Release Notes

English

Lotem 800 II Family

Appendix I and **II** for version **3.80.12**

Document Number:
739-00127A-EN

www.creo.com

Copyright

Copyright © 2004 Creo Inc. All rights reserved.

No copying, distribution, publication, modification, or incorporation of this document, in whole or part, is permitted without the express written permission of Creo. In the event of any permitted copying, distribution, publication, modification, or incorporation of this document, no changes in or deletion of author attribution, trademark legend, or copyright notice shall be made.

No part of this document may be reproduced, stored in a retrieval system, published, used for commercial exploitation, or transmitted, in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission of Creo Inc.

This document is also distributed in Adobe Systems Incorporated's PDF (Portable Document Format). You may reproduce the document from the PDF file for internal use. Copies produced from the PDF file must be reproduced in whole.

Trademarks

The Creo wordmark, Creo logo, and the names of the Creo products and services referred to in this document are trademarks of Creo Inc.

Adobe, Acrobat, and the Acrobat logo are registered trademarks of Adobe Systems Incorporated, and are registered in the U.S. Patents and Trademark Office and may be registered in other jurisdictions.

Apple, AppleTalk, AppleShare, EtherTalk, LocalTalk and LaserWriter are trademarks of Apple Computer, Inc.

Microsoft, Windows, Windows 2000, and Windows NT are trademarks or registered trademarks of Microsoft Corp.

Xerox is a registered trademark of Xerox Corp.

Other brand or product names are the trademarks or registered trademarks of their respective owners.

FCC Compliance

The Creo equipment referred to in this document complies with the requirements in Part 15 of FCC Rules for a Class A computing device. Operation of the Creo equipment in a residential area may cause unacceptable interference to radio and TV reception, requiring the operator to take whatever steps are necessary to correct the interference.

Limitation of Liability

The product, software or services are being provided on an "as is" and "as available" basis. Except as may be stated specifically in your contract, Creo Inc. expressly disclaims all warranties of any kind, whether express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose and non-infringement.

You understand and agree that Creo Inc. shall not be liable for any direct, indirect, incidental, special, consequential or exemplary damages, including but not limited to, damages for loss of profits, goodwill, use, data or other intangible losses (even if Creo has been advised of the possibility of such damages), resulting from: (i) the use or the inability to use the product or software; (ii) the cost of procurement of substitute goods and services resulting from any products, goods, data, software, information or services purchased; (iii) unauthorized access to or alteration of your products, software or data; (iv) statements or conduct of any third party; (v) any other matter relating to the product, software, or services.

The text and drawings herein are for illustration and reference only. The specifications on which they are based are subject to change. Creo Inc. may, at any time and without notice, make changes to this document. Creo Inc., for itself and on behalf of its subsidiaries, assumes no liability for technical or editorial errors or omissions made herein, and shall not be liable for incidental, consequential, indirect, or special damages, including, without limitation, loss of use, loss or alteration of data, delays, or lost profits or savings arising from the use of this document.

Patents

This product is covered by one or more of the following U.S. patents:

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	6,541,181
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	6,545,772
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	6,564,018
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	

Creo Inc.
3700 Gilmore Way
Burnaby, B.C., Canada
V5G 4M1
Tel: 1-604-451-2700
Fax: 1-604-437-9891

http://www.creo.com

Document No. 739-00127A-EN

November 2004

Appendix I: Hardware Upgrade Kit

This Appendix describes how to perform a **hardware upgrade kit for Lotem Controller software version 3.80.12, running on Windows 2000.**



Important: This procedure only applies to platesetters whose operating systems need upgrading from Windows '95 to Windows 2000

The procedure includes the following steps:

- Preparation
- Replacing the boards, cables and COM outputs

Preparation

Before installing the hardware and software version 3.80.12, do the following:

1. Expose a reference plate by exposing a customer's file (per plate size). Put the reference plate to one side. If the customer uses a GTO, expose an additional GTO reference plate, because the geometric change (GC) parameters are different for GTO machines.



Note: The reference plate is used to check and compare the customer's *cross marks*, *margins*, *shifts* and *image quality* prior to the software installation, with the cross marks, margins, shift and image quality after the installation.

