

# Service Bulletin

## Tipper Motor Patch Cable Retrofit Installation Procedure Document Number D998200225-10

<b>1</b>	<b>Required Tools, Materials, and Documents .....</b>	<b>2</b>
1.1	Required Tools .....	2
1.2	Suggested Tools .....	2
1.3	Required Materials.....	2
1.4	Required Software and Documents .....	2
<b>2</b>	<b>Introduction .....</b>	<b>3</b>
<b>3</b>	<b>Procedure.....</b>	<b>4</b>

Table 1-1 - Revisions

Rev Number	Date	Notes
10	09/27/2017	Initial Release

## 1 Required Tools, Materials, and Documents

### 1.1 Required Tools

Part Number	Quantity	Description
N/A	1 ea.	Diagonal side cutters
N/A	1 ea.	Workstation or laptop with web access to EC2000

### 1.2 Suggested Tools

Part Number	Quantity	Description
N/A	1 ea.	Flashlight

### 1.3 Required Materials

Part Number	Quantity	Description
1000004608	1 ea.	ASSEMBLY, RETROFIT KIT, TIPPER MODULE MOTOR PATCH CABLE, EC2000

### 1.4 Required Software and Documents

MagTek recommends loading the following required software and documents on a USB thumb drive or service laptop before visiting the customer site.

Part Number	Quantity	Description
N/A	1 ea.	Firmware / software update .cab file(s) provided by MagTek
D998200225	1 ea.	SERVICE BULLETIN, TIPPER MOTOR PATCH CABLE RETROFIT INSTALLATION PROCEDURE

## 2 Introduction

This document provides steps for using **1000004608 ASSEMBLY, RETROFIT KIT, TIPPER MODULE MOTOR PATCH CABLE, EC2000** to install patch cable 1000004557 in-line between the EC2000 main logic board and the motor that drives the wheels on the tipper module's ramp. This allows the device to drive the motor at faster speeds when moving cards.

### 3 Procedure

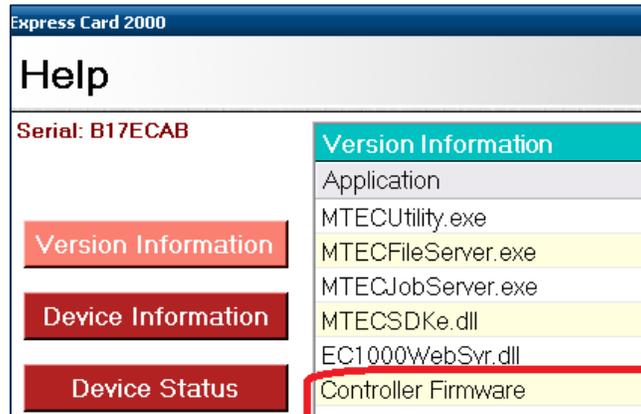
To install the retrofit to an EC2000, follow these steps. Note the photos show the device from the top, as seen from the left side of the device:

- 1) Use the touchscreen to remove the indenter ribbon from the device, if one is installed.
- 2) Load the new device firmware provided by MagTek as a .CAB file by following these steps:
  - a) Use the Ethernet cable to connect the service laptop to the EC2000. If necessary, you may instead use a customer workstation, provided it has Microsoft Internet Explorer and a way for you to get to the .CAB file that contains the update.
  - b) Launch Internet Explorer and navigate to **https://ec-xxxxxxx**, where xxxxxxx is the device's serial number. The browser should show an **ExpressCard 2000** web interface page.

