Kodak

Multi-Cassette Unit and Single-Cassette Unit for Magnus 400 and Magnus 400 Quantum Platesetters

Installation and Upgrade Guide

English

731-00555A-EN Rev A

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Introduction

This document describes the Kodak® Magnus™ 400 hardware and software installation procedures required to install the multi-cassette unit (MCU) or the single-cassette unit (SCU) on an MCU or SCU-ready platesetter or to upgrade the Magnus 400 and Magnus 400 Quantum platesetters to the MCU or SCU configuration. For Magnus 400 devices with MCU or SCU site requirement details, see the Magnus 400 / Magnus 400 Quantum Platesetter Site Preparation Guide (707-00520E).

Figure 1 on page 2 shows the tasks in the order that you need to perform them for installing an MCU or SCU-ready platesetter or for upgrading to an MCU or SCU configuration.

If you are installing the MCU or SCU in conjunction with the platesetter, skip the sections designated for upgrades only.

Note: All the procedures in this guide are applicable also to the SCU.

Before You Begin

Before you begin the upgrade, do the following actions:

- Confirm that the upgrade kit contains all of the items in the list on page 3.
- Confirm that you have all the required tools in the list on page 4.
- If you are upgrading, back up the registry file, database folder, and Magnus 400 Controller TCP/IP address (see page 18).

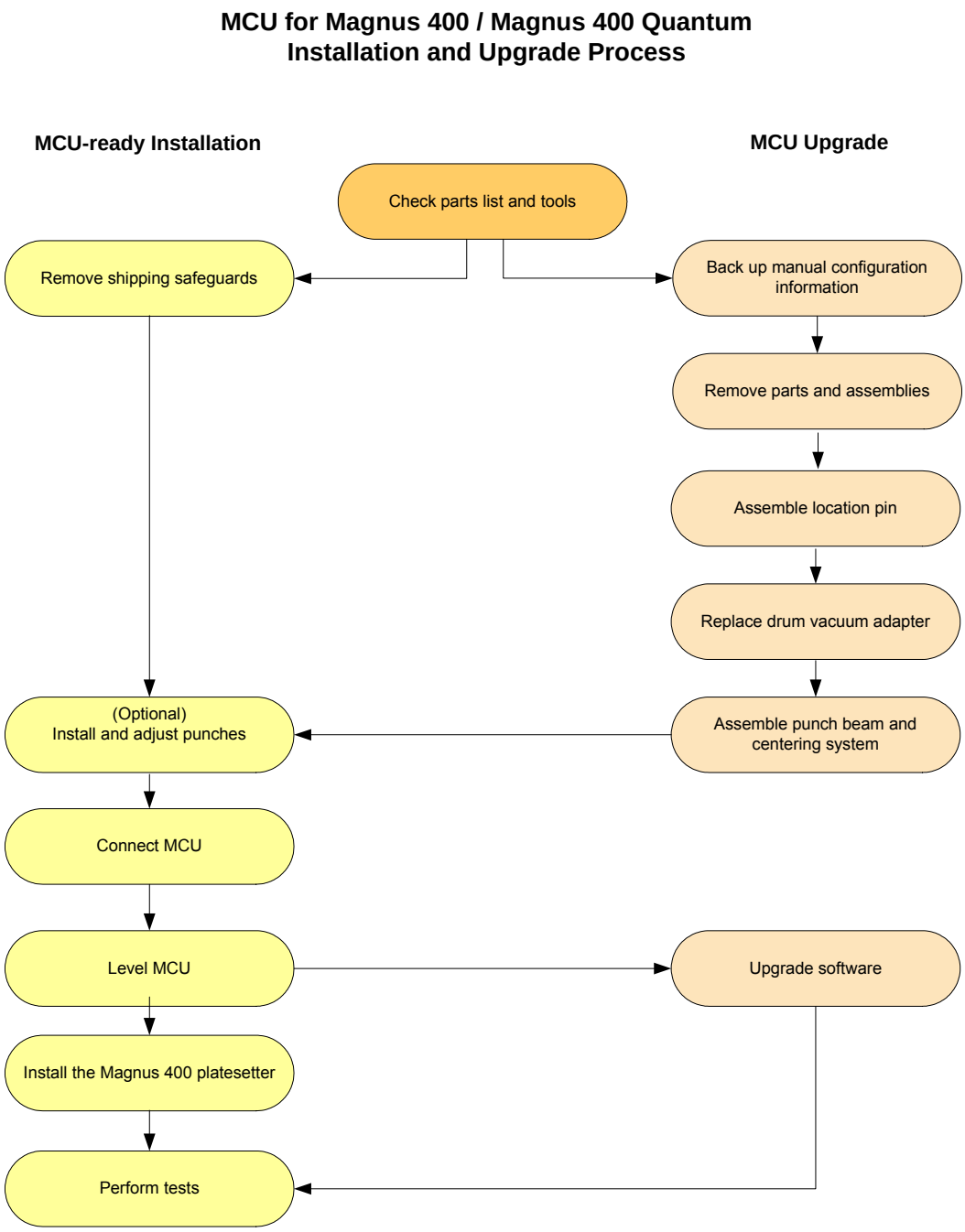


Figure 1: MCU for Magnus 400 / Magnus 400 Quantum installation/upgrade process

Parts List

To upgrade or install the MCU or SCU configuration you will need items that appear in the parts list. Verify that all items in the list are included in their respective kits.

Catalog Number	Quantity	Part Name
Add-on Upgrade Kit for Magnus 400 SA (manual) to Magnus 400 MCU (automatic):		
518-01005A	1	Magnus 400 MCU Accessory Kit
298A2P757	1	Upper labyrinth (light guard)
507E4E236	1	Punch assembly (small)
507F4E079	1	Centering assembly (small)
380A05081	4	SOC HD CAP STST 8-32×5/8"
382B11000	4	Spring washer
Magnus 400 MCU Accessory Kit (518-01005A):		
290A2P847	2	Punch beam adapter (punch beam spacer)
290A2U461	2	Loader centering pin
290A6B219	2	Omron interlock bracket
290B2P411	1	Interlock cheater
290B2P840	1	Location pin bracket left (loader spacer left)
290B2P841	1	Location pin bracket right (loader spacer right)
296A2T694	1	Drum vacuum hose adapter vacuum tube weldment
380A06101	3	Screws for punch assy to spacer (10-32×3/4)
380A12140	2	Screws for connecting automatic loader to Magnus 400
380G06020	6	Screws for punch spacer (Phillips® screws 10-32×½)
382-00716A	1	Magnus 400 Quantum sticker
382A14001	3	Flat washer 10
382A23000	2	Flat washer ST 3/8×.049"
382D13000	3	Spring 10
382D23001	2	Spring L/W ST 3/8
391A3L478	1	RCS box 560×245×245
504L4E182	1	Solo int adaptor type II
653-00903B-EN	1	Magnus 400 with MCU VRG (document)

Tools

To perform the installation or upgrade procedure, you will need the following tools:

- Set of hex keys (imperial, not metric)
- Cross-head screw driver
- 16 mm (0.63 in.) open ring
- 29 mm (1.14 in.) open ring
- Frame bending jig (for upgrades only)

Installing an MCU or SCU-ready Platesetter

This section describes how to install a platesetter that is configured for MCU operation, but is not physically connected to the MCU.

Note: The procedures in this section apply also to the SCU.

Removing Shipping Safeguards

The MCU is shipped with safeguards that prevent excessive movement of the XY bar and cassette drawers during transport. The safeguards are red for easy identification. This section describes how to remove these safeguards.

Removing the XY Bar Safeguards

➢ Cut the two cable ties that secure the XY bar.

