AMPEX PROFESSIONAL AUDIO DIVISION

FIELD ENGINEERING BULLETIN

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MODEL MM-1200
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SUPERSEDES
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TITLE: MM-1200 SEARCH TO CUE MULTIPLEX "BEAT"

I. APPLICABILITY

All MM-1200's from Serial No. 1001 to 1075

II. PURPOSE

To eliminate a very low level beat frequency recorded on tape in the 100 HZ to 5 KHZ region.

III. DISCUSSION

The Search to Cue multiplex beat problem is caused by the beating of the 9th harmonic of the digit frequency (approximately 297 KHZ) with the second harmonic of the bias frequency (300 KHZ) or approximately 3 KHZ. Due to temperature changes causing drift in the digit frequency, the beat frequency may vary from 100 HZ to 5 KHZ. This may or may not be present on all machines Serial No. 1001 to 1075.

IV. PARTS NEEDED

1 each - 68 MF capacitor, tantalum, 15V, 20%.
Ampex P/N 037-957

7 each - 120 OHM Resistors, Comp., 1/4W, 10%.
Ampex P/N 049-545

V. PROCEDURE

This is a two step procedure.

Step 1. Remove AC power from the line. Remove the D.C. power supply cover and both regulator cards. Locate the rear of J1, a ten pin Jones connector. Cut the bare wire from J1, Pins 6 and 8. Re-install both regulator cards and the cover.

Step 2. Remove the Search to Cue tape timer assembly P/N 4020414-XX and locate the tach. pre-amp PWA P/N 4050783-XX. Install 1 each 68 MF capacitor, tantalum, 15V, 20%, Ampex P/N 037-957, across pins 3 and 2 on the board. The positive side is at pin 3. Next remove the display timer printed wiring assembly, P/N 4050810-XX and locate R4, R7 through R12. Replace these 47 ohm resistors with 7 each resistors. Comp. 120 ohm, 1/4 W, 10%, Ampex P/N 049-545. Re-assemble the tape timer assembly and mount the timer on the transport. Verify proper transport functions.

V. PROCEDURE (CONTINUED)

If this problem existed prior to this modification, confirm that it no longer exists. This completes the modification.