



Document Number:	CS021
Revision Date:	5/23/12
Updated By:	Freddie H
Title:	DCE SD Card Reader Upgrade

**Caution – Use standard electrical safety and ESD procedures at all times.**

**Please make certain the unit is unplugged from the AC wall outlet before proceeding with these instructions.**

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SN# DCEJ81172 and below 1.24 D Oct 2008  
1.24 E For Newer

## 1. Scope

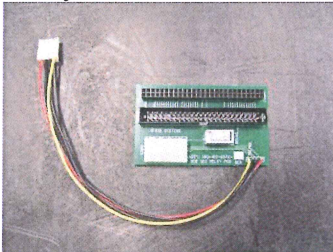
1.1. This document describes how to upgrade a DCE with a Zip Drive to an SD card reader.

## 2. Responsibilities

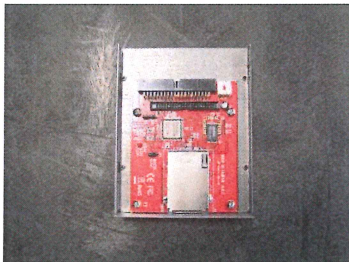
2.1. Customer service members will update this document and be able to cover this document with customers as needed.

## 3. Definitions

### 3.1. Relay board



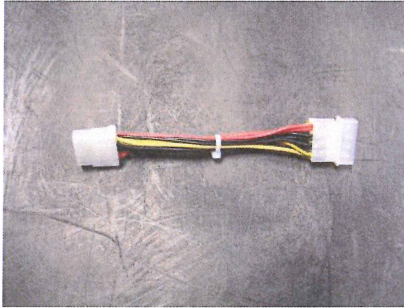
### 3.2. Card reader



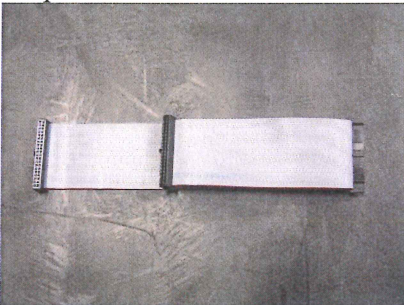
### 3.3. SD card



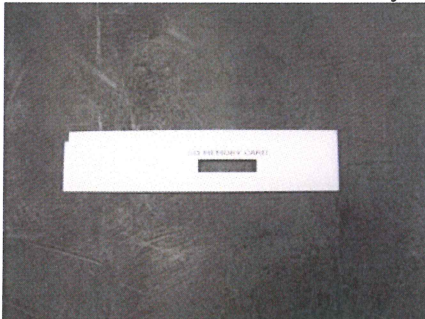
#### 3.4. DC power cable extender



#### 3.5. 40 pin ribbon cable



#### 3.6. SD MEMORY CARD Overlay



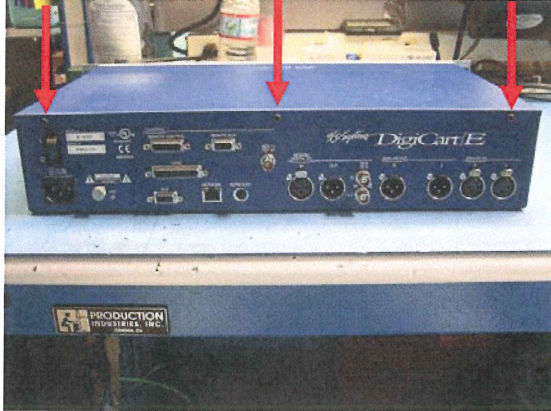
### 4. Process

#### 4.1. Remove Zip Drive

- 4.1.1. Unplug AC power cable from unit.

