

Technical Note

Model Number: ESA-10 Console

Applies to :
Serial Numbers/
Date of Manufacture: ALL

Purpose: Cure hum or "motorboating" in Monitor, Headphones, or Program Output.

Diagnostic note: Removal of input plug-ins may change frequency or amplitude of the hum.

Parts Required:

- (6) 15 mfd 35V low-leakage electrolytic capacitor (p/n 1026)
- (2) 0.1 mfd 50V mylar capacitors (p/n 5743)
- (5) 1000 mfd 35V electrolytic capacitors (p/n 1080)
- (1) Solder lug (p/n 1155)

Description: As electrolytic capacitors age, deterioration may cause hum or "motorboating" on an output. This procedure should cure the hum/motorboating problem. Additionally, replacement of other electrolytic capacitors should be done at the same time since deterioration has probably occurred in these as well.

Procedure:

1. Replace C18 in the Power Supply with a 15 mfd 35V low leakage capacitor (p/n 1026).
2. Replace C19 in the Power Supply with a 0.1 mfd 50V mylar capacitor (p/n 5743).
3. Add C16A (0.1 mfd 50V mylar) to the underside of the socket of IC102. Solder one side to the output pin of the socket, and connect the other side to a mounting screw retaining the socket to the chassis.

(continued)

The following two steps are recommended to prevent future problems:

4. Replace C4, C6, C9, C13, and C13A with 15 mfd 35V low-leakage electrolytic capacitors (p/n 1026).
5. Replace C11A, C11B, C11C, C15A, and C15B with 1000 mfd 35V electrolytic capacitors.