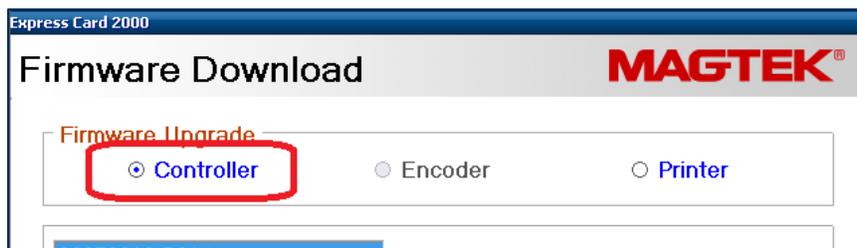


- c) Open the **Software Upload** link on the left side of the page to display a **File to Upload** page.
- d) Press the **Browse...** button to launch the **Choose File to Upload** dialog box.
- e) Navigate to the folder that contains the .CAB files you want to apply (such as the field service laptop's hard drive or the USB thumb drive).
- f) Select the .CAB file you want to apply, and press the **Open** button to return to the **File to Upload** page.
- g) Press the **Send** button to upload the .CAB file to the device. The browser will display a status message telling you when the patch will be applied (for example, "File Copied Successfully. Update will be performed during next reboot."). The device's touchscreen may also go blank.
- h) If the device does not restart itself, restart it by powering it off, then powering it on. Wait until the touchscreen once again displays the ExpressCard 2000 **Status** page.
- i) In the web browser, open the **Upload Status** link on the left side of the page. If the browser reports **SUCCESS**, repeat these steps for any additional patch .CAB files you need to apply.

- 3) Update the controller (main logic board / MLB) firmware by following these steps:
- From the EC2000 touchscreen, press the **Help** button to open the **Help** page.
  - In the **Version Information** list, note the **Controller Firmware** entry.



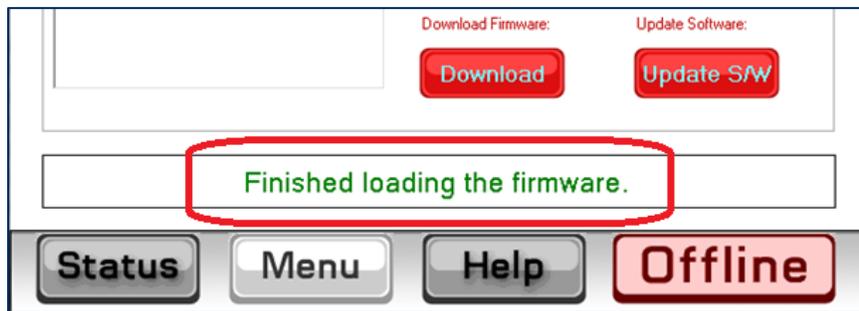
- Press the **Menu** button to launch the **Main Menu** page.
- Press the **Settings** button to launch the **Settings Menu** page.
- Press the **Load F/W** button to launch the **Firmware Download** password page.
- Use the on-screen keyboard to enter the password **1234567**, then press the **E** key to launch the second **Firmware Download** password page.
- Use the on-screen keyboard to enter the password **7654321**, then press the **E** key to launch the **Firmware Download** page.
- Select the **Controller** radio button.



- In the list of .hex files, select the file that corresponds to the new revision you installed from the .CAB file. The number should begin with **33050821** and should end with **F06** or higher.
- Press the **Download** button to download the .hex file to the controller. The system will report **Loading the firmware. Please wait...**