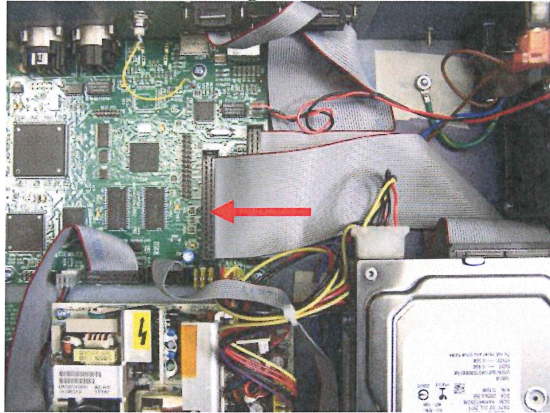


- 4.1.2. Remove the three black screws securing the top cover from the rear of the unit.

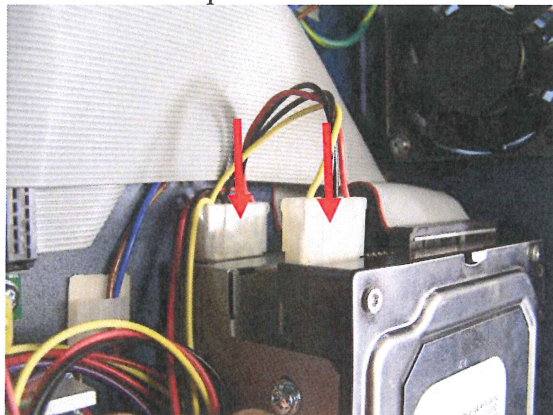


- 4.1.3. Remove the top cover.

- 4.1.4. Disconnect the 40-pin ribbon cable from the DCE mainboard.

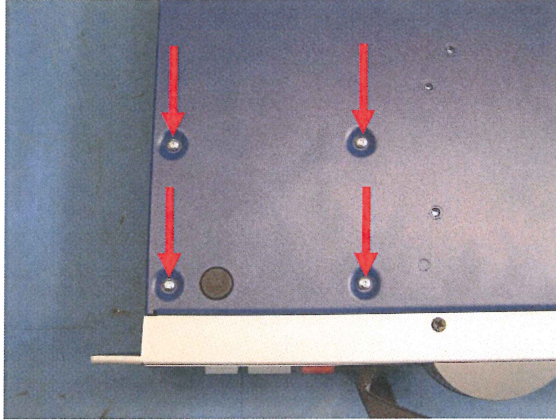


- 4.1.5. Disconnect the power cable from the hard drive and Zip drive.

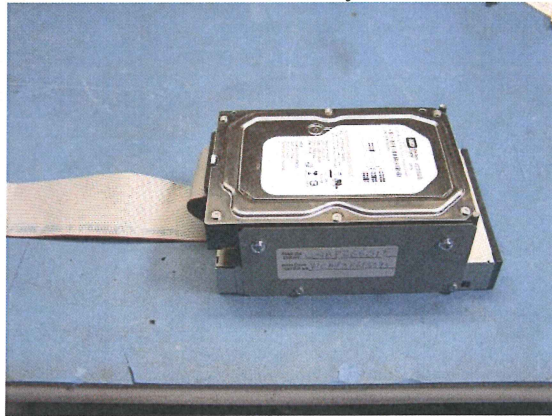




- 4.1.6. While holding drive assembly with one hand, remove the four screws securing the drive assembly from the bottom of the unit and discard.



- 4.1.7. Remove the drive assembly from the unit.



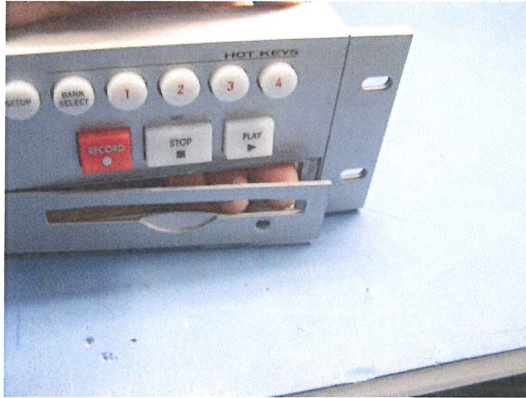
- 4.1.8. Disconnect the ribbon cable from the drives and discard.