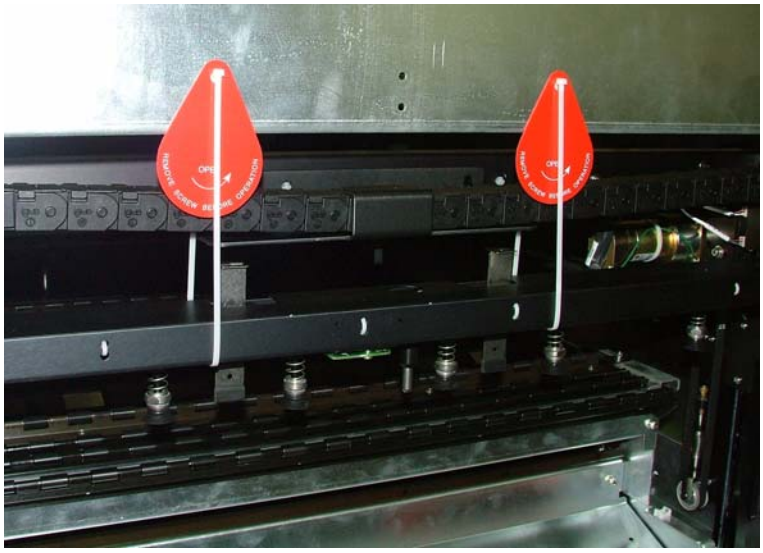


Figure 2: Removing the XY bar cable ties

Removing the Left and Right Cassette Drawer Safeguards

1. Cut the three cable ties that secure the cassette drawers on the left-side of the MCU.

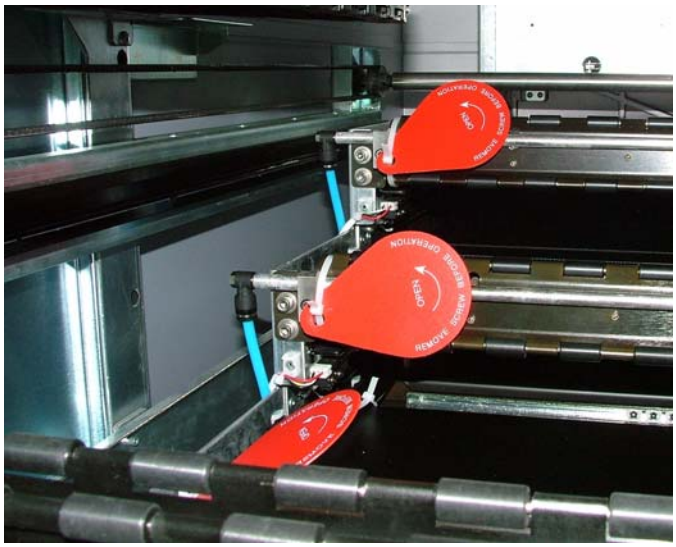


Figure 3: Removing the left-side cassette drawer cable ties

2. Cut the three cable ties that secure the cassette drawers on the right-side of the MCU.

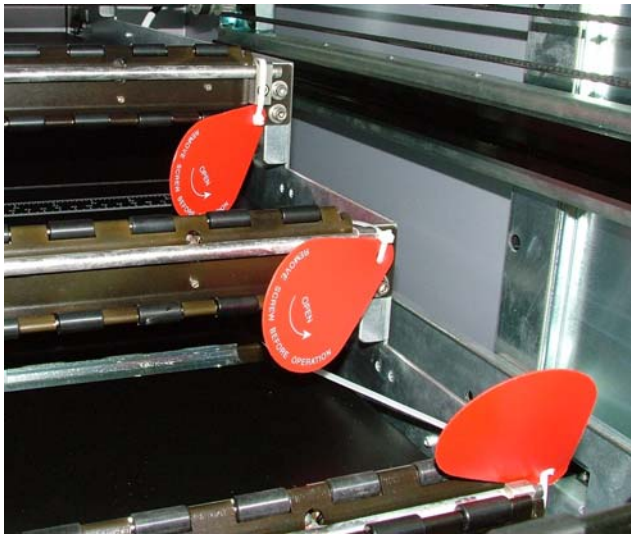


Figure 4: Removing the right-side cassette drawer cable ties

(Optional) Installing and Adjusting the Punches

Note: If there are no punches to install on the punch beam, proceed to *Connecting the MCU to the Platesetter* on page 8.

1. Install the punches with one hex screw each, according to the platesetter configuration (maximum six punches).

   Note: Leave one roller in the center of the punch system to support thin plates.

2. Place a punched plate in front of the punch system.
3. Manually close the centering system.
4. Loosen the hex screw to adjust the punch positions according to the punch holes on the plate, and then tighten the hex screw.
5. Connect each punch to the nearest Molex® connector.

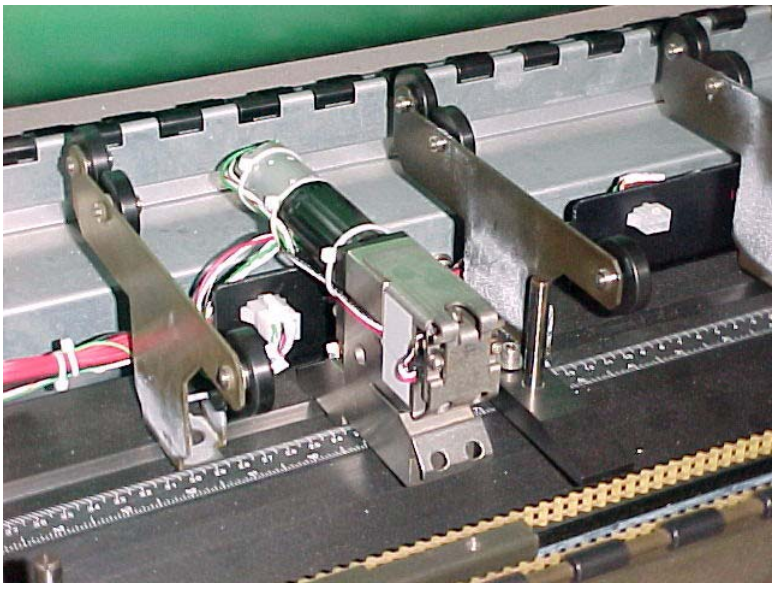


Figure 5: Punches

Note: After you assemble the MCU, make any final adjustments to the punch system.

Connecting the MCU to the Platesetter

This section describes how to connect the MCU to the platesetter. It includes cable connection procedures to the right, center, and left sides of the platesetter.

Note: The right, center, and left side direction references are from the loading direction (rear) of the MCU.

The MCU is shipped with interlock brackets that fit the platesetters.

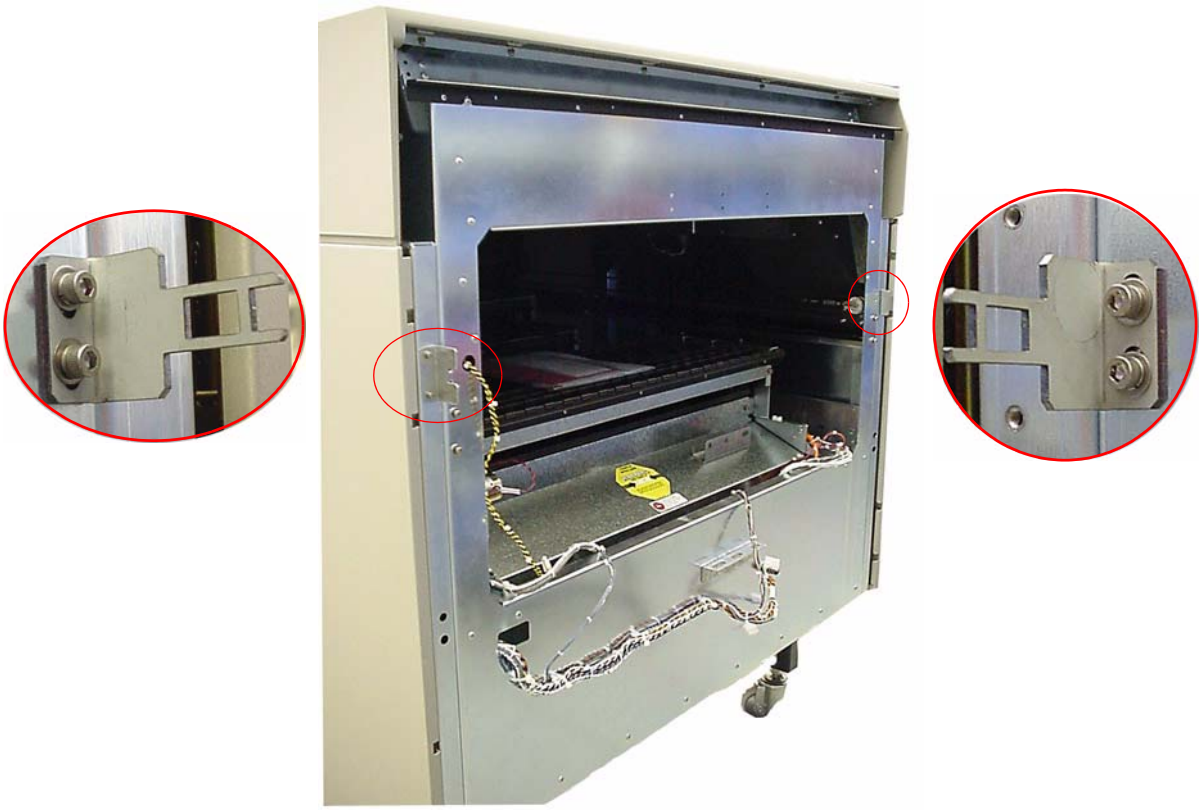


Figure 6: MCU to platesetter connection, rear view

Note: To enable easy access, move the MCU to an angle that is approximately 45° from the platesetter.

1. From the rear (loading direction) of the MCU, connect the yellow-black cover solenoid cable (labeled COVER SOL) to the corresponding cable [labeled FRONT DOOR SOL (R)] on the platesetter. This cable is wrapped inside the MCU, so you must release it first. See *Removing the Plate Driver Assembly, Interlocks and Lockers* on page 25.



Figure 7: Yellow-black cover solenoid cable connection, right-side platesetter view

