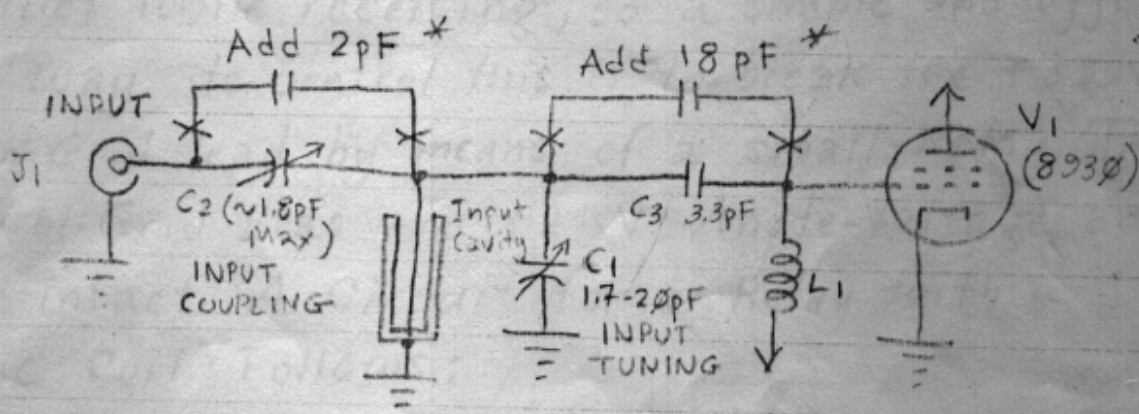


NOTES ON AM-6155/GRT TRANSMITTER MODIFICATIONS FOR 22 ϕ MHz.

— R.F. DECK MODIFICATIONS —

Output-Power and Gain for the Tube are Low, due to undercoupling of the Tube's Grid Circuit to the Input Network. Increase 'coupling' by adding 2 Capacitors, as shown:



These Capacitors should be Silver-Mica or other Low Loss Types, with a $>250V$ Rating.

- Set Plate Idling Current (Hole in Top Cover) to 50mA. Tune C_1, C_2 , for Maximum RF Output Power into a $\geq 500W$ Dummy Load, using $\sim 5W$ Drive (start out with Less). This will also result in a Minimum Input-V.S.W.R. (1.0), and C_1 will Tune at $\sim$ Mid-Range. Lock the Front-Panel Input Tuning and Coupling Controls in Place.

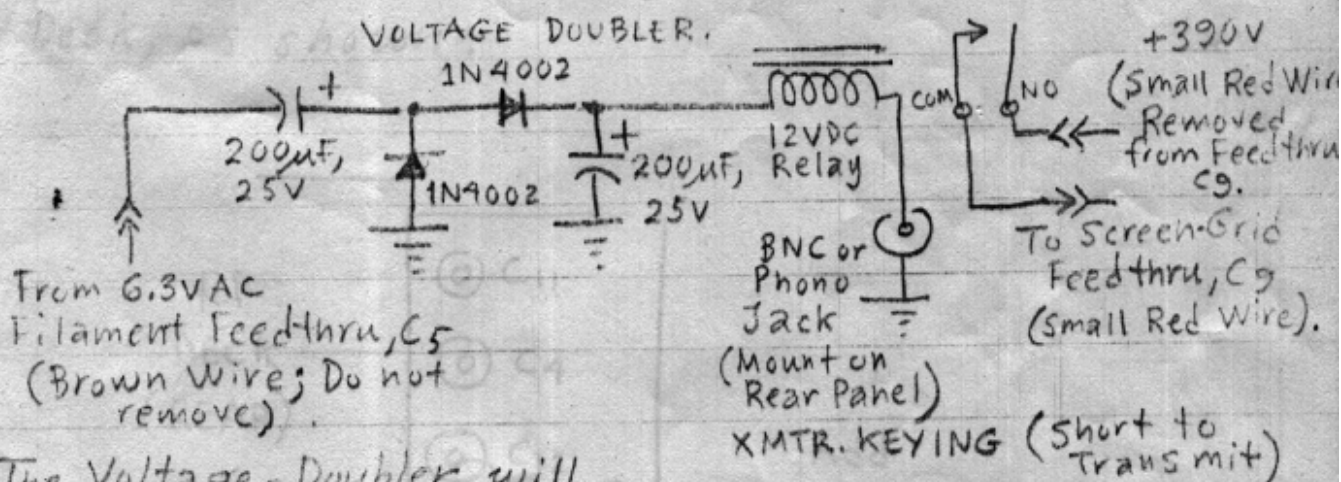
If V_1 is good, Output-Power will be $\sim 500W$ with 6W of Drive! Plate-Current $\sim 350mA$ @ Plate-Voltage $\approx 2KV$. Dial-Counter will Indicate $\sim "70"$ when Output is tuned to 22MHz.

