

**RCA 55U**

This change refers to RCA Model 55U, which appears on page 15-16 of *Rider's Volume XV*. Models having serial numbers B62201 will use transformer part number 922246-7 (Stock No. 70386). In this transformer, C21 is 100  $\mu\text{mf}$ , rather than 110  $\mu\text{mf}$ , as in previous transformers.

**RCA 55U, 56X, 56X5, 65X**

On these models, the data for which appear in *Rider's Volume XV*, the lead coloring on the output transformer may not correspond with the coloring given on the schematic in the service notes. It is therefore necessary to rely on resistance measurements to determine lead connections, rather than the color coding given in the schematic.

**RCA 56X5, 56X10**

In some of these models the 15-megohm resistor R5 has been omitted. This does not affect the basic operation of the set, the primary effect being to make the set more sensitive. The schematics for the RCA Models 56X5 and 56X10 appear on pages 15-32 and 15-34 respectively of *Rider's Volume XV*. Resistor R5 appears in both of these schematics.

**RCA 59VI**

A speaker substitution has been made in some of the RCA Models 59VI, the circuit diagram of which appears on page 15-54 of *Rider's Volume XV*. Speaker 92567-1 has been substituted for speaker 92513-1K. For replacement of speakers stamped 92567-1, order Stock No. 36330.

**RCA 59VI**

In RCA Model 59VI, found on page 15-44 of *Rider's Volume XV*, field coils stamped 94136-501A will have a minimum resistance of 1300 ohms at 25° C.

**RCA 61-6, 61-7**

A change has been made in the dial drive cord of these models, the dial drive mechanism of which appears on page 15-53 of *Rider's Volume XV*. Stock No. 32634 cord-drive cord (about 37 inches long) should be approximately 34 $\frac{3}{4}$  inches long.

**RCA 66BX**

The following changes pertain to RCA Model 66BX which appears on page 15-87 of *Rider's Volume XV*:

1. Change Stock No. 71229—Transformer—First i-f transformer (L6, L7, C13, C14), to Stock No. 71399.
2. Add Stock No. 72541—Socket—Tube socket—miniature—bottom mounted.

**RCA 61-1, 61-2, 61-3**

The schematic shown on page 15-49 of *Rider's Volume XV* shows a 12J5GT oscillator tube in chassis RC-1011. In the second production the 12J5GT tube was replaced with a 12SR7 tube (as shown in Fig. 1) and the chassis changed to RC-1011A. In the third production, the 12SR7 tube was replaced with a 12-

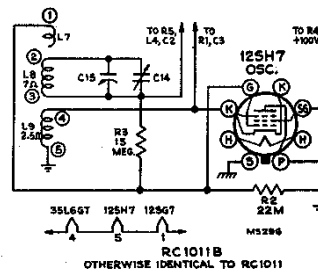
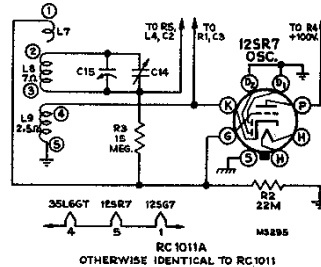
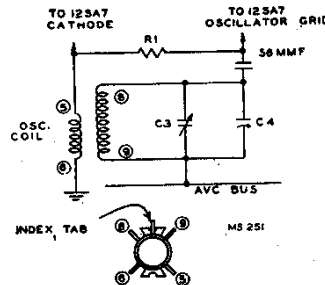


Fig. 1, above. Revised circuit with 12SR7 oscillator. Fig. 2, below, Second revision with 12SH7 oscillator.

SH7 tube (as shown in Fig. 2) and the chassis number is now RC-1011B.

**RCA 65X Series**

Some models may use a No. 71406 oscillator coil in place of the one shown in the schematic which appears on page 15-62 of *Rider's Volume XV*. When No. 71406 oscillator coil is used, there will be a No. 39622 mica capacitor (56  $\mu\text{mf}$ ) used in place of the "gimmick" capacitance winding shown in the schematic. The accompanying drawing illustrates the necessary circuit changes.



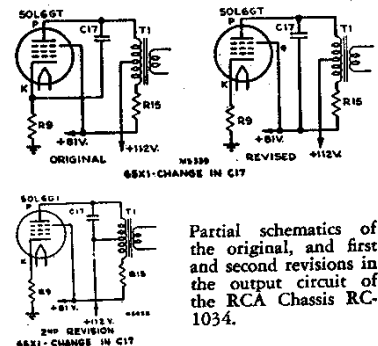
Alternate oscillator coil in RCA 65X.