2. Connect the punch motor *Molex* connector (labeled PUNCH MOTOR) to the punch assembly (labeled PUNCH HARNESS).

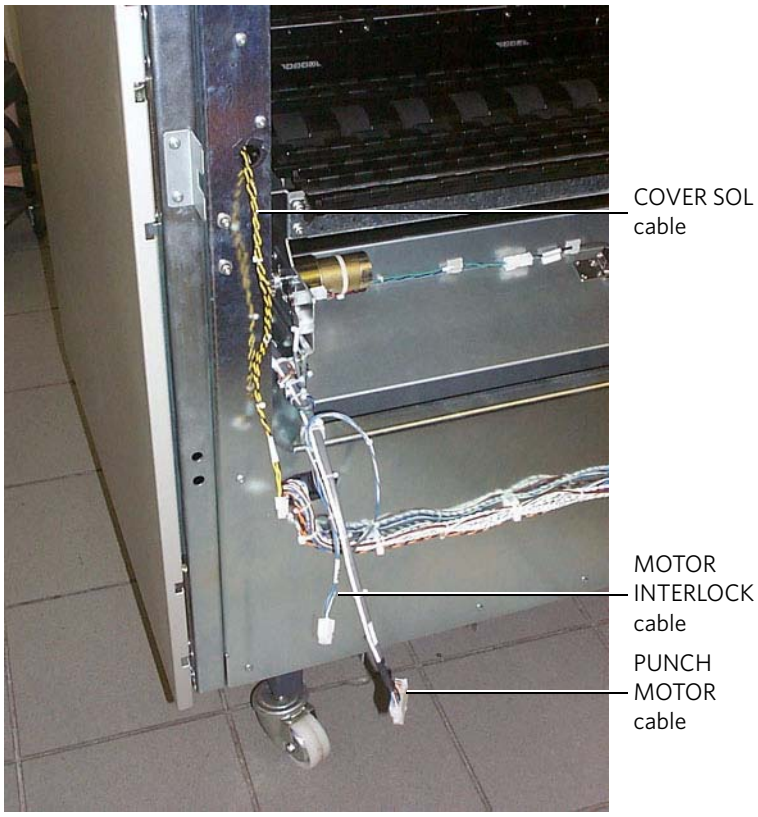


Figure 8: Cables and interlocks, rear-left side MCU view

3. On the front right side of the platesetter, disconnect the MCU jumper from the MCU(2) Molex connector.

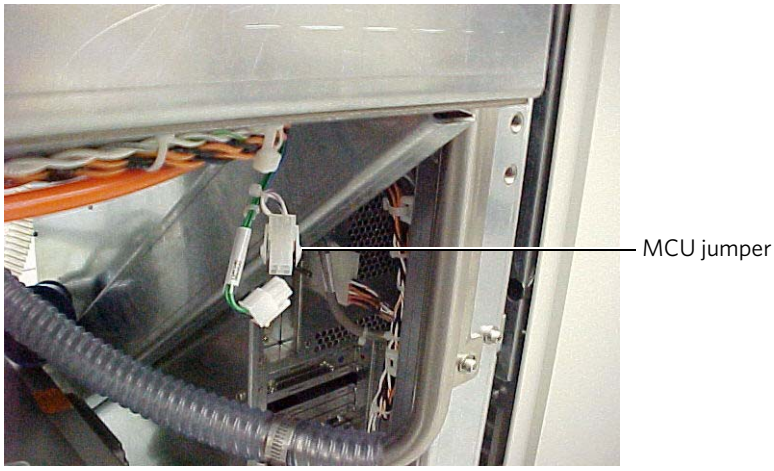


Figure 9: MCU jumper

4. Connect the MCU motor interlock Molex connector to the MCU(2) Molex connector on the platesetter that you disconnected from the jumper.

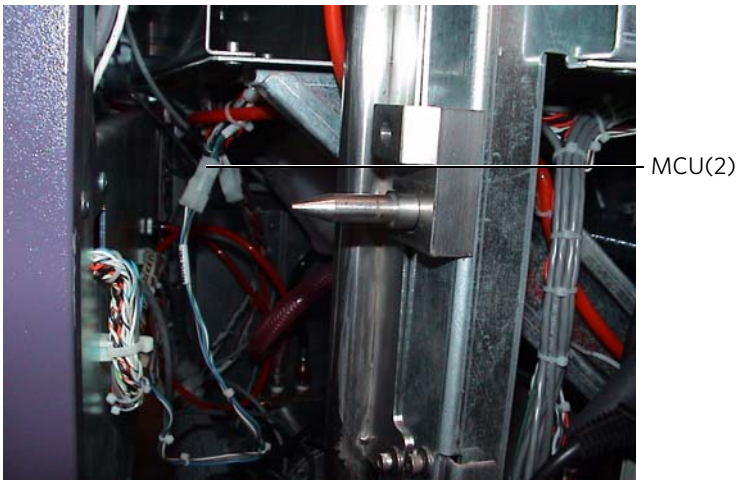


Figure 10: Motor interlock connected to MCU(2) connector

5. From the platesetter, route the communication cable (labeled MCU COM) along the bottom of the platesetter to connector J8 on the Local3 board in the MCU.

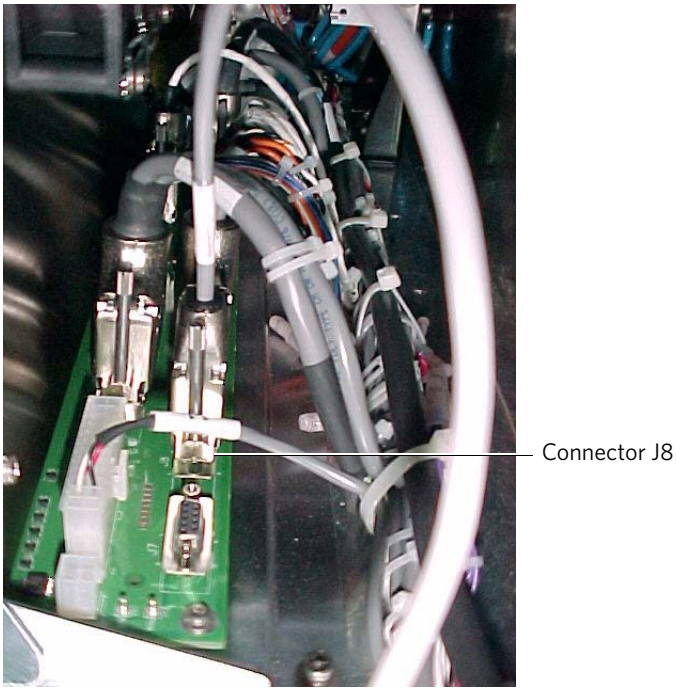


Figure 11: Connector J8 on Local3 board

6. From the center of the MCU, connect the four Molex connectors (P1, P14, P10, and the laser interlock) to the platesetter.
   a. Connect P1 on the MCU to MCU P1 on the platesetter.
   b. Connect P10 on the MCU to MCU P10 on the platesetter.
   c. Connect P14 on the MCU to MCU P14 on the platesetter.

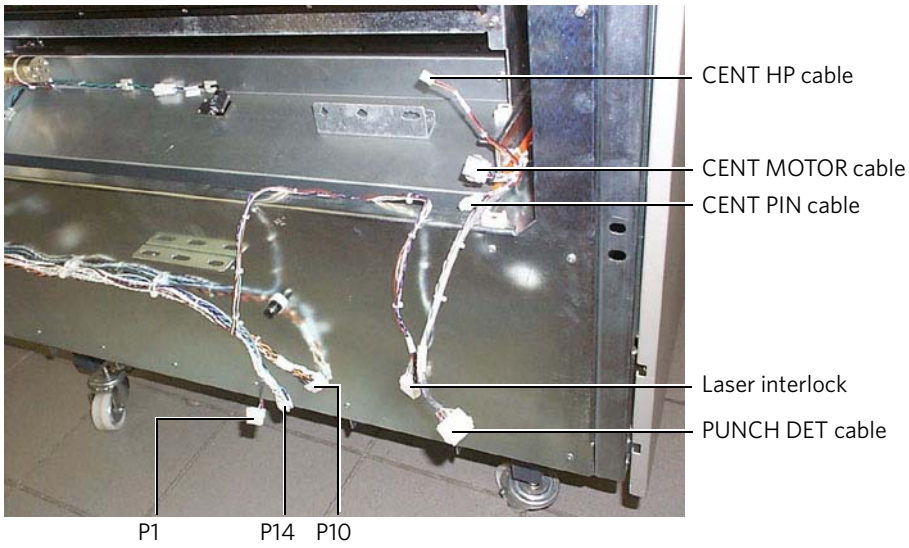


Figure 12: Molex connectors and cables, rear-center and left side MCU view

   d. On the front-left side of the platesetter, disconnect the front panel Molex connector (labeled FRONT PANEL) from the Omron interlock.
   e. Connect the LASER INT cable on the MCU to the LOTEM 400 ADP cable on the platesetter.

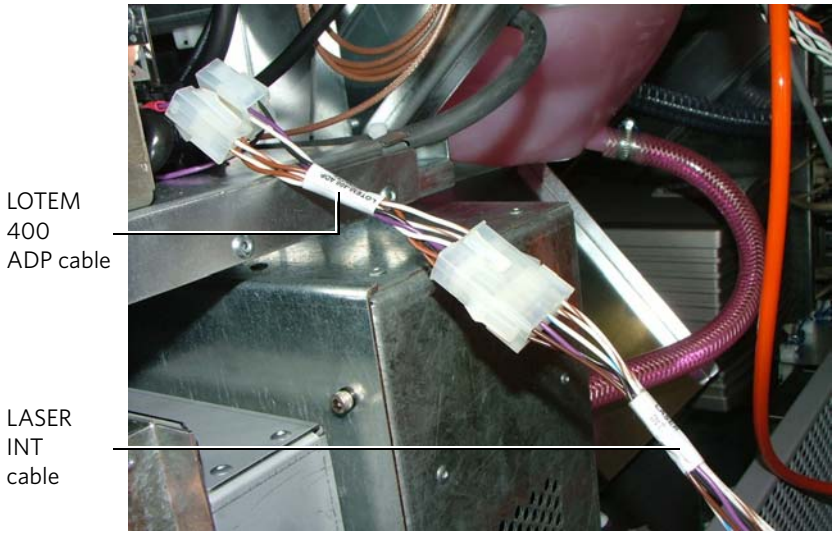


Figure 13: Connecting the MCU laser interlock cable to the platesetter

f. Connect the front panel 4-pin Molex connector (labeled FRONT PANEL) that you just disconnected from the Omron interlock and the MCU connector (labeled MCU) to the LOTEM 400 ADP cable.

