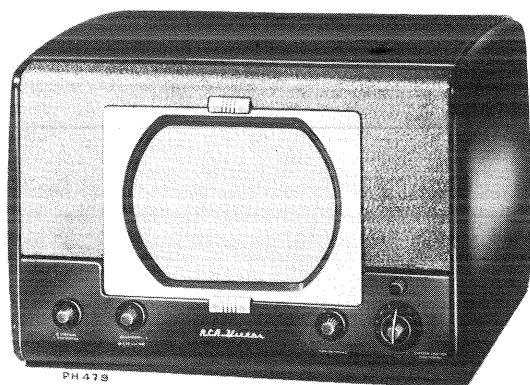




# RCA VICTOR



Model T100, Mahogany Finish Metal Cabinet

## TELEVISION RECEIVER

### MODEL T100

Chassis No. KCS38

— Mfr. No. 274 —

## SERVICE DATA

— 1950 No. T1 —

RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION

CAMDEN, N. J., U. S. A.

### GENERAL DESCRIPTION

Model T100 is a table type television receiver in a mahogany finish metal cabinet. The chassis employs twenty-one tubes plus two rectifiers and a 10BP4 kinescope.

Features of the television unit are: full twelve channel coverage; FM sound system; improved picture brilliance; picture

A-G-C; A-F-C horizontal hold; stabilized vertical hold; two stages of video amplification; noise saturation circuits; improved sync separator and clipper; four mc. band width for picture channel and reduced hazard high voltage supply. An auxiliary audio input jack is provided to permit the use of an external record playing attachment.

### ELECTRICAL AND MECHANICAL SPECIFICATIONS

PICTURE SIZE ..... 61 square inches on a 10BP4 Kinescope

#### R-F FREQUENCY RANGES

Channel Number	Channel Freq. Mc.	Picture Carrier Freq. Mc.	Sound Carrier Freq. Mc.	Receiver R-F Osc. Freq. Mc.
2	54-60	55.25	59.75	81
3	60-66	61.25	65.75	87
4	66-72	67.25	71.75	93
5	76-82	77.25	81.75	103
6	82-88	83.25	87.75	109
7	174-180	175.25	179.75	201
8	180-186	181.25	185.75	207
9	186-192	187.25	191.75	213
10	192-198	193.25	197.75	219
11	198-204	199.25	203.75	225
12	204-210	205.25	209.75	231
13	210-216	211.25	215.75	237

#### FINE TUNING RANGE

Plus and minus approximately 250 kc on channel 2 and plus and minus approximately 650 kc on channel 13.

#### POWER SUPPLY RATING

KCS38 ..... 115 volts, 60 cycles, 230 watts

AUDIO POWER OUTPUT RATING ..... 2.0 watts max.

#### LOUDSPEAKERS

KCS38 ..... 970773-1 5" x 7" EM Dynamic, 3.2 ohms

#### DIMENSIONS (inches)

	Width	Height	Depth
Cabinet (outside)	22	15 $\frac{5}{8}$	21 $\frac{1}{4}$
Chassis (overall)	19 $\frac{1}{2}$	13	20 $\frac{1}{2}$

#### RECEIVER ANTENNA INPUT IMPEDANCE

Choice: 300 ohms balanced or 72 ohms unbalanced.

#### WEIGHT

Chassis with Tubes in Cabinet ..... 84 lbs.

Shipping Weight ..... 99 lbs.

#### RCA TUBE COMPLEMENT

Tube Used	Function
(1) RCA 6AG5	R-F Amplifier
(2) RCA 6AG5	Converter
(3) RCA 6J6	R-F Oscillator
(4) RCA 6AU6	1st Sound I-F Amplifier
(5) RCA 6AU6	2nd Sound I-F Amplifier
(6) RCA 6AL5	Sound Discriminator
(7) RCA 6AV6	1st Audio Amplifier
(8) RCA 6K6GT	Audio Output
(9) RCA 6BA6	1st Picture I-F Amplifier
(10) RCA 6AG5	2nd Picture I-F Amplifier
(11) RCA 6BA6	3rd Picture I-F Amplifier
(12) RCA 6AG5	4th Picture I-F Amplifier
(13) RCA 6AL5	Picture 2nd Detector & Sync Limiter
(14) RCA 12AU7	1st and 2nd Video Amplifier
(15) RCA 6SN7GT	AGC Amplifier & Vertical Sweep Oscillator
(16) RCA 6SN7GT	AGC Rectifier & 1st Sync Separator
(17) RCA 6SN7GT	Sync Amplifier & 2nd Sync Separator
(18) RCA 6K6GT	Vertical Sweep Output
(19) RCA 6SN7GT	Horizontal Sweep Oscillator and Control
(20) RCA 6BG6G	Horizontal Sweep Output
(21) RCA 6W4GT	Damper
(22) RCA 1B3-GT/8016	High Voltage Rectifier
(23) RCA 5U4G	Power Supply Rectifier
(24) RCA 10BP4	Kinescope

Specifications continued on page 2

## T100

# ELECTRICAL AND MECHANICAL SPECIFICATIONS (Continued)

## PICTURE INTERMEDIATE FREQUENCIES

Picture Carrier Frequency .....	25.75 Mc.
Adjacent Channel Sound Trap .....	27.25 Mc.
Accompanying Sound Traps .....	21.25 Mc.
Adjacent Channel Picture Carrier Trap .....	19.75 Mc.

## SOUND INTERMEDIATE FREQUENCIES

Sound Carrier Frequency .....	21.25 Mc.
Sound Discriminator Band Width between peaks .....	350 kc

VIDEO RESPONSE .....To 4 Mc.

FOCUS .....Magnetic

SWEEP DEFLECTION .....Magnetic

SCANNING .....Interlaced, 525 line

HORIZONTAL SWEEP FREQUENCY .....15,750 cps

VERTICAL SWEEP FREQUENCY .....60 cps

FRAME FREQUENCY (Picture Repetition Rate) .....30 cps

## OPERATING INSTRUCTIONS

The following adjustments are necessary when turning the receiver on for the first time:

1. See that the TV-PH switch on the rear apron is in the "TV" position.

2. Turn the receiver "ON" and advance the SOUND VOLUME control to approximately mid-position.

3. Set the STATION SELECTOR to the desired channel.

4. Adjust the FINE TUNING control for best sound fidelity and the SOUND VOLUME control for suitable volume.

5. Turn the BRIGHTNESS control fully counter-clockwise, then clockwise until a light pattern appears on the screen.

6. Adjust the VERTICAL hold control until the pattern stops vertical movement.

7. Adjust the HORIZONTAL hold control until a picture is obtained and centered.

8. Turn the BRIGHTNESS control counter-clockwise until the retrace lines just disappear.

9. Adjust the PICTURE control for suitable picture contrast.

10. After the receiver has been on for some time, it may be necessary to readjust the FINE TUNING control slightly for improved sound fidelity.

11. In switching from one station to another, it may be necessary to repeat steps 4, 8 and 9.

12. When the set is turned on again after an idle period, it should not be necessary to repeat the adjustments if the positions of the controls have not been changed. If any adjustment is necessary, step number 4 is generally sufficient.

13. If the positions of the controls have been changed, it may be necessary to repeat steps 2 through 9.

14. To use the instrument with a record player, plug the record-player output cable into the PHONO jack on the rear apron, and set the TV-PH switch on "PH." Set the TV-PH switch back to TV on completion of the record program.

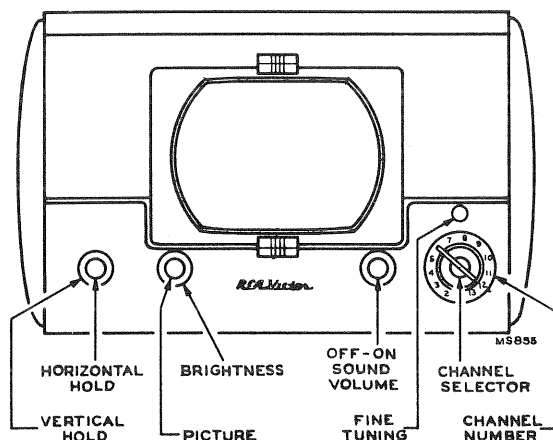


Figure 1—Receiver Operating Controls

**NOTE:** THE CHASSIS USED IN MODEL T100 IS VERY SIMILAR TO THE CHASSIS USED IN MODELS T120 AND T121. REFER TO MODELS T120 AND T121 FOR ALIGNMENT PROCEDURE, TEST PATTERN AND WAVEFORM PHOTOGRAPHS, R-F UNIT WIRING, LEAD DRESS AND VOLTAGES. IT SHOULD BE NOTED THAT MODEL T100 USES A 10BP4 KINESCOPE WHEREAS MODELS T120 AND T121 USE A 12LP4 KINESCOPE. THE SECOND ANODE VOLTAGE (RECTIFIER AND KINESCOPE) IS SLIGHTLY LOWER IN MODEL T100.

