APPLICABILITY: The FCO applies to TA81 tape drives that experience position lost errors or serious exception errors caused by a failure to write or retry written tape marks while performing a backup operation.

This revision supersedes the previous revision dated 4 December 1991.

PROBLEM & SYMPTOM: When performing a backup operation the customer can experience intermittent position lost errors or serious exception errors. Position lost errors can be determined in errorlog by a status event code of 11, serious exception errors can be identified by a status event code of 12. A failure to write or retry a tape mark will be identified in the errorlog extended sense data information as a write tape mark check error, byte 9 of the extended sense data will indicate status of 08.

SOLUTION: Replace 3 removable EPROMS located on the STI interface module (29-25345-00) below revision D01. (See Figure 4 for EPROM locations and Pages 2 & 3 installation procedures.)

QUICK CHECK: Rev D01 and below do not feature the micro-code changes.

PRE/COREQUISITE FCO: MTTI HRS
None .5

TOOL/TEST EQUIPMENT:
N/A

FCO PARTS INFORMATION

<table>
<thead>
<tr>
<th>FCO KIT NO.</th>
<th>DESCRIPTION OF CONTENTS</th>
<th>EQ KIT VARIATION</th>
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<tr>
<td>EQ-01626-01</td>
<td>1 29-29624-01 1 36-30204-01 Brady revision marker</td>
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FCO CHARGING INFORMATION

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<td>TRAVEL/INSTALL</td>
<td>EQ KIT</td>
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</table>

APPROvals

DSSE | DS LOGISTICS | PRODUCT SAFETY
INSTALLATION AND TEST PROCEDURE FOR FCO TA81-F002

Installation Procedure:

*******************************************************************
*                      C A U T I O N                              *
*  Please use antistatic wrist strap while working on equipment.  *
*  Before proceeding, make sure the voltage to the TA81 tape     *
*  drive transport deck is off.  Set the power switch to the     *
*  off position (0) located on the back right hand corner of the  *
*  tape deck.  (Reminder: The 874 power controller located at     *
*  the bottom rear of the transport cabinet will still           *
*  supply voltage to the cooling fan and pneumatic pump).        *
*                                                             *
*******************************************************************

Tools Required: Phillips screwdriver, flat blade screwdriver, 5/32" allen wrench

1. The major tape drive components are located on the underside of the tape deck. The tape deck must be placed in the maintenance position. Before proceeding insure that all shipping brackets are removed. The shipping and safety brackets on the logic cage must be removed and the retaining latch released from the shipping position. (See Figures 1 & 2)

2. Open the top cover, and use a 5/32 inch allen wrench to open the front door.

3. Using a flat blade screwdriver rotate the pawl fastener located on the front left corner of the tape deck one quarter turn counterclockwise to release the deck. Rotate the fastener around six more turns counterclockwise to disengage the pawl fully. (See Figure 1)
4. While pressing down on the front of the tape deck, pull the spring loaded tape deck latch out. With the latch extended pull the tape deck upward and allow the front of the tape deck to rise. Release the tape deck latch and manually tilt the front of the tape deck up until the latch engages and the tape deck is lifted in the vertical (maintenance position).

**Caution** Be careful not to snag or chafe the control panel cable or any other cables when positioning the tape deck in the maintenance position.

5. Loosen the mounting screws and remove the lower shipping bracket from the logic cage if necessary. Using a flat blade screwdriver pull the retaining latch from the shipping position to the operating (middle) position. On the top of the logic cage, release the mounting nut and remove the holding safety brackets. (See Figure 2)

6. Remove the bracket that holds the STI cables by removing the two screws that secure the bracket to the logic cage.

7. Loosen the top and bottom logic cage lockscrews and slide the cage out until the upper and lower guards engage.

8. Loosen the upper and lower thumbscrews located on the right hand side of the STI interface module (29-25345-00) attached to the formatter write module. (See Figure 3)

9. Remove the top and bottom small phillips head screws from the small plastic board clip brackets used to secure the STI interface module to the formatter write module. Swing out the module and remove the cable connectors W17P1(J4), W15P1(J5), W11P(A1) port A and port B STI cables from interface module.

10. Release the top and bottom screws from the brackets and free the module from rear connector W7P9 remove module form the cage.

   Reminder: Before installing the EQKIT# EQ-01626-01, make sure the baud rate jumpers remain in the same position.

11. Locate the 3 removable EPROMS at the bottom of the STI module at position G2, G4, and G6 and remove the EPROMS one at a time. (Refer to Figure 4)

12. Begin to install EQ-KIT# EQ-01626-01. The EPROM locations and
13. Locate a visible area (etch free) on the back of the STI module. Use the brady marker revision label supplied with the EQ-Kit and mark the module revision to E01.

14. After installing the 3 EPROMS, begin re-installing the STI module cable connectors as follows, rear connector W7P9 TO STI interface, and secure the interface module in the lower and upper brackets. Install the cable connectors as follows, W7P9 TO (J1), Port A and Port B, W11P TO (A1), W17P1 TO (J4), W151 TO (J5).

15. Tighten the upper and lower thumbscrews to secure the interface module to the formatter write module.

16. Release the upper and lower guards and slide the logic cage into the frame. Tighten the top and bottom cage lock screws.

17. Secure the STI cable bracket to the logic cage.

18. Return the tape deck to the operating position by pulling the tape deck latch out and manually place the deck in the horizontal position until the latch engages. Secure the tape deck by turning the pawl fasteners clockwise.

19. To verify the EQ kit is installed correctly apply power to the tape drive. Set the power switch to the on position(1) located on the back right hand corner of the tape deck. The tape drive will execute the power on self-test. A successful completion of the self test will display normal operating conditions and show the unit number in the three-digit display. If the test is unsuccessful start performing standard TA81 trouble shooting procedures.

   NOTE: Internal diagnostic test 01 is not required to verify the installation of this EQ_KIT. Test 01 is a optional test that can be ran to check basic tape drive functions. The test take about 10 minutes to run. Test 01 was not included in the installation time of this FCO. If you decide to run optional test 01 use a known good quality scratch tape for this test.

20. Complete LARS data as per the following example.
**CATEGORY F**  
**USA**  
**GIA**  
**EUROPE**

**Activity** -

(a) Contract and Warranty  
(b) IN-DEC Contract  

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Non Contract/Non Warranty  

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**DEC Option**  
**Type of Call**  
**Action Taken**

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**Fail Area-Module-FCO-Comments**  
**Material Used**

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<td>EQ-01626-01</td>
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(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.

(b) Applies to INDEC AREA ONLY - Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements.

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

---

**FIGURE 1**

---

**FIGURE 2**

---
FIGURE 3

A1
(formatter write connector) --> ++ A1

-- J1

_ _ J6

Baud select
Jumpers

FCO EPROM
Locations

[location]

CHANGE
Eprom 77028516 to 77028517 location G6
Eprom 77028496 to 77028497 Location G4
Eprom 77028487 to 77028488 Location G2