- 4.1.9. Remove the four screws securing the Zip drive.

- 4.1.10. Remove Zip drive from the drive assembly.



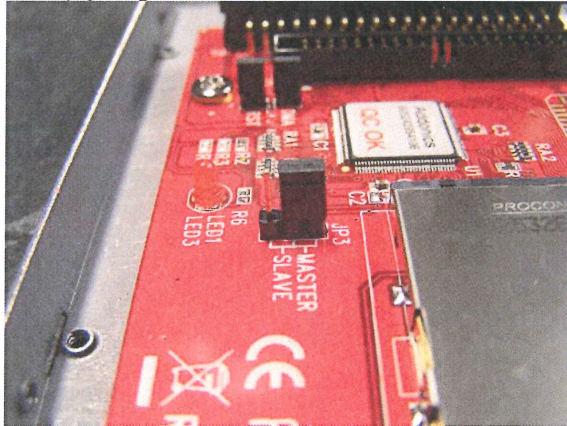
- 4.1.11. Remove the Zip drive bezel from the front panel. The bezel is secured to the front panel by adhesive tape. Carefully push outward on the bezel from inside the unit, and remove.



- 4.1.12. Using a fingernail or flat blade screwdriver as a scraper, remove any adhesive residue from the front panel.

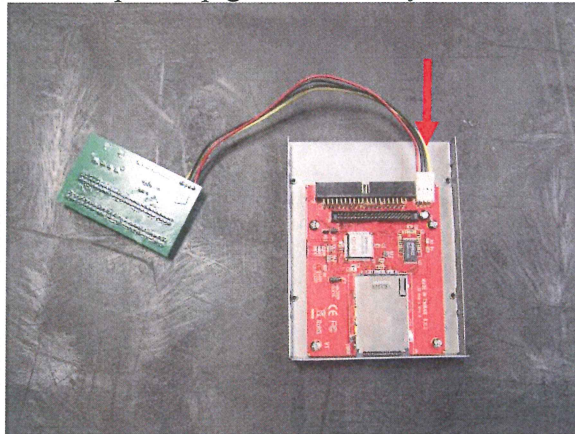
## 4.2. Upgrade System Software

- 4.2.1. Verify jumper on card reader is set to MASTER.

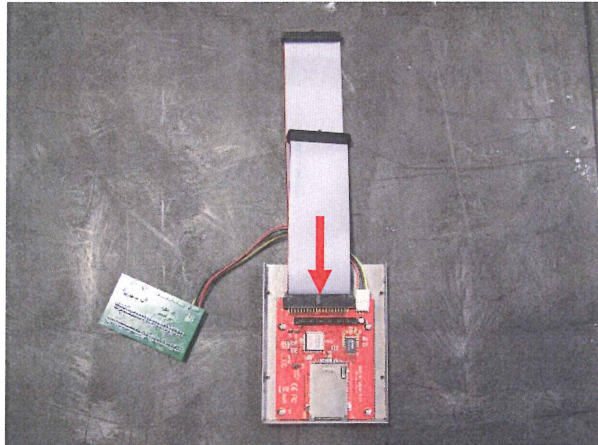




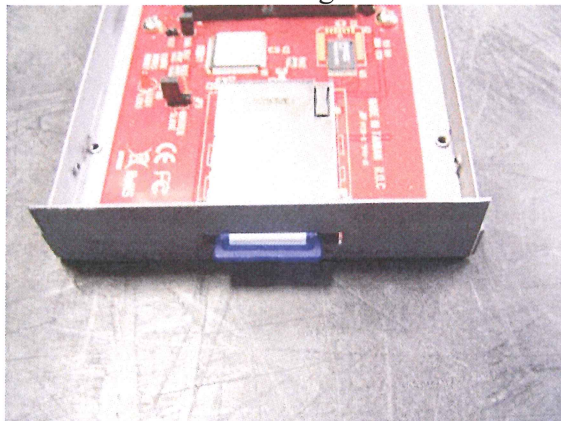
4.2.2. Connect power pigtail from relay board to card reader.



