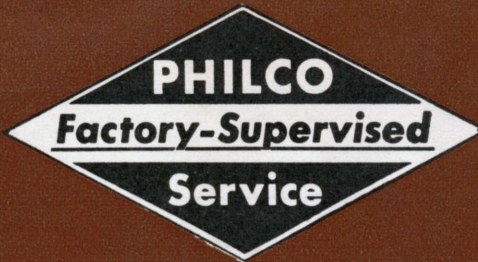


PHILCO



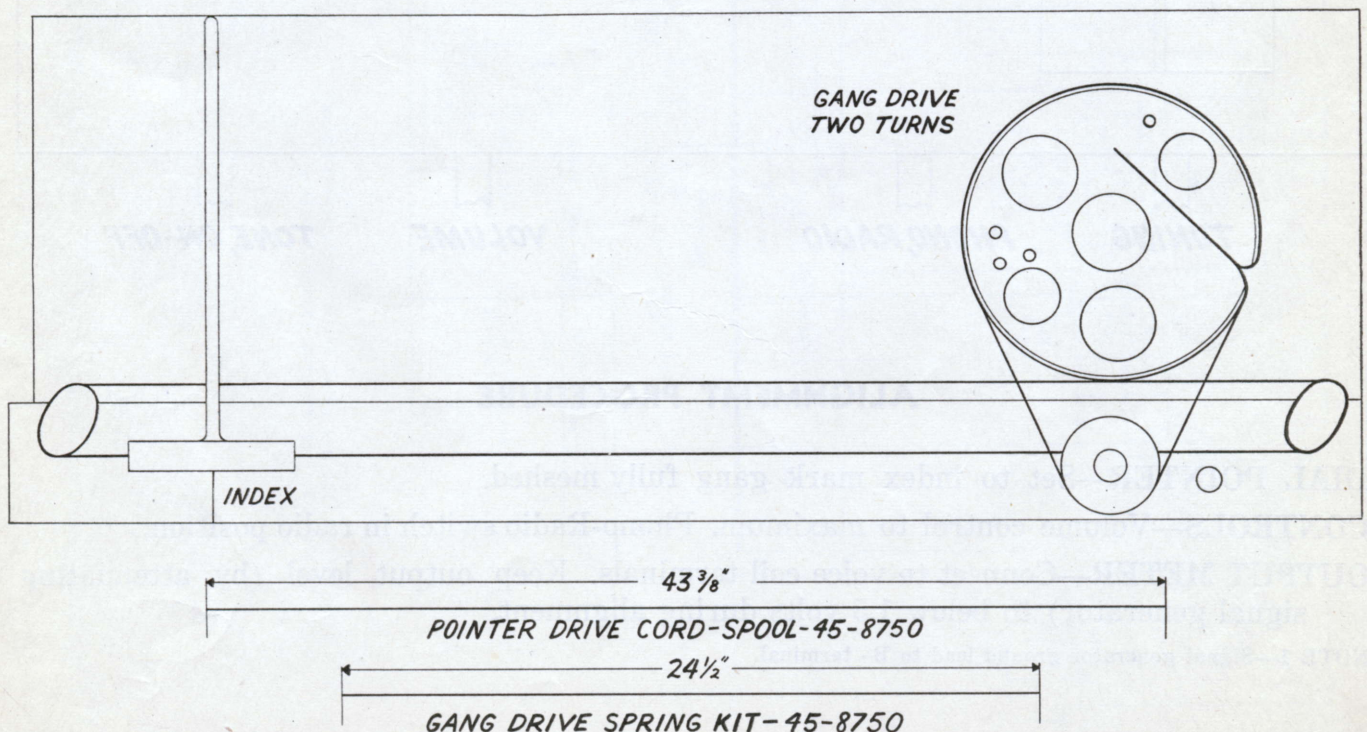
SERVICE

HOME RADIO

PHILCO MODEL 740-2 and 740 RADIO PHONOGRAPH

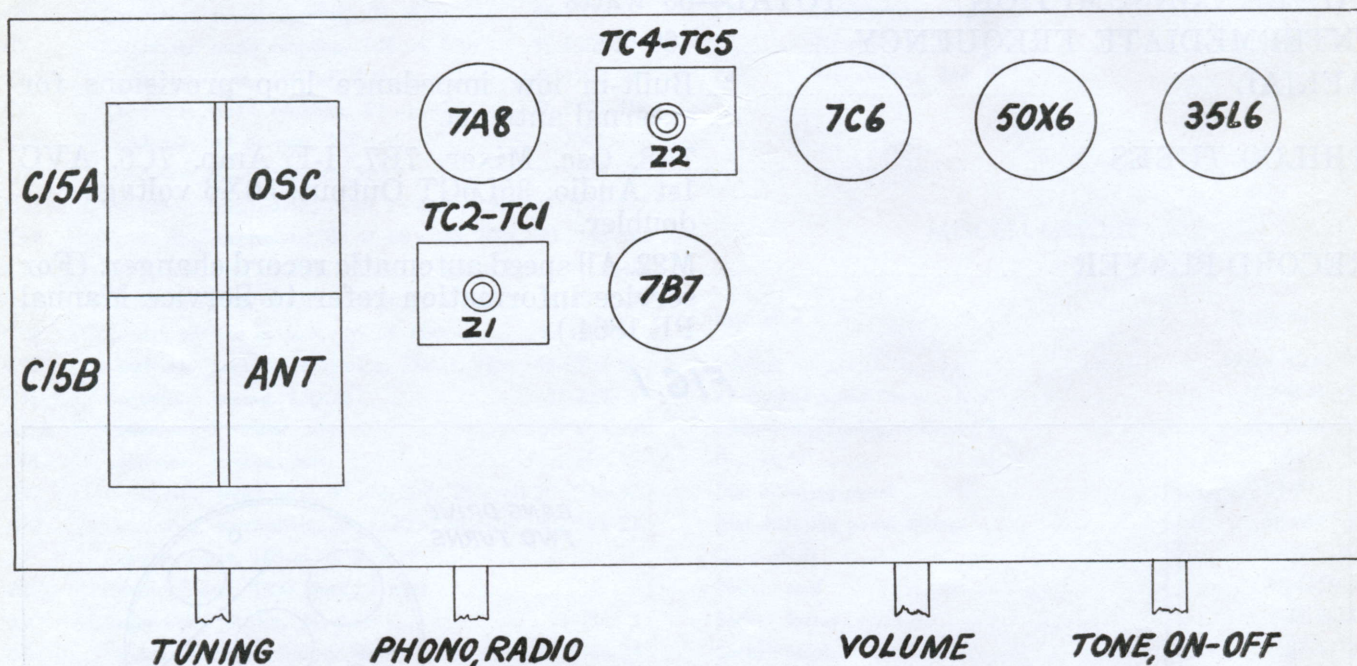
CABINET	Wood Console
CIRCUIT	5 tube Superheterodyne
FREQUENCY RANGE	540 kc to 1630 kc
AUDIO OUTPUT	3 watts
OPERATING VOLTAGES	740—110 volts—60 cycles 740-2—110 volts—25 cycles
POWER CONSUMPTION	TOTAL—65 watts
INTERMEDIATE FREQUENCY	460 kc.
AERIAL	Built-in low impedance loop provisions for external antenna.
PHILCO TUBES	7A8, Osc. Mixer, 7B7, I-F Amp. 7C6, AVC 1st Audio, 35L6GT Output, 50X6 voltage doubler.
RECORD PLAYER	M22. All speed automatic record changer. (For service information refer to Service Manual PR 1864.)

FIG. 1



STEP	SIGNAL GENERATOR		RADIO		ADJUST TRIMMERS
	CONNECTION TO RADIO	DIAL SETTING	DIAL SETTING	SPECIAL INSTRUCTIONS	
1	Through .01 MF Condenser to pin No. 6 of 7A8 tube. Note (1)	460 kc.	Gang Closed	Adjust in order for maximum output. Fig. 2	TC 4 TC 5 TC 2 TC 1
2	Radiating loop	1600 kc.	1600 kc.	Adjust for maximum. Fig. 2	C15A
3	Same as step 2	1500 kc.	1500 kc.	Adjust for maximum. Fig. 2	C15B

