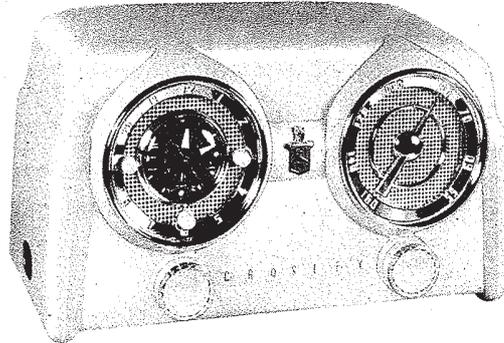


PAGE 22-4 CROSLEY

MODELS D-25BE, D-25CE,
D-25GN, D-25MN, D-25TN,
D-25WE, Ch. 311, 311-1

Model No.	Color
D-25 WE	White
D-25 TN	Tan
D-25 CE	Chartreuse
D-25 MN	Maroon
D-25 BE	Metallic Blue
D-25 GN	Metallic Green



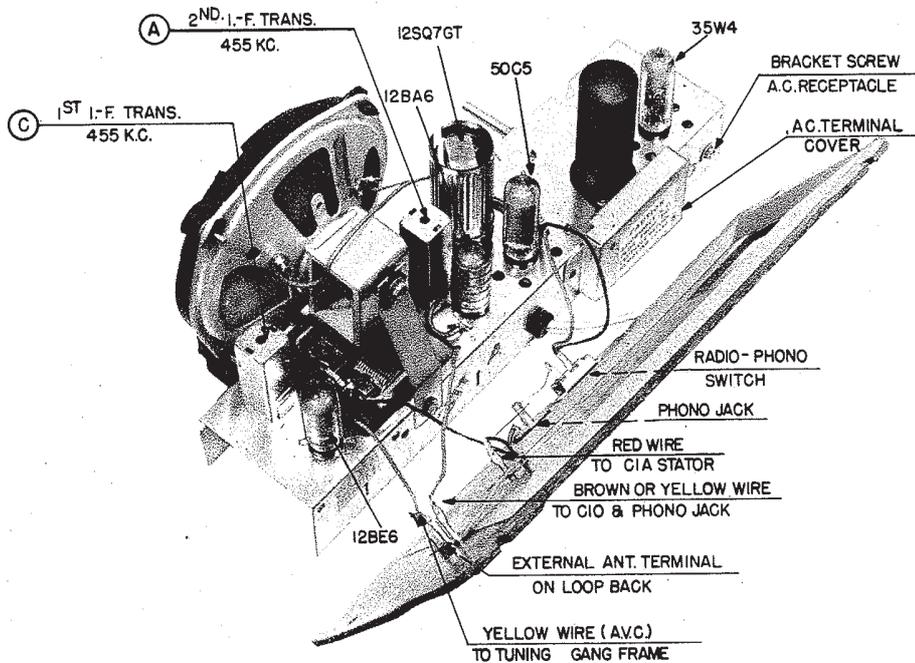
DESCRIPTION

TYPE: Five-tube, single band, Superheterodyne.
FREQUENCY RANGE: 540 to 1600 kc.
INTERMEDIATE FREQUENCY: 455 kc.
POWER SUPPLY: 60 cycle, a.c. only.
VOLTAGE RATING: 105-125 volts.
POWER OUTPUT: 1 watt maximum.
POWER CONSUMPTION:

Radio and Clock..... 35 watts
Clock 2 watts

TUBE COMPLEMENT:

Type	Function
12BE6	Converter
12BA6	I. F. Amplifier
12SQ7GT	Detector, AVC, 1st. A. F. Amplifier
50C5	A. F. Power Output
35W4	Rectifier



NOTE: ALIGNMENT LOCATIONS UNDER CHASSIS ARE SHOWN ON SOCKET VOLTAGE CHART.

CHASSIS, TOP VIEW

MODELS D-25BE, D-25CE,
D-25GN, D-25MN, D-25TN,
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Under no circumstances should a ground be connected to this receiver.

Phonograph connection — To use a record player with this receiver insert the pickup plug of the record player into the Phono jack on back of receiver. Then slide the Radio-Phono Switch on the back of the receiver to the "Phono" position. Connect the power cord of the record player to a convenient electric outlet of the correct voltage and frequency. Operate the record player in the normal manner. The controls of the receiver operate the same as for radio programs.

