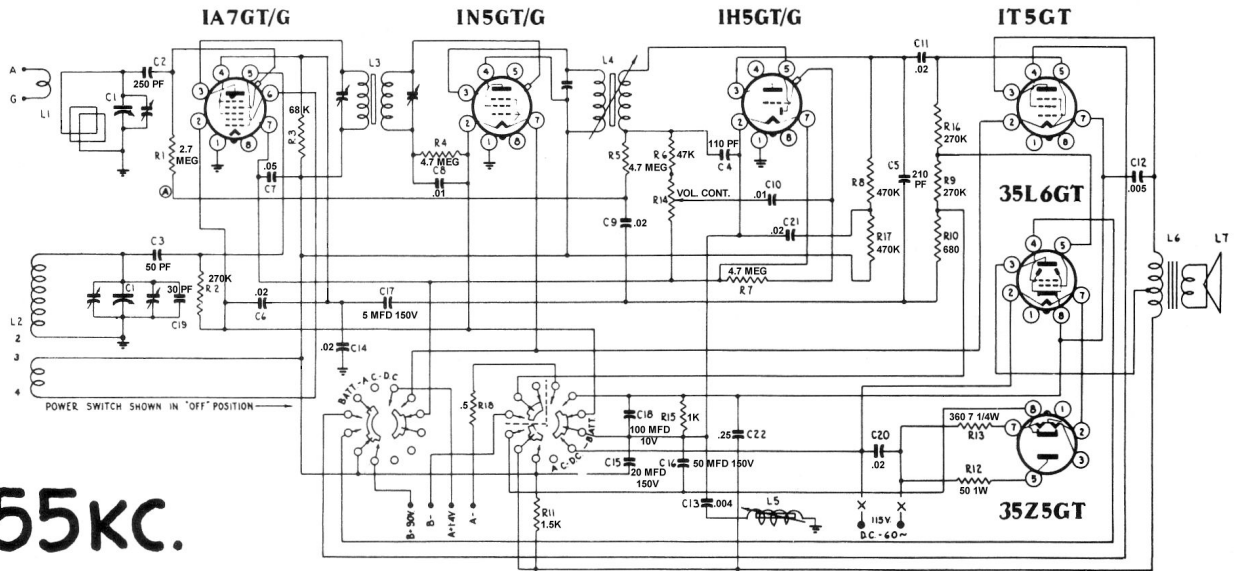
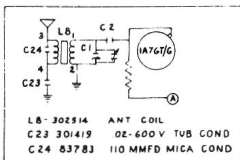


ALTERNATE INPUT SYSTEM WITH ANTENNA COIL USED ON SOME MODELS



**I.F. = 455 KC.**

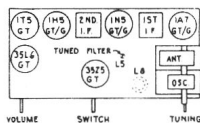
ALL VOLTAGES MEASURED FROM TUBE SOCKET TO "B" TERMINAL WITH 1000 OHM PER VOLT METER

BATTERY OPERATION  
"A" DRAIN - 200 MILS  
"B" DRAIN - 8-3 MILS

A C - D C OPERATION  
INPUT - 20 WATTS

On AC-DC operation, the power switch connects the four 1.4 volt tube filaments in series between the cathode of the output pentode portion of the 35L6GT tube and "B" negative. This supplies the bias for the 35L6GT as well as the filament current for the other tubes. The switch also disconnects the 1T5G screen grid, rendering it inoperative and the output transformer is fed at the low impedance tap from the plate of the 35L6GT. The circuit is otherwise the same as on battery operation.

In order to make the chassis "dead" from a shock-proof standpoint, the circuits are all returned to a "B" negative line which is by-passed to the chassis through C17 and C14 in series and also through the tuned filter circuit L5 and C13. This filter has a very low impedance at the I.F. frequency and renders the complete circuit quite stable during operation. The "adjustment of this filter circuit" is quite simple. First unscrew the core of the filter coil a few turns to the left. Then after aligning the second I.F. transformer and first I.F. transformer in that order screw in the filter core until oscillation or severe swish ceases. Then re-adjust the first I.F. transformer again for maximum output (do not touch second stage transformer). If the receiver becomes unstable again, screw in the filter core a little further. These operations should be repeated until maximum sensitivity with good stability is obtained. The same adjustments should hold for battery operation.

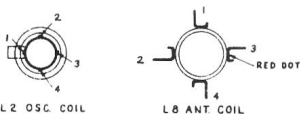


ALIGNMENT: A well shielded oscillator and suitable output meter are required. The output meter may be connected across the speaker voice coil terminals. Proceed with alignment as follows using the weakest possible signal that will give readable output and having the volume control full on. It is preferable to align the chassis on AC-DC because under these conditions the tuned filter (L5) adjustment will be proper for battery operation also.

NOTE: In models which contain Loop Antenna in place of Antenna coil, the back is not permanently attached to chassis. Alternate input schematic is shown using antenna coil in place of Loop Antenna.

NOTE: No. 7 operation should be performed with the chassis replaced in the case in its normal operating location. When replacing the chassis make sure that the speaker leads are kept clear of the speaker cone but at the same time well toward the front corner of the case and away from the 1H5G grid lead.

In order to obtain correct calibration on the dial scale, the pointer should be set in a vertical position when the gang condenser is fully meshed.



No.	Dummy Antenna	Connection of Signal Generator to Receiver	Signal Generator Frequency	Receiver Dial Setting	Trimmer to Be Adjusted	Description of Adjustment
1.	.1 mfd. cond.	1A7G grid cap	455 Kc	High frequency end	Core on top of 2nd I.F. Transformer	Peak for maximum output with the filter coil core (L5) screwed well out.
2.	.1 mfd. cond.	1A7G grid cap	455 Kc	High frequency end	1st I.F. Trimmers	Peak for maximum output.
3.	.1 mfd. cond.	1A7G grid cap	455 Kc	High frequency end		Screw in L5 core until there is no oscillation squeal or excess swish.
4.	.1 mfd. cond.	1A7G grid cap	455 Kc	High frequency end		Repeat operation 2
5.	.1 mfd. cond.	1A7G grid cap	455 Kc			Repeat operation 3
6.	.1 mfd. cond.	1A7G grid cap	1550 Kc	High frequency end	Trimmer on oscillator (front) section of gang condenser.	Adjust to bring in signal.
7.	Tune in a weak broadcast station between 1450 and 1500 kc.				Trimmer on antenna (rear) section of gang cond.	Peak for maximum output while rocking the gang slightly back and forth.

**1947-48  
AC-DC  
BATTERY  
MODEL  
R 551**