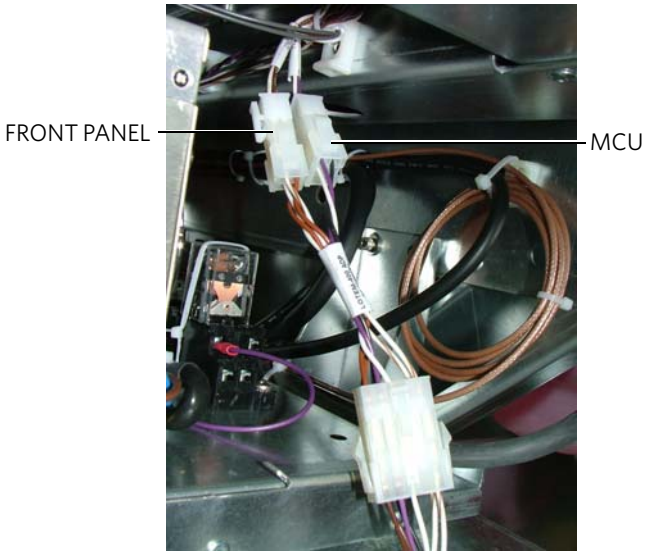


Figure 14: Front panel and MCU connectors on platesetter

7. From the rear (loading direction) of the MCU:
   - Connect the home position cable (labeled CENT HP) to the HP detector on the centering system on the platesetter. See Figure 12 on page 12.
   - Connect the centering motor cable (labeled CENT MOTOR) to the motor (labeled MOTOR WIRING) of the centering system. See Figure 12 on page 12.
   - Connect the centering pin cable (labeled CENT PIN) to the Molex connector on the two gray cables (labeled CENTERING) attached to the centering pins. See Figure 12 on page 12.
   - Connect the punch detector cable (labeled PUNCH DET) to the punch system Molex connector (labeled DET) on the platesetter. See Figure 12 on page 12.

Connecting the Air Pressure Pipe

Note: For upgrades, see *Connecting the Air Pressure Pipe* on page 32.

1. Plug one end of the air pressure pipe into the air pressure outlet in the wall.
2. On the front-left of the platesetter, connect the other end of the long air pipe to the MCU air outlet. Use cable ties to secure the air pipe to the other cables.



Figure 15: Connecting the air pipe to the MCU air outlet

Connecting the CPU

1. On the platesetter, open the side door of the PC assembly.



Figure 16: COM 2 connection

2. Connect the COM 2 cable to the COM 2 port.

Completing the Connection Process

1. Check that all the cables are neatly tied with white cable ties so that they do not block the XY system.
2. When you finish connecting the MCU to the platesetter, stick the MCU safety labels in the relevant language on the MCU according to the illustrations in the Magnus 400 Safety Precautions for Service (731-00392A) or the Magnus 400 Quantum Safety Precautions for Service (731-00442A).

Leveling the MCU

1. Carefully move the MCU closer to the platesetter.

   Attention: While moving the MCU, do not disconnect or damage the cables.

2. To verify that the MCU is level on both axes, place a level on the center front of the device, as shown, and then on the right side, verify that it shows that the MCU is level.

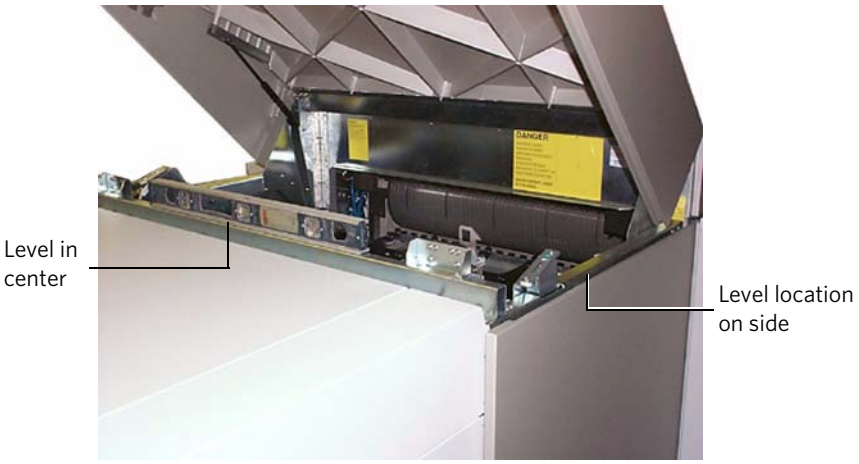


Figure 17: Levels, center and right side

3. Open the side doors of the MCU.
4. To connect the MCU to the platesetter, adjust the height and level of the MCU using its four wheels. Verify that the platesetter and the MCU are exactly the same height so that the location pins on the Magnus 400 slide into the holes in the mainframe of the MCU without touching the edges of the holes.

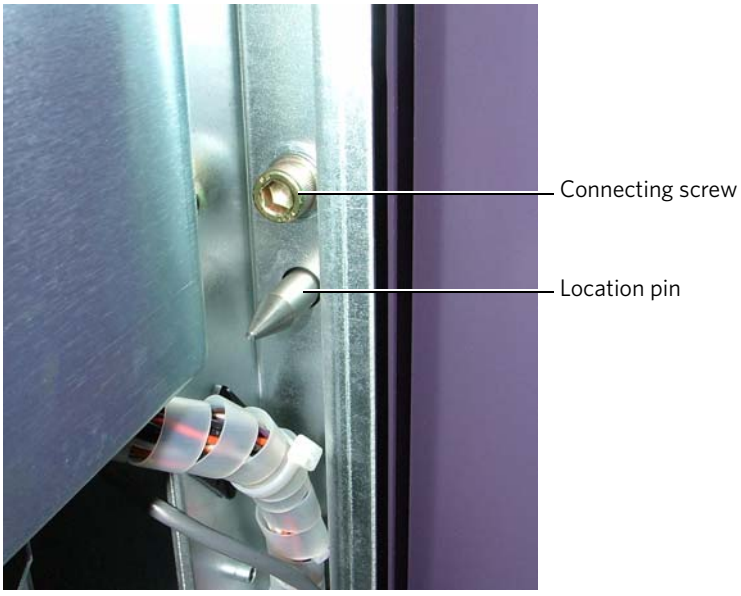


Figure 18: Leveling the MCU to the height of the location pins

5. Verify that the distance between the top of the platesetter and the top of the MCU is between 20 to 22 mm (0.79 to 0.87 in.).

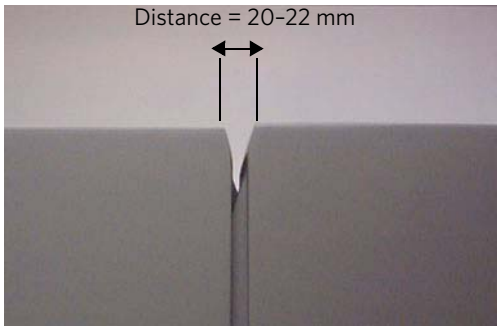


Figure 19: Top doors of platesetter and MCU

6. To verify that the weight of the MCU is evenly distributed on all four wheels, jiggle each wheel. If the wheels wobble, readjust the height of the MCU, and then use a level to verify leveling.
7. Tighten the two connecting screws (part number 380A12140) on each side of the MCU mainframe. See Figure 18.

Installing a Magnus 400 Platesetter

After you finished installing the MCU, to complete the installation, you need to install the platesetter. See the relevant hardware installation guide: Magnus 400 Hardware Installation Guide (731-00316C) or Magnus 400 Quantum Installation Guide (731-00408A).

Testing the MCU Configuration

This section describes the tests that you must perform, and provides a final checklist of procedures for the customer.

Testing the Centering System

Note: Before you begin the tests described in this section, attach all translated labels (attached to the platesetter) in the language required.

1. Load a plate in the lowest cassette of the MCU. Make sure that the plate is centered in the cassette.
2. Insert the cassette and close the loader door.
3. In the Magnus 400 Controller software, load the plate onto the drum.
4. Open the rear door and make sure that the distance between the plate and the edge of the drum is the same on both the left and right sides, with no more than 1 mm (0.04 in.) tolerance.
5. If the distance between the plate and the edge of the drum on the left and right sides varies by more than 1 mm, adjust the centering system assembly.

Testing Customer Plates

Test each plate type that the customer intends to use to verify that all plate types load properly.

1. Load a plate on the drum.
2. Operate all punch motors.
3. Check that all the punches are adjusted properly, according to customer requirements.
4. Expose a test file and check registration.

Customer Onsite Training Check List

Explain the following basic operations to the customer, using the VRG as reference. Before leaving the site, verify that the customer understands and can perform the following operations:

- Observing safety precautions
- Operating the Magnus 400 Controller software
- Loading plates on all trays
- Removing plates from the XY system
- Removing paper from the paper disposal
- Initiating the XY system
- Exposing and media definition setup
- Performing preventive maintenance (PM)
- Troubleshooting common customer-level problems

Equipment Supplied by Customer

Verify that the customer has, or is aware that it is the responsibility of the customer to supply the following equipment:

- Plate measuring
- Plates
- Desk for monitor

Upgrading a Semi-Automatic (Manual) Platesetter to an Automatic Platesetter (MCU or SCU)

This section describes how to upgrade the platesetter from its manual configuration to the MCU or SCU configuration.

Backing Up Manual Configuration Information

This section describes how to back up the registry and database information on your current platesetter.

If you are upgrading a Magnus 400 Quantum platesetter to the MCU or SCU configuration, you must also back up the non-volatile storage (NVS) parameters.

Saving the Registry and Database Files

Note: If you are not upgrading a manual platesetter, proceed to *Assembling the Location Pin* on page 27.

When performing an upgrade, make sure to back up the following information before you begin:

- **Registry** file
- **DataBase** folder
- Microsoft® Windows® license number
- Platesetter settings
- Magnus 400 Controller TCP/IP address
- NVS parameters

The factory-set parameters of each new platesetter are saved on the Machine Parameters disk, which is attached to the electronic box (E-box).

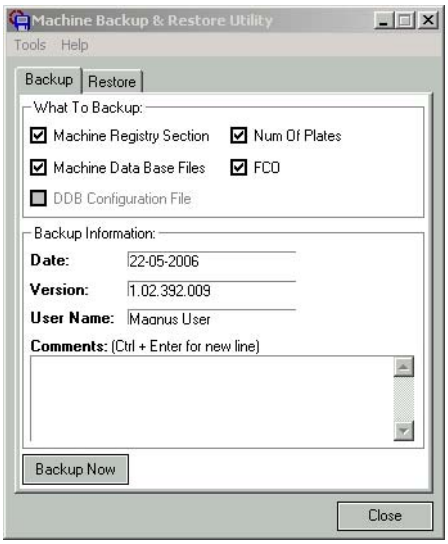
Note: You can save the **Registry** file and the **DataBase** folder on the same disk. Remember to label the disk appropriately before backing up files. Frequently back up the platesetter parameters and settings, in case of a system crash.

