FCO 512-00492A: Improved Power Distribution Board

Internal document number: 719-00959A Rev A

Product

- Kodak® Magnus™ 400 platesetter family
- Kodak Magnus 400 II platesetter family

FCO priority

Next failure

Component

- Power distribution board (PDB)
- Contactor assembly

Background

On Magnus 400 and Magnus 400 II family platesetters, the distribution board burns out because the drum vacuum pump continues working long after a job has been completed.

Solution

Replace the earlier model PDB with the improved PDB.

Time required

2 hours

Parts required

Part Number	Part Name	Quantity
503-00334D	CTP_PWR2_M400 board assembly	1
500-06684A	Contactor assembly for Magnus 400	1
308-00135	Standoff 5/46 hex, MF, 10-32x1/2" STST	3
380A06061	SOC HD cap STWST 10-32x1/2"	3
382D14000	Spring L/W STST #10	3
382A14001	Flat washer STST #10L	3
Software		
651-00911A	FCO 512-00492A Improved Power Distribution Board disc (FCO Updater Utility)	1
Documentation		
719-00959A	FCO 512-00492A Improved Power Distribution Board	1

Tools required

- Hex key set
- Cross-head screwdriver

Procedure

This procedure includes the following sections:

- Before you begin
- (Optional) Uninstall the MCU/MCU II
- Removing the PDB
- Installing the improved PDB
- Installing the contactor assembly
- Completing the installation

Before you begin

1. In the Magnus 400 Controller software, open the front and rear doors.
2. Quit the Magnus 400 Controller software, and turn off the platesetter.
   Note: Make sure all the power switches on the D-box are in the OFF position.



Figure 1: Power switches turned off

3. Unplug the power cable on the platesetter from the AC mains supply wall outlet.

(Optional) Uninstall the MCU/MCU II

Important: If the platesetter is a multi-cassette unit (MCU)/MCU II configuration, you must first uninstall the MCU/MCU II from the platesetter.

1. On the MCU/MCU II, remove the two connecting screws (one on each side) that connect the MCU/MCU II to the platesetter, and set the screws aside.



Figure 2: Connecting screw on MCU II

2. To enable access to the platesetter, carefully slide the MCU/MCU II away from the platesetter. Make sure there is enough space between the MCU/MCU II and platesetter to perform tasks and that there is no tension on the connection cables.
3. If the cables interfere with performing the tasks, disconnect them.