ALIGNMENT PROCEDURE

1. To remove the chassis from the cabinet, proceed as follows:
 - a. Turn the tuning control completely counter-clockwise to close the gang.
 - b. Remove the volume and tuning control knobs, and the dial pointer.
 - c. Remove the cabinet back and loosen the screw on the terminal cover behind the electrolytic capacitor. Lift up the cover and disconnect the three leads to the clock.
 - d. Connect a jumper between the terminal coded yellow and the center terminal on the terminal board.
 - e. Remove the two screws in the top corners of the chassis apron that secure the chassis to the cabinet.
 - f. Loosen the slotted hex head screw on the right rear of the chassis and slide the screw toward the center of the chassis to release power receptacle from opening in side of cabinet.
 - g. Slide the chassis from the cabinet.
2. Connect an output meter across the speaker voice coil.
3. The r.f. signal input from the signal generator should be connected as indicated in the alignment chart. Connect the signal generator ground to the top lug on loop antenna back (See Chassis Top View, page 1).
4. Turn the volume control on full and adjust the signal generator output to produce approximately midscale deflection of the output meter, but maintain signal generator output as low as possible to prevent AVC action in the receiver.

ALIGNMENT CHART

Alignment adjustment locations are shown on "Chassis, Top View," and on "Socket Voltage Chart".

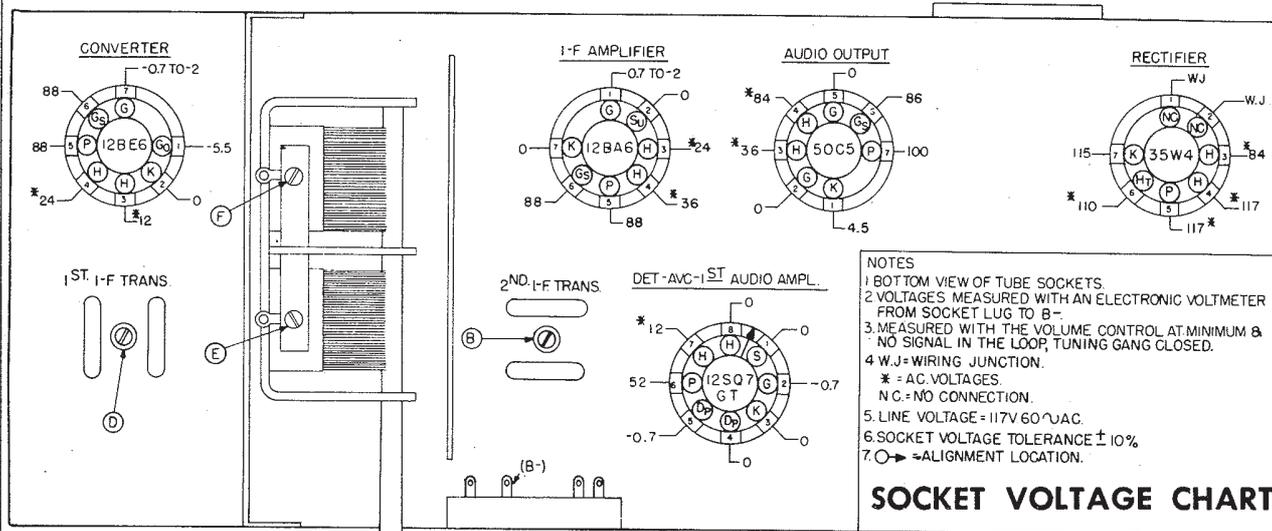
Alignment Sequence	Signal Generator Output			Position of Dial pointer	Adjust for Maximum Output
	Frequency in KC	In Series with	To		
1	455	200 mmf.	External Ant. Screw	1620	A, B, C & D (See Note 1.)
2	1620	200 mmf.	External Ant. Screw	1620	E
3	1400	200 mmf.	External Ant. Screw	1400	F (See Note 2.)

ALIGNMENT NOTES

Repeat adjustments (A, B, C & D) in sequence, until maximum output is obtained.

