R.C.A. Victor Co., Inc.

Model: 56X5	Chassis:	Year: Pre 1949
Power:	Circuit:	IF:
Tubes:		
Bands:		

Resources
Riders Volume 17 - CHANGES 17-7
Riders Volume 15 - RCA 15-32
Riders Volume 15 - RCA 15-33
Riders Volume 15 - RCA 15-34

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 $\mu\mu$f, rather than 110 $\mu\mu$f, 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 59V1

In RCA Model 59V1, 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 34¾ inches long.

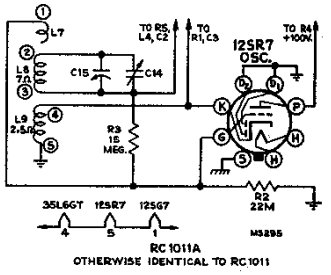
RCA 66BX

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-



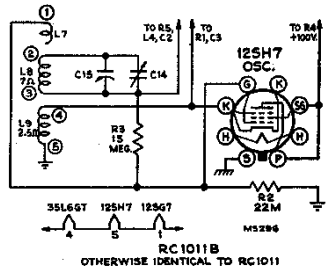
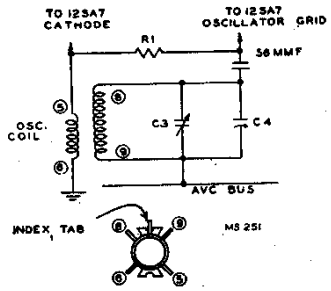


Fig. 1, above. Revised circuit with 12SR7 oscillator. Fig. 2, below, Second revision with 12SH7 oscillator.

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 $\mu\mu$f) used in place of the "gimmick" capacitance winding shown in the schematic. The accompanying drawing illustrates the necessary circuit changes.



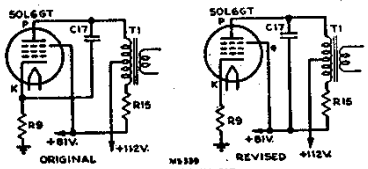
Alternate oscillator coil in RCA 65X.

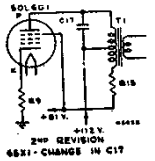
RCA 65X1, 65X2, 65X8 and 65X9, Chassis RC-1034

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 $\mu\mu$f) 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.

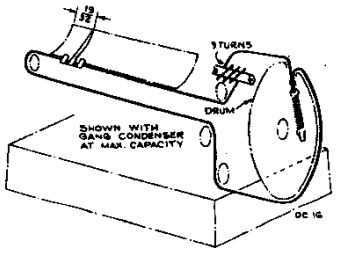




Partial schematics of the original, and first and second revisions in the output circuit of the RCA Chassis RC-1034.

