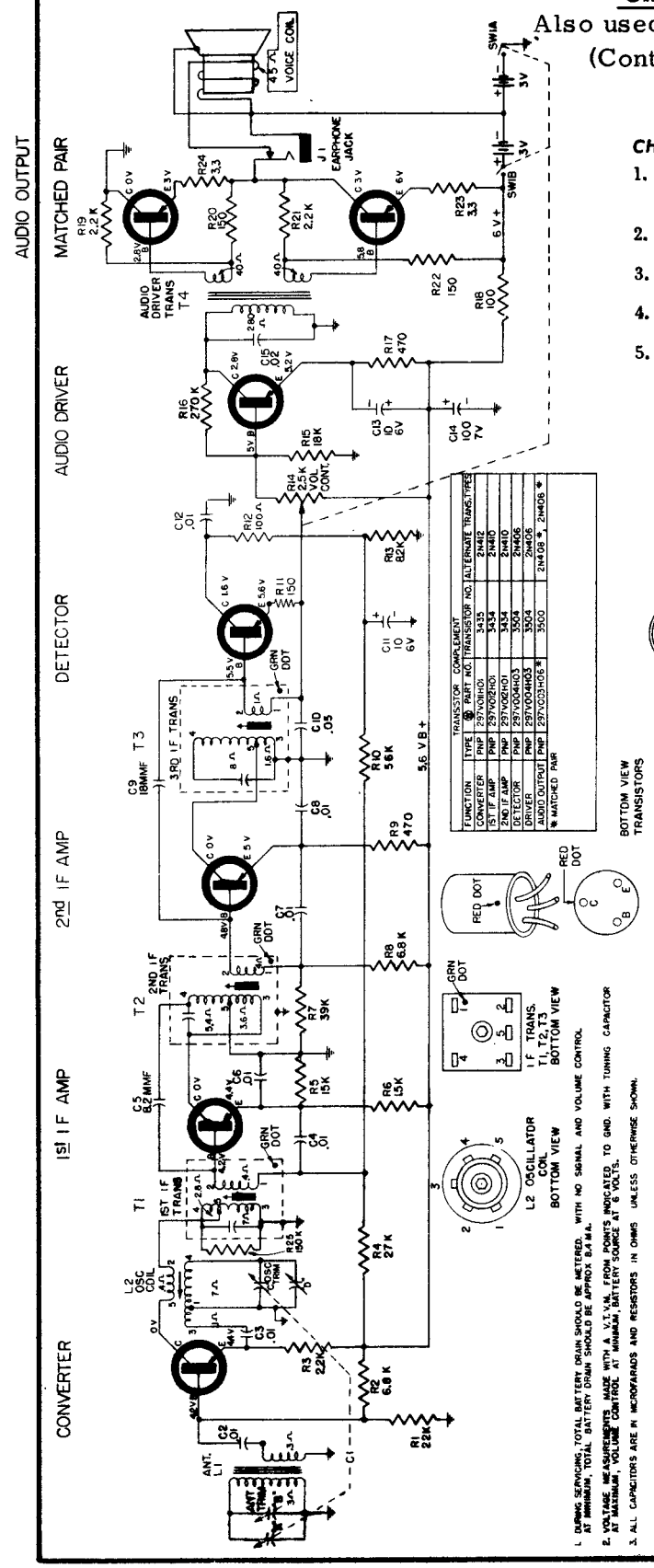
WESTINGHOUSE Models H-697P7, H-698P7, H-699P7, Chassis V-2393-3

Also used in Montgomery Ward Model GTM-1201A

(Continued on page 149, at right)



CHASSIS REMOVAL

1. Remove the tuning knob as follows. Insert a loop of string (see figure 1) under the tuning knob and pull the knob up and out of the cabinet front.
2. Remove the back of the cabinet by loosening the two coin-slot screws on the back.
3. Remove the two 1" long hex head screws securing the chassis to the cabinet front.
4. Remove the printed circuit chassis, battery case, speaker spacers, rubber grommet and speaker.
5. To insert the printed circuit chassis back into the cabinet use the reverse procedure. *The tuning knob and cabinet back screws must be the same or identical to the original dimensions to prevent possible damage to the tuning gang.*