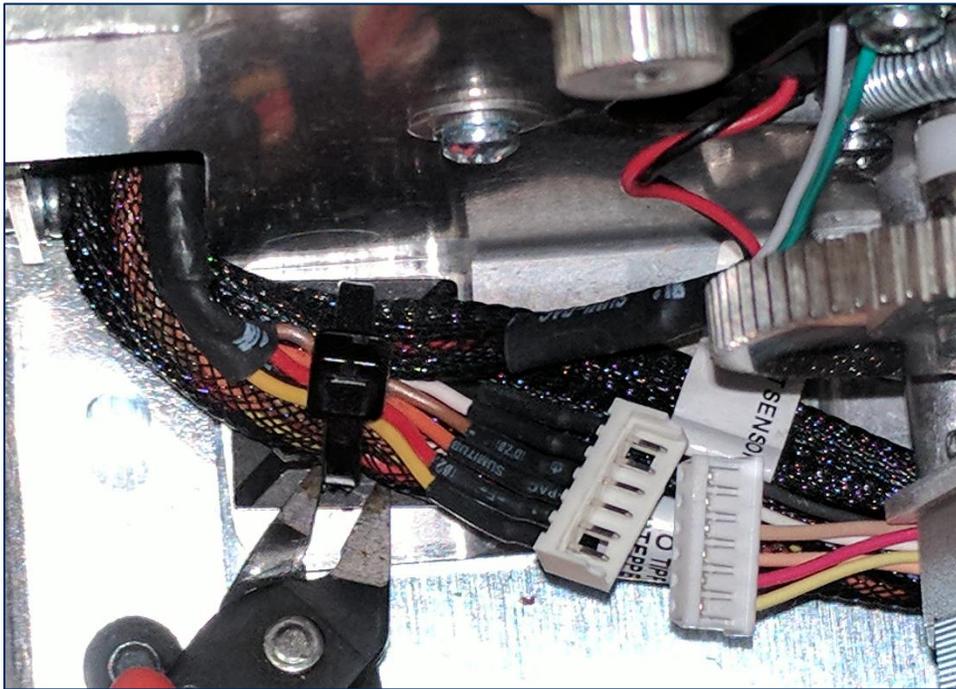
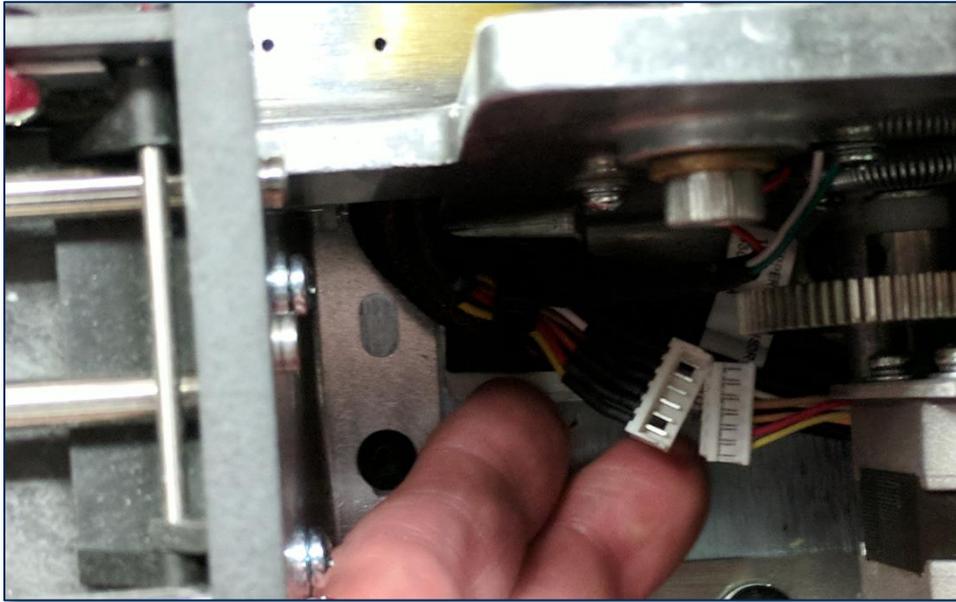


- k) Wait about 5 minutes for the firmware to finish downloading. **Do not power off the device.**
- l) After the firmware update is complete, the device will make sounds as the MLB resets. Wait until the sounds stop and the touchscreen reports **Finished loading the firmware.**

