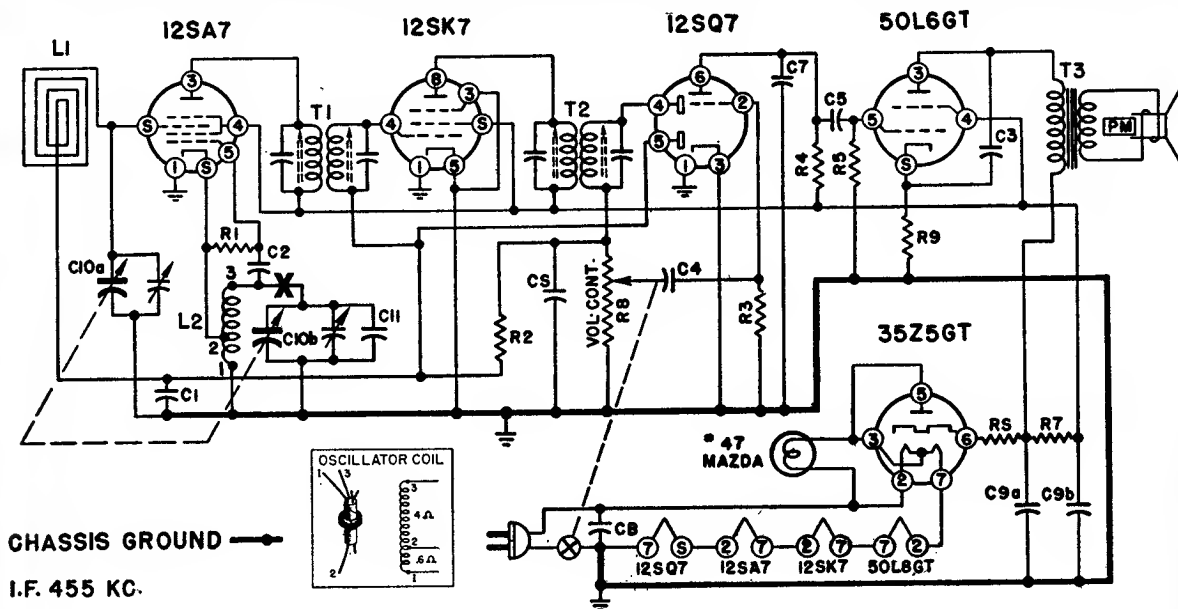




Admiral			
	Model: 7T10	Chassis:	Year: Pre 1952
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		
Resources			
Beitmans 1948 8			
Riders 17 (XVII) ADMIRAL 17-11			
Riders 17 (XVII) ADMIRAL 17-12			
Riders 22 (XXII) ADMIRAL 22-13			
Riders 22 (XXII) ADMIRAL 22-14			



# MANUAL OF 1948 MOST-OFTEN-NEEDED RADIO DIAGRAMS



- UL5K1** { 1. .05 mfd. condenser added at point "X" in oscillator circuit.  
2. B minus is isolated from chassis by 150,000 ohm resistor and .18 mfd. condenser in parallel.  
3. Gang condenser grounded to chassis and not connected to B minus as in above circuit.

*Admiral*

CHASSIS **5 K 1**  
MODELS **7T10, 7T14, 7T15**

## RESISTORS

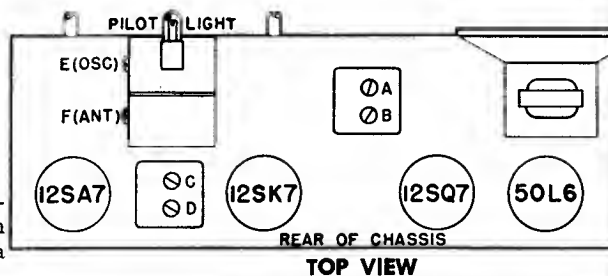
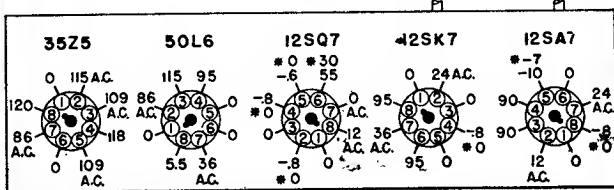
Symbol	Description	Part No.
R1	22,000 Ohms, 1/2 Watt	608 B-223
R2	1 Megohm, 1/2 Watt	608 B-105
R3	4.7 Megohms, 1/2 Watt	608 B-475
R4	470,000 Ohms, 1/2 Watt	608 B-474
R5	470,000 Ohms, 1/2 Watt	608 B-474
R6	33 Ohms, 1 Watt	608 B-28-3
R7	1000 Ohms, 1 Watt	608 B-28-2
R8	1 Megohm Volume Control and Switch	75B 1-16
R9	150 Ohms, 1/2 Watt	608 B-151

