

AVR-A-1-S1-C-P

SYSTEM DESCRIPTION AND REPAIR PROCEDURE

In the event of an instrument malfunction, it is most likely that the 0.5A slow blow fuse or the main power fuse on the rear panel has failed. Replace if necessary.

If the unit still does not function, it is most likely that some of the output switching elements (SL9T and SL23T) may have failed due to an output short circuit condition or to a high duty cycle condition. The switching elements may be accessed by removing the cover plate on the bottom side of the chassis. The cover plate is removed by removing the two 2-56 Phillips screws.

NOTE: First turn off the prime power. Briefly ground the SL9T and SL23T tabs to discharge the 200 Volts power supply potential.

The elements may be removed from their sockets by means of a needle nosed pliers after removing the four counter sunk 2-56 Phillips screws which attach the small copper heat sink to the body of the output module. The SL9T and SL23T are selected Mosfet power transistor in a TO-220 package and may be checked on a curve tracer. If defective, replacement units should be ordered directly from Avtech. When replacing the SL switching elements, take care to ensure that the short lead (of the three leads) is adjacent to the black dots towards the back of the chassis. (See the following illustration). The SL elements are electrically isolated from the small copper heat sink but are bonded to the heat sink using Wakefield Type 155 Heat Sink Adhesive.

Bottom View of Chassis