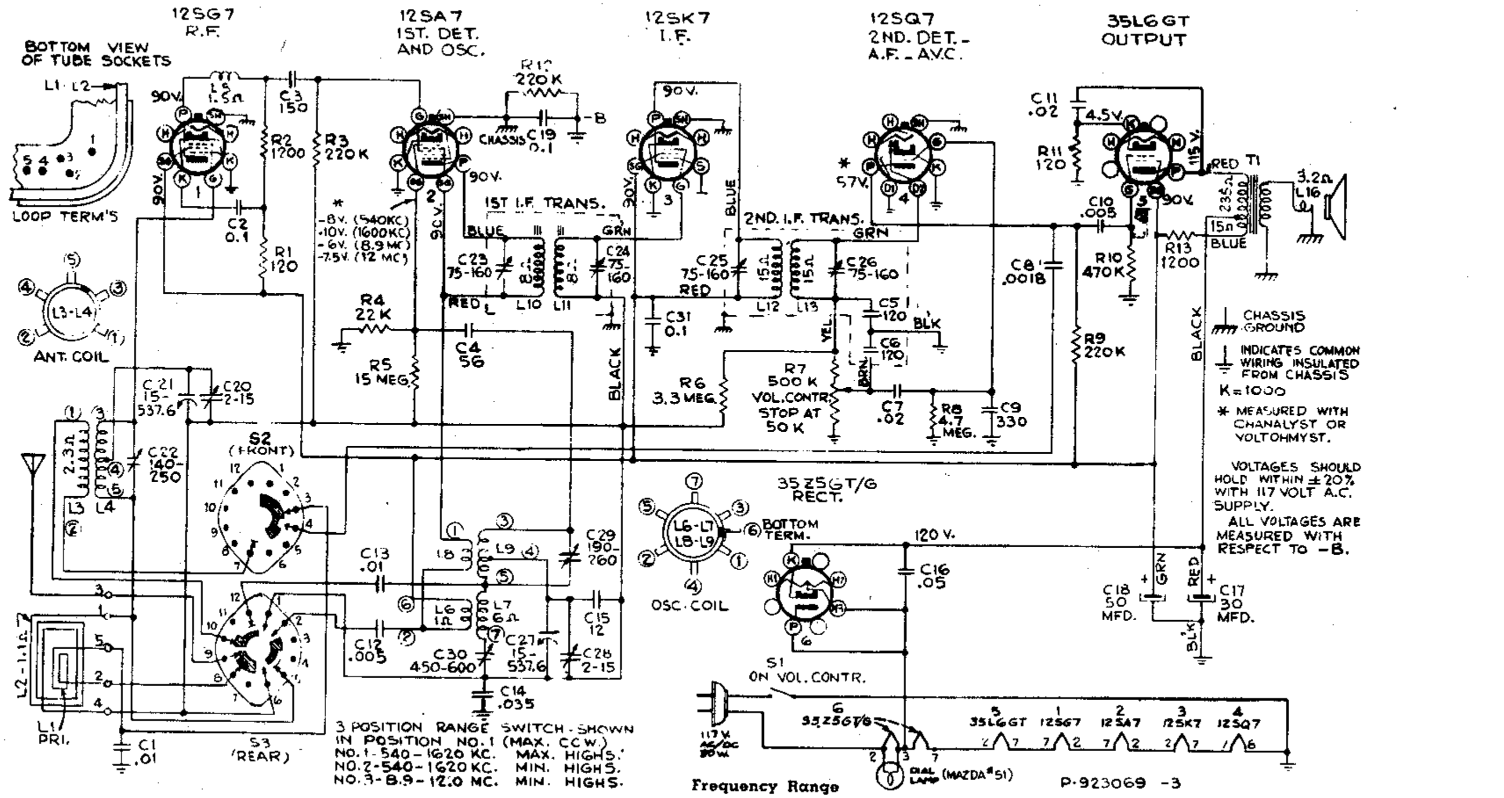
RCA 66BX

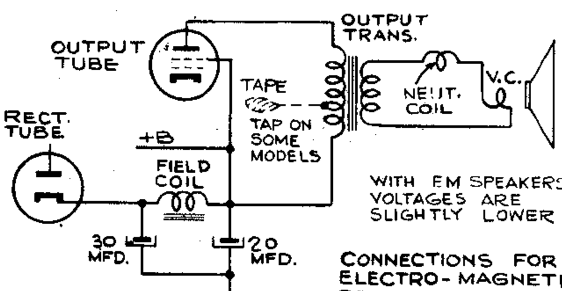
The dial cord drawing for this model is shown on *page 15-87* of *Rider's Volume XV;* this is slightly in error and the correct drawing is shown in the accompanying figure.



The dial cord drawing for RCA 66BX.

RCA MFG. CO.





CONNECTIONS FOR ELECTRO-MAGNETIC SPEAKER

Frequency Range
Broadcast .... 540-1600 kc
Short Wave .... 8.9-12 mc

Intermediate Frequency .... 455 kc

Tube Complement
(1) RCA-12SG7 .... R-F Amplifier
(2) RCA-12SA7 .... 1st Det.—Osc.
(3) RCA-12SK7 .... I-F Amplifier
(4) RCA-12SQ7 .... 2nd Det., A.V.C., and A-F Amplifier
(5) RCA-35L6-GT .... Power Output
(6) RCA-35Z5-GT/G .... Rectifier

Pilot Lamp .... Mazda No. 51, 6-8 volts, 0.2 amp.