## CONDENSERS

C1	.1 mfd., 200 Volts, Paper	648 1-30
C2	50 mmfd., $\pm 20\%$ , Ceramic	658 6-4
C3	.02 mfd., 400 Volts, Paper	648 1-24
C4	.01 mfd., 400 Volts, Paper	648 1-25
C5	.01 mfd., 400 Volts, Paper	648 1-25
C6	250 mmfd., $\pm 20\%$ , Ceramic	658 6-5
C7	500 mmfd., $\pm 20\%$ , Ceramic	658 6-6
C8	.05 mfd., 400 Volts, Paper	648 1-22
C9a	.50 mfd., 150 Volts	Elec. 67A 10
C9b	30 mmfd., 150 Volts	
C10a	Gong, 0 to 420 mmfd.	
C10b	Gong, 0 to 162 mmfd.	A1460
C11	20 mmfd., $\pm 20\%$ , Ceramic	658 6-26

Connect Signal Generator to—	Dummy Antenna Between Radio and Generator	Set Generator Frequency to—	Set Receiver Dial Frequency to—	Adjust Following Trimmers	Type of Adjustment
Tuning Condenser Antenna Stator	250 mmfd. Condenser	455 K.C.	High frequency end of Dial	A-B—2nd I. F. C-D—1st I. F. (See note below)	Adjust to maximum Output
Tuning Condenser Antenna Stator	250 mmfd. Condenser	1630 K.C.	High frequency end of Dial	E—Osc.	Adjust to maximum Output
Loop radiator (or place lead from generator close to loop of set to obtain adequate signal).	No actual connection between set and generator.	1400 K.C.	Tune in generator signal	F—Ant.	Adjust to maximum Output

Note: In some sets, the B and D adjustments must be made from the underside of the chassis.



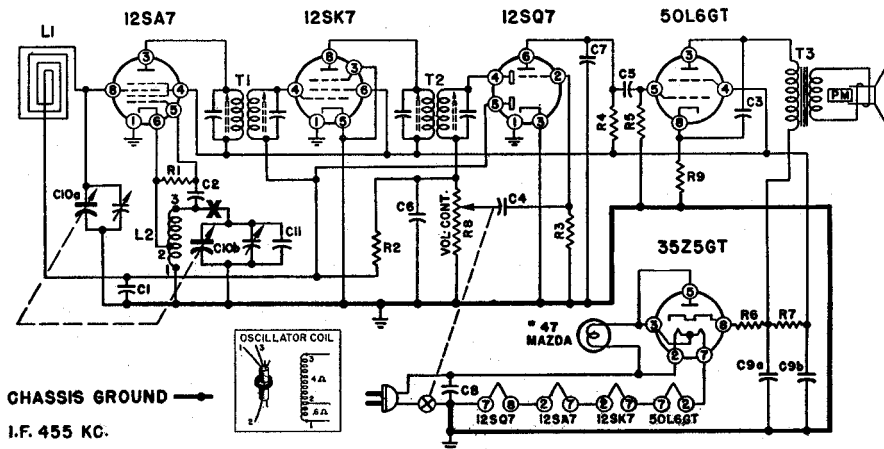
**8**

- Voltages measured with a vacuum-tube voltmeter. A second voltage reading (marked with an asterisk \*) indicates readings made with a 1000 ohm-per-volt meter.



## ADMIRAL CORPORATION

MODELS 7T10, 7T14,  
7T15, Chassis 5K1,  
UL5K1



UL5K1 Chassis has circuit changes as described. It uses Speaker 78B 26-2.