After the chassis and loop antenna have been replaced in the cabinet, repeat alignment sequence "3". Adjust "F" by inserting screw driver through the hole provided in the bottom of the cabinet.

MODELS D-25BE, D-25CE,
D-25GN, D-25MN, D-25TN,
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CLOCK ADJUSTMENTS

PROCEDURE FOR CHECKING TIMER SWITCH AND VIBRATOR:

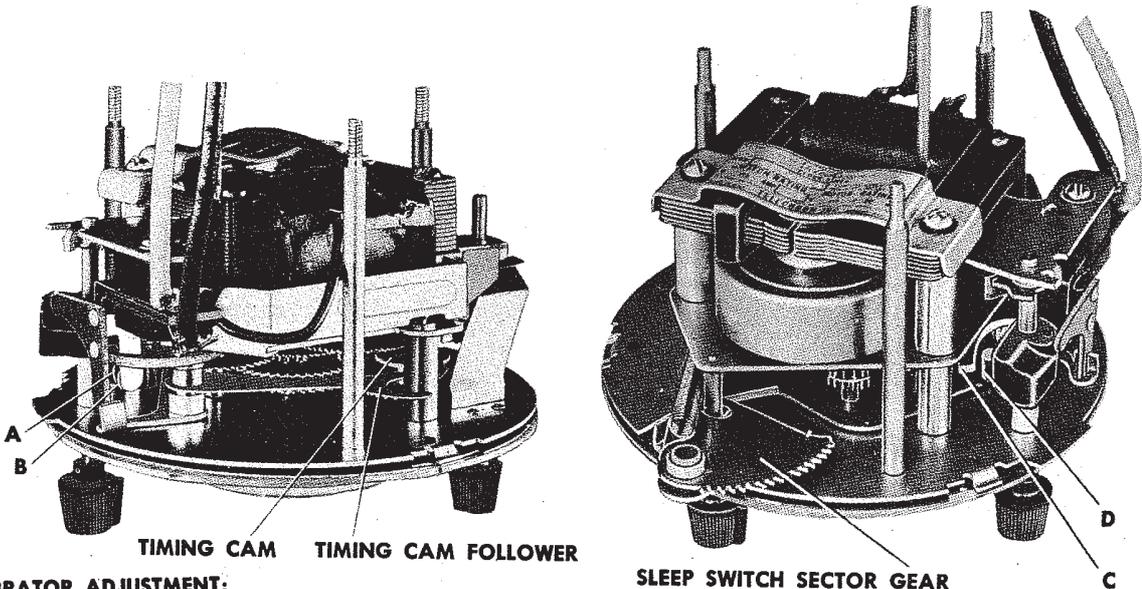
1. With the time set knob, turn the clock hands so as to advance the time at least one (1) hour. (For ease in checking, it is recommended that the time be set to the hour.)
2. Attach test light to black and yellow switch leads.
3. Turn switch knob to "Radio" position - light must go on.
4. Turn switch knob to "Off" position - light must go out.
5. Set alarm disc so that small pointer on hour hand reads two (2) hours in advance of the time of the clock. **EXAMPLE:** If the clock hands are set to read 7 o'clock, set the alarm disc to read 9 o'clock.
6. Turn sleep switch to "60" - test light must go on.
7. Turn time set knob advancing clock hands to next hour - light must go out and **SLEEP SWITCH SECTOR GEAR** must be completely disengaged within one (1) hour plus or minus eight (8) minutes.
8. Manually push **SLEEP SWITCH SECTOR GEAR** in until it touches its mating pinion **WITHOUT** meshing - light must go on.
9. Turn switch knob to "Radio Alarm" position.
10. Turn time set knob to advance clock hands so they read 15 minutes until the next hour. Then slowly advance the hands until the test light lights, which indicates the contacts are closed. The contacts must close somewhere between 14 minutes to the hour and 4 minutes past the hour.
11. Remove test light and connect 110 volt supply to the black and red leads.
12. Turn time set knob to advance the clock hands 4 minutes - vibrator must **NOT** buzz. Then advance the hands 14 minutes - vibrator **MUST** buzz within this 14 minute period.