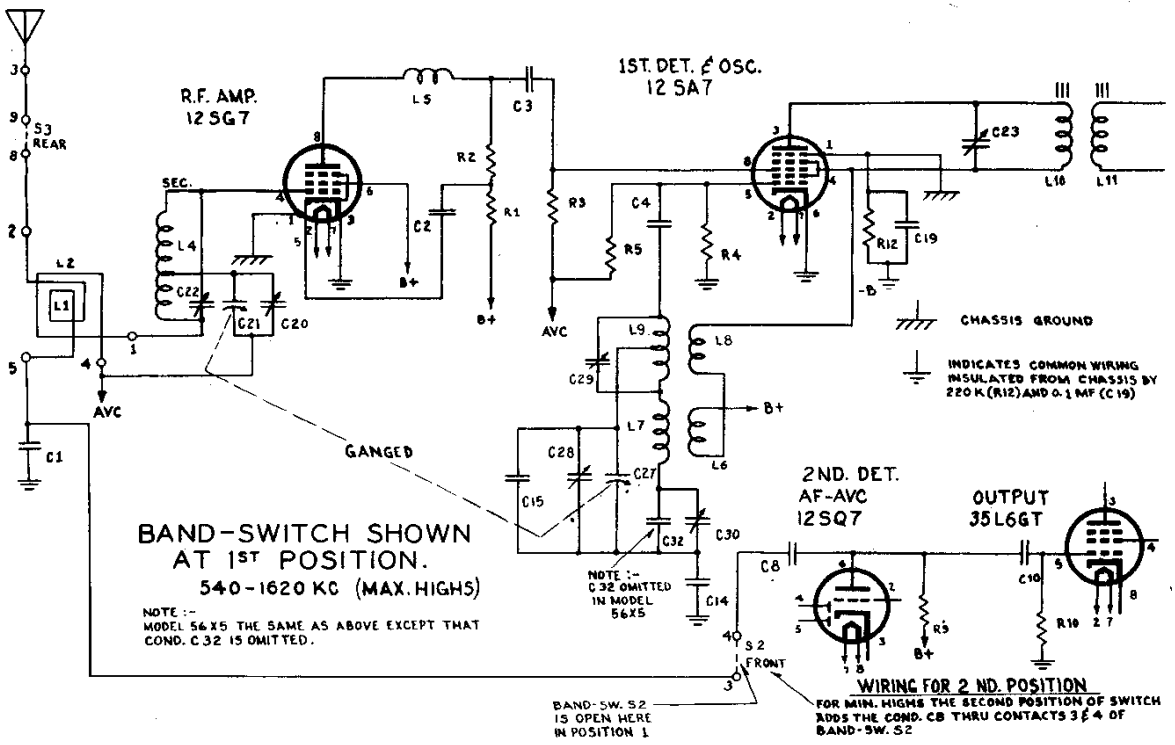
Power Output
Undistorted .... 1.0 watts
Maximum .... 1.5 watts

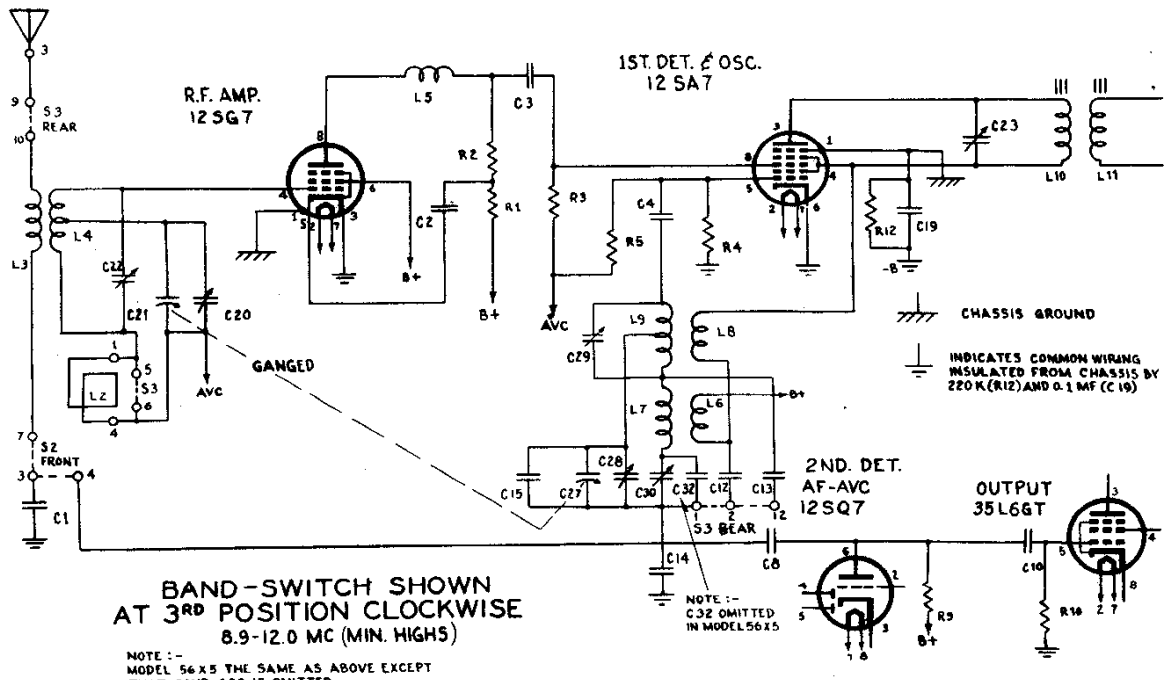
Loudspeaker (92510-1) "PM"
Size 5-inch
V.C. Impedance .... 3.4 ohms at 400 cycles

