FIELD CHANGE ORDER

NUMBER: TU81E-F001

APPLICABILITY: The FCO applies to TU81+ tape drives that experience position lost or serious exception errors caused by a failure to write or retry written tape marks while performing backup operations.

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 status event code 11, serious exception errors can be identified by a status event code 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 a 08 status.

SOLUTION: Replace the Buffer TMSCP module (29-25797-00) below Revision D01 with Revision E01.

QUICK CHECK: 29-25797-00 Rev. D01 and below do not feature the microcode changes.

PRE/CO-REQUISITE FCO: None

MTTI HRS

.5 Hrs.

TOOL/TEST EQUIPMENT: N/A

FCO PARTS INFORMATION

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FCO CHARGING INFORMATION

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APPROVALS

CSSE | CSL LOGISTICS | CS PRODUCT SAFETY
INSTALLATION AND TEST PROCEDURE FOR FCO TU81E-F001

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 TU81E 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 inch 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 Figure 1)

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. Loosen the top and bottom logic cage lock screws and slide the cage out until the upper and lower guards engage. Loosen the upper and lower thumbscrews located on the right hand side of the TMSCP interface module (29-25797-00) attached to the formatter write module. (See Figure 3)

7. Remove the top and bottom small phillips head screws from the small plastic board clip brackets used to secure the TMSCP interface module to the formatter write module. Swing out the module and remove the I/O cable W18(J2), and connectors W17P1(J4), W15P1(J5), W11P(A1) and power connector W7P9. The module can then be removed from the logic cage. (Reminder: Before installing EQKIT# EQ-01625-02 make sure the baud rate jumpers are in the same positions as the replaced module). (See Figure 4)

8. Begin to install EQ-KIT# EQ-01625-02 (Remember to verify the baud rate jumpers are in the same position as the module being replaced).

9. Begin by re-installing the cable connectors as follows W7P9 TO (J1), W18 TO (J2), W11P TO (A1), W17P1 TO (J4), W151 TO (J5)

10. Install the TMSCP module between the upper and lower plastic board clip brackets, re-install the two small phillips head screws that
secure the TMSCP module to the formatter write board.

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

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

13. 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.

14. 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 TU81 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.
FIGURE 4

W11
(formatter write connector) -> A1
++

_ J1

_ ! ++

Baud select

Jumpers

FCO EPROM

Locations [G8,F8,E8]

J4 J5 ++ ++

++ ++

CHANGE

EPROM 77031478 to 77031479 location G8
EPROM 77031458 to 77031459 Location F8
EPROM 77031468 to 77031469 Location E8

\TU81E
/^ TU81
\FCO_DOCS
\1991
\OCT