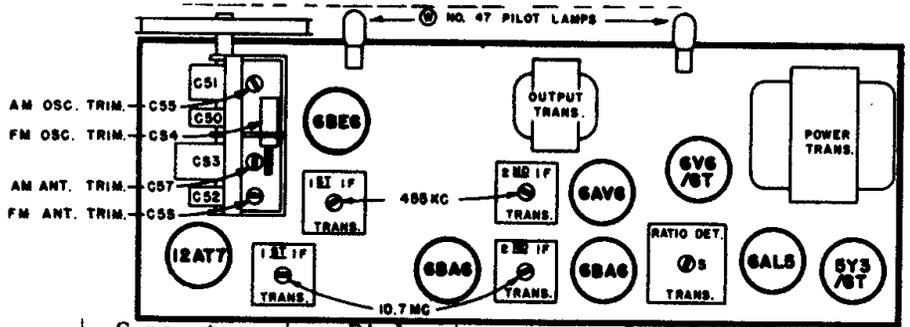


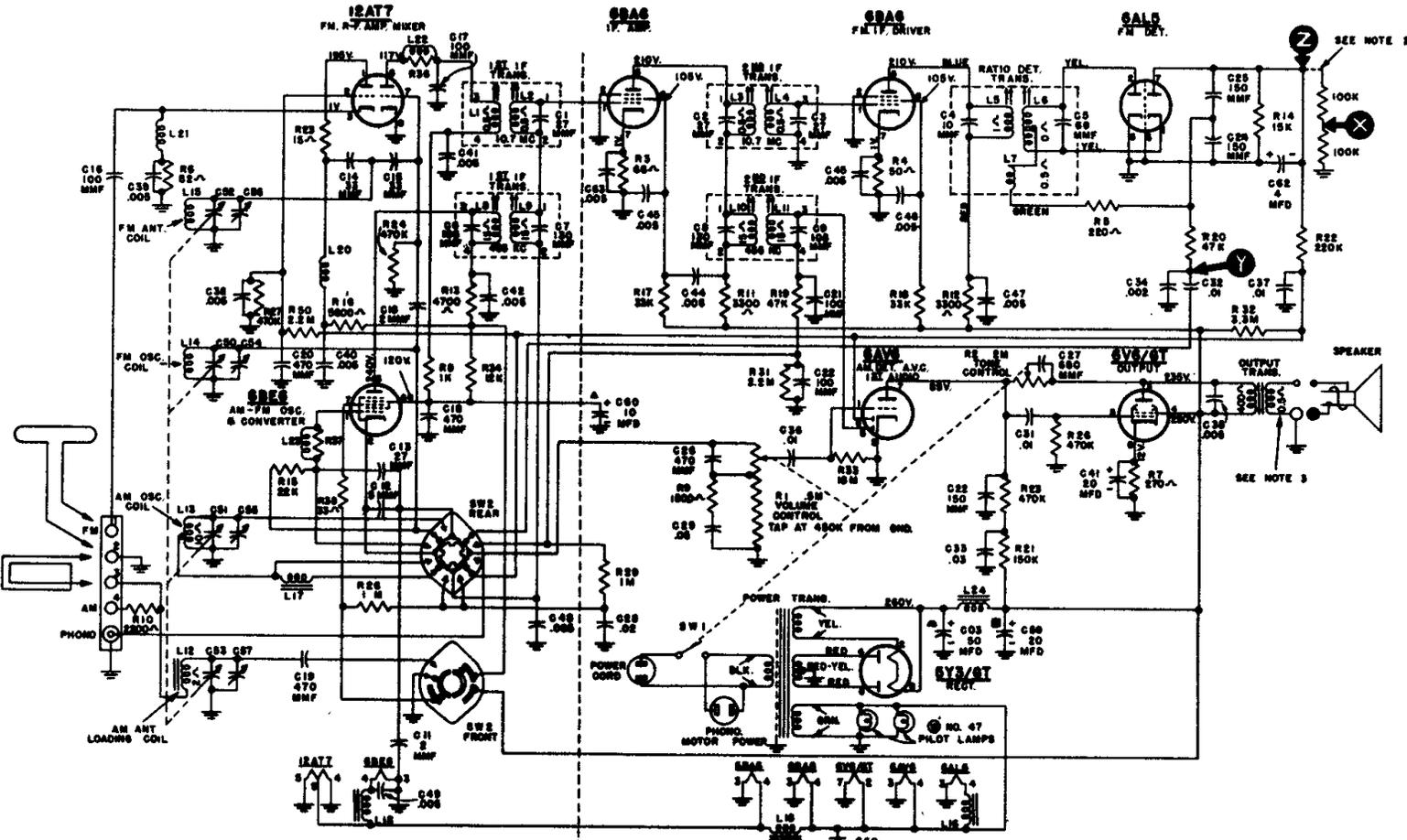
Westinghouse Electric

Model H-199
Chassis V-2137-1

F.M. Alignment



| Step | Connect Signal Generator to — | Generator Frequency | Dial Setting | Adjust |
|--|--|---------------------|------------------|---|
| 1 | Set the band switch to FM. | | | |
| 2 | Connect two 100,000 ohm resistors (the resistances must be equal within 5 percent) between pin #7 of the 6AL5 tube and ground as shown on the schematic diagram. | | | |
| 3 | Connect a V.T.V.M. between points "X" and "Y" (see schematic diagram). | | | |
| 4 | Stator of FM ant. section (C52) on tuning capacitor through a .01 mfd mica | 10.7 mc. | maximum capacity | Sec. of ratio det. trans. for zero (use medium strength signal) |
| 5 | Connect the V.T.V.M. between point "Z" and ground. | | | |
| 6 | Same as step 4 | 10.7 mc. | maximum capacity | Pri. of ratio det. trans. and pri. and sec. of 10.7 mc. 1st and 2nd I-F trans. for max. |
| NOTE: The pri. of the ratio det. trans. peaks in two places. Use the peak with the slug farthest out. | | | | |
| 7 | Reconnect the V.T.V.M. between points "X" and "Y", and increase the signal strength 2 times. | | | |
| 8 | Same as step 4 | 10.7 mc. | maximum capacity | Recheck sec. of ratio det. trans. for zero voltage |
| 9 | Reconnect the V.T.V.M. between point "Z" and ground. | | | |
| 10 | Same as step 4 | 10.7 mc. | maximum capacity | Pri. of ratio det. trans. for maximum voltage |
| 11 | Remove the two 100,000 ohm resistors that were inserted in step 2. | | | |
| 12 | FM ant. terminal through a 300 ohm non-inductive resistor | 105 mc. | 105 mc. | FM osc. trimmer (C54) for maximum output |
| 13 | Same as step 12. | 105 mc. | 105 mc. | FM ant. trimmer (C56) for maximum output |



NOTE:
 1. SWITCH SWE IS SHOWN IN EXTREME COUNTER CLOCKWISE POSITION SO FM BAND.
 FIRST POSITION CLOCKWISE IS AM BAND.
 SECOND POSITION CLOCKWISE IS PHONO.
 2. TO BE INSTALLED FOR ALIGNMENT ONLY.
 3. VOICE COIL DISCONNECTED.
 4. ALL VOLTAGES MEASURED FROM CHASSIS (GND.) USING A 20,000 OHM/VOLT METER.
 LINE VOLTAGE 117 V.A.C. VOLTAGES SHOULD BE AS SHOWN ± 20 PER CENT.