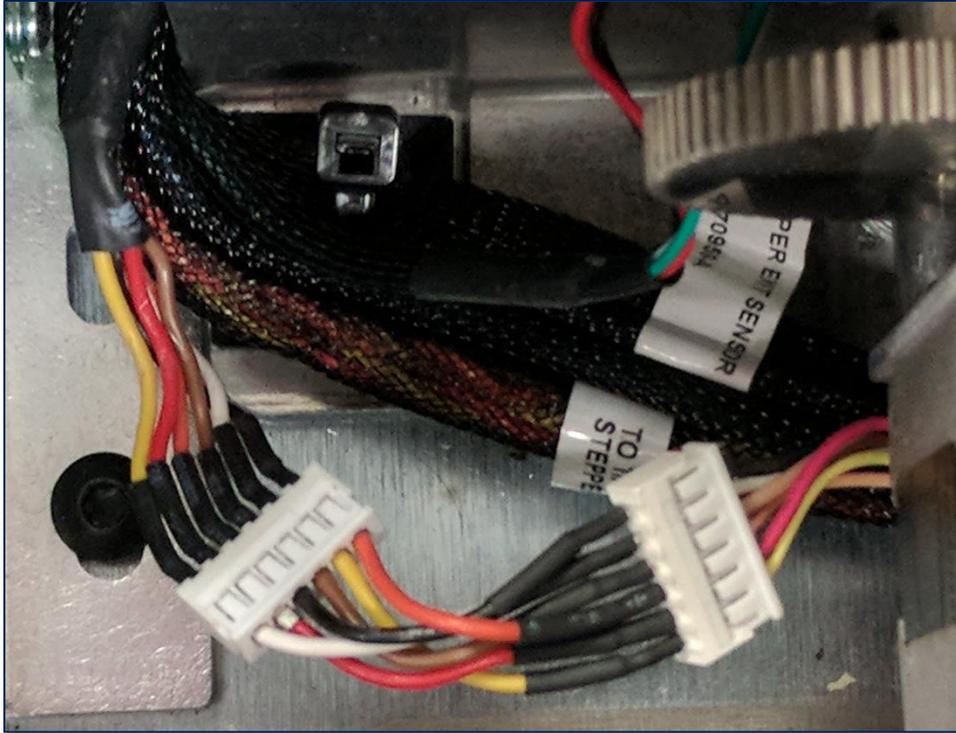


- 4) Update is now complete. Open the **Help** menu and verify the versions of the software components have changed to the following values. If the values do not match, contact MagTek:
  - a) **MTECUtility.exe** should be **1.2.5.6** or higher.
  - b) **MTECJobServer.exe** should be **2.0.1.10** or higher.
  - c) **MTECSDKe.dll** should be **2.0.4.6** or higher.
  - d) **Controller Firmware** 33050821 should end in **F06** or higher.

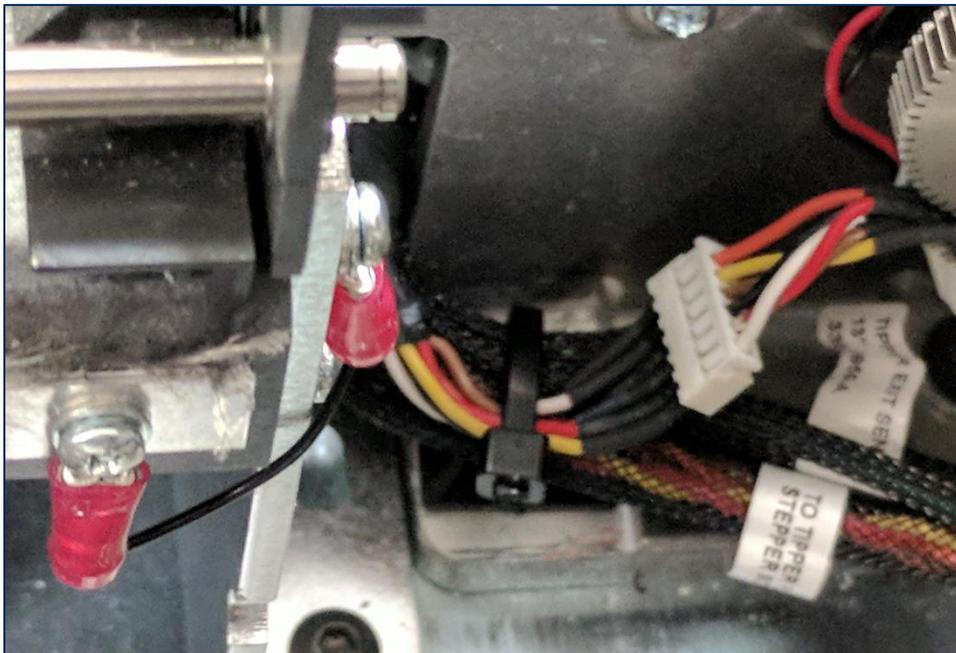
- 5) Power down the device.
- 6) Open the top cover.
- 7) Remove the tipper foil cartridge (see *D99875600 ExpressCard 2000 Installation and Operation Manual* for detailed instructions) and set it aside in a secure location, or offer it to the customer for temporary storage or secure disposal.
- 8) Find the bundle of cables on the left of the tipper module at the base, and disconnect the cable shown, which goes to the stepper motor. You may have to cut the cable tie to find the connection.