MODELS T120 AND T121 INCORPORATE A WIDTH SELECTOR SWITCH BUT T100 DOES NOT. MODELS T120 AND T121 USE A PM SPEAKER AND MODEL T100 USES AN EM SPEAKER.

## HIGH VOLTAGE WARNING

OPERATION OF THIS RECEIVER OUTSIDE THE CABINET OR WITH THE COVERS REMOVED INVOLVES A SHOCK HAZARD FROM THE RECEIVER POWER SUPPLIES. WORK ON THE RECEIVER SHOULD NOT BE ATTEMPTED BY ANYONE WHO IS NOT THOROUGHLY FAMILIAR WITH THE PRECAUTIONS NECESSARY WHEN WORKING ON HIGH-VOLTAGE EQUIPMENT. DO NOT OPERATE THE RECEIVER WITH THE HIGH-VOLTAGE COMPARTMENT SHIELD REMOVED.

## INSTALLATION INSTRUCTIONS

T100

**ION TRAP MAGNET ADJUSTMENT.**—Set the ion trap magnet approximately in the position shown in Figure 2, and with the part number on magnet towards the rear of the chassis. Starting from this position immediately adjust the magnet by moving it forward or backward at the same time rotating it slightly around the neck of the kinescope for the brightest raster on the screen. Reduce the brightness control setting until the raster is slightly above average brilliance. Adjust the focus control (R191 on the chassis rear apron) until the line structure of the raster is clearly visible. Readjust the ion trap magnet for maximum raster brilliance. The final touches on this adjustment should be made with the brightness control at the maximum position with which good line focus can be maintained.

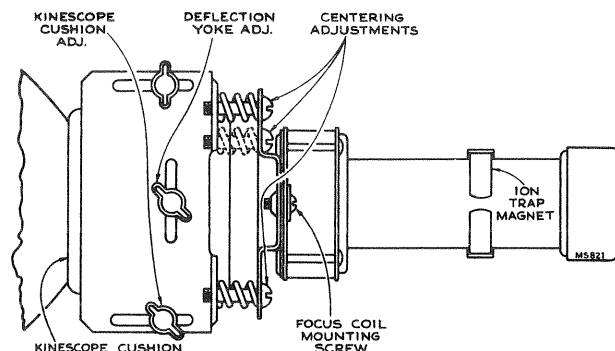


Figure 2—Yoke and Focus Coil Adjustments

**DEFLECTION YOKE ADJUSTMENT.**—If the lines of the raster are not horizontal or squared with the picture mask, rotate the deflection yoke until this condition is obtained. Tighten the yoke adjustment wing screw.

**PICTURE ADJUSTMENTS.**—It will now be necessary to obtain a test pattern picture in order to make further adjustments. See steps 3 through 9 of the receiver operating instructions.

If the Horizontal Oscillator and AGC System are operating properly, it should be possible to sync the picture at this point. However, if the AGC threshold control is misadjusted, and the receiver is overloading, it may be impossible to sync the picture.

If the receiver is overloading, turn R138 on the rear apron (see Figure 3) clockwise until the set operates normally and the picture can be synced.

**CHECK OF HORIZONTAL OSCILLATOR ALIGNMENT.**—Turn the horizontal hold control to the extreme counter-clockwise position. The picture should remain in horizontal sync. Momentarily remove the signal by switching off channel then back. Normally the picture will be out of sync. Turn the control clockwise slowly. The number of diagonal black bars will be gradually reduced and when only 3 bars sloping downward to the left are obtained, the picture will pull into sync upon slight additional clockwise rotation of the control. Pull in should occur when the control is approximately 90 degrees from the extreme counter-clockwise position. The picture should remain in sync for approximately 90 degrees of additional clockwise rotation of the control. At the extreme clockwise position, the picture should be out of sync and should show 1 vertical or diagonal black bar in the raster.

If the receiver passes the foregoing checks and the picture is normal and stable, the horizontal oscillator is properly aligned. Skip "Alignment of Horizontal Oscillator" and proceed with "Centering Adjustment."

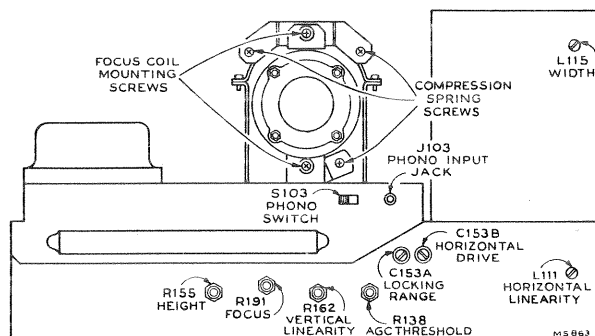


Figure 3—Rear Chassis Adjustments

**ALIGNMENT OF HORIZONTAL OSCILLATOR.**—If in the above check the receiver failed to hold sync with the hold control at the extreme counter-clockwise position or failed to hold sync over 90 degrees of clockwise rotation of the control from the pull-in point, it will be necessary to make the following adjustments:

**Horizontal Frequency Adjustment.**—Turn the horizontal hold control to the extreme clockwise position. Tune in a television station and adjust the T109 horizontal frequency adjustment (under the chassis) until the picture is just out of sync and the horizontal blanking appears as a vertical or diagonal black bar in the raster.

**Horizontal Lock in Range Adjustment.**—Set the horizontal hold control to the full counter-clockwise position. Momentarily remove the signal by switching off channel then back. Slowly turn the horizontal hold control clockwise and note the least number of diagonal bars obtained just before the picture pulls into sync.

If more than 3 bars are present just before the picture pulls into sync, adjust the horizontal locking range trimmer C153A slightly clockwise. If less than 3 bars are present, adjust C153A slightly counter-clockwise. Turn the picture control counter-clockwise, momentarily remove the signal and recheck the number of bars present at the pull in point. Repeat this procedure until 3 bars are present.

Repeat the adjustments under "Horizontal Frequency Adjustment" and "Horizontal Locking Range Adjustment" until the conditions specified under each are fulfilled. When the horizontal hold operates as outlined under "Check of Horizontal Oscillator Alignment" the oscillator is properly adjusted.

If it is impossible to sync the picture at this point and the AGC system is in proper adjustment it will be necessary to adjust the Horizontal Oscillator by the method outlined in the alignment procedure. For field purposes paragraph "A" under Horizontal Oscillator Waveform Adjustment may be omitted.

**CENTERING ADJUSTMENT.**—No electrical centering controls are provided. Centering is obtained by mechanically orienting the focus coil with the three adjustment screws shown in Figure 2. Center the picture on the screen by adjustment of these screws. The focus coil should be concentric around the neck of the kinescope to prevent curvature of the raster.

**FOCUS COIL ADJUSTMENTS.**—If, after making the centering adjustments described in the above paragraph, a corner of the picture is shadowed, it will be necessary to loosen the focus coil mounting screws (shown in Figure 2) and change the position of the coil to eliminate the shadow. Recenter the picture by adjustment of the centering screws.

Recheck the position of the ion trap magnet to insure that maximum brilliance is obtained. It is important that the kinescope not be operated with the ion trap magnet adjusted for less than maximum brightness. To do so may cause injury to the tube.

## T100

## INSTALLATION INSTRUCTIONS

**WIDTH, DRIVE AND HORIZONTAL LINEARITY ADJUSTMENTS.**—Adjustment of the horizontal drive control affects the high-voltage applied to the kinescope. In order to obtain the highest possible voltage hence the brightest and best focused picture, turn the horizontal drive control counter-clockwise until the left side of the picture begins to stretch.

