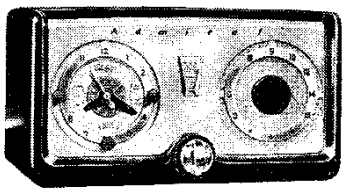
Admiral

	Model: 5A32/12	**Chassis:**	**Year:** Pre 1955
	Power:	**Circuit:**	**IF:**
	Tubes:		
	Bands:		

Resources

- Riders Volume 23 - ADMIRAL 23-16
- Riders Volume 23 - ADMIRAL 23-17

MODELS 5A32/12, /15, /16, 5A33/12, /15, /16, Ch. 5A3



Model 5A32 Mahogany, 5A33 Ivory
Operating Voltage: 117 volt AC only.
Power: 30 watts.

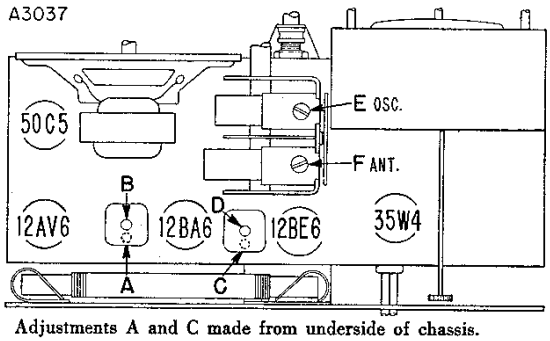
ALIGNMENT PROCEDURE

- 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

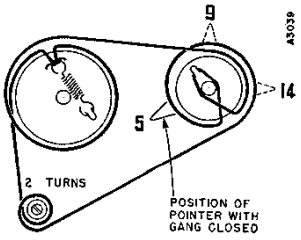
*Adjustments A and C made from the underside of the chassis. If IF transformers have hollow core slugs, these adjustments may all be made from the top of the chassis, if you use alignment tool #98A30-7 obtainable from your Admiral distributor. The bottom IF slug adjustment may be reached through the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

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

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 CLOCK FROM CABINET

To remove the clock, proceed as follows:

1. Remove the radio chassis from the cabinet.
2. Remove the three hexagonal nuts and lock washers which mount the clock movement to the metal cover.
3. Carefully remove the clock movement from the cover. Do not unsolder leads unless complete removal of the clock is required. The metal cover mounting the clock to the chassis may be removed if more space is required for servicing 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.

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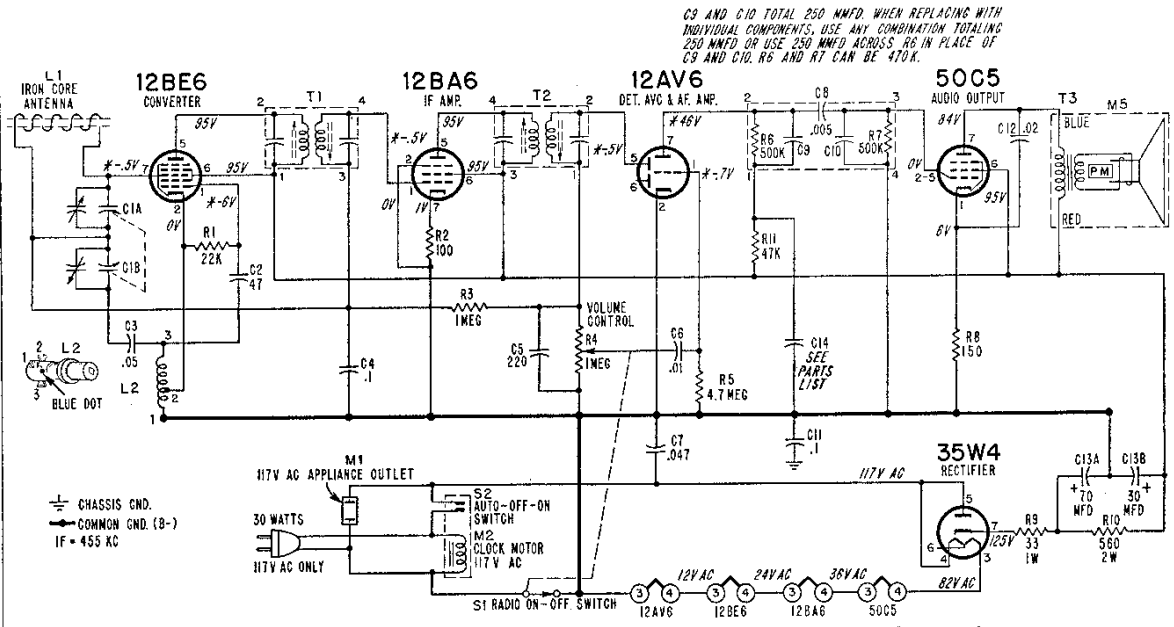

*These voltage readings will be either lower or practically zero if taken with a 1000 ohm-per-volt meter.

