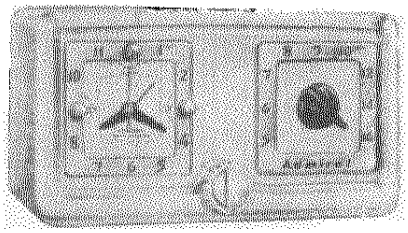
MODELS 5L21, 5L
5L23, Ch. 5L2



TO REMOVE CLOCK FROM CABINET

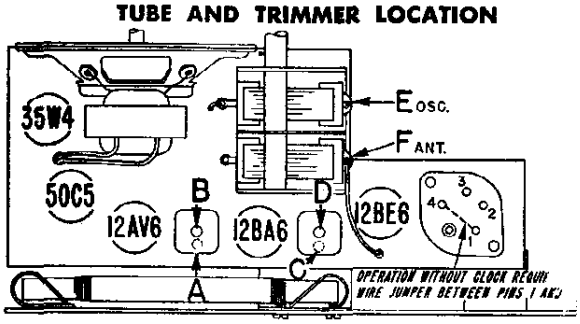
(Radio chassis need not be removed when removing clock)

1. Remove the back from radio cabinet.
2. Remove the clock plug from the socket on top of the radio chassis, by removing screw from top of p'ug and gently prying plug out from socket.
3. Remove the 2 nuts which hold the clock back cover to the clock.
4. Pull the clock out through the front of the cabinet.

OPERATING RADIO WHEN CLOCK IS REMOVED FROM CABINET

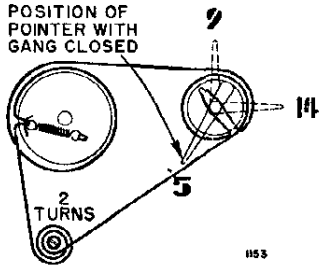
If the radio must be operated without the clock, a wire jumper must be connected between contacts 1 and 4 on socket M2 to complete the circuit.

TUBE AND TRIMMER LOCATION



Adjustments A and C made from underside of chassis.

DIAL STRINGING AND POINTER SETTING



Dial stringing and pointer with solid lines shown w[hen] closed. Dashed line pointer positions (1400 KC and [9]0 shown when tuning condenser is tuned to generator sign[al]

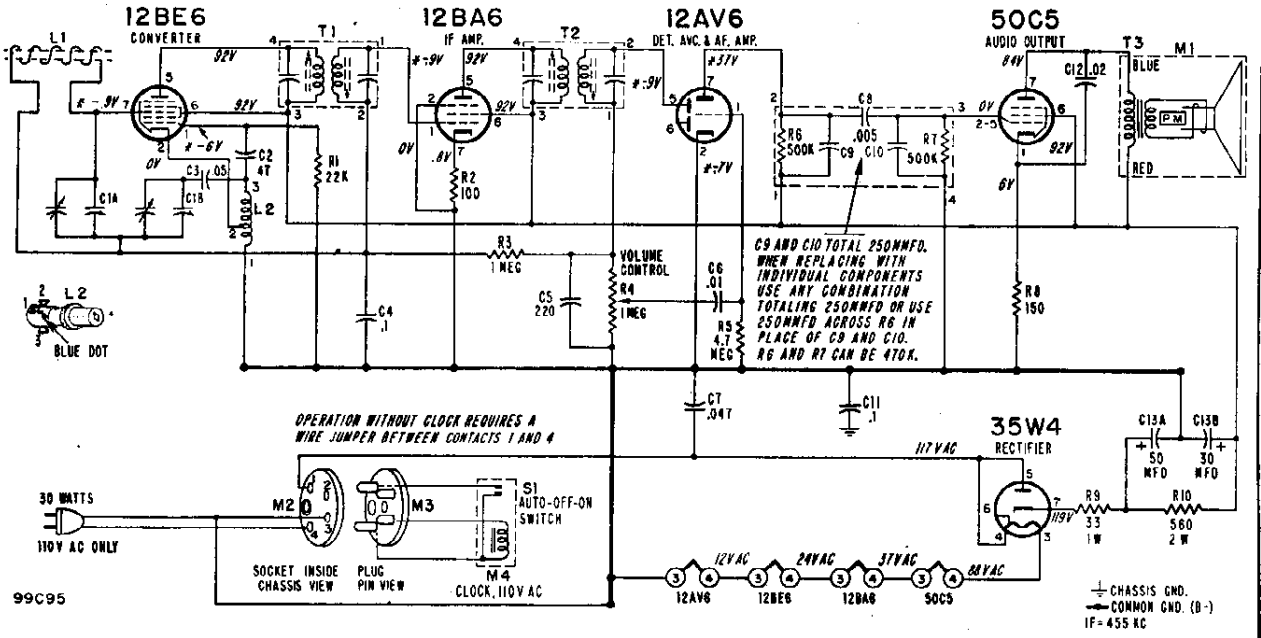
ALIGNMENT PROCEDURE

- Connect a wire jumper between contacts 1 and 4 on clock socket (M2) as shown in illustration.
- Turn receiver volume control full on (fully clockwise).
- Use an isolation transformer if available, otherwise connect a .1 mfd. condenser in series with low side of signal generator and connect to chassis.
  Caution: Do not connect a ground wire directly to chassis.
- Connect output meter across speaker voice coil.
- Use lowest output setting of signal generator capable o[f] producing adequate output meter indication and proceed i[n] the following sequence.
- Repeat adjustments to insure good results.