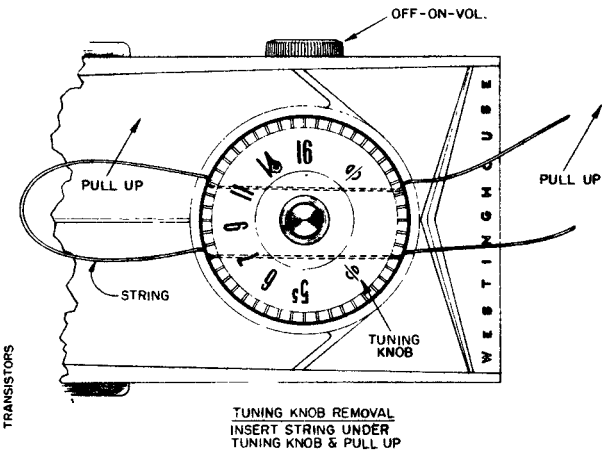


Figure 1 – Tuning knob removal

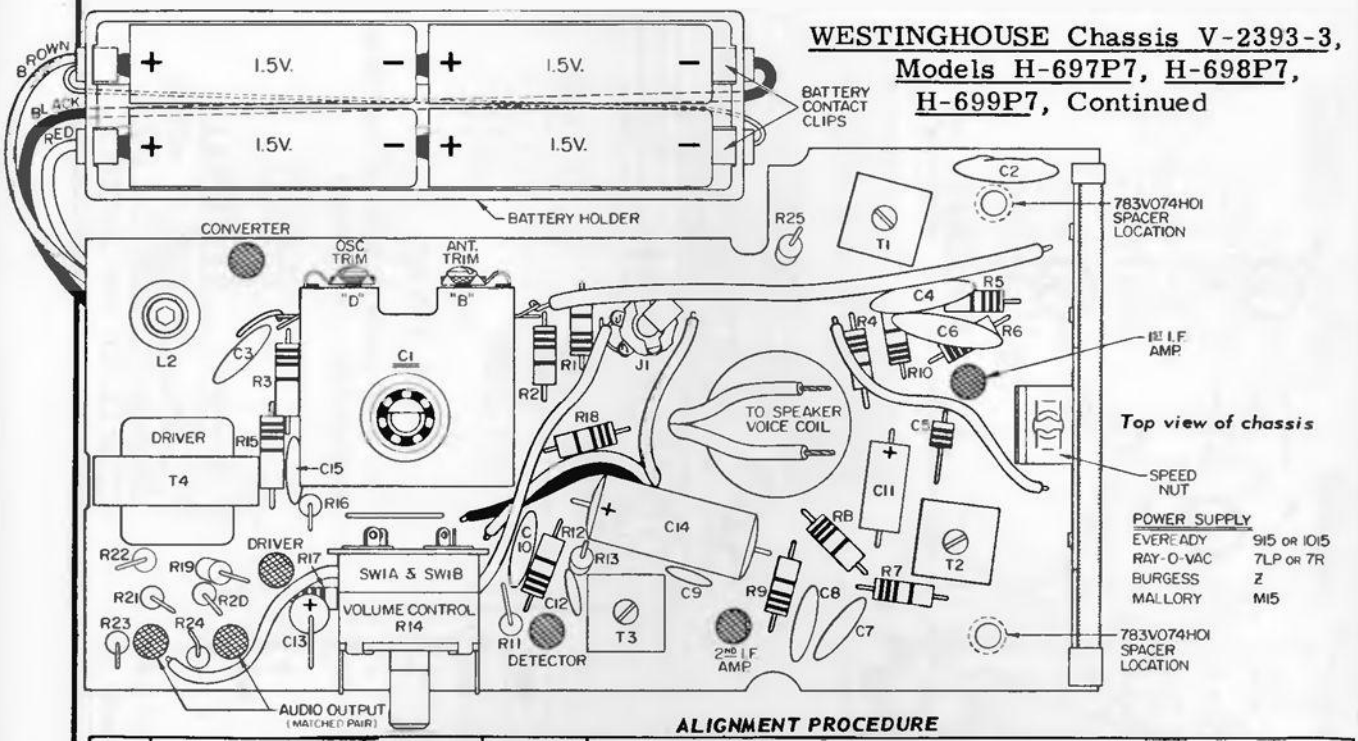
NEW CIRCUIT FEATURES

This receiver incorporates new circuitry not previously used in Westinghouse radios. This is the use of a transformerless audio output circuit and an improved transistor detector circuit having amplified AGC and DC coupling to the Audio Driver stage. These new circuits provide improved fidelity, less distortion and more uniform operation.