VOLTAGE DATA

Voltages shown on schematic diagram.

- All readings made between tube socket terminals and B minus (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.

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 (R4 includes switch S1)	75B I-41
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 watts	60B 20-561
R11	47,000 ohms, ½ watt	60B 8-473

CONDENSERS

C1A	290 mmfd, max., Ant. } gang	68B 39
C1B	104 mmfd, max., Osc. } (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 mmfd, ceramic	65C 6-80
C6	.01 mfd, 400 volts, paper	64B 1-25
C7	.047 mfd, 400 volts, paper	65A 13-5
§C8	.005 mfd, 400 volts	
§C9	{ See note	
§C10	} on schematic	
C11	.1 mfd, 200 volts, paper	64B 1-30
C12	.02 mfd, 400 volts, paper	64B 1-24
C13A	70 mfd, 150 volts } elect.	67A 17
C13B	30 mfd, 150 volts }	
C14	{ .25 mfd, 200 volts, paper (in later sets)	64B 1-28
	{ 4 mfd, 150 volts, elect. (in early sets)	67A 4-2

§Part of couplate (part No. 63A 5-4). 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 and Cabinet Back	69C 156
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	Outlet, Appliance	87A 21-1
M5	Speaker (4" PM) and Output Transformer	78B 72-1
S1	Switch, Radio On-Off	Part of R4
S2	Switch Auto-On-Off (part of M4)	91C 4-14
	Couplate (Includes R6, R7, C8, C9, C10)	63A5-4

MISCELLANEOUS PARTS

Baffle Ring, Speaker	12B 49
Bracket, Dial Pointer Support	15A 498
Bracket, Tuning Shaft	15A 698
Carton and Fillers	44B 228
Clip, IF Transformer Mounting	72B 28-10
Compression Ring (for pointer)	19A 31-10
Dial Cord (20" length needed)	50A 1-3
Drum, Dial Pointer	17A 27
Grommet, Rubber (gang mtg.)	12B 1-19
Line Cord and Plug	89A 34-1
Manual, Customer Instruction	41B 20-11
Shaft, Dial Pointer	28A 42-2
Sleeve (for pointer shaft)	27A 124
Sleeve, Tuning (brass)	27A 157
Socket, Tube plain	87A 24-2
Socket, Tube with grounding strap	87A 24-3
Speaker Gasket	12B 49
Spacer, Metal "T" (for mtg. gang)	29A 2-1-71
Speed Nut (mtg. pointer shaft sleeve)	2B 10-28-59
Spring, Dial Cord Tension	19C 1-5
Washer, "C" (for pointer drum)	4A 4-6
Washer, Spring (for tuning shaft)	4A 6-10-0

CABINET PARTS

Description	Part No.
Cabinet, Plastic Mahogany	34D 56-2
Cabinet, Plastic Ivory	34D 56-3
Escutcheon and Speaker Grille Assembly	AA230
Knob Off-Volume, Mahogany	33D 55-3
Knob Off-Volume, Ivory	33D 55-27
Knob Tuning, Mahogany	33D 55-23
Knob Tuning, Ivory	33D 55-26
Pointer and Hub Assembly (includes compression ring) Mahogany	A3732
Pointer and Hub Assembly (includes compression ring) Ivory	A3733
Washer, Felt (for dial pointer)	5A 4-3
Washer, Felt (for tuning knobs)	5A 4-18

CLOCK PARTS

M2 Clock, Complete for 117 volts, 60 cycles	91C 7-1
M2 Clock, Complete for 117 volts, 50 cycles	91C 7-2
M2 Clock, Complete for 117 volts, 25 cycles	91C 7-3
Back Cover (fibre)	32A 151
Bumper, Sleep Switch (rubber)	12B 3-6
Cover (metal)	15B 838
Field and Coil Assembly for 117 volts, 60 cycles	91C 4-15
Field and Coil Assembly for 117 volts, 50 cycles	91C 4-17
Field and Coil Assembly for 117 volts, 25 cycles	91C 4-19
Knob, Clock Mahogany	91C 7-11
Knob, Clock Ivory	91C 7-12
Rotor for 117 volts, 60 cycles	91C 4-16
Rotor for 117 volts, 50 cycles	91C 4-18
Rotor for 117 volts, 25 cycles	91C 4-20
Window (plastic)	24B 11