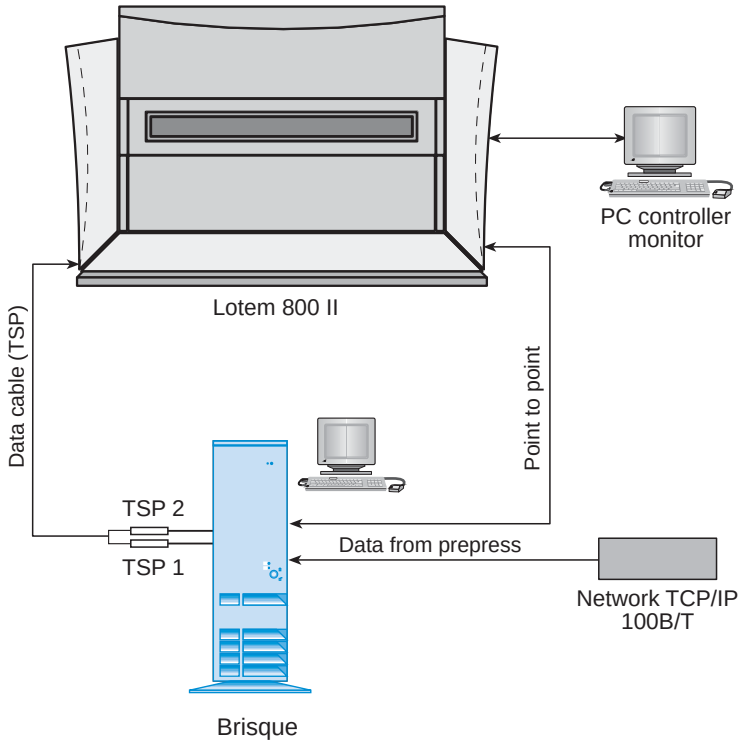


Figure 46. Connecting Tsp Cables

3.2 Platesetter Power Up/Shutdown

To power up the Lotem 800 II platesetter:

1. Check the air pressure gauge (see figure below) in the air pressure unit. Make sure the air pressure is 6 ATM (88 psi).



Figure 47. Air Pressure unit

2. Make sure the **Main circuit breaker** is **on**, that is, set to "**1**".
3. At the rear panel, press **out** the two (2) **On/Off power** pushbuttons so that they are both lit.
4. Press the **On/Off** pushbutton of the PC controller monitor.



5. Wait until the Windows operating system comes up. Then double-click the **Lotem 800** icon on the PC desktop.
6. Power on the Brisque (see the *Lotem 800 II Family User Guide,* 399Z3R855A).

To turn off the Lotem 800 II platesetter:



1. At the PC controller monitor, click on **Routine Functions**.
2. From the **Routine Functions** menu, click the **Shut Down** button.
3. In the **Confirm** message, click **Shut Down**.



4. From the **Start** menu of your Windows, click **Shut Down** to shut down your computer.
5. When the message It is safe to turn off your computer appears, press the **On/Off power** pushbutton at the platesetter rear panel.

3.2.1 Parameter Settings in the Platesetter

1. At the Operation monitor, open the **Utilities** menu.
2. Click the **User** button.
3. Enter the **Service** password in the Password window.
4. From the extended **Utilities** menu, Click **Hardware**.
5. Click -> **Other** then (right-click) **Lotem 800V** > **I/O object**.
6. Under **I/O object** > **Unload Conveyor motor**, set **Open** value to **1**.
7. Under **I/O object** > **Unload Conveyor Detector**, set **Open** value to **1**.

3.3 Connecting the Brisque to a Lotem

This section describes how to connect the Brisque to a Lotem, which consists of the following procedures:

- Connecting the Brisque via a TSP Data Cable Link (Data Connectivity)
- Setting Up TCP/IP Connectivity
- Verifying the TSP Board Installation
- Verifying the Connection Between the Brisque and the Lotem

3.3.1 Using TSP Data Cable Link (Data Connectivity)

To connect the TSP data cable (199D20024) link between the Brisque and a Lotem:

1. Connect the cable marked TSP 2 to the Upper TSP Board on the Brisque. (See *Figure 48 on page 101*).
2. Connect the TSP 1 connector to the Lower board on the Brisque.
3. Connect the other end of the TSP cable to connector J44 on the TMCE board.

The SCSI connection is covered with a protective label.

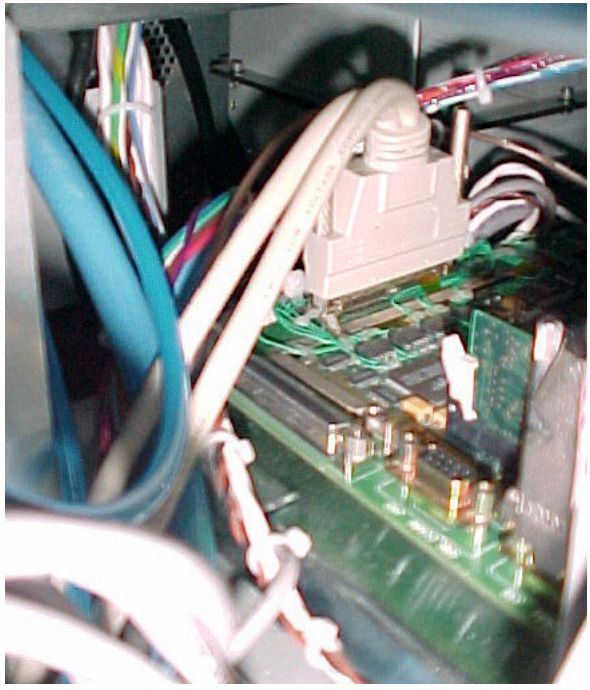


Figure 48. TSP connector on TMCE board

3.3.2 Setting up TCP/IP Connectivity

There are two methods of setting up the TCP/IP connection between the Brisque and the Lotem:

Recommended

Connect the Brisque directly to the Lotem controller using the special network cross cable (199A02132) supplied with the Lotem.

Alternative

Connect both the Brisque and the Lotem to the site network infrastructure.

Setting Up TCP/IP Connectivity Using a Cross Cable (Recommended)

The direct link solution involves connecting the Brisque directly to the Lotem PC Controller using the special network cross cable (199A02132) supplied with the Lotem, this cable cannot be used for network connection.

This section describes how to set up the TCP/IP connectivity via a direct link and includes the following procedures:

- Connecting the Brisque to the PC Controller
- Defining the IP Address on the Lotem PC Controller
- Defining the IP Address on the Brisque.