ADJUSTING CONTACTS:

1. Set the alarm disc so that the time indicated by the small pointer on the hour hand is different (at least 1 hour) from the time indicated by the hands of the clock. Then set switch to "Radio Alarm" position so that the TIMING CAM FOLLOWER rests on the TIMING CAM. Contacts shall be adjusted at .020" minimum gap.
2. With switch in "OFF" position contacts shall remain open as in step one and there shall be clearance between TIMING CAM FOLLOWER and TIMING CAM.
3. With switch in "Radio" position, contacts shall be closed. Check for proper contact pressure by depressing CONTACT (A), using a small pointed tool. If CONTACT (B) follows CONTACT (A), a noticeable amount before the contacts separate, the pressure is sufficient.
4. Set the switch to "Radio Alarm" position; pull out and turn alarm set knob counter-clockwise until the TIMING CAM FOLLOWER drops into the slot of TIMING CAM. The contacts shall be closed. Check contact pressure as previously described in step three.
5. SWITCH ARM (C) should clear CAM (D) by .008" minimum when in the "Radio Alarm" position.

TIMING:

1. Adjust timer for contact closure at 6:55 o'clock. On repeat tests, contacts shall close at 6:55 plus or minus 3 minutes. At all other settings the contacts shall close between 12 minutes before and 2 minutes after the setting time.
2. Check time keeping for a minimum of twelve hours with power applied to the motor. Clock must be run with vibrator (buzzer) shut off.

