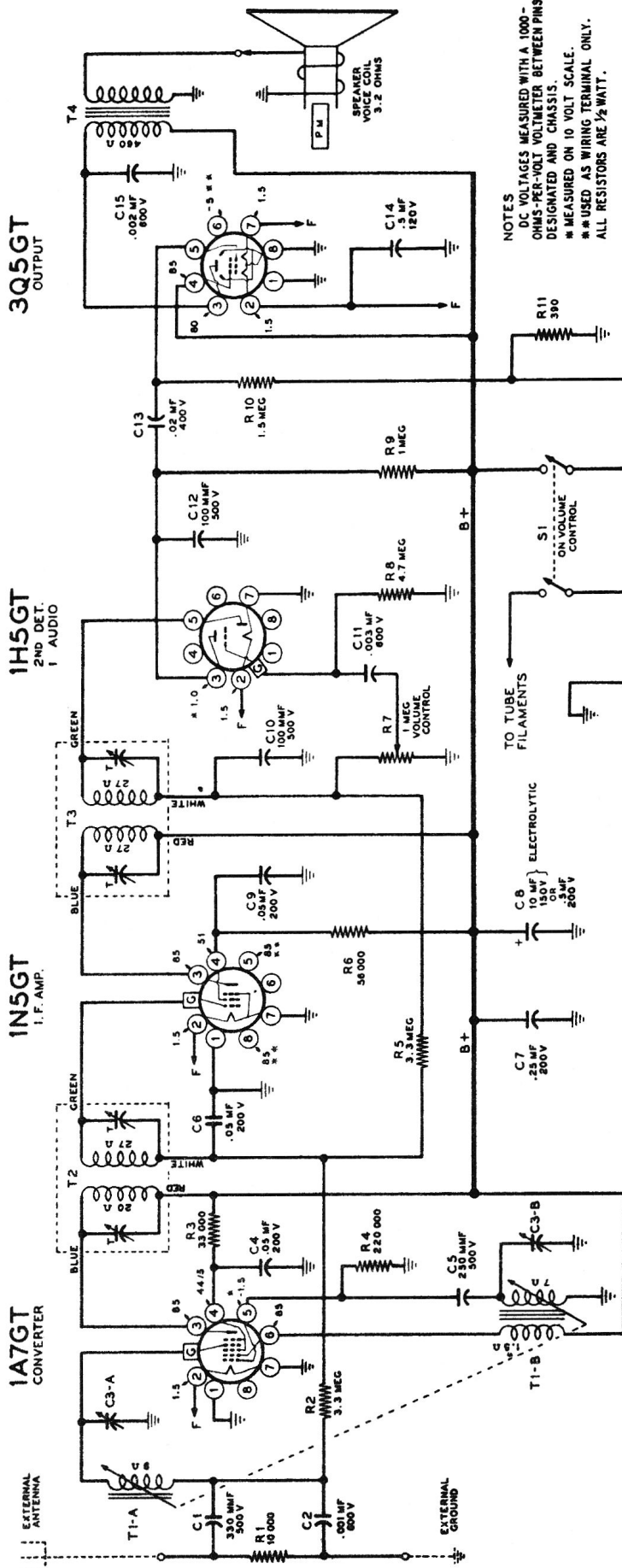
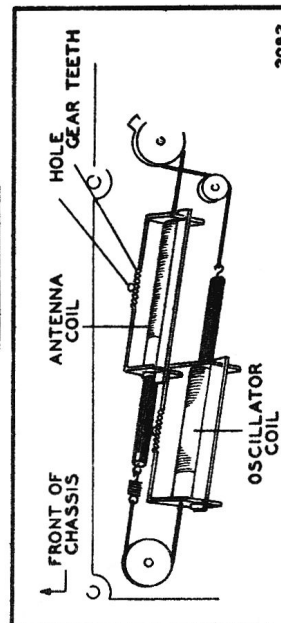




NOTES
DC VOLTAGES MEASURED WITH A 1000-
OHMS-PER-VOLT VOLTMETER BETWEEN PINS
DESIGNATED AND CHASSIS.
* MEASURED ON 10 VOLT SCALE.
** USED AS WIRING TERMINAL ONLY.
ALL RESISTORS ARE 1/2 WATT.