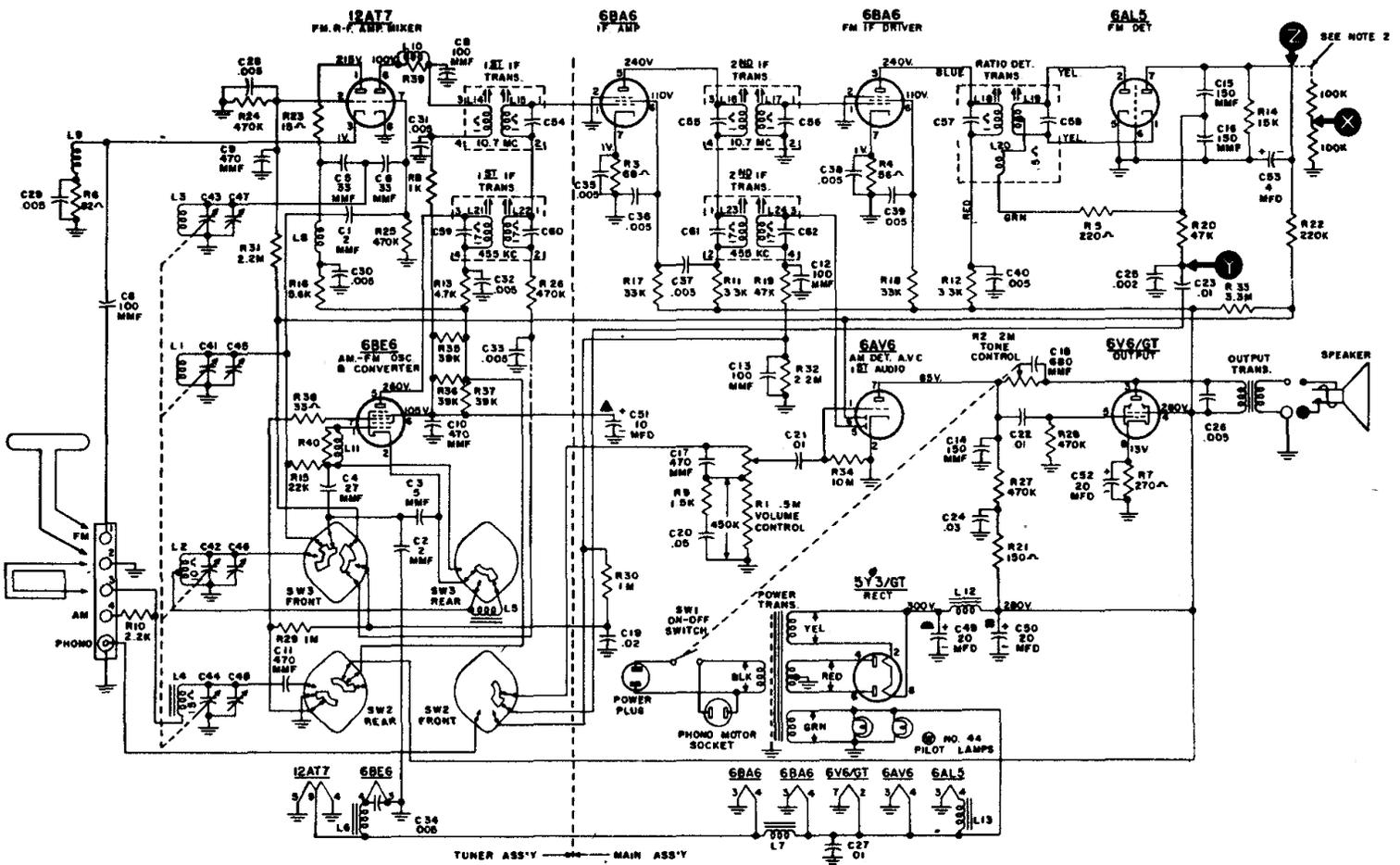
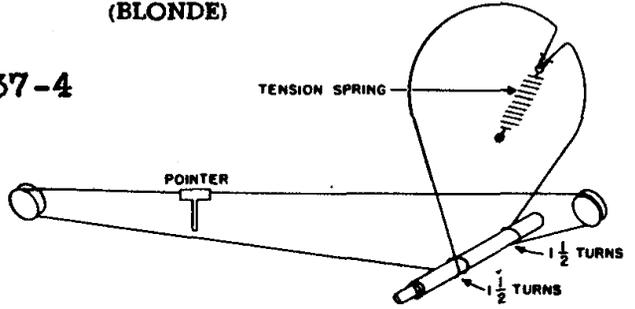
Westinghouse Electric Corporation

MODELS H-305C8 AND H-306C8

(MAHOGANY)

(BLONDE)

Chassis V-2137-4



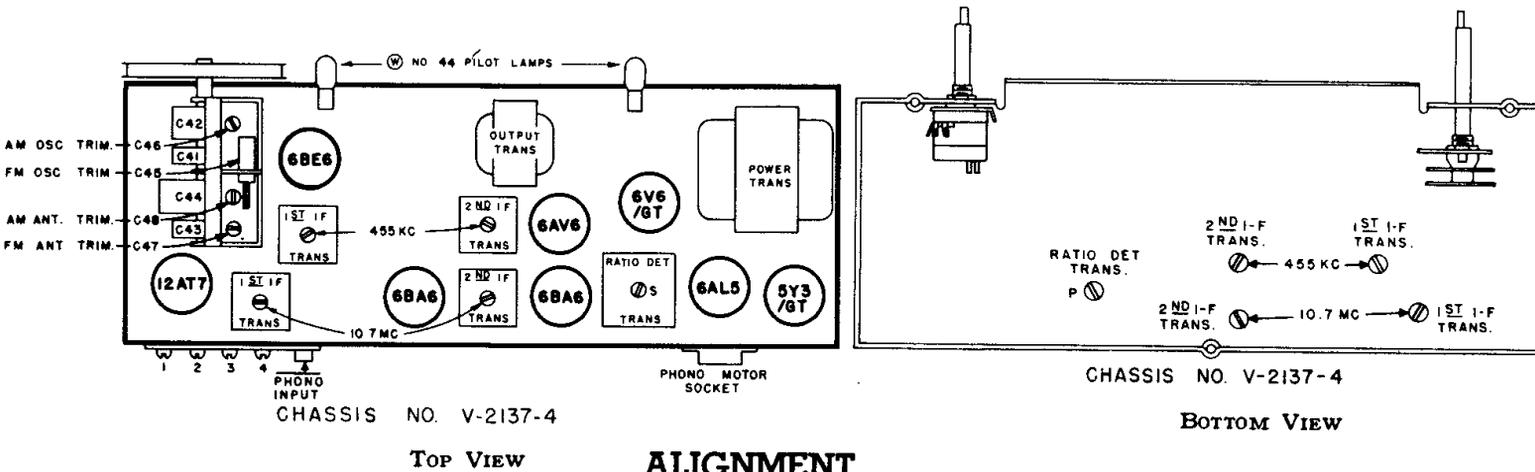
- NOTE
- 1 SELECTOR SWITCH SW2 AND SW3 ARE SHOWN IN EXTREME COUNTER CLOCKWISE POSITION OR FM BAND
FIRST POSITION CLOCKWISE IS AM BAND
SECOND POSITION CLOCKWISE IS PHONO
 - 2 TO BE INSTALLED FOR ALIGNMENT ONLY.
 - 3 ALL VOLTAGES MEASURED FROM CHASSIS (GND) USING A 20,000 OHM/VOLT METER. LINE VOLTAGE SET AT 117 V.A.C VOLTAGES SHOULD BE AS SHOWN \pm 20 PER CENT