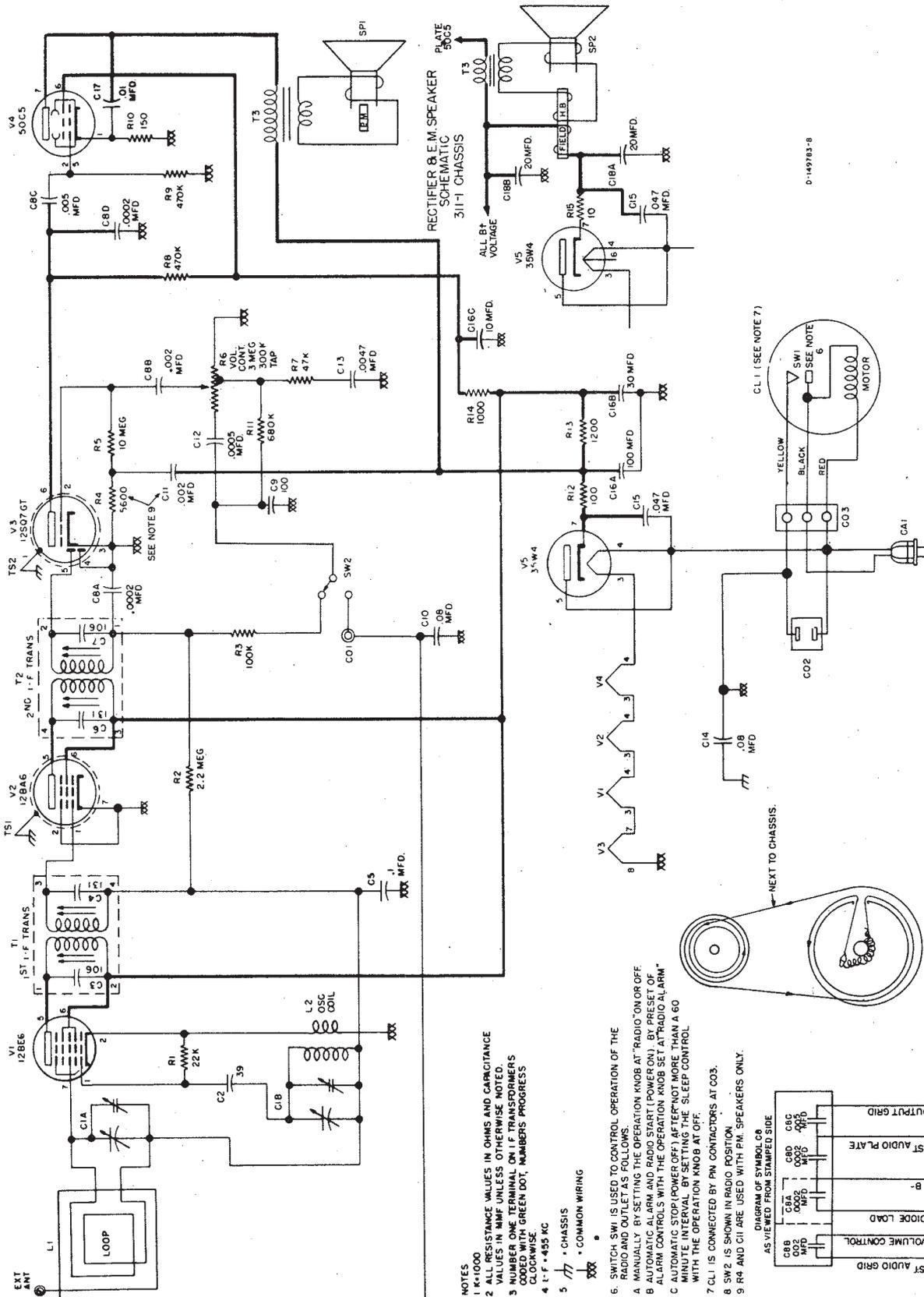
**VIBRATOR ADJUSTMENT:**

1. Vibrator shall start buzzing 10 minutes plus or minus 5 minutes after contact closure occurs.
2. When the alarm set knob is pushed in ("shut-off" position of vibrator) the shut-off spring shall lift the vibrator sufficiently above the cam, so that the cam will not contact the vibrator in any position.
3. Adjust vibrator for good sounding position.
4. Vibrator shall be manually shut off before completion of buzzing period.

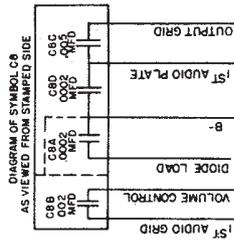
CLOCK LUBRICATION

1. Center stack bearing in base plate and hole in back gear pinion should be lubricated with Nye watch oil or equivalent.
2. Path of switch locating spring on bracket should be lubricated with Dixon graphite grease.

MODELS D-25BE, D-25CE,
D-25GN, D-25MN, D-25TN,
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- NOTES
1. L1 1000
 2. ALL RESISTANCE VALUES IN OHMS AND CAPACITANCE VALUES IN MMF UNLESS OTHERWISE NOTED.
 3. NUMBER ONE TERMINAL ON I-F TRANSFORMERS CODED WITH GREEN DOT, NUMBERS PROGRESS CLOCKWISE.
 4. I-F - 455 KC
 5. - CHASSIS
 6. - COMMON WIRING
 7. SWITCH SW1 IS USED TO CONTROL OPERATION OF THE RADIO AND OUTLETS AS FOLLOWS:
 - A. MANUALLY BY SETTING THE OPERATION KNOB AT "RADIO" OR OFF.
 - B. AUTOMATIC ALARM AND RADIO START (POWER ON) BY PRESET OF ALARM CONTROLS WITH THE OPERATION KNOB SET AT "RADIO ALARM".
 - C. AUTOMATIC STOP (POWER OFF) AFTER NOT MORE THAN A 60 MINUTE INTERVAL BY SETTING THE SLEEP CONTROL WITH THE OPERATION KNOB AT OFF.
 8. SW2 IS SHOWN IN RADIO POSITION.
 9. R4 AND C1 ARE USED WITH PM SPEAKERS ONLY.



PLACEMENT OF DIAL DRIVE CORD
TUNING CAPACITOR IN THE CLOSED POSITION.

SCHEMATIC DIAGRAM

D-149783-8

MODELS D-25BE, D-25CE, D-25GN, D-25MN, D-25TN, D-25WE, Ch. 311, 311-1

REPLACEMENT PARTS LIST
(Clock)

Part No.	Description	Part No.	Description
B-151389-1	Crystal, Dial	B-151389-6	Hands, Hour & Minute
B-151389-2	Rivet, Dial Crystal (3 required)	B-151389-8	Knob, Time Set (Bronze)
B-151389-3	Dial	B-151389-9	Field & Coil (60 cycle)
B-151389-4	Disc, Alarm	B-151389-10	Rotor Unit (60 cycle)
B-151389-5	Hand, Sweep Second (Gold)		

