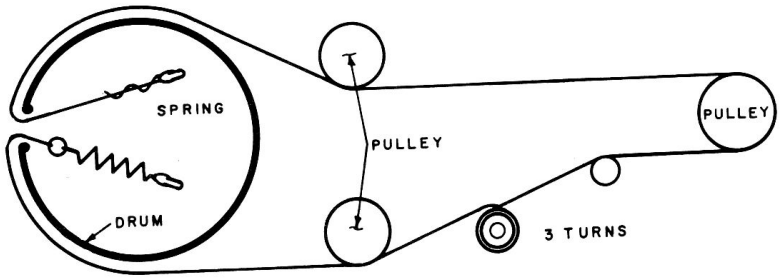
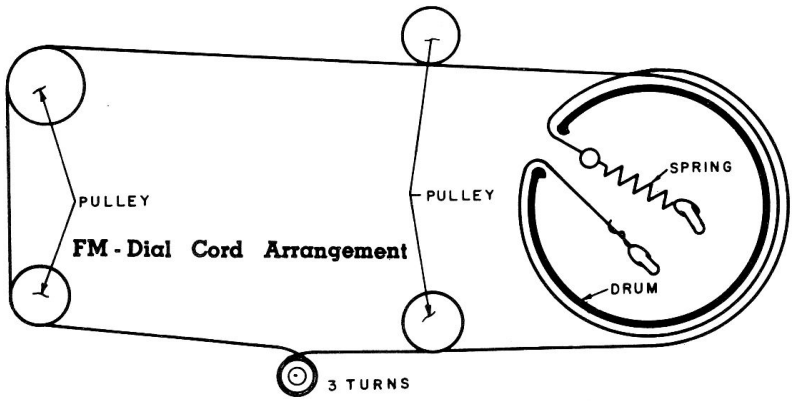
RCA SHC661, SHC662, SHC667 SERVICE INFORMATION

Record changer SHC661, 662, 667 ..... Garrard Model 210
Record changer SHC663 ..... Garrard Model Type "A"

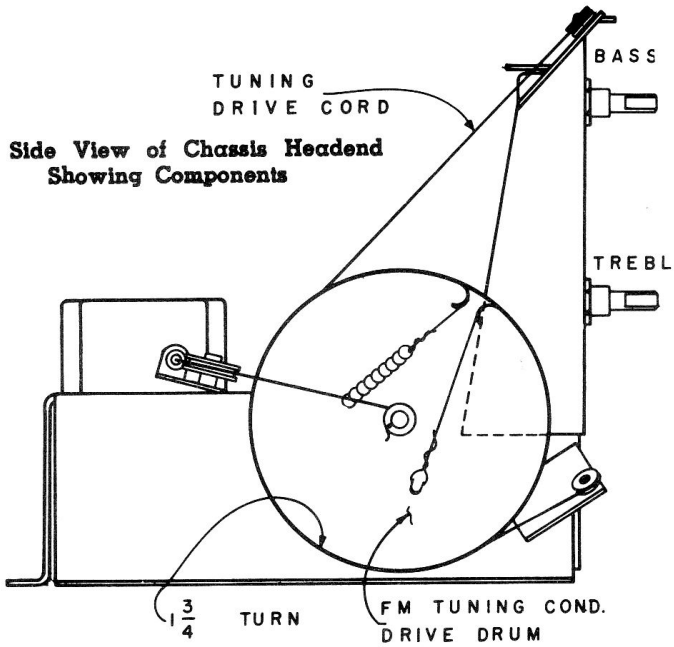
Cartridge *63-24304
Stylus 33-1/3, 45 r.p.m. — Diamond *63-24305
Stylus 78 r.p.m. — Sapphire *63-24053