FIG. 2



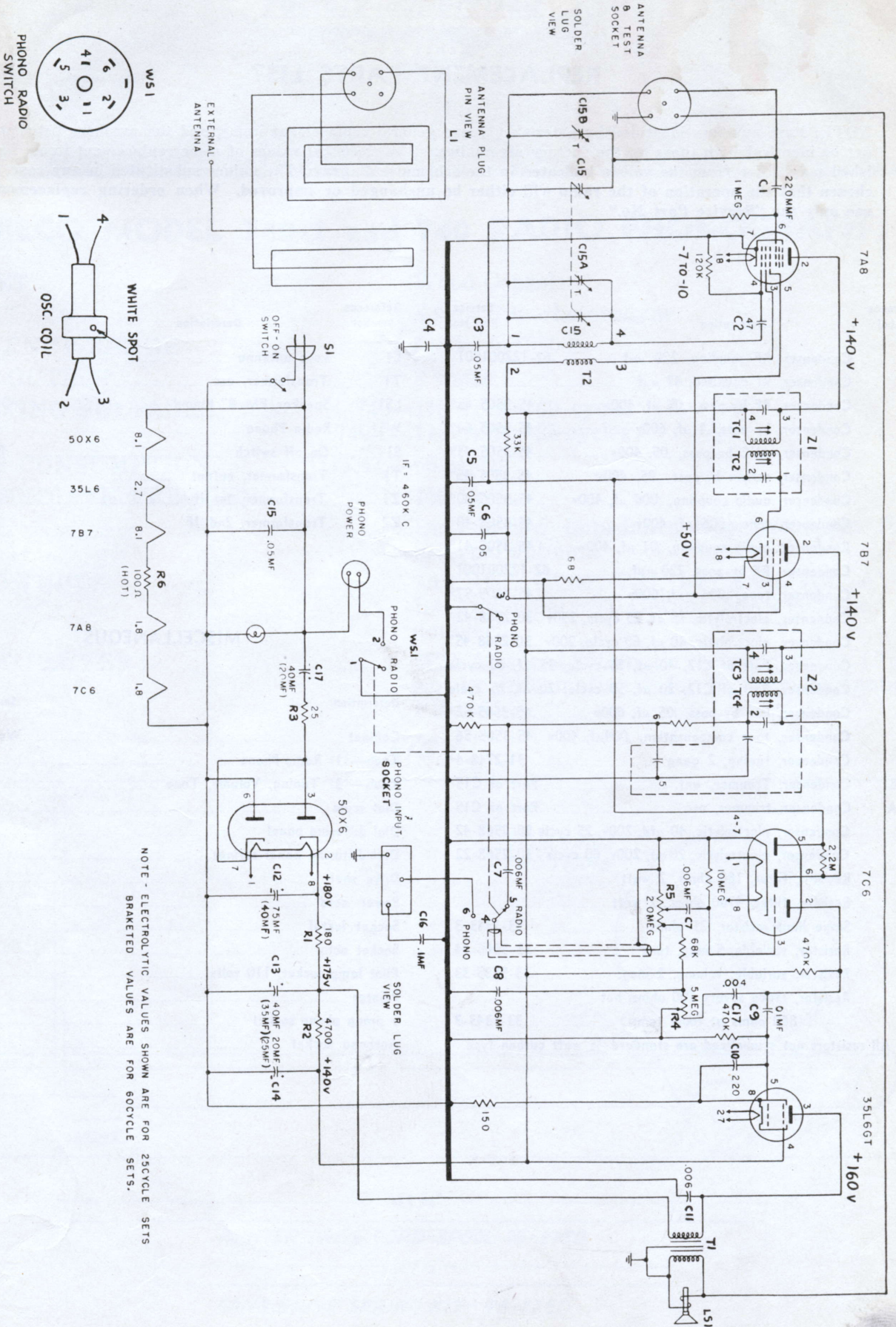
ALIGNMENT PROCEDURE

DIAL POINTER—Set to index mark gang fully meshed.

CONTROLS—Volume control to maximum. Phono-Radio switch in radio position.

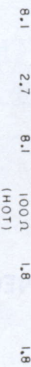
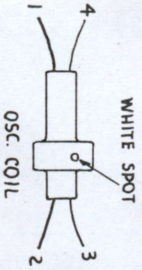
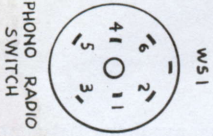
OUTPUT METER—Connect to voice coil terminals. Keep output level (by attenuating signal generator) to below 1.5 volts during alignment.

