FCO MT10A-F001, Startup problem when option cards installed

<table>
<thead>
<tr>
<th>DIGITAL</th>
<th>FCO</th>
<th>CATEGORY</th>
<th>PAGE 1 OF 8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>[F]</td>
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</tr>
</tbody>
</table>

FIELD CHANGE ORDER NUMBER: MT10A-F001

APPLICABILITY: This "F" coded FCO should be installed on all MT10A-AA and MT10A-AB systems per revision chart on page 2. This FCO will change the revision of the MT10A systems to "B04".

PROBLEM & SYMPTOM: Some DECpos units were shipped to the field under waiver to meet customer requirements and need to be upgraded to revenue quality. These units have rev. "D01" power supplies which seem to be working adequately. These units while needing upgrade should have a lower priority than revenue units shipped with rev. "E01" power supplies may have problems starting up when option cards are installed. The symptom is a locked keyboard or a blank CRT screen. Many of the revenue units are awaiting installation. The FCO should be co-ordinated with the installation to reduce the cost of effecting the FCO and to avoid possible customer satisfaction issues. Parts will be available from stockroom 17. Factory P1 orders should not be necessary.

SOLUTION: Replace the 54-22408-01 logic card, the 54-22410-01 I/O card, the H7891 Power supply and the MTXLA-AA keyboard as required on these units.

QUICK CHECK: Check for the following revisions:
- MT10A-AA or AB, rev. B04
- 54-22408-01 Logic Card, rev. D02
- H7891 Power Supply, rev. F01
- 54-22410-01 I/O Card, serial tag AS
- MTXKA-AA Keyboard, rev. A02

PRE/CO-REQUISITE FCO: N/A

TOOL/TEST EQUIPMENT: Field Service Tool Kit

FCO PARTS INFORMATION

<table>
<thead>
<tr>
<th>FCO KIT NO.</th>
<th>DESCRIPTION OF CONTENTS</th>
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<tbody>
<tr>
<td>EQ-01679-01</td>
<td>1 54-22408-01 Logic Card</td>
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<tr>
<td>EQ-01679-02</td>
<td>1 54-22410-01 I/O Card</td>
</tr>
<tr>
<td>EQ-01679-03</td>
<td>1 H7891 Power Supply and 1 Tie Wrap</td>
</tr>
<tr>
<td>EQ-01679-04</td>
<td>1 MTXLA-A Keyboard</td>
</tr>
<tr>
<td>FA-05015-01</td>
<td>1 FCO Document</td>
</tr>
</tbody>
</table>

FCO CHARGING INFORMATION (See Last Page)
Applicability (Continued)

Parts Affected:

H7891 Power Supply: Replace any unit of rev. "E01" or lower. The power supply must be removed from the unit to see the rev. level.

Logic Card 54-22408-01: Replace any unit of rev. "D01" or lower. An easy way to determine the rev. level without taking the machine apart is to read the DECpos rev. level from the boot-up screen. Replace any board with DECpos V1.01 or lower.


I/O Card 54-22410-01: This is the small card at the right rear of the unit with the I/O port connectors. Any unit with a ML serial number is suspect due to a process problem in manufacture. Units with AS serial tag are OK.

MT10A Chassis: Affix sticker and write "B04" on it. If you do not have a sticker, cross out the rev. number on the serial tag with a pencil and write in the new rev. level below and cover with scotch tape.
Instructions for Replacing ONLY the Power Supply

Note: Applies to all units shipped between May 20 and July 16 having serial numbers in the range KA 321**** to KA329**** which have rev. "E01" power supplies. To avoid having to make a separate visit to replace the power supply, the replacement should be done concurrent with installation. Priority should be given to the replacement of rev. "E01" power supplies as the rev. "D01" supplies do not have the start-up problem. Some of the pre-revenue units shipped in early May require only that the rev. "D01" power supply be replaced.

1. Ask the customer to open the drawer, remove the money tray, and leave the drawer open.

2. Ask the customer to save his data and shut the machine off.

3. Remove the rear cover of the system unit, unplug the AC power cord, the power cord for the monitor, and the power cord for the printer.

4. Place the keyboard across the open drawer so the top of the drawer cabinet is clear.

5. Place the monitor to the side of the machine, or carefully atop the printer, so the system unit cover can be removed.

6. Using a #2 Phillips screwdriver, loosen the captive screws that secure the cover and slide the cover forward to remove it.

7. Unplug the multi-color ribbon cable from the front of the logic card.

8. Using the Phillips screwdriver, remove the two screws which secure the power supply to the chassis (one is in the rear near the +24V connector and the other on the right side near the fan).

9. Remove the power supply by pulling it forward from the chassis.

10. Remove the battery from the power supply being replaced, transfer it to the new supply, and secure it with the tie wrap provided. >>>> Do not connect the battery at this time.
11. >>>>>> Check that the supply voltage selector switch on the rear of the power supply is set for 115 V or 230 V as required for your location. Slide the replacement supply into the chassis and secure it with the two screws.