Adjust the horizontal linearity control L111 to provide best linearity. Adjust the width control until the picture just fills the mask.

Adjustments of the horizontal drive control affect horizontal oscillator hold and locking range. If the drive control was adjusted, recheck the oscillator alignment.

**FOCUS.**—Adjust the focus control (R191 on chassis rear apron) for maximum definition in the test pattern vertical "wedge" and best focus in the white areas of the pattern.

**HEIGHT AND VERTICAL LINEARITY ADJUSTMENTS.**—Adjust the height control (R155 on chassis rear apron) until the picture fills the mask vertically. Adjust vertical linearity (R162 on rear apron), until the test pattern is symmetrical from top to bottom. Adjustment of either control will require a readjustment of the other. Adjust centering to align the picture with the mask.

**CHECK TO SEE THAT THE CUSHION AND YOKE THUMB-SCREWS AND THE FOCUS COIL MOUNTING SCREWS ARE TIGHT.**

**AGC THRESHOLD CONTROL.**—The AGC threshold control R138 is adjusted at the factory and normally should not require readjustment in the field.

To check the adjustment of the AGC Threshold Control, tune in a strong signal, sync the picture and turn the picture control to the maximum clockwise position. Turn the brightness control counter-clockwise until the vertical retrace lines are just invisible. Momentarily remove the signal by switching off channel and then back. If the picture reappears immediately, the receiver is not overloading due to improper setting of R138. If the picture requires an appreciable portion of a second to reappear, R138 should be readjusted.

Set the picture control at the maximum clockwise position. Turn R138 fully clockwise. The top one-half inch of the picture may be bent slightly. This should be disregarded. Turn R138 counter-clockwise until there is a very, very slight bend or change of bend in the top one-half inch of the picture. Then turn R138 clockwise just sufficiently to remove this bend or change of bend.

If the signal is very weak, the above method may not work as it may be impossible to get the picture to bend. In this case, turn R138 counter-clockwise until the snow in the picture becomes more pronounced, then clockwise until the best signal to noise ratio is obtained.

The AGC control adjustment should be made on a strong signal if possible. If the control is set too far counter-clockwise on a weak signal, then the receiver may overload when a strong signal is received.

**CHECK OF R-F OSCILLATOR ADJUSTMENTS.**—Tune in all available stations to see if the receiver r-f oscillator is adjusted to the proper frequency on all channels. If adjustments are required, these should be made by the method outlined in the alignment procedure. The adjustments for channels 2 through 5 and 7 through 12 are available from the front of the cabinet by removing the station selector escutcheon as shown in Figure 4. Adjustment for channel 13 is on top of the chassis and channel 6 adjustment is in the kinescope well.

Replace the cabinet back and make sure that the screws are tight in order to prevent rattling at high volume.

**WEAK SIGNAL AREA OPERATION**—Since the vast majority of receivers are sold in strong signal areas, the chassis are

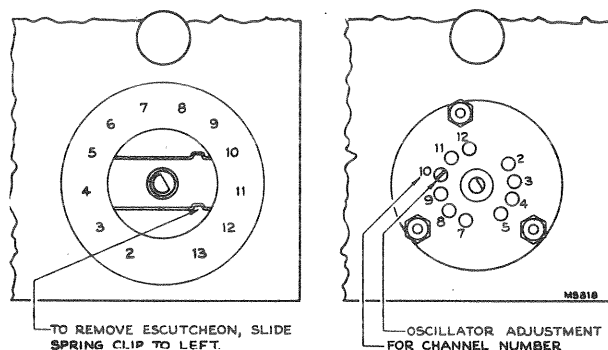


Figure 4—R-F Oscillator Adjustments

aligned to produce the cleanest pictures in those areas. However, if the receiver is to be operated in a weak signal area, better performance can be obtained by "peaking" the r-f unit.

To peak the r-f unit in these receivers, disconnect the 390 ohm resistor which is on top of the r-f unit chassis. Adjust L66 to obtain the best possible picture on the weakest low channel station received. By this action, the r-f gain, is increased 50% at the expense of r-f bandwidth and an improvement in the weak signal picture results.

If the peaked receiver is subsequently taken to a strong signal area, the resistor R14 should be connected in place and L66 adjusted for "flat" response on the low channels.

**KINESCOPE HANDLING PRECAUTION.**—Do not install, remove, or handle the kinescope in any manner, unless shatter-proof goggles and heavy gloves are worn. People not so equipped should be kept away while handling the kinescope. Keep the kinescope away from the body while handling.

To remove the kinescope, remove the kinescope socket, the ion-trap magnet, and the second-anode connector. Loosen the cross-recessed head screw on the kinescope strap, as shown in Figure 5. Withdraw the kinescope toward the front of the chassis.

**INSTALLATION OF KINESCOPE.**—Slide the kinescope cushion toward the rear of the chassis. Loosen the deflection yoke adjustment, slide the yoke toward the rear of the chassis and tighten.

The kinescope second anode contact is a recessed metal well in the side of the bulb. The tube must be installed so that this contact is up but rotated approximately 30 degrees toward the high-voltage compartment.

Insert the neck of the kinescope through the deflection and focus coils until the bell of the tube is against the rubber cushion. If the tube sticks, or fails to slip into place smoothly, investigate and remove the cause of the trouble. Do not force the tube.

Slip the ion trap magnet assembly over the neck of the kinescope.

Connect the kinescope socket to the tube base.

Connect the high voltage lead to the kinescope second anode socket.

Wipe the kinescope screen surface and front panel safety glass clean of all dust and finger marks.

To replace the chassis in the cabinet, first tighten the cross-recessed head screw on the kinescope strap. Slide the chassis into the cabinet, then insert and tighten the six chassis bolts. Loosen the kinescope strap from the rear of the cabinet, or from the bottom through a hole in the chassis shelf. The bottom end of the cross-recessed head screw is slotted to fit a screwdriver. Push the kinescope forward until the face of the tube is against the mask. Push the yoke cushion forward against the kinescope flare, then tighten the cushion adjusting screws. Push the yoke forward and tighten. Tighten the kinescope strap. Replace the knobs and the cabinet back.