Connecting the Brisque to the PC Controller

Connecting the Brisque to the PC Controller:

➢ Connect the twisted pair network cable from the Brisque to the network interface in the E-Box, located on the right side of the Lotem.



The PC controller and the Brisque must have individual IP addresses.

Installing an additional Ethernet board:

If the Ethernet board is already installed on the Brisque there is no need to perform steps 1-5 in the procedure that follows.

To install an additional Ethernet board, proceed as follows:

1. Shut down the Brisque with the appropriate shutdown procedure.
2. Disconnect the power cord.
3. Power off all peripheral devices.
4. Remove expansion slot cover from slot # 8.
5. Lock the board in place with the screw from the slot cover.
6. Connect the cross cable from the Ethernet board in slot # 2 [16].

Defining the IP Address on the Lotem PC Controller

To define the IP address on the Lotem PC Controller:

The Lotem PC Controller should already be booted up with the Windows 95 startup screen displayed.

1. Turn on the Lotem.
2. In Windows NT, select **Start** > **Settings** > **Control Panel**. The Control Panel window opens.
3. Double-click the Network icon to open the Network (viewing mode) window.
4. Select the Configuration tab and then double-click **TCP/IP Protocol** to open the TCP/IP Properties window.
5. Type in the IP Address (e.g. 192.9.100.2) and the Subnet (e.g. 255.255.255.0) for the Lotem PC Controller and then click **OK** twice.
6. Launch the application by double-clicking the Lotem application icon.
7. Verify that the system executes the startup sequence.

Defining the IP Address on the Brisque

1. At the Brisque command prompt, type smit tcpip.
2. From the **SMIT TCP/IP** menu, select Further **Configuration** > **Network Interfaces** > **Network Interface Selection** > **Change/ Show Characteristics of Network Interface** to open the Available Network Interfaces window.
3. In the Internal Address box type in the IP address of the interface board (e.g. 192.9.100.1).
4. In the Network Mask box type in the address of the Subnet Mask (e.g. 255.255.255.0).
5. Switch the **Current Status** box to Up and then press **Enter**; an OK status now appears.
6. Press [F10] to exit **SMIT**.

Setting Up TCP/IP Connectivity via the Network (Alternative)

TCP/IP connectivity via the network involves connecting both the Brisque and the Lotem to the site network infrastructure, and consists of the following procedures:

- Connecting the Brisque to the Lotem PC Controller
- Defining the IP Address on the Lotem PC Controller
- Defining the IP Address on the Brisque

Connecting the Brisque to the Lotem PC Controller

1. Verify that the Brisque is connected to the network via the Fast Ethernet board in slot#2 [2].
2. Connect the Lotem PC Controller E-Box network port to the communication network switching hub (see figure below).

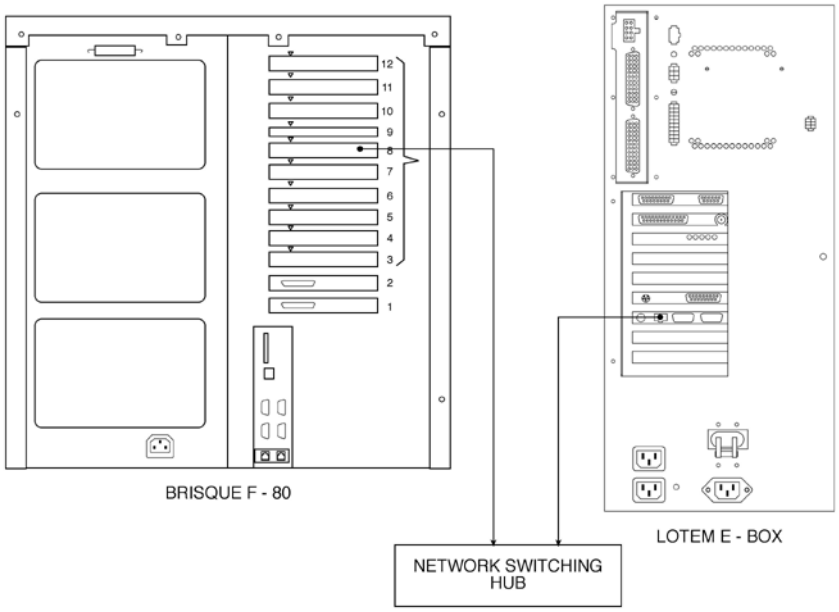


Figure 49. Brisque/Lotem Network Connections

3.4 Configuring the Lotem 800 II

For details on how to configure the Lotem 800 II to the Brisque, see the *Brisque to Lotem II / Lotem Quantum Family Connectivity User Guide,* 399Z3R084.

For details on how to configure the Lotem 800 II to the Prinergy, see the *Prinergy to Lotem II / Lotem Quantum Family Connectivity User Guide,* 399Z1R512B.



Chapter 4

Customer Configuration Setting

Punch Configuration Setting 108
Plate Setting Configuration Process 113
Testing the Lotem 800 II 115

4.1 Punch Configuration Setting

4.1.1 Setting from PC Controller

To configure punches after they are installed:

Registry access:

1. Execute the following sequence:
    1. From the **Utilities** menu, select **Hardware** > **Lotem 800V Right-click on Lotem 800V and select I/O Object** > **Punches.**
    2. Another path that can be used, from the registry, select **HKEY_LOCAL_MACINE** > **software** > **Scitex** > **Project > Lotem800 > I/O Object > Local 3 >Punch motors.**
2. To define each punch motor installed, select relevant **Punches to Activate**.
3. On the screen select the first **punch motor** installed and double-click it.
4. Click **open** and in the Edit String window enter 1 in the Value Data box.
5. Ensure that the **Width Pos** (mm) is 45 and that the **Height Pos** (mm) is **50**.
6. Enter to the first punch Detector installed and double-click it.
7. Click **open** and in the Edit String window enter **1** in the **Value Data** box.
8. Repeat steps 5-9 for each installed punch to be defined.

To configure punch detectors:

To configure punch detectors, follow step 1 from section 3.1.1. Select **Hardware > Lotem 800V.** Right-click on **Lotem 800V and select I/O Object > Punch Detector.**

1. Select **detectors** from the menu and repeat the same procedure as described in configuring punches (above), for each installed punch detector.
2. Exit from the Lotem application to update the database.

3. From the Hardware menu select **Database** and then **Punch** to verify all punches installed are defined.

To define a punch system configuration set:

1. From **Punch** menu select **New**, and then select any combination of the previously defined punches (check each punch). These punches will now comprise a **Punch configuration** set.
2. In the **Name** box type in the name you want for this configuration of punches, then select **Save** (typical name is the press name).
3. Exit from the application.