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 Adjustmen
1	250 mmfd. condenser	Antenna stator of tuning condenser	455 KC	Gang fully open	2nd IF 1st IF	*A, B *C, D	Maximum output
2	250 mmfd. condenser	Antenna stator of tuning condenser	1620 KC	Gang fully open	Oscillator	E	Maximum output
Mount and set dial pointer to horizontal position with tuning condenser tuned to 1400 KC generator signal; see illustration below.							
3	Loop of several turns of wire, or place generator lead close to receiver loop for adequate signal pickup.	No actual connection (signal by radiation)	1400 KC	Tune in generator signal	Antenna	F	Maximum output

*Adjustments A and C made from the underside of the chassis. If IF transformers have hollow core slugs, these adjustments may all be made from the top of the chassis, if you use alignment tool #98A30-7 obtainable from your Admiral distributor. The bottom IF slug adjustment may be reached through the hollow core in the upper slug.

MODELS 5L21, 5L22, 5L23, Ch. 5L2



***These readings will be either lower or practically zero if taken with a 1000 ohm-per-volt meter.**

VOLTAGE DATA

Voltages shown on schematic diagram

- All readings made between tube socket terminals and B minus (negative lead of electrolytic condenser C13).
- Measured on 117 Volt 60 Cycle AC line.
- Volume control minimum; dial turned to low frequency end.
- Voltages measured with Vacuum Tube Voltmeter.

RESISTORS

Symbol	Description	Part No.
R1	22,000 ohms, ½ watt	60B 8-223
R2	100 ohms, ½ watt	60B 8-101
R3	1 megohm, ½ watt	60B 8-105
R4	1 megohm, Volume Control	75B 1-46
R5	4.7 megohms, ½ watt	60B 8-475
§R6	500,000 ohms, ¼ watt	
§R7	500,000 ohms, ¼ watt	
R8	150 ohms, ½ watt	60B 8-151
R9	33 ohms, 1 watt	60B 28-3
R10	560 ohms, 2 watt	60B 20-561

CONDENSERS

Symbol	Description	Part No.
C1A	290 mmfd. max., Ant. } Gang	68B 39
C1B	104 mmfd. max., Osc. } Gang	
	(Dial drum spotwelded to gang)	
C2	47 mmfd. ceramic	65C 6-79
C3	.05 mfd. 400 volts, paper	64B 1-22
C4	.1 mfd, 200 volts, paper	64B 1-30
C5	220 mfd, ceramic	65C 6-90
C6	.01 mfd, 400 volts, paper	64B 1-25
C7	.047 mfd, 400 volts, paper	65A 13-5
§C8	.005 mfd, 450 volts	
§C9	See Schematic	
§C10	See Schematic	
C11	.1 mfd, 200 volts, paper	64B 1-30
C12	.02 mfd, 400 volts, paper	64B 1-24
C13A	50 mfd, 150 volts } Elect.	67A 22-1
C13B	30 mfd, 150 volts } Elect.	

§Part of couplate (part #63A5-4). Replace with exact duplicate or individual components. Note that numbers 1, 2, 3, 4, on schematic correspond to lead numbers printed on face of couplate.

COIL, TRANSFORMERS, ETC.

Symbol	Description	Part No.
L1	Rod Antenna & Cabinet Back	69C 143-1
L2	Coil, Oscillator	69A 52-4
T1	Transformer, 1st IF	72B 28-7
T2	Transformer, 2nd IF	72B 28-7
T3	Transformer, Output	98A 21
M1	Speaker (4" PM) and Output Trans.	78B 65-2
S1	Switch, Auto-Off-On (part of M4)	91C 6-14

MISCELLANEOUS PARTS

Description	Part No.
Bracket, Tuning Shaft	15A 698
Carton and Fillers	44B 214
Clamp, for Line Cord	11A 9-4
Clip, IF Transformer mtg.	72B 28-10
Compression Ring (for pointer)	19A 31-2
Dial Cord (30" length needed)	50A 1-3
Drum, Dial Pointer	17A 27
Grommet, Rubber (Gang mtg.)	12A 1-19
Line Cord and Plug	89A 1-4
Manual Customer Instructions	41A 18-45
Socket, Tube plain type	87A 24-2
Socket, Tube with grounding strap	87A 24-3
Plate, Pointer Support	15A 498
Pointer, Dial	25A 46-2
Sleeve, for pointer shaft	27A 124
Sleeve, Tuning (Brass)	27A 157
Speed Nut (for mtg. pointer shaft sleeve)	2B 10-28-59
Spring, Dial Cord Tension	19B 1-5
Washer, "C" (for pointer drum)	4A 4-6

CABINET PARTS

Description	Part No.
Bezel, Tuning Dial (Frame) Copper Bronze finish	23A 107-1
Cabinet, Plastic Ebony (5L21)	34D 43-1
Cabinet, Plastic Mahogany (5L22)	34D 43-2
Cabinet, Plastic Ivory (5L23)	34D 43-3
Grille, Speaker (plastic)	36A 22
Knob Volume, Ebony	33D 55-28
Knob Volume, Maroon	33D 55-32
Knob Volume, Ivory	33D 55-29
Knob Tuning, Ebony	33D 55-24
Knob Tuning, Maroon	33D 55-23
Knob Tuning, Ivory	33D 55-26
Washer, Felt (for tuning knobs)	5A 4-18

CLOCK PARTS

	Description	Part No.
M2	Socket, Clock, 4 contact	87A 6-3
M3	Plug, Clock, 4 pin	88B 22-5
	Shell and Insulator for plug M3	88B 22-3
M4	Clock, Complete 60 cycle, for 5L21, 5L22, 5L23	91C 6-1
	Bezel, Clock (Frame) Copper Bronze finish	91C 6-10
	Motor Assembly for 110 V. 60 cycles	91C 6-14
	Glass, Window	91C 6-13
	Knob, Clock Off-Auto-On	91C 6-12
	Knob, Clock Time set, Alarm set	91C 6-11