ZENER DIODE MODIFICATION ON AR305 AND AR313 AMPLIFIER

The amplifier was originally designed for operation from a well-regulated power supply. For this reason, the regulation of the gate bias voltage was omitted. The effects of variations in the power supply voltage can be minimized by connecting a 6.8 – 8.2 volt zener diode (1N5921A – 1N5923A) from the junction of R3 and R4 (trimpot) to ground. The idle current can then be set once and will not change considerably with power supply variations especially on the AR313 where the power supply voltage may be varied from 12 to 28 volts.