## CHASSIS TOP VIEW

T100

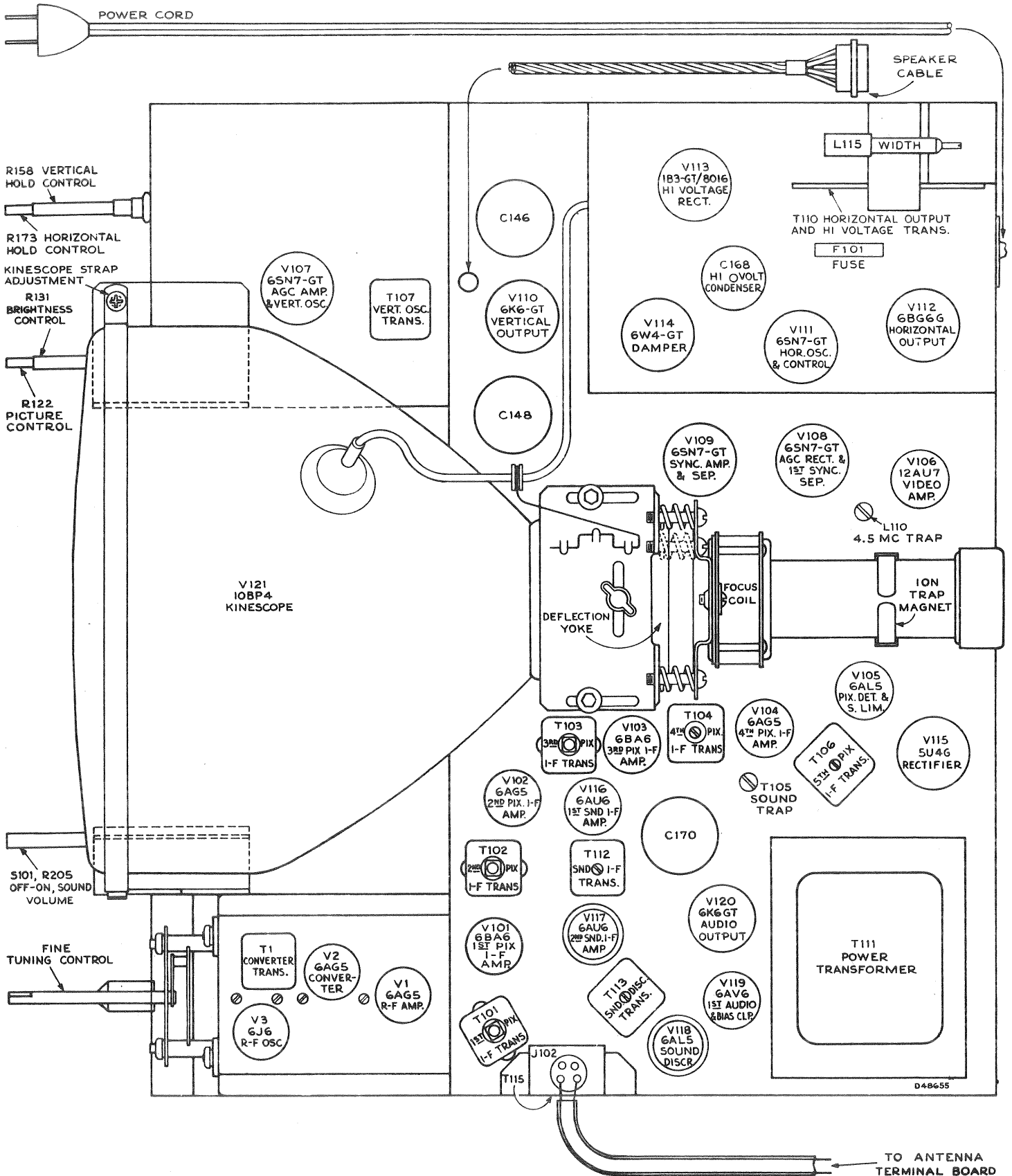


Figure 5—Chassis Top View

## T100

## CHASSIS BOTTOM VIEW

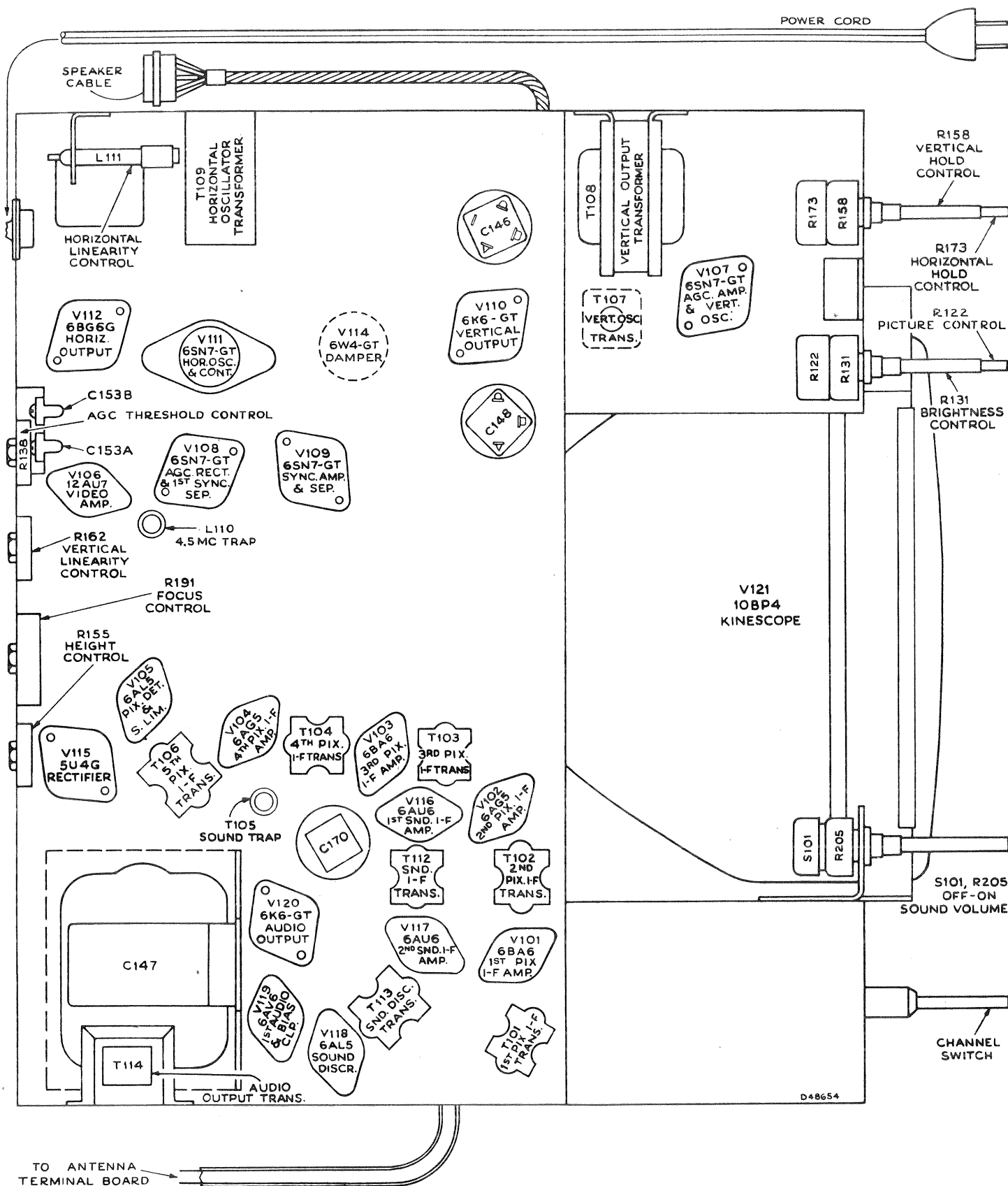
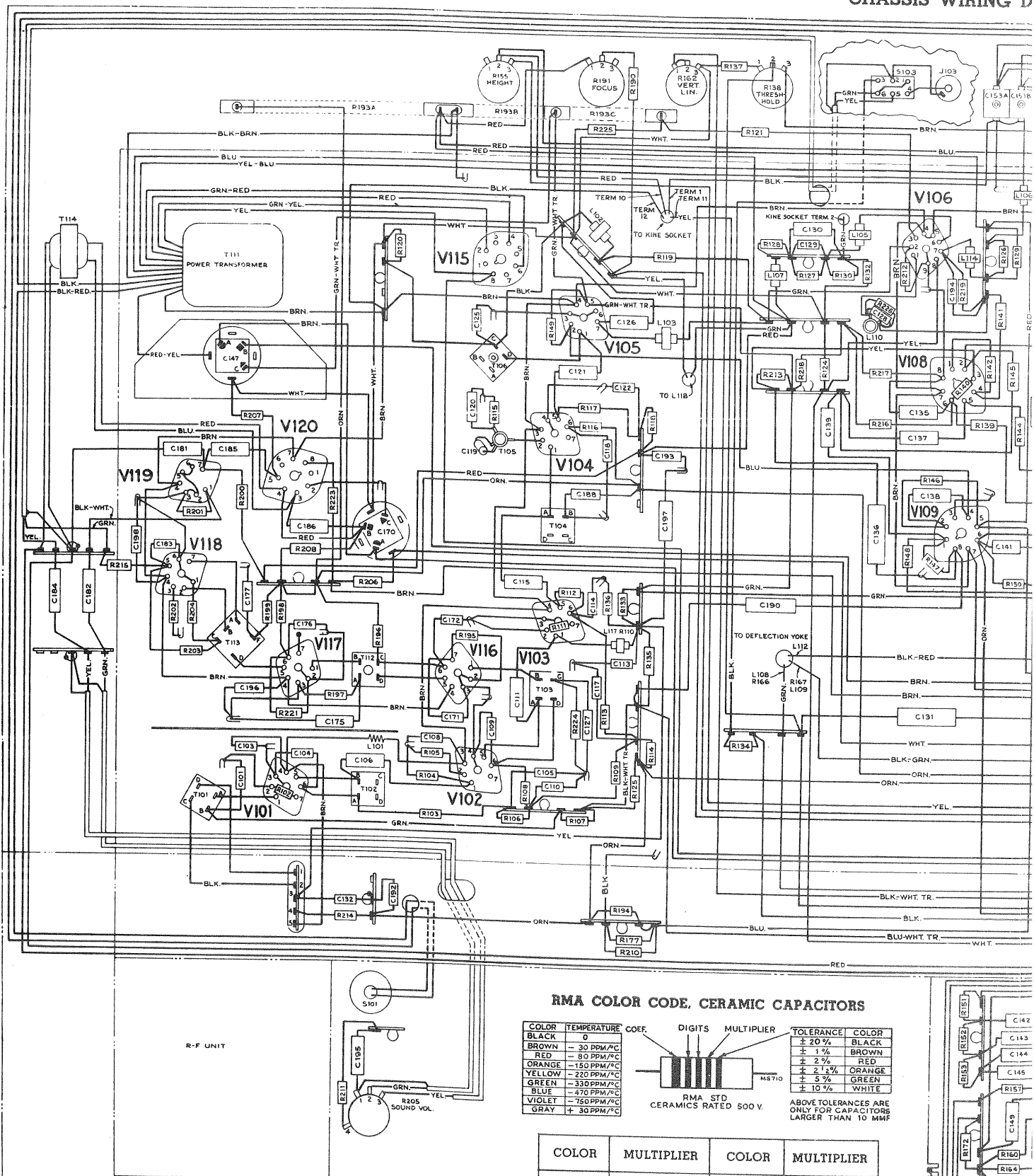
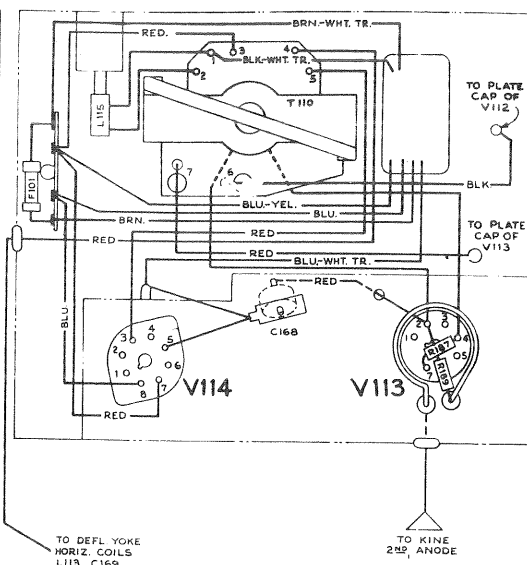


