

Static Kit Installation for FMPlus FMUs

To prevent the negative performance of smart card and credit card readers related to static electricity, install one of the following Static Kits:

| Part # | Indicated for FMUs with |
|-----------|--|
| 941A0102 | 4X4 (16 char) keypads No Multi-Input Board (MIB) previously installed This kit requires a Mainboard with a part number of 941B0222F or later and an MIB with firmware 3.72 or later. |
| 941A0102A | 4x11 (43 char) keypads MIB previously installed with firmware 3.72 or later |

Install 941F0205 MIB (4x4 Keypad)

If an MIB is already installed, skip to [Install Ferrite Kit](#).

1. Turn off the FMU Power Switch behind the FMU pedestal door.
2. Open the FMU upper cabinet.
3. Remove the nuts (leave washers installed) from the two top 4x4 keypad attach screws.
4. Install the standoffs (#8 threaded end) on the top two 4x4 keypad screws and washers.
5. Insert the two #6 screws provided with the ferrite kit into a lock washer and flat washer.
6. Attach the two bottom holes of the MIB to the altered standoffs as shown in Figure 1.
7. Cut any cable ties securing the multi-colored cable extending from the card reader to the card reader board.
8. Cut any cable ties securing the cable to the door (discard).
9. Install the short 981B0114 multi-colored cable between the card reader and lower left connector (J4) of the MIB as shown in Figure 1.
10. Disconnect the Smartcard ribbon cable from J4 on the FMU mainboard.
11. Reconnect the cable to the bottom center connector (J3) of the MIB.
12. Install the 180556 ribbon cable between J4 on the FMU mainboard and the bottom right connector (J5) on the MIB.

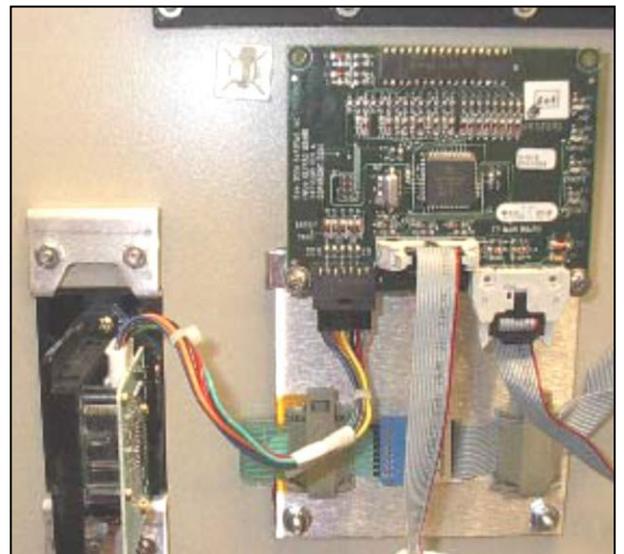


Figure 1

NOTE FMU power will not be restored until ferrite installation is complete.

Install 941F0207 MIB (4x4 Keypad)

1. Turn off the FMU Power Switch behind the FMU pedestal door.
2. Open the FMU upper cabinet.
3. Cut any cable ties securing the multi-colored cable extending from the card reader to the card reader board.
4. Cut any cable ties securing the cable to the door (discard).
5. Remove the 4x4 keypad attach nuts and flat washers (reserve).
6. Install four standoffs (with female threads on one end and male threads on the other) on the 4x4 keypad attach screws.
7. Using the four nuts and flat washers removed in step 5, install the MIB on the standoffs as shown in Figure 2.
8. Disconnect the Smartcard ribbon cable from J4 on the FMU mainboard.
9. Reconnect the cable to the SMART CARD connector of the MIB.
10. Install the short 981B0114 multi-colored cable between the card reader and CREDIT CARD connector of the MIB as shown in Figure 2.
11. Install the 180556-ribbon cable between J4 on the FMU mainboard and the TO MAINBOARD connector on the MIB.