(Be sure that Internal VHF/UHF Plunger is Pushed In, to the "UHF" Position!)

NOTES ON AM-6155/GRT TRANSMITTER MODIFICATIONS FOR 22 ϕ MHz.

— TRANSMITTER KEYING MODIFICATIONS —

As supplied, the Unit will always draw Idling Current, after initial warm-up, unless the Front Panel H.V. Switch is manually turned off. It is not desirable to allow the Tube to conduct while receiving, so a simple and effective way to control this is to break the +390V Screen-Grid lead by means of a small Relay. The Control-Grid Bias and +2kV Anode-Voltage are left intact. A Circuit for a Relay with a 12VDC Coil Follows:



(The Voltage-Doubler will not be needed if a 6.3VAC Relay can be located.)

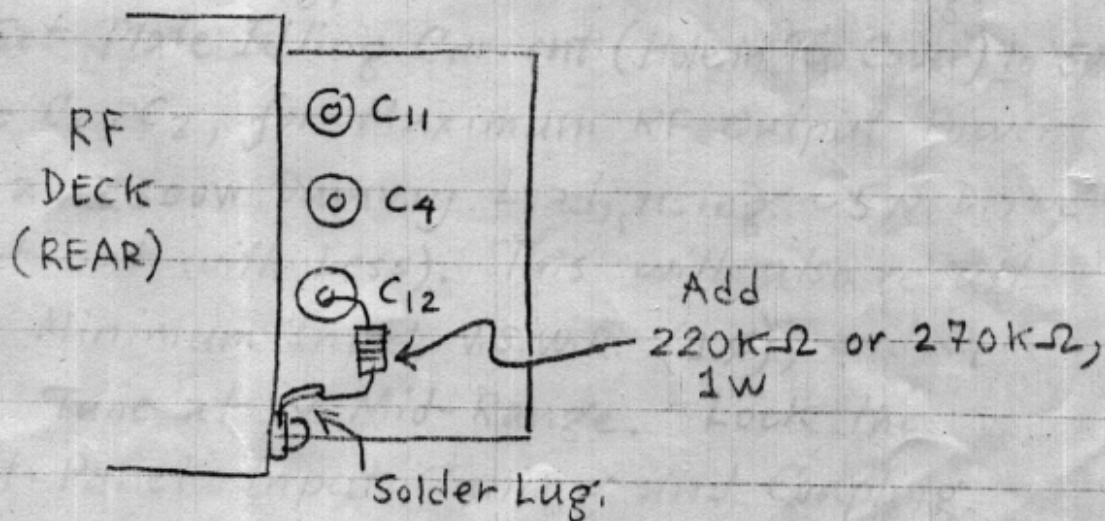
The Connections for this Circuit are located under the Blower, and lead into the R.F. Deck wall. Remove the Blower (it lifts out), and disconnect its Connector J3, for easy access. The Relay/Dbler. may be mounted anywhere convenient (plenty of room) if long leads are used from the Feedthrus.

W Dale P. Clement, AF1T W May, 1984
NOTES ON AM-G155/GRT TRANSMITTER
MODIFICATIONS FOR 220 MHz.

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— TRANSMITTER-KEYING MODIFICATIONS —

If the +390V Screen-Grid lead is broken as described, the Tube's Screen Grid will be left ungrounded, and could take on the Potential of the +2kV Power Supply! This could damage the tube, or Screen-Grid Bypass Capacitor. For safety, add a High Value Resistor, from Screen-Grid to Ground, which will prevent this, but yet draw negligible current while transmitting. This Resistor should be mounted to the RF Deck, as shown:



The added Rear-Panel XMTR-KEYING Jack may now be controlled by a Push-to-Talk Circuit, or by external Contacts on the XMT/RCV Antenna Relay.