1. .05 mfd. condenser added at point "X" in oscillator circuit.
2. B minus is isolated from chassis by 150,000 ohm resistor and .18 mfd. condenser in parallel.
3. Gang condenser grounded to chassis and not connected to B minus as in above circuit.

## REPLACEMENT PARTS

Symbol	Description	Part No.
R1	22,000 Ohms, 1/2 Watt	608 8-223
R2	1 Megohm, 1/2 Watt	608 8-105
R3	4.7 Megohms, 1/2 Watt	608 8-475
R4	470,000 Ohms, 1/2 Watt	608 8-474
R5	470,000 Ohms, 1/2 Watt	608 8-474
R6	33 Ohms, 1 Watt	608 28-3
R7	1000 Ohms, 1 Watt	608 28-2
R8	1 Megohm Volume Control and Switch	758 1-16
R9	150 Ohms, 1/2 Watt	608 8-151

## CONDENSERS

C1	.1 mfd., 200 Volts, Paper	648 1-30
C2	.50 mfd., $\pm 20\%$ , Ceramic	658 6-4
C3	.02 mfd., 400 Volts, Paper	648 1-24
C4	.01 mfd., 400 Volts, Paper	648 1-25
C5	.01 mfd., 400 Volts, Paper	648 1-25
C6	.250 mfd., $\pm 20\%$ , Ceramic	658 6-5
C7	.500 mfd., $\pm 20\%$ , Ceramic	658 6-6
C8	.05 mfd., 400 Volts, Paper	648 1-22
C9	.50 mfd., 150 Volts Elec.	67A 10
C9B	.30 mfd., 150 Volts Elec.	A1460
C10a	Gang, 0 to 420 mfd.	
C10b	Gang, 0 to 162 mfd.	
C11	(Spot welded to drum)	
	20 mfd., $\pm 20\%$ , Ceramic	658 6-26

## COILS, TRANSFORMERS, ETC.

Symbol	Description	Part No.
L1	Antenna, Loop	69C 19
L2	Coil, Oscillator	69A 20
T1	Transformer, 1st I.F.	728 31
	Above I.F. transformer is slug-tuned. Trimmer-tuned I.F. transformer, part number 72833, also used and is interchangeable with 72831.	
T2	Transformer, 2nd I.F.	728 32
	Above I.F. transformer is slug-tuned. Trimmer-tuned I.F. transformer, part number 72834, also used and is interchangeable with 72832.	
T3	Transformer, Output	98A 4
	Speaker (5" PM) and Output Transformer	78B 26-1

## MISCELLANEOUS

Description	Part No.
Cabinet, Plastic (Black)	34D 14-1
Cabinet, Plastic (Black with Ivory Louvre)	34D 14-2
Cabinet, Plastic (Ivory)	34D 14-3

## MISCELLANEOUS

Description	Part No.
Cabinet, Plastic (Ivory with Black Louvre)	34D 14-5
Cabinet, Plastic (Mahogany)	34D 14-2
*Cabinet, Wood (7T14)	35D 61
*Cabinet, Wood (7T15)	35D 60
Dial Background	158 180
Dial Cord	50A 1-3
Dial Crystal	244A 4
Dial Drum	See C10
Dial Light (#47 Mazda)	81A 1-8
Dial Light Socket and Leads	82A 3-2
Dial Scale	218 39
Knob, Plastic (Black)	33A 18-6
Knob, Plastic (Ivory)	33A 18-5
Knob, Wood (Walnut)	33A 18-4
Pointer	25A 26
Shaft, Tuning	28A 11-3
Snap, Buttons (for dial scale)	13A 1-3-47
Snap Ring (for pointer)	18A 5-3
Socket, Tube	87A 10-2
Spring, Tension	198 1-2
Washer, "C" (for tuning shaft)	4A 4-1
Washer, Felt (for knobs)	5A 4-3
Washer, Fibre	5A 2-1
Washer, Spring (for tuning shaft)	4A 5-3-0

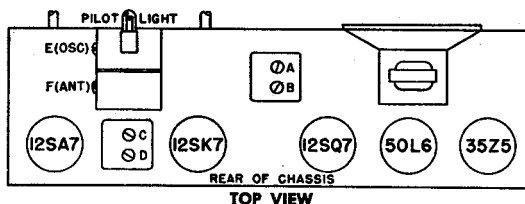
\*Supplied only if old cabinet cannot be repaired. When ordering, describe condition of old cabinet in detail.