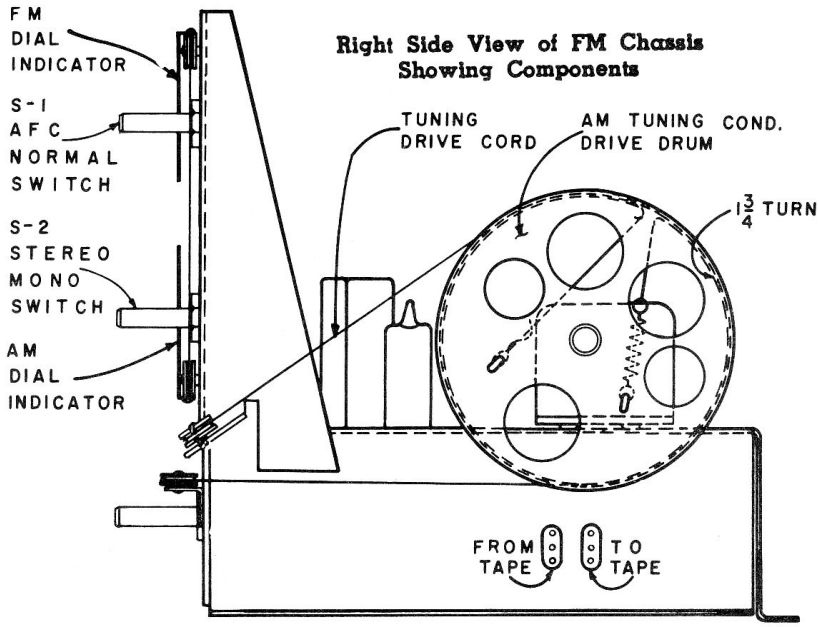
AM - Dial Cord Arrangement with Gang Capacitor in Closed Position



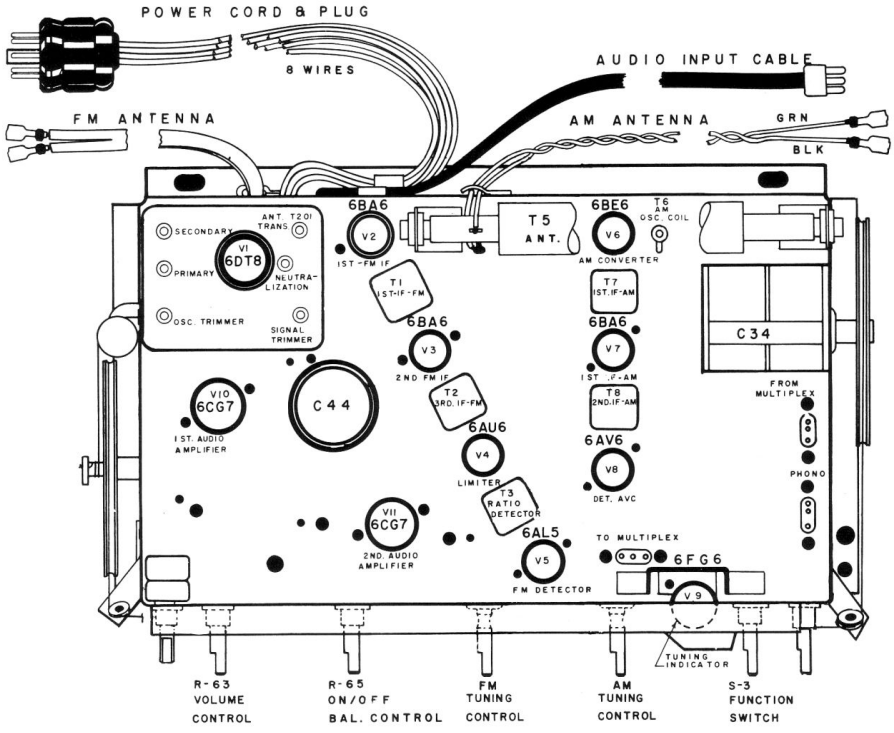
FM - Dial Cord Arrangement



Left Side View of Chassis Headend Showing Components



Right Side View of FM Chassis Showing Components



ALIGNMENT PROCEDURE

ALIGNMENT INDICATORS:

An RCA VoltOhmyst® or equivalent VTVM is necessary for measuring developed d-c voltage during FM alignment. Connections are specified in the alignment tabulation. An output meter is also necessary to indicate maximum audio output during AM alignment. Connect the output meter across the speaker voice coil. The RCA VoltOhmyst can also be used as an AM alignment indicator, either to measure audio output or to measure AVC voltage. When audio output is being measured, the volume control should be turned to maximum. Adjust tone control to mid-position.

SIGNAL GENERATOR:

For all alignment operations, connect the low side of the signal generator to the receiver chassis, close to the point of signal injection. If output measurement is used for AM alignment, the output of the signal generator should be kept as low as possible to avoid AVC action.