Figure 6—Chassis Bottom View







The top row shows two cylindrical resistors. The left one has a wire extending from the left end, and the right one has a wire extending from the right end. Both have labels: 'MULTIPLIER' at the top, 'DIGITS' pointing to the first two vertical bands, 'TOLERANCE' pointing to the third band, and 'VOLTAGE RATING' pointing to the fourth band. Below each cylinder is the text 'OUTER FOIL END (MAY BE ON EITHER END)' with a curved arrow pointing to the right end of the cylinder.

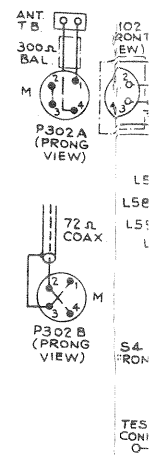
The bottom diagram shows a rectangular resistor with a zigzag line on its left side. It has four circular terminals on its right side. Labels include: 'VOLTAGE RATING' pointing to the top terminal, 'TOLERANCE' pointing to the bottom terminal, 'DIGITS' pointing to the two middle terminals, and 'MULTIPLIER' pointing to the bottom terminal. An arrow points from the text 'ARROW POINTS TO OUTER FOIL END' to the left side of the resistor.

MS 708

CAPACITY VALUE IN MMF		
COLOR	DIGITS	MULTIPLIER
BLACK	0	1
BROWN	1	10
RED	2	100
ORANGE	3	1,000
YELLOW	4	10,000
GREEN	5	
BLUE	6	
VIOLET	7	
GRAY	8	
WHITE	9	

TOLERANCE	
COLOR	TOLERANCE
BLACK BAND OR NONE	$\pm 20\%$
WHITE OR SILVER	$\pm 10\%$
YELLOW OR GOLD	$\pm 5\%$

The Voltage Rating is given in hundreds of volts. Only one band is employed for ratings under 1,000 volts. Two bands are employed for ratings over 1,000 volts. Use digit column to read voltage rating.