MODELS 7T10, 7T14,  
7T15

## ADMIRAL CORPORATION

## TUBE AND TRIMMER LOCATION



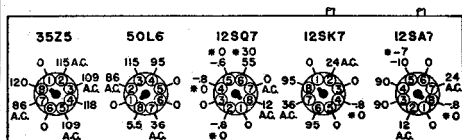
## ALIGNMENT PROCEDURE

1. Check pointer setting: With gang closed, the pointer should be horizontal.
2. Connect Output Meter across Voice Coil.
3. Turn Receiver Volume Control full on.
4. Use lowest Output setting of Signal Generator capable of producing adequate Output Meter indication and then proceed as outlined in chart below.
5. Repeat adjustments to insure good results.

Connect Signal Generator to—	Dummy Antenna Between Radio and Generator	Set Generator Frequency to—	Set Receiver Dial Frequency to—	Adjust Following Trimmers	Type of Adjustment
Tuning Condenser Antenna Stator	250 mmfd. Condenser	455 K.C.	High frequency end of Dial	A-B—2nd I. F. C-D—1st. I. F. (See note below)	Adjust to maximum Output
Tuning Condenser Antenna Stator	250 mmfd. Condenser	1630 K.C.	High frequency end of Dial	E—Osc.	Adjust to maximum Output
Loop radiator (or place lead from generator close to loop of set to obtain adequate signal).	No actual connection between set and generator.	1400 K.C.	Tune in generator signal	F—Ant.	Adjust to maximum Output

Note: In some sets, the B and D adjustments must be made from the underside of the chassis.

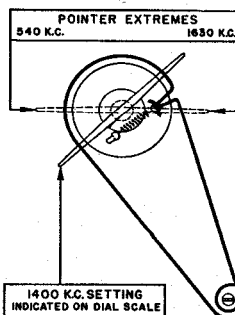
## VOLTAGE CHART



\*Indicates second reading taken with 1000 ohm-per-volt meter.

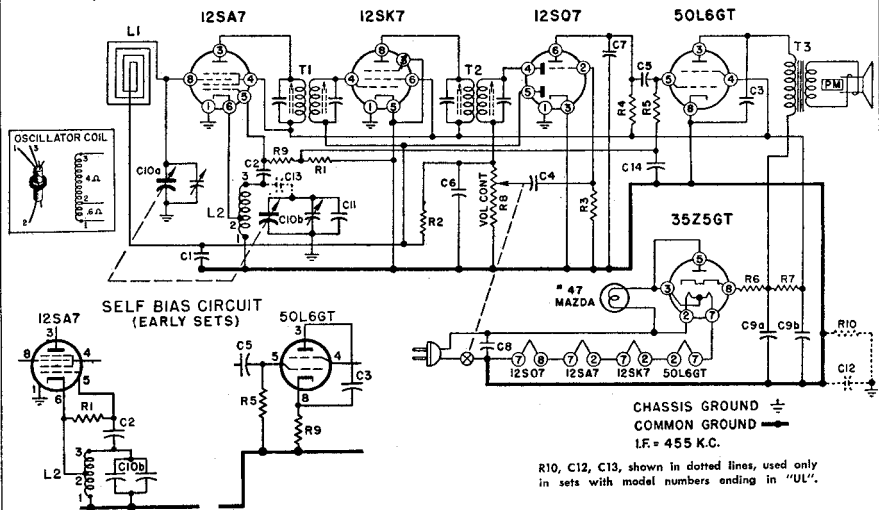
- All readings made between tube socket terminals and chassis.
- Voltages measured on a 117 Volt A.C. line.
- Dial turned to low frequency end, no signal.
- Voltages measured with a vacuum-tube voltmeter. A second voltage reading (marked with an asterisk \*) indicates readings made with a 1000 ohm-per-volt meter when use of this instrument would result in appreciably lower readings.

## DIAL CORD STRINGING





MODELS 5K11, 5K12, 5K13,  
5K14; 7T10, 7T14, 7T15,  
Rev.; Ch. 5K1



Local tubes 14B6, 50A5, 35Y4 used as alternates for 12SQ7, 50L6, 35Z5 respectively. See tube manual for pin numbers.