To save the registry and database files:



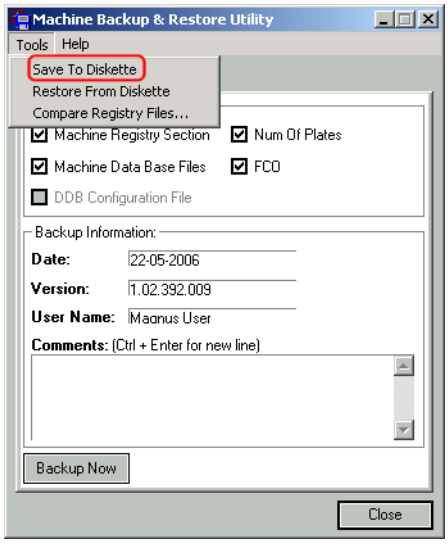
1. Turn on the platesetter and start the Magnus 400 Controller software.
2. Insert a formatted write-enabled disk into the disk drive.
3. On the Windows desktop, double-click the **MachineBackup** icon.

   The Machine Backup & Restore Utility window appears.



4. On the **Backup** tab, verify that the following check boxes are selected:
   - **Machine Registry Section**
   - **Machine Data Base Files**
   - **Num Of Plates**
   - **FCO**
5. In the **Backup Information** area:
   - In the **Version** box, type the software version currently installed on the platesetter.
   - In the **User Name** box, type the user name.
   - (Optional) In the **Comments** box, type a short description of the backup files that you are saving. If multiple backups were performed, this information can help you to restore the correct backup.

6. From the **Tools** menu, select **Save To Diskette**.



7. Click **Backup Now**.
8. When the Machine Backup & Restore Utility finishes copying the files to the disk, the following message appears:



9. Click **OK**, and then click **Close** to quit the Machine Backup & Restore Utility.
10. Remove the disk from the disk drive and store it in the E-box.

Saving the Xpo Software Settings

➢ On the Windows desktop, select **Start > Programs > Xpo > Save Settings**.

The Kodak Xpo™ software settings are automatically saved in **E:\dataVolumes\Config_save**.

Saving the Magnus 400 Controller TCP/IP Address

1. On the Windows desktop, select **Start > Settings > Control Panel**.

   The Control Panel window appears.
2. Double-click **Network**.

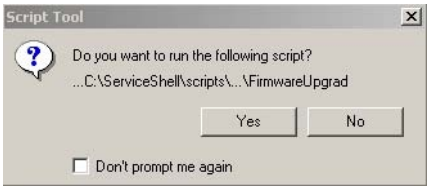
   The Network dialog box appears.
3. Right-click **Local Area Connection**, and then click **Properties**.
4. Double-click **TCP/IP address**.
5. Write down the IP address.
6. Click **OK** twice, and then close the Control Panel window.

Backing Up the NVS RAM and MCE NVS Flash Parameters

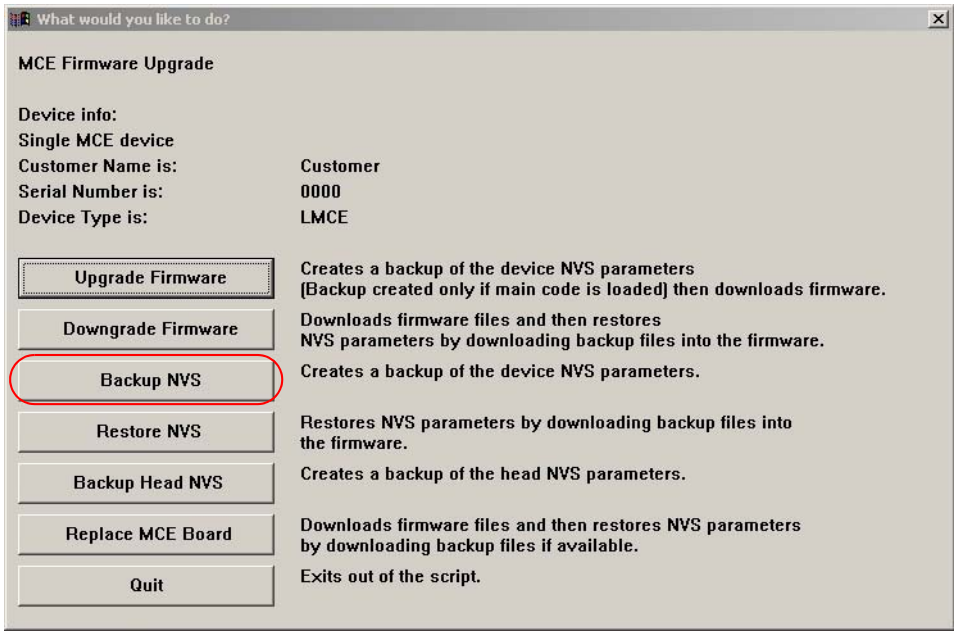
Note: The following procedure applies to Magnus 400 Quantum platesetters *only*.

The NVS RAM and MCE NVS Flash parameters are defined on the LMCE board. Back up these parameters so that they can be restored if the LMCE board is damaged or becomes corrupted.

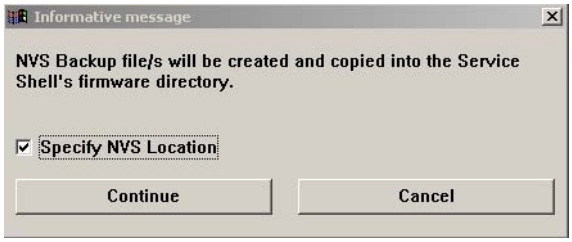
1. Insert a formatted write-enabled disk into the floppy disk drive.
2. On the left panel in the Service Shell workspace, click the **Scripts** tool .
3. On the middle panel, select **Device**, and then double-click **FirmwareUpgrade**. When the following message appears, click **Yes**.



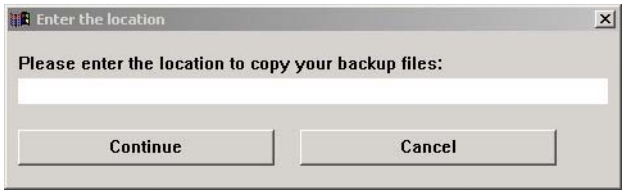
4. Wait a few moments for the MCE Firmware Upgrade dialog box to appear, and then click **Backup NVS**.



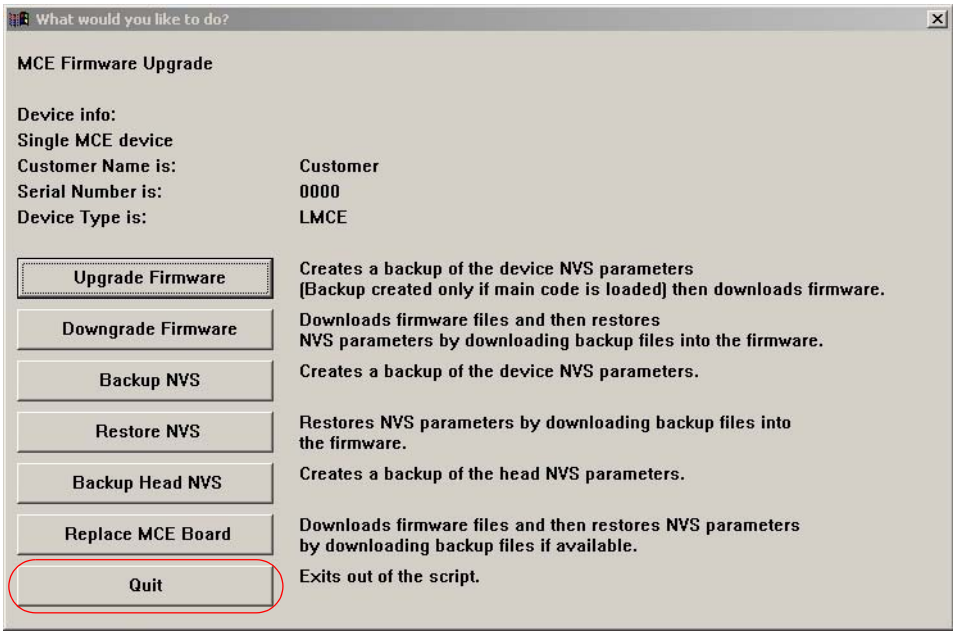
   a. In the dialog box, select the **Specify NVS location** check box and click **Continue**.



b. In the dialog box, type the path to which you want to copy the files and click **Continue**.



5. After the files are copies, in the MCE Firmware Upgrade dialog box, click **Quit** to return to Monitor view.



Removing Parts and Assemblies

Note: If you are not upgrading a manual platesetter, proceed to *Assembling the Location Pin* on page 27.

1. Before you remove any parts or assemblies from the platesetter, verify that the platesetter is leveled properly on all four legs. See the relevant Magnus 400 or Magnus 400 Quantum hardware installation guide.
2. Turn off the platesetter.
3. Disconnect the platesetter from the main power supply.
4. Turn off the air supply.

Removing the Lower Front Panel and the Loading Tray

1. Open the front door. (Use the manual opening procedure as described in the *Magnus 400 Hardware Installation Guide*.)
2. Remove the lower front panel.
3. Remove the harness from the support brackets.