CHASSIS NO. V-2137-4

Westinghouse

RADIO TELEVISION

MODELS H-305C8 AND H-306C8 (Continued)



ALIGNMENT

BROADCAST BAND

Connect an output meter across the speaker voice coil.

While making the following adjustments, keep the volume control set for maximum output, the tone control set for maximum treble, and the signal generator output attenuated to avoid A.V.C. action.

| Step | Connect Signal Generator to— | Signal Generator Frequency | Radio Dial Setting | Adjust |
|---|--|----------------------------|--------------------|---|
| 1 | Set the band switch to AM. | | | |
| 2 | Stator of tuning capacitor (C44) through a 0.1 mfd capacitor | 455 kc. | maximum capacity | 455 kc. pri. and sec. of 1st and 2nd I-F trans. for max. output |
| <i>NOTE: If the I-F transformers are badly mis-aligned, it may be impossible to obtain sufficient output using the above system. In this event, it will be necessary to align each transformer separately. Start with the last I-F transformer and work forward, connecting the signal generator to the control grid of the tube preceding the transformer under alignment.</i> | | | | |
| 3 | Radiated signal (no actual connection) | 1600 kc. | 1600 kc. | AM osc. trimmer (C46) for max. output |
| 4 | Radiated signal (no actual connection) | 1400 kc. | tune to signal | AM ant. trimmer (C48) for max. output (rock-in adjustment) |

FM BAND

Do not align the FM circuits until all AM adjustments have been completed.

| Step | Connect Signal Generator to— | Signal Generator Frequency | Radio Dial Setting | Adjust |
|--|---|----------------------------|--------------------|---|
| 1 | Set the band switch to FM. | | | |
| 2 | Connect two 100,000 ohm resistors (the resistances must be equal within 5 percent) between pin No. 7 of the 6AL5 tube and ground as shown on the schematic diagram. | | | |
| 3 | Connect a V. T. V. M. between points "X" and "Y" (see schematic diagram). | | | |
| 4 | Stator of FM ant. section (C43) on tuning capacitor through a .01 mfd mica capacitor | 10.7 mc. | maximum capacity | Sec. of ratio det. trans. for zero (use medium strength signal) |
| 5 | Connect the V. T. V. M. between point "Z" and ground. | | | |
| 6 | Same as step 4 | 10.7 mc. | maximum capacity | Pri. of ratio det. trans. and pri. and sec. of 10.7 mc. 1st and 2nd I-F trans. for max. |
| <i>NOTE: The pri. of the ratio det. trans. peaks in two places. Use the peak with the slug farthest out.</i> | | | | |
| 7 | Reconnect the V. T. V. M. between points "X" and "Y", and increase the signal strength 10 times. | | | |
| 8 | Same as step 4 | 10.7 mc. | maximum capacity | Recheck sec. of ratio det. trans. for zero voltage |
| 9 | Reconnect the V. T. V. M. between point "Z" and ground. | | | |
| 10 | Same as step 4 | 10.7 mc. | maximum capacity | Pri. of ratio det. trans. for maximum voltage |
| 11 | Remove the two 100,000 ohm resistors that were inserted in step 2. | | | |
| 12 | FM ant. terminal through a 300 ohm non-inductive resistor | 105 mc. | 105 mc. | FM osc. trimmer (C45) for maximum output |
| 13 | Same as step 12 | 105 mc. | 105 mc. | FM ant. trimmer (C47) for maximum output |