RMA CO

WHITE INDICATES RAILROADS

QUALITY  
SOLE  
RMA FIXED MIC A C

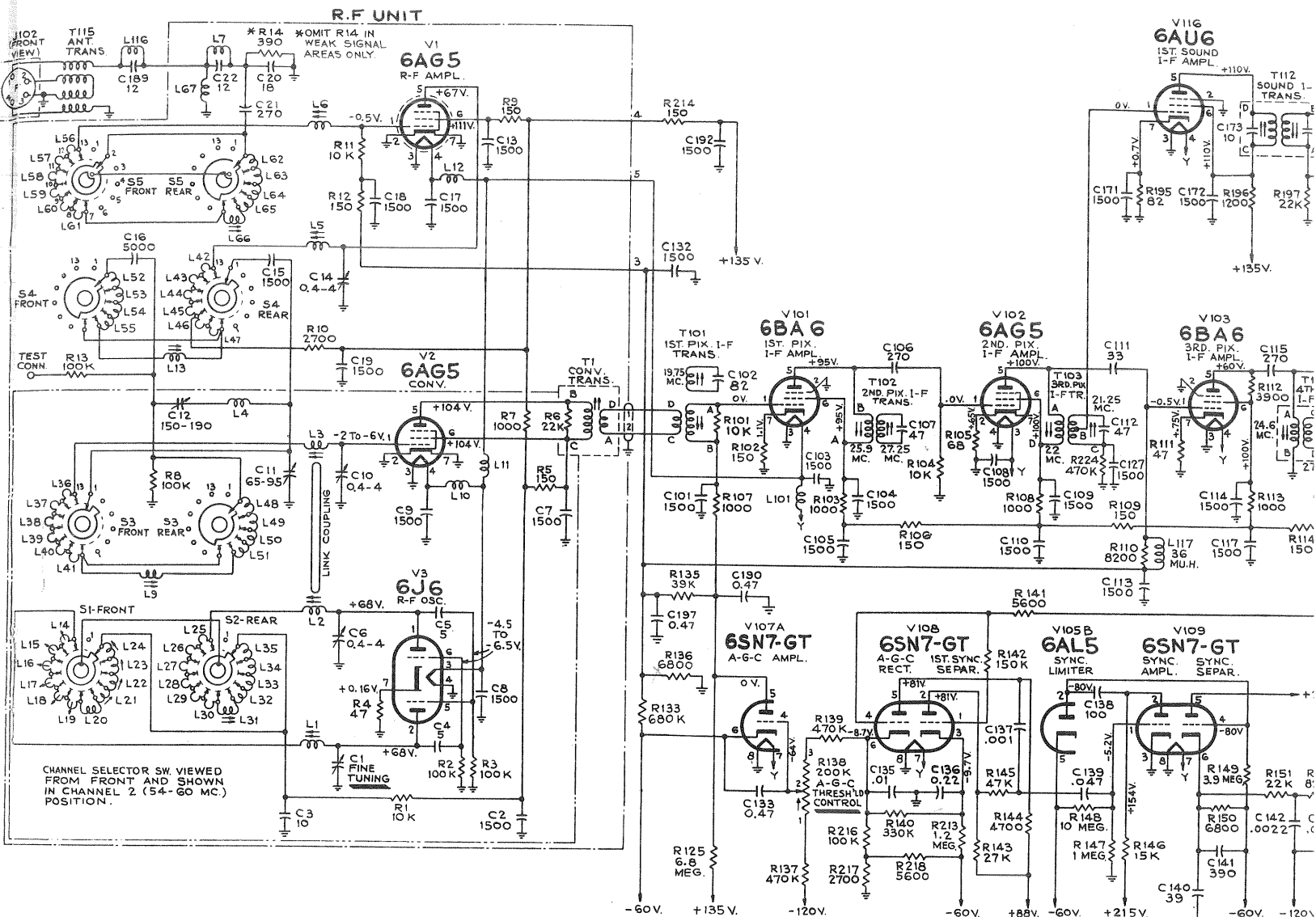
TOLERAN

COLOR	TOLERANCE
RED	$\pm 0.0005$
GREEN	$\pm 0.0005$
SILVER	$\pm 0.0005$
BLACK	$\pm 0.0005$

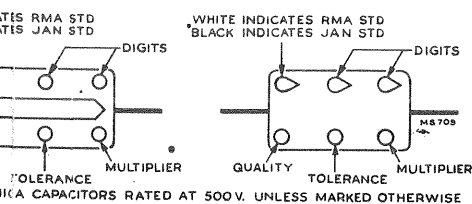
**Figure 7—Chassis Wiring Diagram**



# CIRCUIT SCHEMATIC



## A COLOR CODE, FIXED MICA CAPACITORS



TOLERANCE	COLOR	CLASS	COLOR	CLASS
±2%	BLACK	A	YELLOW	D
±5%	BROWN	B	GRAY	I
±10%	RED	C	WHITE	J
±20%	ORANGE	D		

**NOTE:** The chassis used in Model T100 is very similar to the chassis used in Models T120 and T121. Refer to Models T120 and T121 for alignment procedure, test pattern and waveform photographs, r-f unit wiring, lead dress and voltages. It should be noted that Model T100 uses a 10BP4 kinescope whereas Models T120 and T121 use a 12LP4 kinescope. The second anode voltage (rectifier and kinescope) is slightly lower in Model T100.

Models T120 and T121 incorporate a width selector switch but T100 does not. Models T120 and T121 use a PM speaker and Model T100 uses an EM speaker.

All resistance values in ohms. K = 1000.

All capacitance values less than 1 in MF and above 1 in MMF unless otherwise noted.

Coil resistance values less than 1 ohm are not shown.

Direction of arrows at coils indicates clockwise rotation.

## CIRCUIT SCHEMATIC DIAGRAM

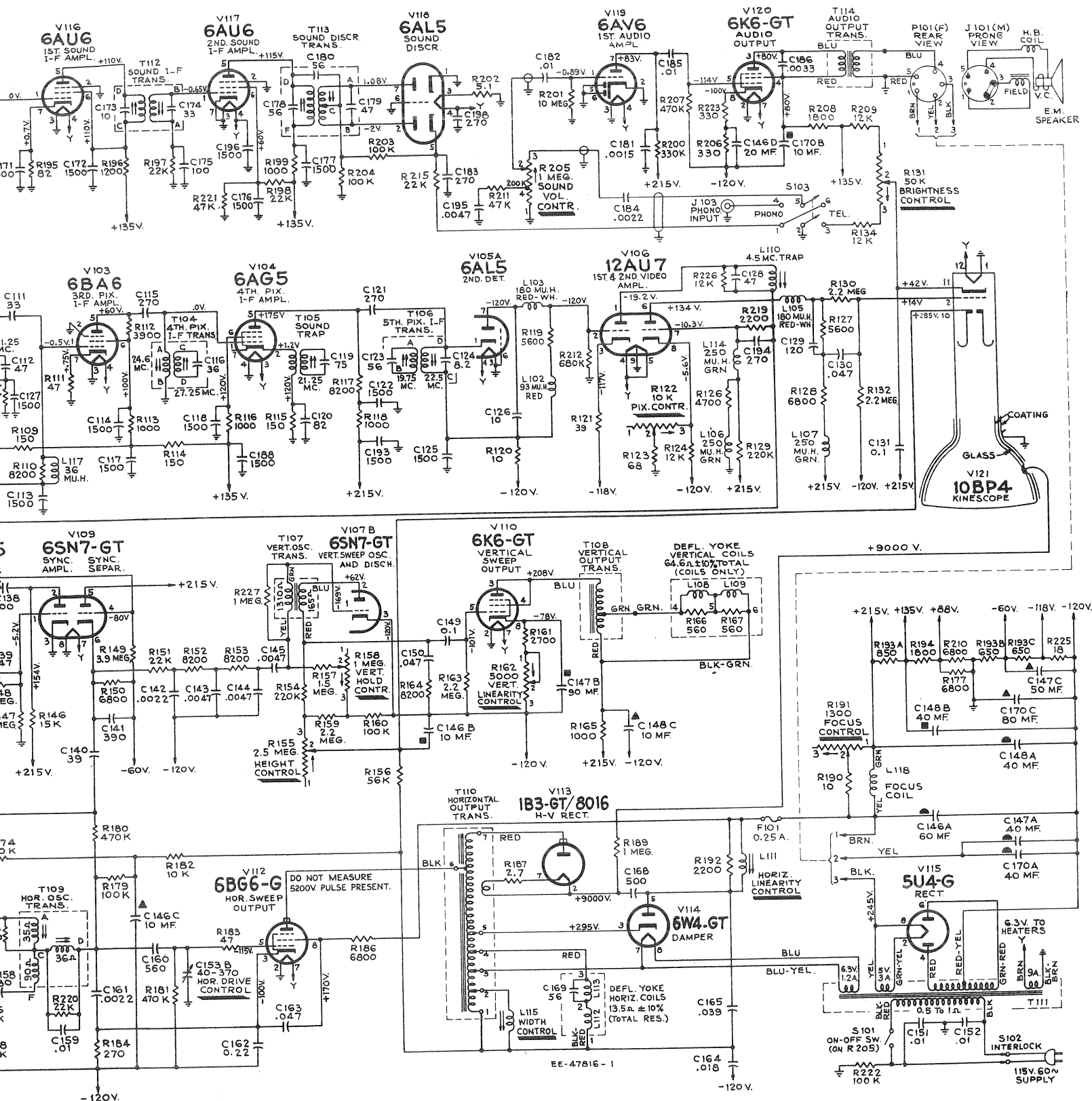


Figure 8—Circuit Schematic Diagram

## T100

## REPLACEMENT PARTS (Continued)

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
72927	Socket—Tube socket, 9 pin, miniature	71778	Trap—Sound trap (T105, C119)
31251	Socket—Tube socket, octal, wafer	73476	Trap—I-F trap (L116, C189)
73249	Socket—Tube socket, octal, ceramic, plate mounted	71420	Yoke—Deflection yoke (L108, L109, L112, L113, C169, R166, R167)
71508	Socket—Tube socket for 8016		
72741	Socket—Kinescope socket		<b>SPEAKER ASSEMBLIES</b>
73586	Spring—Compression spring used under centering control screws (3 required)		970773-1
74595	Spring—Anode lead spring		RL 116-1
74936	Spring—Suspension spring (coil type) for kinescope tube socket leads	71560	Connector—5 contact male connector for speaker
74735	Strap—Retaining strap for mounting kinescope	74599	Speaker—5" x 7" EM speaker complete with cone and voice coil
74596	Support—Bakelite supports (1 set) for mounting hi-voltage rectifier tube mounting plate		
46760	Switch—"TV-Phono" switch (S103)		<b>MISCELLANEOUS</b>
74586	Transformer—Power transformer, 117 volt x 60 cycle (T111)	74637	Back—Cabinet back
74587	Transformer—Vertical output transformer (T108)	75039	Board—"Ant" terminal board
73569	Transformer—Vertical oscillator transformer (T107)	39153	Connector—4 contact male connector for antenna cable
74588	Transformer—Horizontal output and hi-voltage transformer (T110)	74638	Cushion—Vinylite cushion for safety glass
71419	Transformer—Sound output transformer (T114)	74627	Decal—Control panel function decal
74589	Transformer—First pix, i-f transformer (T101, C102, R101)	74809	Emblem—"RCA Victor" emblem
74590	Transformer—Second pix, i-f transformer (T102, C107)	73642	Escutcheon—Channel marker escutcheon
74591	Transformer—Third pix, i-f transformer (T103, C112)	74631	Foot—Rubber foot (4 required)
74592	Transformer—Fourth pix, i-f transformer (T104, C116)	74632	Gasket—Cork gasket for safety glass
73575	Transformer—Fifth pix, i-f transformer (T106, C123, C124)	74629	Glass—Safety glass
71424	Transformer—Sound, i-f transformer (T112, C173, C174)	74000	Knob—Horizontal hold control or picture control knob (inner)
71427	Transformer—Sound discriminator transformer (T113, C178, C179, C180)	74635	Knob—Channel selector knob
73576	Transformer—Horizontal oscillator transformer (T109)	74636	Knob—Fine tuning knob
73578	Transformer—Antenna transformer complete with socket and bracket (T115, J102)	73998	Knob—Vertical hold control or brightness control knob (outer)
73577	Trap—4.5 mc trap (L110, C128)	74002	Knob—Volume control and power switch knob
		74633	Nut—Speed nut for safety glass retainers
		74630	Panel—Removable grille panel and cloth assembly
		74628	Retainers—Safety glass retainers (1 set)
		30330	Spring—Retaining spring for knob #74000
		14270	Spring—Retaining spring for knobs #73998, 74002, 74635, 74636
		73643	Spring—Spring clip for channel marker escutcheon

To obtain resistors for which no stock number is given, order by stating type, value of resistance, tolerance and wattage.

