

516F-2 AC POWER SUPPLY (522-1170-000)

SERVICE INFORMATION LETTER 1-76

PREVENT FUSE BLOWING CAUSED BY ARCING IN THE VACUUM TUBE RECTIFIERS

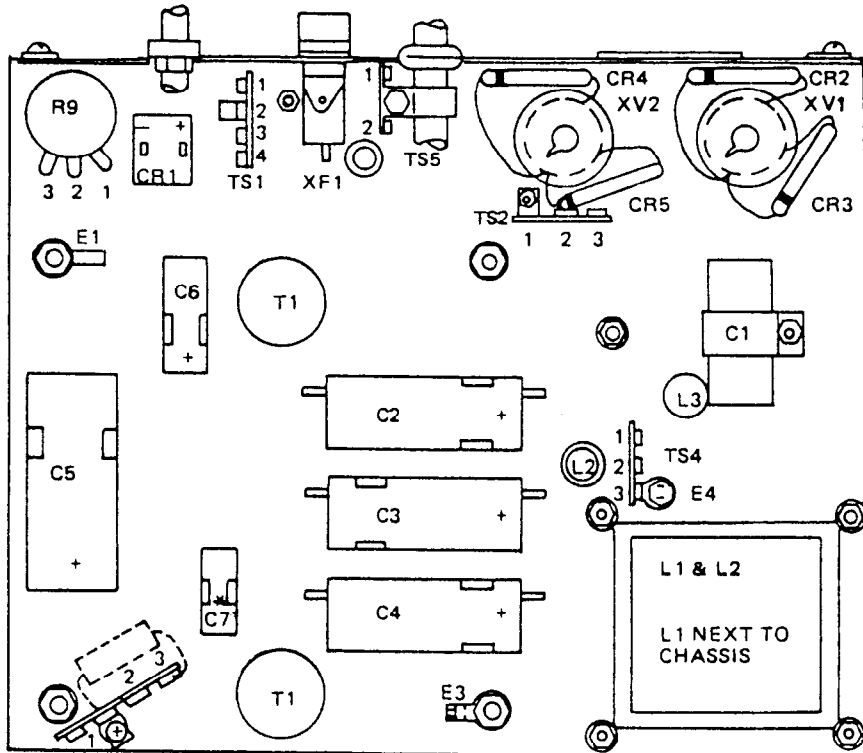
A few problems have been reported from the field concerning blown fuses in the 516F-2 power supply. Investigation has shown that the cause of the problem is arcing in rectifier tubes V1 (5R4GYA) and V2 (5U4GB). However, most of these tubes are performing satisfactorily so this service information letter is intended only for those power supplies that have a fuse blowing problem.

Vacuum tubes V1 and V2 should be removed and Semtech SCH-5000 solid state diodes (CPN 353-0425-010) should be installed as follows.

<u>DIODE</u>	<u>FROM</u>	<u>TO</u>
CR2	XV1-8 (cathode)	XV1-4
CR3	XV1-8 (cathode)	XV1-6
CR4	XV2-8 (cathode)	XV2-4
CR5	XV2-8 (cathode)	XV2-6

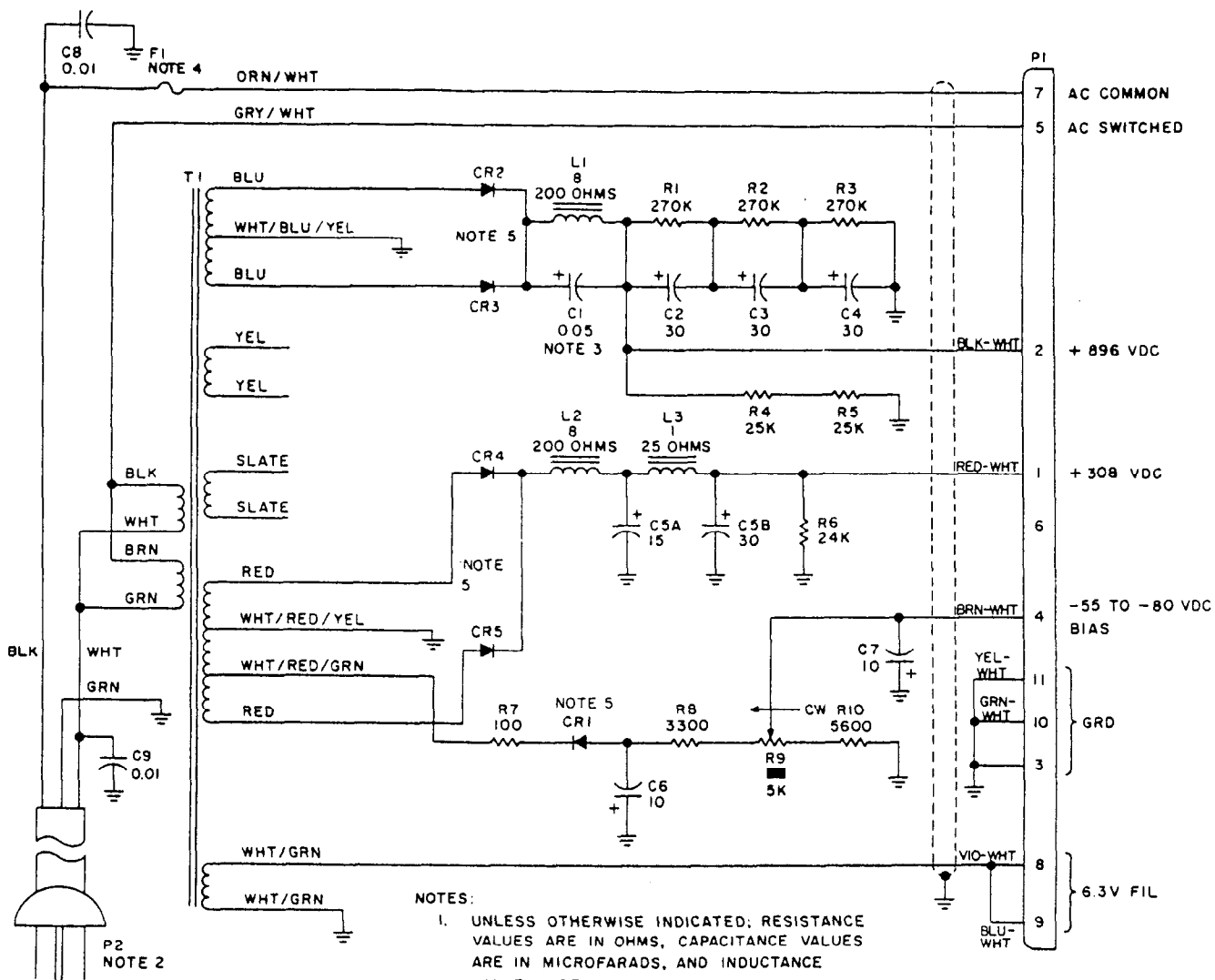
Figure 1 shows the diode locations pictorially and figure 2 shows the circuit change schematically.

This change will increase the output voltage to the KWM-2/2A and 32S-() transmitters by approximately 12 percent. The respective bias must be adjusted using the transmitter instruction books as a guide. It is recommended that the transmitter final amplifiers be kept at resonance at all times and that the swr always be less than 2:1.



*MOUNTING LOCATION OF C7 DEPENDS ON COMPONENT SIZE.

CR2, 3, 4, 5 Mounting Location
Figure 1



516F-2 AC Power Supply, Schematic Diagram Figure 2