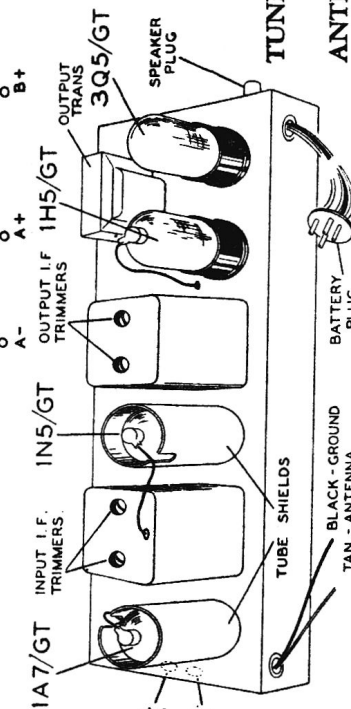
View of Coil Assembly

The antenna coil assembly is movable left or right. When making the adjustment as required in the alignment procedure, move the coil assembly very slowly, either by hand or by pivoting the edge of a screwdriver blade in the hole and engaging the blade in the gear teeth of the coil form.

POWER SUPPLY.....A Battery—1.5 volts, 250 ma.
B Battery—90 volts, 14 ma.

FREQUENCY RANGE.....535 to 1720 kc.

INTERMEDIATE FREQ.....455 kc.



TUNING.....Two permeability-tuned circuits.

ANTENNA.....External only. Also external ground.

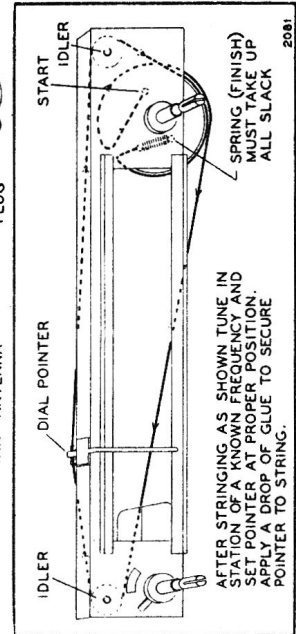
SPEAKER.....5-inch; P.M., 1.5-ounce magnet; voice coil impedance 3.2 ohms.

POWER OUTPUT.....160 milliwatts undistorted.

SENSITIVITY.....250 milliwatts maximum.

.....20 microvolts average for 50-milliwatt output.

SELECTIVITY.....48 kc broad at 1000 times signal at 1000 kc.



Replacement of Dial Pointer Drive Cord

MODEL 4B17
MODELS 4B112, 4B113

BELMONT RADIO CORP.

ALIGNMENT INSTRUCTIONS FOR MODELS 4B17, 4B112, 4B113

- Output meter across 3.2-ohm output load.
- Align for maximum output. Reduce input as needed to keep output near 0.4 volts.
- Volume control at maximum for all adjustments.
- Connect ground post of signal generator to radio chassis.

SIGNAL GENERATOR			TUNER SETTING	ADJUST FOR MAXIMUM OUTPUT (in order shown)
Frequency	Dummy Antenna	Connection to Radio		
455 kc	.1 mf	Grid (top cap) of 1A7GT	Iron cores all the way out	Trimmers on output and input I.F. cans
1720 KC, 4B17 1700 kc, 4B112, 4B113	.1 mf	Grid (top cap) of 1A7GT	Iron cores all the way out	Oscillator trimmer C3-B
1720 KC, 4B17 1700 kc, 4B112, 4B113	200 mmf	Antenna lead	Iron cores all the way out	Antenna trimmer C3-A
1400 kc	200 mmf	Antenna lead	Turn dial to 1400 kc	Adjust position of antenna coil (see coil view)*

* This adjustment and the previous adjustment are interlocking; therefore repeat the two adjustments alternately for best results.

MODEL 4B17

REPLACEMENT PARTS LIST

MODELS 4B112, 4B113

Ref. No. Part No. Description

CAPACITORS *

C1	C-8F3-11	330 mmf, 20%, mica
C2	C-8D-10929	.001 mf, 600 volts, 10%
C3-A, B	A-8H-10807	Dual trimmer; antenna (42-78 mmf) and oscillator (84-156 mmf)
C4, C6, C9	C-8D-10770	.05 mf, 200 volts, 20%
C5	C-8F3-10	220 mmf, 20%, mica
C7	C-8D-10775	.25 mf, 200 volts, +20%—10%
C8	C-8D-11270	.5 mf, 200 volts, +20%—10%
	or	
	119117	10 mf, 150 volts, electrolytic
C10, C12	C-8F3-113	100 mmf, 10%, mica
C11	C-8D-10786	.003 mf, 600 volts, 20%
C13	C-8D-10774	.02 mf, 400 volts, 20%
C14	10017	.5 mf, 120 volts, +50%—10%
C15	C-8D-10784	.002 mf, 600 volts, 25%