AM Alignment

FUNCTION SWITCH IN AM POSITION—VOLUME CONTROL MAXIMUM—TONE CONTROL CENTER

Steps	Connect high side of sig. gen. to—	Set Sig. gen. to—	Set radio dial to—	Adjust— for max.
1	Pin #1 of V-7 in series with .01 mfd	455 kc. (mod.)	Quiet point at high freq. end	T-8 bottom core (sec.) top core (pri.)
2	Pin #1-V-6 in series with .01			T-7 bottom core (sec.) T-6 top core (pri.)
3	Short wire placed near loop for radiated signal	1620 kc. (mod.)	1620 kc. (gang fully open)	C-240 (osc.)
4				
5		600 kc. (mod.)	600 kc. signal	T-6 (rock gang)
6		Repeat Steps 4 and 5 until Maximum gain is obtained		

Oscillator frequency is above signal frequency on both AM and FM.

If an FM sweep generator is used for FM alignment, adjust for 10.7 mc, 0.4 mc sweep. Connect oscilloscope across C-13, adjusting discriminator T-3 top core for 10.7 mc crossover, and T-3 bottom core for balanced peaks. Peak separation should be approximately 330 kc. When aligning the other FM tuned circuits, connect oscilloscope lead through a 270K resistor to pin 1 of V-4. Follow alignment table sequence, adjusting for maximum gain and symmetrical curves.