2. If available, use the Backup and Restore Utility to backup the registry and database. (If unavailable, save the backup and registry information onto a diskette.)
3. Write down the Lotem's TCP/IP address., and then measure and write down the X and Y motor values for the virtual home position application detector.
4. Open Service Shell and type the following:
   `QUANTUM>>`**set gc.**
   `QUANTUM>>`**set gc trackprofile.**
   Write down all the parameter settings, including Trackprofile, or alternatively, save the settings as a text file.
5. Write down the following parameters:
   - **IO_Object/balance system/weight configure mechanical stop center pos (deg)**
   - **IO_Object/balance system/weight configure mechanical stop width pos (deg)**
   - **HKey_Local_Machine/Software/MCkey**
     MCValue = Plates
     DCValue = Donors
   - **Loading System/Load plate/Load From cassette to punch entry/ x rel backward for 0.15 and also for 0.2, 0.3, 0.4**
6. Open the right hand side door of the platesetter.

7. Close Lotem Controller and the Service Shell client.

Replacing the Boards, Cables and COM Outputs

Note: Use an anti-static bracelet when working with the boards.

1. In order to gain greater access to the E-box, remove the screws securing it to the mainframe and then slightly rotate the E-box.
2. Remove the NUC board and return it to stock.
3. Disconnect cable J6 from the top right hand corner of the motherboard:

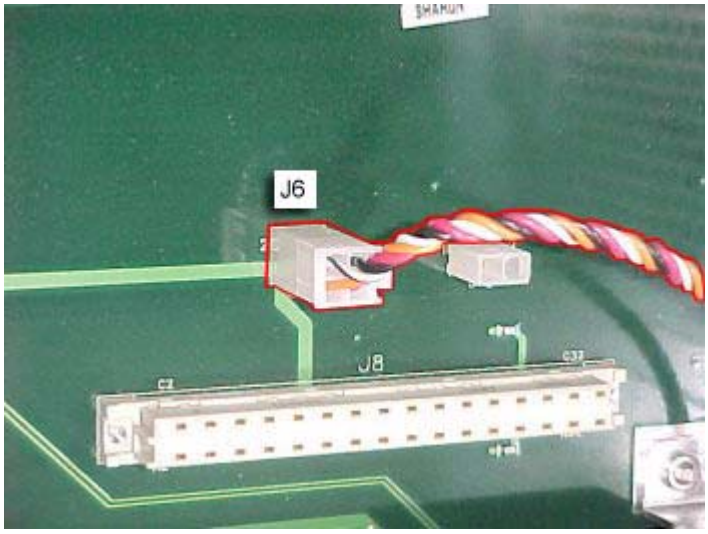


Figure 1: Disconnect cable J6.

4. Make sure the cable and all wirings are disconnected, then pull out the hard disk tray.
5. Disconnect the cables from the SBC 686 CPU board and then remove the board.
6. Disconnect cable J2 from the top left hand side of the E box:

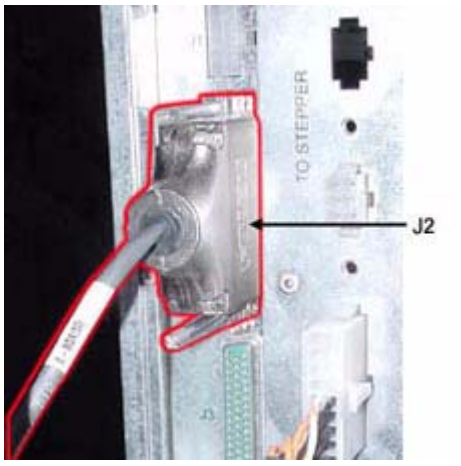


Figure 2: Disconnect cable J2.

7. Remove one of the slot blocks from the PC unit:

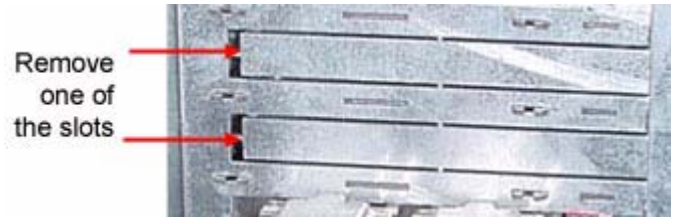


Figure 3: Remove one of the slots.