RESISTORS *

R1	C-9B1-19	10,000 ohms, 1/2 watt, 20%
R2, R5	C-9B1-34	3.3 megohms, 1/2 watt, 20%
R3	C-9B1-80	33,000 ohms, 1/2 watt, 10%
R4	C-9B1-27	220,000 ohms, 1/2 watt, 20%
R6	C-9B1-83	56,000 ohms, 1/2 watt, 10%
R7, S1	A-10A-10155	Volume control (1 megohm) and on-off switch
R8	C-9B1-35	4.7 megohms, 1/2 watt, 20%
R9	C-9B1-31	1 megohm, 1/2 watt, 20%
R10	C-9B1-32	1.5 megohms, 1/2 watt, 20%
R11	C-9B1-57	390 ohms, 1/2 watt, 10%

TRANSFORMERS AND COILS

T1-A, B	C-211-10171	Tuning assembly complete, including antenna and oscillator coils
T2	108202C	Input I.F. coil, complete in can (range of trimmers: pri. 60-110 mmf, sec. 40-70 mmf)
T3	108153D	Output I.F. coil, complete in can (range of trimmers: 40-70 mmf each)
T4	10591B	Output transformer

MISCELLANEOUS

B-18A-10164	Speaker, 5", P.M.
121210	Socket, for tubes (4 used)
A-55A-7386-1	Connector, for speaker plug
10724	Plug, on speaker leads
B-14A-10152	Battery cable assembly
A-2G-10162	Pointer, for dial
115396	Tube shield (for 1N5GT, 1A7GT)
A-5B-10170-1	Knob (volume control, tuning)
B-6D-10618	Dial scale
B-2M-7758	Snap-in rivet for dial scale
A-6D-10163	Crystal for dial
A-2F-10165	On-off indicator
A-49A-10173	Spring for on-off indicator
A-3A-10156	Tuning shaft
A-53A-10576	Cord, for dial pointer drive (32")
A-49A-11324	Spring for dial pointer drive cord

Ref. No. Part No. Description

CAPACITORS *

C1	C-8F3-11	330 mmf, 20%, mica
C2	C-8D-10787	.001, 600 volts, 20%
C3-A, B	124165	Dual trimmer, antenna and oscillator. Range of each: 84-156 mmf
C4, C6	C-8D-10770	.05 mf, 200 volts, 20%
C5	C-8F3-10	220 mmf, 20%, mica
C7	C-8D-10775	.25 mf, 200 volts, +20%—10%
C8	C-8D-11270	.5 mf, 200 volts, +20%—10%
	or	
	119117	10 mf, 150 volts, electrolytic
C9	129177	45 mmf, 5%, ceramicon
C10, C12	C-8F3-8	100 mmf, 20%, mica
C11	C-8D-11013	.003 mf, 600 volts, 10%
C13	C-8D-10774	.02 mf, 400 volts, 20%
C14	C-8D-11270	.5 mf, 200 volts, +20%—10%
C15	C-8D-10935	.005 mf, 600 volts, +40%—15%
C16	C-8D-10771	.1 mf, 200 volts, +20%—10%

RESISTORS *

R1	C-9B1-19	10,000 ohms, 1/2 watt, 20%
R2, R5	C-9B1-34	3.3 megohms, 1/2 watt, 20%
R3	C-9B1-80	33,000 ohms, 1/2 watt, 10%
R4	C-9B1-27	220,000 ohms, 1/2 watt, 20%
R6	C-9B1-82	47,000 ohms, 1/2 watt, 10%
R7, S1	101250	Volume control (1 megohm) and on-off switch
R8	C-9B1-35	4.7 megohms, 1/2 watt, 20%
R9	C-9B1-31	1 megohm, 1/2 watt, 20%
R10	C-9B1-33	2.2 megohms, 1/2 watt, 20%
R11	C-9B1-57	390 ohms, 1/2 watt, 10%

COILS AND TRANSFORMERS

T1-A, B	1364	Tuning assembly complete, including antenna and oscillator coils
T2	108202	Input I.F. coil complete in can. Range of trimmers: primary, 60-110 mmf; secondary, 40-70 mmf
T3	108153B	Output I.F. coil complete in can. Range of trimmers: 40-70 mmf ea.
T4	10591B	Output transformer

MISCELLANEOUS

114238	Speaker, 5-inch, P.M.
121210	Tube socket
115396	Tube shield
107361	Battery cable assembly
128621-18	Cabinet, walnut
128621-9	Cabinet, ivory
128523-17	Knob, walnut
128523-8	Knob, ivory
128626B	Back for cabinet, walnut
128626	Back for cabinet, ivory
131356	Tee-pins for securing back
12920	Dial scale
13143	Snap-in rivets for dial scale
112914	Crystal for dial
112908B	Pointer
A-53A-10989	Cord for dial pointer drive
120184	Spring for drive cord
112915	On-off indicator
120405	Spring for indicator
120409	Trip for indicator