4.1.2 Activating Punch Configuration System

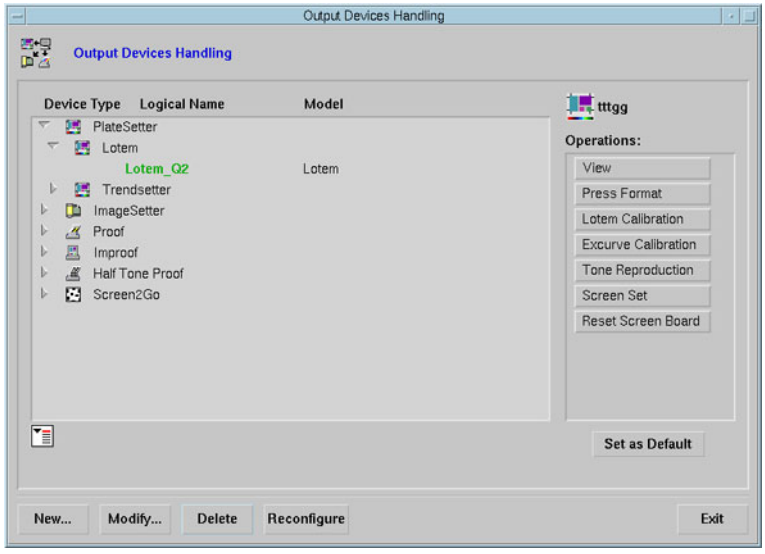
1. To activate a configured punch system, open the **Punch System** menu and select previously activated punch motors.
2. Similarly, select **Detectors** and select previously activated detectors.
3. From the Punch System menu select **Do Punch**, and verify that the Punch Detector Status for each activated punch changes from **ON** to **OFF**.

4.1.3 Punch Configuration from the Brisque

1. From the Brisque Launch pad, double-click **Devices**.

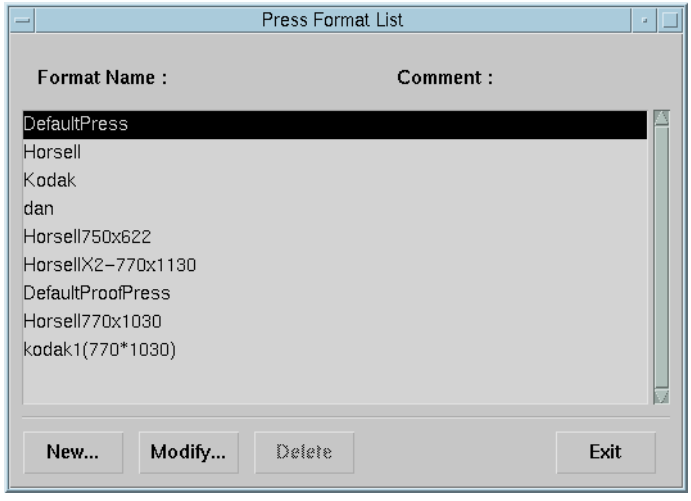


2. The Output Device Handling window is displayed. Select **Platesetter** and click the arrow icon on the left.



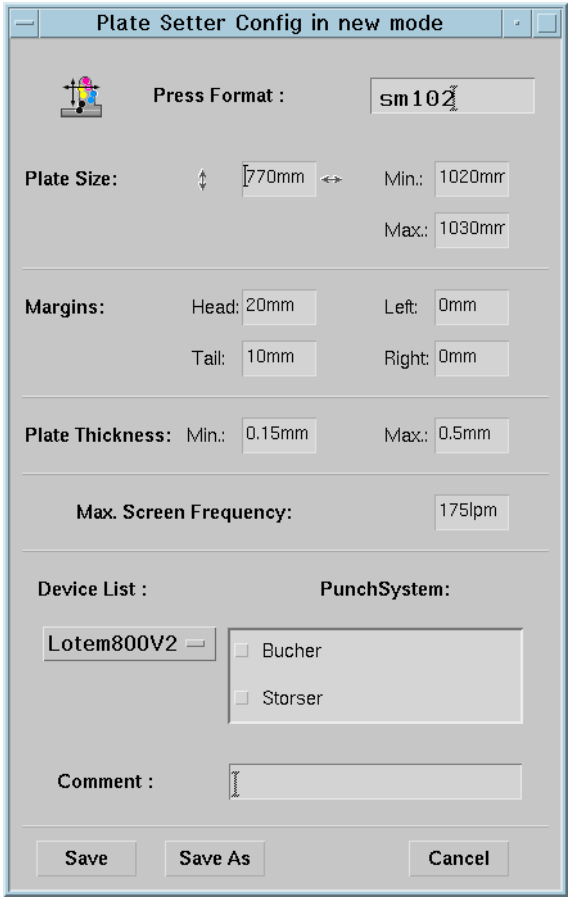
3. Double-click **Lotem** and choose the Lotem platesetter you are working with. The buttons in the **Operation** section to the right are now enabled.

4. Select **Press Format** in the Operations section. The **Press Format** list is displayed.



5. Choose the **Press Format** you are working with, click **Modify**. The Platesetter Configuration in new mode window is displayed.

6. In the **Press Format** box the Punches defined in the PC Controller are displayed under **Punch system** box.



7. Select the **Punch configuration** you need.
8. Click **Save**.

4.1.4 Checking Punches

After all punches have been installed and configured, you need to check the punches.

1. Load a plate using the automatic loading system.
2. Punch the plate and then remove it for visual comparison with the master to confirm position of holes.
3. If necessary, move the punches.
4. Request the press operator to install plate on press to verify position of punches.
5. To prevent registration problems, expose the four separations and mount on press.

4.2 Plate Setting Configuration Process

Plate setting configuration involves four different activities as follows:

1. Load plates in a cassette and define the plate measurements in the Lotem application (in the Off-line cassette or Current cassette windows).
2. When updating the plate size, the balance weight and tail gripper location are adjusted automatically.

To manually adjust the balance and tail gripper, perform the following: select **hardware > loading system > load plate to drum -> loading system > new plate4**

4.2.1 Insert Plate Measurements

To insert new plate measurements

1. If the cassette is loaded into the machine, click the **Release Cassette** button. Unload the cassette and load new plates into the cassette.
2. Measure the width and height dimensions of the new plates and load the cassette.
3. The Current Cassette window opens. Enter the plate height and width measurements and the number of plates in the cassette.
4. Select **OK**.