8. Replace the disk's power cable with the new cable:

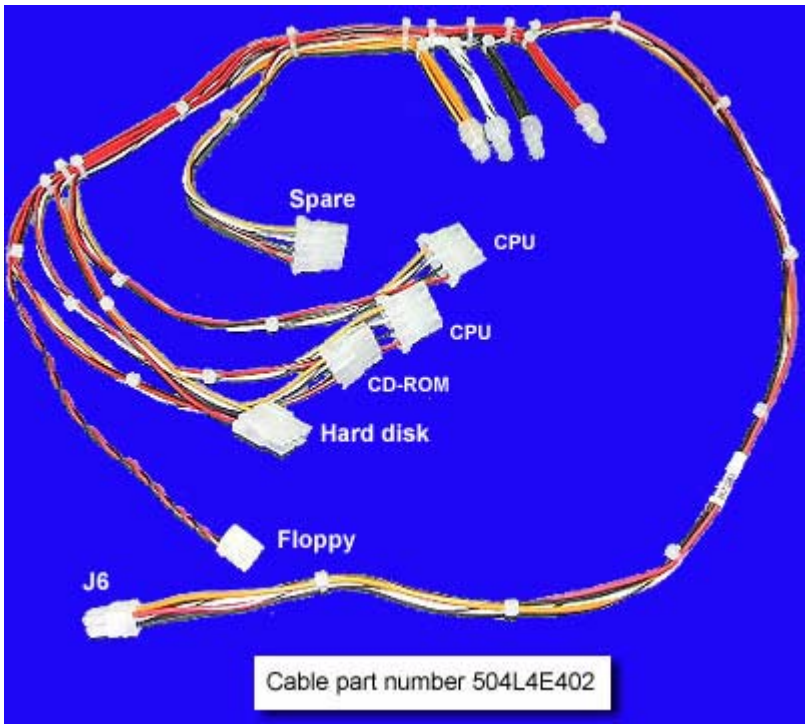


Figure 4: Replace the disk's power cable.

Note: The order of the connections is not important. The Spare connection is left unconnected and may be used in the future.

9. Insert the hard disk tray back into place. Make sure you do not short circuit the wires.
10. Connect the power cable to the floppy, hard disk and CD-ROM connectors.
11. Connect the power cable splitter to the power cable and the CPU connectors.
12. Reconnect cable J6 to the motherboard.

13. Insert the new SBC 786 board with the COM brackets and the SBC 786 connector outputs as shown in figures 4 and 5:

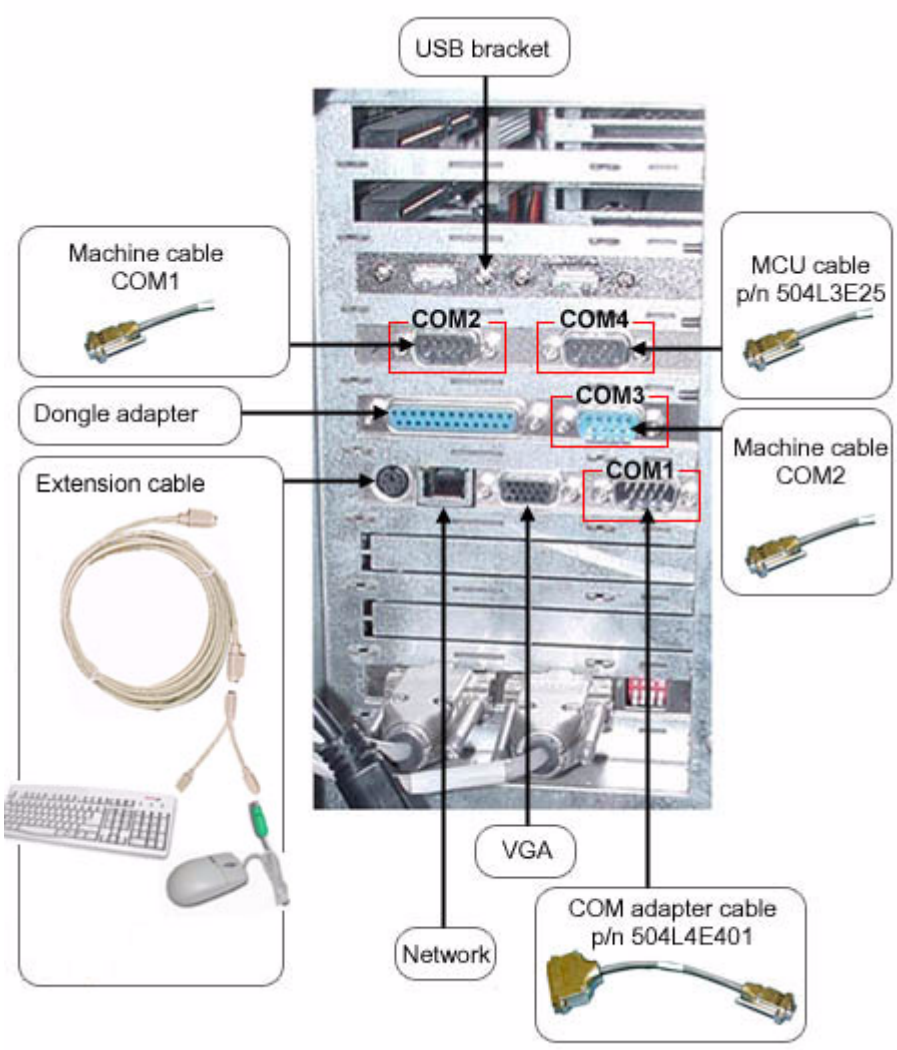
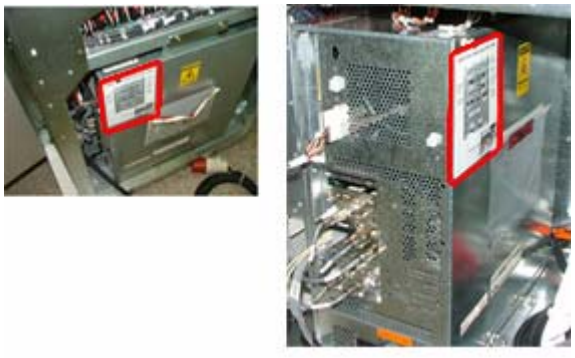