4.2.3. Connect center connector of new ribbon cable to card reader.

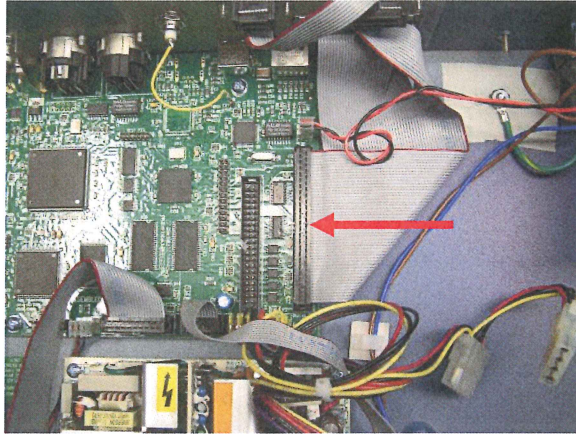


4.2.4. Insert SD card containing DCE software into card reader.

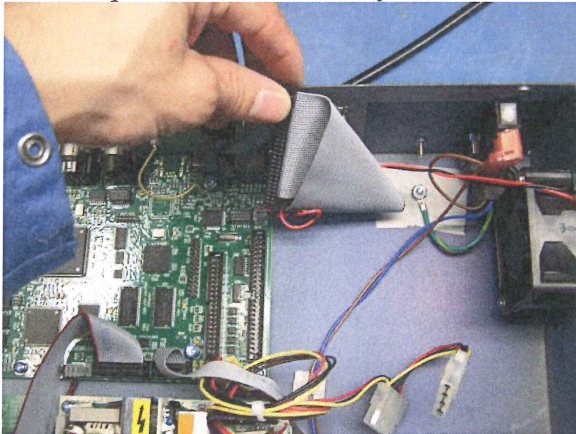




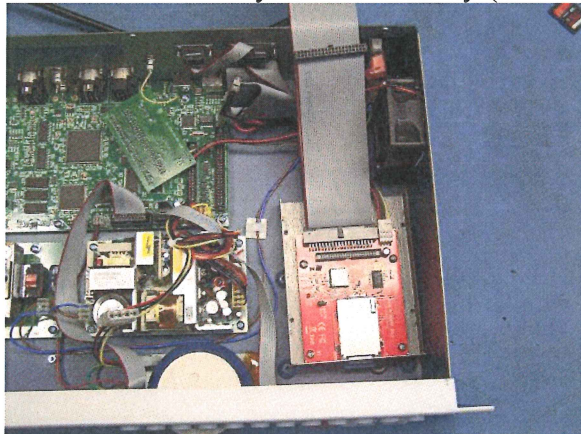
4.2.5. Disconnect 50 pin ribbon cable from DCE mainboard.



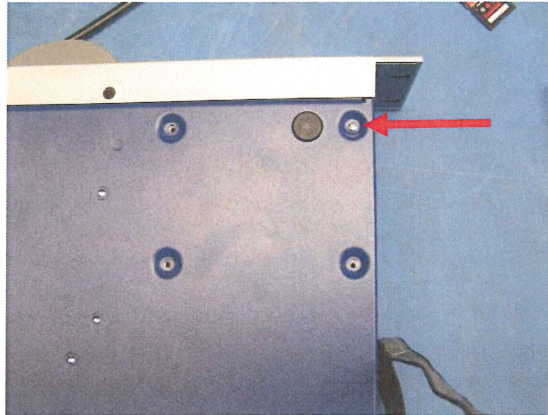
4.2.6. Fold 50 pin ribbon cable away from the DCE mainboard.