REPLACEMENT PARTS LIST

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
C1A	B-149437	Capacitor, Variable } Two Section	T2	AC-139919-3	Transformer, 2nd I.F.
C1B		Capacitor, Variable } Two Section	T3	B-147171	Transformer, Output
C2	C-137727-109	Capacitor, 39 mmf., 10%, 200 v., ceramic	CO2	AB-149562	Outlet & Bracket Assy.
C3	Part of T1	Capacitor, 106 mmf.			
C4	Part of T1	Capacitor, 131 mmf.	CO3	W-149673	Contact Strip
C5	39001-19	Capacitor, .1 mfd., 600 v., paper		W-149366	Bracket, Speaker Support
C6	Part of T2	Capacitor, 131 mmf.	AD-149598-1	AD-149598-7	Cabinet & Medallion Assy. (D-25WE)
C7	Part of T2	Capacitor, 106 mmf.	AD-149598-3	AD-149598-3	Cabinet & Medallion Assy. (D-25GN)
C8A	C-144675-1	Capacitor, .0002 mfd., 500 v. } Four Sec-	AD-149598-4	AD-149598-8	Cabinet & Medallion Assy. (D-25MN)
C8B		Capacitor, .002 mfd., 500 v. } tion disc	AD-149598-8	AD-149598-8	Cabinet & Medallion Assy. (D-25BE)
C8C		Capacitor, .005 mfd., 500 v. } ceramic	AD-149598-9	AD-149598-9	Cabinet & Medallion Assy. (D-25TN)
C8D		Capacitor, .002 mfd., 500 v. } ceramic	W-139921	W-139921	Clip, I.F. Transformer Mtg.
C9	B-143686-3	Capacitor, 100 mmf., 500 v., molded disc ceramic	W-131154-1	W-131154-1	Cotter (External), Pointer Pulley
C10	39001-85	Capacitor, .08 mfd., 600 v., paper	B-149398	B-149398	Cover, Clock
C11	39001-74	Capacitor, .002 mfd., 600 v., paper (Chassis 311)	W-147216	W-147216	Cups, Suction
C12	39001-5	Capacitor, .0005 mfd., 600 v., paper	B-149667-1	B-149667-1	Escutcheon, Outlet
C13	39477-39	Capacitor, .0047 mfd., 600 v., molded paper	D-149963-1	D-149963-1	Escutcheon, Radio
C14	39001-85	Capacitor, .08 mfd., 600 v., paper	C-149964-1	C-149964-1	Escutcheon, Clock
C15	39477-45	Capacitor, .047 mfd., 600 v., molded paper	D-149742	D-149742	Gasket, Speaker
C16A	B-149541	Capacitor, 100 mfd., 150 v. } Three Sec-	W-149341	W-149341	Gasket, Clock Dial Grille & Ring
C16B		Capacitor, 30 mfd., 150 v. } tion Elec-	AC-149962-1	AC-149962-1	Grille & Ring Assy., Clock Dial (D-25WE)
C16C		Capacitor, 10 mfd., 150 v. } trolytic	AC-149962-7	AC-149962-7	Grille & Ring Assy., Clock Dial (D-25GN)
C17	39477-41	Capacitor, .01 mfd., 600 v., molded paper	AC-149962-3	AC-149962-3	Grille & Ring Assy., Clock Dial (D-25CE)
C18A	B-151617	Capacitor, 20 mfd., 150 v. } Two Section	AC-149962-4	AC-149962-4	Grille & Ring Assy., Clock Dial (D-25MN)
C18B		Capacitor, 20 mfd., 150 v. } Electrolytic	AC-149962-8	AC-149962-8	Grille & Ring Assy., Clock Dial (D-25BE)
		(Chassis 311-1)	AC-149962-9	AC-149962-9	Grille & Ring Assy., Clock Dial (D-25TN)
R1	39373-60	Resistor, 22,000 ohm, 1/2 w.	AB-149524-1	AB-149524-1	Grille, Radio Dial (D-25WE)
R2	39373-97	Resistor, 2.2 megohm, 1/2 w.	AB-149524-7	AB-149524-7	Grille, Radio Dial (D-25GN)