**RCA 65X1, 65X2, 65X8 and 65X9, Chassis RC-1034**

Models 65X8 and 65X9 are the same, except for the cabinets, as models 65X1 and 65X2, chassis RC-1034, shown on pages 15-61 and 15-62 of *Rider's Volume XV*. The following changes are applicable to all models. Capacitor C17, which was originally connected between plate and cathode of the 50L6GT output tube and later connected between plate and screen grid of the 50L6GT output tube, is now connected between plate of the 50L6GT output tube and center tap of the output transformer. These changes are shown in the accompanying schematic.

Some chassis use a part No. 71406 oscillator coil instead of the one indicated on the schematic. When this oscillator coil is used, a part No. 39622 mica capacitor (56  $\mu\text{mf}$ ) is used in place of the capacitance winding L4 (gimmick) shown in the schematic. This capacitor is connected between 7 and 8 of the oscillator coil.

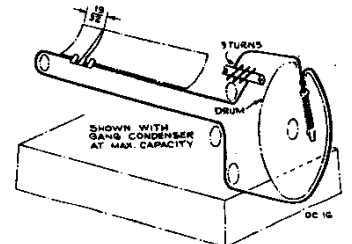
The lead coloring of the output transformer may not correspond with the coloring given on the schematic. It is, therefore, necessary to rely on resistance measurements rather than the color coding given on the schematic to determine lead connections.



Partial schematics of the original, and first and second revisions in the output circuit of the RCA Chassis RC-1034.

**RCA 66BX**

The dial cord drawing for this model is shown on page 15-87 of *Rider's Volume*



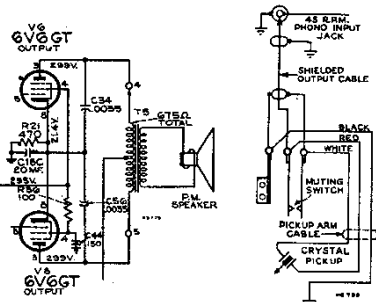
The dial cord drawing for RCA 66BX.

*XV*; this is slightly in error and the correct drawing is shown in the accompanying figure.

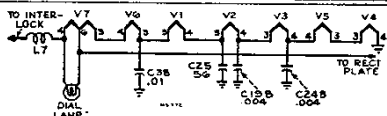
**RCA 9W101, 9W103, 9W105**

These models appear on pages 19-35 through 19-44 of Rider's Manual Volume XIX.

A capacitor (150  $\mu\text{f}$ -C44) has been added between the screen grid terminal of V8 (6V6GT) socket and chassis as shown in the accompanying illustration. This was



Output Tubes Circuit Pickup Arm Cable Models 9W101, 9W103, 9W105



Heater Connections—Models 8X71, 8X72

schematic diagram is illustrated in the accompanying diagram.

The following have been added to the parts list:

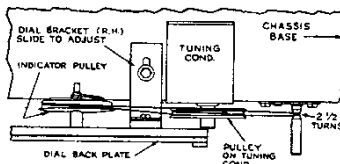
- 71923 Capacitor—Tubular, 0.01  $\mu\text{f}$ , 200 v. (C38) same as C23, C36.

**RCA 75ZU, Ch. RC-1063A**

This model appears on pages 19-45 and 19-46 of Rider's Manual Volume XIX. A groove approximately 1/16 inch deep by 1/8 inch wide is now included on the outer rim of the bakelite station selector indicator pulley, Stock No. 73060.

If trouble is encountered with the drive cord coming off this pulley, either of the following corrections may be applied:

(a) Position the pulley in relation to the gang drum by the adjustment provided on the long support bracket for the dial back plate assembly so that the drive cord occupies the position indicated in the accompanying illustration.



Dial Drive Cord of RCA 75ZU.

(b) Replace the pulley with one incorporating the groove indicated above.

The service data for the 50-cycle version of Radiola 75ZU will apply to this instrument except:

RP-178 record changer only is used.

A conversion spring (Stock No. 73158) is added to the motor spindle shaft for 50-cycle operation.

A decal ("RCA Victor" Stock No. 71984) is added to the front of the cabinet.

These changes apply to the RC-1063B also.