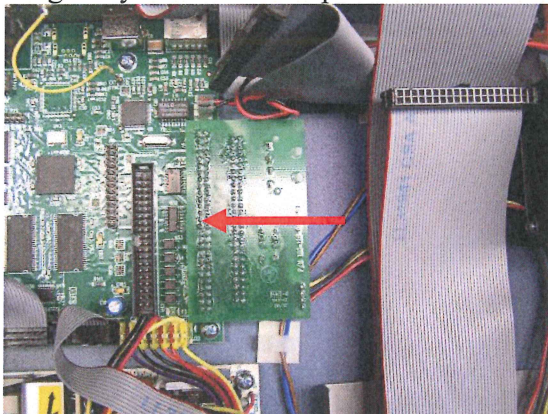
4.2.7. Set card reader/relay board assembly (without the hard drive) inside unit.



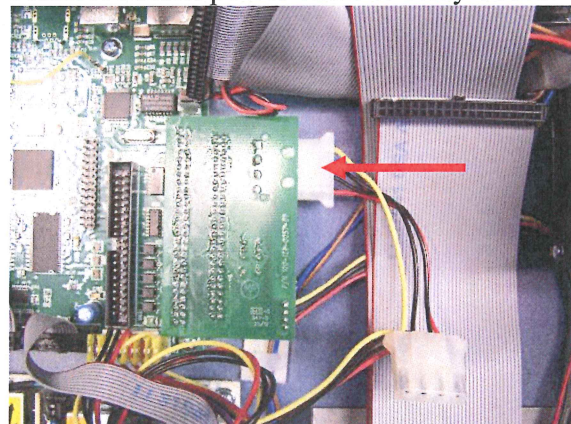
- 4.2.8. Install one of the provided 4-40 screws through the bottom of the unit to temporarily prevent the card reader from moving during the software update process.



- 4.2.9. Plug relay board into 50 pin connector of DCE mainboard.

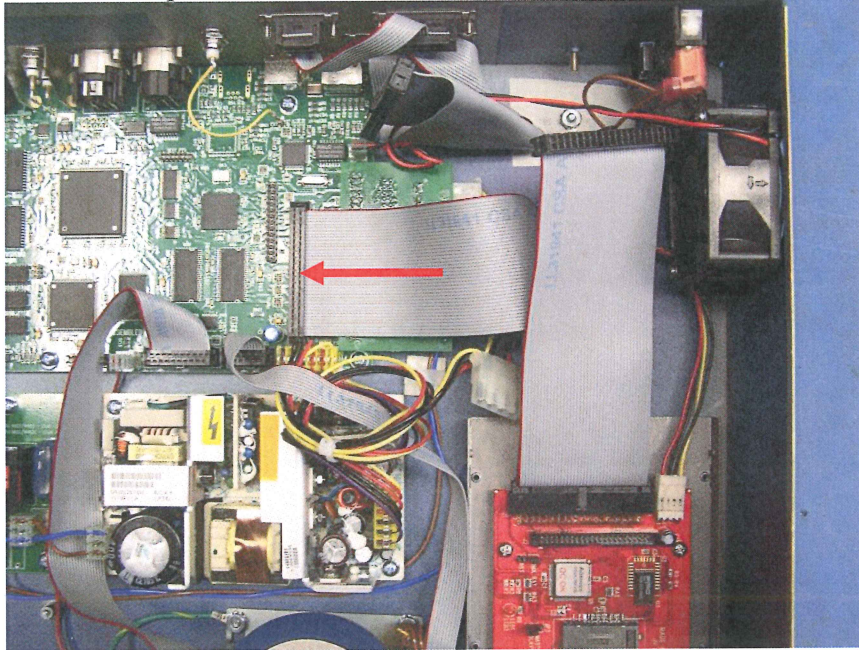


- 4.2.10. Connect Molex power cable to relay board.





4.2.11. Connect 40 pin ribbon cable from card reader to DCE mainboard.



4.2.12. Install top cover and secure with the three black screws removed in step 4.1.2.

DO NOT ATTEMPT TO APPLY AC POWER WITHOUT TOP COVER  
PROPERLY SECURED! SERIOUS INJURY MAY RESULT!

