

SECTION II

OPERATING PROCEDURES

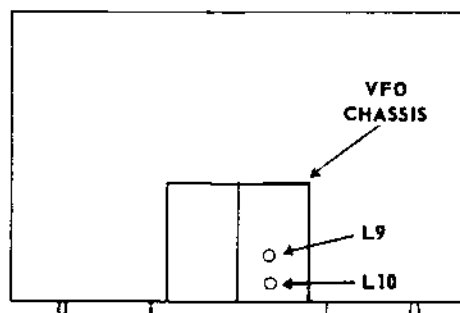


FIG. 2. TOP VIEW OF POWER SUPPLY SECTION

a. Place all switches on the power supply section to the OFF position.

b. Place the power supply section as close as possible to the RF section of the transmitter.

c. Insert the VFO output cable into power supply and RF section sockets labeled VFO. They are located on the rear apron of each of the two chassis.

d. Insert the 6-prong power plug from the power supply section into the socket on the RF section labeled POWER.

e. Place the power supply section FILAMENT switch to the ON position.

f. Place the EXCITER switch to the VFO TUNE position.

g. Place the VFO BAND SW. and the RF section EXC. BAND SW. to the 80 M position.

h. Adjust the slug of coil L10 (Refer to Fig. 2 for location) for maximum drive to the oscillator stage of the transmitter as determined by the maximum amount of oscillator plate current dip.

i. Place the VFO BAND SW. and the RF section EXC. BAND SW. to the 40M position.

j. Adjust the slug of coil L9 (Refer to Fig. 2 for location) for maximum drive to the oscillator stage as in step h.

2-49. VFO alignment and peaking is now completed and the transmitter may be reassembled for normal operation.

SECTION III

RADIO TELEPHONY OPERATION

3-1. RADIO TELEPHONY (AM) OPERATION.

3-2. After the transmitter has been properly tuned for CW operation it may be placed in AM operation, as follows:

a. Place TRANSMIT switch in OFF position.

b. Place FILAMENT switch in ON position. (Modulator panel). Allow a three minute warm-up for the tubes in the modulator section.

c. Connect microphone to microphone jack on the modulator panel. (Use only high impedance crystal or dynamic microphone).

d. Place MOD. PLATE switch in the ON position.

e. Set FUNCTION switch to PHONE position.

f. Place TRANSMIT switch in ON position, or actuate push-to-talk switch on microphone, if used.

g. Speak into the microphone in a normal tone of voice, while advancing the audio GAIN control until modulator plate current increases from it's static reading of about 60 Ma. up to 200 Ma. on PEAKS (the average reading will be lower). This will give full modulation of the carrier. An external de-

vice may be used to determine the exact point of 100% modulation, if desired.

h. When speech compression is desired, place the COMPRESSION switch to the ON position.

i. Talk into the microphone in a normal steady tone and advance the audio GAIN control until the modulation meter indicates 180 Ma. on peaks. The audio GAIN control should now be at approximately $7\frac{1}{2}$ and modulation will hold to approximately 95% with either a whisper or a shout into the microphone. Sideband splatter will also be greatly reduced.

CAUTION

DO NOT modulate the transmitter unless the final amplifier is fully loaded and the FUNCTION switch is in the PHONE position. DO NOT attempt to change bands while any voltages are on, other than filaments. Always place TRANSMIT switch in the OFF position, or release the push-to-talk switch first. Failure to heed this warning will most likely result in damage to the equipment.