The following have been added to the parts list for instruments using blonde mahogany cabinets:

- 73722 Knob—Power—Phono—radio switch knob—for blonde instruments
- 73829 Knob—Tuning Knob—for blonde instruments
- 73630 Knob—Volume Control Knob—for blonde instruments

**RCA 66BX, Ch. RC-1040, RC-1040A, RC-1040B; 8BX5, 8BX54, 8BX55, Ch. RC-1059, RC-1059A; 8BX65, Ch. RC-1040C, RC-1040D; 9BX5, Ch. RC-1059B**

Model 66BX appears on pages 16-87 through 16-88 of Rider's Manual Volume XV and on page C17-7 of Rider's Manual Volume XVII. Models 8BX5, 8BX54, and 8BX55 appear on pages 19-6 through 19-9 of Rider's Manual Volume XIX. Models

8BX6 and 8BX65 appear on pages 18-11 through 18-14 of Rider's Manual Volume XVIII.

The line-battery switch used in these receivers is of the "slide" type. The actual switch does not have numbered terminals, although the schematic diagrams have numbers indicated. The numbers on the schematic diagrams do not indicate the actual sequence of the terminals on the switch. The accompanying illustrations show the actual sequence of the switch terminals and the corresponding numbers which appear on the schematic diagrams. Figure 1 is the diagram for the 8BX5.

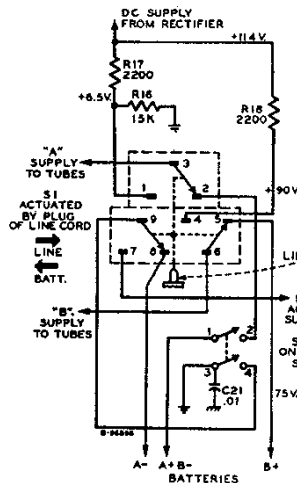


Fig. 1. Line-battery switch for RCA 8BX5.

first production, Ch. RC-1059. Figure 2 applies to models 8BX5, 8BX54, 8BX55, second production, Ch. RC-1059A; 9BX5, first production, Ch. RC-1059B; 9BX5, second production, Ch. RC-1059C. For models 8BX6 and 66BX, the circuit is as shown in Figure 2, except for different resistor numbers and values.

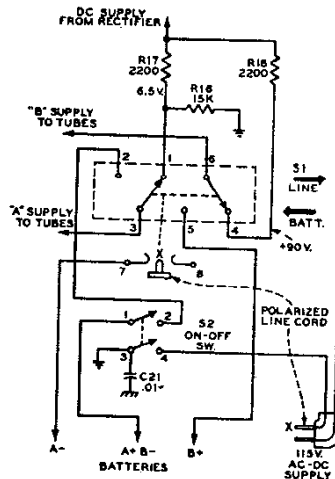


Fig. 2. Line-battery switch for RCA 8BX5, 8BX54, 8BX55, 9BX5, 8BX6, and 66BX.

done to eliminate spurious audio oscillation.

The simplified schematic diagrams (phono position) on page 19-39 show C34 and C36 connected to ground. They should be shown connected to the cathodes of the 6V6GT tubes as shown in the accompanying illustration.

To improve fm stability one dial lamp is now connected to pin #2 of V9 (6X5GT). Previously, both were connected to pin #2 of V8 (6V6GT).

Speakers stamped 92569-1WX have been used as a substitute for 92569-5W speakers in Model 9W101; 92569-1WX speakers have a 2.2-ohm voice coil; 92569-5W speakers have a 3.2-ohm voice coil.

The following additions have been made to the parts list:

- 48125 Capacitor—Ceramic, 150  $\mu\text{f}$  (C44) Same as C7, C19, C38, C50, C53
  - 13867 Cap—Dust cap
  - 36145 Cone—Cone and voice coil assembly
  - 5039 Plug—4 prong male plug for speaker
  - 71145 Suspension—Metal cone suspension
  - 37899 Transformer—Output transformer (T3)
- Note: When replacing complete speaker order Stock No. 73635 (92569-5W).
- 37396 Grommet—Rubber grommet for mounting speaker (3 required)—for Model 9W103
  - 73896 Loop—Loop antenna complete for Models 9W101 and 9W103 (previously listed for 9W101 and 9W105).

The RP-168A-1 record changer pickup arm cable now being used is a three wire cable (RED-WHITE-BLACK). In some instruments the black wire is omitted or a shielded wire may be used as shown in 9W101, 9W103, 9W105 Service Data. The latest connection diagram is shown in the accompanying illustration.

