

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

**Model:** 1X591

**Chassis:**

**Year:** Pre 1955

**Power:**

**Circuit:**

**IF:**

**Tubes:**

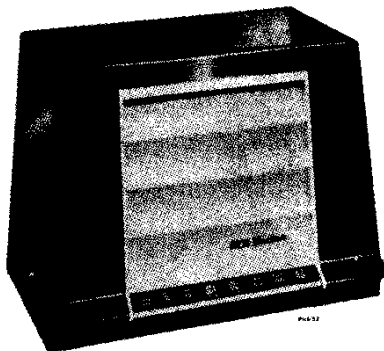
**Bands:**

### Resources

**Riders Volume 23 - RCA 23-17**

**Riders Volume 23 - RCA 23-18**

MODELS 1X591, Ch. RC1079K; 1X592, Ch. RC1079L



1X591  
Maroon  
  
1X592  
Ivory

### Specifications

Tuning Range ..... 540-1600 kc  
 Intermediate Frequency ..... 455 kc  
 Tube Complement  
 (1) RCA 12SA7 ..... Converter  
 (2) RCA 12SK7 ..... I-F Amplifier  
 (3) RCA 12SQ7 ..... Det.—A.V.C.—A-F Amp.  
 (4) RCA 50L6GT ..... Output  
 (5) RCA 35Z5GT ..... Rectifier  
 Power Supply Rating  
 115 volts a.c., 50 to 60 cycles or d.c. .... 30 watts

Power Output  
 Undistorted ..... .85 watts  
 Maximum ..... 1.1 watts  
 Dial Lamps (2) ..... Mazda type 1490, 3.2 volts, .16 amp.  
 Loudspeaker  
 Size and Type ..... 8 in. PM  
 Voice Coil Impedance ..... 3.2 ohms at 400 cycles  
 Cabinet Dimensions  
 Height ..... 9 1/2" Width ..... 12 1/2" Depth ..... 8 1/2"  
 Weight ..... 9 lbs.  
 Tuning Drive Ratio ..... 9 to 1 (4 1/2 turns of knob)

### Alignment Procedure

#### Lead Dress

1. Dress all heater leads down to chassis and away from all audio grid and plate wiring.
2. Dress power cord against chassis base.
3. Dress capacitor C18 against back apron.
4. Dress capacitor C13 down to base alongside of shielded lead.
5. Dress output transformer leads down to chassis.
6. Dress capacitors C9 and C15 as direct as possible.
7. Dress dial lamp leads on top of chassis between 12SQ7 and 50L6GT tubes; below chassis, as short as possible to rectifier socket.
8. Dress excess loop leads away from tubes and clear of tuning condenser.

**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.

On AC operation an isolation transformer (115 v./115 v.) may be necessary for the receiver if the test oscillator is also AC operated.

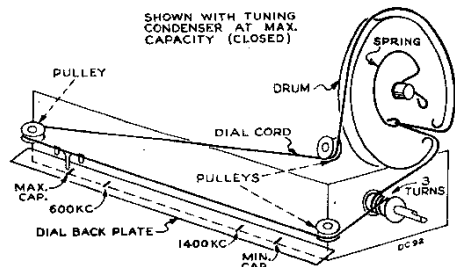
#### Dial Calibration

With the tuning condenser fully meshed, the dial pointer should be set to the first score mark at the left-hand end of the dial back plate. The four score marks represent:  
 Max cap.      600 kc      1400 kc      min. cap.

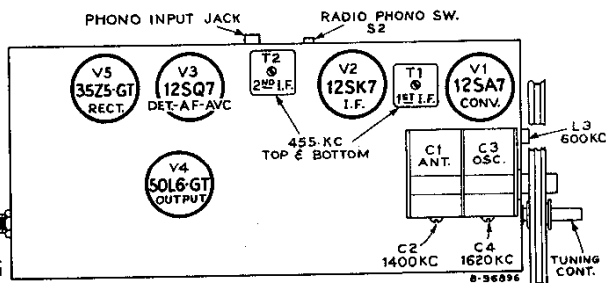
Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. output
1	12SK7 I-F grid through 0.1 mfd. capacitor	455 kc	Quiet-point 1600 kc end of dial	T2 (top and bottom) 2nd I-F trans.
2	Stator of C1 through 0.1 mfd.			*T1 (top and bottom) 1st I-F trans.
3	Short wire placed near loop to radiate signal	1620 kc	Min. cap.	C4 (osc.)
4		1400 kc	1400 kc signal	†C2 (ant.)
5		600 kc	600 kc signal	L3 (osc.) Rock gang
6	Repeat steps 3, 4 and 5.			

