

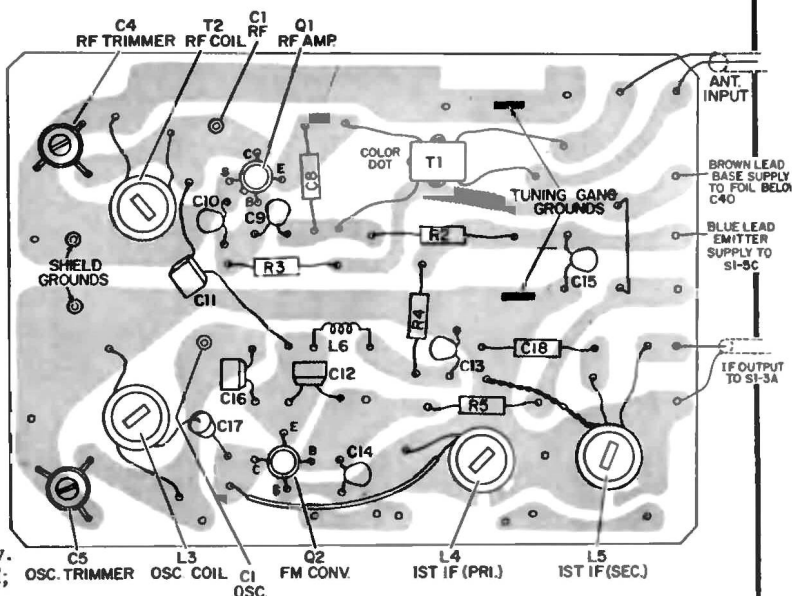
AM-FM TRANSISTOR PORTABLE MODEL T-907

REMOVAL OF FM TUNER PANEL

1. Remove chassis from cabinet. See "Chassis Disassembly" instructions.
2. Remove 2 magnecore antenna mounting clamps and swing magnecore out of the way.
3. Loosen 2 FM tuner shield screws and remove shield.
4. Disconnect FM tuner leads from their points of origin. See FM tuner perma-circuit illustration. Do Not attempt to disconnect leads from the tuner panel. Bring free leads up through hole in main perma-circuit panel.
5. Unsolder "Tuning Gang Grounds" (See FM tuner perma-circuit illustration), separate and straighten lugs. Be sure lugs are free of excess solder.
6. Unsolder "Shield Grounds" from rear or outside of back shield. Be sure lugs are clean and free in the shield holes.
7. While alternately heating the gang terminals C1-R-F and C1-osc., gently pry panel out using a thin bladed tool.

