

PROCESSOR TYPE All

**M7761-00001** CODE: D CS: C ETCH: D  
OCT-72 - CORRECTION: Layout new etch revision "D" to meet production standards.  
In-plant effectivity -02 phase-in

**M7761-00002** CODE: P CS: B1  
NOV-72 - PROBLEM: Circuit Schematic does not match M7761 etch board revision "C".  
CORRECTION: Issue new Circuit Schematic at revision "B1".  
In-plant effectivity -06 documentation change only

**M7761-00003** CODE: D CS: D  
JAN-73 - PROBLEM 1: Poor operating margin on Raytheon version of 2N2219 and lack of proper documentation control of purchased part.  
CORRECTION 1: Replace 2N2219 with DEC 2007.  
CORRECTION 2: Correct print: R50 improperly marked as R5 on Circuit Schematic.  
CORRECTION 3: Correct print: Swage lug part number must be changed.  
In-plant effectivity -02 phase-in

**M7761-00004** CODE: D CS: E ETCH: E  
JAN-73 - PROBLEM: Read circuits do not clear completely with some specific programming timing and sequences.  
CORRECTION: Use ENERGY CLEAR MONO to generate direct clear for ENERGY MONO.

NOTE: This ECO creates M7761 special CS revision "B2".  
In-plant effectivity -03 rework immediately

**M7761-00005** CODE: D CS: F  
FEB-73 - PROBLEM: Capacitors in leader sensing circuit slows down EOT sensors now being purchased.  
CORRECTION: Remove capacitors C119 and C120 on CS revision "B2" and C84 and C85 on CS revision "E".

NOTE: This ECO creates M7761 CS revision "B3".  
In-plant effectivity -02 phase-in

**M7761-C0006** CODE: F CS: H  
APR-73 - PROBLEM 1: Logic POWER LOW circuit threshold too low to protect tape from erasure. Problem occurs when power is shut off on un-rewind tapes.  
CORRECTION 1: Change resistor R129 from 1K to 220 ohms.  
PROBLEM 2: Unloading/rewinding tape on Drive "A" generates a noise pulse which may cause read/write errors on Drive "B".  
CORRECTION 2: Move diode D17 to better ground.

NOTE: This FCO creates M7761 special CS revision "B4".  
In-plant effectivity -03 rework immediately  
Field effectivity -Rework all etch revision "D" M7761's when symptoms are present. Rework all etch revision "C" M7761's to correction #1 only, when symptoms are present.  
( Time To Install And Test 1.0 Hour. ) ( Kit Contents -FCO/Prints And Parts )

**M7761-00007** CODE: D CS: J  
MAY-73 - PROBLEM: The 74123 IC's in position E21 and E4 do not always clear.  
CORRECTION: In positions E21 and E4, insert IC sockets #12-10025 to speed changing of problem IC's on etch revision "D" and "E" boards. This is a temporary fix. An ECO will follow to layout the board.

NOTE: This ECO is cancelled by supplement ECO M7761-0008A.  
In-plant effectivity -02, all boards wave-soldered after May 15 must have this eco; do not retrofit.

**M7761-D0008** CODE: F CS: K  
JUN-73 - PROBLEM: Some 74123 one-shots do not clear properly, causing the cassette to rewind to the end. The problem may be noticed when a drive is rewinding under either program or manual control. If the tape does not stop near the beginning of clear leader, but continues to the end of the tape, this FCO may be required.  
CORRECTION: Add circuit to prevent retrigger on trailing edge of clear pulse. Two D664 diodes and two 300 ohm resistors are added.

NOTE: See correction supplement FCO's M7761-B008A and M7761-B008B.  
Quick Check -300 ohm resistor on E31 pin 8 and E35 pin 3.  
In-plant effectivity -03 \* -Rework immediately all in-plant units prior to Module Test in Puerto Rico. Other units are to be reworked only if problem exists or if E4 or E21 must be replaced.  
Field effectivity -Rework all M7761's when symptoms are present or when 74123 IC, E4 or E21, is replaced.  
( Time To Install And Test 1.3 Hours. ) ( Kit Contents -FCO/Prints And Parts )

**M7761-D008A** CODE: F  
JUL-73 - CORRECTION: Item #8 in FCO M7761-B0008 eliminates the need for ECO M7761-00007. Do not implement ECO M7761-00007; bypass its drawing revision letters to those shown on FCO M7761-B0008.  
In-plant effectivity -M7761-00007 effectivity cancelled  
Field effectivity -Unchanged

**M7761-D008B** CODE: F  
AUG-73 - CORRECTION 1: IC 7404 which was called out in FCO M7761-D0008 is not needed; delete it from the FCO.  
CORRECTION 2: Layout of the etch board to be postponed.  
In-plant effectivity -Unchanged except new etch revision "F" cancelled.  
Field effectivity -Unchanged

**M7761-B0009** CODE: F CS: L  
AUG-73 - PROBLEM: Splices in cassettes breaking because of fatigue caused by bending of joint during rewind.  
CORRECTION: Add 1 ufd capacitors across resistors R51 and R76 to the leader sensing circuits to allow the splice to wrap around the reel before stopping.  
In-plant effectivity -03 \* -Rework all M7761's etch revision "D" and later.  
Field effectivity -Retrofit all TU60's  
( Time To Install And Test 1.0 Hour. ) ( Kit Contents -FCO/Prints And Parts )

**M7761-00010** CODE: D CS: M ETCH: F  
AUG-73 - PROBLEM 1: Balance adjustments need more range for some operational amplifiers.  
CORRECTION 1: Redesign balance circuit to increase range.  
PROBLEM 2: 0.1 ufd capacitors are physically too large.  
CORRECTION 2: Use 0.22 ufd capacitors.  
PROBLEM 3: Signal MONO TIMING needs more range for some monos.  
CORRECTION 3: Redesign timing adjustment to increase range.  
PROBLEM 4: Some Zener diodes, D24, IN752, cause threshold to be slow.  
CORRECTION 4: Replace with two D664's.  
PROBLEM 5: Write gate connector is not fail-safe.  
CORRECTION 5: Add pull-up to WRITE L.

NOTE: See continuation supplement M7761-0010A.  
In-plant effectivity -Create new etch revision "F" M7761. Use present stock until new stock available, phase-in.

**M7761-0010A** CODE: D  
AUG-73 - PROBLEM 1: Rewind one-shots retriggering on trailing edge of CLEAR pulse because of too high junction capacitance in some diodes.  
CORRECTION 1: Change diode type to FD777.  
PROBLEM 2: ENERGY CLEAR MONO too short.  
CORRECTION 2: Lengthen by changing timing capacitor, C43, to 0.47 ufd.  
In-plant effectivity -Unchanged

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**M7761-D0011 CODE: F CS: L1**

AUG-73 - PROBLEM: Rewind one-shots retriggering on trailing edge of CLEAR pulse because of too high junction capacitance in some diodes.  
CORRECTION: Change diode type to FD777.

NOTE: The problem may be noticed when a drive is rewinding under either program or manual control. If the tape does not stop near the beginning of clear leader, but continues to the end of the tape, this FCO may be required.

In-plant effectivity -Rework immediately, in Puerto Rico, prior to module test, in Westfield, prior to final acceptance.

Field effectivity -Rework all M7761's which have FCO M7761-D0008 installed, CS revision "K".

( Time To Install And Test .5 Hour. ) ( Kit Contents -F1033 -FCO/Prints And Parts )