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

MODEL 56X5
MODELS 61-5,61-10

RCA MFG. CO.





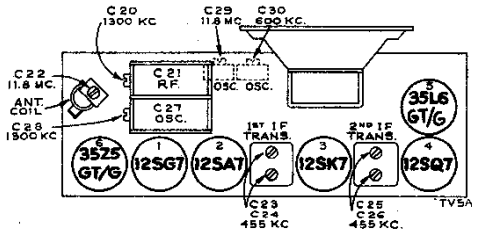
MODEL 56X5, Ch. RC-1023
MODEL 56X10, Ch. RC-1023B

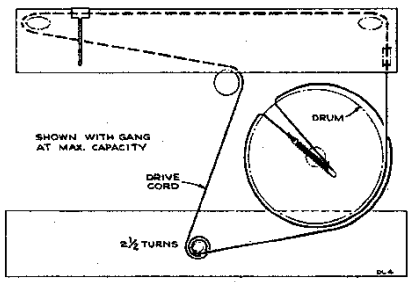
RCA MFG. CO.

Models 56X5 and 56X10

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 R-F plate filter capacitor (C2, 0.1 mf.) back against rear chassis apron.
3. Dress yellow and brown leads from 2nd I-F away from all other leads.
4. Dress all heater leads next to chassis.
5. Dress capacitor (C13, .01 mf.) parallel to osc. coil and approximately 3/16 inch from coil.
6. Dress tone control lead and speaker field leads next to chassis and front apron.
7. Dress pilot lamp leads away from ant. coil.
8. Dress leads from loop ant. coil around rectifier tube towards end of chassis.
9. Dress output plate lead against chassis.





Test Oscillator.—Connect high side of test oscillator as shown in chart. Connect low side through a .01 mf. capacitor to common "—B." Keep the output signal as low as possible to avoid A.V.C. action.

Output Meter.—Connect meter across speaker voice coil. Turn volume control to maximum clockwise position, station selector switch to broadcast maximum high position (pos. 1), for broadcast alignment and to position 3 for high frequency band.

Dial Pointer Adjustment.—Rotate tuning condenser fully counter-clockwise (plates fully meshed). Adjust indicator pointer to left (max. cap.) mark on dial back plate.

Calibration Scale.—The glass tuning dial may be easily removed from the cabinet and temporarily attached to the dial backing plate.

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.