NOTE 1—Signal generator ground lead to B- terminal.



NOTE - ELECTROLYTIC VALUES SHOWN ARE FOR 25CYCLE SETS
 BRACKETED VALUES ARE FOR 60CYCLE SETS.

SCHEMATIC MODEL 740-2 - 740



ANTENNA
 B TEST
 SOCKET
 SOLDER
 LUG
 VIEW

REPLACEMENT PARTS LIST

NOTE: Part numbers identified by asterisk (*) are general replacement items, and the numbers listed may not be identical with those on the factory assemblies. The electrical values of some replacement items furnished may differ from the values indicated in the schematic diagram. The values substituted in any case are chosen that the operation of the radio will either be unchanged or improved. When ordering replacements, use only the "Service Part No."

Reference Symbol	Description	Service Part No.	Reference Symbol	Description	Service Part No.
C1	Condenser, RF coupling, 220 $\mu\mu\text{f}$	62-122001001	L1	Loop antenna	32-4052-53
C2	Condenser, RF coupling, 47 $\mu\mu\text{f}$		T1	Transformer, osc.	32-4263
C3	Condenser, RF by-pass, .05 μf , 400v	45-3505-45*	LS1	Speaker, PM, 8" Round	36-1626-17
C4	Condenser, by-pass, .1 μf , 600v	45-3505-64*	WS1	Radio Phono	42-1824-5
C5	Condenser, AVC by-pass, .05, 400v	45-3505-45*	S1	On-off switch	Part of R4
C6	Condenser, screen by-pass, .05, 400v	45-3505-45*	T1	Transformer, output	32-8310-6
C7	Condenser, audio coupling, .006 μf , 400v	45-3505-40*	Z1	Transformer, 1st IF	32-4160
C8	Condenser, tone, .006 μf , 400v	45-3505-40*	Z2	Transformer, 2nd IF	32-4240
C9	Condenser, audio coupling, .01 μf , 400v	45-3505-41*			
C10	Condenser, RF by-pass, 220 $\mu\mu\text{f}$	62-122001001			
C11	Condenser, tone, .006 $\mu\mu\text{f}$, 600v	45-3505-57*			
C12	Condenser, electrolytic, 75 μf , 25 cycle, 250v	30-2568-42*			
C13	Condenser, electrolytic, 40 μf , 60 cycle, 200v	30-2568-45*			
C13	Condenser, Part of C12, 40 μf , 25 cycle; 35 μf , 60 cycle				
C14	Condenser, Part of C12, 20 μf , 50 cycle; 20 μf , 25 cycle				
C16	Condenser, line by-pass, .05 μf , 600v	45-3505-62*			
C17	Condenser, tone compensation, .004 μf , 400v	45-3505-56			
C15	Condenser, tuning, 2 gang	31-2748-4			
C15B	Condenser, Trimmer, ant.	Part of C15			
C15A	Condenser, trimmer, osc.	Part of C15			
C17	Condenser, electrolytic, 40 μfd , 200v, 25 cycle	30-2568-42			
C17	Condenser, electrolytic, 20 μf , 200v, 60 cycle	30-2568-22			
R1	Resistor, filter, 180 ohms, 2 watt				
R2	Resistor, filter, 4700 ohms., 2 watt				
R3	Single limit resistor, 25 ohms	33-1343-3			
R4	Resistor, variable, 5 meg. tone	33-5566-34			
R5	Resistor, variable, volume, 2 meg.	33-5535-33			
R6	Resistor, (tube saver) 100 ohms. hot (880 ohms at room temp.)	33-1343-3			

All resistors not symbolized are standard 1/2 watt carbon type.

MISCELLANEOUS

Description	Service Part No.
Cabinet	Wood Console
Knob—(1) Radio Phono	54-4718-18
Knob—(3) Tuning, Volume, Tone	54-4718-19
Dial scale	54-5126
Dial diffusing panel	54-8171-3
Dial diffusing panel springs	56-3587-1
Drive shaft	76-3671-10
Power cord	41-3755-4
Socket loctal	27-6213
Socket octal	27-6174
Pilot lamp socket, 110 volts	27-6233-40
Pointer	56-5630-28
3 prong phono socket	27-6126
Antenna socket	27-6214-1