Removing the PDB

1. At the rear of the platesetter, remove the rear panel and the rear trapezoid.



Figure 3: Rear panel removed

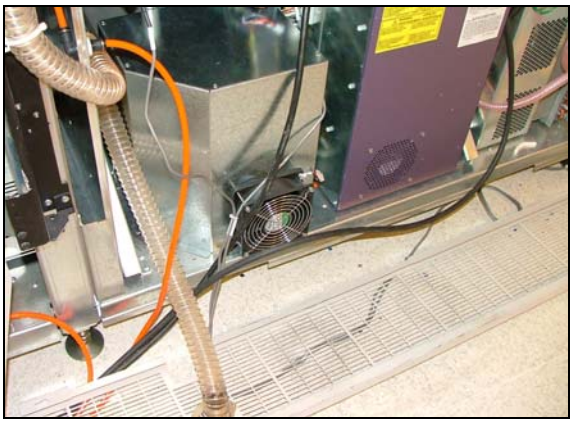


Figure 3: Rear trapezoid removed

2. Disconnect the fan cable from the D-box.

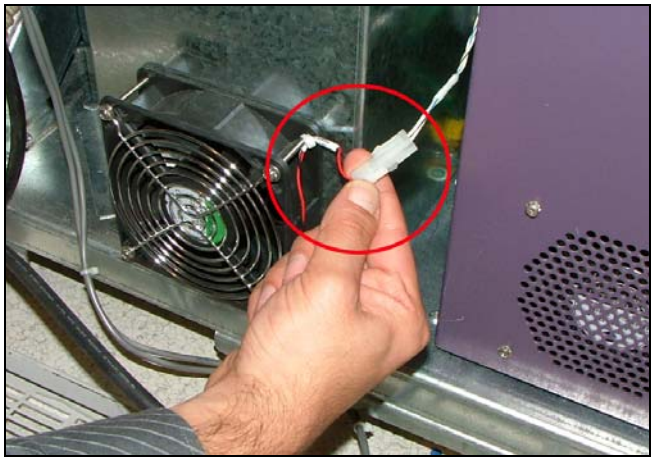


Figure 4: Disconnecting the fan cable

3. Remove the screw that secures the vacuum pump cooling unit to the mainframe and remove the vacuum pump cooling unit.

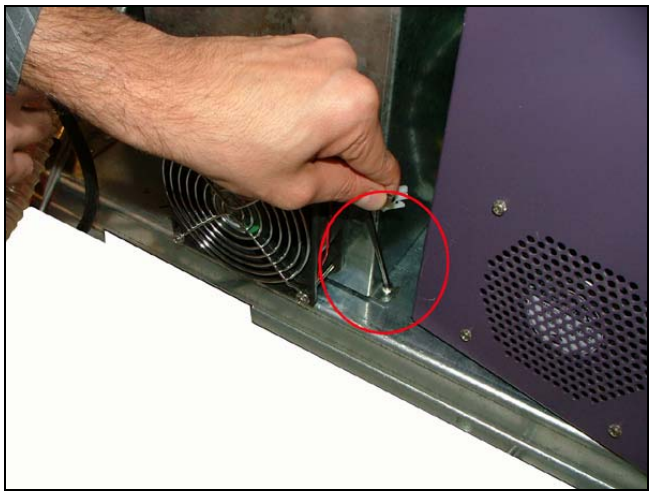


Figure 5: Removing the vacuum pump cooling unit screw

4. Disconnect all the cables that are connected to the D-box.



Figure 6: Removing D-box cable connections

5. Using a cross-head screwdriver, loosen the screws on the D-box cover, and remove the cover.

   Note: The loosened screws remain on the D-box cover.



Figure 7: Loosening the D-box cover screws

6. Disconnect all the cables connected to the PD board.



Figure 8: Removing PD board cable connections

7. Remove the six screws that secure the PDB to the D-box, and remove the PDB.



Figure 9: Removing PBD screws



Figure 10: PDB removed

Installing the improved PDB

1. Insert the improved PDB into the D-box, and secure with the six screws that you removed earlier.
2. On the improved PDB installed inside the D-box, reconnect all the PDB cable connections.
   Note: Each cable connection is a different size. Connect each cable to the correct size Molex® connector on the PDB.
3. At the rear of the D-box, reconnect all the cable connections *except* the vacuum pump cable.

Connector	Connection on D-box
J10	Drum vacuum
J8	Loading vacuum
J6	Power and communication
J5	Solenoid
J4	Interlocks and solenoid
J2	Hall effect
J1	Drum meter

4. Using a cross-head screwdriver, reinstall the D-box cover by tightening the cross-head screws that secure the D-box cover to the D-box.
5. Reinstall the vacuum pump cooling unit.
6. Reinstall the rear trapezoid.

Installing the contactor assembly

Install the contactor assembly on the platesetter according to the platesetter configuration: Quantum or LDA.