Figure 5: Insert the new SBC 786 board.

14. Affix the **Lotem 800 II E-box Win. 2K cable layout** adhesive to the cover of the E-box:



15. Connect the USB to the SBC. Make sure the black wire faces outwards:

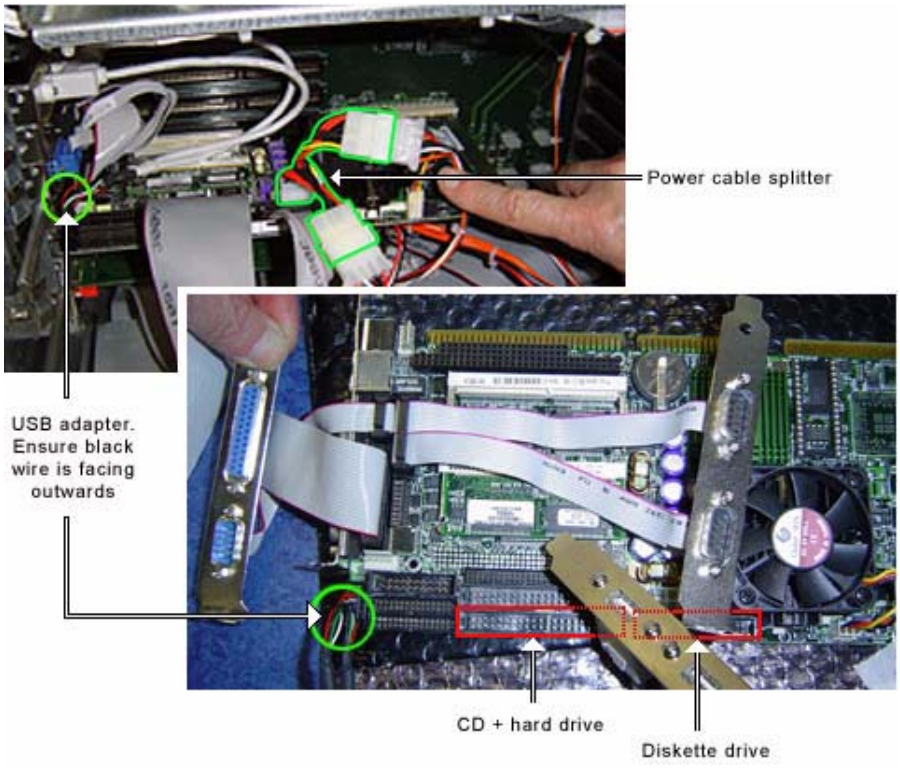


Figure 6: Connect the USB to the SBC

16. Connect the Com adaptor cable between Com 1 and J2 (E-box 50 pin) - removed in Figure 6:

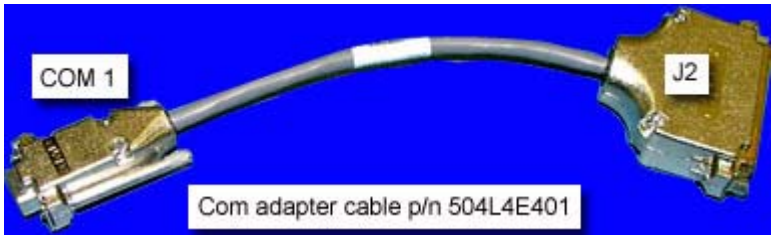


Figure 7: Connect the Com adapter cable.

