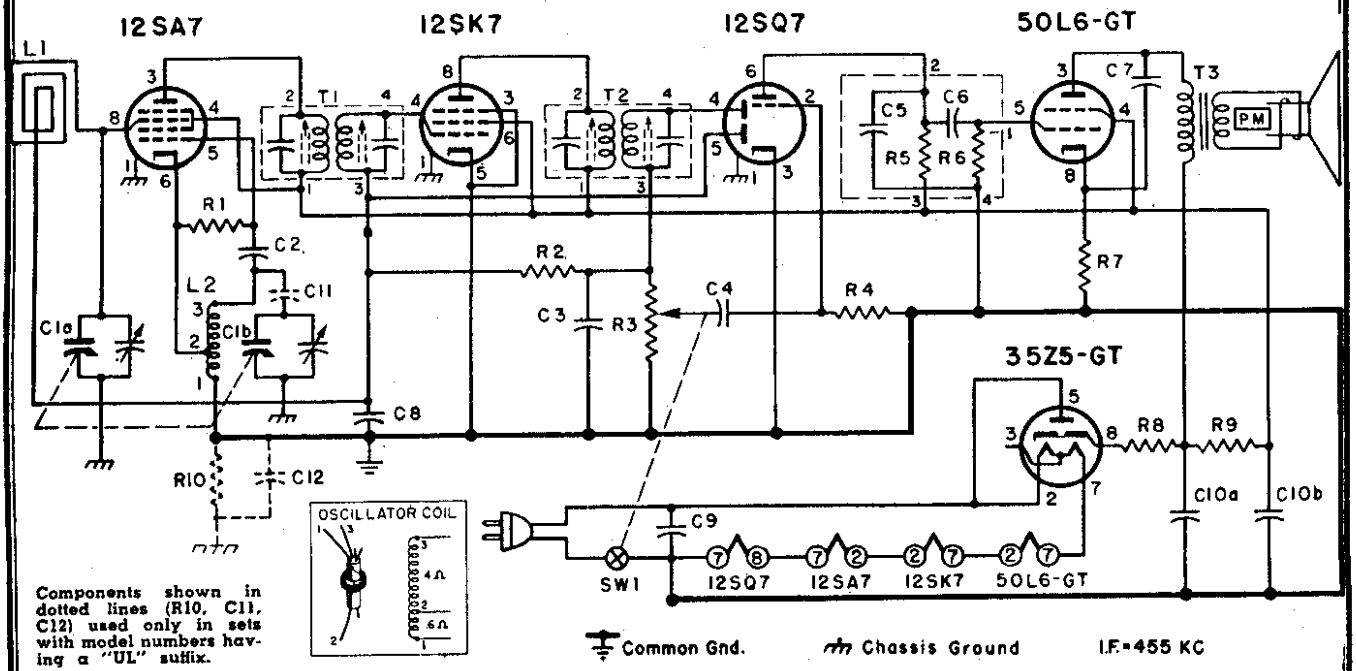
MODELS 5R10, 5R11, 5R12, 5R13, 5R14, Ch. 5R1



ALIGNMENT PROCEDURE

- Connect output meter across voice coil.
- Turn receiver volume control full on.
- Use an isolation transformer if available, otherwise connect a .1 mfd. condenser in series with low side of signal generator and attach to B minus of chassis.
- Use lowest output setting of signal generator capable of producing adequate output meter indication and then proceed as outlined in chart below.
- Repeat adjustments to insure good results.

NOTE

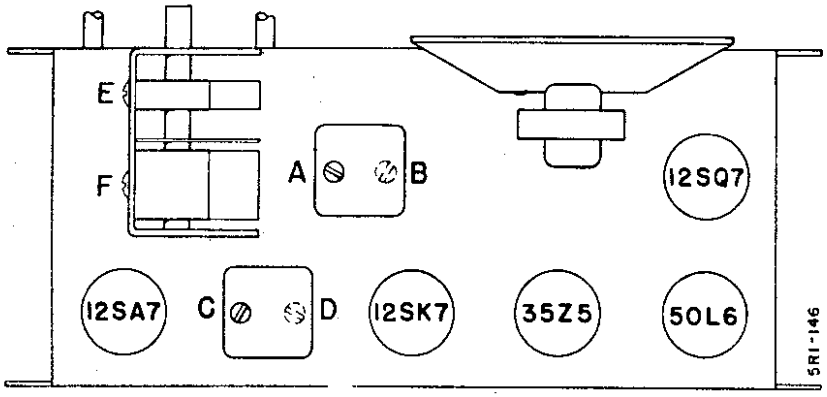
To avoid splitting the slotted head of powdered iron core tuning slugs in I.F. transformers, use an alignment tool having a blade 1/8" wide.

Step	Dummy Antenna in Series with Signal Generator	Connection of Signal Generator (High Side)	Signal Generator Frequency	Receiver Gang Setting	Trimmer Description	Trimmer Designation	Type of Adjustment
1	250 mmfd. condenser	Tuning condenser Antenna stator	455 KC	Gang fully open	2nd IF 1st IF	A, B C, D	Maximum Output
2	250 mmfd. condenser	Tuning condenser Antenna stator	1620 KC	Gang fully open	Oscillator (on gang)	E	Maximum Output
3	Loop of several turns of wire (or place generator lead close to receiver loop for adequate signal)	No physical connection (signal by radiation)	1400 KC	Tune in generator signal	Antenna (on gang)	F	Maximum Output
4	Upon completion of alignment, install chassis in cabinet. Mount and set dial pointer as shown in Dial Stringing and Pointer Setting Diagram.						

