**Alignment of Compensators**

**EQUIPMENT REQUIRED:** (1) Signal Generator using a fundamental frequency range covering the intermediate and tuning ranges of the receiver. Philco Model 077 Signal Generator which has a fundamental frequency range from 115 to 36,000 K.C., is the correct instrument for this purpose; (2) output meter, Philco Model 026 circuit tester incorporates a sensitive output meter, and is recommended; (3) Philco Fibre Handle Screw Driver, part No. 27-7059 and Fibre Wrench part No. 3164.

**OUTPUT METER:** The 026 output meter is connected to the plate and cathode terminals of the 6F6G tube. Adjust the meter to use the (0-30) volt scale and advance attenuator control of the generator until a readable indication is noted or the output meter after a signal is applied to the receiver in the following adjustments.

**DIAL CALIBRATION:** In order to adjust this receiver correctly the dial must be aligned to track properly with the tuning condenser. To do this proceed as follows:

1. Turn the tuning condenser to the maximum capacity position, then loosen dial hub, set screws and rotate the dial (condenser at maximum capacity) until the glowing beam indicator is centered between the first and second index lines at the low frequency end of the broadcast scale.
2. With dial in this position, tighten dial hub set screws.

**INTERMEDIATE FREQUENCY CIRCUIT**

Connect the 077 signal generator output lead through a .1 mfd. condenser to the control grid of the 6AS8 tube and the ground connection of the output lead to the chassis. Then set the controls of the signal generator and receiver as follows:

a. Signal Generator 470 K. C.

b. Receiver dial at 580 K. C.

c. Range switch of receiver at Range One.

d. Volume Control maximum.

e. Adjust I. F. Compensator (18B), (18A), (14B), (14A) for maximum output.

**RADIO FREQUENCY CIRCUIT**

1. Connect the signal generator output lead through a 200 mmfd. condenser from the “med” post of the generator to the aerial terminal; and the output lead ground connection to the chassis.

2. The R. F. Compensators are adjusted as follows for maximum output:

   **Range Switch Position**
   
   1. 1500 K. C.
   1. 580 K. C.
   1. 1500 K. C.

   **Signal Generator and Receiver Dial**
   
   1. (9A) Note A
   1. (9A) Note A
   1. (9A) Note A

**Tuning Range 530 to 1720 K.C.**

Remove the 200 mmfd. from the output lead and replace with a 400 ohm carbon resistor and reconnect to the antenna terminal.

**Tuning Range 2.3 to 7.4 M. C.**

Connect the output lead through a .1 mfd. condenser from the “med” post of the generator to the aerial terminal; and the output lead ground connection to the chassis.

**Alignment of Compensators**

**EQUIPMENT REQUIRED:** (1) Signal Generator using a fundamental frequency range covering the intermediate and tuning ranges of the receiver. Philco Model 077 Signal Generator which has a fundamental frequency range from 115 to 36,000 K.C., is the correct instrument for this purpose; (2) output meter, Philco Model 026 circuit tester incorporates a sensitive output meter, and is recommended; (3) Philco Fibre Handle Screw Driver, part No. 27-7059 and Fibre Wrench part No. 3164.

**OUTPUT METER:** The 026 output meter is connected to the plate and cathode terminals of the 6F6G tube. Adjust the meter to use the (0-30) volt scale and advance attenuator control of the generator until a readable indication is noted or the output meter after a signal is applied to the receiver in the following adjustments.

**DIAL CALIBRATION:** In order to adjust this receiver correctly the dial must be aligned to track properly with the tuning condenser. To do this proceed as follows:

1. Turn the tuning condenser to the maximum capacity position, then loosen dial hub, set screws and rotate the dial (condenser at maximum capacity) until the glowing beam indicator is centered between the first and second index lines at the low frequency end of the broadcast scale.
2. With dial in this position, tighten dial hub set screws.

**INTERMEDIATE FREQUENCY CIRCUIT**

Connect the 077 signal generator output lead through a .1 mfd. condenser to the control grid of the 6AS8 tube and the ground connection of the output lead to the chassis. Then set the controls of the signal generator and receiver as follows:

a. Signal Generator 470 K. C.

b. Receiver dial at 580 K. C.

c. Range switch of receiver at Range One.

d. Volume Control maximum.

e. Adjust I. F. Compensator (18B), (18A), (14B), (14A) for maximum output.

**RADIO FREQUENCY CIRCUIT**

1. Connect the signal generator output lead through a 200 mmfd. condenser from the “med” post of the generator to the aerial terminal; and the output lead ground connection to the chassis.

2. The R. F. Compensators are adjusted as follows for maximum output:

   **Range Switch Position**
   
   1. 1500 K. C.
   1. 580 K. C.
   1. 1500 K. C.

   **Signal Generator and Receiver Dial**
   
   1. (9A) Note A
   1. (9A) Note A
   1. (9A) Note A

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