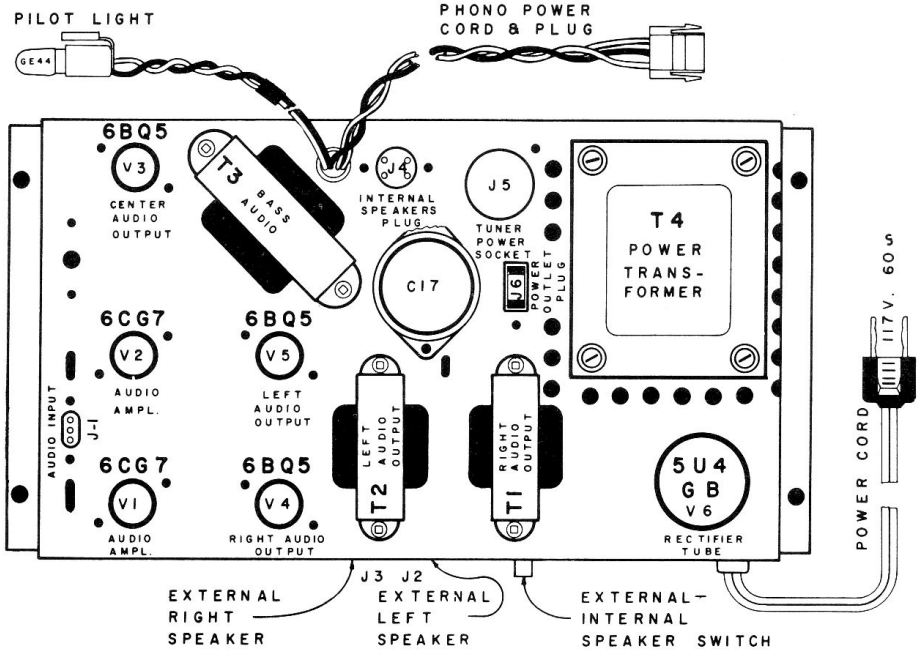
FM Alignment

FUNCTION SWITCH IN FM POSITION—VOLUME CONTROL MINIMUM—TONE CONTROL CENTER

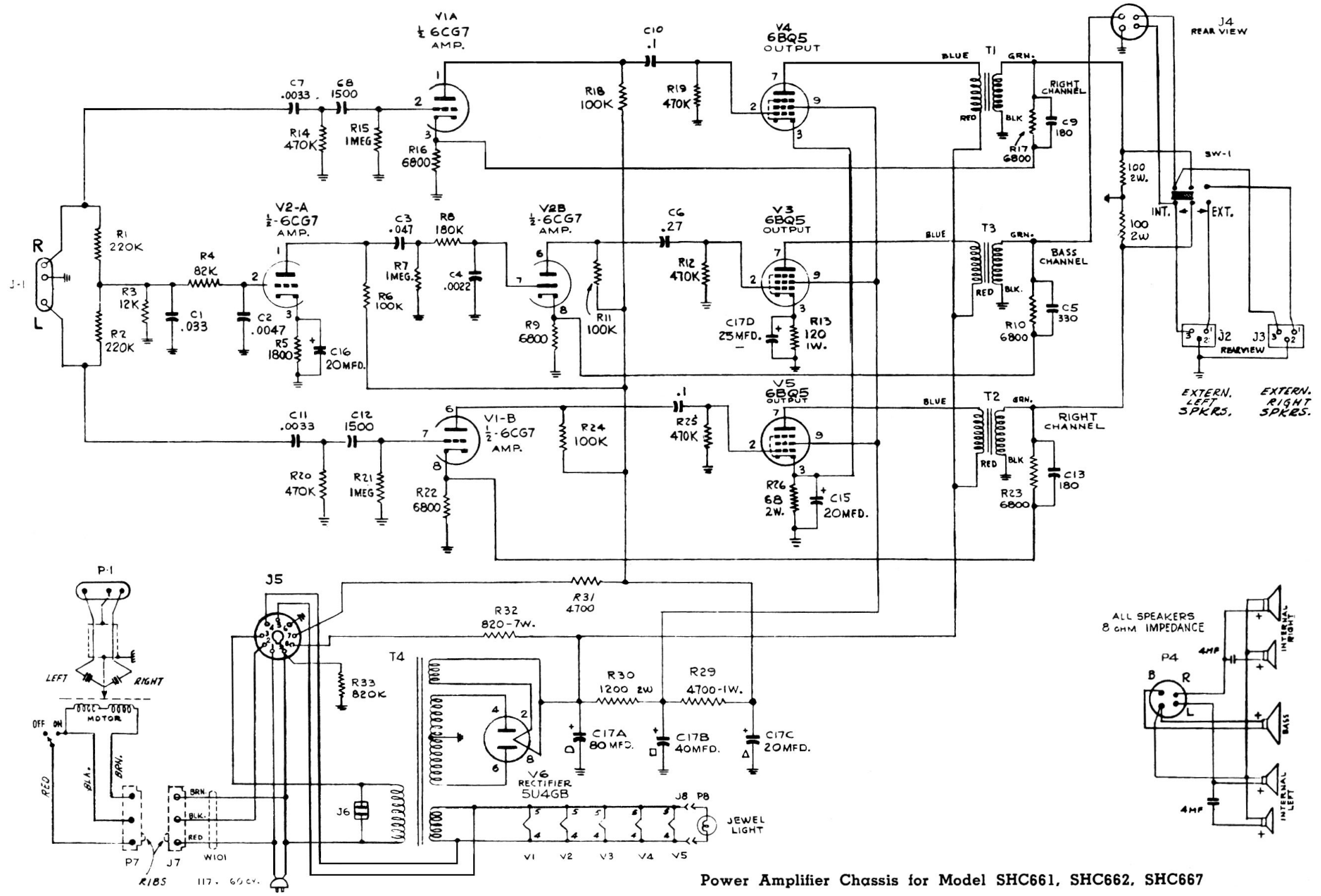
Steps	Connect High side of sig. gen. to—	Set sig. gen. to—	Set radio dial to—	Adjust for—
1	Pin #1 of V-2 (6BA6)	Connect VoltOhmyst across R-16		
2		10.7 mc	—	Max. Top T-1
3			—	Max. Bottom T-1
4			—	Max. Top T-2
5			—	Max. Bottom T-3
6		Repeat steps 2, 3, 4, 5		
7		Connect VoltOhmyst across R-16 & R-17 Zero VoltOhymst Half scale		
8		10.7 mc *	—	Zero Top T-3 pointer should swing through zero rapidly
9	Antenna Terminal board through 270 ohms	87.5 mc *	Tuning coil slug closed	FM Tuner string drive collar *
10		108.5 mc *	Tuning coil slug opens	Max. Osc. trimmer 2-8
11		95 mc *	Tuning coil slug closed	Max. RF trimmer T-4-20

* Adjust output level of signal generator to provide approximately 1 volt indication on VoltOhmyst.