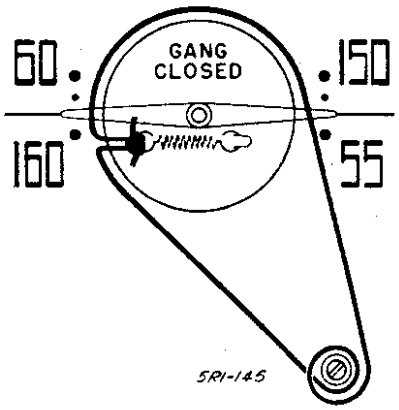
NOTE: Adjustments B and D are made from underside of chassis.

MODELS 5R10, 5R11,
5R12, 5R13, 5R14,
Ch. 5R1

TUBE AND TRIMMER LOCATION

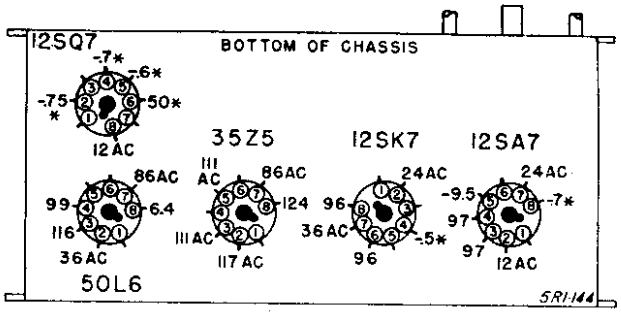


POINTER SETTING AND DIAL CORD STRINGING



VOLTAGE DATA

- All readings made between tube socket terminals and B minus (terminal of On-Off switch).
- Dial turned to low frequency end; volume control at minimum.
- Measured on 117 Volts AC line. When measured from DC line, voltages may be slightly lower.
- Voltages measured with Vacuum Tube Voltmeter. Readings taken with a 1,000 ohm per volt meter will be approximately the same except for those marked with an asterisk * in the voltage chart; these readings will either be lower or practically zero.



RESISTORS

Symbol	Description	Part No.
R1	22,000 Ohms, ½ Watt	60B 8-223
R2	1 Megohm, ½ Watt	60B 8-105
R3	1 Meghom Volume Control and On-Off switch SW1	75B 1-25
R4	4.7 Megohms, ½ Watt	60B 8-475
*R5	470,000 Ohms, ½ Watt	
*R6	470,000 Ohms, ½ Watt	
R7	150 Ohms, ½ Watt	60B 8-151
R8	33 Ohms, 1 Watt	60B 28-3
R9	1,000 Ohms, 1 Watt	60B 28-2
R10	150,000 Ohms, ½ Watt	60B 8-154

CONDENSERS

Symbol	Description	Part No.
C1a	Gang, 0 to 420 mmfd.	68B 19
C1b	Gang, 0 to 162 mmfd. (Spot welded to drum)	
C2	50 mmfd., Ceramic	65B 6-4
C3	250 mmfd., Ceramic	65B 6-5
C4	.01 mfd., 400 Volts, Paper	64B 1-25
*C5	250 mmfd., 500 Volts	
*C6	.01 mfd., 400 Volts	
C7	.02 mfd., 400 Volts, Paper	64B 1-24
C8	.1 mfd., 200 Volts, Paper	64B 1-30
C9	.05 mfd., 400 Volts, Paper	64B 1-22
C10a	50 mfd., 150 Volts	Elect. 67A 10
C10b	30 mfd., 150 Volts	
C11	.05 mfd., 400 Volts, Paper	64B 1-22
C12	.18 mfd., 200 Volts, Paper	64A 2-2

COILS, TRANSFORMERS, Etc.

Symbol	Description	Part No.
L1	Antenna, Loop (mounted on cardboard back)	69C 60
L2	Coil, Oscillator	69A 20-2
T1	Transformer, 1st I.F.	72B 50
T2	Transformer, 2nd I.F.	72B 51
T3	Transformer, Output	98A 4
	Speaker (5" PM) and Output Transformer	78B 26-1
SWI	Switch, On-Off	Part of R3
	*Couplate (Includes R5, R6, C5, C6)	63A 5-1

MISCELLANEOUS

Description	Part No.
Cabinet	
Ebony	34D 22-1
Mahogany	34D 22-2
Ivory	34D 22-3
Walnut and Gold	34D 22-4
Cartons and fillers	44B 110
Dial Cord	50A 1-3
Felt Washer (Knob)	5A 4-3
Felt Washer (Pointer)	5A 4-8
Knob	
Ebony	33A 32-6
Ivory	33A 32-5
Walnut	33A 32-4
Walnut and Gold	33A 32-7
Pointer	
Ebony	25A 31-3
Ivory	25A 31-2
Walnut	25A 31-1
Ring, Pointer Compression	19A 31-1
Shaft, Tuning	28A 26-1
Spacer, Tuning Shaft	29A 2-7
Speed Nut, Tuning Shaft	2B10-19
Spring, Dial Cord Tension	19B1-2
Washer, "C" (tuning shaft)	4A4-6-0
Washer, Spring (tuning shaft)	4A6-3-0

*** C5, C6, R5, and R6 are contained in a multiple-unit component called a couplate (part number 63A5-1). Although a defective section of the couplate can sometimes be replaced by individual components, we strongly recommend replacing the entire couplate.**

Note that numerals 1, 2, 3, 4, shown at schematic connections correspond to couplate lead numbers printed on face of couplate.