**RCA 8X53, 65X1, 65X2, RC-1064**

Model 8X53 appears on pages 18-41 and 18-42 of Rider's Volume XVIII and Models 65X1 and 65X2 appear on pages 16-61 and 16-62 of Rider's Volume XV.

The number of turns of dial cord on the tuning shaft has been increased from 2-1/4 turns to 3-1/4 turns.

**RCA 8X71, 8X72**

These models appear on pages 19-30 through 19-34 of Rider's Manual Volume XIX. A capacitor (0.01  $\mu\text{f}$ -C38) has been added between pin #3 of V6 (35C5) and chassis. The revised heater connection

RCA MFG. CO.

MODELS 64F1, 64F2,  
Ch. RC-1037; 64F3,  
Ch. RC-1037A  
MODELS 65X1, 65X2,  
Ch. RC-1034

64F1, 64F2, 64F3

Alignment Procedure

Cathode Ray Alignment is the preferable method. Connections for the oscillograph are shown in the diagram.

**Output Meter Alignment.**—If this method is used, connect the meter across the voice coil and turn the receiver volume control to maximum.

**Test Oscillator.**—For all alignment operations, connect the low side of the test oscillator to the receiver chassis, and keep the output as low as possible to avoid AVC action.

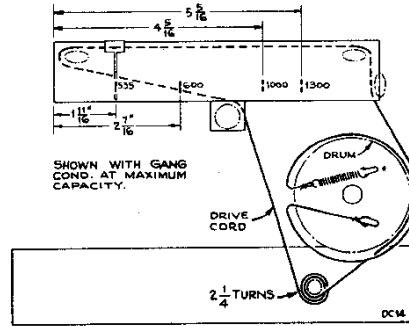
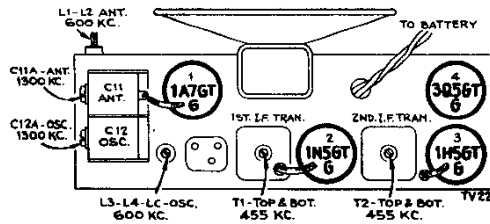
**Pre-Setting Dial.**—With gang condenser in full mesh, the pointer should be set at the left-hand end dial calibration mark.

Critical Lead Dress

1. Keep output plate capacitor dressed close to the chassis.
2. Keep lead from lug A of second IF transformer down and dressed close around the 1H5 tube socket.
3. Dress 1N5 plate lead close to chassis.
4. Dress C1 down and away from the antenna coil.
5. Dress C3 and C5 away from each other.
6. Dress the lead from 2nd IF transformer to the volume control in the open.

Steps	Connect high side of the test oscillator to—	Tune test osc. to—	Turn radio dial to—	Adjust following for maximum peak output
1	I.F. (1N5) grid in series with .1 mfd.	455 kc	Quiet point at the low freq. end of the dial	2nd I.F. trans.*
2	1A7 grid in series with .1 mfd.			1st I.F. trans.
3	Antenna lead (blue) in series with 200 mmf.	1300 kc	1300 kc	C12A (osc.) C11A (ant.)
4		600 kc	600 kc	(Osc.) and (ant.) slugs
5	Repeat steps 3 and 4 for exact alignment.			

\*Do not repeat step 1.



NOTE:—

When using the electrifier, remove the shorting plug on the chassis adjacent to the 1A7GT/G tube and replace it with a similar plug, attached to the electrifier. Also connect the remaining plug attached to the electrifier, in place of the normal battery plug. The receiver will operate in the normal manner, using the same control for turning the set on and off.

NOTE:—

Do not plug electrifier into a DC outlet.

65X1, 65X2

**Output Meter Alignment.**—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

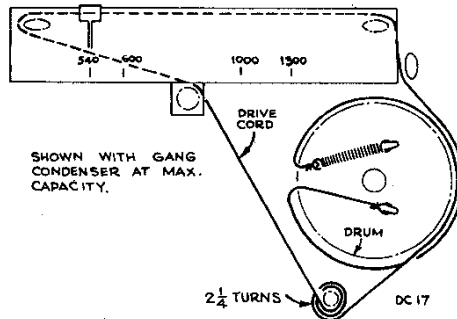
**Test-Oscillator.**—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the oscillator output as low as possible to avoid a-v-c action.

**Calibration Scale.**—The glass tuning dial may be removed from the cabinet and mounted above the pointer for reference during alignment. The extreme left hand mark of the Standard Broadcast scale must be in line with the left hand mark on the dial backing plate.