4.2.2 Manual Setting of Pre-load Tail Gripper

1. Slide the tail grippers all the way down the slot until they are at the end opposite the head grippers.



Figure 50. Tail gripper

2. From the **Hardware** menu, select **Loading System**, and then click **Drum init** to reset the drum to initialization position.
3. Verify that the General box displays **[OK][InitXY - DR]**.
4. Click **Pre-load** and select **Yes** in answer to system prompt: "`Are You Sure?`" This rotates the drum and brings the tail grippers to the position loaded for the new plate size.
5. Load a plate and select **From Drum Entry to Drum** (c). Make sure the **Ignore Stage Test** check box is not checked.
6. The Keep Task List window opens, verifying the procedure is executing.

4.2.3 Verify Position of Tail Gripper Position

After the plate is loaded, visually check that all tail grippers uniformly grip the plate (at least 4 mm).

4.3 Testing the Lotem 800 II

1. Turn on the Lotem 800 II .
2. When the GUI is open, open and activate the drum vacuum pump. If it sounds abnormal, shut down the machine and switch between phase two until they are in the correct order.



Make sure that the **ALL** the cassette centering systems are parallel to the Lotem centering system.

3. Load and expose **ALL** the plates sizes the customer uses.
4. Check all the screen formats that the customer uses.
5. Train the customer how to operate the machine.
6. Train the customer how to execute PM.
7. Back up the registry and data base.
8. Send QFR.
9. Ask the remote support to dial in and check the connection.



Make sure that ALL the latest FCO's are implemented on the machine, if **NOT** order them and implement them during the installation.

4.3.1 Filling in Quality Field Report (QFR)

After installation, you are required to fill in a Quality Field Report (QFR). Make sure to use the lone ranger.
When done, send to Product Support Specialist in Creo Israel.



Appendix A

Software Installation / Update

Software Installation Procedure 118

A.1 Software Installation Procedure

Prior to the S/W Loading:

1. Save the Registry file on a floppy diskette.
2. Save the **Data Base** folder on a floppy diskette.
3. Write down the IP address of the PC controller.
4. Loading Windows 2000 Operating System 2.00 - 501VR083 (only if required).
5. Loading Lotem 800 II Application S/W 3.51.02 - 510V1R454.
6. Loading Lotem 800 II with Spectrum Application S/W 3.70.02

After the S/W installation:

1. Install the Remote Support tools.

The above steps are detailed below.

A.1.1 Saving the Registry File

1. Power up the Lotem 800 II.
2. Manually open the right side door of the Lotem 800 II.
3. Insert a formatted write-enabled floppy diskette into the floppy drive.
4. On the PC, select **Start** and then **Run** from the pop-up menu.
5. Type regedit in the text box and select **OK**.
6. Select HKEY_LOCAL_ MACHINE, SOFTWARE, Scitex, Projects, LOTEM800V. Make sure that Lotem800V is highlighted.
7. Select **Registry** from the main menu.
8. Select **Export Registry File**.
9. Select the floppy diskette (A:) from the Save in: pop-up menu. Type in logical file name **xxx.reg** and **Save** the registry.
10. Select **Exit**.

11. Leave the diskette in the floppy drive and proceed to save the DataBase (B).

A.1.2 Save the DataBase Folder

1. Select **Start** and then **Programs** from the pop-up menu.
2. Select **Windows Explorer**.
3. Select Drive (C:), the folder Lotem, DataBase (**DataBase** is highlighted).
4. From the **Edit** menu, select **Copy**.
5. Select the floppy diskette (A:); from the **Edit** menu select **Paste** to copy the DataBase folder to the floppy diskette (or use the Drag & Drop option).
6. Select **File** and **Close**.
7. Remove the diskette from the floppy drive.

A.1.3 Write down the IP address of the PC controller.

1. Select **Start** and then **Settings** and **Control Panel**.
2. From the **Control Panel**, select **Network**.
3. Select **TCP/IP**.
4. Write down the **IP Address**.
5. Select **OK** (twice) and exit the Control Panel.

A.1.4 Saving NVS Parameters from TMCE to the Disk

1. From the Splot, run NVS dump script.
2. Wait until the end.

A.1.5 Saving Flash Parameters from TMCE to the Disk

1. From the DOS Prompt, type:
   C:\TH2\Tools\
   Bload F= File Name_flash.bin
   p = x; b = 57600; d = flash; i = NVS upload.
2. Wait until the file is saved.


The file must be saved under the same directory as the Bload program.

A.1.6 Loading Windows 2000 Operating System


This procedure should be performed only when required.

Use the following procedures in order to load the Win 2K S/W and all the necessary drivers.

1. Turn on the Lotem 800 II in order to open the CD drive.
2. Insert the S/W Startup 1.00 diskette into the floppy drive and the Operating System 2.00 CD-ROM into the CD drive.

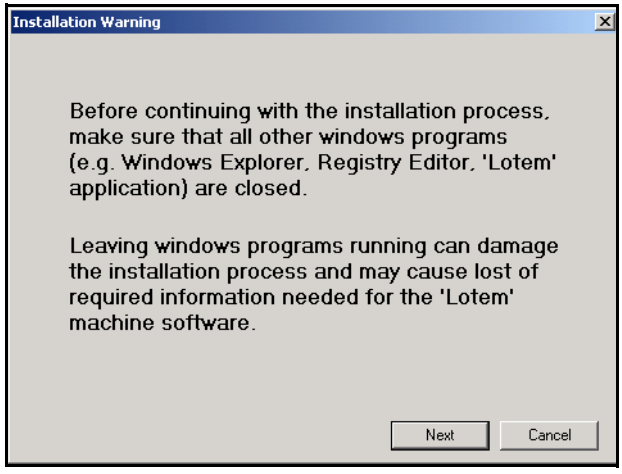
A.1.7 Loading Lotem 800 II Application S/W Version 3.51.02

Use the following procedures to load the Lotem 800 II Application S/W version 3.51.02.

Before installing a new version, make sure to delete the Lotem 800 Quantum/ II application and diagnostics icons of the previous version.