R3	39373-74	Resistor, 100,000 ohm, 1/2 w.	AB-149524-3	AB-149524-3	Grille, Radio Dial (D-25CE)
R4	39374-34	Resistor, 5600 ohm, 10%, 1/2 w. (Chassis 311)	AB-149524-4	AB-149524-4	Grille, Radio Dial (D-25MN)
			AB-149524-8	AB-149524-8	Grille, Radio Dial (D-25BE)
			AB-149524-9	AB-149524-9	Grille, Radio Dial (D-25TN)
R5	39373-107	Resistor, 10 megohm, 1/2 w.	W-45580-2	W-45580-2	Grommet (Rubber), Speaker Mtg.
R6	B-149382	Control, Volume (3 meg., Tap 300 K ohm)	AC-149952-1	AC-149952-1	Knob, Volume-Tuning (D-25WE)
			AC-149952-7	AC-149952-7	Knob, Volume-Tuning (D-25GN)
			AC-149952-3	AC-149952-3	Knob, Volume-Tuning (D-25CE)
			AC-149952-4	AC-149952-4	Knob, Volume-Tuning (D-25MN)
R7	39373-67	Resistor, 47,000 ohm, 1/2 w.	AC-149952-8	AC-149952-8	Knob, Volume-Tuning (D-25BE)
R8	39373-87	Resistor, 470,000 ohm, 1/2 w.	AC-149952-9	AC-149952-9	Knob, Volume-Tuning (D-25TN)
R9	39373-87	Resistor, 470,000 ohm, 1/2 w.	B-149311-1	B-149311-1	Knob, Switch (D-25WE)
R10	39373-16	Resistor, 150 ohm, 1/2 w.	B-149311-7	B-149311-7	Knob, Switch (D-25GN)
R11	39373-90	Resistor, 680,000 ohm, 1/2 w.	B-149311-3	B-149311-3	Knob, Switch (D-25CE)
R12	39374-189	Resistor, 100 ohm, 10%, 2 w. (Chassis 311)	B-149311-4	B-149311-4	Knob, Switch (D-25MN)
			B-149311-8	B-149311-8	Knob, Switch (D-25BE)
R13	39374-114	Resistor, 1200 ohm, 10%, 1 w. (Chassis 311)	B-149311-9	B-149311-9	Knob, Switch (D-25TN)
			B-149339-1	B-149339-1	Knob, Alarm Set (D-25WE)
R14	39373-33	Resistor, 1000 ohm, 1/2 w. (Chassis 311)	B-149339-7	B-149339-7	Knob, Alarm Set (D-25GN)
			B-149339-3	B-149339-3	Knob, Alarm Set (D-25CE)
R15	39373-1	Resistor, 10 ohm, 1/2 w. (Chassis 311-1)	B-149339-4	B-149339-4	Knob, Alarm Set (D-25MN)
			B-149339-8	B-149339-8	Knob, Alarm Set (D-25BE)
TS1	W-147784	Shield, Tube (V2)	B-149339-9	B-149339-9	Knob, Alarm Set (D-25TN)
TS2	W-46447-1	Shield, Tube (V3)	B-150140-1	B-150140-1	Medallion (D-25WE, D-25GN, D-25MN, D-25TN)
CA1	C-149780	Cable & Plug Assy., Power	B-150140-2	B-150140-2	Medallion (D-25CE, D-25BE)
CO1	W-136998	Connector, Phono	C-149621-1	C-149621-1	Pointer, Tuning
L1	AC-149557	Loop Antenna & Back Assy.	W-149368	W-149368	Pulley, Pointer Mtg.
L2	AW-148259	Coil, Oscillator	W-51752	W-51752	Spring, Drive Cord
SP1	AD-145956-2	Speaker, 5 1/4" P.M. (Chassis 311)	W-148469	W-148469	Spring, Pointer Pulley
SP2	AD-151190-2	Speaker, 5 1/4" E.M. 680 ohm (Chassis 311-1)	39462-2	39462-2	Socket, Tube (V1, V2, V4, V5)
SW1	Part of CL1	Switch, On-Off	W-149987	W-149987	Socket, Tube (V3)
SW2	W-148260	Switch, Radio-Phono	AB-149438	AB-149438	Support & Bushing Assy., Pointer Pulley
CL1	AW-149689	Clock Assy.	W-149676	W-149676	Washer (Rubber), Speaker Mtg.
T1	AC-139919-3	Transformer, 1st I.F.			