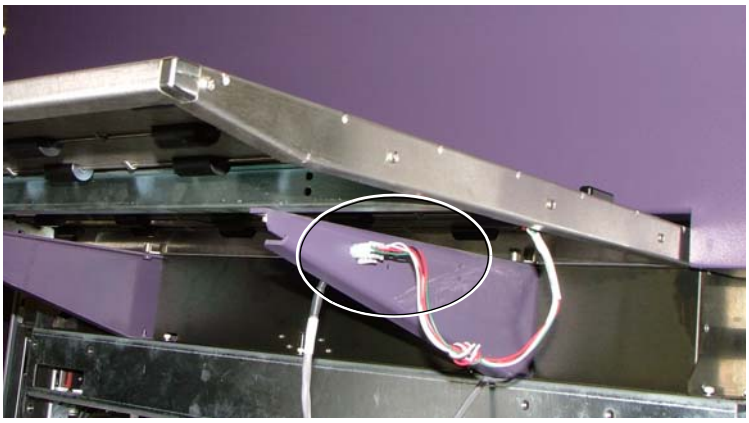


Figure 20: Support bracket harness

4. Disconnect the Molex connector from its location on the support brackets.
5. Remove the two spring screws located on the top part of tray, near the platesetter frame.
6. Remove the two hex screws from each support bracket, and then remove the tray.

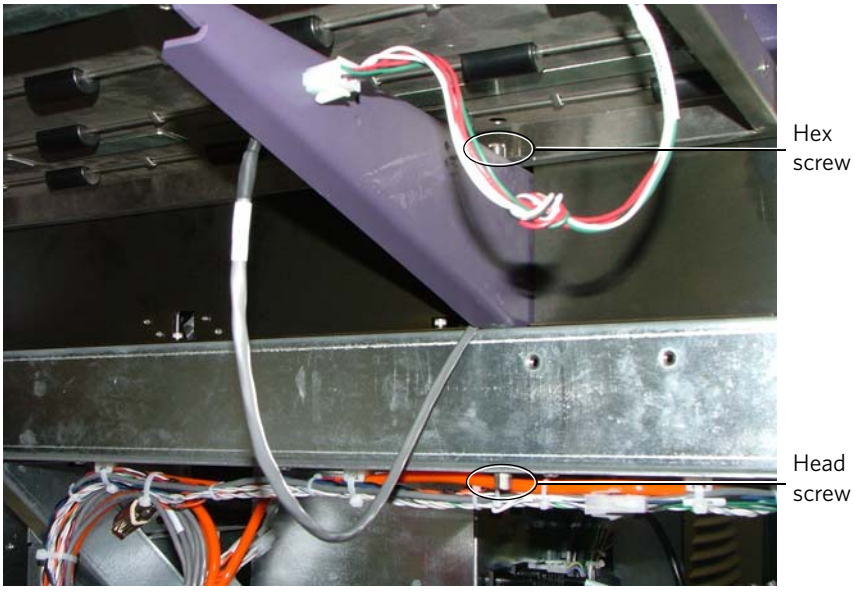


Figure 21: Removing loading tray

7. Remove the two bottom hexagonal head screws from each bracket, and then remove the support brackets.

Removing the Front Door

WARNING: The front door is very heavy. Two people are required to remove the front door.

1. Remove the nine screws that secure the front door to the mainframe (four on the left side, four on the right side, and one in the center).



Figure 22: Front door screws, front view with door removed

2. Loosen, but *do not remove* the two screws that secure the front door support pistons, and then slide the door up to remove it.

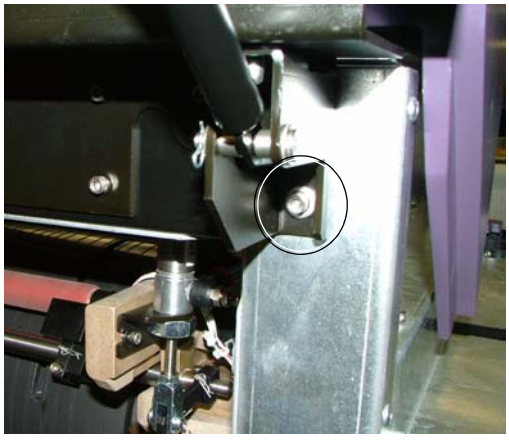


Figure 23: Front door support screw

3. Remove the two screws that secure the front door support pistons to the mainframe.

Removing the Plate Driver Assembly, Interlocks and Lockers

Attention: Before proceeding, verify that the air supply to the platesetter is turned off.

1. Disconnect the harness Molex connector (labeled LOADING) from the platesetter, as shown in Figure 24.
2. To take apart the plate driver assembly:
   a. Remove the seven screws (two on the left side, two on the right side, and three in the center), as shown in Figure 24.

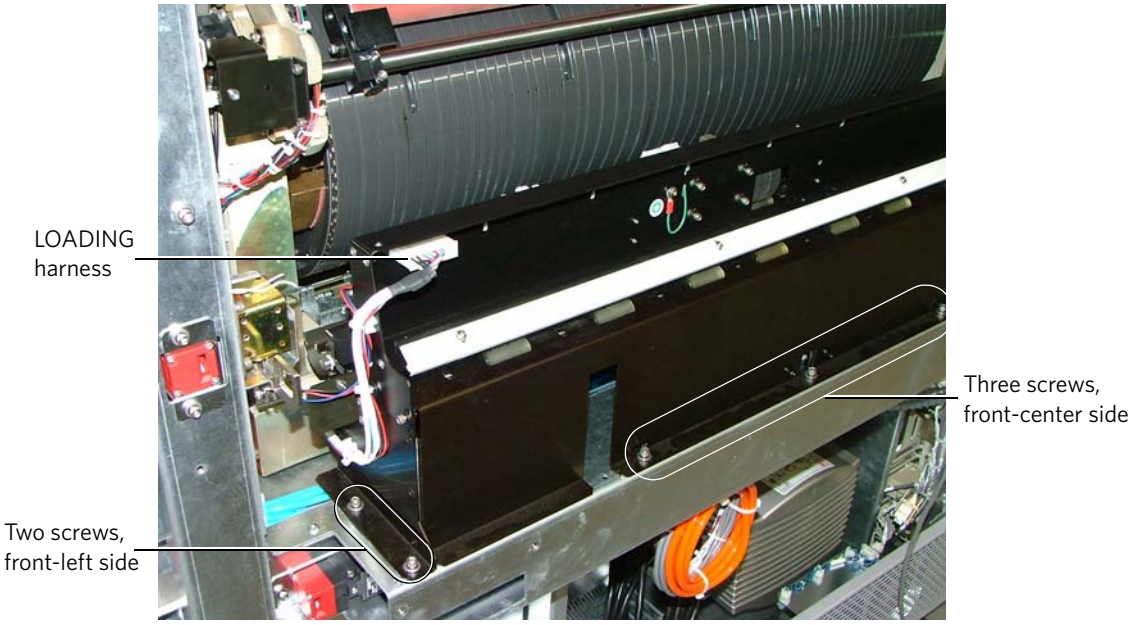


Figure 24: Plate driver assembly

   b. Lift up the plate driver assembly, and then disconnect the two air pipes from the cylinder.
   c. Remove the plate driver assembly.
3. To verify that air does not escape during operation, fold the edges of the air pipes that you disconnected in step 2b and close the adjusting screw in the manifold.
4. Remove the left and right door lockers, as shown in Figure 25 and Figure 26.

5. On the front-left side of the platesetter, roll up the wiring, and then attach it to the harness.

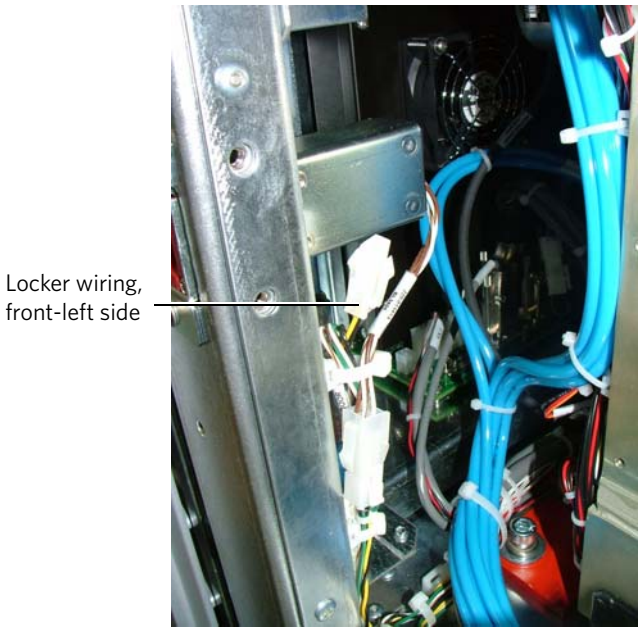


Figure 25: Front view, lower-left side

6. On the right side of the platesetter, leave the locker wiring loose (to connect to the MCU).

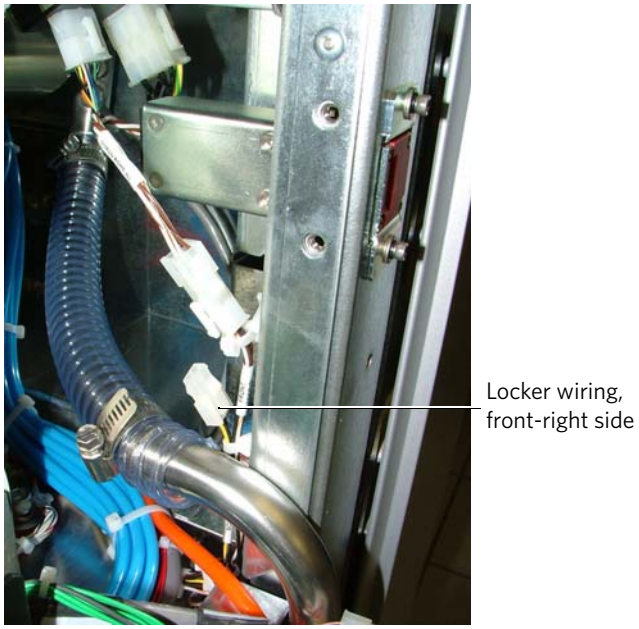


Figure 26: Front view, lower-right side

Assembling the Location Pin

1. Attach the new upper light guard as shown in Figure 27, with the top part of it hanging over the screws, and then tighten the screws in the five existing holes.