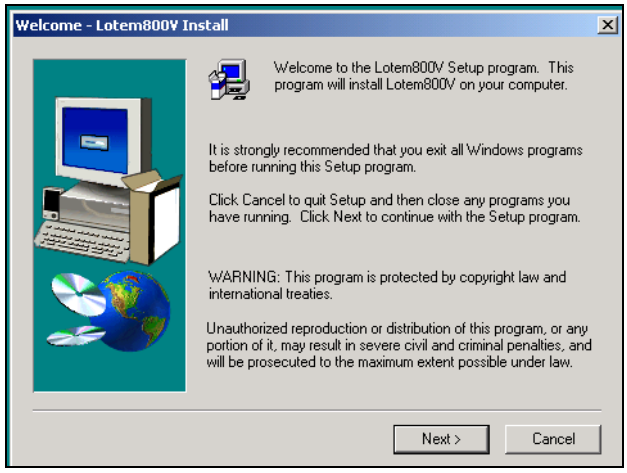
If you are installing a Lotem 800 II with Spectrum, then you must use software version 3.700.02. Refer to the *Lotem 800 Quantum with Spectrum Release Notes version 3.50.07* on Tech Planet.

1. Insert the Application S/W 3.51.02 CD-ROM into the CD drive. A warning dialog box is displayed. Select **Next**.

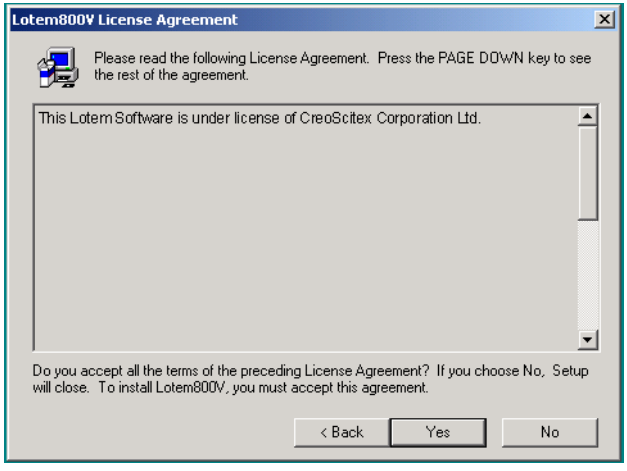


2. If the Export Reg file failed, a window is displayed asking you to save the reg before the installation. If you already saved the reg, click **yes** to continue.
3. If you didn't save the reg before installation, click **no** and save the reg.

4. Click **Next** in the Welcome screen.



5. Click **Yes** to confirm Software License Agreement.

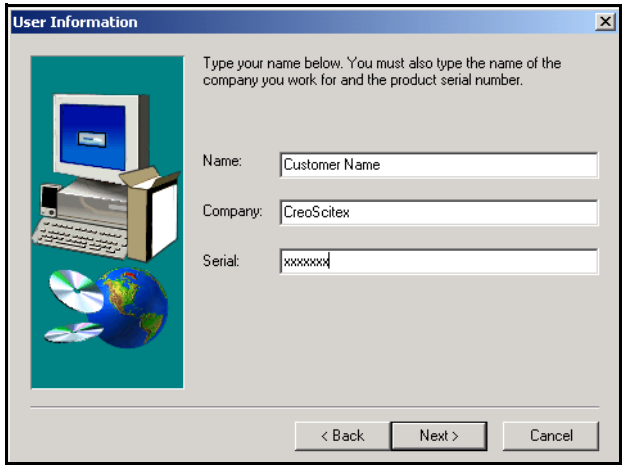


6. Enter the following and select **Next**:

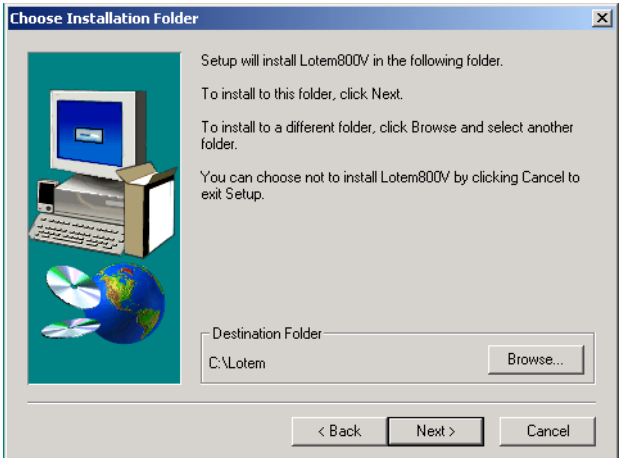
   Name: (engineer's name)

   Company: Creo Inc.

   Serial: (machine serial number)

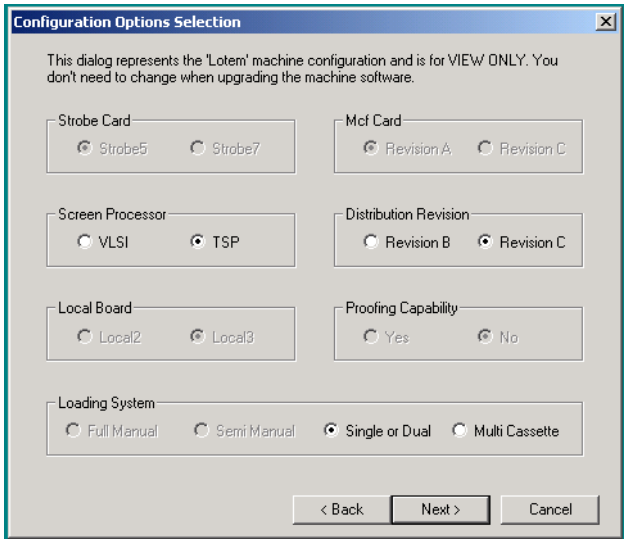


7. Verify that the Destination folder is C:\Lotem and select **Next**.



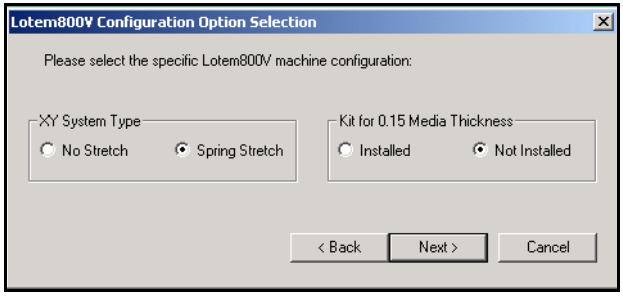
8. Select **Distribution Revision B or C**, depending on your machine configuration.