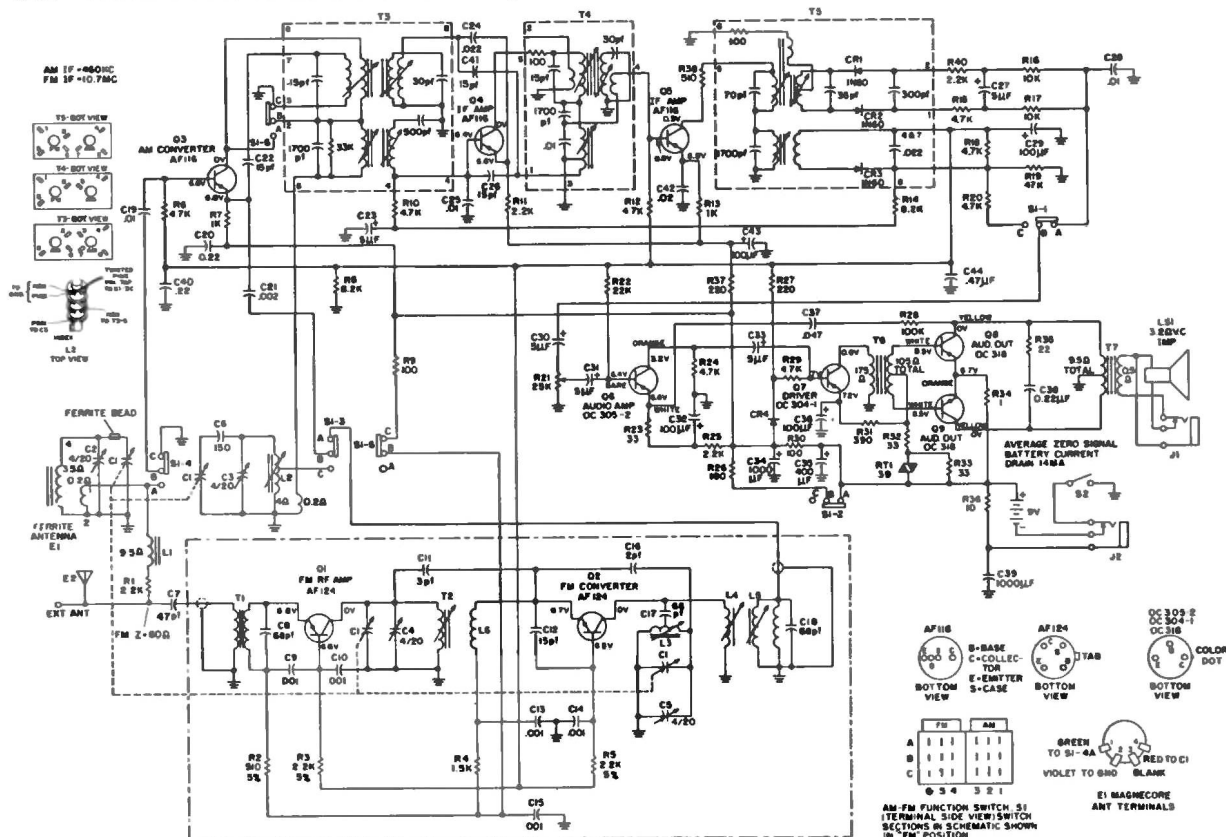
CHASSIS DISASSEMBLY

1. Remove back by loosening back retaining screw. CAUTION - Monopole antenna lead is connected; disconnect lead from antenna.
2. Remove knobs.
3. Remove nut holding band switch clamp and remove clamp.
4. Remove back mounting threaded post.
5. Remove nut at volume control end of back plate.
6. Remove nut at left end of FM R-F sub-assembly.



