HARRIS COMMUNICATIONS AND INFORMATION HANDLING

SERVICE BULLETIN

MAINTENANCE AND MODIFICATION DATA

Broadcast Products Division

Equipment: MW-5/5A

Bulletin No. AM-121-LAP
ECN-23815

Date July 19, 1978

Problems encountered: Very sharp PA grid tuning; ringing of class 'D' waveform; random loss of RF driver transistors Q1 & Q2 in through A5 in IPA RF driver 1A2A3A1 (992-3820-001) assemblies.

The major supplier of these 2N6340 transistors (Motorola) have changed the doping mixture used to manufacture the collector emitter junction's structure. Thus, the newly created junction characteristics cause the operational duty cycle to be unstable.

CR-3 and CR-4 (25 nanoseconds reverse recovery time clamping diodes) have been added across the emitter to collector of Q1 & Q2; 1A2A3 A1 through A5.

This modification is mandatory when using or replacing Motorola 2N6340 transistors manufactured starting with 7739 and later date codes. However, we recommend this improvement be made in most RF drivers for improved performance when the above problems are encountered. The date code is stamped on each transistor, and is read as 7739 (77, year; 39, week)

Parts required for each module:

Quantity	Part Number	Description
2	384-0678-000	Diode TRW DSR 3200

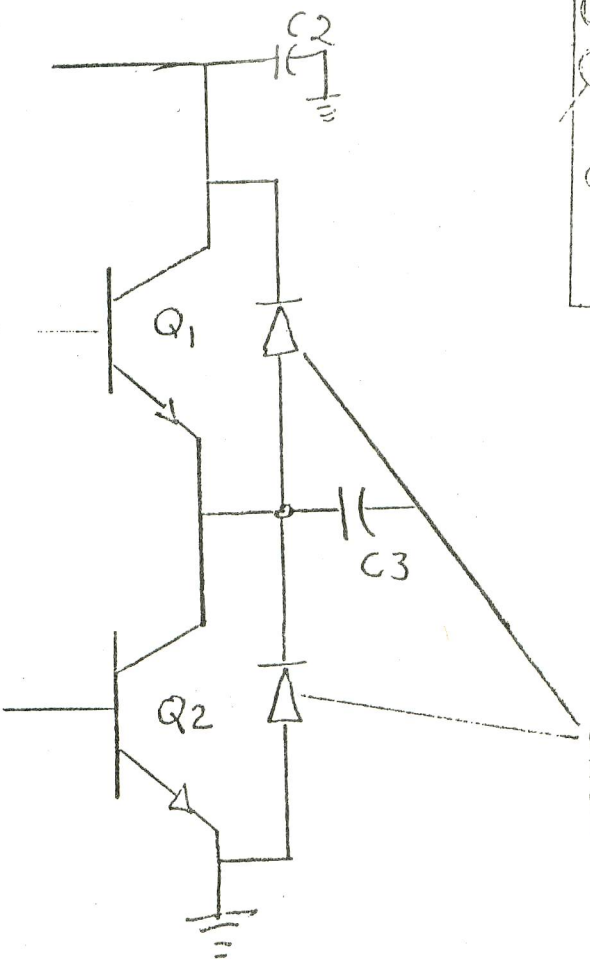
Connect diodes between existing solder lugs, as shown in the attached drawing, on the back of each RF driver assembly. Cut both diode leads as short as possible and approximately the same length. Ground the anode of CR-4 to heat sink solder lug. Dress leads carefully, making sure they don't come in direct contact with other components. Be sure to heat sink carefully the diode leads when soldering.

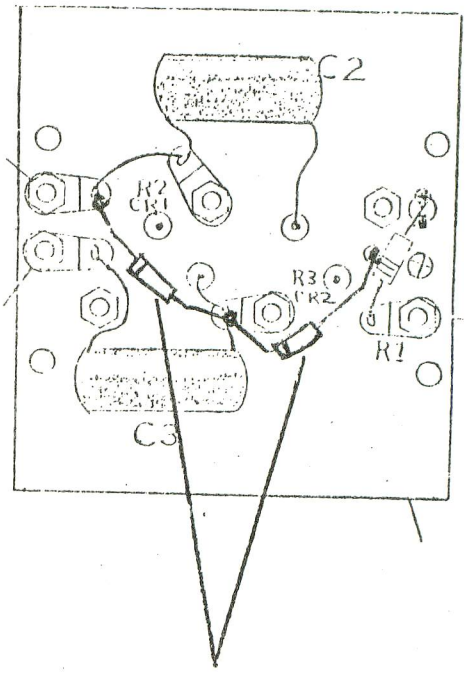
THIS COMPLETES THE MODIFICATION

Parts required may be purchased from Harris Service Parts Department. If questions should arise, please direct them to our Radio Field Service Department.

RF Driver

1A2A3 A1 - A5





CR3, CR4

CR3, CR4
Harris Part No. 384-0678-000
TRW Model No. DSR 3200
(Diode leads should be short as possible)

Please Note:

Schematic 852-7589-002

1A2A3
A1 - A5 RF Drivers

Q2, Q1 lable should be reversed