9. Select **Single** or **Multi Cassette,** depending on your machine configuration.

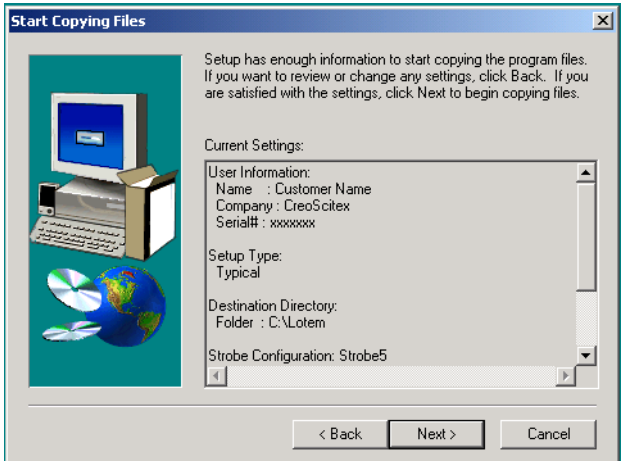


10. For the Lotem 800 II with Spectrum, select **Proofing Capability** option.

11. Verify that the setting in the window is correct and select **Next**.



12. The Start Coping Files message appears (estimated time 5 min.).



13. Select **Finish** when Setup Complete appears; the Lotem800 icon will appear on your desktop.



14. Remove the Application S/W 3.51.02 CD-ROM from the CD drive and close the doors.

15. Open the **vcon** icon server application. Check that **rcon** connection is established.

16. Launch the Lotem 800 II application by double-clicking on the icon. Note that launching the application may take about 7 minutes.



Important! Do not restore the Registry file.

A.1.8 Installing the Lotem Remote Tools

Installation of remote support tools for the Lotem site is needed. This installation includes the following steps:

1. NetMeeting installation on the Lotem.
2. VNC Installation on the Lotem.
3. One-Click Activation.
4. Downloading files to Brisque.
5. Modem Installation on Brisque.
6. PPP Setup on Brisque.
7. Site Preparation Verification.

This installation requires using the Remote Site Installation CD-ROM (501V1R343B).

To activate the CD-ROM

1. Insert it to the Lotem PC. A panel describing the CD content will open.
2. Click **Remote Support Site Installation - Full Document**, and follow the instructions.
3. In case the panel does not open automatically after the CD-ROM insertion, double-click **My Computer**, and then double-click the **CD-ROM** icon.
4. When done, the Response Center will call you and attempt to log in to make sure installation was completed correctly.

A full description of the installation procedure is available:

- Lotem-Brisque Configuration:

http://techplanet.creo.com/software_solutions/networking_os/remote_support/content/proced/Windows/Lotem/LotemBrisque/LotemBrisque.htm

- Lotem-Prinergy Configuration:

http://techplanet.creo.com/software_solutions/networking_os/remote_support/content/proced/Windows/Lotem/LotemPrinergy/LotemPrinergy.htm

A.1.9 Restore the Database Folder



The application automatically restores the DataBase.

In case you need to restore the Database folder, do the following:

1. Make sure that the backup diskette is in the floppy drive.
2. On the PC, select **Start** and then **Program** from the pop-up menu.
3. Select **Windows Explorer**.
4. Select and open **Drive C:\Lotem\Lotem800**.
5. Select and open the floppy diskette (**A**).
6. Drag & drop the **DataBase** folder from floppy diskette (A) to Drive C:\Lotem.
7. Select **Yes to all** to confirm folder replacement.
8. From the **File** menu, select **Close**.
9. Remove the diskette from the floppy drive.



Appendix B

Lotem 800 II Site Layout

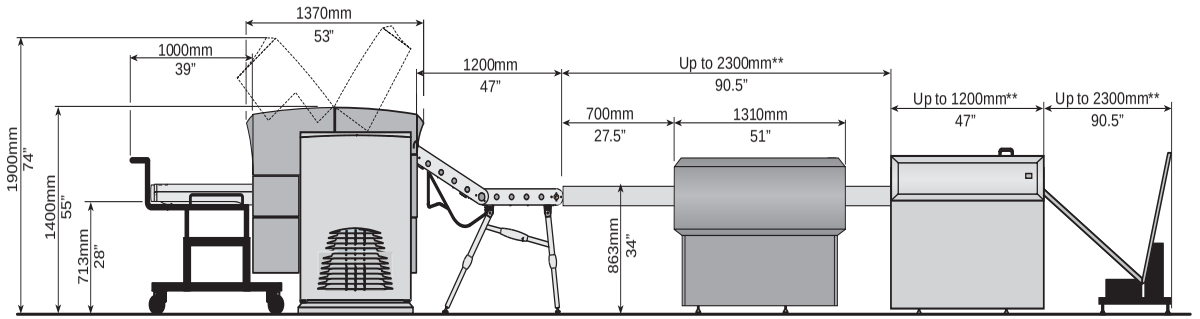
The following figures show the Lotem 800 II layout at the customer's site:

- with Pre-Heat configuration - single cassette
- with Non-Pre Heat configuration - single cassette
- with Spectrum option; optional configuration

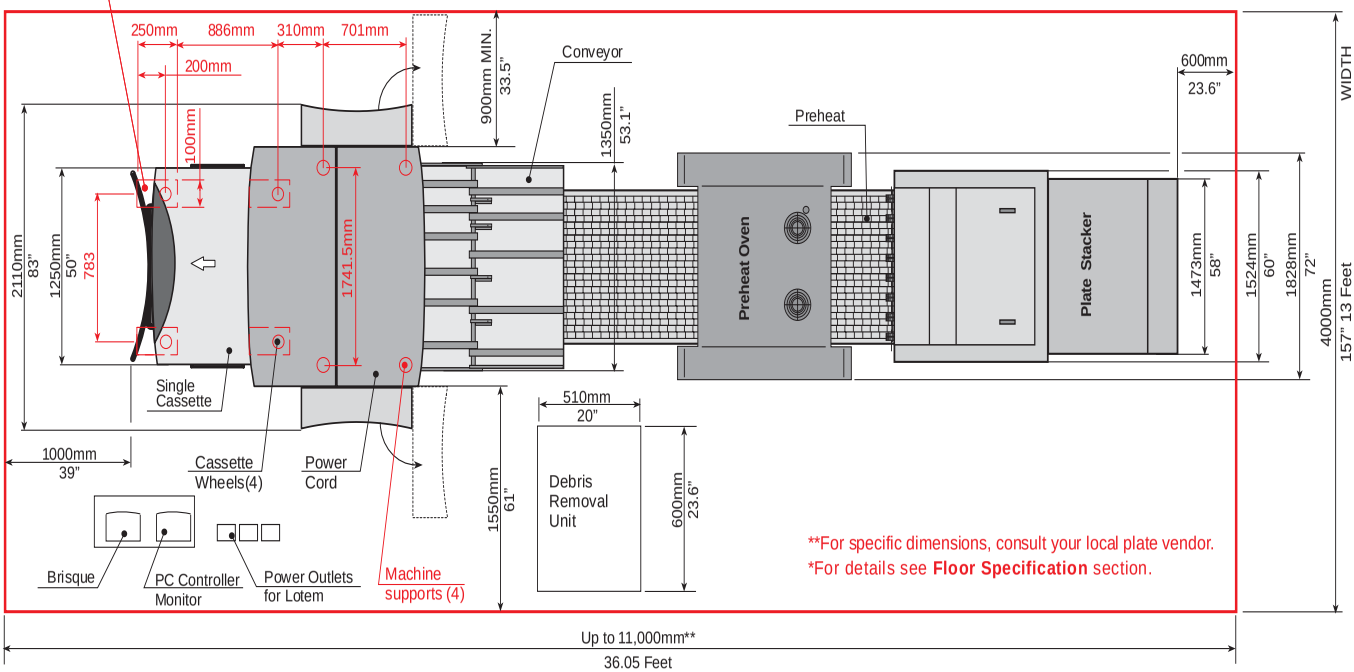
The site configurations shown in this document are relevant for both the Lotem 800 II and the Lotem 800 II Quantum.