APPLY TO YOUR RCA DISTRIBUTOR FOR PRICES OF REPLACEMENT PARTS

## REPLACEMENT PARTS (Continued)

T100

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
71441	Control—Vertical linearity control (R162)		6800 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R150)
71440	Control—Height control (R155)		6800 ohms, $\pm 5\%$ , 1 watt (R128)
74475	Control—AGC threshold control (R138)		6800 ohms, $\pm 10\%$ , 2 watts (R177, R186, R210)
74597	Control—Focus control (R191)		8200 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R164, R175)
71457	Cord—Power cord and plug		8200 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R152, R153, R171)
71437	Cover—Insulating cover for electrolytics #71432, 73581 and 73582		8200 ohms, $\pm 5\%$ , 1 watt (R117)
74418	Cushion—Rubber cushion for kinescope bottom support		10,000 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R104)
73590	Cushion—Rubber cushion for deflection yoke hood (2 required)		10,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R182)
73600	Fuse—0.25 amp., 250 volts (F101)		12,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R134, R209, R226)
71799	Grommet—Rubber grommet for yoke horizontal lead exit		12,000 ohms, $\pm 10\%$ , 2 watts (R124)
37396	Grommet—Rubber grommet for mounting ceramic tube socket		15,000 ohms, $\pm 10\%$ , 1 watt (R146)
73301	Magnet—Ion trap magnet (PM type)		22,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R151, R197, R220)
73587	Nut—Speed nut to mount hi-voltage capacitor		22,000 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R198, R215)
18469	Plate—Bakelite mounting plate for electrolytics		27,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R143)
74598	Resistor—Wire wound, 2.7 ohms, $\frac{1}{3}$ watt (R187)		39,000 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R135)
72067	Resistor—Wire wound, 5.1 ohms, $\frac{1}{2}$ watt (R202)		47,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R145, R211)
18471	Resistor—Wire wound, 10 ohms, $\frac{1}{2}$ watt (R190)		47,000 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R221)
73588	Resistor—Voltage divider, comprising 1 section of 850 ohms, 12 watts and 2 sections of 650 ohms, 6 watts (R193A, R193B, R193C)		56,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R156)
	Resistor—Fixed, composition:—		68,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R172)
	10 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R120)		100,000 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R203, R204)
	18 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R225)		100,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R160, R216)
	39 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R121)		100,000 ohms, $\pm 10\%$ , 1 watt (R179)
	47 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R111)		100,000 ohms, $\pm 20\%$ , 1 watt (R222)
	47 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R183)		120,000 ohms, $\pm 5\%$ , 1 watt (R176)
	68 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R105)		120,000 ohms, $\pm 10\%$ , 1 watt (R174)
	68 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R123)		150,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R168)
	82 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R195)		150,000 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R142)
	150 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R102)		180,000 ohms, $\pm 5\%$ , 1 watt (R178)
	150 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R115)		220,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R129, R154)
	150 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R106, R109, R114, R214)		330,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R140, R200)
	270 ohms, $\pm 10\%$ , 2 watts (R184)		470,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R137, R139, R180, R181, R224)
	330 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R206, R223)		470,000 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R207)
	1000 ohms, $\pm 20\%$ , $\frac{1}{2}$ watt (R103, R107, R108, R113, R116, R118, R165, R199)		680,000 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R133, R212)
	1200 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R196)		820,000 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R169)
	1800 ohms, $\pm 10\%$ , 2 watts (R194, R208)		1 megohm, $\pm 10\%$ , $\frac{1}{2}$ watt (R147)
	2200 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R219)		1 megohm, $\pm 20\%$ , 1 watt (R189, R227)
	2200 ohms, $\pm 10\%$ , 1 watt (R192)		1.2 megohm, $\pm 5\%$ , $\frac{1}{2}$ watt (R213)
	2700 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R161, R217)		1.5 megohm, $\pm 5\%$ , $\frac{1}{2}$ watt (R157)
	3900 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R112)		2.2 megohm, $\pm 10\%$ , $\frac{1}{2}$ watt (R130, R132, R159, R163)
	4700 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R126)		2.7 megohm, $\pm 5\%$ , 1 watt (R170)
	4700 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R144)		3.9 megohm, $\pm 10\%$ , $\frac{1}{2}$ watt (R149)
	5600 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R119)		6.8 megohm, $\pm 10\%$ , $\frac{1}{2}$ watt (R125)
	5600 ohms, $\pm 10\%$ , $\frac{1}{2}$ watt (R141, R218)		10 megohm, $\pm 10\%$ , $\frac{1}{2}$ watt (R148)
	5600 ohms, $\pm 10\%$ , 1 watt (R127)		10 megohm, $\pm 20\%$ , $\frac{1}{2}$ watt (R201)
	6800 ohms, $\pm 5\%$ , $\frac{1}{2}$ watt (R136)	74601	Screw—#8-32 x $\frac{3}{8}$ " cross-recessed binder head screw for focus coil mounting (2 required)
		74602	Screw—#10-32 x $\frac{1}{4}$ " cross-recessed round head screw for focus coil adjustments (3 required)
		74416	Screw—#10-32 x $\frac{1}{4}$ " round head cross-recessed screw for strap 74735
		71456	Screw—#8-32 x $\frac{7}{16}$ " wing screw for deflection yoke mounting
		75083	Screw—#8-32 x $\frac{1}{4}$ " wing screw for deflection yoke mounting
		73584	Shield—Tube shield
		74937	Sleeve—Rubber sleeve for focus coil
		73117	Socket—Tube socket, 7 pin, miniature

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## REPLACEMENT PARTS (Continued)

