

MODELS 5G21, 5G21/15, 5G22,  
5G22/15, 5G23, 5G23/15,  
Ch. 5G2

**CLOCK PARTS**

M2 Socket, Clock, 4 contact	87A 6-3
M3 Plug, Clock, 4 pin	88B 22-5
M4 Clock, M3	88B 22-3
50 cycle, for 5G21, 5G22	**91C 4-1
50 cycle, for 5G21/15, 5G22/15	91C 4-2
50 cycle, for 5G23/15	**91C 4-3
Background, Clock Dial Bezel	91C 4-4
Bezel, Clock (Frame)	22A 27
gold spray finish	91C 4-12
polished brass finish	91C 4-13
Field and Coil Assembly for 110 V. 60 cycles	91C 4-15
for 110 V. 50 cycles	91C 4-17
Glass, Window	91C 4-11
Knobs, Clock (Mahogany)	91C 4-10
Rotor for 110 V. 60 cycles	91C 4-16
for 110 V. 50 cycles	91C 4-18

\*\*Specify whether bezel is gold spray finish or polished brass finish.

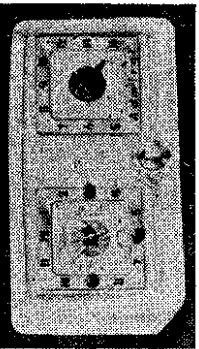
**CONDENSERS**

Symbol	Description	Part No.
C1A	290 mmid. max., Ant. (gang)	68B 39
C1B	104 mmid. max., Ant. (Dial drum spotwelded to gang)	
C2	47 mfd. ceramic	55C 6-79
C3	.05 mfd. 400 volts, paper	64B 1-22
C4	.1 mfd. 200 volts, paper	64B 1-30
C5	.220 mfd. ceramic	55C 6-80
C6	.01 mfd. 400 volts, paper	64B 1-25
C7	.047 mfd. 400 volts, paper	64B 8-28
C8	.005 mfd. 450 volts	
C9	See Schematic	
C10	1 mfd. 200 volts, paper	64B 1-30
C11	.02 mfd. 400 volts, paper	64B 1-24
C12	50 mfd. 150 volts	Elect. 67A 22-1
C13A	30 mfd. 150 volts	
C13B	50 mfd. 150 volts	

Part of couplote (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 couplote.

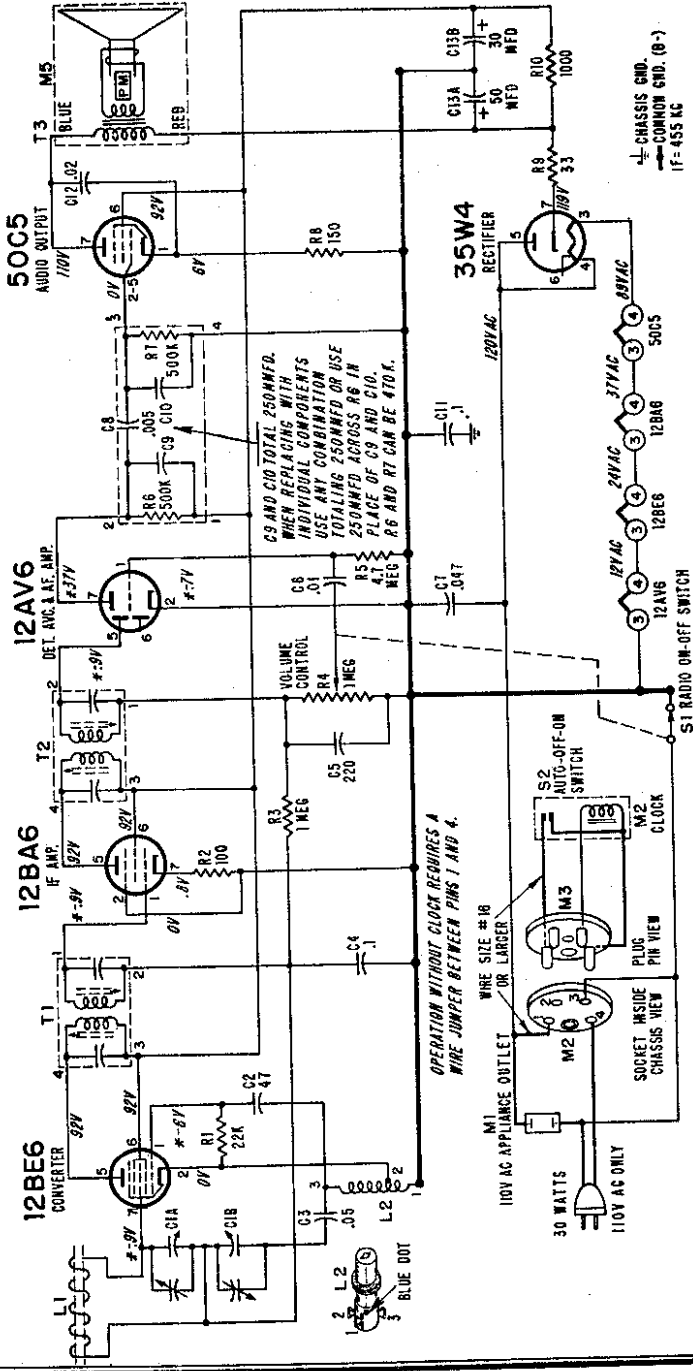
**MISCELLANEOUS PARTS**

Description	Part No.
Bracket, Tuning Shaft	15A 898
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	59A 34-1
Manual	
Customer Instructions	41A 18-41
Service Manual	5407
Socket, Tube	
plain type	87A 24-2
with grounding strap	87A 24-3
Pointer, Dial	15A 496
Plate, Pointer Support	25A 46-1
Sleeve, for pointer shaft	27A 124
Sleeve, Tuning (Brass)	27A 137
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



**VOLTAGE DATA**

- Voltages shown on schematic diagram
- All readings made between tube socket terminals and B minus (terminal of On-Off switch).
- Measured on 117 Volt AC line.
- Volume control minimum; dial turned to low frequency end.
- Voltages measured with Vacuum Tube Voltmeter.