Steps	Connect high side of the test oscillator to—	Tune test osc. to—	Turn radio dial to—	Adjust the following for maximum peak output
1	Pin #8 of 12SA7 in series with 0.1 mfd.	455 kc	Quiet Point at 1,600 kc end of dial	C25, C26 2nd I-F trans.
2				C23, C24† 1st I-F trans.
3	Ant. terminal in series with 220 mmf.	600 kc	600 kc "A" Band	C30 (osc.) Rock gang
4		1300 kc	1300 kc "A" Band	C28 (osc.) C20 (R-F)
5		Repeat 3 Rocking gang		
6		Repeat 3, 4 and 5 for exact cal.		
7	Ant. terminal in series with 0.1 mfd.	11.8 mc	11.8 mc	C29 (osc.)* Rock gang
8	Ant. terminal in series with 47 mmf.	11.8 mc	11.8 mc	C22 (R-F) Rock gang
9	Repeat steps 7 and 8			

* Use minimum capacity peak if two can be obtained. Check for selection of correct peak by tuning receiver to approximately 10.9 mc where a weaker signal should be received.

† Do not readjust C25 or C26

Model 56X5

STOCK No.	DESCRIPTION
	CHASSIS ASSEMBLIES
	RC 1023
39606	Capacitor—Mica, 12 mmf. (C15)
39622	Capacitor—Mica, 56 mmf. (C4)
39632	Capacitor—Mica, 150 mmf. (C3)
70417	Capacitor—Mica trimmer, 140-250 mmf., mounted on antenna coil (C22)
39839	Capacitor—Adjustable mica, comprising 1 section of 190-260 mmf. and 1 section of 450-600 mmf. (C29, C30)
39640	Capacitor—Mica, 330 mmf. (C9)
70627	Capacitor—Paper, .005 mfd. (C10, C12)
70712	Capacitor—Paper, .0018 mfd. (C8)
70652	Capacitor—Paper, .01 mfd. (C1, C13)
70711	Capacitor—Paper, .02 mfd. (C7, C11)
70635	Capacitor—Paper, .035 mfd. (C14)
70615	Capacitor—Paper, .05 mfd. (C16)
70617	Capacitor—Paper, 0.1 mfd. (C2, C19, C31)
39152	Capacitor—Electrolytic, comprising 1 section of 30 mfd., 150 volts, and 1 section of 50 mfd., 150 volts (C17, C18)
70416	Coil—Antenna coil (L3, L4, C22)
39892	Coil—Oscillator coil (L6, L7, L8, L9)
70418	Coil—Peaking coil (L5)
39838	Condenser—Variable tuning condenser (C20, C21, C27, C28)
36242	Control—Volume control and power switch (R7, S1)
32634	Cord—Drive cord (approx. 49 inches overall length)
70392	Cord—Power cord
36237	Drum—Drive drum
37068	Indicator—Station selector indicator
11765	Lamp—Dial lamp
70980	Lead—Antenna lead
39841	Loop—Antenna loop (L1, L2)
36229	Plate—Dial back plate complete with drive cord pulleys less dial
36230	Pulley—Drive cord pulley
30189	Resistor—120 ohms, ¼ watt (R1, R11)
30731	Resistor—1200 ohms, ¼ watt (R2)
6134	Resistor—1200 ohms, 1 watt (R13)
30492	Resistor—22,000 ohms, ¼ watt (R4)
14583	Resistor—220,000 ohms, ¼ watt (R3, R9, R12)
30648	Resistor—470,000 ohms, ¼ watt (R10)
12928	Resistor—3.3 megohms, ¼ watt (R6)
30931	Resistor—4.7 megohms, ¼ watt (R8)
38785	Resistor—15 megohms, ¼ watt (R5)
36897	Shaft—Tuning knob shaft
34449	Socket—Lamp socket
37605	Socket—Tube socket, moulded
31251	Socket—Tube socket, wafer
31418	Spring—Drive cord tension spring
39837	Switch—Range switch (S2, S3)
36800	Transformer—Output transformer (T1)
70411	Transformer—First I-F transformer (L10, L11, C23, C24)
70412	Transformer—Second I-F transformer (L12, L13, C5, C6, C25, C26)
33726	Washer—"C" washer for tuning knob shaft
	SPEAKER ASSEMBLY
	92510-1
70413	Speaker—5-inch P.M. speaker complete with cone and voice coil
	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.
	MISCELLANEOUS ASSEMBLIES
39777	Back—Cabinet back
70419	Dial—Glass dial scale
33006	Feet—Rubber feet for cabinet (4 required)
X1337	Grille—Cabinet grille cloth
36886	Knob—Range switch knob
36722	Knob—Volume control or tuning knob
30900	Spring—Retaining spring for knob