17. Connect Machine Cable Com 1 to Com 2 of the SBC 786 board.
18. Connect Machine Cable Com 2 to Com 3 of the SBC 786 board.

19. **Windows 2000 - Lotem Controller version 3.75**
Connect one end of the extension cable to the SBC 786 board, and connect the Y splitter cable to the other end of the extension cable.
The Y splitter cable has two connectors: One is labelled mouse and the other is labelled keyboard. Connect the mouse connector to the mouse and the keyboard connector to the keyboard:



Figure 8: Windows 2000 cable connections.

Windows 95 - Upgrading to Windows 2000
Existing on site are two extension cables. One is connected to the keyboard, and one is connected to the mouse. Connect the opposite ends of these extension cables to the Y splitter cable and then connect the Y splitter cable to the SBC 786 board:



Figure 9: Upgrading from Windows 95 to Windows 2000.

20. Connect the dongle adaptor and the other relevant dongles. Mount them with bands to the left wall of the E-box:

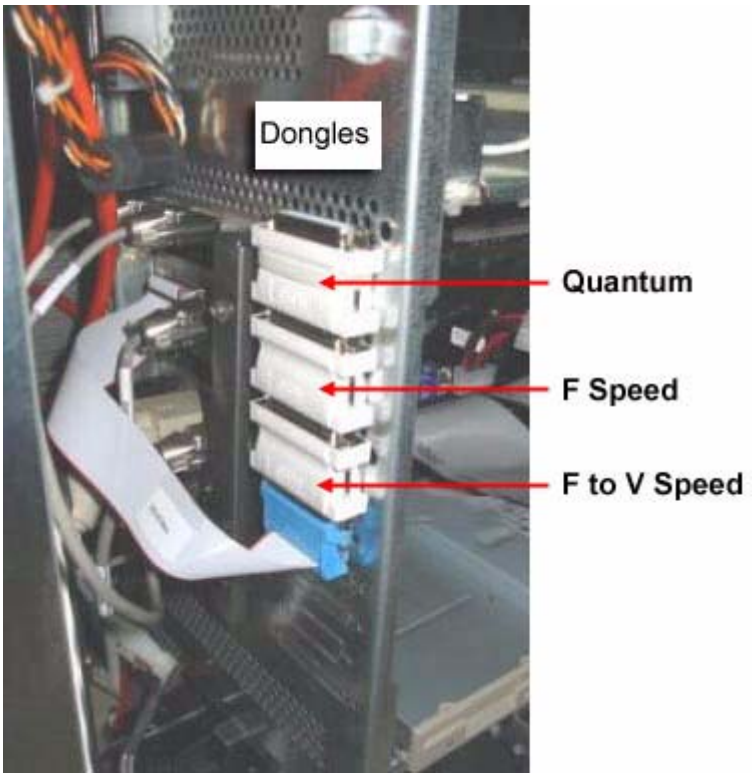


Figure 10: Connect the dongle adapter and the other relevant dongles.

Tip: To ensure that the device's flat cables are connected properly, make sure the red edge of the cable faces towards the power lead.