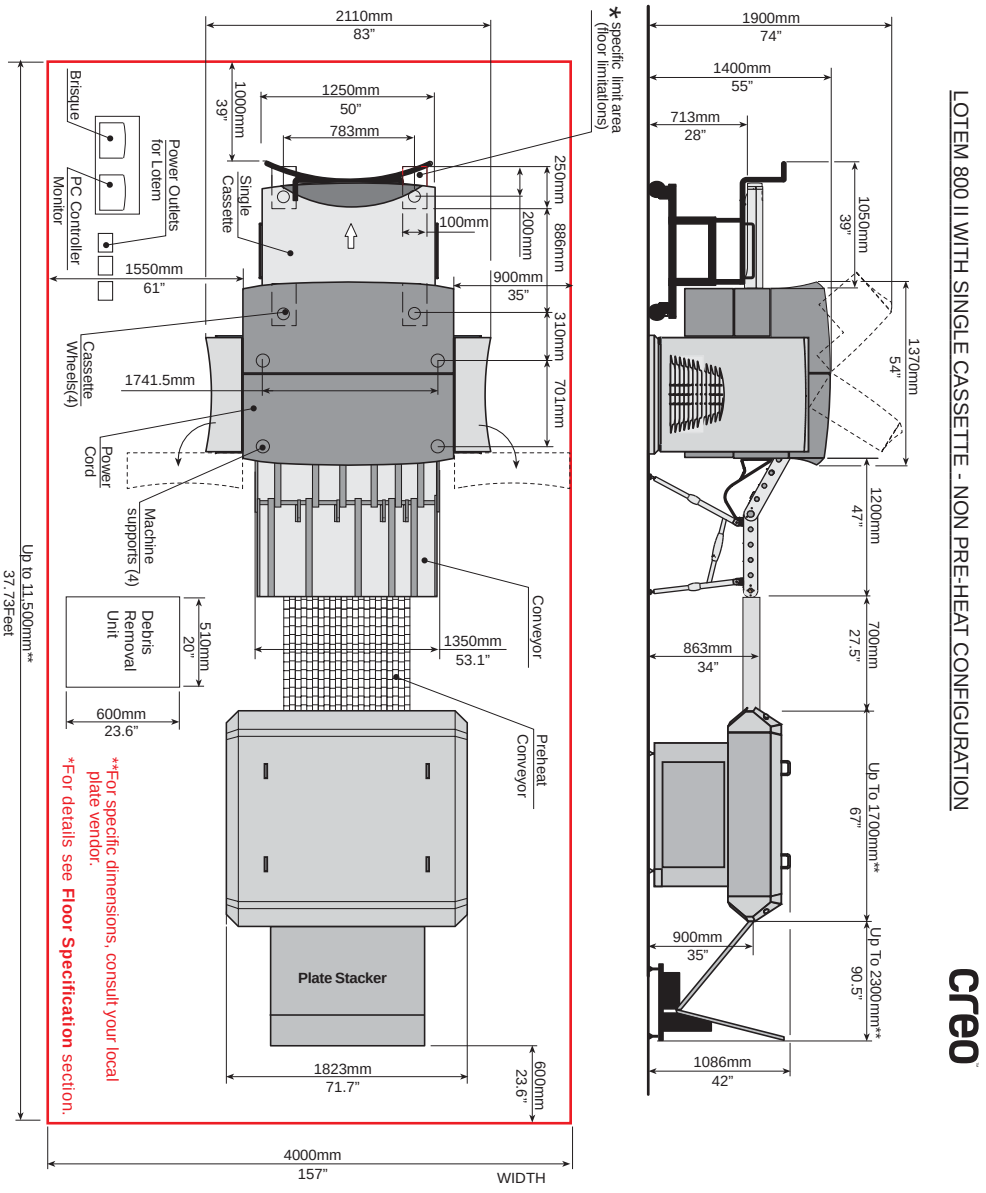
LOTEM 800 II WITH SINGLE CASSETTE - PRE-HEAT OPTION

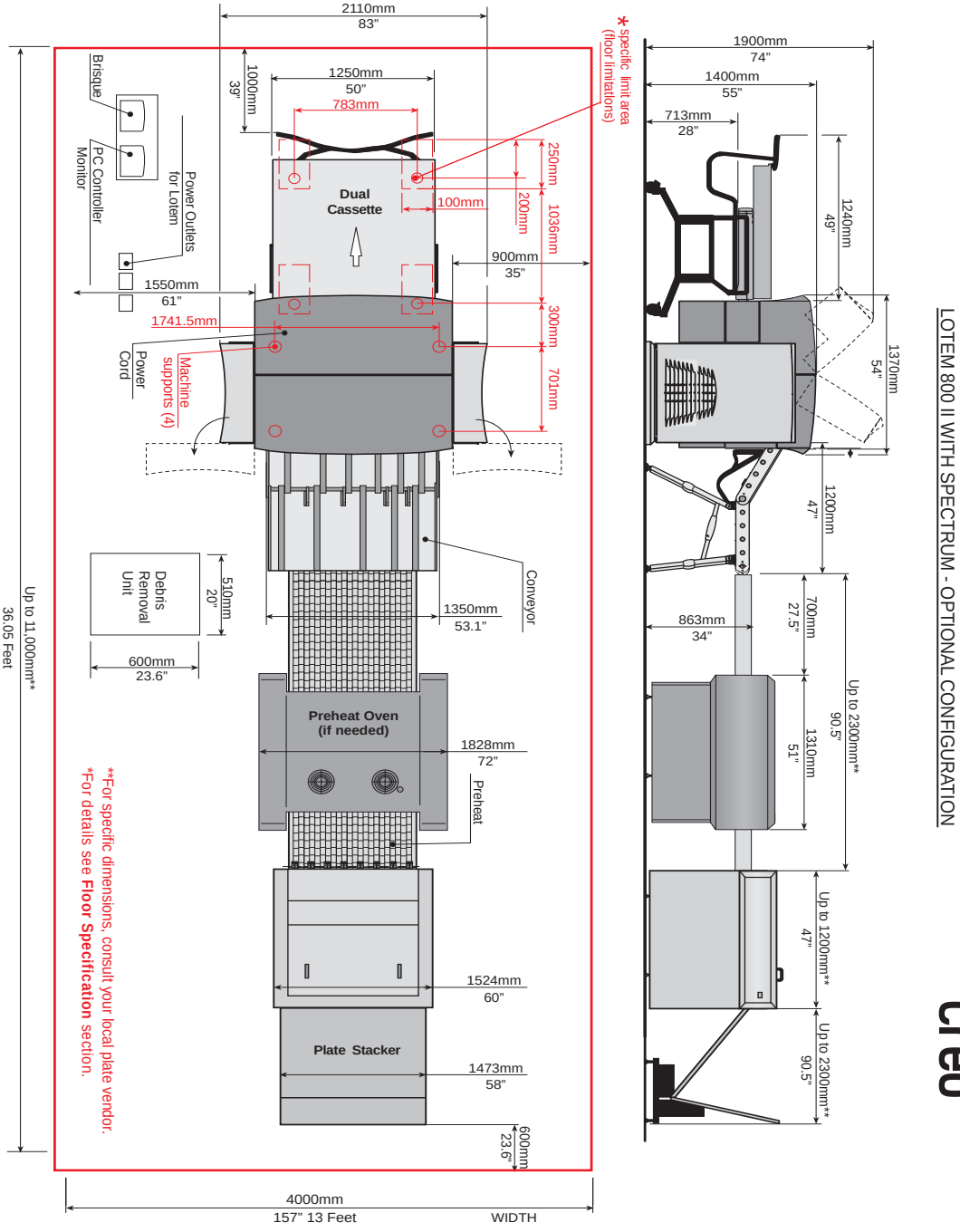
creo



* specific limit area (floor limitations)




LOTEM 800 II WITH SINGLE CASSETTE - NON PRE-HEAT CONFIGURATION
creo
1900mm
74"
1400mm
55"
713mm
28"
1050mm
39"
1370mm
54"
1200mm
47"
700mm
27.5"
863mm
34"
Up To 1700mm**
67"
900mm
35"
Up To 2300mm**
90.5"
1086mm
42"
* specific limit area (floor limitations)
2110mm
83"
1000mm
39"
1250mm
50"
783mm
250mm
886mm
200mm
100mm
900mm
35"
310mm
701mm
1550mm
61"
1741.5mm
Brisque
PC Controller Monitor
Power Outlets for Lotem
Single Cassette
Cassette Wheels(4)
Power Cord
Machine supports (4)
Debris Removal Unit
510mm
20"
600mm
23.6"
1350mm
53.1"
Conveyor
Preheat Conveyor
Plate Stacker
1823mm
71.7"
600mm
23.6"
Up to 11,500mm**
37.73Feet
4000mm
157"
WIDTH
**For specific dimensions, consult your local plate vendor.
*For details see Floor Specification section.


LOTEM 800 II WITH SPECTRUM - OPTIONAL CONFIGURATION
creo
2110mm
83"
1000mm
39"
1250mm
50"
783mm
Brisque
PC Controller
Monitor
Power Outlets
for Lotem
Dual
Cassette
250mm
200mm
100mm
1036mm
900mm
35"
1550mm
61"
1741.5mm
300mm
701mm
Power
Cord
Machine
supports (4)
Debris
Removal
Unit
510mm
20"
600mm
23.6"
1350mm
53.1"
Conveyor
Preheat Oven
(if needed)
1828mm
72"
Preheat
1524mm
60"
Plate Stacker
1473mm
58"
600mm
23.6"
Up to 11,000mm**
36.05 Feet
4000mm
157" 13 Feet
WIDTH
* specific limit area
(floor limitations)
**For specific dimensions, consult your local plate vendor.
*For details see Floor Specification section.
1900mm
74"
1400mm
55"
713mm
28"
1240mm
49"
1370mm
54"
1200mm
47"
700mm
27.5"
863mm
34"
1310mm
51"