4.2.13. Connect AC power cable and power on unit.

4.2.14. Press HOT KEY 1 while holding UTILITY button.

4.2.15. Press ENTER at prompt to update software.

4.2.16. Allow the software update to complete, then power off unit and unplug the AC power cable.

### 4.3. Remove Card Reader

4.3.1. Remove the three black screws securing the top cover from the rear of the unit.

4.3.2. Remove the top cover.

4.3.3. Disconnect the 40-pin ribbon cable from the DCE mainboard.

4.3.4. Disconnect the molex power cable from the relay board.

4.3.5. Unplug the relay board from the DCE mainboard.

4.3.6. Remove the screw securing the card reader installed in step 4.2.8.

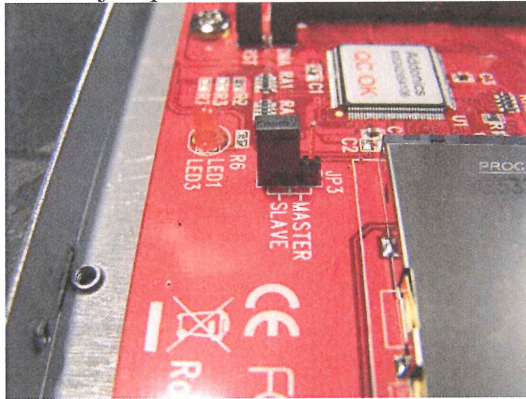
4.3.7. Remove the card reader/ relay board assembly from the unit.

4.3.8. Remove the SD card containing the DCE software.

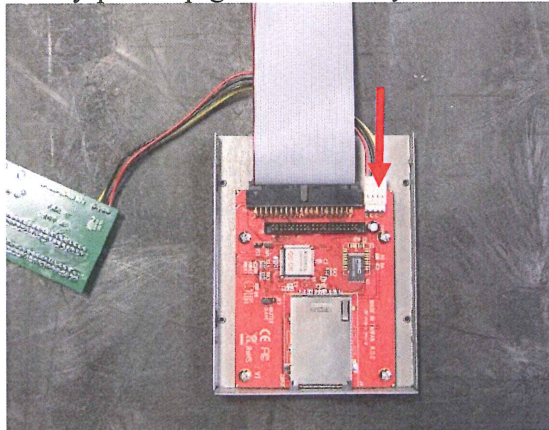


#### 4.4. Final Installation

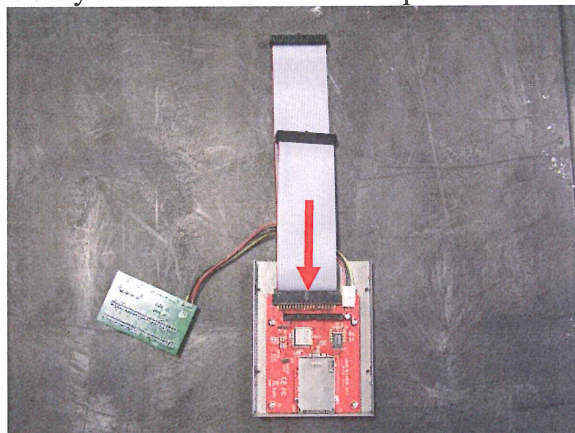
4.4.1. Set the jumper on the card reader to SLAVE.



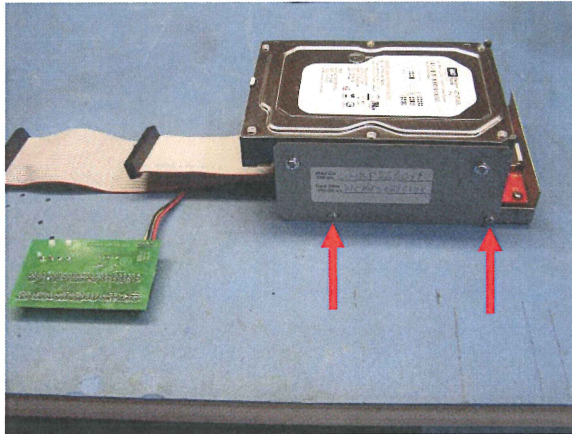
4.4.2. Verify power pigtail from relay board is connected to the card reader.