**Dial Backing Plate.**—In the event that only the chassis is returned for service, the marks on the dial backing plate may be used during alignment; refer to the Dial Indicator and Drive Mechanism drawing for corresponding frequencies.

**Dial Pointer.**—With the gang condenser in full mesh the dial pointer should be set to the left hand reference mark on the dial backing plate.

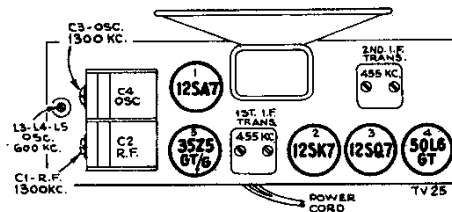
For additional information refer to booklet "RCA Victor Receiver Alignment."



Dial-Indicator and Drive Mechanism

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output
1	12SK7 I-F grid through 0.1 mfd. capacitor	455 kc	Quiet-point 1,600 kc end of dial	C8 and C9 2nd I-F transformer
2	Stator of C2 through 0.1 mfd.			*C6 and C7 1st I-F transformer
3	Ant. lead in series with 200 mmf.	1,300 kc	1,300 kc	C3 (osc.) C1 (ant.)
4		600 kc	600 kc	L5 (osc.) Rock gang
5	Repeat steps 3 and 4			

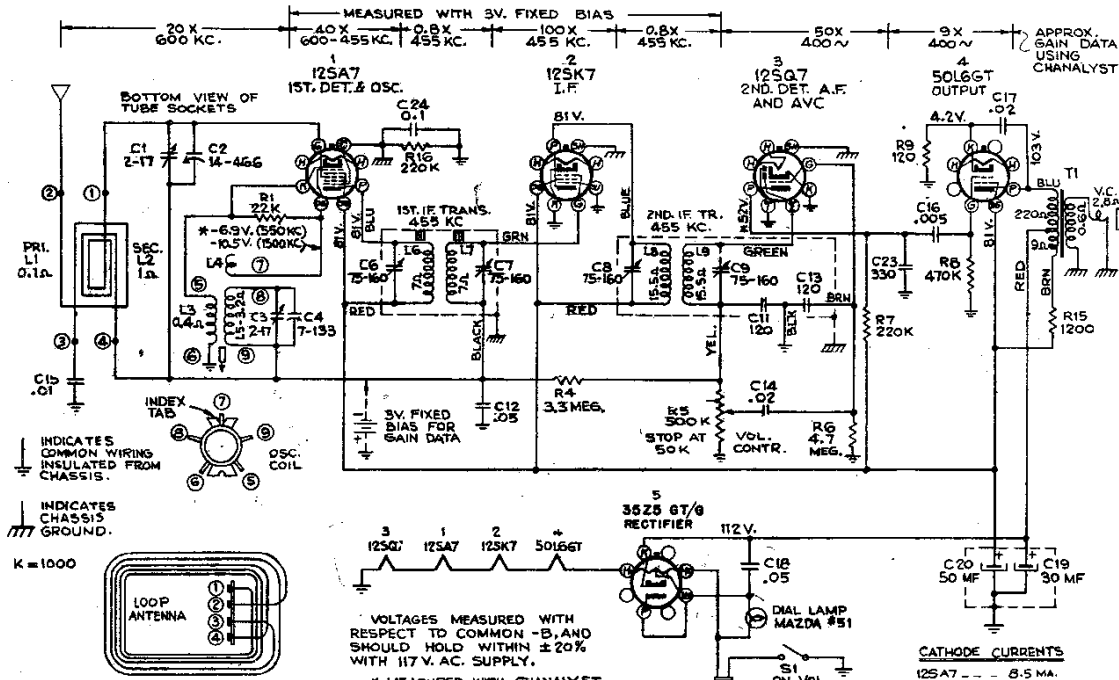
\* Do not readjust C8 or C9 when test oscillator is connected to C2.



Tube and Trimmer Locations

MODELS 65X1, 65X2  
Ch. RC-1034

RCA MFG. CO.



**Power Supply Rating**  
105-125 volts, AC, 50 or 60 cycles, or DC..... 30 watts

**POWER SUPPLY POLARITY.**—For operation on d-c, the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On a-c, reversal of the plug may reduce hum.

**Critical Lead Dress**

1. Dress blue and green leads of both I-F transformers back in shield cans, leaving them as short as possible.
2. Dress all heater leads next to chassis.
3. Dress power cord toward output transformer away from volume control and audio circuits.
4. Dress capacitor (C14) toward switch and parallel to chassis length.
5. Dress capacitor (C16) back against rear chassis apron.
6. Dress capacitor (C17) over and towards 50L6 socket perpendicular to capacitor (C14) and (C16).
7. Dress pilot lamp leads over second I-F transformer and away from tubes.