\* Do not readjust T2 when test oscillator is connected to C1.  
 † When adjusting C2 (ant. trimmer) it is necessary to have the speaker and loop in the same position and spacing as they will have when assembled in the cabinet.

**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.

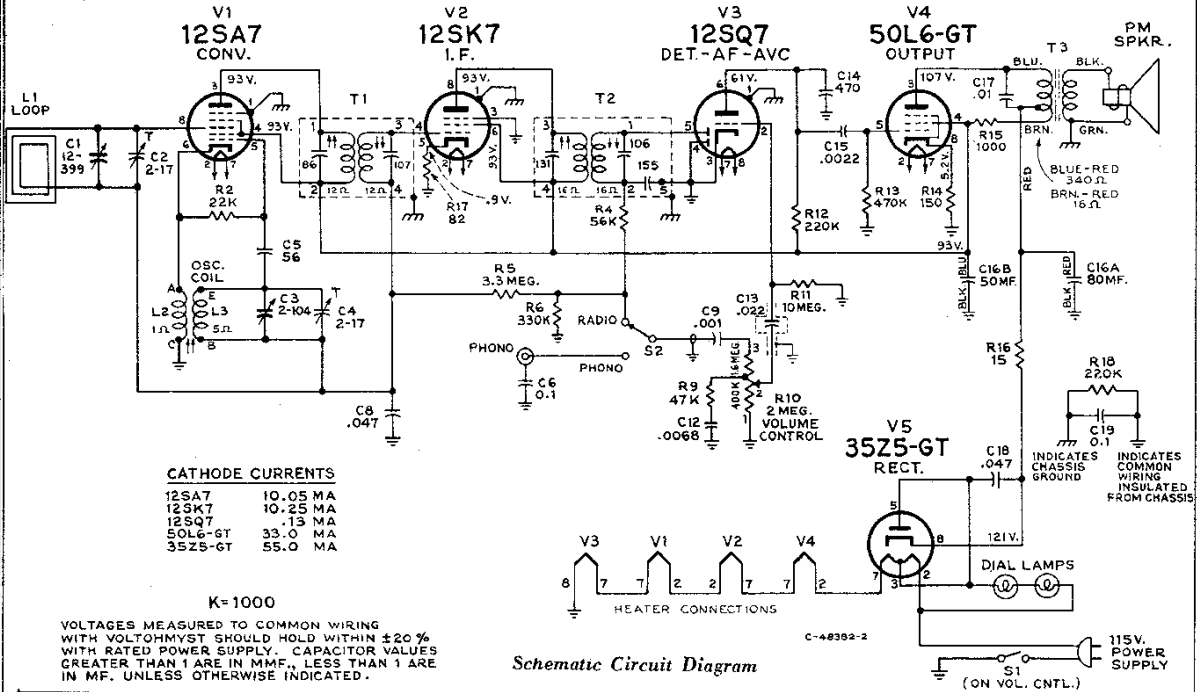


Dial Indicator and Drive Cord



Tube and Trimmer Locations

MODELS 1X591, Ch. RC1079K; 1X592, Ch. RC1079L



Stock No.	DESCRIPTION	Stock No.	DESCRIPTION
	<b>CHASSIS ASSEMBLIES</b>		
	RC 1079K-1X591		
	RC 1079L-1X592		
76584	Antenna—Antenna loop and back cover (L1)	503422	220,000 ohms, ±10%, ½ watt (R12, R18)
74653	Capacitor—Variable tuning capacitor (C1, C2, C3, C4)	503433	330,000 ohms, ±10%, ½ watt (R6)
71924	Capacitor—Ceramic, 56 mmf. (C5)	503447	470,000 ohms, ±10%, ½ watt (R13)
75198	Capacitor—Ceramic, 470 mmf. (C14)	503533	3.3 megohm, ±10%, ½ watt (R5)
74662	Capacitor—Electrolytic, comprising 1 section of 80 mfd., 150 volts, and 1 section of 50 mfd., 150 volts (C16A, C16B)	503610	10 megohm, ±10%, ½ watt (R11)
75643	Capacitor—Tubular, paper, .001 mfd., 1000 volts (C9)	74659	Shaft—Tuning knob shaft and pulley
73595	Capacitor—Tubular, paper, .0022 mfd., 600 volts (C15)	74697	Socket—Dial lamp socket
73789	Capacitor—Tubular, paper, .0068 mfd., 400 volts (C12)	31251	Socket—Tube socket, octal, water
73561	Capacitor—Tubular, paper, .01 mfd., 400 volts (C17)	76368	Spring—Drive cord spring
73562	Capacitor—Tubular, paper, .022 mfd., 400 volts (C13)	33634	Switch—Radio-phon switch (S2)
73553	Capacitor—Tubular, paper, .047 mfd., 400 volts (C8, C18)	74654	Transformer—Output transformer (T3)
73551	Capacitor—Tubular, paper, 0.1 mfd., 400 volts (C6, C19)	74918	Transformer—First I.F. transformer (T1)
73935	Clip—Mounting clip for I.F. transformer	73037	Transformer—Second I.F. transformer (T2)
74448	Coil—Oscillator coil complete with adjustable core (L2, L3)	33726	Washer—"C" washer for tuning knob shaft
35787	Connector—Phono input connector (socket)		<b>SPEAKER ASSEMBLIES</b>
75474	Connector—Single contact male connector for speaker cable		92586-5W
