

SECTION 7

ATR-100

TRANSISTOR INSULATORS

Initial production of the ATR-100 used silicone rubber insulators under the power transistors on the transport casting. They were susceptible to physical damage and were marginal in heat transfer. Whenever a transistor needs to be replaced, the insulator should be changed to Ampex Part Number 580-445. Dow Corning heatsink compound number DC340, Ampex Part Number 087-388, should also be used.

AUDIO CONTROL PWA IMPROVEMENT

To improve the slow start up exhibited by some 5.1840 MHz crystals, perform the following modifications to PWA 4050788-04.

1. Change R2 from an 820-ohm resistor to a 680-ohm ceramic film resistor, 1/4W, 5%, Ampex Part Number 066-840.
2. Change C1 from a 33-pF to 100-pF capacitor, 500V, 5%, Ampex Part Number 034-177.
3. A symptom of this condition is that when power is applied to the ATR-100, the lights on the control unit come on in random fashion, instead of indicating the reproduce and safe modes.
4. Correct schematic number 4840398 accordingly.

I/O MODULE INTERFERENCE

There have been some instances of interference between the I/O module and the main frame casting such as to prevent engagement of the captive holddown screw in the I/O module and the threaded hole in the main frame. This interference is generally caused by the uppermost corners of the I/O module chassis digging into the corners of the main frame. To rectify this problem, use a flat file to produce a 45° chamfer, approximately 3/16-inch long, on the corners of the chassis as shown in Figure 7-1. (Shield critical areas from filings.)