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

**CABINET PARTS**

Symbol	Description	Part No.
L1	Rod Antenna & Cabinet Back	85C 143
L2	Coil, Oscillator	69A 52-4
T1	Transformer, 1st IF	72B 28-7
T2	Transformer, 2nd IF	72B 28-7
T3	Transformer, Output	96A 21
M1	Appliance Outlet	87A 21-1
M2	Speaker (4" PM) and Output Trans.	78B 65-1
M3	Switch, Radio On-Off (part of M4)	91C 4-14
S1	Switch, Auto-Off-On	
S2	Switch, Radio On-Off (part of M4)	

**COIL, TRANSFORMERS, ETC.**

Symbol	Description	Part No.
L1	Rod Antenna & Cabinet Back	85C 143
L2	Coil, Oscillator	69A 52-4
T1	Transformer, 1st IF	72B 28-7
T2	Transformer, 2nd IF	72B 28-7
T3	Transformer, Output	96A 21
M1	Appliance Outlet	87A 21-1
M2	Speaker (4" PM) and Output Trans.	78B 65-1
M3	Switch, Radio On-Off (part of M4)	91C 4-14

**RESISTORS**

Symbol	Description	Part No.
R1	22,000 ohms, 1/2 watt	60B 8-223
R2	100 ohms, 1/2 watt	60B 8-101
R3	1 megohm, 1/2 watt	60B 8-105
R4	1 megohm, Volume Control (includes Radio On-Off Switch S1)	75B 1-41
R5	4.7 megohms, 1/2 watt	60B 8-475
R6	500,000 ohms, 1/2 watt	
R7	150 ohms, 1/2 watt	60B 8-151
R8	33 ohms, 1 watt	33D 55-24
R9	1,000 ohms, 1 watt	33D 55-23
R10	1,000 ohms, 1 watt	33D 55-26

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### ALIGNMENT PROCEDURE

- Connect a wire jumper between pins 1 and 4 on clock plug (M2) as shown in illustration below.
- 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 of producing adequate output meter indication and proceed in the following sequence.
- Repeat adjustments to insure good results.

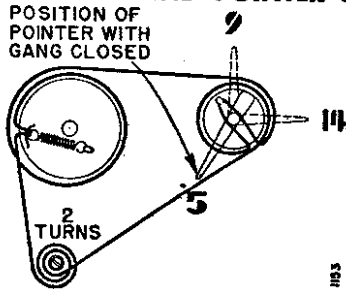
Step	Dummy Antenna in Series with Signal Generator	Connection of Signal Generator (High Side)	Signal Generator Frequency	Receiver Gang Setting	Trimmer Description	Trimmer Designation	Type of Adjustment
1	250 mmfd. condenser	Antenna stator of tuning condenser	455 KC	Gang fully open	2nd IF 1st IF	*A, B *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
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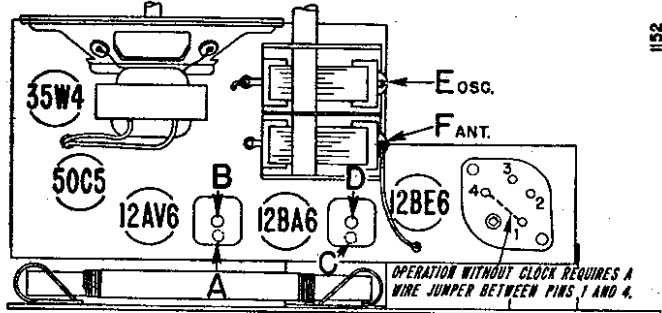
\*Adjustments A and C made from the underside of the chassis. If IF transformers have hollow core slugs, these adjustments may all be made from the top of the chassis, if you use alignment tool #98A30-7 obtainable from your Admiral distributor. The bottom IF slug adjustment may be reached through the hollow core in the upper slug.

#### DIAL STRINGING AND POINTER SETTING



Dial stringing and pointer with solid lines shown with gang closed. Dashed line pointer positions (1400 KC and 900 KC) shown when tuning condenser is tuned to generator signal.

#### TUBE AND TRIMMER LOCATION



Adjustments A and C made from underside of chassis.

#### 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 plug and gently prying plug out from socket.
3. Turn the slumber switch to the "60" position.
4. Remove the 3 nuts which hold the clock back cover to the clock.
5. Carefully pull the clock through the front of the cabinet while twisting it slightly to eliminate binding.

#### OPERATING RADIO MANUALLY

To operate the radio manually, the "Auto-Off-On" switch must be in the "On" position or the radio will not operate.

The radio on-off switch will turn the radio on or off, but will have no control over the appliance or the clock.

#### TO REMOVE FIELD and COIL ASSEMBLY or TO REMOVE ROTOR

The field and coil assembly and the rotor can be easily removed after the two screws which mount the nameplate are removed.

Note that when the rotor is replaced, the gear on the rotor must drop into the hole in the center of the gear plate and mesh with the clock gear.