For Quantum configurations

1. At the front of the platesetter, remove the front panel and front trapezoid.



Figure 11: Removing the front panel



Figure 12: Front panel removed

2. Lift up the coolant container from its rails, and slide it up and out of the platesetter.

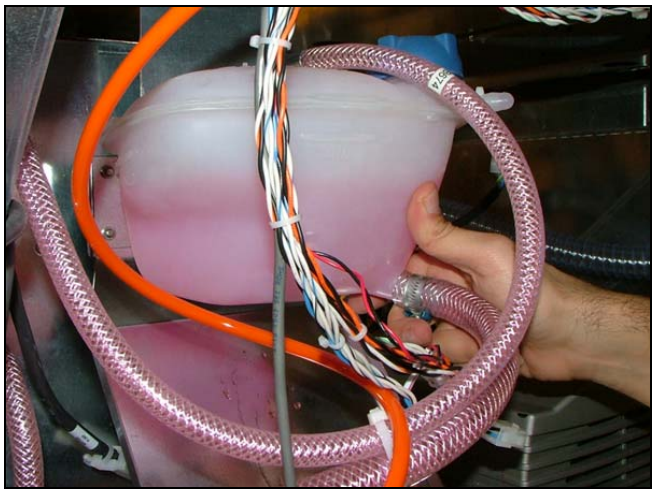


Figure 13: Lifting up the coolant container

3. Remove the three screws that secure the coolant container bracket to the mainframe, and remove the bracket.

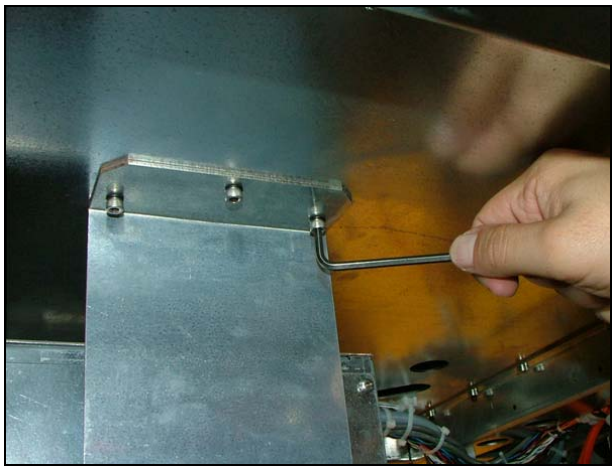


Figure 14: Removing the coolant container bracket screws

4. Insert the contactor assembly (in place of the coolant container bracket) and secure it to the mainframe.

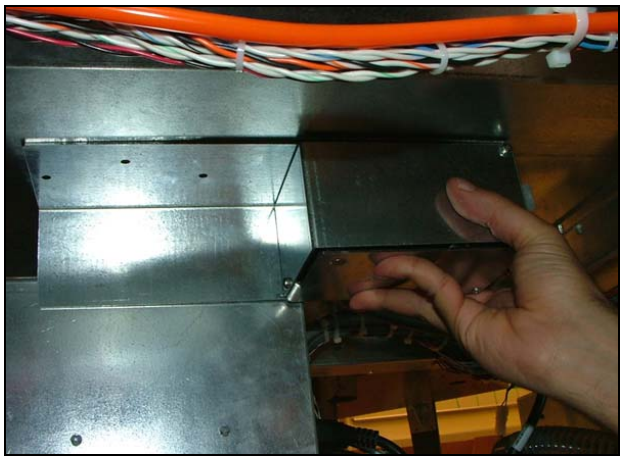


Figure 15: Inserting the contactor assembly

5. On the underside of the assembly, secure the contactor assembly screws with standoffs.

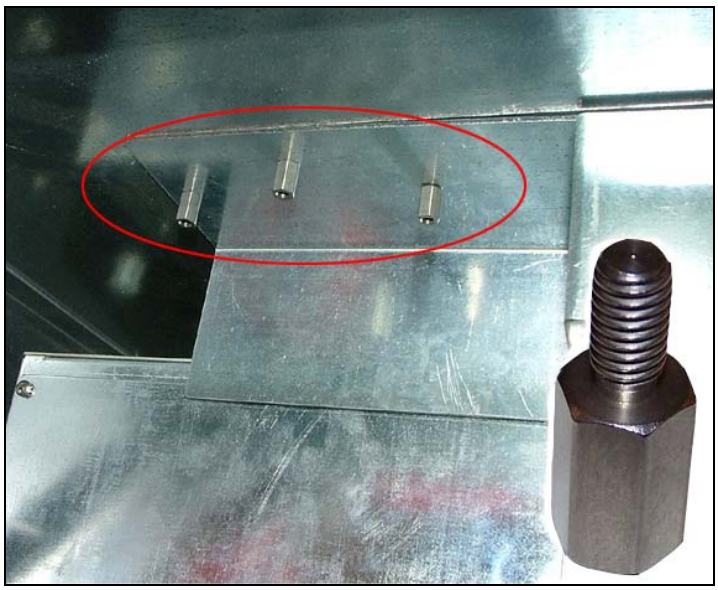


Figure 16: Securing the contactor assembly screws with standoffs

6. Align the holes on the contactor assembly with the standoffs on the coolant container bracket, and reinstall the coolant container bracket.

