SONY

Professional Audio Products
Technical Bulletin 89–039

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677 River Oaks Pkwy, San Jose, California 95134

Date: **May, 1989**

Subject: **REDUCTION OF MASTER ERASE SIGNAL DISTORTION**

Model: **APR–5002/5003**

Serial No: **20,001 AND HIGHER**

DESCRIPTION

The erase transient at the end of a recorded segment may be too large in APR–5002/5003 units that contain an MST Assembly with part number A–7850–376–B or A–7850–377–B. To correct this problem, perform the modifications described in the following procedure.

APR–5002/5003 units with serial numbers 20,001 through 20,701 that have not been modified to accept ½ inch headblocks have lower master bias and erase levels and will not have this problem.

PARTS REQUIRED

Part No.	Description	Qty.
1–162–672–11	Cap, Ceramic, 27pF, 50V	1
	OR	
T–9411–279–1	Cap, Ceramic, 27pF, 100v	1

MODIFICATION AND ALIGNMENT PROCEDURE

MST BOARD (PN A–7850–376–B/377–B)

Solder Side (See Figures 1 and 2.)

1. Verify that master bias level is 15Vpp.
2. Perform record alignments for both channels.
3. Load a bulk erased tape into recorder.
4. Remove MST Board from unit.
5. Solder a 27pF capacitor in parallel with C66.
6. Replace MST Board into unit.
7. Remove CH1 CNL Board from unit.
8. Remove heat sink plate from board.
9. Replace CNL Board on card extender.
10. Power up unit.
11. Verify that the bias level at CN–30B of CNL Board is 15 Vpp. If necessary adjust RV1 on MST Board.
12. Connect oscilloscope CH–A input to CH–1 Line Out.
13. Connect oscilloscope CH–B input and EXT trigger input to IC23–8.
14. Set oscilloscope sweep to 5ms/div and Volts/div for 50mv/div. Select NORMAL and EXT trigger source.
15. Alternately select PLAY then RECORD modes at 1 second intervals.

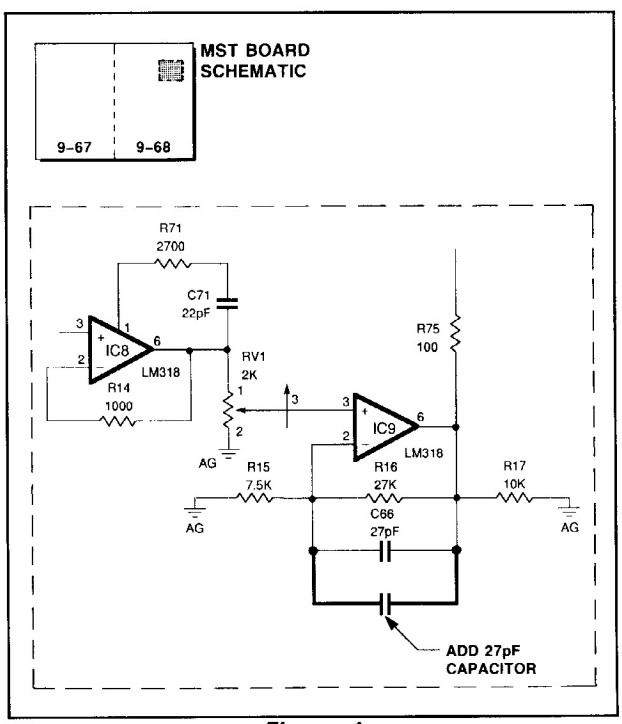

Figure 1

Analog Audio

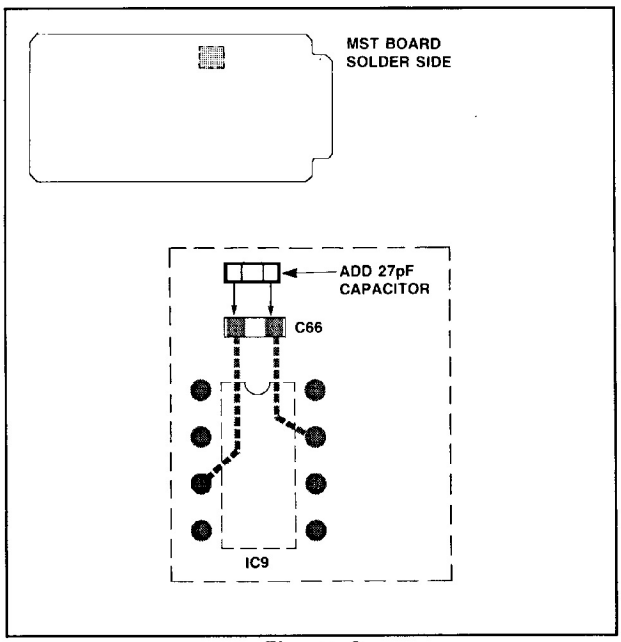

Figure 2

16. Adjust oscilloscope trigger level until *punch out* transient is easily detectable. See Figure 3.
17. Verify that transient is 100 mVpp or less. If specification is not met, contact your local Sony Regional Service Center.
18. Turn off power.
19. Replace heat sink on CNL Board and place board back into unit. Repeat steps 7 through 10 and 12 through 19 for CH-2 CNL Board.

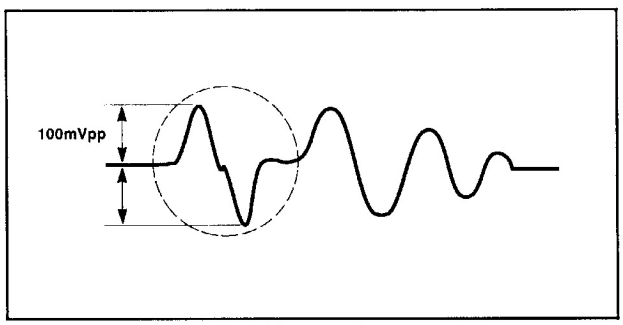

Figure 3

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