## ALIGNMENT PROCEDURE

1. Check pointer setting: With gang closed, the pointer should be horizontal.
2. Connect Output Meter across Voice Coil.
3. Turn Receiver Volume Control full on.
4. Use lowest Output setting of Signal Generator capable of producing adequate Output Meter indication and then proceed as outlined in chart below.
5. Repeat adjustments to insure good results.

Connect Signal Generator to—	Dummy Antenna Between Radio and Generator	Set Generator Frequency to—	Set Receiver Dial Frequency to—	Adjust Following Trimmers	Type of Adjustment
Tuning Condenser Antenna Stator	250 mmfd. Condenser	455 K.C.	High frequency end of Dial	A-B—2nd I. F. C-D—1st I. F. (See note below)	Adjust to maximum Output
Tuning Condenser Antenna Stator	250 mmfd. Condenser	1630 K.C.	High frequency end of Dial	E—Osc.	Adjust to maximum Output
Loop radiator (or place lead from generator close to loop of set to obtain adequate signal).	No actual connection between set and generator.	1400 K.C.	Tune in generator signal	F—Ant.	Adjust to maximum Output

Note: In some sets, the B and D adjustments must be made from the underside of the chassis.

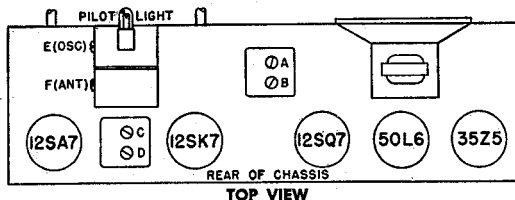


# PAGE 22-14 ADMIRAL

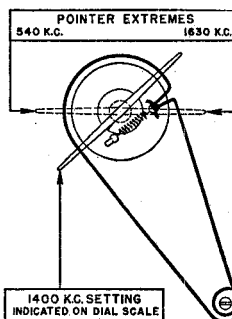
MODELS 5K11, 5K12, 5K13,  
5K14; 7T10, 7T14, 7T15,  
Rev.; Ch. 5K1

## TUBE AND TRIMMER LOCATION

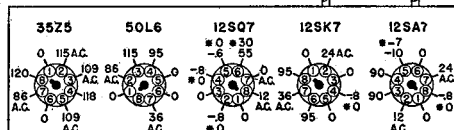
Local tubes 14B6, 50A5, 35Y4 used as alternates for 12SQ7,  
50L6, 35Z5 respectively. See tube manual for pin numbers.



## DIAL CORD STRINGING



## VOLTAGE DATA



\*Indicates second reading taken with 1000 ohm-per-volt meter.

- All readings made between tube socket terminals and B minus (Terminal of on-off switch).
- Voltages measured on a 117 Volt A.C. line.
- Dial turned to low frequency end, no signal.
- Voltages measured with a vacuum-tube voltmeter. A second voltage reading (marked with an asterisk \*) indicates readings made with a 1000 ohm-per-volt meter when use of this instrument would result in appreciably lower readings.

## RESISTORS

Symbol	Description	Part No.
R1	12,000 ohms, 1/2 watt.....	60B8-123
R2	1 Megohm, 1/2 Watt.....	60B 8-105
R3	4.7 Megohms, 1/2 Watt.....	60B 8-475
R4	470,000 Ohms, 1/2 Watt.....	60B 8-474
R5	150,000 Ohms, 1/2 watt.....	60B8-154
R6	33 Ohms, 1 Watt.....	60B 28-3
R7	1000 Ohms, 1 Watt.....	60B 28-2
R8	1 Megohm Volume Control and Switch.....	75B 1-16
R9	12,000 Ohms, 1/2 watt.....	60B8-123
R10	150,000 Ohms, 1/2 watt.....	60B 8-154
(R10 used only in sets with model numbers ending in "UL".)		
R1 was 22,000, R5 was 470,000 and R9 was 150 ohms when self-bias circuit was employed. See schematic inset.		