Top Composite View of FM Tuner Perma-Circuit Panel

7. Remove nut in front of 1st I-F, T3.
8. Remove panel, dial, switch and mtg. plate assembly.



VOLUME R-24, MOST-OFTEN-NEEDED 1964 RADIO SERVICING INFORMATION

PHILCO Model T-907

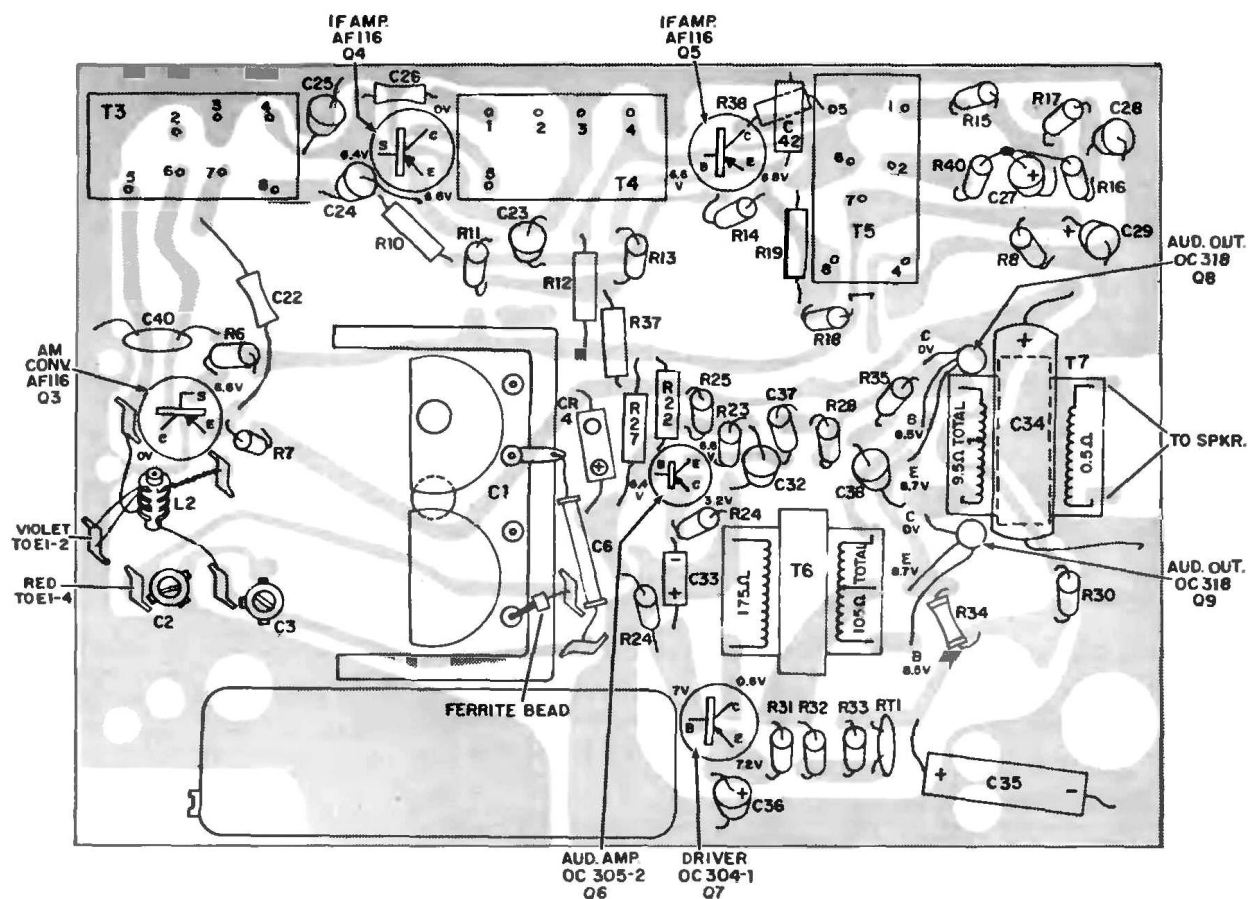
alignment on next page

BATTERY SUPPLY - 6 type "C" cells (number 635) in a 9 volt supply. Provision for connecting an external battery or AC power supply. Special receptacle automatically disconnects internal battery.

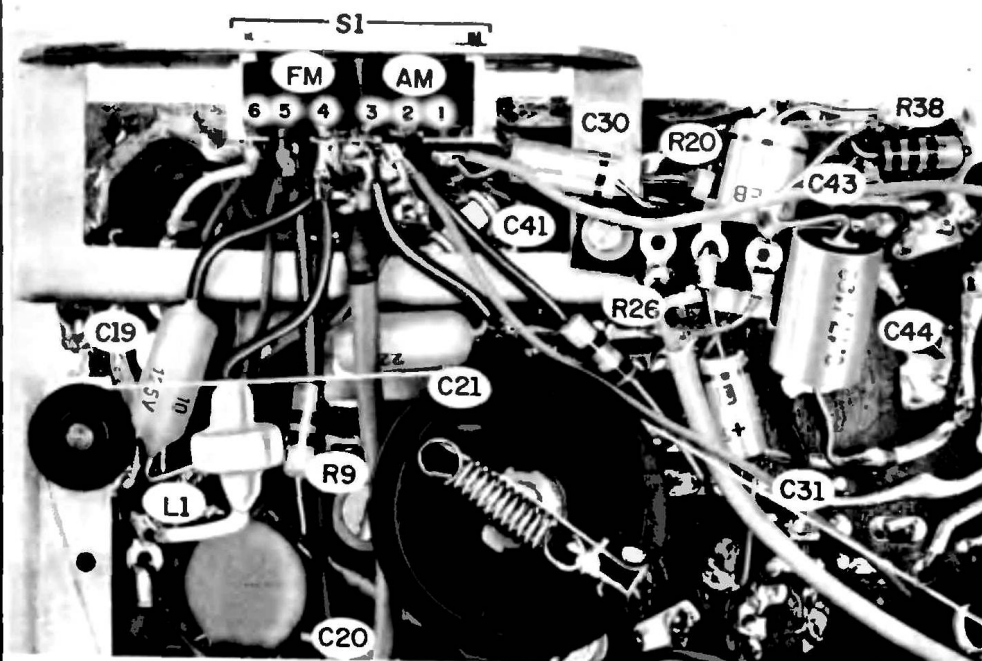
CIRCUIT - Nine transistor, 3 diode, AM-FM super-heterodyne.