12. Connect the multi-colored flat cable to the logic card.

13. Be sure that the power switch is in the OFF (out) position.

14. Connect the monitor AC cord, the printer power cord, and the AC power cord, in that order.

15. See that the system boots properly, and that the customer display and printer can execute the self tests. If not, re-check all connections and consult the trouble shooting guide.

16. Turn on the AC and then connect the battery.

17. Shut off the AC.

18. Affix the sticker to the DECpos chassis just below the serial tag and write "B04" on it, or write "B04" on the serial tag with a pencil and cover with scotch tape.

19. Replace the cover of the system unit and secure the captive screws.

20. Return the monitor and keyboard to their normal operating positions and dress the cables as necessary.

21. Replace the rear cover of the system unit.

Instructions for Power Supply, Logic Card and I/O Card

Note: Applies to pre-revenue units. Items to be replaced vary by date of shipment.

1. Ask the customer to open the drawer, remove the money tray, and leave the drawer open.
2. Ask the customer to save his data and shut the machine off.

3. Remove the rear cover of the system unit. Be sure to note the position of any cables plugged into serial ports 1, 2, A, B, and C, and tag if necessary to insure correct replacement. Unplug all cables from the rear of the system unit.

4. Place the keyboard across the open drawer so the top of the drawer cabinet is clear.

5. Place the monitor to the side of the machine or carefully atop the printer so the system unit cover can be removed.

6. Using a #2 Phillips screwdriver, loosen the captive screws that secure the cover and slide the cover forward to remove it.

7. Unplug the multi-color ribbon cable from the front of the logic card.

8. Using the Phillips screwdriver, remove the two screws which secure the power supply to the chassis (one is in the rear near the +24V connector, and the other, on the right side near the fan).

9. Remove the power supply by pulling it forward from the chassis.

10. If no battery was received with your replacement supply, remove the one from the unit being replaced and use it. >>>> Do not connect the battery at this time.

11. >>>> Check that the supply voltage selector switch on the rear of the power supply is set for 115 V or 230 V as required for your location. Slide the replacement supply into the chassis and secure it with two screws.

12. Attach your ground strap!!!

13. Note the position of any option cards and remove them from the ISA slots.

14. Disconnect and remove the loudspeaker.
15. Disconnect the floppy and hard drive cables if these options are installed. Loosen the captive screws which secure the disk bracket and remove the bracket assembly.

16. Loosen the captive screws which attach the ISA support bracket to the chassis and remove the ISA support bracket.

17. Note the location of the flat head screws which secure the logic card. Remove the screw attaching the I/O card and the five screws attaching the logic card to the chassis.

18. Remove the logic card (the I/O card comes with it).

19. Transfer the SIMMs from the old logic card to the new one. Check that all jumpers on the new logic card are identical with those on the card being replaced.

20. If there is a new I/O card, plug it into the connector on the logic card, otherwise transfer the original I/O card to the new logic card.

21. Install the logic card and secure it and the I/O card with the six screws being sure to put the flat head screws in the same location from which they were removed.

22. Re-install the ISA card and secure the captive screws.

23. If a new floppy shield was provided and the old shield is the type that has bent up tabs, remove the floppy shield by loosening the screws at the side of the floppy and slipping the bracket off. Re-tighten the screws on the side that has two mounting tabs. Remove the screw on the side that has one tab and install the spacer washer and gently re-tighten.

24. Install the new floppy shield with the three screws provided.

25. Re-install the disk bracket assembly and connect the cables to the logic card.

26. Re-install the loudspeaker.

27. Connect the multi-colored ribbon cable from the power supply to the logic card.

28. Re-install the option cards.

29. Make sure that the AC switch is in the OFF (outward) position.
30. Connect all the cables, or if you prefer, just the power cord, monitor, and keyboard cables.

31. Turn on the AC and see if the machine will boot. If the configuration stored in the CMOS is different from the installed configuration, you will have to set up the BIOS screen. See the User’s Guide for instructions.

32. If the unit does not come up, turn off the power and re-check all steps. Follow the trouble shooting procedures in the Service Guide.

33. Turn on the AC and then connect the battery.

34. Shut off the AC.

35. Affix the sticker to the chassis just below the serial tag and write the new rev. "B04" on it or write on the serial tag with a pencil and cover with scotch tape.

36. Replace the cover of the system unit and secure the captive screws.

37. Return the monitor and keyboard to their normal operating positions and dress the cables as necessary.

38. Replace the rear cover of the system unit.

39. Report this FCO activity on the LORES form in the "Fail Area/Module/FCO/Comments" column as follows: FCO MT10A-F001 (See Page 8).
(b) IN-DEC Contract  K  U  A
Non Contract/Non Warranty  F  F  F
(c) RTD/Off-site Agreement  F  U  F

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(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements; * Note material (only) free of charge for all customers.

(b) Applies to IN-DEC Area Only

(c) RTD=Return to Digital or Off-site Agreements; If Field Engineer On-site, use Activity Code "F".

### FCO CHARGING INFORMATION

<table>
<thead>
<tr>
<th>WARRANTY/CONTRACT</th>
<th>NONWARRANTY/NONCONTRACT</th>
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