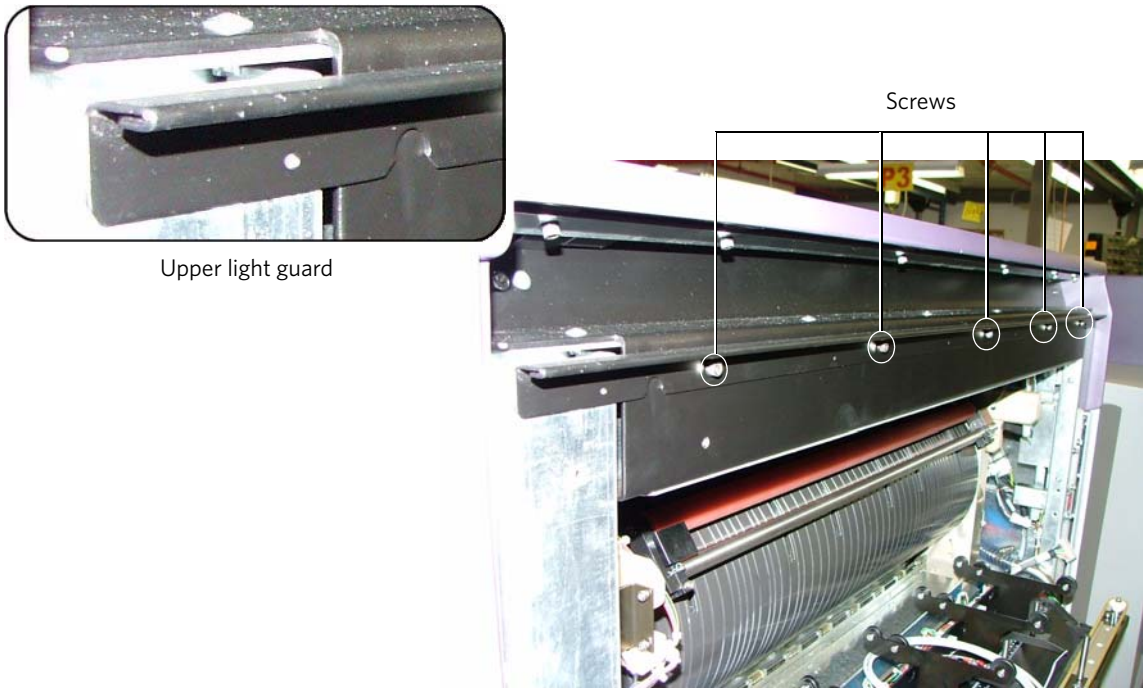


Figure 27: Attaching the upper light guard

2. Assemble the location pin together with the left and right base.

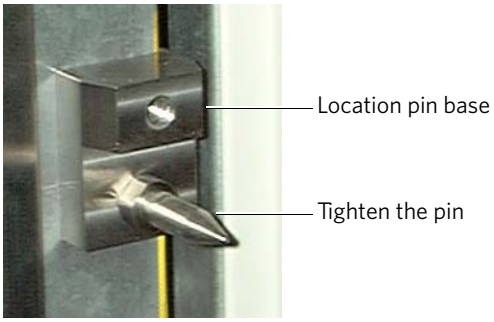


Figure 28: Location pin

Replacing the Drum Vacuum Adapter

Note: This procedure is for upgrades only. If you are not upgrading a manual platesetter, proceed to page 30.

1. On the right side of the platesetter, remove the existing drum vacuum hose adapter.



Figure 29: Removing the existing drum vacuum hose adaptor

2. Install the longer drum vacuum hose adapter (from the kit) and secure it in place on both sides of the adapter with cable ties.



Figure 30: Installing the long drum vacuum hose adaptor

Assembling the Punch and Centering System

Note: All Magnus 400 MCU or SCU-ready platesetters are released from the factory with the punch and centering system assembled.

1. Connect the punch beam adaptors to the left and right sides of the platesetter, as shown in Figure 31.
   - Attach the left punch beam adaptor with two conical head screws, and then tighten both screws.
   - Attach the right punch beam adaptor with three conical head screws, and then tighten all three screws.

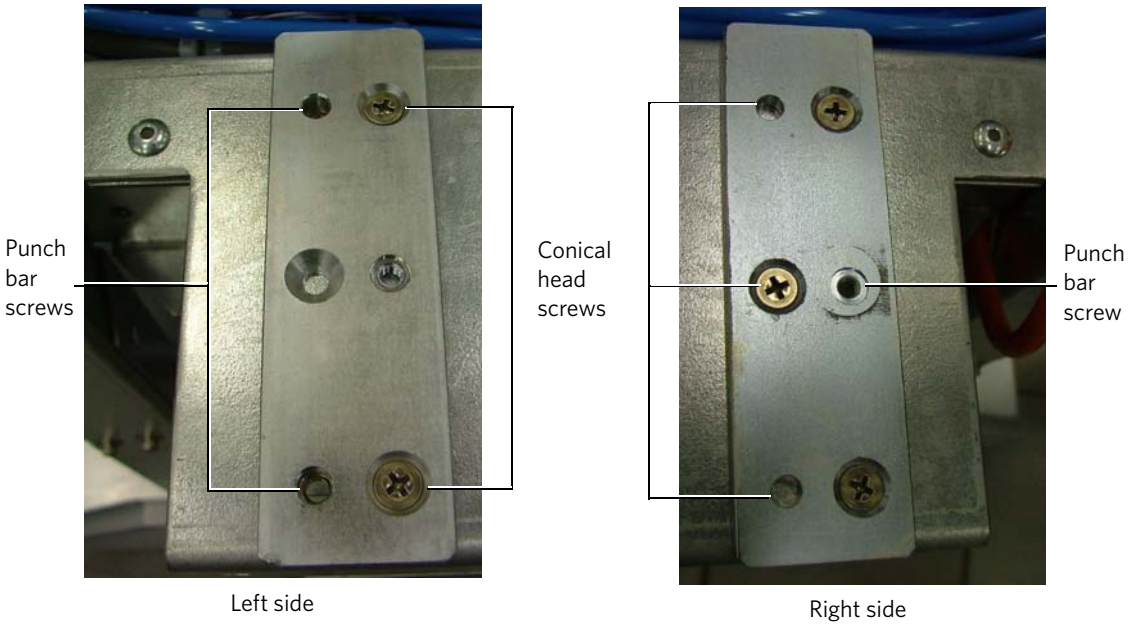


Figure 31: Punch beam adaptors

2. Place the punch and centering beam on top of the spacers, with the chain facing the front.
3. Insert the three punch bar screws, but do not tighten the screws.
   - On the left, insert two punch bar screws, as shown in Figure 31.
   - On the right, insert one punch bar screw, as shown in Figure 31.
4. Measure the distance between the punch and centering system, and the optomech on the left and right sides. The distance should be the same on both sides, with a tolerance of ±0.5 mm (0.02 in). Adjust if required.

   Note: The holes are large enough to swivel the punch and adjust it so that it is parallel to the drum.

5. When the punch and centering system is correctly positioned, tighten the three punch beam screws (two on the left side and one on the right side), as shown in Figure 32 and Figure 33.



Figure 32: Punch beam screws, left-side view

6. Connect the green grounding cable from the far right side of the punch to the punch beam.

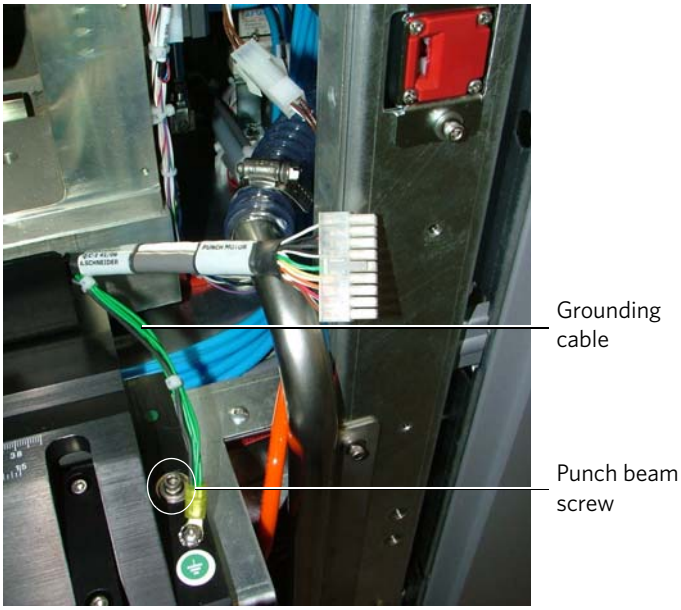


Figure 33: Grounding cable and punch beam screw, right-side view

7. Connect the centering motor and grounding cable, as shown, to any of the screws in the punch and centering system.

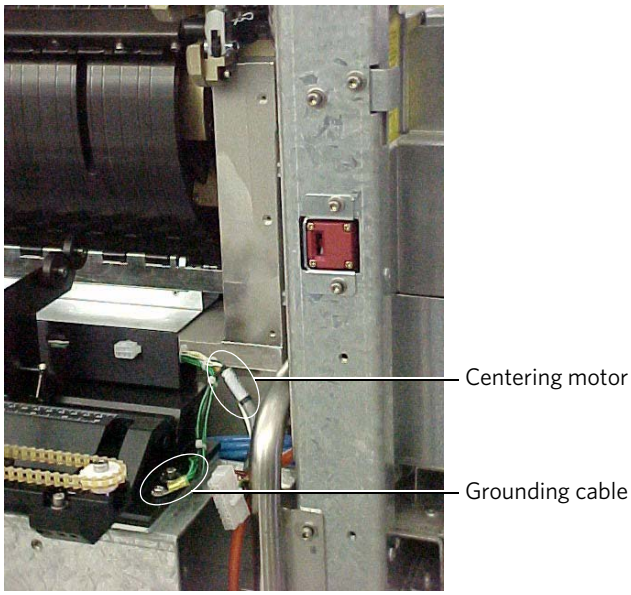


Figure 34: Punch system, right front, new

Connecting the MCU to the Platesetter

See *Connecting the MCU to the Platesetter* on page 8.

