C-10

500 KC

STATIONS

OSC. SECTION

L-5 3IM OSC. 9.5 MC.

6SA7

RANGES

CHASSIS LAYOUT

RADIO-PHONOGRAPH TONE

OFF-ON VOLUME

ALIGNING INFORMATION

Never re-align unless absolutely necessary.

Use a good modulated signal generator (test oscillator with variable output voltage) and a sensitive output meter across the voice coil of the speaker.

Always align using the smallest possible input from the signal generator, as a strong signal makes adjustments inaccurate. Always turn the receiver volume control "full on".

Aligning Procedure (Follow this order exactly):

1. Dial Pointer Adjustment.

With the plates of the gang condenser fully engaged, check to be sure that the dial pointer is in a vertical position directly on the calibration mark located at the low frequency end of the dial scale. It appears as a small gold dot just below the center gold line and the word "Short Wave". Adjust if necessary.

2. Intermediate Frequency Adjustments.

- 2.1 Set the range switch to "BC" broadcast position.
- 2.2 Set the pointer to the extreme low frequency end of the dial.
- 2.3 Connect the ground terminal of the signal generator to the chassis ground terminal.
- 2.4 Introduce a modulated 460 kilocycle signal to the grid of the 68A7 modulator tube (No. 8 terminal or C) using a .1 mfd. capacitor in series with the output lead of the signal
- 2.5 Adjust the I.F. 460 kc trimmers for maximum output in the following order:
 - Secondary of 2nd I.F. transformer C19
 - B. Primary of 2nd I.F. transformer C18C. Secondary of 1st I.F. transformer C17

 - D. Primary of 1st I.F. transformer C16

3. Radio Frequency Adjustments

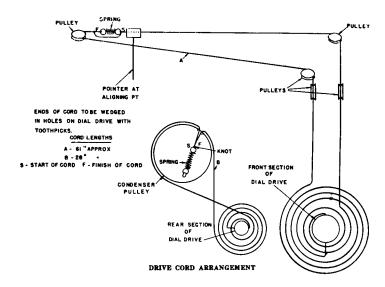
Broadcast Range

- 3.1 Set the range switch to Broadcast "BC".
- 3.2 Set the signal generator frequency and the receiver tuning dial to 1500 Kc.
- 3.2 Set the signal generator frequency and the receiver tuning that to 1000 Kc.
 3.3 Connect a 200 mmfd. capacitor in series with the antenna lead from the signal generator to the "Ant." terminal on the set, replacing the .1 mfd. capacitor.
 3.4 Adjust the "BC" band oscillator trimmer C10 for maximum signal and correct calibration.
 3.5 Adjust antenna trimmer C for maximum output. "Rock" the gang to obtain maximum receiver.

- 3.6 Adjust L6 "BC Oscillator 600 kc adjust" for correct calibration and L1, L2 "BC Ant. 600 kc adjust" for maximum sensitivity.
- 3.7 Repeat 3.4, 3.5, 3.6 until no further improvement of calibration or sensitivity is obtained.

4. 31 Meter Spreadband Range.

- 4.1 Set the range switch to Shortwave "SW".
- Set the Signal Generator frequency and the receiver tuning dial to 9.500 megacycles.
 Connect a 400 ohm carbon resistor in series with the antenna lead from the Signal Generator to the "Ant." terminal on the set, replacing the 200 mmfd. capacitor.
- 4.4 Adjust the "31 M Osc. 9.5 mc" adjusting screw L5 for maximum signal and correct calibra-
- 4.5 Adjust the "31 M Ant. 9.5 mc." adjusting screw L3L4 for maximum output "Rock" the gang to obtain maximum peak.
- 4.6 Check sensitivity at 9.250 mcs. and 9.750 mcs.



NORMAL VOLTAGE READINGS

Take all readings with the chassis operating and tuned to 1000 Kc-no signal. Use a line voltage of 117 volts or make allowance for any variations.

Use a good high resistance voltmeter having a resistance of at least 1000 ohms per volt. Read from the indicated terminals to the chassis base. See the location chart for position of sockets. AC voltages are indicated by italics.

NORMAL VOLTAGE READINGS

Tube		Socket Terminals								
	Circuit	2	3	4	5	6	7	8		
6SA7	ModOsc.		225	125	-6.5		6.4	25		
6SK7	I.F. Amp.			25	3	100	6.4	225		
6SQ7	Demod. AVC, 1st Audio	25		25	25	82	6.4			
6K6GT	Output		260	225		25	6.4	13		
6X5GT	Rectifier		280	225	280	260	6.4	320		

See Data Sheet 77

MODEL-752 INSTRUCTION DATA

ALIGNING INFORMATION

CAUTION. When the chassis is removed from the cabinet for servicing, the operator must be extremely careful not to place the chassis on ony grounded object while the line cord is "plugged-in" to the supply line. Tube shells and other metal parts of the chassis are "Hot" with respect to ground, therefore the operator must guard against accidental contact with "ground" while handling the chassis.

Never realign unless absolutely necessary.

Use a good modulated signal generator (test oscillator) with variable output voltage, and a sensitive output meter across the voice coil of the speaker. Always align using the smallest possible input from the signal generator. A strong signal makes adjustments inaccurate. Always have the volume control "full on".

CAUTION. Do not "ground" the Signal Generator.

ALIGNING PROCEDURE. (follow this order exactly).