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
	R-F, I-F CHASSIS ASSEMBLIES KCS 38		
74593	Capacitor—Mica trimmer, comprising 1 section of 3-35 mmf. and 1 section of 40-370 mmf. (C153A, C153B)	73561	Capacitor—Tubular, paper, oil impregnated, .01 mfd., 400 volts (C135, C182)
39604	Capacitor—Mica, 10 mmf. (C126)	73594	Capacitor—Tubular, moulded paper, oil filled, .01 mfd., 600 volts (C159)
74105	Capacitor—Mica, 33 mmf. (C111)	73565	Capacitor—Tubular, paper, oil impregnated, .01 mfd., 1000 volts (C151, C152, C185)
74726	Capacitor—Mica, 39 mmf. (C140)	74727	Capacitor—Tubular, moulded paper, oil-filled, .018 mfd., 1000 volts (C164)
64062	Capacitor—Ceramic, 82 mmf. (C120)	73562	Capacitor—Tubular, paper, oil impregnated, .022 mfd., 400 volts (C155)
75060	Capacitor—Mica, 100 mmf. (C138)	74728	Capacitor—Tubular, moulded paper, oil filled, .039 mfd., 1000 volts (C165)
39396	Capacitor—Ceramic, 100 mmf. (C175)	73553	Capacitor—Tubular, paper, oil impregnated, .047 mfd., 400 volts (C130, C139)
73921	Capacitor—Ceramic, 120 mmf. (C129)	73592	Capacitor—Tubular, paper, oil impregnated, .047 mfd., 600 volts (C150, C156)
73102	Capacitor—Mica, 180 mmf. (C158)	73597	Capacitor—Tubular, paper, oil impregnated, .047 mfd., 1000 volts (C163)
73091	Capacitor—Mica, 270 mmf. (C106, C115, C121)	73551	Capacitor—Tubular, paper, oil impregnated, 0.1 mfd., 400 volts (C149)
73922	Capacitor—Ceramic, 270 mmf. (C183, C194, C198)	73557	Capacitor—Tubular, paper, oil impregnated, 0.1 mfd., 600 volts (C131)
39642	Capacitor—Mica, 390 mmf. (C141, C200)	73794	Capacitor—Tubular, paper, oil impregnated, 0.22 mfd., 400 volts (C136, C157, C162)
74153	Capacitor—Hi-voltage, 500 mmf., 15,000 volts (C168)	73787	Capacitor—Tubular, paper, oil impregnated, 0.47 mfd., 200 volts (C133, C190, C197)
74250	Capacitor—Mica, 560 mmf. (C160)	74585	Coil—Focus coil (L118)
71501	Capacitor—Ceramic, 1500 mmf. (C101, C103, C104, C105, C108, C109, C110, C113, C114, C117, C118, C122, C125, C127, C132, C171, C172, C176, C177, C188, C192, C193, C196)	71449	Coil—Horizontal linearity control coil (L111)
71432	Capacitor—Electrolytic, comprising 2 sections of 40 mfd., 450 volts and 1 section of 10 mfd., 450 volts (C148A, C148B, C148C)	71429	Coil—Width control coil (L115)
73582	Capacitor—Electrolytic, comprising 1 section of 40 mfd., 450 volts, 1 section of 10 mfd., 450 volts and 1 section of 80 mfd., 200 volts (C170A, C170B, C170C)	74170	Coil—Peaking coil (36 muh) (L117, R110)
73583	Capacitor—Electrolytic, comprising 1 section of 40 mfd., 450 volts, 1 section of 90 mfd., 150 volts and 1 section of 50 mfd., 150 volts (C147A, C147B, C147C)	71527	Coil—Peaking coil (93 muh) (L102)
73581	Capacitor—Electrolytic, comprising 1 section of 60 mfd., 450 volts, 2 sections of 10 mfd., 450 volts and 1 section of 20 mfd., 150 volts (C146A, C146B, C146C, C146D)	74214	Coil—Peaking coil (180 muh) (L103, L105)
73801	Capacitor—Tubular, paper, oil impregnated, .001 mfd., 1000 volts (C137)	71526	Coil—Peaking coil (250 muh) (L106, L107, L114)
73802	Capacitor—Tubular, paper, oil impregnated, .0015 mfd., 1000 volts (C181)	73477	Coil—Choke coil (L101)
73595	Capacitor—Tubular, moulded paper, oil filled, .0022 mfd., 600 volts (C142, C154, C161, C184)	74594	Connector—2 contact male connector for power cable
73795	Capacitor—Tubular, paper, oil impregnated, .0033 mfd., 600 volts (C186)	35787	Connector—Phono input connector (J103)
73920	Capacitor—Tubular, paper, oil impregnated, .0047 mfd., 600 volts (C143, C144, C145, C195)	12493	Connector—5 contact female connector for speaker cable
		71789	Connector—Kinescope anode connector
		71521	Contact—Hi-voltage capacitor contact
		72734	Control—Horizontal and vertical hold control (R158, R173)
		74047	Control—Brightness and picture control (R122, R131)
		38408	Control—Sound volume control and power switch (R205, S101)

# REPLACEMENT PARTS

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STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
	<b>R-F UNIT ASSEMBLIES</b> <b>KRK 7</b>		
75067	Bracket—Vertical bracket for holding r-f oscillator tube shield.	30340	Retainer—Retainer ring for fine tuning stud
75069	Board—R-F unit power connection terminal board (5 contact)	70881	Screw—#4-40 x 1/4" binder head screw for adjusting coils L14, L15, L16, L17, L18, L19
73478	Cable—I-F transmission cable (W1)	73640	Screw—#4-40 x 5/8" adjusting screw for L66
74035	Capacitor—Ceramic, 5 mmf. (C4, C5)	71475	Screw—#4-40 x 15/32" adjusting screw for coils L21, L22, L23, L24
53511	Capacitor—Ceramic, 10 mmf. (C3)	74575	Screw—#4-40 x 17/32" adjusting screw for L6
54207	Capacitor—Ceramic, 18 mmf. (C20)	74573	Shaft—Channel selector shaft complete with pawl and stud
73449	Capacitor—Ceramic trimmer comprising 1 section of 150-190 mmf. and 1 section of 65-95 mmf. (C11, C12)	74574	Shaft—Fine tuning shaft and cam assembly
73091	Capacitor—Ceramic, 270 mmf. (C21)	73632	Shield—Metal tube shield for V1
71501	Capacitor—Ceramic, 1500 mmf. (C2, C7, C8, C9, C13, C15, C17, C18, C19)	72951	Shield—Metal tube shield for V3
73473	Capacitor—Ceramic, 5,000 mmf. (C16)	75443	Shield—"U" shape shield for bottom of R-F unit
73460	Coil—R-F plate coil for channel 6 (L13)	71494	Socket—Tube socket, moulded, 7 prong, saddle mounted
73461	Coil—Rear section—Oscillator plate coil for channel 6 (L20)	73450	Socket—Tube socket, ceramic, 7 prong, bottom mounted
73462	Coil—Coupling inductance coil (L4)	74576	Spacer—Insulating spacer for front plate (4 required)
73475	Coil—Antenna filter shunt coil (C67)	73457	Spring—Return spring for fine tuning control core
73476	Coil—I-F trap (L7, C22)	74188	Spring—Retaining spring for adjustable core RCA 74187
73477	Coil—Choke coil (L10, L11, L12)	75068	Spring—Retaining spring for r-f oscillator tube shield
73874	Coil—Front section—Oscillator plate coil for channel 6 (L31)	74578	Spring—Retaining spring for adjusting screws RCA 73640 and RCA 74575
74108	Coil—Fine tuning coil (1 1/2 turns) with adjustable inductance core and capacitor stud (plunger adjustment) (L1, C1)	73468	Stator—Front oscillator section stator complete with rotor, segment, coils and adjusting screws (S1, L14, L15, L16, L17, L18, L19, L21, L22, L23, L24)
74109	Coil—Trimmer coil (1 1/2 turns) with adjustable inductance core and capacitor stud (screw adjustment for oscillator section or converter section) (L2, L3, C6, C10)	73469	Stator—Rear oscillator section stator complete with rotor, segment, and coils (S2, L25, L26, L27, L28, L29, L30, L32, L33, L34, L35)
74110	Coil—Trimmer coil (3 turns) with adjustable inductance core and capacitor stud (screw adjustment) for r-f amplifier section (L5, C14)	73633	Stator—Antenna stator complete with rotor and coils (S5, L6, L56, L57, L58, L59, L60, L61, L62, L63, L64, L65, L66, C21)
73455	Core—Sliding core for fine tuning control trimmer	73470	Stator—Converter stator complete with rotor and coils (S3, L9, L36, L37, L38, L39, L40, L41, L48, L49, L50, L51)
74187	Core—Adjustable core for coil L9	73471	Stator—R-F amplifier stator complete with rotor and coils (S4, L13, L42, L43, L44, L45, L46, L47, L52, L53, L54, L55, C15, C16, R10)
73453	Form—Coil form assembly for L9, C13	75446	Stud—Capacitor stud, brass, No. 4-40 x 1 3/16" with 3/64" screwdriver slot for trimmer coils 74109 and 74110, uncoded or coded "ER"
73442	Link—Link assembly for fine tuning	75447	Stud—Capacitor stud, brass, No. 4-40 x 1 3/16" with 3/64" screwdriver slot for trimmer coils 74109 and 74110, coded numerically or "Hi Q"
71462	Loop—Oscillator to converter trimmer loop connector	73448	Transformer—Converter transformer (T1, R6)
74572	Plate—Front plate and bushing Resistor—Fixed, composition:— 47 ohms, ±20%, 1/2 watt (R4) 150 ohms, ±20%, 1/2 watt (R5, R8, R12) 390 ohms, ±10%, 1/2 watt (R14) 1000 ohms, ±20%, 1/2 watt (R7) 2700 ohms, ±10%, 1/2 watt (R10) 10,000 ohms, ±20%, 1/2 watt (R1, R11) 100,000 ohms, ±20%, 1/2 watt (R2, R3, R8, R13)	73466	Washer—Insulating washer for front shield (1 set)
		74577	Washer—Spring washer for fine tuning shaft and cam
		2917	Washer—"C" washer for channel selector shaft or fine tuning shaft and cam