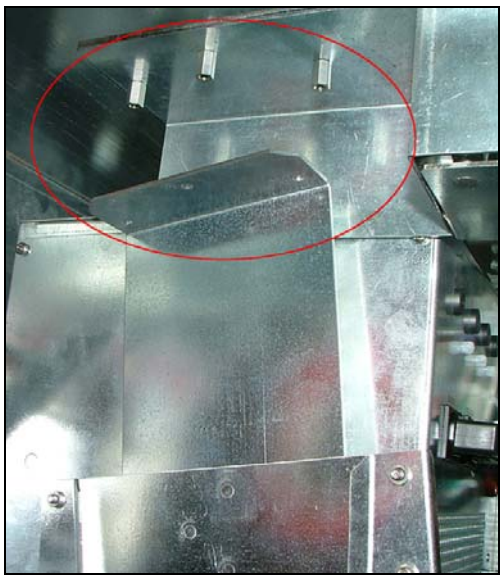


Figure 17: Aligning the holes and standoffs

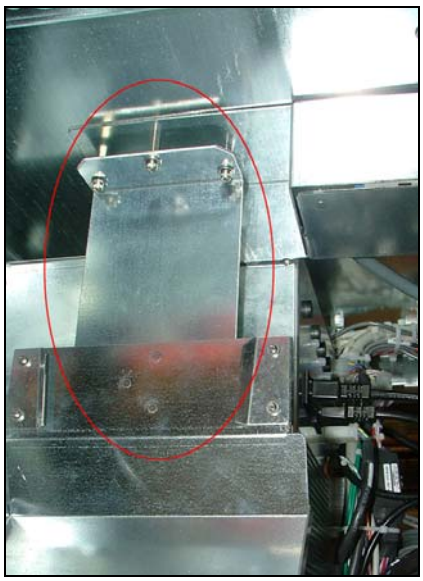


Figure 18: Reinstalling the container bracket

7. Secure the coolant container bracket to the contactor assembly with the three screws that you removed in step 3.

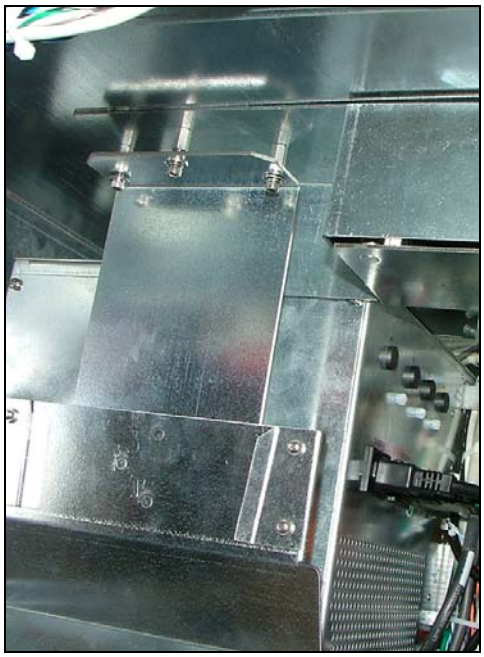


Figure 19: Coolant container bracket reinstalled

8. Reinstall the coolant.

For LDA configurations

1. At the front of the platesetter under the optomech assembly, locate the three holes for the contactor assembly.

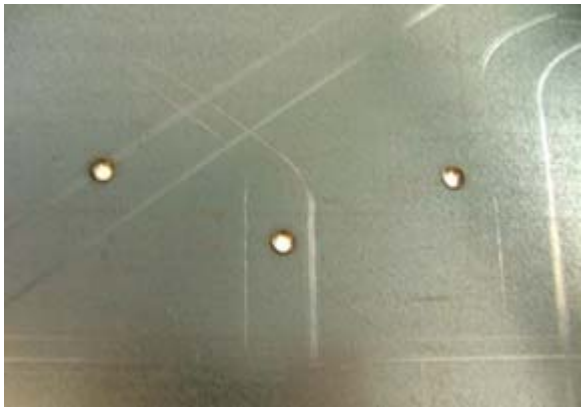


Figure 20: Contactor assembly holes under optomech assembly

2. Insert the three standoffs (or three screws) into the holes, and secure the contactor assembly to the optomech assembly.