1. Dial Pointer Adjustment.

With the plates of the gang tuning condenser fully engaged set the dial pointer in a horizontal position directly parallel with the dividing line between the dark and light sections of the dial, pointing towards the .550 mcs. mark.

- Intermediate Frequency Adjustments.
 2.1 Tune the set to the extreme low frequency position. (Variable capacitor plates all the
- 2.1 Tune the set to the extreme low frequency position. (Variable capacitor plates all the way in.)

 2.2 Connect the ground terminal of the signal generator to the common bus.

 2.3 Introduce a modulated signal of 460 kilocycles, using a .01 mfds. capacitor in series with the lead from the signal generator to the oscillator aligning capacitor, C21, located on the front section of the variable capacitor.

 2.4 Adjust the I.F. aligners for maximum output in the following order:

 A. Secondary of second I.F. Transformer C10.

 B. Primary of second I.F. Transformer C9.

 C. Secondary of first I.F. Transformer C15.
- - Primary of first I.F. Transformer C14.

 Radio Frequency Adjustments.
 Replace the .01 mfd. capacitor, in series with the output lead of the signal generator, with a 200. mmfd. capacitor and connect them to the antenna terminal located on the back of the loop assembly.

- 3.2 Set the signal generator's frequency and the receiver's tuning dial to 1.5 megacycles.
 3.3 Adjust the oscillator C21, and antenna C18, aligning capacitors for maximum signal.
 3.4 Check calibration and sensitivity at 600 kc. Adjust "BC Oscillator 600 Kc." for correct calibration and maximum sensitivity.
 3.5 Repeat 3.3 and 3.4 until further adjustment at either 1.5 mcs. or 600 kc. makes no improvement in performance.

4. Wave Trap Adjustment.

(Leave the receiver connected in the same manner as when making the Radio Frequency Adjustments.)

Tune the receiver dial to 1000 Kc.

4.2 Set the signal generator frequency to 460 kc. and introduce a fairly strong modulated signal to the receiver.

4.3 Adjust the wave-trap aligner C28 for minimum signal.

NORMAL VOLTAGE READINGS

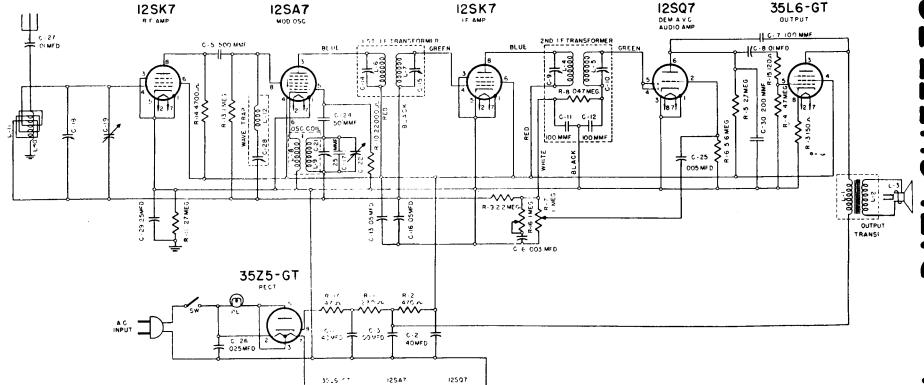
Use a good high resistance voltmeter having a resistance of at least 1000 ohms per volt. Take all DC voltage readings on the 500 volt scale except where an asterisk appears. Take all readings with chassis operating and tuned to 1000 Kc.—no signal. Use a line voltage of 120 volts or make allowance for the variation. Read from indicated socket terminals to terminal No. 3 of the 125K7 I.F. Amp. Socket (B-). AC voltages are indicated by italics; when the receiver is operated from a DC power supply, DC voltages will appear in place of AC voltages shown.

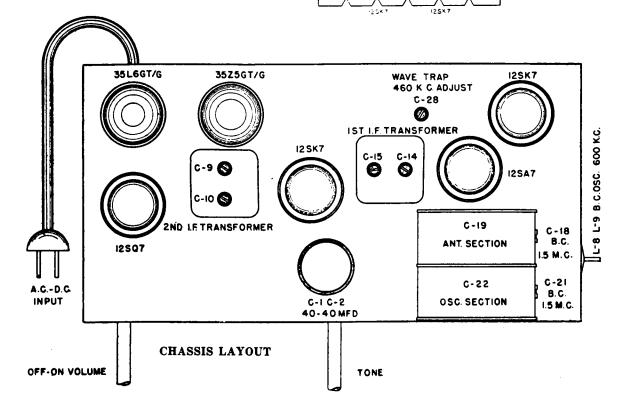
Tube	Socket Terminals										
	Circuit	1	2	3	4	5	6	7	8		
12SK7	R.F. Amp		52	0	0	0	87	40	40		
12SA7	Mod Osc		26	95	82	.5*	0	40	0		
12SK7	I.F. Amp.	0	12.5	0	0	0	87	25.5	85		
12SQ7	Demod., AVC First Audio	0	0	0	0	0	15	12.5	0		
35L6GT	Output	0	87	100	87	0		5.2	5.2		
35Z5GT	Rectifier	_	120	115	_	115	_	87	125		

* Read on 100.V. scale of meter having a resistance of 1000 ohms per volt.

See Data Sheet 79

MODEL-761 INSTRUCTION DATA STROMBERG-CARLSON DATA SHEET 78





1946-47 AC-DC MODEL 761

Further Instructions on Data Sheet 78

1.F. = 460KC.