21. If an MCU is installed, the RS-232 cable should be connected between Com4 and the MCU local motherboard (J8).

22. After completing the installation, the configuration should resemble the following schematic:

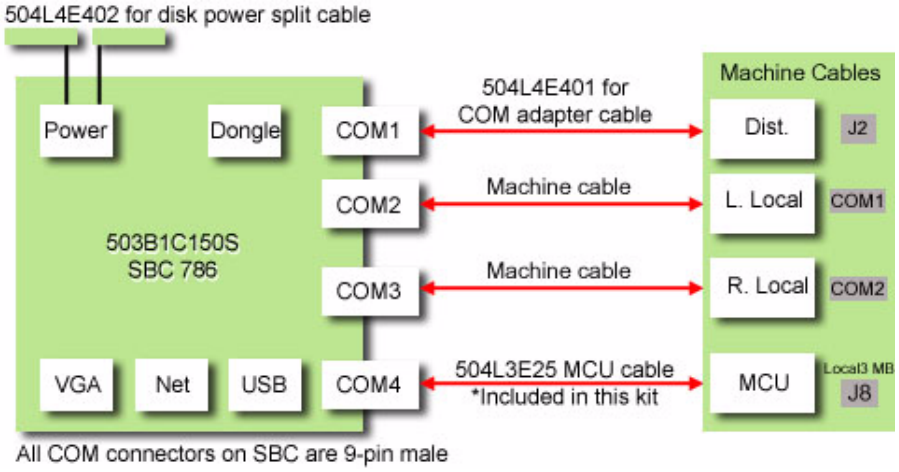


Figure 11: Schematic of configuration.

Appendix II: Measuring the X, Y Motor Values

A closed circuit loop was added to Lotem Controller software version 3.8.xx. This enabled the following enhancements:

- Much closer control over the centering motor and X,Y movements
- Increased stability
- Increased movement flexibility
- Reduced margin of error

In order for the enhancement to work correctly, it is necessary to adjust the virtual home position application detector values, as described below:

Procedure:

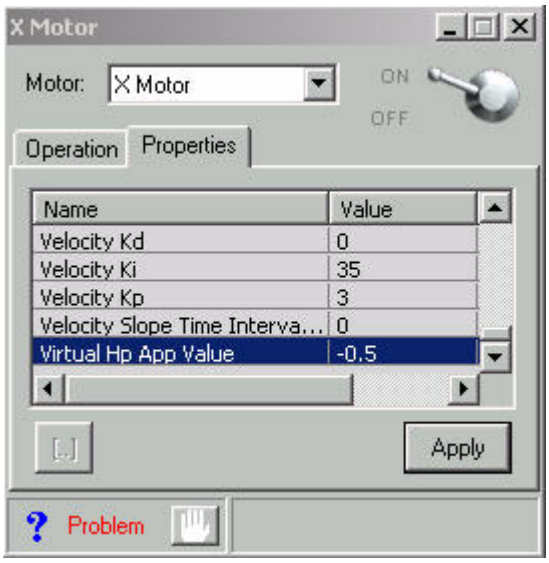
1. Before upgrading to software version 3.80.xx, calculate the following X and Y measurements:
   X motor:
   - Send the **X motor** to **position 350** at a speed of **10**.
   - Use a ruler to measure the distance from the loading system to the front beam of the main frame.
   - Send the **X motor** back to the **home position detector**.

   Repeat this step 5 times and then calculate the average measurement.

   Y motor:
   - Send the X motor to position 170 at a speed of 10.
   - Send the Y motor to the bar flag detector at a speed of 10.
   - In Lotem Controller, read the Pos. value (encoder measurement).

   Repeat this step 5 times and then calculate the average measurement.
2. After upgrading to software version 3.80.xx, repeat step 1, and then do the following:
   - Navigate to the **X/Y Motor** dialog box. In the Properties tab, scroll down to the **Virtual Hp App Value** and in the **Value** column, enter the delta value of the measurements before and after the upgrade.
     The final number will usually be a negative number, as shown in the example below:

     Example:
     Average value before upgrade: **A** = 65 mm
     Average value after upgrade: **B** = 64.5 mm
     Delta: **B - A** = (64.5 - 65) = -0.5 mm
     Virtual Hp App Value"="-0.5"



3. Attach a plate to the punch beam's short pins.
   - Send the centering motor to **end position** at a speed of **3**.
   - From within Lotem Controller, read the **Pos**. value (encoder measurement).
   - Add/subtract the delta value to/from the actual plate size value entered into the Pos. field (in the Virtual App. Det. dialog box).
   - Make sure that the amended Pos. value reflects the actual size of the plate.

Test 1

- Move the XY system to **X=352, Y=0**.
  Check the status of the paper plate on disposal detector. If the status is **off**, navigate to the Registy and change the value of the **X after gripper** (Loading system\From Drum Entry to Drum Stage\X after gripper) parameter to a value between **350-354**.
- Move the XY system ±2, from **X=352** (350 - 354), Y**=0**.
  Make sure the paper plate on disposal detector is **off**. If the detector's status is not off, then change the value in the registry.

Test 2

Test several plate sizes and make sure that the value in the Pos. field reflects the size of the plate.