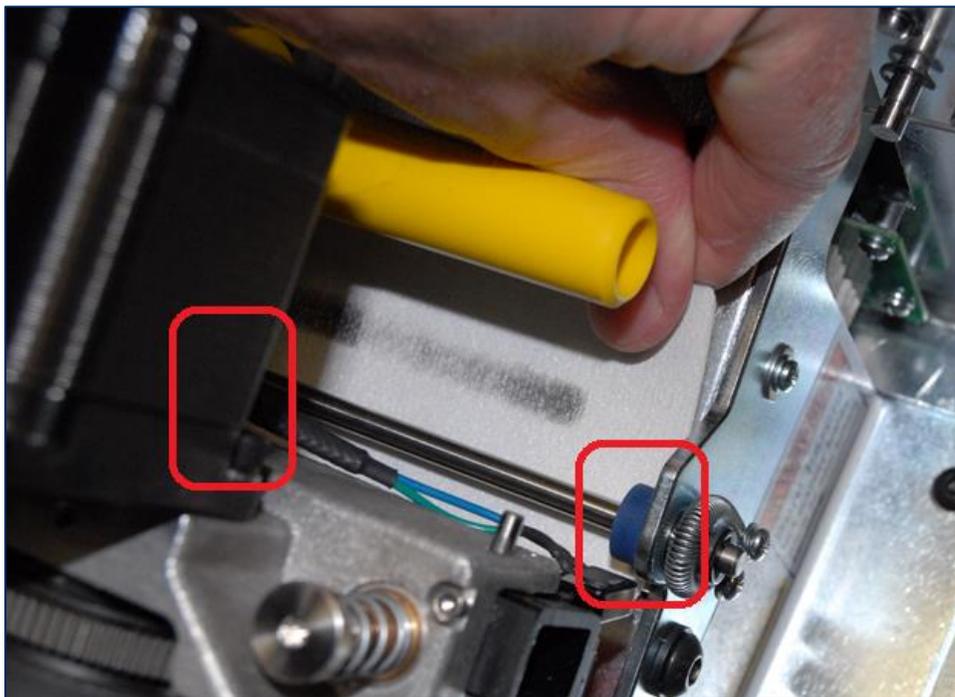
- 9) Attach patch cable 1000004557 between the disconnected ends of the cable.



10) Re-tie the cables using 8" cable tie 89800023 and trim the cable tie. The longer cable tie gives more slack for hands to maneuver and close/tighten the cable tie in the limited space.



- 11) Power on the device.
- 12) Clean the tipper ramp rollers by following these steps:
  - a) On the touchscreen, navigate to **Menu** > **Settings** > **Service** > **MCP Cmds** to open the **Controller Commands** page.
  - b) Feed the card partly under the exit ramp rollers and **do not let the rollers take the cleaning card out of your hand.**
  - c) Press the **Exit Eject** button. Hold the card there until the rollers stop moving.



**Figure 3-1 - Cleaning the Exit Ramp Rollers (TOP VIEW FROM FRONT)**

- d) Press the **Status** button to return to the **Status** page.
  - e) Re-install the tipper foil spool assembly with the original tipper foil roll, or obtain and install a new one from the customer.
- 13) Re-install the indenter ribbon.
- 14) Perform any additional service called out on the work order.
- 15) Close the top access door.
- 16) Test the device by creating one or more samples card or customer designed cards that use tipping.