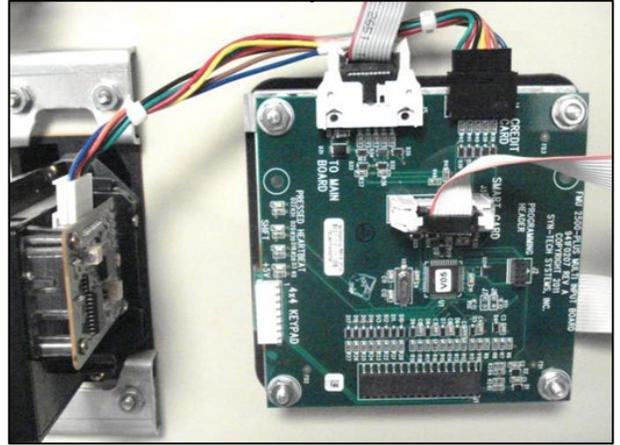


Figure 2

Install 941F0207 MIB (941B0222F or later Mainboard - 4x4 Keypad)

1. Turn off the FMU Power Switch behind the FMU pedestal door.
2. Open the FMU upper cabinet.
3. Open both cable hold-down clamps adhered to the 4x4 keypad backplate.
4. Disconnect the keypad flat cable from the mainboard ribbon cable.
5. Remove the four 4x4 keypad attach nuts and flat washers.
6. Install four standoffs on the 4x4 keypad attach screws.
7. Using the four nuts and flat washers removed in step 5, attach the MIB to the standoffs as shown in Figure 3.
8. On the left side of the MIB, connect the 4x4 keypad flat cable to the MIB 4x4 KEYPAD connector.
9. Disconnect the Smartcard ribbon cable from J4 on the FMU mainboard. Reconnect the cable to the SMART CARD connector of the MIB.
10. Cut any cable ties securing the multi-colored cable extending from the card reader to the card reader board (discard cable).
11. Install the short 981B0114 multi-colored cable between the card reader and CREDIT CARD connector of the MIB as shown in Figure 3.
12. Install the 180556 ribbon-cable between J4 on the FMU mainboard as well as the TO MAINBOARD connector on the MIB.

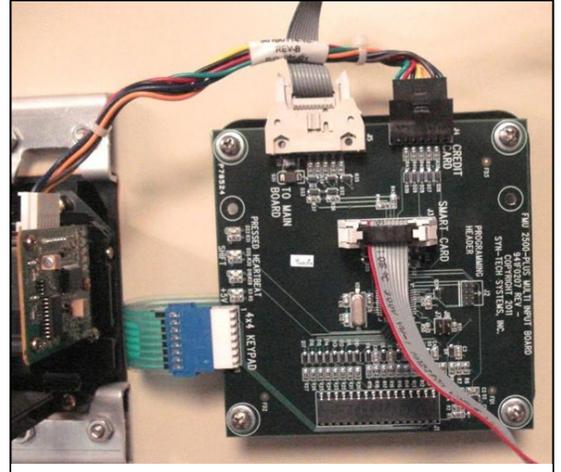


Figure 3

NOTE FMU power will not be restored until ferrite installation is complete.

Install Ferrite Kit

Ferrite Listing and Installation Location Overview

| Ferrite | Qty. | Location |
|---------|------|---|
| 243825 | 2 | One on the onsite printer cable; one on the receipt printer cable |
| 243809 | 1 | Card reader cable* |
| 243817 | 1 | Mainboard ribbon cable |
| 243833 | 1 | Smartcard ribbon cable* |
| 243795 | 1 | Mainboard power cable |

NOTE If the Card Reader or Smartcard reader are not installed, install ferrites 243809 and 243833 on the small ribbon cable (folded into a “U” shape) plugged into TO MAINBOARD on the MIB and/or Prokee ribbon cable.

CAUTION When installing ferrites, ensure the ferrite housing does not pinch the wire/cable.

- As required, place a 243825 ferrite around both the onsite and receipt printer cables (Figure 4).