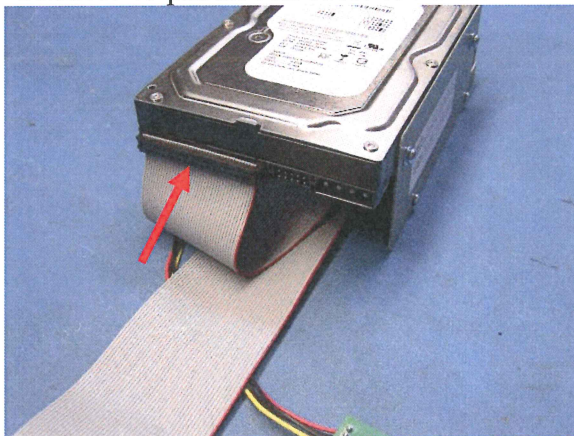
4.4.3. Verify middle connector of 40 pin ribbon cable is connected to card reader.



4.4.4. Mount card reader/relay board assembly to hard drive assembly using four of the provided screws.



4.4.5. Connect 40 pin ribbon cable to hard drive.

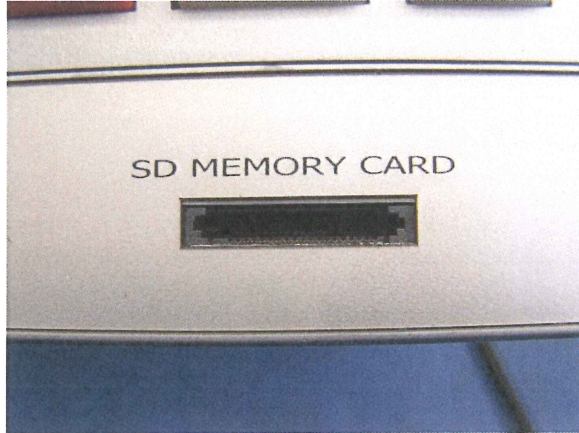


4.4.6. Remove adhesive backing and install SD MEMORY CARD overlay onto front panel of unit.

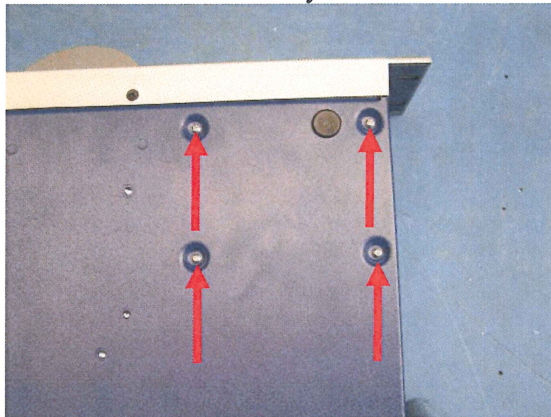




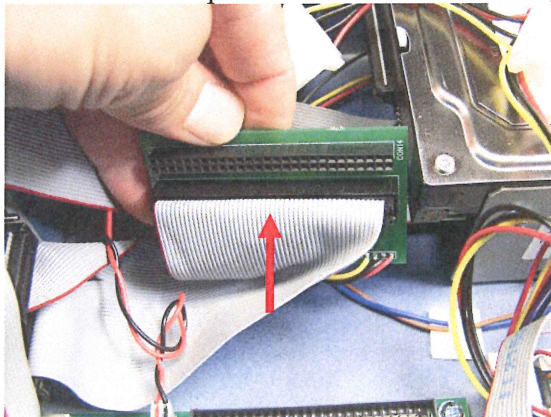
- 4.4.7. Place drive/card reader assembly into unit, taking care to carefully align the SD card reader slot with the slot in the overlay.



- 4.4.8. Install four of the provided screws through the bottom of the unit to secure the drive/card reader assembly.