## CONDENSERS

C1	1 mfd., 200 Volts, paper.....	64B 1-30
C2	50 mfd., $\pm 20\%$ , Ceramic.....	65B 6-4
C3	.02 mfd., 400 Volts, Paper.....	64B 1-24
C4	.01 mfd., 400 Volts, Paper.....	64B 1-23
C5	.01 mfd., 400 Volts, Paper.....	64B 1-25
C6	.250 mfd., $\pm 20\%$ , Ceramic.....	65B 6-5
C7	500 mfd., $\pm 20\%$ , Ceramic.....	65B 6-6
C8	.05 mfd., 400 Volts, Paper.....	64B 1-22
C9	50 mfd., 150 Volts.....	67A 10
C10	30 mfd., 150 Volts.....	67A 10
C10a	(.0-420 mfd) Stamped.....	A1460
C10b	(.0-162 mfd) 68B5.....	
C10c	or (.0-420 mfd) Stamped.....	68B19
C10d	(.0-108 mfd) 68B19.....	
(Drums are spotwelded to gangs.)		
C11	20 mfd., $\pm 20\%$ , Ceramic.....	65B 6-26
(Used in early sets only.)		

## CONDENSERS

Symbol	Description	Part No.
C12	.18 mfd., 200 Volts, paper.....	64A2-2
C13	.05 mfd., 400 Volts, paper.....	64B1-22
(C12 and C13 used only in sets with model numbers ending in "UL".)		
C14	500 mfd., $\pm 20\%$ , Ceramic.....	65B 6-6
(Added in later production to prevent R.F. oscillation.)		

## COILS, TRANSFORMERS, ETC.

L1	Antenna, Loop.....	69C 19
L2	Coil, Oscillator for gang stamped 68B5.....	69A20-2
for gang stamped 68B19.....69A20-2		
T1	Transformer, 1st I.F.....	72B50
Alternates 72B31 and 72B33 also used. Order part number stamped on original part.		
T2	Transformer, 2nd I.F.....	72B51
Alternates 72B32 and 72B34 also used. Order part number stamped on original part.		
T3	Transformer, Output.....	98A 4
Speaker (2" PM) and Output Transformer.....78B 26-1		
SW1	Switch, On-Off.....	Part of R8

## MISCELLANEOUS

Cabinet	Plastic Ebony (7710E).....	34D 14-1
	Plastic Mahogany (7710M).....	34D 14-2
	Plastic Ivory (7710C).....	34D 14-3
	Wood (7715).....	34D 14-1
	Plastic Ebony (5K11).....	34D 18-3
	Plastic Mahogany (5K12).....	34D 18-2
	Plastic Ivory (5K13).....	34D 18-3
	Plastic Mahogany & Gold (5K14).....	34D 18-4

## MISCELLANEOUS

Description	Part No.
Carton and Fillers.....	44B 98
Dial Background.....	15B 180
Dial Cord.....	50A 1-3
Dial Crystal for 7T10, 7T14, 7T15.....	24A 4
Dial Drum.....	24A 8
Dial Light (See 47 Magdol).....	See C10
Dial Light Socket and Leads.....	81A 1-8
Dial Scale.....	82A 7-2
Knob	21B 39-1
Plastic Ebony (7710E).....	33A 18-6
Plastic Mahogany (7710M).....	33A 18-4
Plastic Ivory (7710C).....	33A 18-5
Plastic Ebony (5K11).....	33A 32-3
Plastic Mahogany (5K12).....	33A 32-1
Plastic Mahogany & Gold (5K14).....	33A 32-7
Plastic Ivory (5K13).....	33A 32-2
Pointer, for 7T10, 7T14, 7T15.....	25A 26
Pointer, for 5K11, 5K12, 5K13, 5K14	
Brown.....	25A 30-1
Brown and Gold.....	25A 30-2
Shaft, Tuning.....	28A 11-3
Snap, Buttons (For dial scale).....	13A 1-3-47
Snap Button, for dial crystal.....	13A 1-1-47
Snap Ring (for pointer).....	19A 31-1
Socket, for tube.....	67A 10-2
Spring, Tension.....	19B 1-2
Washer, "C" (for tuning shaft).....	4A 4-1
Washer, Flat (for knobs).....	5A 4-3
Washer, Fibre.....	5A 2-1
Washer, Spring (for tuning shaft).....	4A 6-3-0

\*No longer available. Order plastic cabinet.