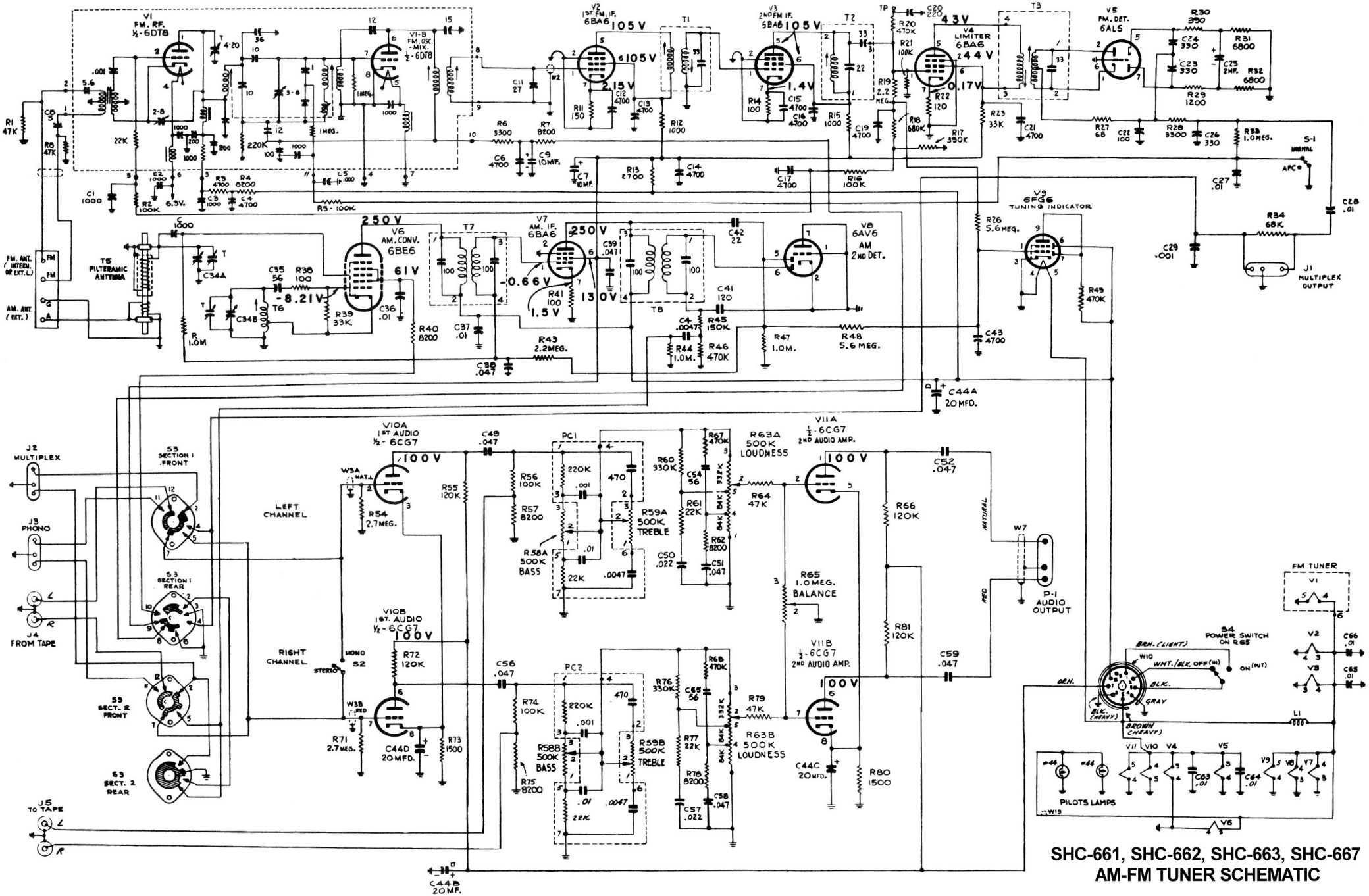
† Alternate loading may be required for accurate peaking; the winding not being peaked should be loaded with a resistor, 270 ohms in Step 8 and 470 ohms in Step 9.



Power Amplifier Chassis Showing Location of Tubes and Major Components
For Models SHC661, SHC662, SHC667



Power Amplifier Chassis for Model SHC661, SHC662, SHC667



SHC-661, SHC-662, SHC-663, SHC-667
AM-FM TUNER SCHEMATIC