Up to 2300mm**
90.5"
Up to 1200mm**
47"
Up to 2300mm**
90.5"

Index

A

Air pressure unit
  gauge, 98
Air presure connection, 65
Auto focus laser, 7
Automation, 39

B

Brisque connection
  tcp/ip connectivity, 101
  tsp cable link, 100

C

Cassette Type, 40
Checklist, 42
Chiller, 72
Conveyor
  processor interface, 78

D

Data connectivity, 96
Debris removal, 72

E

Electronic system specifications, 41

F

Front End Connectivity, 39

H

Height adjustment, 55

I

Image, 41
Image head, 67
In this document, ix
Interlocks, 9

L

Locking devices, 57
Lotem 800
  power up, 98
  shutdown, 99
Lotem 800 II
  platesetter dimensions, 41
Lotem 800 II operating system, 120
Lotem 800 II Quantum Features, 34

M

Media specifications, 39

O

Open front door, 57

P

Packing up platesetter, 88, 91
Parameter settings, 86
Plate conveyor, 76
Plate type, 39
Platesetter
  power up, 98
  shutdown, 99
Punch configuration
  activating, 109
  checking, 109
  defining, 109
  from Brisque, 109
Punching, 41

S

Safety precautions
drum, 30
during installation, 4
litium battery, 32
mains supply, 5
summary, 2, 3
vacuum pump, 31
Software installaiton, 118
Software installation
flash parameters, 120
IP address, 119
NVS parameters, 119
saving database, 119
saving registry, 118
Specifications
digital front end, 39
media design, 39
SquareSPOT thermal imaging, 34

T

Tail gripper, 113
TCP/IP connectivity
connecting to Brisque, 102
Tcp/ip connectivity
defing address, 103
via network, 104
Thermal imaging head, 32
Throughput, 39
Transformer wiring, 61
Trolley assembly, 52

U

Unpacking loading cassette trolley, 51
Unpacking platesetter, 48

W

Warning labels, 12
locations, 20

Z

Z- stage, 69