In the transformerless audio output circuit the trnasistors are operated in "push-pull" with each conducting for approximately 50% of each cycle. Both transistors are biased close to cutoff, so that with no AC signal, both are effectively not conducting. Out of phase audio signals are fed to the base of each transistor from the secondaries of the audio driver transformer (T4). Each transistor now conducts on alternate half cycles of the incoming signal. The collector-to-emitter AC currents of each transistor alternately flow through the speaker voice coil.

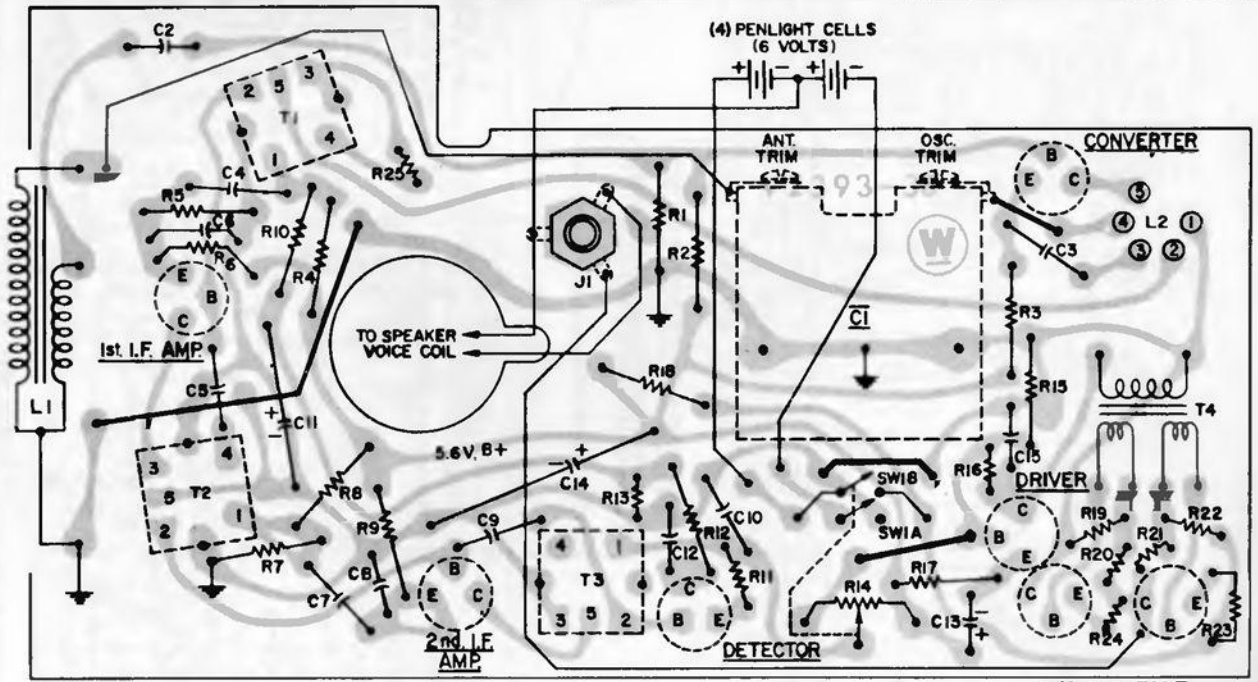
The need for a blocking capacitor between the detector and audio driver circuits is eliminated by locating the detector audio load (volume control) in the detector emitter circuit. The AGC voltage is taken from the collector load of the transistor and therefore provides a greater range of AGC control voltage. The detector transistor is biased at near cutoff. The base-to-emitter circuit of the transistor thus acts as a diode, rectifying the IF signal (detection). The amplified DC voltage, proportional to the IF signal level appears across R13 and is used for AGC. The AGC voltage is filtered by C11 and coupled to the base of the 1st IF amplifier through R10.

WESTINGHOUSE Chassis V-2393-3, Models H-697P7, H-698P7, H-699P7, Continued



ALIGNMENT PROCEDURE

Step	*Loosely couple modulated signal to:*	*Generator frequency*	*C1 setting*	*Adjust for maximum:*
1	Loop L1	455KC	maximum	T3, T2 and T1 in order indicated for max. output: (Reduce generator output if necessary for T2 and T1 adjustments.)
2	"	1625KC	minimum	Oscillator trimmer "D"
3	"	1400KC	1400KC	RF trimmer "B"
4	"	600KC	600KC	Oscillator coil, L2, if necessary
5	Repeat steps 2, 3 & 4			



Bottom view of printed circuit chassis with components shown as electrical symbols