( ) Install the five knobs on the shafts of the panel controls with the pointers at the extreme counterclockwise marking on the panel, and tighten the setscrews.

( ) Install the 3 watt 115 volt candelabra lamp and the 6X4, 6AU6, and 6CL6 tubes in their proper sockets. See Figure 14.

( ) Install the handle on the cabinet with 10-24 screws.

( ) Mount the four rubber feet with 6-32 x 1/2" screws, #8 flat washers, #6 lockwashers, and 6-32 nuts as shown in Figure 16.

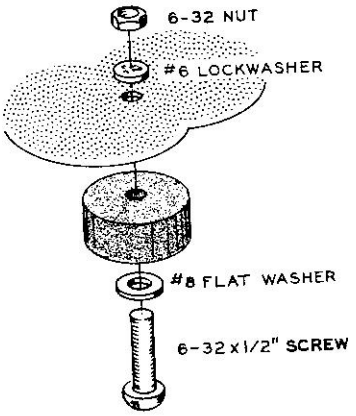

Figure 16

INITIAL TEST AND ADJUSTMENT

Plug the line cord into a 105-125 volt 50-60 cycle outlet. Do not plug into an outlet of higher voltage or lower frequency, or a DC outlet, as an incorrect power source will damage the transformer.

Turn power switch on and observe tubes and pilot lamp as they light up. If they do not light, turn power off and investigate filament circuit wiring. Set OSCILLATOR and METER controls about midway. Set precision (0-100) CYCLE switch to 10 or more and advance OUTPUT control. This should show a reading on the meter.

Calibrate the meter. NOTE: If in the following test the OUTPUT control is left off or fully counterclockwise, it will be severly damaged. Proceed as follows: Turn both CYCLE switches to 0. Turn the OUTPUT control to maximum clockwise. Turn the ATTENUATOR to maximum clockwise (10 volt or +20 db). Connect a wire between the red output binding post and one of the pilot light terminals on the meter terminal board. Use the terminal that gives a meter indication. Turn the METER control to produce a meter reading of 6.3 volts on the 0-10 scale (a little over half-way up the scale). Now remove the wire.

If an accurate AC voltmeter of adequate sensitivity (at least 500 Ω per volt on the 10 volt range for instance) is available, it should be used in preference to the above procedure. In that case: select a suitable frequency (between 50 and 3000 cycles, depending on the AC meter used) with the CYCLE and MULTIPLIER switches and connect the meter to the output of the generator. Adjust the METER control to produce equal readings on the two meters.

Adjust the OSCILLATOR control as follows: No connections to the output terminals. OUTPUT control at maximum. CYCLE switches and MULTIPLIER to 10 cycles or more. Turn OSCILLATOR control to give just over full scale reading on the meter. Select various frequencies between 10 cycles and 100 kc and if the output drops below full scale, readjust OSCILLATOR control for full scale. Do not adjust OSCILLATOR control higher than necessary as higher than nominal distortion will result.

This completes the adjustment of the instrument. Install the generator in the cabinet and fasten with the two #6 sheet metal screws through the rear of the cabinet into the chassis.