**CATHODE CURRENTS**

12SA7	8.5 MA.
12SK7	12.1 MA.
12SQ7	12 MA.
50L6GT	33.0 MA.
35Z5GT/G	54.1 MA.

**Frequency Range** ..... 540-1600 kc  
**Intermediate Frequency** ..... 455 kc  
**Power Output**  
 Undistorted ..... 1.0 watt  
 Maximum ..... 1.5 watts

**Tube Complement**

- (1) RCA-12SA7 ..... Converter
- (2) RCA-12SK7 ..... I.F. Amplifier
- (3) RCA-12SQ7 ..... 2nd Det., A.V.C., and A.F. Amplifier
- (4) RCA-50L6GT ..... Power Output
- (5) RCA-35Z5GT ..... Rectifier

**Pilot Lamp** ..... Mazda No. 51, 6-8 volts, 0.2 amp.  
**Loudspeaker (922258-1)**  
 Type ..... 4" x 6" PM  
 V. C. impedance ..... 3.4 ohms at 400 cycles

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
<b>CHASSIS ASSEMBLIES</b> RC 1034			
70389	Bearing—Tuning knob shaft bearing	*70467	Shaft—Tuning knob shaft
39640	Capacitor—Mica, 330 mfd., (C23)	34449	Socket—Lamp socket
70606	Capacitor—Tubular, .005 mfd., 400 volts (C16)	37605	Socket—Tube socket—moulded
70610	Capacitor—Tubular, .01 mfd., 200 volts (C15)	70390	Spring—Drive cord tension spring
70611	Capacitor—Tubular, .02 mfd., 400 volts (C14, C17)	*70465	Transformer—First I.F. transformer (L6, L7, C6, C7)
70615	Capacitor—Tubular, .05 mfd., 400 volts (C12, C18)	*70466	Transformer—Second I.F. transformer (L8, L9, C8, C9, C11, C13)
70617	Capacitor—Tubular, 0.1 mfd., 400 volts (C24)	70385	Transformer—Output transformer (T1)
70408	Capacitor—Electrolytic, comprising 1 section of 30 mfd., 150 volts and 1 section of 50 mfd., 150 volts (C19, C20)	33726	Washer—"C" washer for tuning knob shaft
*70477	Coil—Oscillator coil (L3, L4, L5)	<b>SPEAKER ASSEMBLY</b> 922258-1	
*70463	Condenser—Variable tuning condenser complete with drum (C1, C2, C3, C4)	*70470	Speaker—
70322	Control—Volume control and power switch (R5, S1)	NOTE: If stamping on speaker in instrument does not agree with above speaker number, order replacement parts by referring to model number of instrument, number stamped on speaker and full description of part required.	
32634	Cord—Drive cord (approximately 38")	<b>MISCELLANEOUS ASSEMBLIES</b>	
*70464	Drum—Drive drum	*70471	Back—Cabinet back for 65X1
*70469	Indicator—Station selector indicator	*70472	Back—Cabinet back for 65X2
11765	Lamp—Dial lamp—Mazda 51	*70475	Clamp—Dial clamps (1 set)
*70468	Loop—Antenna loop (L1, L2)	*70476	Dial—Glass dial scale
*70462	Plate—Dial back plate complete with drive cord pulleys less dial	37831	Fastener—Push fastener (1 set) for cabinet back
36230	Pulley—Drive cord pulley	*70474	Knob—Control knob—ivory—for 65X2
30189	Resistor—120 ohms, 1/4 watt (R9)	*70473	Knob—Control knob—mottled walnut—for 65X1
6134	Resistor—1200 ohms, 1 watt (R15)	*71821	Knob—Control knob—maroon—for 65X1
30482	Resistor—22,000 ohms, 1/4 watt (R1)	30900	Spring—Retaining spring for knob
14583	Resistor—220,000 ohms, 1/4 watt (R7, R16)		
30648	Resistor—470,000 ohms, 1/4 watt (R8)		
31417	Resistor—3.3 megohms, 1/4 watt (R4)		
30931	Resistor—4.7 megohms, 1/4 watt (R6)		

\*THIS IS THE FIRST TIME THIS STOCK NUMBER HAS APPEARED IN PRINT.

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For Alignment and other data, see P.15-61