

FIELD ENGINEERING BULLETIN

TITLE: TAPE TIMER READOUT MALFUNCTION

I. APPLICABILITY

All ATR-100's

II. PURPOSE

Some ATR-100's when threaded up, or when the edit switch is pressed to take the machine out of stop edit mode will scramble the tape timer display reading. The following modification will prevent this from occurring.

III. DISCUSSION

Switching transients caused by the energizing or de-energizing of relay K-1 in the power supply may cause the "scrambling" of the tape timer display. These transients are coupled into the 432 kHz master clock line which affects the readout. No method of shielding or preventing the transients from entering the master clock has been found; however, slightly integrating the master clock by means of a small 220 pF, 5%, 500V mica capacitor in the transport control board (board 7) effectively filters out the disturbance and stabilizes the readout.

IV. PARTS LIST - TOOLS REQUIRED

1 ea. capacitor 220pF, 5% mica, 500V P/N 034-240

Common technicians' hand tools are required.

V. PROCEDURE

Remove the transport control PWA (board 7) and remove the 4 cap screws which hold the shield assembly to the PWA. Turn the PWA over with the etched circuit side up. Locate and identify A-33 pins 8 and 9. Solder the capacitor to these leads. Dress the capacitor as close to the PWA as possible. Re-assemble the PWA to the shield and re-install in the electronic chassis and verify tape timer readout operation.