

2-27. EXTERNAL CONNECTIONS.

WARNING

Before making any external connections remove the AC line cord plug from the AC outlet. Also make certain all panel switches are in the OFF, or down, position.

2-28. MICROPHONE JACK. Located on front panel of modulator section. Plug connections for Push-to-Talk operation; pin 2 to ground through the Push-to-Talk switch; audio input is made to pin 1.

2-29. KEY JACK. Located on front panel of RF section.

2-30. RECEIVER DISABLING RELAY. Connected to terminal strip marked ANT. RLY. Located on rear apron of the power supply chassis.

2-31. The Power Amplifier output network will match impedances of 52 to 600 ohms on all bands providing reactance is held to a minimum. The output is unbalanced with respect to ground, but may be used with balanced lines by the use of Balun coils or an antenna tuner. When using end fed antennas fed directly from the output connector make certain the antenna is not an even multiple of $\frac{1}{2}$ wave length as the impedance is very high and the output circuit will not match into it. The most practical long wire antenna is one that is slightly shorter than an odd multiple of $\frac{1}{4}$ wave length. ie; slightly shorter than $\frac{1}{4}$, $3/4$, $1\frac{1}{4}$, etc. See next page.

2-32. TUNE-UP PROCEDURE.

- a. Select proper crystal for desired frequency from Crystal Chart, TABLE II. Insert into CRYSTAL socket.
- b. Place all panel switches into the OFF position.
- c. Insert AC line cord plug into 115 V 60 cycle single phase Alternating Current source.
- d. Place FILAMENT SWITCH (Power Supply Panel) into the ON position. Allow three minute tube warm-up period.
- e. Set EXCITER and FINAL bandswitches to the desired operating frequency.
- f. Place FUNCTION switch to TUNE position.
- g. Set IMPEDANCE SELECTOR switch to "X" position and ANT. LOADING control counter-clockwise to MIN.
- h. Rotate DRIVE control to extreme left, or minimum position.
- i. Place SSB-AM switch, located on the rear of the RF chassis, to the AM position.
- j. Connect the antenna feed line to the co-axial connector marked ANT. This is located at the rear of the RF chassis.
- k. Place the METER SWITCH to the OSC. PLATE position.
- l. Place EXCITER switch (Power Supply Panel) in the ON position and tune the OSCILLATOR control for minimum dip of plate current.
- m. Place METER switch to BUFF. PLATE position.
- n. Advance DRIVE control clock-wise slowly. When a meter reading of 25 MA is obtained, tune BUFFER control for minimum dip of plate current.
- o. Place METER switch to F. GRID position and note amount of grid current. Should current exceed 15 MA rotate DRIVE control counter-clockwise to decrease this current to the proper value. If grid current is less than 15 MA, advance DRIVE control clockwise until desired current reading is obtained.