74133	Control—Volume control and power switch (R10, S1)	75023	Cap—Dust cap
72953	Cord—Drive cord (approx. 43" overall length required)	75024	Cone—Cone and voice coil
70392	Cord—Power cord and plug	76392	Speaker—"8" P.M. speaker complete with cone and voice coil
73693	Grommet—Power cord strain relief (1 set)		NOTE:—If stamping on speaker in instrument does not agree with above speaker numbers, order replacement parts by referring to model number of instrument, number stamped on speaker and full description of part required.
72283	Grommet—Rubber grommet for mounting variable tuning capacitor		<b>MISCELLANEOUS</b>
71116	Lamp—Dial lamp, Mazda #1490	Y2358	Cabinet—Plastic cabinet—maroon—for Model 1X591
76585	Pointer—Station selector pointer	Y2359	Cabinet—Plastic cabinet—ivory—for Model 1X592
72602	Pulley—Drive cord pulley	X3231	Cloth—Grille cloth only
	Resistors—Fixed, composition:	76586	Dial—Polystyrene dial scale
504015	15 ohms, ±20%, ½ watt (R16)	76588	Emblem—"RCA Victor" emblem
503082	82 ohms, ±10%, ½ watt (R17)	76587	Grille—Speaker grille and cloth assy.
503115	150 ohms, ±10%, ½ watt (R14)	74686	Knob—Control knob—maroon—for Model 1X591
513210	1000 ohms, ±10%, 1 watt (R15)	74667	Knob—Control knob—ivory—for Model 1X592
503322	22,000 ohms, ±10%, ½ watt (R2)	74734	Spring—Retaining spring for knob
503347	47,000 ohms, ±10%, ½ watt (R9)		
503356	56,000 ohms, ±10%, ½ watt (R4)		

† Stock No. 72953 is a reel containing 250 feet of cord.

**Change in Resistor:**

In late production of these receivers the fusa resistor R16 is changed from 15 ohms, ½ watt to 33 ohms, 1 watt. The Stock No. of the 33 ohm resistor is 514033.

**Change in Parts List:**

The Service Data for these models lists only one emblem. The listed emblem (Stock No. 76588) is correct for Model 1X591 only and is maroon color. The correct emblem for Model 1X592 is Stock No. 74782 and is gold finish.

**Change in Control Knob:**

Late production of these models use control knobs with a dimpled edge.

The stock Nos. of the dimpled knobs are as follows:

- 77234 Knob—Control knob—maroon—for Model 1X591
- 77235 Knob—Control knob—ivory—for Model 1X592