Figure 21: Contactor assembly secured with standoffs

Completing the installation

1. Connect the black vacuum pump cable to the contactor assembly.

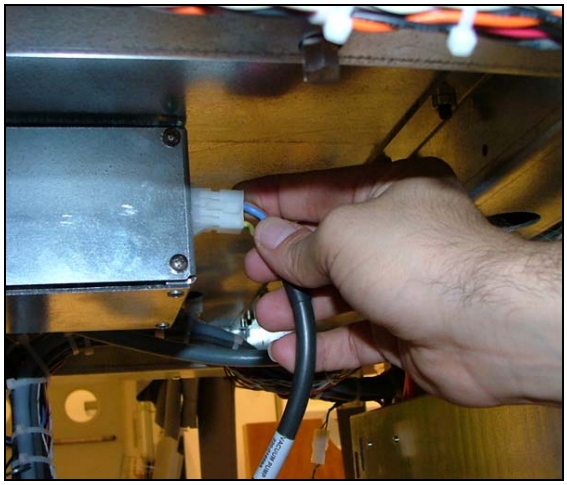


Figure 22: Connecting the vacuum pump cable to the contactor assembly

2. At the rear of the D-box, connect the gray contactor assembly cable to connector **J10** (drum vacuum) on the D-box.

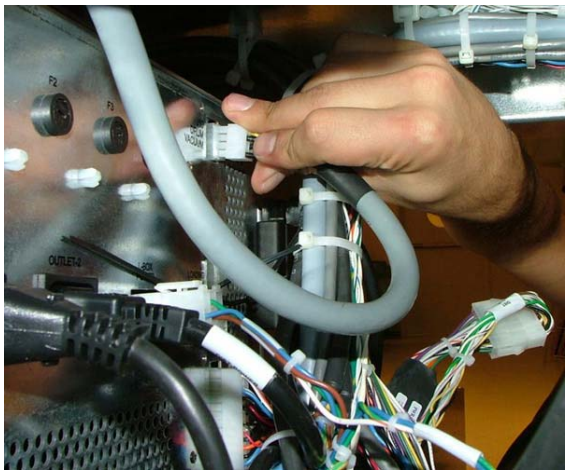


Figure 23: Connecting the contactor assembly cable

3. Reinstall the coolant container unit.
4. If your output device is a platesetter with MCU/MCU II configuration, when you finish the PDB installation, reconnect the MCU/MCU II cable connections, and then reconnect the MCU/MCU II to the platesetter.
   Note: For more information see *Installing the MCU II-Ready to the Platesetter* in the *MCU II and SCU II Installation and Upgrade Guide* (731-01209A).

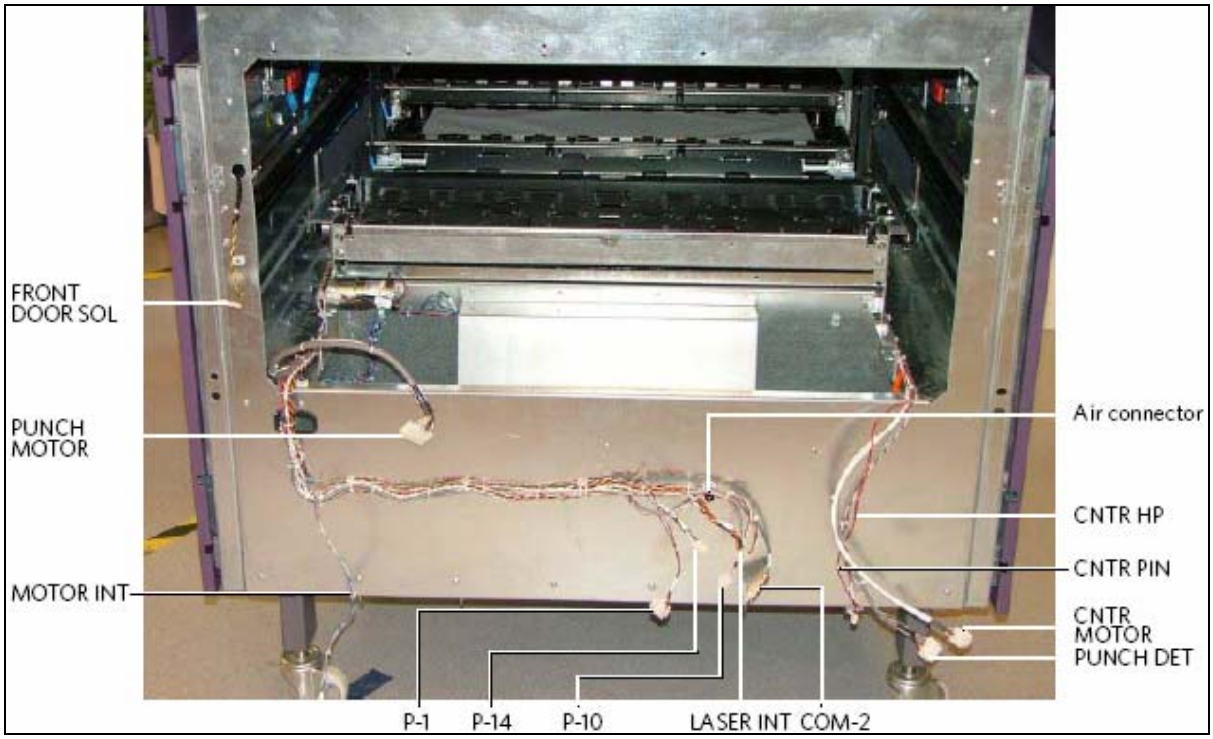


Figure 24: MCU II cable connections

5. Reinstall the front and rear trapezoids, the front and rear panels, and close all doors.
6. Turn on the platesetter, and start the Magnus 400 Controller software.

Test

- In the Magnus 400 Controller software, go to **Utilities > Hardware > Drum System > Drum Vacuum Pump**, and verify that the vacuum pump is working properly.

FCO Updater Utility

After completing the FCO procedure, insert the FCO Updater Utility CD into the CD-ROM drive and run the utility.

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Last updated	