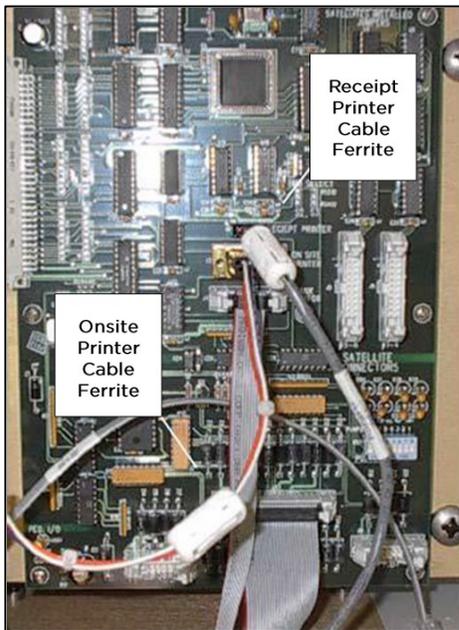


Figure 4

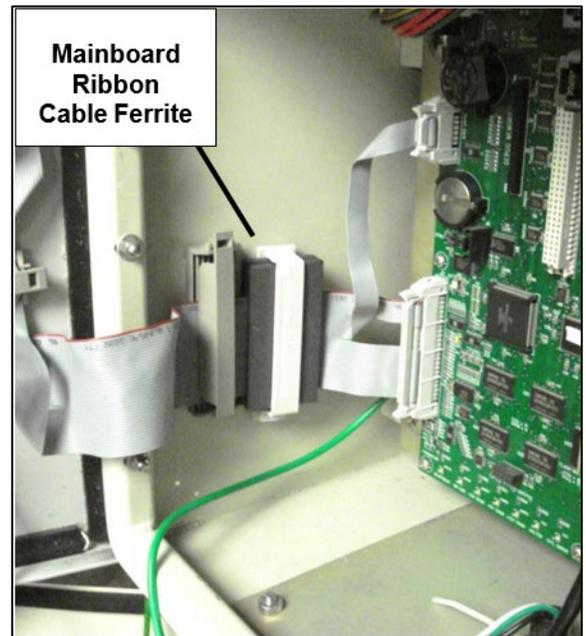


Figure 5

2. Place a 243817 ferrite around the wide ribbon cable extending from J17 on the mainboard. If desired, use the adhesive backing to secure to the FMU cabinet, positioning it next to the existing clamp (Figure 5).
3. Place a 243809 ferrite around the card reader board cable. If card reader is not installed, see Note above (Figure 6).

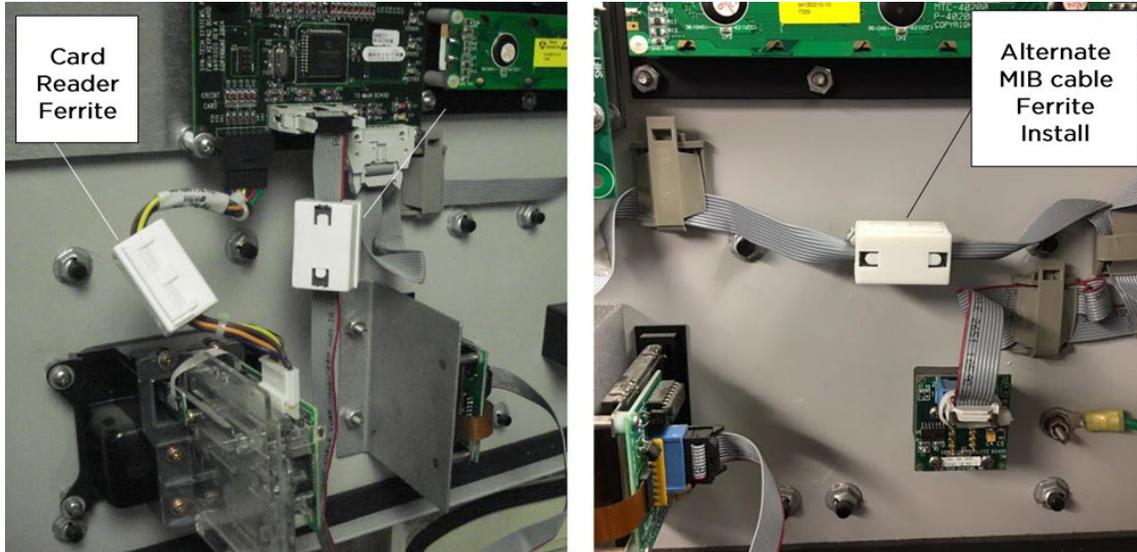


Figure 6

4. Place a 243833 ferrite on the smartcard ribbon cable, bowed into a "U" shape. If the smartcard reader is not installed, refer to Note above (Figure 6).
5. Place a 243795 ferrite around the multi-colored power cable plugged into J1 POWER CONN in the top left corner of the mainboard (Figure 7).