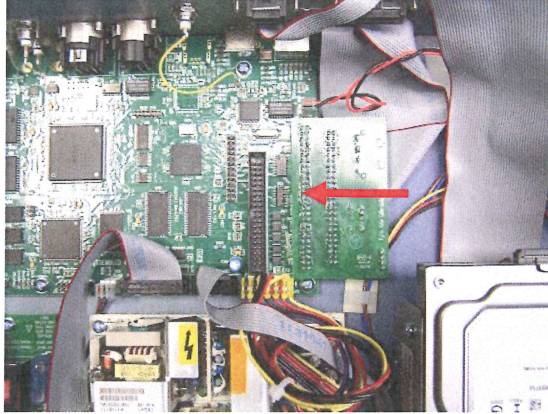


- 4.4.9. Connect the 50 pin ribbon cable to the relay board.

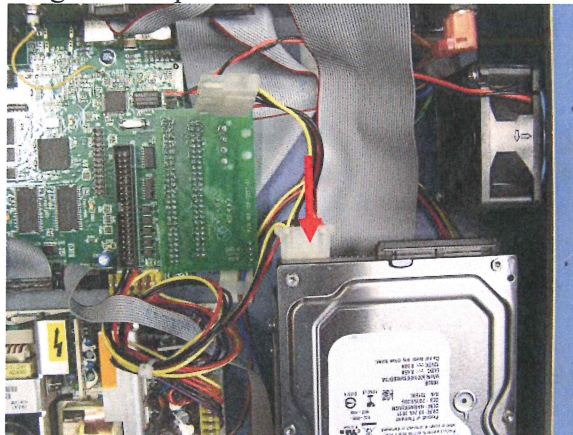




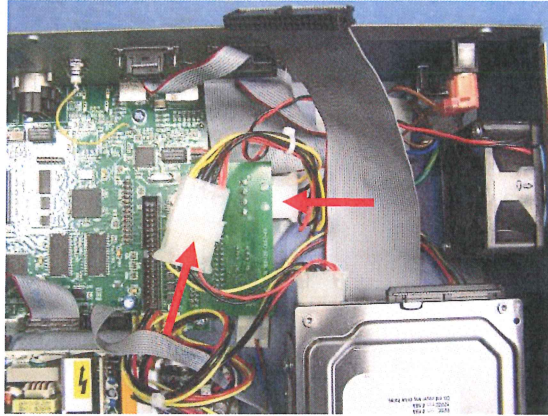
4.4.10. Plug the relay board into the 50 pin header of the DCE mainboard. Insure the 50 pin ribbon cable is not bunched up under the relay board preventing it from fully seating.



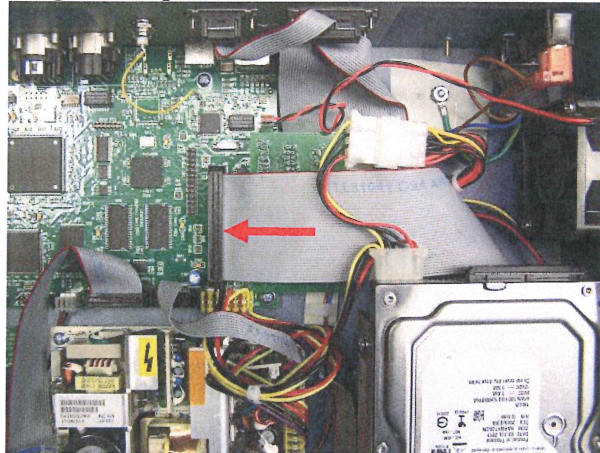
4.4.11. Plug the DC power cable into the hard drive.



4.4.12. Plug the DC power cable extender into to the relay board and the DC power cable.



4.4.13. Plug the 40 pin ribbon cable into the DCE mainboard.



4.4.14. Install the top cover.

4.4.15. Install three black screws securing top cover.

## 5. Normative References

5.1. None

## 6. Revision History

Date	Brief Description of Change
5/23/12	Initial Release