Connecting the Air Pressure Pipe

1. Plug one end of the air pressure pipe into the air pressure outlet in the wall.
2. Cut an 8 cm (3.15 in.) piece of air pipe.

3. On the rear-right side of the platesetter, attach one end of the 8 cm (3.15 in.) air pipe to the main air pressure outlet.



Figure 35: Connecting the air pipes

4. Connect the other end of the 8 cm (3.15 in.) piece of air pipe to a Y connector, as shown in Figure 35.
5. Connect a long piece of air pipe to the other side of the outlet on the Y connector, and route it toward the front of the platesetter.

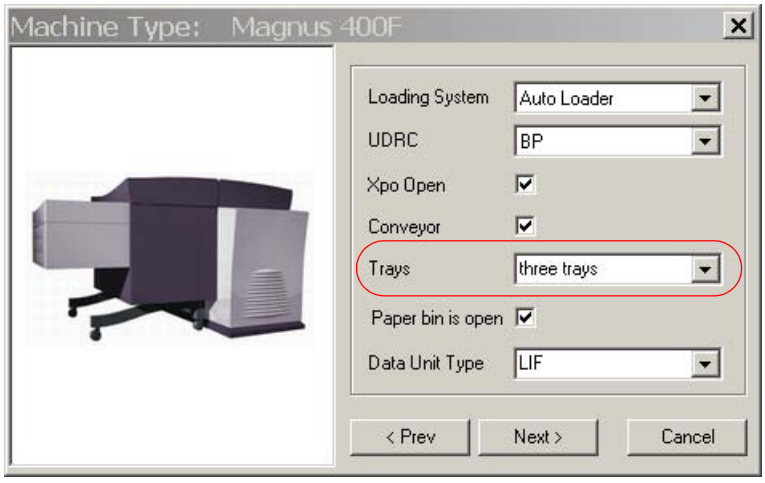
Upgrading the Magnus 400 Controller Software for MCU or SCU

Note: Perform the following procedures on platesetters that were configured for semi-automatic operation before being upgraded. If you are not upgrading a manual platesetter, proceed to *Updating the Magnus 400 Controller Software for the Punch System* on page 36.

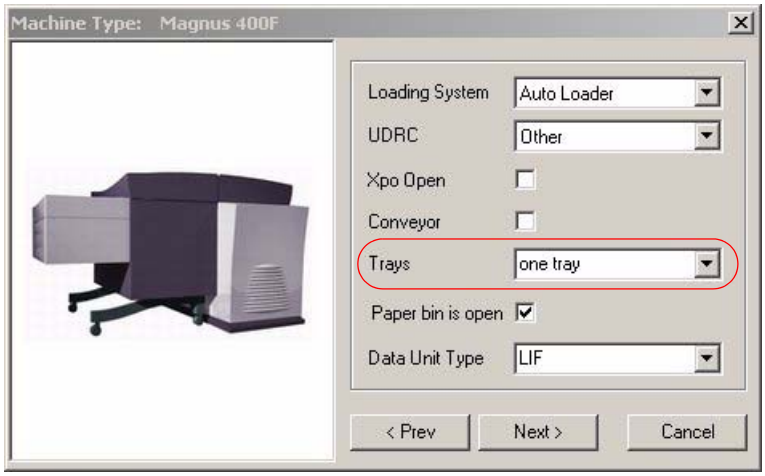
After the MCU is properly connected to the platesetter, continue with the software update for MCU.

Updating the Magnus 400 Controller Software for MCU or SCU Configuration

1. Insert the **Magnus 400 Version 1.02.392** CD (651-00640A) into the CD-ROM drive and follow the steps in the Magnus Family Installation Setup wizard.
2. When the Machine Type dialog box appears, you need to specify the cassette configuration:
   - For MCU configurations: In the **Trays** list, select **three trays**.



   - For SCU configurations: In the **Trays** list, select **one tray**.



3. Continue following the steps in the Magnus Family Installation Setup wizard.
4. When you finish the software installation, remove the installation CD from the CD-ROM and restart the computer.

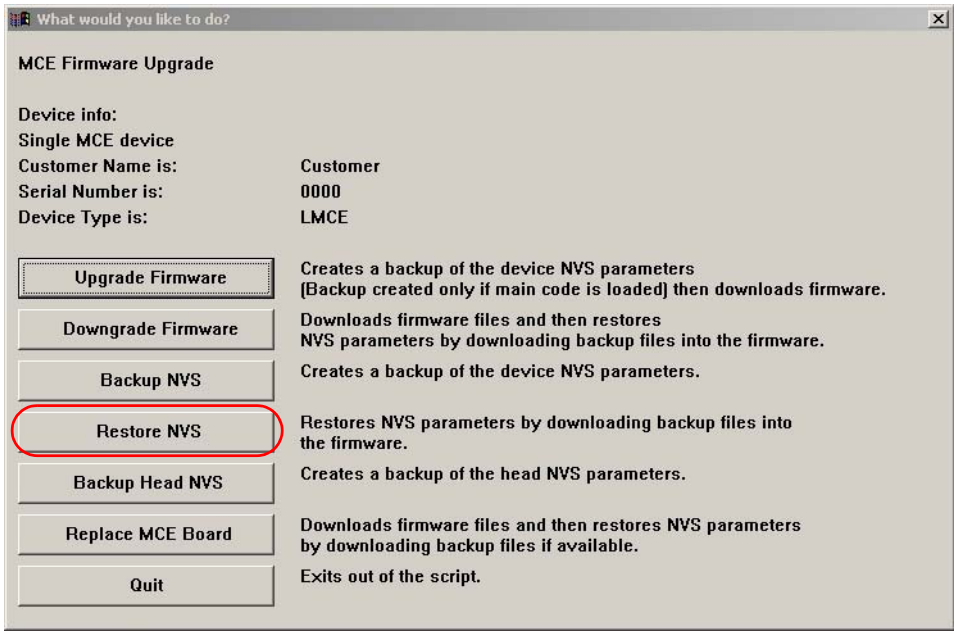
5. Start the updated Magnus 400 Controller software.
6. In the Magnus 400 Controller software, select **Loading System > Multi Cassette**. See the Magnus 400 Cold Start Installation Guide (731-00804A).
7. To verify that the MCU system is functioning properly, perform a loading sequence and calibrate, if required.
8. To verify that the new software functions properly, calibrate the laser and verify that the plate definition is loaded correctly.
9. Save the updated registry and database information on a floppy disk. See *Saving the Registry and Database Files* on page 18.

Restoring the NVS RAM and MCE NVS FLASH Parameters

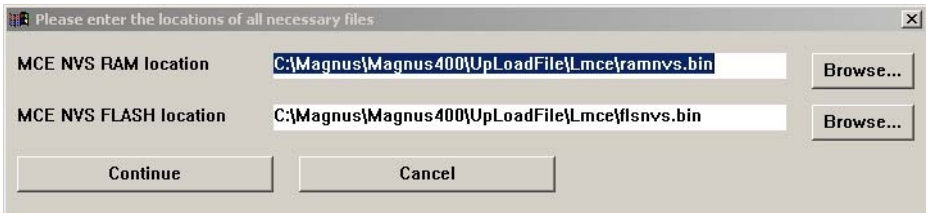
Note: To perform the restore procedure, you must have a previous backup.

The NVS RAM and MCE NVS FLASH parameters are defined on the LMCE board. Follow the steps in this procedure if the LMCE board is damaged or becomes corrupted.

1. In the Kodak Service Shell workspace, on the left panel, click the **Scripts** tool.
2. On the middle panel, click **Device**, and then double-click **FirmwareUpgrade**.
3. When the Script Tool message appears, click **Yes**.
4. Wait a few moments for the MCE Firmware Upgrade dialog box to appear, and then click **Restore NVS**.



5. In the dialog box, in the **MCE NVS RAM location** box, click the browse button to locate the file that you want to restore: **C:\Magnus\Magnus400\UpLoadFile\Lmce\ramnvs.bin** file.



6. In the **MCE NVS FLASH location** box, click the browse button to locate the file that you want to restore: **C:\Magnus\Magnus400\UpLoadFile\Lmce\flsnvs.bin** file.
7. Click **continue**.
8. When the files finish loading, in MCE Firmware Upgrade dialog box, click **Quit** to exit Script view and return to Monitor view.
9. In the command line, type `reset`.

   All the parameters in the selected files are loaded onto the LMCE board.

Updating the Magnus 400 Controller Software for the Punch System

Note: In some cases, the MCU is delivered with the punch system installed. If this is the case, proceed to *Testing the MCU Configuration* on page 16.

1. In the Magnus 400 Controller software, select **Utilities > Hardware > Other > Magnus 400 > IO objects**.
2. For each punch motor and punch detector, change the **Open** status from 0 to **1**.

   Note: Select the relevant punch motor and punch detector according to the number on the Molex connector on the punch system.
3. Restart the Magnus 400 Controller software.
4. Configure the punch motors according to customer requirements.

Testing the MCU Configuration

See *Testing the MCU Configuration* on page 16.