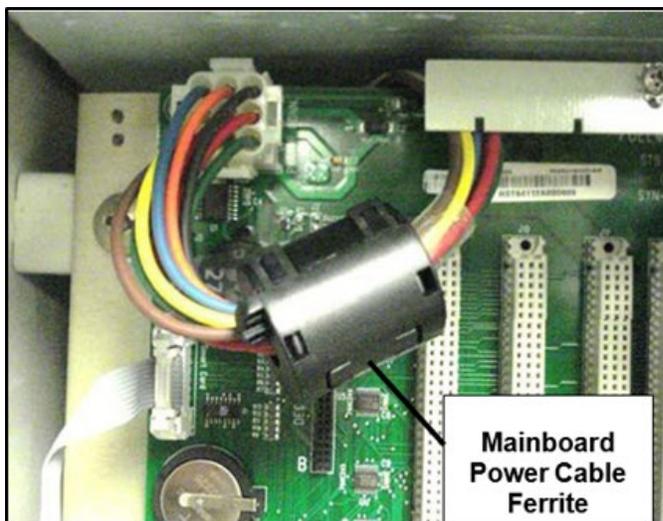


Figure 7

6. Skip to Step 7 if the green ground wire is attached to a stud near the center of the door. If not, disconnect the green ground wire, and attach one end of the ground strap on the same stud under the ground wire. Attach the other end of the ground strap to the closest anchor nut for the door hinge (Figure 8).

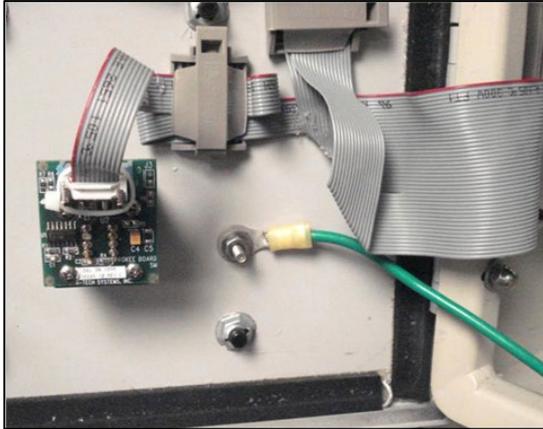


Figure 8

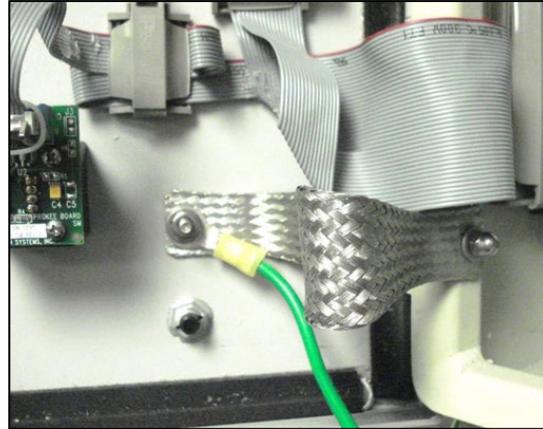


Figure 9

7. Attach one end of the ground strap to an LCD adapter stud and the other end to one of the door hinge screws.



Figure 10

8. Turn on the FMU power switch to observe the following at the display:
- Prompt - MULTI INPUT BOARD DETECTED!
 - MIB - Green +5V LED
 - MIB - Amber PRESSED LED illuminates when any key on the keypad is pressed and when a mag stripe card is swiped on the card reader if installed.

9. Lock the FMU upper cabinet.
10. Lock the FMU pedestal door.

Change Log

| Date | Description |
|------------|---|
| 8/28/2012 | Original |
| 6/09/2017 | Added installation notes for non-card reader and not smartcard FMUs. Alternate ferrite installation now exists for ferrite installation on MIB cable. |
| 07/29/2020 | <p>Changed name to "Static Kit Installation for FMPlus FMUs".</p> <p>Clarified that MIB must be firmware 3.72 or later.</p> <p>Edited for conciseness.</p> <p>Reformatted, styled, and rebranded.</p> |

TIP

If any questions arise, contact Syntech Systems, Inc.'s Customer Satisfaction Center (CSC) at 1-800-888-9136, ext. 2, or email support@myfuelmaster.com.