FREQUENCY COVERAGE - AM, 540KC to 1610KC
FM, 87.5MC to 108.5MC

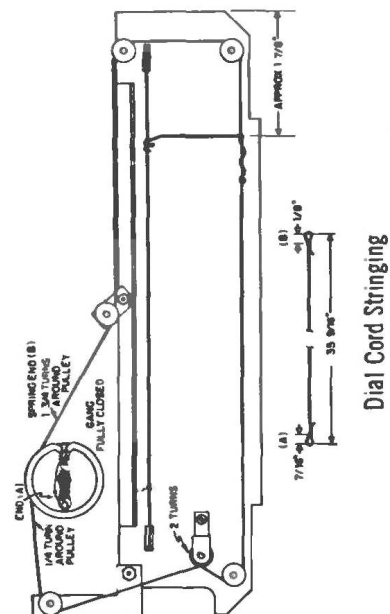
INTERMEDIATE FREQUENCY - AM, 460KC
FM, 10.7MC



Bottom Composite View of Main Perma-Circuit Panel



Under Panel Component Identification



Dial Cord Stringing

VOLUME R-24, MOST-OFTEN-NEEDED 1964 RADIO SERVICING INFORMATION

PHILCO Model T-907, Alignment Information

AM ALIGNMENT PROCEDURE

Allow generator to warm up for 15 minutes.
Check pointer-scale alignment.
Chassis must be removed from cabinet. See disassembly instructions.
Connect scope or AC meter across speaker voice coil to observe output.
Volume control to maximum.
Check battery supply voltage, 9 volts.

FM ALIGNMENT PROCEDURE

Check pointer-scale alignment.
Chassis must be removed from cabinet. See disassembly instructions.
Depress FM push button.
Connect scope across volume control to observe "S" curve (see illustration below).
Loosely couple generator output to telescope antenna. Use only sufficient signal for clean scope presentation --- Do Not Overload.

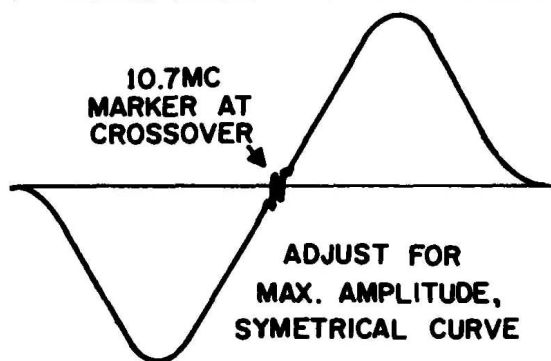
AM ALIGNMENT CHART

Signal Generator			Radio		
Step	Connection To Radio	Frequency	Dial Setting	Special Instructions	Adjust
1	To base of AM converter, Q3, thru a .01 μ fd capacitor.	460KC	1500KC	Adjust, in order given, for maximum output.	T3, 1st AM I-F top & bot. T4, 2nd AM I-F, top T5, 3rd AM I-F, top
2	Use radiating loop.	600KC	600KC	Adjust for maximum output.	L2, AM oac. core
3	Radiating loop	1500KC	1500KC	Adjust for maximum output.	C3, AM osc. trimmer
4	Repeat Steps 2 and 3 until no further improvement is obtained.				
5	Radiating loop	600KC	600KC	Adjust for maximum output by sliding ant. coil on core.	E1, AM magnecore ant.
6	Radiating loop	1500KC	1500KC	Adjust for maximum output.	C2, AM ant. trimmer
7	Repeat Steps 5 and 6 until no further improvement is obtained.				

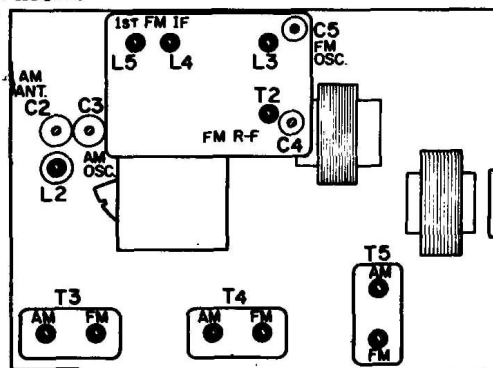
NOTE: For radiating loop, use a 6 to 8 turn, 6-inch diameter loop made up of insulated wire. Connect to generator terminals and place about one foot from antenna coil.

FM ALIGNMENT CHART

Sweep Generator			Radio		
Step	Center Frequency	Sweep Width	Dial Setting	Special Instructions	Adjust
1	10.7MC	50KC		Adjust for cross-over at 10.7MC.	T5 - FM top.
				Adjust in order given for maximum output and best symmetry. Repeat	T5 - FM bottom T4 - FM Top & Bot. T3 - FM Top & Bot. L4 & L5
2	89MC	25KC	89MC	Adjust for maximum output.	L3 - FM osc. core T2 - FM R-F core
3	102MC	25KC	102MC	Adjust for maximum output.	C5 - FM osc. trim. C4 - FM R-F trim.
4	Repeat Steps 2 and 3 until no further improvement is noted.				



FM Alignment Curve



Chassis Alignment Points