CALIBRATION DATA FOR 6000 AND 6005 TESTERS

GE 49 016A ZV

This procedure assumes the tester is in parmal operating condition. All measurements listed below are made with a 1,000 Dwns/Volt and a 20,000 Ohms/Volt meter. Be sure that readings for type of meter used agree with readings stated for that type of meter, and test meter has been checked for accuracy.

- 1. Check shunt and bias dials for indexing at zero when set at zero
- 2. With cathode and suppressor switched in the same position (Example: 1-1, 3-3) through the range of positions, and with the exception of position 0-0, the short test indicator lamps should show a cathode to suppressor short.
- 3. Set the selector switches to HS-5348-1, which is the setting for a 616 tube, FOR ALL THE FOLLOWING TESTS. Use calibrated 6L6 to calibrate Microhmo Range.
- 4. With meter on A.C. range and leads attached to Pin 2 and 7 of the octal socket, turn filament switch through range and check filament voltages. With no load, voltages will be slightly above those indicated on tester.
- 5. Vary line adjust control so that meter needle of tester points to line test. Place negative lead of D.C. voltmeter in Pin 8 of octal socket and the positive lead in Pin 3, When "TEST" button is depressed, meter should read:
 190V 2V on, 20,000 Ohms/Volt meter 150V ± 2V on, 1,000 Ohms/Volt meter

Which is the plate voltage. If these readings are not obtainable, adjust R-19 variable resistor so that correct voltage readings can be obtained when tester meter points to line test.

- 6. Attach leads of an A.C. meter to Fins 5 and 8 of the octal socket, with bias control at zero. When "TEST" button is depressed, readings should road: 2.8V ± .2V on 20,000 Ohms/Volt meter 2.5V ± .2V on 1,000 Ohms/Volt meter which is the signal voltage.
- 7. Using D.C. meter, place positive lead in Pin 8 and negative lead in Pin 5. Set bias dial to 100; when "TEST" button is depressed meter should read. 43V 2 2V on 20,000 Ohms/volt meter 40V 2 2V on 1,000 Ohms/Volt meter

to vary this voltage, adjust sliding tap on left side of resistor mounted on panel near transformer. Turn bias dial back to 22. Meter should read 3.3V ± 2V on 20,000 Ohms/Volt meter 3.3V ± .2V on 1,000 Ohms/Volt meter

To vary this voltage, bend the arm of the bias potentiometer.

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8. Lith meter on D.C. range, place negative lead in Pin 8 and positive lead in Pin 4. Then "TEST" button is depressed, meter should read:

135V % 2V on 20,000 Ohms/Volt meter 135V % 2V on 1,000 Ohms/Volt meter

which is the high screen voltage. Place switch in range "B", push "TEST" button; meter should read:

60V \$ 2V on 20,000 Ohms/Volt meter 56V \$ 2V on 1,000 Ohms/Volt meter

which is low screen voltage. This can be varied by moving the sliding tap on the right side of the resistor mounted on the panel near the transformer.

9. To calibrate micromho range, press "TEST" button and turn shunt dial until meter reads micromho rating of tube. If micromho rating of calibrated 6L6 tube is 6000 Mhos or less, the index position of the shunt dial is the 6000 range. If the value of the tube is over 6000 Mhos, the index position on the dial is the 15,000 range. Assuming a value of 6000 or less, this determines the 6000 range, so mark the dial. Increase biss until the meter reads 3000 Mhos on the 6000 scale. Rotate shunt dial until meter reads 3000 Mhos on the 3000 scale. This is the 3000 range, mark dial. Rotate shunt dial until meter reads 3000 range, mark dial.

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