

AUDIO AMPLIFIER

TEST PROCEDURE

Equipment Required

- 1 Audio Signal Generator
- 2 Output Meter
- 3 Oscilloscope
- 4 Capacitor 820pF, and 5 pin DIN plug
- 5 Multimeter

output impedance 600Ω frequency range 50 Hz to 10 kHz (sinewave).

impedance 15 ohms, 0 to 5 watts—or 15Ω, 2 watt, resistor and Multimeter, 20k, o.p.v. (2.5V and 10V a.c. range).

Telequipment Type S31 or equivalent.

for use with audio generator.

20k, o.p.v., voltage and current measurement.

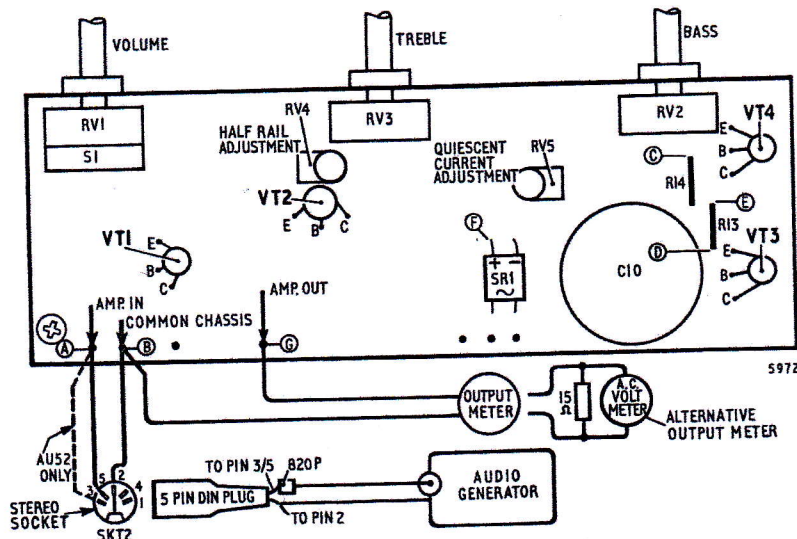


Fig. 3
Connection of test equipment.

Carry out the following procedure:—

1 HALF RAIL VOLTAGE, AND QUIESCENT CURRENT

- 1.1 Switch on unit, set pre-set control RV5 half way, Volume control to minimum and no signal input.
- 1.2 Connect the Multimeter (25 volt d.c. range) between test points 'B' and 'F' and measure +25 volt rail, then transfer Multimeter positive lead to test point 'E' and adjust the pre-set control RV4 for half the rail voltage obtained on the +25 Volt rail. Disconnect Multimeter.
- 1.3 Connect Multimeter (50 μ A range) between test points 'C' and 'D' (across resistors R13/14) then, adjust the pre-set control RV5 for a current of 6 to 7 mA i.e. 9.25 μ A to 12 μ A. This adjustment should be carried at an ambient temperature of 65°F. See Fig. 3 for location of test points and controls.
- 1.4 Repeat operations 1.1 to 1.3.

2 SENSITIVITY

- 2.1 Connect Audio Signal Generator and Output Meter as Fig. 3. Set Volume to maximum and Tone Controls to maximum Treble and Bass respectively.

- 2.2 Set Audio Signal Generator to 1000 Hz at a level of 45 mV. The output from the amplifier should be not less than 50 mW. (0.86V across 15Ω).

3 SENSITIVITY (at rated output)

- 3.1 Connect equipment and set controls as item 2.1.
- 3.2 Set Audio Signal Generator to 1000 Hz at a level of 300 mV. The output from the amplifier should be not less than 2 Watts. (5.4V across 15Ω).

4 TONE CONTROL CHECK

- 4.1 Connect equipment and set controls as item 2.1.
- 4.2 Set Audio Signal Generator to 3000 Hz and adjust the input level to give an output of 100 mW (1.2V across 15Ω).
- 4.3 Adjust the Treble tone control for minimum output, the level should fall to approx. 20 mW (0.54V across 15Ω). Reset Treble control for maximum treble.
- 4.4 Set Audio Signal Generator to 100 Hz and adjust the input level for an output of 100 mW (1.2V across 15Ω).
- 4.5 Adjust the Bass tone control for minimum output, the level should fall to 5 mW (0.27 across 15Ω).

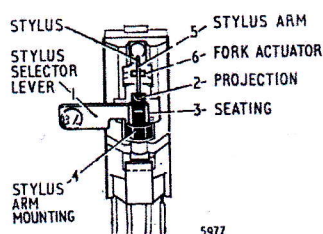


Fig. 4 P.U. cartridge details

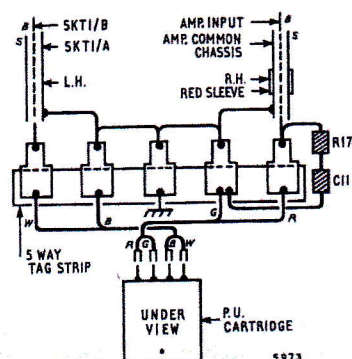


Fig. 5
P.U. cartridge connections